

# Technical Manual

## Technical Manual



AN ISO 9001:2000 & TS 16949 Co.

**PIX**  
BELTS & HOSES

# PIX

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## BELTS & HOSES



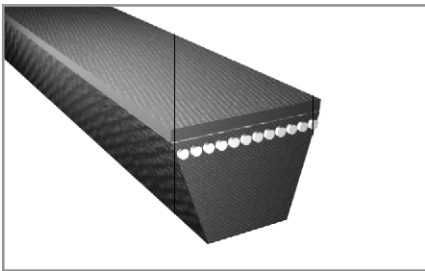
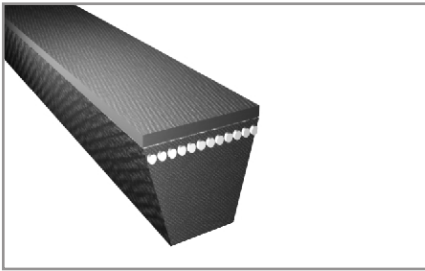
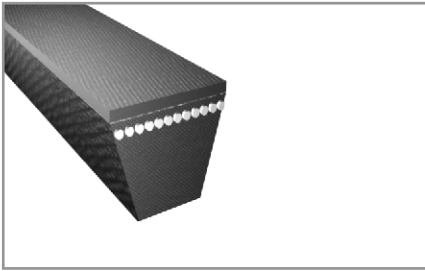
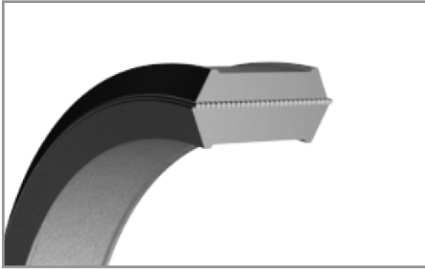
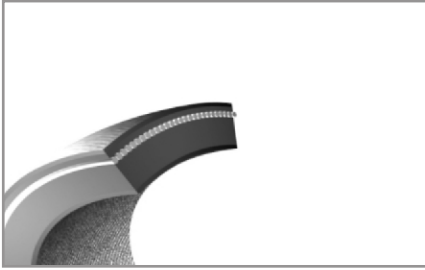
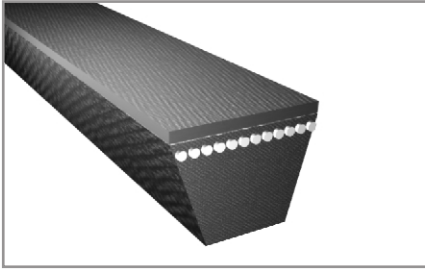
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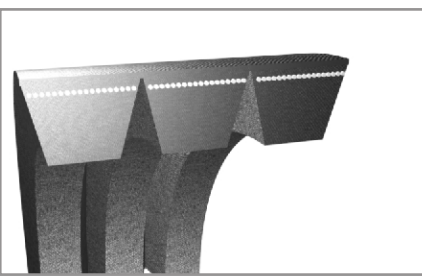
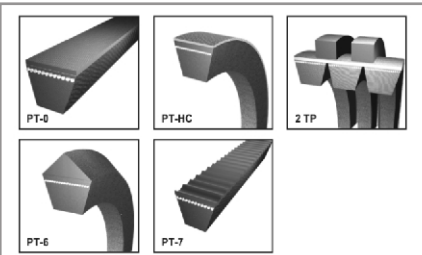
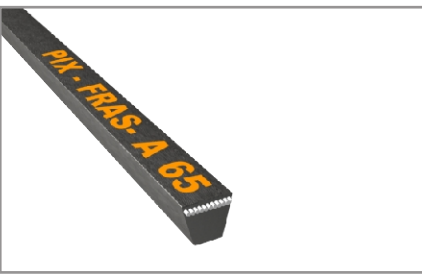

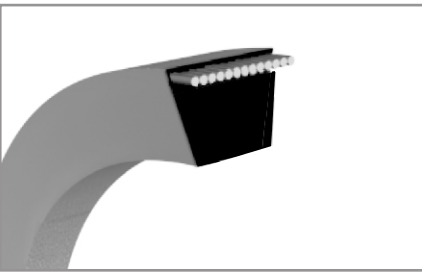
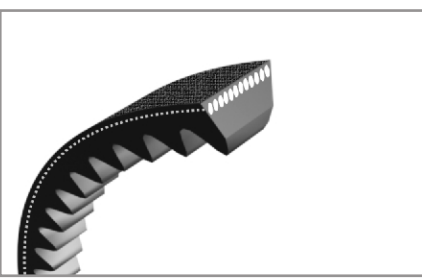
### V-BELTS & CUT EDGE BELTS

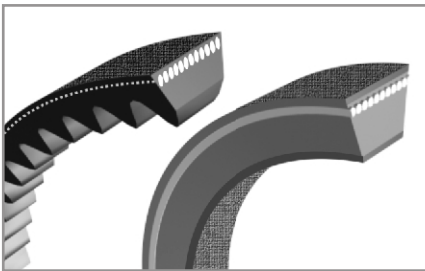
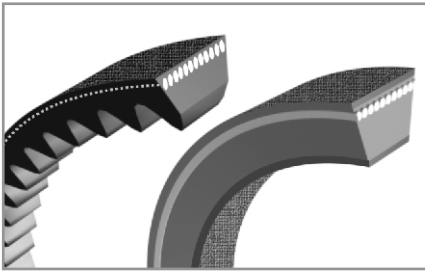
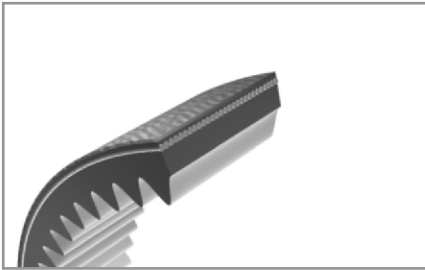
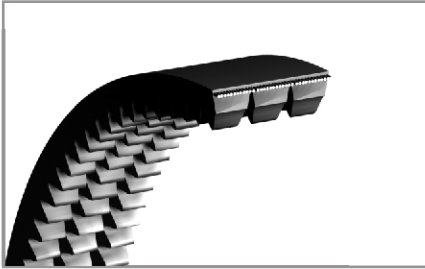
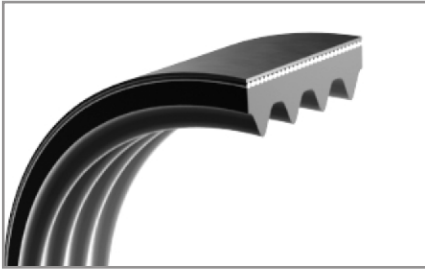
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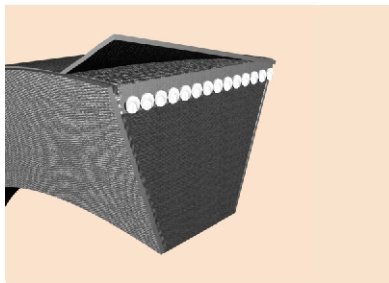
| BELT TYPE                                   | BELT PROFILE  | DESCRIPTION  | PAGE NO. |
|---|---|--|----------|
| <b>CLASSICAL SECTION WRAPPED V-BELTS</b>    |    | <p><b>Section:</b> Z,A,B,C,D,20,25,E<br/> <b>Standard:</b> IS 2494, BS 3790 &amp; DIN 2215, ISO 4183, ISO 4184<br/> <b>Application:</b> General industrial Drives &amp; V-flat drives.<br/> <b>Length Designation:</b> Li in inches</p>                | 08       |
| <b>WEDGE SECTION WRAPPED V-BELTS</b>        |    | <p><b>Section:</b> SPZ,SPA,SPB,19,SPC<br/> <b>Standard:</b> BS 3790<br/> <b>Application:</b> General Engineering &amp; Industrial Drives<br/> <b>Length Designation:</b> Lp in mm</p>  | 13       |
| <b>HIGH CAPACITY NARROW WRAPPED V-BELTS</b> |   | <p><b>Section:</b> 3V, 5V, 8V<br/> <b>Standard:</b> RMA IP-22<br/> <b>Application:</b> General Engineering &amp; Industrial Drives<br/> <b>Length Designation:</b> Belt No./10 = La in inches</p>  | 18       |
| <b>HEXAGONAL WRAPPED BELTS</b>              |  | <p><b>Section:</b> AA, BB, CC, 25X22<br/> <b>Standard:</b> IS 11038, RMA IP-21, ISO 5289<br/> <b>Application:</b> Industrial &amp; Agricultural Drives, Drives with multiple pulleys &amp; Rice Mills<br/> <b>Length Designation:</b> Li in inches</p> | 21       |
| <b>VARI SPEED WRAPPED V-BELTS</b>           |  | <p><b>Section:</b> VARISPEED<br/> <b>Standard:</b> RMA IP-25, ISO 3410, BS 3733<br/> <b>Application:</b> Agricultural &amp; Industrial Drives. Speed changing drives- Machine tools, Harvester Combine, textile &amp; Printing machines etc.</p>       | 07       |
| <b>LIGHT DUTY V-BELTS</b>                   |  | <p><b>Section:</b> 3L,4L,5L<br/> <b>Standard:</b> RMA IP-23<br/> <b>Application:</b> Lawn &amp; Garden Applications, Household Appl. etc.<br/> <b>Length Designation:</b> Belt No./10 = La in inches</p>   | 35       |

| BELT TYPE   | BELT PROFILE  | DESCRIPTION  | PAGE NO. |
|---|---|--|----------|
| <b>BANDED WRAPPED BELTS</b>                             |    | <p><b>Section:</b> HA, HB, HC, HD, HE, HSPZ, HSPA, HSPB, HSPC, H3V, H5V, H8V</p> <p><b>Standard:</b> ISO 5291, BS 3790, ISO 5290</p> <p><b>Application:</b> Agricultural Drives, Drives with severe vibrations, V-flat Drives, Conveyor systems, Crushers, Compressors etc.</p> <p><b>Length Designation:</b> As per section</p>   | 23       |
| <b>PROFILE TOP BELTS</b>                                |    | <p><b>Section:</b> PT-0, PT-HC, 2TP, PT-6, PT-7</p> <p><b>Standard:</b> PIX</p> <p><b>Application:</b> Conveyor systems, Special applications.<br/>Example: Food grain industries, ceramic tile industries, Horticultural industries.</p> <p><b>Length Designation:</b> As per section</p>   | 35       |
| <b>FRAS BELTS</b><br>(Fire Resistant and Antistatic)    |   | <p><b>Section:</b> Entire range</p> <p><b>Standard:</b> IS 2494 Part II, BS 3790, Conforms to :  II 2GD c IIB X (Test report no. IB-03-4-934)- ATEX</p> <p><b>Application:</b> Fire sensitive drives.<br/>Example: Coal mines, Petrochemical installations etc.</p> <p><b>Length Designation:</b> As per section</p> | 34       |
| <b>AOH V-BELTS</b><br>(Antistatic Oil & heat Resistant) |  | <p><b>Section:</b> Classical, Wedge &amp; Narrow</p> <p><b>Standard:</b> BS-3790</p> <p><b>Application:</b> Drives working upto temperature 100°C &amp; drives with oily environment.</p> <p><b>Length Designation:</b> As per section</p>   | 34       |
| <b>BELTS WITH KEVLAR CORD</b>                           |  | <p><b>Section:</b> Entire range</p> <p><b>Standard:</b> As per section</p> <p><b>Application:</b> Drives with high levels of power transmission, Drives having minimum installation &amp; take up allowances</p> <p><b>Length Designation:</b> As per section</p>  | 34       |
| <b>CUT EDGE CLASSICAL SECTION V-BELTS</b>               |  | <p><b>Section:</b> ZX, AX, BX, CX</p> <p><b>Standard:</b> IS 2494, ISO 4183, ISO 4184, BS-3790</p> <p><b>Application:</b> Drives with very small pulley diameters, high temperatures, high speed &amp; high level of power transmission.</p> <p><b>Length Designation:</b> Li in inches</p>  | 29       |

| BELT TYPE                           | BELT PROFILE  | DESCRIPTION   | PAGE NO. |
|-------------------------------------|---|---|----------|
| <b>WEDGE SECTION CUT EDGE BELTS</b> |    | <p><b>Section:</b> XPZ,XPA,XPB,XPC</p> <p><b>Standard:</b> BS 3790</p> <p><b>Application:</b> Drives with very small pulley diametres, high temperatures, high speed,space constraints &amp; high level of power transmission.</p> <p><b>Length Designation:</b> Lp in mm</p>   | 31       |
| <b>NARROW CUT EDGE V-BELTS</b>      |    | <p><b>Section:</b> 3VX, 5VX</p> <p><b>Standard:</b> RMA IP-22</p> <p><b>Application:</b> Drives with very small pulley diametres, high temperatures, high speed,space constraints &amp; high level of power transmission.</p> <p><b>Length Designation:</b><br/>Belt Ref./10 = La in inches</p>   | 32       |
| <b>VARI SPEED CUT EDGE V-BELTS</b>  |   | <p><b>Section:</b> VARISPEED</p> <p><b>Standard:</b> RMA IP-25, ISO 3410, BS 3733</p> <p><b>Application:</b> Agricultural &amp; Industrial Drives. Speed changing drives- Machine tools, Harvester Combine, textile &amp; Printing machines etc.</p>  | 07       |
| <b>BANDED CUT EDGE BELTS</b>        |  | <p><b>Section:</b> HAX,HBX,HCX,HXPZ,HXPA,HXPB,HXPC,H3VX,H5VX,HAVX-10, HAVX-13</p> <p><b>Standard:</b> ISO 5291, BS 3790, ISO 5290, DIN 7753</p> <p><b>Application:</b> Agricultural Drives, Drives with severe vibrations, Smaller pulley drives, Conveyor systems, Crushers, Compressors etc.</p> <p><b>Length Designation:</b> As per section</p> | 23       |
| <b>MULTI RIBBED BELTS</b>           |  | <p><b>Section:</b> PH,PJ,PK,PL,PM</p> <p><b>Standard:</b> RMA IP-26</p> <p><b>Application:</b> Household appliances, Work Tools, Machine Tools, Industrial Machines etc.</p> <p><b>Length Designation:</b><br/>Effective Length in mm (Le)</p>  | 97       |

## CROSS SECTIONAL VIEW

### V-Belt (Wrapped)



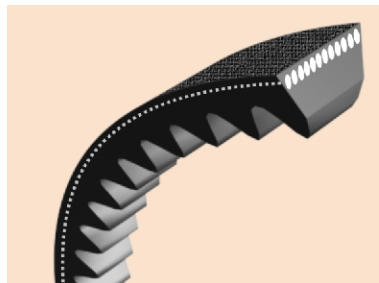
#### Construction :

1. Strong wear resistant bias cut Neoprene rubberised fabric
2. High tenacity, low stretch, specially treated polyester & Kevlar cord.
3. High resistant cord embedding cushion rubber compound
4. Specially compounded high modulus compression rubber

#### Applications :

- ◆ General Engineering industries
- ◆ Agricultural Industries
- ◆ Automotive Industries

### Cut Edge (Cogged)



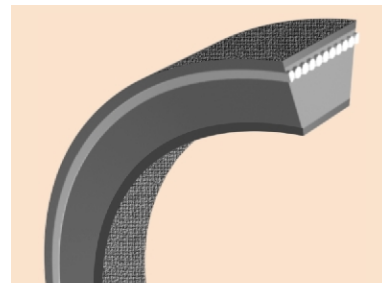
#### Construction :

1. Special Top Rubberised Fabric.
2. Polychloroprene cushion rubber compound.
3. Specially treated & stabilised polyester & Kevlar cord.
4. Fibre filled polychloroprene rubber compound.
5. Moulded cogged for better flexibility.

#### Applications :

- ◆ Automotive Industries
- ◆ General Engineering Industries
- ◆ Agricultural Industries

### Cut Edge (Plain)



#### Construction :

1. Special top rubberised fabric.
2. Specially treated and stabilised polyester & Kevlar cord
3. Polychloroprene cushion rubber compound
4. Fibre filled polychloroprene base rubber compound.

#### Applications :

- ◆ General Engineering Industries
- ◆ Automotive Industries
- ◆ Agricultural Industries

## Range of V-Belts (Wrapped Belts)

| Section | Min      | Max         |
|---------|----------|-------------|
| Y       | 16.5" Li |             |
| 8x5     | 35.0"    | 172" Li     |
| Z       | 9.5"     | 195" Li     |
| M       | 11.0"    | 173" La     |
| A       | 13.0"    | 360" Li     |
| B       | 16.0"    | 658" Li     |
| 20      | 39.0"    | 375" Li     |
| C       | 31.0"    | 658" Li     |
| 25      | 57.0"    | 655" Li     |
| D       | 44.5"    | 662" Li     |
| E       | 90.0"    | 658" Li     |
| AA      | 45.0"    | 260" Li     |
| BB      | 40.0"    | 660" Li     |
| 17x17   | 32.0"    | 658" Li     |
| CC      | 73.0"    | 658" Li     |
| 25x22   | 89.0"    | 681" Le     |
| SPZ     | 365 mm   | 4953 mm Lp  |
| SPA     | 576 mm   | 9144 mm Lp  |
| SPB     | 940 mm   | 16764 mm Lp |
| 19      | 1100 mm  | 8763 mm Lp  |
| SPC     | 1750 mm  | 16789 mm Lp |

NOTE : Li - Inside Length. La - Outside Length.  
Lp - Pitch Length. Le - Effective Length

| Section                   | Min       | Max         |
|---------------------------|-----------|-------------|
| 3V                        | 19.5"     | 190" La     |
| 5V                        | 48.0"     | 654" La     |
| 8V                        | 90.0"     | 654" La     |
| 3L                        | 10.5"     | 160" La     |
| 4L                        | 15.0"     | 360" La     |
| 5L                        | 21.0"     | 220" La     |
| HA                        | 33.0"     | 280" Li     |
| HB                        | 41.0"     | 500" Li     |
| HC                        | 46.0"     | 658" Li     |
| HD                        | 90.0"     | 658" Li     |
| HE                        | 90.0"     | 658" Li     |
| HSPZ                      | 1168 mm   | 9042 mm Lp  |
| HSPA                      | 914 mm    | 3912 mm Lp  |
| HSPB                      | 1778 mm   | 9144 mm Lp  |
| HSPC                      | 2235 mm   | 16688 mm Lp |
| H3V                       | 33.5"     | 178" La     |
| H5V                       | 48.0"     | 360" La     |
| H8V                       | 98.0"     | 664" La     |
| Harvester<br>(Vari speed) | 865 mm Lp | & above     |
| Cable cord flat           | 950 mm Li | & above     |
| FHP (2000 series)         | 11.0"     | 173" La     |
| 9.5/AV10                  | 375 mm    | 4064 mm La  |
| 12.5/AV13                 | 588 mm    | 9296 mm La  |

## Range of V-Belts (Cut Edge Cogged Belts)

| Section | Min    | Max        |
|---------|--------|------------|
| ZX      | 23"    | 200" Li    |
| AX      | 22"    | 200" Li    |
| BX      | 21"    | 200" Li    |
| CX      | 21"    | 200" Li    |
| XPZ     | 590 mm | 5117 mm Lp |
| XPA     | 590 mm | 5125 mm Lp |
| XPB     | 600 mm | 5140 mm Lp |
| XPC     | 600 mm | 5163 mm Lp |
| X9.5    | 600 mm | 5130 mm La |
| X12.5   | 600 mm | 5143 mm La |

| Section  | Min    | Max        |
|----------|--------|------------|
| X15x9    | 600 mm | 5136 mm Lp |
| X13      | 600 mm | 5130 mm La |
| X11x7    | 610 mm | 5124 mm La |
| X20x12.5 | 610 mm | 5158 mm La |
| 3VX      | 24"    | 202" La    |
| 5VX      | 24"    | 203" La    |
| AVX10    | 600 mm | 5130 mm La |
| AVX13    | 600 mm | 5143 mm La |

## Range of V-Belts (Cut Edge Plain Belts)

| Section | Min    | Max        |
|---------|--------|------------|
| Z       | 23"    | 200" Li    |
| A       | 22"    | 200" Li    |
| B       | 21"    | 200" Li    |
| SPZ     | 590 mm | 5117 mm Lp |
| SPA     | 590 mm | 5125 mm Lp |

| Section   | Min    | Max        |
|-----------|--------|------------|
| 25x16     | 26"    | 200" Li    |
| 9.5/AV10  | 600 mm | 5130 mm La |
| 12.5/AV13 | 600 mm | 5143 mm La |
| 20x12.5   | 610 mm | 5158 mm La |

## Range of V-Belts (Cut Edge Laminated Belts)

| Section | Min    | Max        |
|---------|--------|------------|
| Z       | 23"    | 200" Li    |
| A       | 22"    | 200" Li    |
| B       | 21"    | 200" Li    |
| SPZ     | 590 mm | 5117 mm Lp |
| SPA     | 590 mm | 5125 mm Lp |

| Section   | Min    | Max        |
|-----------|--------|------------|
| 25x16     | 26" Li | 200" Li    |
| 9.5/AV10  | 600 mm | 5130 mm La |
| 12.5/AV13 | 600 mm | 5143 mm La |
| 20x12.5   | 610 mm | 5158 mm La |

## Range of V-Belts (Cut Edge Banded Belts)

| Section | Min    | Max        |
|---------|--------|------------|
| HAVX-10 | 600 mm | 5080 mm La |
| HAVX-13 | 600 mm | 5080 mm La |
| HAX     | 23.5"  | 200" Li    |
| HBX     | 23.5"  | 200" Li    |
| H3VX    | 23.5"  | 200" Li    |
| H5VX    | 23.5"  | 200" Li    |

## Range of Ribbed Belts

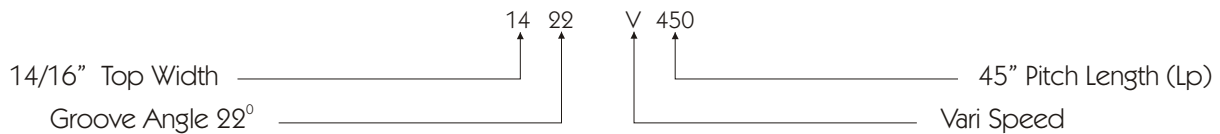
| Section | Min    | Max        |
|---------|--------|------------|
| PH      | 280 mm | 5080 mm Le |
| PJ      | 280 mm | 5080 mm Le |
| PK      | 280 mm | 5080 mm Le |
| PL      | 280 mm | 5080 mm Le |
| PM      | 280 mm | 5080 mm Le |

## PIX Range of V-Belts (Cut Edge - Vari Speed Belts)

### MANUFACTURING DATA (RMA/MPTA IP-25)

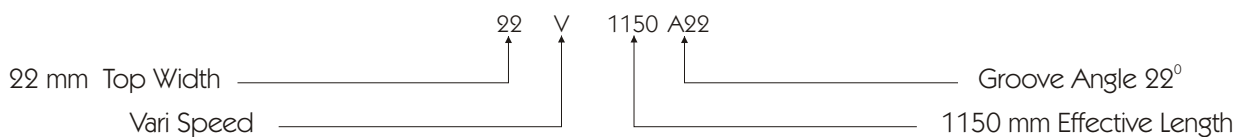
#### Cross Sections Nomenclature : 14 22 V 450

(Metric System)



#### Cross Sections Nomenclature : 22 V 1150 A22

(S.I. System)



### Vari Speed Belts : As per RMA IP 25 (Dimensions in mm)

| Sr. No. | Cross Section | Top width (mm)<br>(Nominal) | Thickness (mm)<br>(Nominal) | Angle (°) |  |
|---------|---------------|-----------------------------|-----------------------------|-----------|--|
| 1       | 22V - A22     | 22                          | 8                           | 22        | Standard length<br>designation -<br>Pitch Length<br>(Lp in inches)<br>OR<br>Effective Length<br>(Le in mm) |
| 2       | 30V - A22     | 30                          | 10                          | 22        |  |
| 3       | 37V - A22     | 37                          | 11                          | 22        |  |
| 4       | 30V - A26     | 30                          | 11                          | 26        |  |
| 5       | 46V - A 26    | 46                          | 13                          | 26        |  |
| 6       | 51V - A26     | 51                          | 13                          | 26        |  |
| 7       | 40V - A30     | 40                          | 15                          | 30        |  |
| 8       | 51V - A30     | 51                          | 16                          | 30        |  |
| 9       | 70V - A30     | 70                          | 18                          | 30        |  |
| 10      | 64V - A36     | 64                          | 18                          | 36        |  |
| 11      | 70V - A36     | 70                          | 18                          | 36        |  |
| 12      | 76V - A36     | 76                          | 19                          | 36        |  |

### Vari Speed Belts : As per RMA IP 25 (Dimensions in inches)

| Sr. No. | Cross Section | Top width<br>(Nominal) | Thickness<br>(Nominal) | Angle (°) |  |
|---------|---------------|------------------------|------------------------|-----------|--|
| 1       | 1422V ..      | 14/16                  | 0.31                   | 22        | Standard length<br>designation -<br>Pitch Length<br>(Lp in inches)<br>OR<br>Effective Length<br>(Le in mm) |
| 2       | 1922V ..      | 19/16                  | 0.39                   | 22        |  |
| 3       | 2322V ..      | 23/16                  | 0.44                   | 22        |  |
| 4       | 1926V ..      | 19/16                  | 0.44                   | 26        |  |
| 5       | 2926V ..      | 29/16                  | 0.51                   | 26        |  |
| 6       | 3226V ..      | 32/16                  | 0.51                   | 26        |  |
| 7       | 2530V ..      | 25/16                  | 0.59                   | 30        |  |
| 8       | 3230V ..      | 32/16                  | 0.62                   | 30        |  |
| 9       | 4430V ..      | 44/16                  | 0.70                   | 30        |  |
| 10      | 4036V ..      | 40/16                  | 0.70                   | 36        |  |
| 11      | 4436V ..      | 44/16                  | 0.70                   | 36        |  |
| 12      | 4836V ..      | 48/16                  | 0.75                   | 36        |  |

### Vari Speed Belts : As per ISO 3410 : 1989 (E)

| Sr. No. | Cross Section | Top width (mm)<br>(Nominal) | Thickness (mm)<br>(Nominal) | Angle (°) |  |
|---------|---------------|-----------------------------|-----------------------------|-----------|--|
| 1       | HG            | 16.5                        | 8                           | 26        | Standard length<br>designation -<br>Datum length<br>(Ld in mm) |
| 2       | HH            | 20.4                        | 10                          | 26        |  |
| 3       | HI            | 25.4                        | 12.7                        | 26        |  |
| 4       | HJ            | 31.8                        | 15.1                        | 26        |  |
| 5       | HK            | 38.1                        | 17.5                        | 26        |  |
| 6       | HL            | 44.5                        | 19.8                        | 26        |  |
| 7       | HM            | 50.8                        | 22.2                        | 26        |  |
| 8       | HN            | 57.2                        | 23.9                        | 26        |  |
| 9       | HO            | 63.5                        | 25.4                        | 26        |  |

### Vari Speed Belts : As per BS 3733 : 1974

| Sr. No. | Cross Section | Top width (mm)<br>(Nominal) | Thickness (mm)<br>(Nominal) | Angle (°) |  |
|---------|---------------|-----------------------------|-----------------------------|-----------|--|
| 1       | HI            | 25                          | 13                          | 26        | Standard length<br>designation -<br>Pitch Length<br>(Lp in mm) |
| 2       | HJ            | 32                          | 15                          | 26        |  |
| 3       | HK            | 38                          | 18                          | 26        |  |
| 4       | HL            | 45                          | 20                          | 26        |  |
| 5       | HM            | 51                          | 22                          | 26        |  |

Apart from the above standard range, the product can be manufactured as per the range given.

However, the details such as top width, thickness, angle or bottom width, length (Li/La/Lp, mm/inches) are required from the customer.

**NOTE :** Non standard Cut Edge Belts having following dimensions can be made on request.

1. Top width : 5 mm - 82 mm
2. Thickness : 5 mm - 25 mm
3. Angle : 22° - 42°
4. Belt Length (Li) - 23.5" to 200" Li

## PIX Classical Belts

The first of the V-belts to enter the power transmission scenario. The continued effort of the R&D of PIX has enabled to achieve the power ratings considerably higher than most of the available in the market. The compounds used to build up these belts are well chosen to match the stipulated power ratings thus offering distinct advantages regarding the increased factor of safety on critical drives.

The standards followed by PIX has put the tolerances to be much more stringent than BS 3790, which forms the basis of PIX classical belts.

### Properties :

PIX classical belts have a belt width to height ratio of approx 1.6:1. The maximum permissible belt speed is 30 m/sec, which should not be exceeded. The permissible flex rate is around  $f=80$  per second

### Features:

- Antistatic
- Temperature range :  $-18^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$
- Maximum belt linear speed : 30 m/sec
- ATEX certified FRAS belts are available

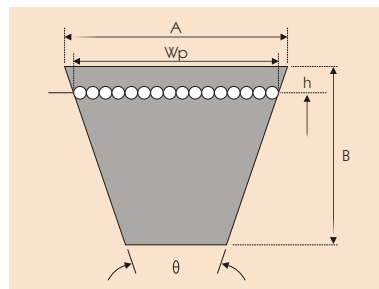
### Applications :

Primarily used as replacement on industrial drives. Special application is V flat drives where only classical belts are recommended.

In applications where reverse idlers have to be used, classical belts are advantageous than other belts, because of smaller heights.

### Standards & Dimensions:

PIX manufactures the entire range of Classical V-belts. The nominal length designation for classical v-belts is the inside length in inches.



| Section | Dimension |      | Angle | Pitch width | Top to pitch | Belt Length Factor |             |             | Standard                             | Recommended Min pulley diameter |
|---------|-----------|------|-------|-------------|--------------|--------------------|-------------|-------------|--------------------------------------|---------------------------------|
|         | A mm      | B mm |       |             |              | Lp to La mm        | Li to Lp mm | Li to La mm |                                      |                                 |
| 8       | 8         | 5    | 40    | 6.7         | 1.3          | 12                 | 19          | 31          | DIN 2215                             | 40                              |
| Z       | 10        | 6    | 40    | 8.5         | 2.0          | 16                 | 22          | 38          | IS 2494, BS 3790, ISO 4183, ISO 4184 | 50                              |
| A       | 13        | 8    | 40    | 11.0        | 2.75         | 14                 | 36          | 50          | IS 2494, BS 3790, ISO 4183, ISO 4184 | 75                              |
| B       | 17        | 11   | 40    | 14.0        | 3.5          | 26                 | 43          | 69          | IS 2494, BS 3790, ISO 4183, ISO 4184 | 125                             |
| 20      | 20        | 13   | 40    | 17.0        | 4.0          | 31                 | 48          | 79          | DIN 2215                             | 160                             |
| C       | 22        | 14   | 40    | 19.0        | 4.8          | 32                 | 56          | 88          | IS 2494, BS 3790, ISO 4183, ISO 4184 | 200                             |
| 25      | 25        | 16   | 40    | 21.0        | 6.0          | 39                 | 61          | 100         | DIN 2215                             | 250                             |
| D       | 32        | 19   | 40    | 27.0        | 8.1          | 40                 | 79          | 119         | IS 2494, BS 3790, ISO 4183, ISO 4184 | 355                             |
| E       | 38        | 23   | 40    | 32.0        |              | 53                 | 92          | 145         | IS 2494                              | 500                             |

'PIX' FRAS belts conforms to : II 2GD c IIB X (Test report no. IB-03-4-934) - ATEX

| Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) |
|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|
| Z 9.5          | 241                | Z 55           | 1397               | Z 105          | 2667               | Z 155          | 3937               |
| Z 10           | 254                | Z 60           | 1524               | Z 110          | 2794               | Z 160          | 4064               |
| Z 15           | 381                | Z 65           | 1651               | Z 115          | 2921               | Z 165          | 4191               |
| Z 20           | 508                | Z 70           | 1778               | Z 120          | 3048               | Z 170          | 4318               |
| Z 25           | 635                | Z 75           | 1905               | Z 125          | 3175               | Z 175          | 4445               |
| Z 30           | 762                | Z 80           | 2032               | Z 130          | 3302               | Z 180          | 4572               |
| Z 35           | 889                | Z 85           | 2159               | Z 135          | 3429               | Z 185          | 4699               |
| Z 40           | 1016               | Z 90           | 2286               | Z 140          | 3556               | Z 190          | 4826               |
| Z 45           | 1143               | Z 95           | 2413               | Z 145          | 3683               | Z 195          | 4953               |
| Z 50           | 1270               | Z 100          | 2540               | Z 150          | 3810               |                |                    |

- Unlisted Sizes on request

| Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) |
|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|
| A 13           | 330                | A 100          | 2540               | A 190          | 4826               | A 280          | 7112               |
| A 15           | 381                | A 105          | 2667               | A 195          | 4953               | A 285          | 7239               |
| A 20           | 508                | A 110          | 2794               | A 200          | 5080               | A 290          | 7366               |
| A 25           | 635                | A 115          | 2921               | A 205          | 5207               | A 295          | 7493               |
| A 30           | 762                | A 120          | 3048               | A 210          | 5334               | A 300          | 7620               |
| A 35           | 889                | A 125          | 3175               | A 215          | 5461               | A 305          | 7747               |
| A 40           | 1016               | A 130          | 3302               | A 220          | 5588               | A 310          | 7874               |
| A 45           | 1143               | A 135          | 3429               | A 225          | 5715               | A 315          | 8001               |
| A 50           | 1270               | A 140          | 3556               | A 230          | 5842               | A 320          | 8128               |
| A 55           | 1397               | A 145          | 3683               | A 235          | 5969               | A 325          | 8255               |
| A 60           | 1524               | A 150          | 3810               | A 240          | 6096               | A 330          | 8382               |
| A 65           | 1651               | A 155          | 3937               | A 245          | 6223               | A 335          | 8509               |
| A 70           | 1778               | A 160          | 4064               | A 250          | 6350               | A 340          | 8636               |
| A 75           | 1905               | A 165          | 4191               | A 255          | 6477               | A 345          | 8763               |
| A 80           | 2032               | A 170          | 4318               | A 260          | 6604               | A 350          | 8890               |
| A 85           | 2159               | A 175          | 4445               | A 265          | 6731               | A 355          | 9017               |
| A 90           | 2286               | A 180          | 4572               | A 270          | 6858               | A 360          | 9144               |
| A 95           | 2413               | A 185          | 4699               | A 275          | 6985               |                |                    |

- Unlisted Sizes on request

| Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) |
|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|
| B 16           | 406                | B 180          | 4572               | B 345          | 8763               | B 510          | 12954              |
| B 20           | 508                | B 185          | 4699               | B 350          | 8890               | B 515          | 13081              |
| B 25           | 635                | B 190          | 4826               | B 355          | 9017               | B 520          | 13208              |
| B 30           | 762                | B 195          | 4953               | B 360          | 9144               | B 525          | 13335              |
| B 35           | 889                | B 200          | 5080               | B 365          | 9271               | B 530          | 13462              |
| B 40           | 1016               | B 205          | 5207               | B 370          | 9398               | B 535          | 13589              |
| B 45           | 1143               | B 210          | 5334               | B 375          | 9525               | B 540          | 13716              |
| B 50           | 1270               | B 215          | 5461               | B 380          | 9652               | B 545          | 13843              |
| B 55           | 1397               | B 220          | 5588               | B 385          | 9779               | B 550          | 13970              |
| B 60           | 1524               | B 225          | 5715               | B 390          | 9906               | B 555          | 14097              |
| B 65           | 1651               | B 230          | 5842               | B 395          | 10033              | B 560          | 14224              |
| B 70           | 1778               | B 235          | 5969               | B 400          | 10160              | B 565          | 14351              |
| B 75           | 1905               | B 240          | 6096               | B 405          | 10287              | B 570          | 14478              |
| B 80           | 2032               | B 245          | 6223               | B 410          | 10414              | B 575          | 14605              |
| B 85           | 2159               | B 250          | 6350               | B 415          | 10541              | B 580          | 14732              |
| B 90           | 2286               | B 255          | 6477               | B 420          | 10668              | B 585          | 14859              |
| B 95           | 2413               | B 260          | 6604               | B 425          | 10795              | B 590          | 14986              |
| B 100          | 2540               | B 265          | 6731               | B 430          | 10922              | B 595          | 15113              |
| B 105          | 2667               | B 270          | 6858               | B 435          | 11049              | B 600          | 15240              |
| B 110          | 2794               | B 275          | 6985               | B 440          | 11176              | B 605          | 15367              |
| B 115          | 2921               | B 280          | 7112               | B 445          | 11303              | B 610          | 15494              |
| B 120          | 3048               | B 285          | 7239               | B 450          | 11430              | B 615          | 15621              |
| B 125          | 3175               | B 290          | 7366               | B 455          | 11557              | B 620          | 15748              |
| B 130          | 3302               | B 295          | 7493               | B 460          | 11684              | B 625          | 15875              |
| B 135          | 3429               | B 300          | 7620               | B 465          | 11811              | B 630          | 16002              |
| B 140          | 3556               | B 305          | 7747               | B 470          | 11938              | B 635          | 16129              |
| B 145          | 3683               | B 310          | 7874               | B 475          | 12065              | B 640          | 16256              |
| B 150          | 3810               | B 315          | 8001               | B 480          | 12192              | B 645          | 16383              |
| B 155          | 3937               | B 320          | 8128               | B 485          | 12319              | B 650          | 16510              |
| B 160          | 4064               | B 325          | 8255               | B 490          | 12446              | B 655          | 16637              |
| B 165          | 4191               | B 330          | 8382               | B 495          | 12573              | B 658          | 16713              |
| B 170          | 4318               | B 335          | 8509               | B 500          | 12700              |                |                    |
| B 175          | 4445               | B 340          | 8636               | B 505          | 12827              |                |                    |

• Unlisted Sizes on request

| Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) |
|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|
| C 31           | 787                | C 160          | 4064               | C 290          | 7366               | C 420          | 10668              | C 550          | 13970              |
| C 35           | 889                | C 165          | 4191               | C 295          | 7493               | C 425          | 10795              | C 555          | 14097              |
| C 40           | 1016               | C 170          | 4318               | C 300          | 7620               | C 430          | 10922              | C 560          | 14224              |
| C 45           | 1143               | C 175          | 4445               | C 305          | 7747               | C 435          | 11049              | C 565          | 14351              |
| C 50           | 1270               | C 180          | 4572               | C 310          | 7874               | C 440          | 11176              | C 570          | 14478              |
| C 55           | 1397               | C 185          | 4699               | C 315          | 8001               | C 445          | 11303              | C 575          | 14605              |
| C 60           | 1524               | C 190          | 4826               | C 320          | 8128               | C 450          | 11430              | C 580          | 14732              |
| C 65           | 1651               | C 195          | 4953               | C 325          | 8255               | C 455          | 11557              | C 585          | 14859              |
| C 70           | 1778               | C 200          | 5080               | C 330          | 8382               | C 460          | 11684              | C 590          | 14986              |
| C 75           | 1905               | C 205          | 5207               | C 335          | 8509               | C 465          | 11811              | C 595          | 15113              |
| C 80           | 2032               | C 210          | 5334               | C 340          | 8636               | C 470          | 11938              | C 600          | 15240              |
| C 85           | 2159               | C 215          | 5461               | C 345          | 8763               | C 475          | 12065              | C 605          | 15367              |
| C 90           | 2286               | C 220          | 5588               | C 350          | 8890               | C 480          | 12192              | C 610          | 15494              |
| C 95           | 2413               | C 225          | 5715               | C 355          | 9017               | C 485          | 12319              | C 615          | 15621              |
| C 100          | 2540               | C 230          | 5842               | C 360          | 9144               | C 490          | 12446              | C 620          | 15748              |
| C 105          | 2667               | C 235          | 5969               | C 365          | 9271               | C 495          | 12573              | C 625          | 15875              |
| C 110          | 2794               | C 240          | 6096               | C 370          | 9398               | C 500          | 12700              | C 630          | 16002              |
| C 115          | 2921               | C 245          | 6223               | C 375          | 9525               | C 505          | 12827              | C 635          | 16129              |
| C 120          | 3048               | C 250          | 6350               | C 380          | 9652               | C 510          | 12954              | C 640          | 16256              |
| C 125          | 3175               | C 255          | 6477               | C 385          | 9779               | C 515          | 13081              | C 645          | 16383              |
| C 130          | 3302               | C 260          | 6604               | C 390          | 9906               | C 520          | 13208              | C 650          | 16510              |
| C 135          | 3429               | C 265          | 6731               | C 395          | 10033              | C 525          | 13335              | C 655          | 16637              |
| C 140          | 3556               | C 270          | 6858               | C 400          | 10160              | C 530          | 13462              | C 658          | 16713              |
| C 145          | 3683               | C 275          | 6985               | C 405          | 10287              | C 535          | 13589              |                |                    |
| C 150          | 3810               | C 280          | 7112               | C 410          | 10414              | C 540          | 13716              |                |                    |
| C 155          | 3937               | C 285          | 7239               | C 415          | 10541              | C 545          | 13843              |                |                    |

• Unlisted Sizes on request

| Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) |
|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|
| D 44.5         | 1130               | D 170          | 4318               | D 295          | 7493               | D 420          | 10668              | D 545          | 13843              |
| D 50           | 1270               | D 175          | 4445               | D 300          | 7620               | D 425          | 10795              | D 550          | 13970              |
| D 55           | 1397               | D 180          | 4572               | D 305          | 7747               | D 430          | 10922              | D 555          | 14097              |
| D 60           | 1524               | D 185          | 4699               | D 310          | 7874               | D 435          | 11049              | D 560          | 14224              |
| D 65           | 1651               | D 190          | 4826               | D 315          | 8001               | D 440          | 11176              | D 565          | 14351              |
| D 70           | 1778               | D 195          | 4953               | D 320          | 8128               | D 445          | 11303              | D 570          | 14478              |
| D 75           | 1905               | D 200          | 5080               | D 325          | 8255               | D 450          | 11430              | D 575          | 14605              |
| D 80           | 2032               | D 205          | 5207               | D 330          | 8382               | D 455          | 11557              | D 580          | 14732              |
| D 85           | 2159               | D 210          | 5334               | D 335          | 8509               | D 460          | 11684              | D 585          | 14859              |
| D 90           | 2286               | D 215          | 5461               | D 340          | 8636               | D 465          | 11811              | D 590          | 14986              |
| D 95           | 2413               | D 220          | 5588               | D 345          | 8763               | D 470          | 11938              | D 595          | 15113              |
| D 100          | 2540               | D 225          | 5715               | D 350          | 8890               | D 475          | 12065              | D 600          | 15240              |
| D 105          | 2667               | D 230          | 5842               | D 355          | 9017               | D 480          | 12192              | D 605          | 15367              |
| D 110          | 2794               | D 235          | 5969               | D 360          | 9144               | D 485          | 12319              | D 610          | 15494              |
| D 115          | 2921               | D 240          | 6096               | D 365          | 9271               | D 490          | 12446              | D 615          | 15621              |
| D 120          | 3048               | D 245          | 6223               | D 370          | 9398               | D 495          | 12573              | D 620          | 15748              |
| D 125          | 3175               | D 250          | 6350               | D 375          | 9525               | D 500          | 12700              | D 625          | 15875              |
| D 130          | 3302               | D 255          | 6477               | D 380          | 9652               | D 505          | 12827              | D 630          | 16002              |
| D 135          | 3429               | D 260          | 6604               | D 385          | 9779               | D 510          | 12954              | D 635          | 16129              |
| D 140          | 3556               | D 265          | 6731               | D 390          | 9906               | D 515          | 13081              | D 640          | 16256              |
| D 145          | 3683               | D 270          | 6858               | D 395          | 10033              | D 520          | 13208              | D 645          | 16383              |
| D 150          | 3810               | D 275          | 6985               | D 400          | 10160              | D 525          | 13335              | D 650          | 16510              |
| D 155          | 3937               | D 280          | 7112               | D 405          | 10287              | D 530          | 13462              | D 655          | 16637              |
| D 160          | 4064               | D 285          | 7239               | D 410          | 10414              | D 535          | 13589              | D 662          | 16815              |
| D 165          | 4191               | D 290          | 7366               | D 415          | 10541              | D 540          | 13716              |                |                    |

• Unlisted Sizes on request

| Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) |
|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|
| E 90           | 2286               | E 205          | 5207               | E 320          | 8128               | E 435          | 11049              | E 550          | 13970              |
| E 95           | 2413               | E 210          | 5334               | E 325          | 8255               | E 440          | 11176              | E 555          | 14097              |
| E 100          | 2540               | E 215          | 5461               | E 330          | 8382               | E 445          | 11303              | E 560          | 14224              |
| E 105          | 2667               | E 220          | 5588               | E 335          | 8509               | E 450          | 11430              | E 565          | 14351              |
| E 110          | 2794               | E 225          | 5715               | E 340          | 8636               | E 455          | 11557              | E 570          | 14478              |
| E 115          | 2921               | E 230          | 5842               | E 345          | 8763               | E 460          | 11684              | E 575          | 14605              |
| E 120          | 3048               | E 235          | 5969               | E 350          | 8890               | E 465          | 11811              | E 580          | 14732              |
| E 125          | 3175               | E 240          | 6096               | E 355          | 9017               | E 470          | 11938              | E 585          | 14859              |
| E 130          | 3302               | E 245          | 6223               | E 360          | 9144               | E 475          | 12065              | E 590          | 14986              |
| E 135          | 3429               | E 250          | 6350               | E 365          | 9271               | E 480          | 12192              | E 595          | 15113              |
| E 140          | 3556               | E 255          | 6477               | E 370          | 9398               | E 485          | 12319              | E 600          | 15240              |
| E 145          | 3683               | E 260          | 6604               | E 375          | 9525               | E 490          | 12446              | E 605          | 15367              |
| E 150          | 3810               | E 265          | 6731               | E 380          | 9652               | E 495          | 12573              | E 610          | 15494              |
| E 155          | 3937               | E 270          | 6858               | E 385          | 9779               | E 500          | 12700              | E 615          | 15621              |
| E 160          | 4064               | E 275          | 6985               | E 390          | 9906               | E 505          | 12827              | E 620          | 15748              |
| E 165          | 4191               | E 280          | 7112               | E 395          | 10033              | E 510          | 12954              | E 625          | 15875              |
| E 170          | 4318               | E 285          | 7239               | E 400          | 10160              | E 515          | 13081              | E 630          | 16002              |
| E 175          | 4445               | E 290          | 7366               | E 405          | 10287              | E 520          | 13208              | E 635          | 16129              |
| E 180          | 4572               | E 295          | 7493               | E 410          | 10414              | E 525          | 13335              | E 640          | 16256              |
| E 185          | 4699               | E 300          | 7620               | E 415          | 10541              | E 530          | 13462              | E 645          | 16383              |
| E 190          | 4826               | E 305          | 7747               | E 420          | 10668              | E 535          | 13589              | E 650          | 16510              |
| E 195          | 4953               | E 310          | 7874               | E 425          | 10795              | E 540          | 13716              | E 655          | 16637              |
| E 200          | 5080               | E 315          | 8001               | E 430          | 10922              | E 545          | 13843              | E 658          | 16713              |

• Unlisted Sizes on request

| Inside Length (Inches) | Inside Length (Inches) | Inside Length (Inches) | Inside Length (Inches) | Inside Length (Inches) | Inside Length (Inches) | Inside Length (Inches) | Inside Length (Inches) | Inside Length (Inches) | Inside Length (Inches) |
|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| 39                     | 70                     | 105                    | 140                    | 175                    | 210                    | 245                    | 280                    | 315                    | 350                    |
| 40                     | 75                     | 110                    | 145                    | 180                    | 215                    | 250                    | 285                    | 320                    | 355                    |
| 45                     | 80                     | 115                    | 150                    | 185                    | 220                    | 255                    | 290                    | 325                    | 360                    |
| 50                     | 85                     | 120                    | 155                    | 190                    | 225                    | 260                    | 295                    | 330                    | 365                    |
| 55                     | 90                     | 125                    | 160                    | 195                    | 230                    | 265                    | 300                    | 335                    | 370                    |
| 60                     | 95                     | 130                    | 165                    | 200                    | 235                    | 270                    | 305                    | 340                    | 375                    |
| 65                     | 100                    | 135                    | 170                    | 205                    | 240                    | 275                    | 310                    | 345                    |                        |

- Unlisted Sizes on request

| Inside Length (Inches) | Inside Length (Inches) | Inside Length (Inches) | Inside Length (Inches) | Inside Length (Inches) | Inside Length (Inches) | Inside Length (Inches) | Inside Length (Inches) | Inside Length (Inches) | Inside Length (Inches) |
|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| 57                     | 120                    | 185                    | 250                    | 315                    | 380                    | 445                    | 510                    | 575                    | 640                    |
| 60                     | 125                    | 190                    | 255                    | 320                    | 385                    | 450                    | 515                    | 580                    | 645                    |
| 65                     | 130                    | 195                    | 260                    | 325                    | 390                    | 455                    | 520                    | 585                    | 650                    |
| 70                     | 135                    | 200                    | 265                    | 330                    | 395                    | 460                    | 525                    | 590                    | 655                    |
| 75                     | 140                    | 205                    | 270                    | 335                    | 400                    | 465                    | 530                    | 595                    |                        |
| 80                     | 145                    | 210                    | 275                    | 340                    | 405                    | 470                    | 535                    | 600                    |                        |
| 85                     | 150                    | 215                    | 280                    | 345                    | 410                    | 475                    | 540                    | 605                    |                        |
| 90                     | 155                    | 220                    | 285                    | 350                    | 415                    | 480                    | 545                    | 610                    |                        |
| 95                     | 160                    | 225                    | 290                    | 355                    | 420                    | 485                    | 550                    | 615                    |                        |
| 100                    | 165                    | 230                    | 295                    | 360                    | 425                    | 490                    | 555                    | 620                    |                        |
| 105                    | 170                    | 235                    | 300                    | 365                    | 430                    | 495                    | 560                    | 625                    |                        |
| 110                    | 175                    | 240                    | 305                    | 370                    | 435                    | 500                    | 565                    | 630                    |                        |
| 115                    | 180                    | 245                    | 310                    | 375                    | 440                    | 505                    | 570                    | 635                    |                        |

- Unlisted Sizes on request

## PIX Wedge Belts

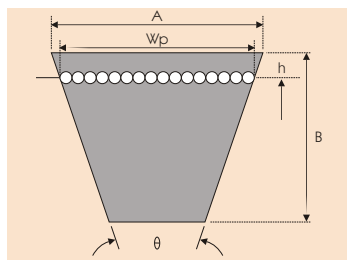
Wedge belts have been the result of continuous thrust by the manufacturers and users on higher power transmissions with reduction in space requirements. Wedge belts can transmit higher powers to extent of 1.5 to 2 times the classical belts with the same top width. This has been achieved by the dimensional changes, apart from better cord constructions used & the optimum placing of the cord line which provides the best support to the cord while in motion. For the efficient performance of wedge drive it is essential that the proper tension be maintained in the drive, failure to maintain the same will render the purpose of wedge belts ineffective.

### Properties :

- The top width to height ratio is 1.2:1
- The maximum permissible belt speed is 42 m/s
- The permissible flex rate is around  $f=100$  per second
- Less deformation of the belt cross section when in contact with the pulleys ensures better contact between the belt flanks & the pulley grooves.

### Features:

- Antistatic
- Temperature range :  $-18^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$
- Maximum belt linear speed : 42 m/sec
- ATEX certified FRAS belts are available



### Applications :

Wedge belts are used primarily on all the new drives because of the space savings achieved by using these belts. Wedge belts finds its extensive use in all industrial applications from light duty drives to heavily loaded drives.

### Standards & dimensions :

PIX manufactures the entire range of wedge belts. The nominal length designation for wedge belts is the pitch length in mm

| Section | Dimension |      | Angle | Pitch width | Top to pitch | Belt Length Factor |             |             | Standard | Recommended Min pulley diameter |
|---------|-----------|------|-------|-------------|--------------|--------------------|-------------|-------------|----------|---------------------------------|
|         | A mm      | B mm |       |             |              | Lp to La mm        | Li to Lp mm | Li to La mm |          |                                 |
| SPZ     | 10        | 8    | 40    | 8.5         | 2.0          | 13                 | 37          | 50          | BS 3790  | 67                              |
| SPA     | 13        | 10   | 40    | 11.0        | 2.75         | 18                 | 45          | 63          | BS 3790  | 100                             |
| SPB     | 17        | 14   | 40    | 14.0        | 3.50         | 28                 | 60          | 88          | BS 3790  | 160                             |
| 19      | 19        | 15   | 40    | 16.0        | 4.00         | 25                 | 69          | 94          | DIN 7753 | 180                             |
| SPC     | 22        | 18   | 40    | 19.0        | 4.80         | 30                 | 83          | 113         | BS 3790  | 224                             |

- 'PIX' FRAS belts conforms to :  II 2GD c IIB X (Test report no. IB-03-4-934)

| Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) |
|----------------|-------------------|----------------|-------------------|----------------|-------------------|
| SPZ 365        | 365               | SPZ 1900       | 1900              | SPZ 3500       | 3500              |
| SPZ 400        | 400               | SPZ 2000       | 2000              | SPZ 3600       | 3600              |
| SPZ 500        | 500               | SPZ 2100       | 2100              | SPZ 3700       | 3700              |
| SPZ 600        | 600               | SPZ 2200       | 2200              | SPZ 3800       | 3800              |
| SPZ 700        | 700               | SPZ 2300       | 2300              | SPZ 3900       | 3900              |
| SPZ 800        | 800               | SPZ 2400       | 2400              | SPZ 4000       | 4000              |
| SPZ 900        | 900               | SPZ 2500       | 2500              | SPZ 4100       | 4100              |
| SPZ 1000       | 1000              | SPZ 2600       | 2600              | SPZ 4200       | 4200              |
| SPZ 1100       | 1100              | SPZ 2700       | 2700              | SPZ 4300       | 4300              |
| SPZ 1200       | 1200              | SPZ 2800       | 2800              | SPZ 4400       | 4400              |
| SPZ 1300       | 1300              | SPZ 2900       | 2900              | SPZ 4500       | 4500              |
| SPZ 1400       | 1400              | SPZ 3000       | 3000              | SPZ 4600       | 4600              |
| SPZ 1500       | 1500              | SPZ 3100       | 3100              | SPZ 4700       | 4700              |
| SPZ 1600       | 1600              | SPZ 3200       | 3200              | SPZ 4800       | 4800              |
| SPZ 1700       | 1700              | SPZ 3300       | 3300              | SPZ 4900       | 4900              |
| SPZ 1800       | 1800              | SPZ 3400       | 3400              | SPZ 4953       | 4953              |

• Unlisted Sizes on request

| Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) |
|----------------|-------------------|----------------|-------------------|----------------|-------------------|
| SPA 576        | 576               | SPA 3500       | 3500              | SPA 6500       | 6500              |
| SPA 600        | 600               | SPA 3600       | 3600              | SPA 6600       | 6600              |
| SPA 700        | 700               | SPA 3700       | 3700              | SPA 6700       | 6700              |
| SPA 800        | 800               | SPA 3800       | 3800              | SPA 6800       | 6800              |
| SPA 900        | 900               | SPA 3900       | 3900              | SPA 6900       | 6900              |
| SPA 1000       | 1000              | SPA 4000       | 4000              | SPA 7000       | 7000              |
| SPA 1100       | 1100              | SPA 4100       | 4100              | SPA 7100       | 7100              |
| SPA 1200       | 1200              | SPA 4200       | 4200              | SPA 7200       | 7200              |
| SPA 1300       | 1300              | SPA 4300       | 4300              | SPA 7300       | 7300              |
| SPA 1400       | 1400              | SPA 4400       | 4400              | SPA 7400       | 7400              |
| SPA 1500       | 1500              | SPA 4500       | 4500              | SPA 7500       | 7500              |
| SPA 1600       | 1600              | SPA 4600       | 4600              | SPA 7600       | 7600              |
| SPA 1700       | 1700              | SPA 4700       | 4700              | SPA 7700       | 7700              |
| SPA 1800       | 1800              | SPA 4800       | 4800              | SPA 7800       | 7800              |
| SPA 1900       | 1900              | SPA 4900       | 4900              | SPA 7900       | 7900              |
| SPA 2000       | 2000              | SPA 5000       | 5000              | SPA 8000       | 8000              |
| SPA 2100       | 2100              | SPA 5100       | 5100              | SPA 8100       | 8100              |
| SPA 2200       | 2200              | SPA 5200       | 5200              | SPA 8200       | 8200              |
| SPA 2300       | 2300              | SPA 5300       | 5300              | SPA 8300       | 8300              |
| SPA 2400       | 2400              | SPA 5400       | 5400              | SPA 8400       | 8400              |
| SPA 2500       | 2500              | SPA 5500       | 5500              | SPA 8500       | 8500              |
| SPA 2600       | 2600              | SPA 5600       | 5600              | SPA 8600       | 8600              |
| SPA 2700       | 2700              | SPA 5700       | 5700              | SPA 8700       | 8700              |
| SPA 2800       | 2800              | SPA 5800       | 5800              | SPA 8800       | 8800              |
| SPA 2900       | 2900              | SPA 5900       | 5900              | SPA 8900       | 8900              |
| SPA 3000       | 3000              | SPA 6000       | 6000              | SPA 9000       | 9000              |
| SPA 3100       | 3100              | SPA 6100       | 6100              | SPA 9144       | 9144              |
| SPA 3200       | 3200              | SPA 6200       | 6200              |                |                   |
| SPA 3300       | 3300              | SPA 6300       | 6300              |                |                   |
| SPA 3400       | 3400              | SPA 6400       | 6400              |                |                   |

• Unlisted Sizes on request

| Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) |
|----------------|-------------------|----------------|-------------------|----------------|-------------------|
| SPB 940        | 940               | SPB 6300       | 6300              | SPB 11700      | 11700             |
| SPB 1000       | 1000              | SPB 6400       | 6400              | SPB 11800      | 11800             |
| SPB 1100       | 1100              | SPB 6500       | 6500              | SPB 11900      | 11900             |
| SPB 1200       | 1200              | SPB 6600       | 6600              | SPB 12000      | 12000             |
| SPB 1300       | 1300              | SPB 6700       | 6700              | SPB 12100      | 12100             |
| SPB 1400       | 1400              | SPB 6800       | 6800              | SPB 12200      | 12200             |
| SPB 1500       | 1500              | SPB 6900       | 6900              | SPB 12300      | 12300             |
| SPB 1600       | 1600              | SPB 7000       | 7000              | SPB 12400      | 12400             |
| SPB 1700       | 1700              | SPB 7100       | 7100              | SPB 12500      | 12500             |
| SPB 1800       | 1800              | SPB 7200       | 7200              | SPB 12600      | 12600             |
| SPB 1900       | 1900              | SPB 7300       | 7300              | SPB 12700      | 12700             |
| SPB 2000       | 2000              | SPB 7400       | 7400              | SPB 12800      | 12800             |
| SPB 2100       | 2100              | SPB 7500       | 7500              | SPB 12900      | 12900             |
| SPB 2200       | 2200              | SPB 7600       | 7600              | SPB 13000      | 13000             |
| SPB 2300       | 2300              | SPB 7700       | 7700              | SPB 13100      | 13100             |
| SPB 2400       | 2400              | SPB 7800       | 7800              | SPB 13200      | 13200             |
| SPB 2500       | 2500              | SPB 7900       | 7900              | SPB 13300      | 13300             |
| SPB 2600       | 2600              | SPB 8000       | 8000              | SPB 13400      | 13400             |
| SPB 2700       | 2700              | SPB 8100       | 8100              | SPB 13500      | 13500             |
| SPB 2800       | 2800              | SPB 8200       | 8200              | SPB 13600      | 13600             |
| SPB 2900       | 2900              | SPB 8300       | 8300              | SPB 13700      | 13700             |
| SPB 3000       | 3000              | SPB 8400       | 8400              | SPB 13800      | 13800             |
| SPB 3100       | 3100              | SPB 8500       | 8500              | SPB 13900      | 13900             |
| SPB 3200       | 3200              | SPB 8600       | 8600              | SPB 14000      | 14000             |
| SPB 3300       | 3300              | SPB 8700       | 8700              | SPB 14100      | 14100             |
| SPB 3400       | 3400              | SPB 8800       | 8800              | SPB 14200      | 14200             |
| SPB 3500       | 3500              | SPB 8900       | 8900              | SPB 14300      | 14300             |
| SPB 3600       | 3600              | SPB 9000       | 9000              | SPB 14400      | 14400             |
| SPB 3700       | 3700              | SPB 9100       | 9100              | SPB 14500      | 14500             |
| SPB 3800       | 3800              | SPB 9200       | 9200              | SPB 14600      | 14600             |
| SPB 3900       | 3900              | SPB 9300       | 9300              | SPB 14700      | 14700             |
| SPB 4000       | 4000              | SPB 9400       | 9400              | SPB 14800      | 14800             |
| SPB 4100       | 4100              | SPB 9500       | 9500              | SPB 14900      | 14900             |
| SPB 4200       | 4200              | SPB 9600       | 9600              | SPB 15000      | 15000             |
| SPB 4300       | 4300              | SPB 9700       | 9700              | SPB 15100      | 15100             |
| SPB 4400       | 4400              | SPB 9800       | 9800              | SPB 15200      | 15200             |
| SPB 4500       | 4500              | SPB 9900       | 9900              | SPB 15300      | 15300             |
| SPB 4600       | 4600              | SPB 10000      | 10000             | SPB 15400      | 15400             |
| SPB 4700       | 4700              | SPB 10100      | 10100             | SPB 15500      | 15500             |
| SPB 4800       | 4800              | SPB 10200      | 10200             | SPB 15600      | 15600             |
| SPB 4900       | 4900              | SPB 10300      | 10300             | SPB 15700      | 15700             |
| SPB 5000       | 5000              | SPB 10400      | 10400             | SPB 15800      | 15800             |
| SPB 5100       | 5100              | SPB 10500      | 10500             | SPB 15900      | 15900             |
| SPB 5200       | 5200              | SPB 10600      | 10600             | SPB 16000      | 16000             |
| SPB 5300       | 5300              | SPB 10700      | 10700             | SPB 16100      | 16100             |
| SPB 5400       | 5400              | SPB 10800      | 10800             | SPB 16200      | 16200             |
| SPB 5500       | 5500              | SPB 10900      | 10900             | SPB 16300      | 16300             |
| SPB 5600       | 5600              | SPB 11000      | 11000             | SPB 16400      | 16400             |
| SPB 5700       | 5700              | SPB 11100      | 11100             | SPB 16500      | 16500             |
| SPB 5800       | 5800              | SPB 11200      | 11200             | SPB 16600      | 16600             |
| SPB 5900       | 5900              | SPB 11300      | 11300             | SPB 16700      | 16700             |
| SPB 6000       | 6000              | SPB 11400      | 11400             | SPB 16764      | 16764             |
| SPB 6100       | 6100              | SPB 11500      | 11500             |                |                   |
| SPB 6200       | 6200              | SPB 11600      | 11600             |                |                   |

• Unlisted Sizes on request

| Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) |
|----------------|-------------------|----------------|-------------------|----------------|-------------------|
| SPC 1750       | 1750              | SPC 6800       | 6800              | SPC 11900      | 11900             |
| SPC 1800       | 1800              | SPC 6900       | 6900              | SPC 12000      | 12000             |
| SPC 1900       | 1900              | SPC 7000       | 7000              | SPC 12100      | 12100             |
| SPC 2000       | 2000              | SPC 7100       | 7100              | SPC 12200      | 12200             |
| SPC 2100       | 2100              | SPC 7200       | 7200              | SPC 12300      | 12300             |
| SPC 2200       | 2200              | SPC 7300       | 7300              | SPC 12400      | 12400             |
| SPC 2300       | 2300              | SPC 7400       | 7400              | SPC 12500      | 12500             |
| SPC 2400       | 2400              | SPC 7500       | 7500              | SPC 12600      | 12600             |
| SPC 2500       | 2500              | SPC 7600       | 7600              | SPC 12700      | 12700             |
| SPC 2600       | 2600              | SPC 7700       | 7700              | SPC 12800      | 12800             |
| SPC 2700       | 2700              | SPC 7800       | 7800              | SPC 12900      | 12900             |
| SPC 2800       | 2800              | SPC 7900       | 7900              | SPC 13000      | 13000             |
| SPC 2900       | 2900              | SPC 8000       | 8000              | SPC 13100      | 13100             |
| SPC 3000       | 3000              | SPC 8100       | 8100              | SPC 13200      | 13200             |
| SPC 3100       | 3100              | SPC 8200       | 8200              | SPC 13300      | 13300             |
| SPC 3200       | 3200              | SPC 8300       | 8300              | SPC 13400      | 13400             |
| SPC 3300       | 3300              | SPC 8400       | 8400              | SPC 13500      | 13500             |
| SPC 3400       | 3400              | SPC 8500       | 8500              | SPC 13600      | 13600             |
| SPC 3500       | 3500              | SPC 8600       | 8600              | SPC 13700      | 13700             |
| SPC 3600       | 3600              | SPC 8700       | 8700              | SPC 13800      | 13800             |
| SPC 3700       | 3700              | SPC 8800       | 8800              | SPC 13900      | 13900             |
| SPC 3800       | 3800              | SPC 8900       | 8900              | SPC 14000      | 14000             |
| SPC 3900       | 3900              | SPC 9000       | 9000              | SPC 14100      | 14100             |
| SPC 4000       | 4000              | SPC 9100       | 9100              | SPC 14200      | 14200             |
| SPC 4100       | 4100              | SPC 9200       | 9200              | SPC 14300      | 14300             |
| SPC 4200       | 4200              | SPC 9300       | 9300              | SPC 14400      | 14400             |
| SPC 4300       | 4300              | SPC 9400       | 9400              | SPC 14500      | 14500             |
| SPC 4400       | 4400              | SPC 9500       | 9500              | SPC 14600      | 14600             |
| SPC 4500       | 4500              | SPC 9600       | 9600              | SPC 14700      | 14700             |
| SPC 4600       | 4600              | SPC 9700       | 9700              | SPC 14800      | 14800             |
| SPC 4700       | 4700              | SPC 9800       | 9800              | SPC 14900      | 14900             |
| SPC 4800       | 4800              | SPC 9900       | 9900              | SPC 15000      | 15000             |
| SPC 4900       | 4900              | SPC 10000      | 10000             | SPC 15100      | 15100             |
| SPC 5000       | 5000              | SPC 10100      | 10100             | SPC 15200      | 15200             |
| SPC 5100       | 5100              | SPC 10200      | 10200             | SPC 15300      | 15300             |
| SPC 5200       | 5200              | SPC 10300      | 10300             | SPC 15400      | 15400             |
| SPC 5300       | 5300              | SPC 10400      | 10400             | SPC 15500      | 15500             |
| SPC 5400       | 5400              | SPC 10500      | 10500             | SPC 15600      | 15600             |
| SPC 5500       | 5500              | SPC 10600      | 10600             | SPC 15700      | 15700             |
| SPC 5600       | 5600              | SPC 10700      | 10700             | SPC 15800      | 15800             |
| SPC 5700       | 5700              | SPC 10800      | 10800             | SPC 15900      | 15900             |
| SPC 5800       | 5800              | SPC 10900      | 10900             | SPC 16000      | 16000             |
| SPC 5900       | 5900              | SPC 11000      | 11000             | SPC 16100      | 16100             |
| SPC 6000       | 6000              | SPC 11100      | 11100             | SPC 16200      | 16200             |
| SPC 6100       | 6100              | SPC 11200      | 11200             | SPC 16300      | 16300             |
| SPC 6200       | 6200              | SPC 11300      | 11300             | SPC 16400      | 16400             |
| SPC 6300       | 6300              | SPC 11400      | 11400             | SPC 16500      | 16500             |
| SPC 6400       | 6400              | SPC 11500      | 11500             | SPC 16600      | 16600             |
| SPC 6500       | 6500              | SPC 11600      | 11600             | SPC 16700      | 16700             |
| SPC 6600       | 6600              | SPC 11700      | 11700             | SPC 16789      | 16789             |
| SPC 6700       | 6700              | SPC 11800      | 11800             |                |                   |

• Unlisted Sizes on request

| Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) |
|----------------|-------------------|----------------|-------------------|----------------|-------------------|
| 19x1100        | 1100              | 19x3700        | 3700              | 19x6300        | 6300              |
| 19x1200        | 1200              | 19x3800        | 3800              | 19x6400        | 6400              |
| 19x1300        | 1300              | 19x3900        | 3900              | 19x6500        | 6500              |
| 19x1400        | 1400              | 19x4000        | 4000              | 19x6600        | 6600              |
| 19x1500        | 1500              | 19x4100        | 4100              | 19x6700        | 6700              |
| 19x1600        | 1600              | 19x4200        | 4200              | 19x6800        | 6800              |
| 19x1700        | 1700              | 19x4300        | 4300              | 19x6900        | 6900              |
| 19x1800        | 1800              | 19x4400        | 4400              | 19x7000        | 7000              |
| 19x1900        | 1900              | 19x4500        | 4500              | 19x7100        | 7100              |
| 19x2000        | 2000              | 19x4600        | 4600              | 19x7200        | 7200              |
| 19x2100        | 2100              | 19x4700        | 4700              | 19x7300        | 7300              |
| 19x2200        | 2200              | 19x4800        | 4800              | 19x7400        | 7400              |
| 19x2300        | 2300              | 19x4900        | 4900              | 19x7500        | 7500              |
| 19x2400        | 2400              | 19x5000        | 5000              | 19x7600        | 7600              |
| 19x2500        | 2500              | 19x5100        | 5100              | 19x7700        | 7700              |
| 19x2600        | 2600              | 19x5200        | 5200              | 19x7800        | 7800              |
| 19x2700        | 2700              | 19x5300        | 5300              | 19x7900        | 7900              |
| 19x2800        | 2800              | 19x5400        | 5400              | 19x8000        | 8000              |
| 19x2900        | 2900              | 19x5500        | 5500              | 19x8100        | 8100              |
| 19x3000        | 3000              | 19x5600        | 5600              | 19x8200        | 8200              |
| 19x3100        | 3100              | 19x5700        | 5700              | 19x8300        | 8300              |
| 19x3200        | 3200              | 19x5800        | 5800              | 19x8400        | 8400              |
| 19x3300        | 3300              | 19x5900        | 5900              | 19x8500        | 8500              |
| 19x3400        | 3400              | 19x6000        | 6000              | 19x8600        | 8600              |
| 19x3500        | 3500              | 19x6100        | 6100              | 19x8700        | 8700              |
| 19x3600        | 3600              | 19x6200        | 6200              | 19x8763        | 8763              |

• Unlisted Sizes on request

## PIX Narrow V-Belts

Constructionally & properties wise the narrow belts are similar to the wedge belts in performance, with the only difference being the additional top ridge provided in the narrow belts. Narrow belts are manufactured in accordance with RMA-IP 22 standards.

### Interchangeability between Narrow & Wedge belts

| Narrow   | Wedge |
|----------|-------|
| 3V / 9N  | SPZ   |
| 5V / 15N | SPB   |

### Properties :

Maximum permissible belt speed is 42 m/s

Maximum flexing rate is  $f = 100$  per second

### Features:

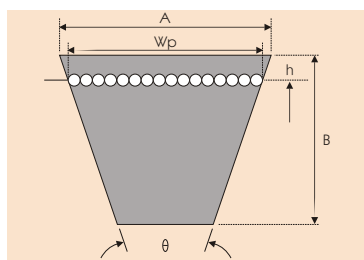
- Antistatic
- Temperature range :  $-18^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$
- Maximum belt linear speed : 42 m/sec

### Dimensions :

The standard length designation in narrow belts is as follows:

Belt no./10 gives outside length in inches

Ex.: 5V 950 means  $950/10 = 95$  inches outside length in inches



| Section | Dimension |      | Angle | Pitch width | Belt Length Factor |             |             | Standard  | Recommended Min pulley diameter |
|---------|-----------|------|-------|-------------|--------------------|-------------|-------------|-----------|---------------------------------|
|         | A mm      | B mm |       |             | Lp to La mm        | Li to Lp mm | Li to La mm |           |                                 |
| 3V      | 9.7       | 8    | 40    | 8.9         | 13                 | 37          | 50          | RMA IP 22 | 67                              |
| 5V      | 16        | 14   | 40    | 15.2        | 25                 | 60          | 85          | RMA IP 22 | 180                             |
| 8V      | 25        | 23   | 40    | 25.4        | 53                 | 92          | 145         | RMA IP 22 | 317                             |

| Belt Reference | Outside Length (mm) | Belt Reference | Outside Length (mm) | Belt Reference | Outside Length (mm) |
|----------------|---------------------|----------------|---------------------|----------------|---------------------|
| 3V 195         | 495                 | 3V 750         | 1905                | 3V 1350        | 3429                |
| 3V 200         | 508                 | 3V 800         | 2032                | 3V 1400        | 3556                |
| 3V 250         | 635                 | 3V 850         | 2159                | 3V 1450        | 3683                |
| 3V 300         | 762                 | 3V 900         | 2286                | 3V 1500        | 3810                |
| 3V 350         | 889                 | 3V 950         | 2413                | 3V 1550        | 3937                |
| 3V 400         | 1016                | 3V 1000        | 2540                | 3V 1600        | 4064                |
| 3V 450         | 1143                | 3V 1050        | 2667                | 3V 1650        | 4191                |
| 3V 500         | 1270                | 3V 1100        | 2794                | 3V 1700        | 4318                |
| 3V 550         | 1397                | 3V 1150        | 2921                | 3V 1750        | 4445                |
| 3V 600         | 1524                | 3V 1200        | 3048                | 3V 1800        | 4572                |
| 3V 650         | 1651                | 3V 1250        | 3175                | 3V 1850        | 4699                |
| 3V 700         | 1778                | 3V 1300        | 3302                | 3V 1900        | 4826                |

• Unlisted Sizes on request

| Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) |
|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|
| 5V 480         | 1219               | 5V 1700        | 4318               | 5V 2950        | 7493               | 5V 4200        | 10668              | 5V 5450        | 13843              |
| 5V 500         | 1270               | 5V 1750        | 4445               | 5V 3000        | 7620               | 5V 4250        | 10795              | 5V 5500        | 13970              |
| 5V 550         | 1397               | 5V 1800        | 4572               | 5V 3050        | 7747               | 5V 4300        | 10922              | 5V 5550        | 14097              |
| 5V 600         | 1524               | 5V 1850        | 4699               | 5V 3100        | 7874               | 5V 4350        | 11049              | 5V 5600        | 14224              |
| 5V 650         | 1651               | 5V 1900        | 4826               | 5V 3150        | 8001               | 5V 4400        | 11176              | 5V 5650        | 14351              |
| 5V 700         | 1778               | 5V 1950        | 4953               | 5V 3200        | 8128               | 5V 4450        | 11303              | 5V 5700        | 14478              |
| 5V 750         | 1905               | 5V 2000        | 5080               | 5V 3250        | 8255               | 5V 4500        | 11430              | 5V 5750        | 14605              |
| 5V 800         | 2032               | 5V 2050        | 5207               | 5V 3300        | 8382               | 5V 4550        | 11557              | 5V 5800        | 14732              |
| 5V 850         | 2159               | 5V 2100        | 5334               | 5V 3350        | 8509               | 5V 4600        | 11684              | 5V 5850        | 14859              |
| 5V 900         | 2286               | 5V 2150        | 5461               | 5V 3400        | 8636               | 5V 4650        | 11811              | 5V 5900        | 14986              |
| 5V 950         | 2413               | 5V 2200        | 5588               | 5V 3450        | 8763               | 5V 4700        | 11938              | 5V 5950        | 15113              |
| 5V 1000        | 2540               | 5V 2250        | 5715               | 5V 3500        | 8890               | 5V 4750        | 12065              | 5V 6000        | 15240              |
| 5V 1050        | 2667               | 5V 2300        | 5842               | 5V 3550        | 9017               | 5V 4800        | 12192              | 5V 6050        | 15367              |
| 5V 1100        | 2794               | 5V 2350        | 5969               | 5V 3600        | 9144               | 5V 4850        | 12319              | 5V 6100        | 15494              |
| 5V 1150        | 2921               | 5V 2400        | 6096               | 5V 3650        | 9271               | 5V 4900        | 12446              | 5V 6150        | 15621              |
| 5V 1200        | 3048               | 5V 2450        | 6223               | 5V 3700        | 9398               | 5V 4950        | 12573              | 5V 6200        | 15748              |
| 5V 1250        | 3175               | 5V 2500        | 6350               | 5V 3750        | 9525               | 5V 5000        | 12700              | 5V 6250        | 15875              |
| 5V 1300        | 3302               | 5V 2550        | 6477               | 5V 3800        | 9652               | 5V 5050        | 12827              | 5V 6300        | 16002              |
| 5V 1350        | 3429               | 5V 2600        | 6604               | 5V 3850        | 9779               | 5V 5100        | 12954              | 5V 6350        | 16129              |
| 5V 1400        | 3556               | 5V 2650        | 6731               | 5V 3900        | 9906               | 5V 5150        | 13081              | 5V 6400        | 16256              |
| 5V 1450        | 3683               | 5V 2700        | 6858               | 5V 3950        | 10033              | 5V 5200        | 13208              | 5V 6450        | 16383              |
| 5V 1500        | 3810               | 5V 2750        | 6985               | 5V 4000        | 10160              | 5V 5250        | 13335              | 5V 6500        | 16510              |
| 5V 1550        | 3937               | 5V 2800        | 7112               | 5V 4050        | 10287              | 5V 5300        | 13462              | 5V 6540        | 16612              |
| 5V 1600        | 4064               | 5V 2850        | 7239               | 5V 4100        | 10414              | 5V 5350        | 13589              |                |                    |
| 5V 1650        | 4191               | 5V 2900        | 7366               | 5V 4150        | 10541              | 5V 5400        | 13716              |                |                    |

• Unlisted Sizes on request

| Belt Reference | Outside Length (mm) | Belt Reference | Outside Length (mm) | Belt Reference | Outside Length (mm) |
|----------------|---------------------|----------------|---------------------|----------------|---------------------|
| 8V 900         | 2286                | 8V 2900        | 7366                | 8V 4900        | 12446               |
| 8V 1000        | 2540                | 8V 3000        | 7620                | 8V 5000        | 12700               |
| 8V 1100        | 2794                | 8V 3100        | 7874                | 8V 5100        | 12954               |
| 8V 1200        | 3048                | 8V 3200        | 8128                | 8V 5200        | 13208               |
| 8V 1300        | 3302                | 8V 3300        | 8382                | 8V 5300        | 13462               |
| 8V 1400        | 3556                | 8V 3400        | 8636                | 8V 5400        | 13716               |
| 8V 1500        | 3810                | 8V 3500        | 8890                | 8V 5500        | 13970               |
| 8V 1600        | 4064                | 8V 3600        | 9144                | 8V 5600        | 14224               |
| 8V 1700        | 4318                | 8V 3700        | 9398                | 8V 5700        | 14478               |
| 8V 1800        | 4572                | 8V 3800        | 9652                | 8V 5800        | 14732               |
| 8V 1900        | 4826                | 8V 3900        | 9906                | 8V 5900        | 14986               |
| 8V 2000        | 5080                | 8V 4000        | 10160               | 8V 6000        | 15240               |
| 8V 2100        | 5334                | 8V 4100        | 10414               | 8V 6100        | 15494               |
| 8V 2200        | 5588                | 8V 4200        | 10668               | 8V 6200        | 15748               |
| 8V 2300        | 5842                | 8V 4300        | 10922               | 8V 6300        | 16002               |
| 8V 2400        | 6096                | 8V 4400        | 11176               | 8V 6400        | 16256               |
| 8V 2500        | 6350                | 8V 4500        | 11430               | 8V 6500        | 16510               |
| 8V 2600        | 6604                | 8V 4600        | 11684               | 8V 6540        | 16612               |
| 8V 2700        | 6858                | 8V 4700        | 11938               |                |                     |
| 8V 2800        | 7112                | 8V 4800        | 12192               |                |                     |

• Unlisted Sizes on request

## PIX Hexagonal Belts

Hexagonal V-belts are also known as double V-belts, can be in simple terms be considered as two V-belts joined back to back. The neutral axis containing the tension member is exactly half way up the section.

### Applications :

Hexagonal belts finds its application in the drives where several pulleys in the same plane are to be driven in the clockwise and anti-clockwise direction simultaneously. The polyester tension cord placed at the centre of the construction provides the belt extreme flexibility and low stretch properties. It is because of this positioning of the cord the same is not subjected to any other forces as in the case of normal V-belts. Double V-belts normally finds its application in machines & rice mills. However of late these belts are rapidly finding its application in industrial drives.

### Drive Calculation :

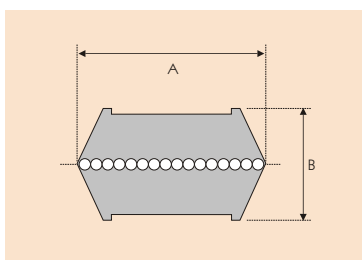
Drive calculation for double V-belts differ from the drive calculations of two pulley drives. The effective lengths, rotational speeds, transmission ratios & belt speeds are determined by the effective pulley diameters. We suggest that the customer should get back to us for assistance in using these belts. The maximum permissible belt speed is 30m/s

### Features:

- Antistatic
- Temperature range : -18°C to +70°C
- Maximum belt linear speed : 30 m/sec

### Dimensions :

For all practical purposes the length of double V-belts is considered as the effective length which is roughly the belt length at the centre.



| Section | A<br>mm | B<br>mm | Angle<br>Deg | Standard                    | Min pulley<br>diameter |
|---------|---------|---------|--------------|-----------------------------|------------------------|
| AA      | 13      | 10      | 40           | IS 11038, ISO 5289          | 75                     |
| BB      | 17      | 14      | 40           | IS 11038IS 11038, ISO 5289  | 125                    |
| CC      | 22      | 17      | 40           | IS 11038IS 11038, ISO 5289  | 200                    |
| 25      | 25      | 22      | 40           | RMA IP 21IS 11038, ISO 5289 | 250                    |

## CLASSICAL SECTION : AA

| Belt Reference | Inside Length (mm) | Li (inches) | Belt Reference | Inside Length (mm) | Li (inches) | Belt Reference | Inside Length (mm) | Li (inches) | Belt Reference | Inside Length (mm) | Li (inches) |
|----------------|--------------------|-------------|----------------|--------------------|-------------|----------------|--------------------|-------------|----------------|--------------------|-------------|
| AA 45          | 1143               | 45          | AA 73          | 1890               | 73          | AA 88          | 2271               | 88          | AA 112         | 2881               | 112         |
| AA 53          | 1382               | 53          | AA 75          | 1941               | 75          | AA 90          | 2322               | 90          | AA 120         | 3084               | 120         |
| AA 58          | 1509               | 58          | AA 76          | 1966               | 76          | AA 91          | 2347               | 91          | AA 128         | 3287               | 128         |
| AA 60          | 1560               | 60          | AA 77          | 1992               | 77          | AA 95          | 2449               | 95          | AA 146         | 3744               | 146         |
| AA 65          | 1687               | 65          | AA 78          | 2017               | 78          | AA 96          | 2474               | 96          | AA 152         | 3897               | 152         |
| AA 66          | 1712               | 66          | AA 80          | 2068               | 80          | AA 102         | 2627               | 102         | AA 180         | 4608               | 180         |
| AA 68          | 1763               | 68          | AA 83          | 2144               | 83          | AA 103         | 2652               | 103         | AA 185         | 4735               | 185         |
| AA 70          | 1814               | 70          | AA 85          | 2195               | 85          | AA 105         | 2703               | 105         | AA 220         | 5588               | 220         |
| AA 71          | 1839               | 71          | AA 87          | 2246               | 87          | AA 108         | 2779               | 108         | AA 260         | 6604               | 260         |

- Unlisted Sizes on request

## CLASSICAL SECTION : BB

| Belt Reference | Inside Length (mm) | Li (inches) | Belt Reference | Inside Length (mm) | Li (inches) | Belt Reference | Inside Length (mm) | Li (inches) | Belt Reference | Inside Length (mm) | Li (inches) |
|----------------|--------------------|-------------|----------------|--------------------|-------------|----------------|--------------------|-------------|----------------|--------------------|-------------|
| BB 40          | 1016               | 40          | BB 200         | 5080               | 200         | BB 400         | 10160              | 400         | BB 600         | 15240              | 600         |
| BB 50          | 1270               | 50          | BB 250         | 6350               | 250         | BB 450         | 11430              | 450         | BB 650         | 16510              | 650         |
| BB 100         | 2540               | 100         | BB 300         | 7620               | 300         | BB 500         | 12700              | 500         | BB 660         | 16764              | 660         |
| BB 150         | 3810               | 150         | BB 350         | 8890               | 350         | BB 550         | 13970              | 550         |                |                    |             |

- Unlisted Sizes on request

## CLASSICAL SECTION : CC

| Belt Reference | Inside Length (mm) | Li (inches) | Belt Reference | Inside Length (mm) | Li (inches) | Belt Reference | Inside Length (mm) | Li (inches) | Belt Reference | Inside Length (mm) | Li (inches) |
|----------------|--------------------|-------------|----------------|--------------------|-------------|----------------|--------------------|-------------|----------------|--------------------|-------------|
| CC 73          | 1854               | 73          | CC 250         | 6350               | 250         | CC 450         | 11430              | 450         | CC 650         | 16510              | 650         |
| CC 100         | 2540               | 100         | CC 300         | 7620               | 300         | CC 500         | 12700              | 500         | CC 658         | 16713              | 658         |
| CC 150         | 3810               | 150         | CC 350         | 8890               | 350         | CC 550         | 13970              | 550         |                |                    |             |
| CC 200         | 5080               | 200         | CC 400         | 10160              | 400         | CC 600         | 15240              | 600         |                |                    |             |

- Unlisted Sizes on request

## CLASSICAL SECTION : 25x22

| Belt Reference | Inside Length (mm) | Li (inches) | Belt Reference | Inside Length (mm) | Li (inches) | Belt Reference | Inside Length (mm) | Li (inches) | Belt Reference | Inside Length (mm) | Li (inches) |
|----------------|--------------------|-------------|----------------|--------------------|-------------|----------------|--------------------|-------------|----------------|--------------------|-------------|
| 89             | 2261               | 89          | 250            | 6350               | 250         | 450            | 11430              | 450         | 650            | 16510              | 650         |
| 100            | 2540               | 100         | 300            | 7620               | 300         | 500            | 12700              | 500         | 681            | 17297              | 681         |
| 150            | 3810               | 150         | 350            | 8890               | 350         | 550            | 13970              | 550         |                |                    |             |
| 200            | 5080               | 200         | 400            | 10160              | 400         | 600            | 15240              | 600         |                |                    |             |

- Unlisted Sizes on request

## PIX Banded Belts

PIX Banded belts are made up from Classical, Wedge or Narrow belts with strong tie band over them. Each band may contain the required number of belts. Maximum up to 5 belts in one tie band, depending upon the drive conditions, are recommended.

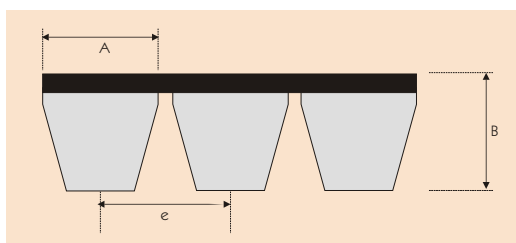
### Applications :

PIX banded belts are recommended on drives under the conditions of-

- Severe vibrations,
- Vertical shaft drives,
- V-flat drives,
- Agricultural drives,
- Conveyor systems,
- Crushers, Compressors, Generator sets, Pumps etc.

### Features :

- Antistatic
- Temperature range : -18°C to +70°C
- Recommended number of Ribs = 5 (Max)



### NOTE :

While using banded belts it is always recommended to use standard pulleys with proper guard only.

The proper belt sitting can only be obtained if the pitch distances maintained for the belts & for pulleys are same.

We recommend that the customer get back to us with details before using banded belts to enable us to provide the best suggestions. Improper design using banded belts can lead to very rapid failure of the drive system.

| Section | Dimension |         | Angle<br>Deg | Pitch<br>distance<br>mm | Standard | Min<br>pulley<br>dia. | Nominal<br>Length                             |
|---------|-----------|---------|--------------|-------------------------|----------|-----------------------|---|
|         | A<br>mm   | B<br>mm |              |                         |          |                       |   |
| HA      | 13.0      | 10.0    | 40           | 15.9                    | ISO 5291 | 80 de                 | Inside<br>length<br>in<br>inches              |
| HB      | 17.0      | 13.0    | 40           | 19.0                    | ISO 5291 | 130 de                |   |
| HC      | 22.0      | 16.0    | 40           | 25.5                    | ISO 5291 | 210 de                |   |
| HD      | 32.0      | 21.5    | 40           | 37.0                    | ISO 5291 | 370 de                |   |
| HSPZ    | 10.0      | 10.0    | 40           | 12.0                    | BS 3790  | 67 dp                 | Pitch<br>length<br>in mm                      |
| HSPA    | 13.0      | 12.0    | 40           | 15.0                    | BS 3790  | 100 dp                |   |
| HSPB    | 17.0      | 16.0    | 40           | 19.0                    | BS 3790  | 160 dp                |   |
| HSPC    | 22.0      | 20.0    | 40           | 25.5                    | BS 3790  | 224 dp                |   |
| H3V     | 9.7       | 10.0    | 40           | 10.3                    | ISO 5290 | 67 de                 | Belt no./10<br>outside<br>length<br>in inches |
| H5V     | 15.8      | 16.0    | 40           | 17.5                    | ISO 5290 | 180 de                |   |
| H8V     | 25.4      | 25.0    | 40           | 28.6                    | ISO 5290 | 317 de                |   |

# BANDED BELTS : HA

| Belt Ref. | Inside Length (mm) | Belt Ref. | Inside Length (mm) | Belt Ref. | Inside Length (mm) | Belt Ref. | Inside Length (mm) | Belt Ref. | Inside Length (mm) | Belt Ref. | Inside Length (mm) |
|-----------|--------------------|-----------|--------------------|-----------|--------------------|-----------|--------------------|-----------|--------------------|-----------|--------------------|
| HA 33     | 838                | HA 59     | 1499               | HA 79     | 2007               | HA 120    | 3048               | HA 177    | 4496               | HA 250    | 6350               |
| HA 47     | 1194               | HA 64     | 1626               | HA 98     | 2489               | HA 128    | 3251               | HA 187    | 4750               | HA 270    | 6858               |
| HA 51     | 1295               | HA 67     | 1702               | HA 100    | 2540               | HA 144    | 3658               | HA 200    | 5080               | HA 280    | 7112               |
| HA 56     | 1422               | HA 71     | 1803               | HA 104    | 2642               | HA 157    | 3988               | HA 220    | 5588               |           |                    |
| HA 57     | 1448               | HA 75     | 1905               | HA 112    | 2845               | HA 167    | 4242               | HA 235    | 5969               |           |                    |

• Unlisted Sizes on request

# BANDED BELTS : HB

| Belt Ref. | Inside Length (mm) | Belt Ref. | Inside Length (mm) | Belt Ref. | Inside Length (mm) | Belt Ref. | Inside Length (mm) | Belt Ref. | Inside Length (mm) | Belt Ref. | Inside Length (mm) |
|-----------|--------------------|-----------|--------------------|-----------|--------------------|-----------|--------------------|-----------|--------------------|-----------|--------------------|
| HB 41     | 1041               | HB 64     | 1626               | HB 88     | 2235               | HB 118    | 2997               | HB 158    | 4013               | HB 250    | 6350               |
| HB 47     | 1194               | HB 67     | 1702               | HB 91     | 2311               | HB 120    | 3048               | HB 167    | 4242               | HB 270    | 6858               |
| HB 51     | 1295               | HB 71     | 1803               | HB 94.5   | 2400               | HB 128    | 3251               | HB 177    | 4496               | HB 300    | 7620               |
| HB 55     | 1397               | HB 73     | 1854               | HB 98     | 2489               | HB 132    | 3353               | HB 187    | 4750               | HB 340    | 8636               |
| HB 59     | 1499               | HB 75     | 1905               | HB 102    | 2591               | HB 140    | 3556               | HB 197    | 5004               | HB 375    | 9525               |
| HB 61     | 1549               | HB 79     | 2007               | HB 106    | 2692               | HB 146    | 3708               | HB 208    | 5283               | HB 450    | 11430              |
| HB 63     | 1600               | HB 83     | 2108               | HB 112    | 2845               | HB 148    | 3759               | HB 220    | 5588               | HB 500    | 12700              |

• Unlisted Sizes on request

# BANDED BELTS : HC

| Belt Ref. | Inside Length (mm) | Belt Ref. | Inside Length (mm) | Belt Ref. | Inside Length (mm) | Belt Ref. | Inside Length (mm) | Belt Ref. | Inside Length (mm) | Belt Ref. | Inside Length (mm) |
|-----------|--------------------|-----------|--------------------|-----------|--------------------|-----------|--------------------|-----------|--------------------|-----------|--------------------|
| HC 46     | 1168               | HC 98     | 2489               | HC 146    | 3708               | HC 197    | 5004               | HC 250    | 6350               | HC 600    | 15240              |
| HC 58     | 1473               | HC 108    | 2743               | HC 151    | 3915               | HC 208    | 5283               | HC 300    | 7620               | HC 658    | 16713              |
| HC 70     | 1778               | HC 120    | 3048               | HC 167    | 4242               | HC 220    | 5588               | HC 350    | 8890               |           |                    |
| HC 80     | 2032               | HC 128    | 3251               | HC 177    | 4496               | HC 236    | 5994               | HC 400    | 10160              |           |                    |
| HC 90     | 2286               | HC 140    | 3556               | HC 187    | 4750               | HC 248    | 6299               | HC 500    | 12700              |           |                    |

• Unlisted Sizes on request

# BANDED BELTS : HD

| Belt Ref. | Inside Length (mm) | Belt Ref. | Inside Length (mm) | Belt Ref. | Inside Length (mm) | Belt Ref. | Inside Length (mm) | Belt Ref. | Inside Length (mm) | Belt Ref. | Inside Length (mm) |
|-----------|--------------------|-----------|--------------------|-----------|--------------------|-----------|--------------------|-----------|--------------------|-----------|--------------------|
| HD 90     | 2286               | HD 158    | 4013               | HD 210    | 5334               | HD 285    | 7239               | HD 360    | 9144               | HD 550    | 13970              |
| HD 110    | 2794               | HD 162    | 4115               | HD 225    | 5715               | HD 300    | 7620               | HD 390    | 9906               | HD 600    | 15240              |
| HD 120    | 3048               | HD 173    | 4394               | HD 240    | 6096               | HD 315    | 8001               | HD 400    | 10160              | HD 658    | 16713              |
| HD 128    | 3251               | HD 180    | 4572               | HD 255    | 6477               | HD 330    | 8382               | HD 450    | 11430              |           |                    |
| HD 144    | 3658               | HD 195    | 4953               | HD 270    | 6858               | HD 345    | 8763               | HD 500    | 12700              |           |                    |

• Unlisted Sizes on request

# BANDED BELTS : HE

| Belt Ref. | Inside Length (mm) | Belt Ref. | Inside Length (mm) | Belt Ref. | Inside Length (mm) | Belt Ref. | Inside Length (mm) | Belt Ref. | Inside Length (mm) | Belt Ref. | Inside Length (mm) |
|-----------|--------------------|-----------|--------------------|-----------|--------------------|-----------|--------------------|-----------|--------------------|-----------|--------------------|
| HE 90     | 2286               | HE 158    | 4013               | HE 210    | 5334               | HE 285    | 7239               | HE 360    | 9144               | HE 550    | 13970              |
| HE 110    | 2794               | HE 162    | 4115               | HE 225    | 5715               | HE 300    | 7620               | HE 390    | 9906               | HE 600    | 15240              |
| HE 120    | 3048               | HE 173    | 4394               | HE 240    | 6096               | HE 315    | 8001               | HE 400    | 10160              | HE 658    | 16713              |
| HE 128    | 3251               | HE 180    | 4572               | HE 255    | 6477               | HE 330    | 8382               | HE 450    | 11430              |           |                    |
| HE 144    | 3658               | HE 195    | 4953               | HE 270    | 6858               | HE 345    | 8763               | HE 500    | 12700              |           |                    |

• Unlisted Sizes on request

| Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) |
|----------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|-------------------|
| HSPZ 1168      | 1168              | HSPZ 3150      | 3150              | HSPZ 5150      | 5150              | HSPZ 7150      | 7150              |
| HSPZ 1200      | 1200              | HSPZ 3200      | 3200              | HSPZ 5200      | 5200              | HSPZ 7200      | 7200              |
| HSPZ 1250      | 1250              | HSPZ 3250      | 3250              | HSPZ 5250      | 5250              | HSPZ 7250      | 7250              |
| HSPZ 1300      | 1300              | HSPZ 3300      | 3300              | HSPZ 5300      | 5300              | HSPZ 7300      | 7300              |
| HSPZ 1350      | 1350              | HSPZ 3350      | 3350              | HSPZ 5350      | 5350              | HSPZ 7350      | 7350              |
| HSPZ 1400      | 1400              | HSPZ 3400      | 3400              | HSPZ 5400      | 5400              | HSPZ 7400      | 7400              |
| HSPZ 1450      | 1450              | HSPZ 3450      | 3450              | HSPZ 5450      | 5450              | HSPZ 7450      | 7450              |
| HSPZ 1500      | 1500              | HSPZ 3500      | 3500              | HSPZ 5500      | 5500              | HSPZ 7500      | 7500              |
| HSPZ 1550      | 1550              | HSPZ 3550      | 3550              | HSPZ 5550      | 5550              | HSPZ 7550      | 7550              |
| HSPZ 1600      | 1600              | HSPZ 3600      | 3600              | HSPZ 5600      | 5600              | HSPZ 7600      | 7600              |
| HSPZ 1650      | 1650              | HSPZ 3650      | 3650              | HSPZ 5650      | 5650              | HSPZ 7650      | 7650              |
| HSPZ 1700      | 1700              | HSPZ 3700      | 3700              | HSPZ 5700      | 5700              | HSPZ 7700      | 7700              |
| HSPZ 1750      | 1750              | HSPZ 3750      | 3750              | HSPZ 5750      | 5750              | HSPZ 7750      | 7750              |
| HSPZ 1800      | 1800              | HSPZ 3800      | 3800              | HSPZ 5800      | 5800              | HSPZ 7800      | 7800              |
| HSPZ 1850      | 1850              | HSPZ 3850      | 3850              | HSPZ 5850      | 5850              | HSPZ 7850      | 7850              |
| HSPZ 1900      | 1900              | HSPZ 3900      | 3900              | HSPZ 5900      | 5900              | HSPZ 7900      | 7900              |
| HSPZ 1950      | 1950              | HSPZ 3950      | 3950              | HSPZ 5950      | 5950              | HSPZ 7950      | 7950              |
| HSPZ 2000      | 2000              | HSPZ 4000      | 4000              | HSPZ 6000      | 6000              | HSPZ 8000      | 8000              |
| HSPZ 2050      | 2050              | HSPZ 4050      | 4050              | HSPZ 6050      | 6050              | HSPZ 8050      | 8050              |
| HSPZ 2100      | 2100              | HSPZ 4100      | 4100              | HSPZ 6100      | 6100              | HSPZ 8100      | 8100              |
| HSPZ 2150      | 2150              | HSPZ 4150      | 4150              | HSPZ 6150      | 6150              | HSPZ 8150      | 8150              |
| HSPZ 2200      | 2200              | HSPZ 4200      | 4200              | HSPZ 6200      | 6200              | HSPZ 8200      | 8200              |
| HSPZ 2250      | 2250              | HSPZ 4250      | 4250              | HSPZ 6250      | 6250              | HSPZ 8250      | 8250              |
| HSPZ 2300      | 2300              | HSPZ 4300      | 4300              | HSPZ 6300      | 6300              | HSPZ 8300      | 8300              |
| HSPZ 2350      | 2350              | HSPZ 4350      | 4350              | HSPZ 6350      | 6350              | HSPZ 8350      | 8350              |
| HSPZ 2400      | 2400              | HSPZ 4400      | 4400              | HSPZ 6400      | 6400              | HSPZ 8400      | 8400              |
| HSPZ 2450      | 2450              | HSPZ 4450      | 4450              | HSPZ 6450      | 6450              | HSPZ 8450      | 8450              |
| HSPZ 2500      | 2500              | HSPZ 4500      | 4500              | HSPZ 6500      | 6500              | HSPZ 8500      | 8500              |
| HSPZ 2550      | 2550              | HSPZ 4550      | 4550              | HSPZ 6550      | 6550              | HSPZ 8550      | 8550              |
| HSPZ 2600      | 2600              | HSPZ 4600      | 4600              | HSPZ 6600      | 6600              | HSPZ 8600      | 8600              |
| HSPZ 2650      | 2650              | HSPZ 4650      | 4650              | HSPZ 6650      | 6650              | HSPZ 8650      | 8650              |
| HSPZ 2700      | 2700              | HSPZ 4700      | 4700              | HSPZ 6700      | 6700              | HSPZ 8700      | 8700              |
| HSPZ 2750      | 2750              | HSPZ 4750      | 4750              | HSPZ 6750      | 6750              | HSPZ 8750      | 8750              |
| HSPZ 2800      | 2800              | HSPZ 4800      | 4800              | HSPZ 6800      | 6800              | HSPZ 8800      | 8800              |
| HSPZ 2850      | 2850              | HSPZ 4850      | 4850              | HSPZ 6850      | 6850              | HSPZ 8850      | 8850              |
| HSPZ 2900      | 2900              | HSPZ 4900      | 4900              | HSPZ 6900      | 6900              | HSPZ 8900      | 8900              |
| HSPZ 2950      | 2950              | HSPZ 4950      | 4950              | HSPZ 6950      | 6950              | HSPZ 8950      | 8950              |
| HSPZ 3000      | 3000              | HSPZ 5000      | 5000              | HSPZ 7000      | 7000              | HSPZ 9000      | 9000              |
| HSPZ 3050      | 3050              | HSPZ 5050      | 5050              | HSPZ 7050      | 7050              | HSPZ 9042      | 9042              |
| HSPZ 3100      | 3100              | HSPZ 5100      | 5100              | HSPZ 7100      | 7100              |                |                   |

- Unlisted Sizes on request

| Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) |
|----------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|-------------------|
| HSPA 914       | 914               | HSPA 1700      | 1700              | HSPA 2500      | 2500              | HSPA 3300      | 3300              |
| HSPA 950       | 950               | HSPA 1750      | 1750              | HSPA 2550      | 2550              | HSPA 3350      | 3350              |
| HSPA 1000      | 1000              | HSPA 1800      | 1800              | HSPA 2600      | 2600              | HSPA 3400      | 3400              |
| HSPA 1050      | 1050              | HSPA 1850      | 1850              | HSPA 2650      | 2650              | HSPA 3450      | 3450              |
| HSPA 1100      | 1100              | HSPA 1900      | 1900              | HSPA 2700      | 2700              | HSPA 3500      | 3500              |
| HSPA 1150      | 1150              | HSPA 1950      | 1950              | HSPA 2750      | 2750              | HSPA 3550      | 3550              |
| HSPA 1200      | 1200              | HSPA 2000      | 2000              | HSPA 2800      | 2800              | HSPA 3600      | 3600              |
| HSPA 1250      | 1250              | HSPA 2050      | 2050              | HSPA 2850      | 2850              | HSPA 3650      | 3650              |
| HSPA 1300      | 1300              | HSPA 2100      | 2100              | HSPA 2900      | 2900              | HSPA 3700      | 3700              |
| HSPA 1350      | 1350              | HSPA 2150      | 2150              | HSPA 2950      | 2950              | HSPA 3750      | 3750              |
| HSPA 1400      | 1400              | HSPA 2200      | 2200              | HSPA 3000      | 3000              | HSPA 3800      | 3800              |
| HSPA 1450      | 1450              | HSPA 2250      | 2250              | HSPA 3050      | 3050              | HSPA 3850      | 3850              |
| HSPA 1500      | 1500              | HSPA 2300      | 2300              | HSPA 3100      | 3100              | HSPA 3900      | 3900              |
| HSPA 1550      | 1550              | HSPA 2350      | 2350              | HSPA 3150      | 3150              | HSPA 3912      | 3912              |
| HSPA 1600      | 1600              | HSPA 2400      | 2400              | HSPA 3200      | 3200              |                |                   |
| HSPA 1650      | 1650              | HSPA 2450      | 2450              | HSPA 3250      | 3250              |                |                   |

- Unlisted Sizes on request

| Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) |
|----------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|-------------------|
| HSPB 1778      | 1778              | HSPB 3650      | 3650              | HSPB 5550      | 5550              | HSPB 7450      | 7450              |
| HSPB 1800      | 1800              | HSPB 3700      | 3700              | HSPB 5600      | 5600              | HSPB 7500      | 7500              |
| HSPB 1850      | 1850              | HSPB 3750      | 3750              | HSPB 5650      | 5650              | HSPB 7550      | 7550              |
| HSPB 1900      | 1900              | HSPB 3800      | 3800              | HSPB 5700      | 5700              | HSPB 7600      | 7600              |
| HSPB 1950      | 1950              | HSPB 3850      | 3850              | HSPB 5750      | 5750              | HSPB 7650      | 7650              |
| HSPB 2000      | 2000              | HSPB 3900      | 3900              | HSPB 5800      | 5800              | HSPB 7700      | 7700              |
| HSPB 2050      | 2050              | HSPB 3950      | 3950              | HSPB 5850      | 5850              | HSPB 7750      | 7750              |
| HSPB 2100      | 2100              | HSPB 4000      | 4000              | HSPB 5900      | 5900              | HSPB 7800      | 7800              |
| HSPB 2150      | 2150              | HSPB 4050      | 4050              | HSPB 5950      | 5950              | HSPB 7850      | 7850              |
| HSPB 2200      | 2200              | HSPB 4100      | 4100              | HSPB 6000      | 6000              | HSPB 7900      | 7900              |
| HSPB 2250      | 2250              | HSPB 4150      | 4150              | HSPB 6050      | 6050              | HSPB 7950      | 7950              |
| HSPB 2300      | 2300              | HSPB 4200      | 4200              | HSPB 6100      | 6100              | HSPB 8000      | 8000              |
| HSPB 2350      | 2350              | HSPB 4250      | 4250              | HSPB 6150      | 6150              | HSPB 8050      | 8050              |
| HSPB 2400      | 2400              | HSPB 4300      | 4300              | HSPB 6200      | 6200              | HSPB 8100      | 8100              |
| HSPB 2450      | 2450              | HSPB 4350      | 4350              | HSPB 6250      | 6250              | HSPB 8150      | 8150              |
| HSPB 2500      | 2500              | HSPB 4400      | 4400              | HSPB 6300      | 6300              | HSPB 8200      | 8200              |
| HSPB 2550      | 2550              | HSPB 4450      | 4450              | HSPB 6350      | 6350              | HSPB 8250      | 8250              |
| HSPB 2600      | 2600              | HSPB 4500      | 4500              | HSPB 6400      | 6400              | HSPB 8300      | 8300              |
| HSPB 2650      | 2650              | HSPB 4550      | 4550              | HSPB 6450      | 6450              | HSPB 8350      | 8350              |
| HSPB 2700      | 2700              | HSPB 4600      | 4600              | HSPB 6500      | 6500              | HSPB 8400      | 8400              |
| HSPB 2750      | 2750              | HSPB 4650      | 4650              | HSPB 6550      | 6550              | HSPB 8450      | 8450              |
| HSPB 2800      | 2800              | HSPB 4700      | 4700              | HSPB 6600      | 6600              | HSPB 8500      | 8500              |
| HSPB 2850      | 2850              | HSPB 4750      | 4750              | HSPB 6650      | 6650              | HSPB 8550      | 8550              |
| HSPB 2900      | 2900              | HSPB 4800      | 4800              | HSPB 6700      | 6700              | HSPB 8600      | 8600              |
| HSPB 2950      | 2950              | HSPB 4850      | 4850              | HSPB 6750      | 6750              | HSPB 8650      | 8650              |
| HSPB 3000      | 3000              | HSPB 4900      | 4900              | HSPB 6800      | 6800              | HSPB 8700      | 8700              |
| HSPB 3050      | 3050              | HSPB 4950      | 4950              | HSPB 6850      | 6850              | HSPB 8750      | 8750              |
| HSPB 3100      | 3100              | HSPB 5000      | 5000              | HSPB 6900      | 6900              | HSPB 8800      | 8800              |
| HSPB 3150      | 3150              | HSPB 5050      | 5050              | HSPB 6950      | 6950              | HSPB 8850      | 8850              |
| HSPB 3200      | 3200              | HSPB 5100      | 5100              | HSPB 7000      | 7000              | HSPB 8900      | 8900              |
| HSPB 3250      | 3250              | HSPB 5150      | 5150              | HSPB 7050      | 7050              | HSPB 8950      | 8950              |
| HSPB 3300      | 3300              | HSPB 5200      | 5200              | HSPB 7100      | 7100              | HSPB 9000      | 9000              |
| HSPB 3350      | 3350              | HSPB 5250      | 5250              | HSPB 7150      | 7150              | HSPB 9050      | 9050              |
| HSPB 3400      | 3400              | HSPB 5300      | 5300              | HSPB 7200      | 7200              | HSPB 9100      | 9100              |
| HSPB 3450      | 3450              | HSPB 5350      | 5350              | HSPB 7250      | 7250              | HSPB 9144      | 9144              |
| HSPB 3500      | 3500              | HSPB 5400      | 5400              | HSPB 7300      | 7300              |                |                   |
| HSPB 3550      | 3550              | HSPB 5450      | 5450              | HSPB 7350      | 7350              |                |                   |
| HSPB 3600      | 3600              | HSPB 5500      | 5500              | HSPB 7400      | 7400              |                |                   |

- Unlisted Sizes on request

| Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) |
|----------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|-------------------|
| HSPC 2235      | 2235              | HSPC 5900      | 5900              | HSPC 9600      | 9600              | HSPC 13300     | 13300             |
| HSPC 2300      | 2300              | HSPC 6000      | 6000              | HSPC 9700      | 9700              | HSPC 13400     | 13400             |
| HSPC 2400      | 2400              | HSPC 6100      | 6100              | HSPC 9800      | 9800              | HSPC 13500     | 13500             |
| HSPC 2500      | 2500              | HSPC 6200      | 6200              | HSPC 9900      | 9900              | HSPC 13600     | 13600             |
| HSPC 2600      | 2600              | HSPC 6300      | 6300              | HSPC 10000     | 10000             | HSPC 13700     | 13700             |
| HSPC 2700      | 2700              | HSPC 6400      | 6400              | HSPC 10100     | 10100             | HSPC 13800     | 13800             |
| HSPC 2800      | 2800              | HSPC 6500      | 6500              | HSPC 10200     | 10200             | HSPC 13900     | 13900             |
| HSPC 2900      | 2900              | HSPC 6600      | 6600              | HSPC 10300     | 10300             | HSPC 14000     | 14000             |
| HSPC 3000      | 3000              | HSPC 6700      | 6700              | HSPC 10400     | 10400             | HSPC 14100     | 14100             |
| HSPC 3100      | 3100              | HSPC 6800      | 6800              | HSPC 10500     | 10500             | HSPC 14200     | 14200             |
| HSPC 3200      | 3200              | HSPC 6900      | 6900              | HSPC 10600     | 10600             | HSPC 14300     | 14300             |
| HSPC 3300      | 3300              | HSPC 7000      | 7000              | HSPC 10700     | 10700             | HSPC 14400     | 14400             |
| HSPC 3400      | 3400              | HSPC 7100      | 7100              | HSPC 10800     | 10800             | HSPC 14500     | 14500             |
| HSPC 3500      | 3500              | HSPC 7200      | 7200              | HSPC 10900     | 10900             | HSPC 14600     | 14600             |
| HSPC 3600      | 3600              | HSPC 7300      | 7300              | HSPC 11000     | 11000             | HSPC 14700     | 14700             |
| HSPC 3700      | 3700              | HSPC 7400      | 7400              | HSPC 11100     | 11100             | HSPC 14800     | 14800             |
| HSPC 3800      | 3800              | HSPC 7500      | 7500              | HSPC 11200     | 11200             | HSPC 14900     | 14900             |
| HSPC 3900      | 3900              | HSPC 7600      | 7600              | HSPC 11300     | 11300             | HSPC 15000     | 15000             |
| HSPC 4000      | 4000              | HSPC 7700      | 7700              | HSPC 11400     | 11400             | HSPC 15100     | 15100             |
| HSPC 4100      | 4100              | HSPC 7800      | 7800              | HSPC 11500     | 11500             | HSPC 15200     | 15200             |
| HSPC 4200      | 4200              | HSPC 7900      | 7900              | HSPC 11600     | 11600             | HSPC 15300     | 15300             |
| HSPC 4300      | 4300              | HSPC 8000      | 8000              | HSPC 11700     | 11700             | HSPC 15400     | 15400             |
| HSPC 4400      | 4400              | HSPC 8100      | 8100              | HSPC 11800     | 11800             | HSPC 15500     | 15500             |
| HSPC 4500      | 4500              | HSPC 8200      | 8200              | HSPC 11900     | 11900             | HSPC 15600     | 15600             |
| HSPC 4600      | 4600              | HSPC 8300      | 8300              | HSPC 12000     | 12000             | HSPC 15700     | 15700             |
| HSPC 4700      | 4700              | HSPC 8400      | 8400              | HSPC 12100     | 12100             | HSPC 15800     | 15800             |
| HSPC 4800      | 4800              | HSPC 8500      | 8500              | HSPC 12200     | 12200             | HSPC 15900     | 15900             |
| HSPC 4900      | 4900              | HSPC 8600      | 8600              | HSPC 12300     | 12300             | HSPC 16000     | 16000             |
| HSPC 5000      | 5000              | HSPC 8700      | 8700              | HSPC 12400     | 12400             | HSPC 16100     | 16100             |
| HSPC 5100      | 5100              | HSPC 8800      | 8800              | HSPC 12500     | 12500             | HSPC 16200     | 16200             |
| HSPC 5200      | 5200              | HSPC 8900      | 8900              | HSPC 12600     | 12600             | HSPC 16300     | 16300             |
| HSPC 5300      | 5300              | HSPC 9000      | 9000              | HSPC 12700     | 12700             | HSPC 16400     | 16400             |
| HSPC 5400      | 5400              | HSPC 9100      | 9100              | HSPC 12800     | 12800             | HSPC 16500     | 16500             |
| HSPC 5500      | 5500              | HSPC 9200      | 9200              | HSPC 12900     | 12900             | HSPC 16600     | 16600             |
| HSPC 5600      | 5600              | HSPC 9300      | 9300              | HSPC 13000     | 13000             | HSPC 16688     | 16688             |
| HSPC 5700      | 5700              | HSPC 9400      | 9400              | HSPC 13100     | 13100             |                |                   |
| HSPC 5800      | 5800              | HSPC 9500      | 9500              | HSPC 13200     | 13200             |                |                   |

- Unlisted Sizes on request

## BANDED BELTS : H3V

| Belt Reference | Outside Length (mm) | Belt Reference | Outside Length (mm) | Belt Reference | Outside Length (mm) | Belt Reference | Outside Length (mm) |
|----------------|---------------------|----------------|---------------------|----------------|---------------------|----------------|---------------------|
| H3V 335        | 851                 | H3V 650        | 1651                | H3V 1000       | 2540                | H3V 1350       | 3429                |
| H3V 350        | 889                 | H3V 700        | 1778                | H3V 1050       | 2667                | H3V 1400       | 3556                |
| H3V 400        | 1016                | H3V 750        | 1905                | H3V 1100       | 2794                | H3V 1500       | 3810                |
| H3V 450        | 1143                | H3V 800        | 2032                | H3V 1150       | 2921                | H3V 1600       | 4064                |
| H3V 500        | 1270                | H3V 850        | 2159                | H3V 1200       | 3048                | H3V 1650       | 4191                |
| H3V 550        | 1397                | H3V 900        | 2286                | H3V 1250       | 3175                | H3V 1700       | 4318                |
| H3V 600        | 1524                | H3V 950        | 2413                | H3V 1300       | 3302                | H3V 1780       | 4521                |

- Unlisted Sizes on request

## BANDED BELTS : H5V

| Belt Reference | Outside Length (mm) | Belt Reference | Outside Length (mm) | Belt Reference | Outside Length (mm) | Belt Reference | Outside Length (mm) |
|----------------|---------------------|----------------|---------------------|----------------|---------------------|----------------|---------------------|
| H5V 480        | 1219                | H5V 850        | 2159                | H5V 1400       | 3556                | H5V 2360       | 5994                |
| H5V 530        | 1346                | H5V 900        | 2286                | H5V 1500       | 3810                | H5V 2500       | 6350                |
| H5V 560        | 1422                | H5V 950        | 2413                | H5V 1600       | 4064                | H5V 2650       | 6731                |
| H5V 600        | 1524                | H5V 1000       | 2540                | H5V 1700       | 4318                | H5V 2800       | 7112                |
| H5V 630        | 1600                | H5V 1060       | 2692                | H5V 1800       | 4572                | H5V 3000       | 7620                |
| H5V 670        | 1702                | H5V 1120       | 2845                | H5V 1900       | 4826                | H5V 3150       | 8001                |
| H5V 710        | 1803                | H5V 1180       | 2997                | H5V 2000       | 5080                | H5V 3350       | 8509                |
| H5V 750        | 1905                | H5V 1250       | 3175                | H5V 2120       | 5385                | H5V 3550       | 9017                |
| H5V 800        | 2032                | H5V 1320       | 3353                | H5V 2240       | 5690                | H5V 3600       | 9144                |

- Unlisted Sizes on request

## BANDED BELTS : H8V

| Belt Reference | Outside Length (mm) | Belt Reference | Outside Length (mm) | Belt Reference | Outside Length (mm) | Belt Reference | Outside Length (mm) |
|----------------|---------------------|----------------|---------------------|----------------|---------------------|----------------|---------------------|
| H8V 980        | 2489                | H8V 2400       | 6096                | H8V 3900       | 9906                | H8V 5400       | 13716               |
| H8V 1000       | 2540                | H8V 2500       | 6350                | H8V 4000       | 10160               | H8V 5500       | 13970               |
| H8V 1100       | 2794                | H8V 2600       | 6604                | H8V 4100       | 10414               | H8V 5600       | 14224               |
| H8V 1200       | 3048                | H8V 2700       | 6858                | H8V 4200       | 10668               | H8V 5700       | 14478               |
| H8V 1300       | 3302                | H8V 2800       | 7112                | H8V 4300       | 10922               | H8V 5800       | 14732               |
| H8V 1400       | 3556                | H8V 2900       | 7366                | H8V 4400       | 11176               | H8V 5900       | 14986               |
| H8V 1500       | 3810                | H8V 3000       | 7620                | H8V 4500       | 11430               | H8V 6000       | 15240               |
| H8V 1600       | 4064                | H8V 3100       | 7874                | H8V 4600       | 11684               | H8V 6100       | 15494               |
| H8V 1700       | 4318                | H8V 3200       | 8128                | H8V 4700       | 11938               | H8V 6200       | 15748               |
| H8V 1800       | 4572                | H8V 3300       | 8382                | H8V 4800       | 12192               | H8V 6300       | 16002               |
| H8V 1900       | 4826                | H8V 3400       | 8636                | H8V 4900       | 12446               | H8V 6400       | 16256               |
| H8V 2000       | 5080                | H8V 3500       | 8890                | H8V 5000       | 12700               | H8V 6500       | 16510               |
| H8V 2100       | 5334                | H8V 3600       | 9144                | H8V 5100       | 12954               | H8V 6600       | 16764               |
| H8V 2200       | 5588                | H8V 3700       | 9398                | H8V 5200       | 13208               | H8V 6640       | 16866               |
| H8V 2300       | 5842                | H8V 3800       | 9652                | H8V 5300       | 13462               |                |                     |

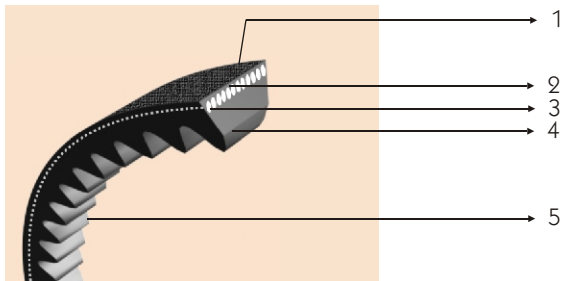
- Unlisted Sizes on request

## PIX Cut Edge Moulded Cogged Belts

The effectiveness of raw edge cogged belts is evident where the pulley diameters are extremely small, belt speed requirement is high, high levels of power transmissions are required, Operating temperatures are quite high, Usage of wrapped construction belts is rendered expensive proposition and impractical.

Raw edge belts are best suited for such conditions because of the usage of high grade components that go into the manufacturing of these belts.

### Construction



1. Special Fabric layer
2. Polychloroprene cushion rubber compound
3. Specially treated & stabilised polyester cord
4. Fibre filled polychloroprene
5. Moulded cogs for better flexibility

### Features :

#### Special top layer with fabric

The rigid layer on the top restricts top layer cracking and gives uniform tension on cord ends. Top fabric gives better support & protection from environment.

#### Tough Tensile Member For Greater Strength

Specially treated stabilised polyester cord provides high tensile strength with minimum stretch which in turn gives V-belt superior resistance to fatigue & shock loads.

#### Oil & Heat Resistant

Polychloroprene used throughout the belt provides the oil & heat resistance properties to the belt. It also helps the V-belt resist ozone, sunlight, weather & ageing.

#### Moulded Cogs

Moulded cogs allow the Raw edge cogged belts to operate even over smaller diameter pulley at high speeds. The cogs also help in reducing the bending stress apart from providing the higher surface area for proper heat dissipation.

#### Polychloroprene Cushion Rubber Compound

Ensures the best possible bond between the base compound, the tension cord & rubber impregnated fabric top surface that provides long service without cord separation.

#### Fibre Filled Polychloroprene Base Compound

Gives increased power transmission capability, superior transverse stiffness & high wear resistance.

#### Speed ratios up to 1:14 are possible

This eliminates the need for multi stage drives.

CLASSICAL SECTION : ZX

| Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) |
|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|
| ZX 23          | 584                | ZX 70          | 1778               | ZX 120         | 3048               | ZX 170         | 4318               |
| ZX 25          | 635                | ZX 75          | 1905               | ZX 125         | 3175               | ZX 175         | 4445               |
| ZX 30          | 762                | ZX 80          | 2032               | ZX 130         | 3302               | ZX 180         | 4572               |
| ZX 35          | 889                | ZX 85          | 2159               | ZX 135         | 3429               | ZX 185         | 4699               |
| ZX 40          | 1016               | ZX 90          | 2286               | ZX 140         | 3556               | ZX 190         | 4826               |
| ZX 45          | 1143               | ZX 95          | 2413               | ZX 145         | 3683               | ZX 195         | 4953               |
| ZX 50          | 1270               | ZX 100         | 2540               | ZX 150         | 3810               | ZX 200         | 5080               |
| ZX 55          | 1397               | ZX 105         | 2667               | ZX 155         | 3937               |                |                    |
| ZX 60          | 1524               | ZX 110         | 2794               | ZX 160         | 4064               |                |                    |
| ZX 65          | 1651               | ZX 115         | 2921               | ZX 165         | 4191               |                |                    |

- Unlisted Sizes on request

CLASSICAL SECTION : AX

| Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) |
|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|
| AX 22          | 559                | AX 70          | 1778               | AX 120         | 3048               | AX 170         | 4318               |
| AX 25          | 635                | AX 75          | 1905               | AX 125         | 3175               | AX 175         | 4445               |
| AX 30          | 762                | AX 80          | 2032               | AX 130         | 3302               | AX 180         | 4572               |
| AX 35          | 889                | AX 85          | 2159               | AX 135         | 3429               | AX 185         | 4699               |
| AX 40          | 1016               | AX 90          | 2286               | AX 140         | 3556               | AX 190         | 4826               |
| AX 45          | 1143               | AX 95          | 2413               | AX 145         | 3683               | AX 195         | 4953               |
| AX 50          | 1270               | AX 100         | 2540               | AX 150         | 3810               | AX 200         | 5080               |
| AX 55          | 1397               | AX 105         | 2667               | AX 155         | 3937               |                |                    |
| AX 60          | 1524               | AX 110         | 2794               | AX 160         | 4064               |                |                    |
| AX 65          | 1651               | AX 115         | 2921               | AX 165         | 4191               |                |                    |

- Unlisted Sizes on request

CLASSICAL SECTION : BX

| Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) |
|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|
| BX 21          | 533                | BX 70          | 1778               | BX 120         | 3048               | BX 170         | 4318               |
| BX 25          | 635                | BX 75          | 1905               | BX 125         | 3175               | BX 175         | 4445               |
| BX 30          | 762                | BX 80          | 2032               | BX 130         | 3302               | BX 180         | 4572               |
| BX 35          | 889                | BX 85          | 2159               | BX 135         | 3429               | BX 185         | 4699               |
| BX 40          | 1016               | BX 90          | 2286               | BX 140         | 3556               | BX 190         | 4826               |
| BX 45          | 1143               | BX 95          | 2413               | BX 145         | 3683               | BX 195         | 4953               |
| BX 50          | 1270               | BX 100         | 2540               | BX 150         | 3810               | BX 200         | 5080               |
| BX 55          | 1397               | BX 105         | 2667               | BX 155         | 3937               |                |                    |
| BX 60          | 1524               | BX 110         | 2794               | BX 160         | 4064               |                |                    |
| BX 65          | 1651               | BX 115         | 2921               | BX 165         | 4191               |                |                    |

- Unlisted Sizes on request

CLASSICAL SECTION : CX

| Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) | Belt Reference | Inside Length (mm) |
|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|
| CX 21          | 533                | CX 70          | 1778               | CX 120         | 3048               | CX 170         | 4318               |
| CX 25          | 635                | CX 75          | 1905               | CX 125         | 3175               | CX 175         | 4445               |
| CX 30          | 762                | CX 80          | 2032               | CX 130         | 3302               | CX 180         | 4572               |
| CX 35          | 889                | CX 85          | 2159               | CX 135         | 3429               | CX 185         | 4699               |
| CX 40          | 1016               | CX 90          | 2286               | CX 140         | 3556               | CX 190         | 4826               |
| CX 45          | 1143               | CX 95          | 2413               | CX 145         | 3683               | CX 195         | 4953               |
| CX 50          | 1270               | CX 100         | 2540               | CX 150         | 3810               | CX 200         | 5080               |
| CX 55          | 1397               | CX 105         | 2667               | CX 155         | 3937               |                |                    |
| CX 60          | 1524               | CX 110         | 2794               | CX 160         | 4064               |                |                    |
| CX 65          | 1651               | CX 115         | 2921               | CX 165         | 4191               |                |                    |

- Unlisted Sizes on request

### WEDGE SECTION : XPZ

| Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) |
|----------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|-------------------|
| XPZ 590        | 590               | XPZ 1700       | 1700              | XPZ 2900       | 2900              | XPZ 4100       | 4100              |
| XPZ 600        | 600               | XPZ 1800       | 1800              | XPZ 3000       | 3000              | XPZ 4200       | 4200              |
| XPZ 700        | 700               | XPZ 1900       | 1900              | XPZ 3100       | 3100              | XPZ 4300       | 4300              |
| XPZ 800        | 800               | XPZ 2000       | 2000              | XPZ 3200       | 3200              | XPZ 4400       | 4400              |
| XPZ 900        | 900               | XPZ 2100       | 2100              | XPZ 3300       | 3300              | XPZ 4500       | 4500              |
| XPZ 1000       | 1000              | XPZ 2200       | 2200              | XPZ 3400       | 3400              | XPZ 4600       | 4600              |
| XPZ 1100       | 1100              | XPZ 2300       | 2300              | XPZ 3500       | 3500              | XPZ 4700       | 4700              |
| XPZ 1200       | 1200              | XPZ 2400       | 2400              | XPZ 3600       | 3600              | XPZ 4800       | 4800              |
| XPZ 1300       | 1300              | XPZ 2500       | 2500              | XPZ 3700       | 3700              | XPZ 4900       | 4900              |
| XPZ 1400       | 1400              | XPZ 2600       | 2600              | XPZ 3800       | 3800              | XPZ 5000       | 5000              |
| XPZ 1500       | 1500              | XPZ 2700       | 2700              | XPZ 3900       | 3900              | XPZ 5100       | 5100              |
| XPZ 1600       | 1600              | XPZ 2800       | 2800              | XPZ 4000       | 4000              | XPZ 5117       | 5117              |

- Unlisted Sizes on request

### WEDGE SECTION : XPA

| Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) |
|----------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|-------------------|
| XPA 590        | 590               | XPA 1700       | 1700              | XPA 2900       | 2900              | XPA 4100       | 4100              |
| XPA 600        | 600               | XPA 1800       | 1800              | XPA 3000       | 3000              | XPA 4200       | 4200              |
| XPA 700        | 700               | XPA 1900       | 1900              | XPA 3100       | 3100              | XPA 4300       | 4300              |
| XPA 800        | 800               | XPA 2000       | 2000              | XPA 3200       | 3200              | XPA 4400       | 4400              |
| XPA 900        | 900               | XPA 2100       | 2100              | XPA 3300       | 3300              | XPA 4500       | 4500              |
| XPA 1000       | 1000              | XPA 2200       | 2200              | XPA 3400       | 3400              | XPA 4600       | 4600              |
| XPA 1100       | 1100              | XPA 2300       | 2300              | XPA 3500       | 3500              | XPA 4700       | 4700              |
| XPA 1200       | 1200              | XPA 2400       | 2400              | XPA 3600       | 3600              | XPA 4800       | 4800              |
| XPA 1300       | 1300              | XPA 2500       | 2500              | XPA 3700       | 3700              | XPA 4900       | 4900              |
| XPA 1400       | 1400              | XPA 2600       | 2600              | XPA 3800       | 3800              | XPA 5000       | 5000              |
| XPA 1500       | 1500              | XPA 2700       | 2700              | XPA 3900       | 3900              | XPA 5100       | 5100              |
| XPA 1600       | 1600              | XPA 2800       | 2800              | XPA 4000       | 4000              | XPA 5125       | 5125              |

- Unlisted Sizes on request

### WEDGE SECTION : XPB

| Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) |
|----------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|-------------------|
| XPB 600        | 600               | XPB 1800       | 1800              | XPB 3000       | 3000              | XPB 4200       | 4200              |
| XPB 700        | 700               | XPB 1900       | 1900              | XPB 3100       | 3100              | XPB 4300       | 4300              |
| XPB 800        | 800               | XPB 2000       | 2000              | XPB 3200       | 3200              | XPB 4400       | 4400              |
| XPB 900        | 900               | XPB 2100       | 2100              | XPB 3300       | 3300              | XPB 4500       | 4500              |
| XPB 1000       | 1000              | XPB 2200       | 2200              | XPB 3400       | 3400              | XPB 4600       | 4600              |
| XPB 1100       | 1100              | XPB 2300       | 2300              | XPB 3500       | 3500              | XPB 4700       | 4700              |
| XPB 1200       | 1200              | XPB 2400       | 2400              | XPB 3600       | 3600              | XPB 4800       | 4800              |
| XPB 1300       | 1300              | XPB 2500       | 2500              | XPB 3700       | 3700              | XPB 4900       | 4900              |
| XPB 1400       | 1400              | XPB 2600       | 2600              | XPB 3800       | 3800              | XPB 5000       | 5000              |
| XPB 1500       | 1500              | XPB 2700       | 2700              | XPB 3900       | 3900              | XPB 5100       | 5100              |
| XPB 1600       | 1600              | XPB 2800       | 2800              | XPB 4000       | 4000              | XPB 5140       | 5140              |
| XPB 1700       | 1700              | XPB 2900       | 2900              | XPB 4100       | 4100              |                |                   |

- Unlisted Sizes on request

### WEDGE SECTION : XPC

| Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) | Belt Reference | Pitch Length (mm) |
|----------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|-------------------|
| XPC 600        | 600               | XPC 1800       | 1800              | XPC 3000       | 3000              | XPC 4200       | 4200              |
| XPC 700        | 700               | XPC 1900       | 1900              | XPC 3100       | 3100              | XPC 4300       | 4300              |
| XPC 800        | 800               | XPC 2000       | 2000              | XPC 3200       | 3200              | XPC 4400       | 4400              |
| XPC 900        | 900               | XPC 2100       | 2100              | XPC 3300       | 3300              | XPC 4500       | 4500              |
| XPC 1000       | 1000              | XPC 2200       | 2200              | XPC 3400       | 3400              | XPC 4600       | 4600              |
| XPC 1100       | 1100              | XPC 2300       | 2300              | XPC 3500       | 3500              | XPC 4700       | 4700              |
| XPC 1200       | 1200              | XPC 2400       | 2400              | XPC 3600       | 3600              | XPC 4800       | 4800              |
| XPC 1300       | 1300              | XPC 2500       | 2500              | XPC 3700       | 3700              | XPC 4900       | 4900              |
| XPC 1400       | 1400              | XPC 2600       | 2600              | XPC 3800       | 3800              | XPC 5000       | 5000              |
| XPC 1500       | 1500              | XPC 2700       | 2700              | XPC 3900       | 3900              | XPC 5100       | 5100              |
| XPC 1600       | 1600              | XPC 2800       | 2800              | XPC 4000       | 4000              | XPC 5163       | 5163              |
| XPC 1700       | 1700              | XPC 2900       | 2900              | XPC 4100       | 4100              |                |                   |

- Unlisted Sizes on request

| Belt Reference | Outside Length (mm) | Belt Reference | Outside Length (mm) | Belt Reference | Outside Length (mm) | Belt Reference | Outside Length (mm) |
|----------------|---------------------|----------------|---------------------|----------------|---------------------|----------------|---------------------|
| 3VX 240        | 610                 | 3VX 700        | 1778                | 3VX 1200       | 3048                | 3VX 1700       | 4318                |
| 3VX 250        | 635                 | 3VX 750        | 1905                | 3VX 1250       | 3175                | 3VX 1750       | 4445                |
| 3VX 300        | 762                 | 3VX 800        | 2032                | 3VX 1300       | 3302                | 3VX 1800       | 4572                |
| 3VX 350        | 889                 | 3VX 850        | 2159                | 3VX 1350       | 3429                | 3VX 1850       | 4699                |
| 3VX 400        | 1016                | 3VX 900        | 2286                | 3VX 1400       | 3556                | 3VX 1900       | 4826                |
| 3VX 450        | 1143                | 3VX 950        | 2413                | 3VX 1450       | 3683                | 3VX 1950       | 4953                |
| 3VX 500        | 1270                | 3VX 1000       | 2540                | 3VX 1500       | 3810                | 3VX 2000       | 5080                |
| 3VX 550        | 1397                | 3VX 1050       | 2667                | 3VX 1550       | 3937                | 3VX 2020       | 5131                |
| 3VX 600        | 1524                | 3VX 1100       | 2794                | 3VX 1600       | 4064                |                |                     |
| 3VX 650        | 1651                | 3VX 1150       | 2921                | 3VX 1650       | 4191                |                |                     |

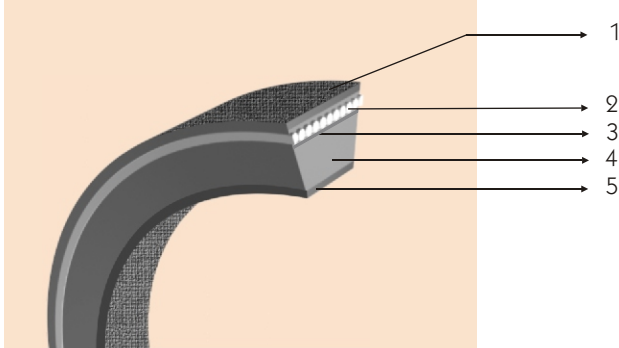
- Unlisted Sizes on request

| Belt Reference | Outside Length (mm) | Belt Reference | Outside Length (mm) | Belt Reference | Outside Length (mm) | Belt Reference | Outside Length (mm) |
|----------------|---------------------|----------------|---------------------|----------------|---------------------|----------------|---------------------|
| 5VX 240        | 610                 | 5VX 700        | 1778                | 5VX 1200       | 3048                | 5VX 1700       | 4318                |
| 5VX 250        | 635                 | 5VX 750        | 1905                | 5VX 1250       | 3175                | 5VX 1750       | 4445                |
| 5VX 300        | 762                 | 5VX 800        | 2032                | 5VX 1300       | 3302                | 5VX 1800       | 4572                |
| 5VX 350        | 889                 | 5VX 850        | 2159                | 5VX 1350       | 3429                | 5VX 1850       | 4699                |
| 5VX 400        | 1016                | 5VX 900        | 2286                | 5VX 1400       | 3556                | 5VX 1900       | 4826                |
| 5VX 450        | 1143                | 5VX 950        | 2413                | 5VX 1450       | 3683                | 5VX 1950       | 4953                |
| 5VX 500        | 1270                | 5VX 1000       | 2540                | 5VX 1500       | 3810                | 5VX 2000       | 5080                |
| 5VX 550        | 1397                | 5VX 1050       | 2667                | 5VX 1550       | 3937                | 5VX 2030       | 5156                |
| 5VX 600        | 1524                | 5VX 1100       | 2794                | 5VX 1600       | 4064                |                |                     |
| 5VX 650        | 1651                | 5VX 1150       | 2921                | 5VX 1650       | 4191                |                |                     |

- Unlisted Sizes on request

## PIX Cut Edge Plain Belts

### Construction



1. Special Top fabric layer
2. Specially treated & stabilised polyester cord
3. Polychloroprene cushion rubber compound
4. Fibre filled polychloroprene base
5. Special bottom fabric layer

### Features:

#### Special top fabric layer

The rigid fabric layer on the top restricts top layer cracking and gives uniform tension on cord ends. Top fabric construction gives better support & protection from environment.

#### Tough tensile member for greater strength

Specially treated stabilised polyester cord provides high tensile strength with minimum stretch which in turns gives V-belt superior resistance to fatigue & shock loads.

#### Oil & heat resistant

Polychloroprene used throughout the belt provides the oil & heat resistance properties to the belt. It also helps the V-belt resist ozone, sunlight, weather & ageing.

#### Polychloroprene cushion rubber compound

Ensures the best possible bond between the base compound, the tension cord & the rubber impregnated fabric top surface that provides long service without cord separation.

#### Fibre filled polychloroprene base compound

Gives increased power transmissions capability, superior transverse stiffness & high wear resistance.

### Range

#### Sections

Same as that of Cut Edge Cogged belts

#### Size

Same as that of Cut Edge Cogged belts, maximum up to 200 inches

## BELTS WITH SPECIAL CONSTRUCTION

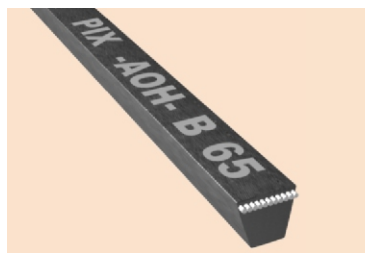
### Oil & Heat Resistant

#### PIX AOH V-BELTS

##### Range : Classical, Wedge & Narrow V-Belts

Continuous contact with oil & grease has harmful effect on belt life. The heat resistant properties of regular construction belts allow drive operations in ambient temperature upto 60°C (Wrap belts). Ambient temperature above 60°C may lead to premature ageing of the belt. For both these conditions PIX AOH Belts are to be used.

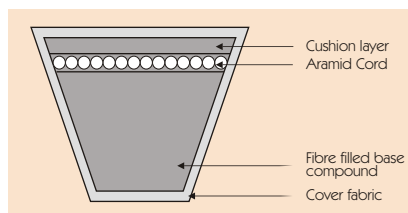
Its special oil resistant cover protects the belt from contamination. Also these belts have been developed to work in ambient temperature upto 100°C. PIX AOH belts are also anti-static.



### PIX Belts with Aramid Tension Cord

Aramid is an organic polyamide fibre that is manufactured using complex chemical processes. They are generally used where the power transmission requirements are very critical, apart from space restrictions on the installation and take up allowances permissible. Aramid is used as tension member in such cases because of its inherent & high tensile strength.

| Cord      | Tensile Strength<br>lb/in2 | % Elongation<br>at break |
|-----------|----------------------------|--------------------------|
| Polyester | 162000                     | 14                       |
| Aramid    | 400000                     | 4                        |



PIX aramid construction belts are specially suggested where :

- High levels of power transmission are required
- There are restrictions on the drive width
- The installation & take up allowances are minimal
- The drive is critical

Thus the usage of PIX aramid belts significantly increases the power transmissions with the same number. The drive design calculation associated with this belt is similar to the standard drive design procedure except that the higher power ratings have to be considered. For further information kindly call on our Technical Services Department.

### Fire Resistant & Anti-Static

#### PIX FRAS V-BELTS

##### Range : Classical, Wedge & Narrow V-Belts

Certain working environments such as coal mines & sensitive petro chemical installations require V-belts having fire resistant properties in addition to normal anti-static properties.

PIX FRAS belts are suitable for such environments. This construction is thoroughly tested during & after manufacture, to comply with all aspects of IS-2494 Part - II & BS-3790. FRAS Belts are also certified by ATEX.

Conforms to : II 2GD dIB X  
(Test report no. IB-03-4-934) - ATEX

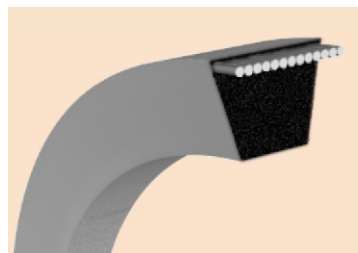


### Dry Cover

#### PIX DC V-BELTS

##### Range : Classical, Wedge & Narrow V-Belts

It is suitable for drives having clutch applications, lawn movers, chemical industries where contamination is not acceptable. Basically manufactured in Blue colour. Can also be supplied in green, brown, red, black & white colours. Available in polyester as well as aramid constructions.



## PIX AUTOMOTIVE BELTS

PIX Automotive belts are specially designed to cater to the needs of automotive industries. These belts are suitable to drive various accessories in automobile such as charging system, water pump, power steering pump, A/C compressors. The PIX automotive belts are available in Wrap construction/ Cut Edge/Ribbed.

| Section        | 9.5/AV10 | 12.5/AV13 | X9.5/AVX10 | X12.5/AVX13 |
|----------------|----------|-----------|------------|-------------|
| Top width (mm) | 9.5      | 12.5      | 10.0       | 13.0        |
| Thickness (mm) | 8.0      | 10.0      | 8.0        | 10.0        |
| Angle (deg)    | 40       | 40        | 36         | 36          |

## BELTS WITH SPECIAL CONSTRUCTION

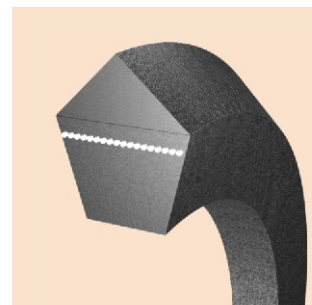
### PIX Profile Belts

In some of the applications it is desired that the belt used to transmit the power should also convey material.

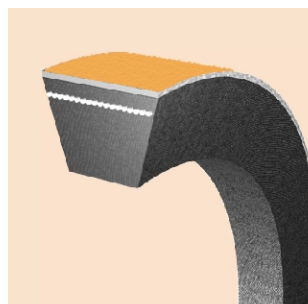
In such cases, the V-belt needs to have a special construction depending on the type of material to be conveyed. PIX manufactures these type of belts to cater to such applications.

| Patterns   | Height of Pattern |        | Pitch |
|------------|-------------------|--------|-------|
|            | Std mm            | Max mm |       |
| PT - 0     | 3                 | 5      | 10    |
| PT - 1     | 3                 | 5      |       |
| PT - 6 (B) | -                 | 15     |       |
| PT - 6 (C) | -                 | 11     |       |
| PT - 7     | -                 | 7      |       |
| PT - HC    | 8                 | 12     |       |
| PT - 2TP   | 6                 | -      |       |

NOTE : Other profiles can be manufactured on request.

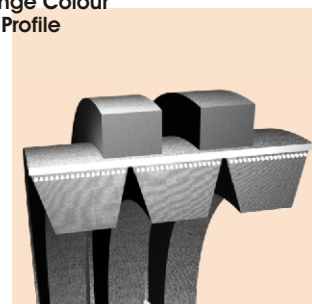


PT - 6

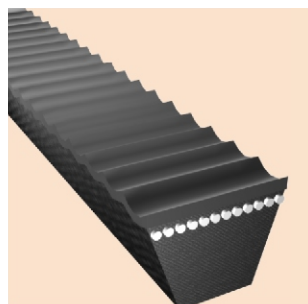


PT - HC

Orange Colour  
Top Profile



PT - 2TP



PT - 7



PT - 0

## FRACTIONAL HORSE POWER BELTS (FHP/M)

These belts are mainly used on Fractional Horse Power motors installed mainly in domestic appliances.

| Series            | 2000       |
|-------------------|------------|
| Top width (mm)    | 10         |
| Thickness (mm)    | 6.0        |
| Angle (deg)       | 40         |
| Range La (inches) | 11" - 173" |

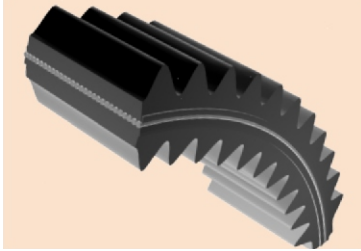
## LIGHT DUTY SINGLE V-BELT

These belts are used for a smaller sized machineries installed in the household appliances. These belts are available in three different sections to meet the varying requirements.

| Series            | 3L         | 4L       | 4L       |
|-------------------|------------|----------|----------|
| Top width (mm)    | 10         | 13       | 17       |
| Thickness (mm)    | 6          | 8        | 10       |
| Angle (deg)       | 40         | 40       | 40       |
| Range La (inches) | 10.5"-160" | 15"-360" | 21"-220" |

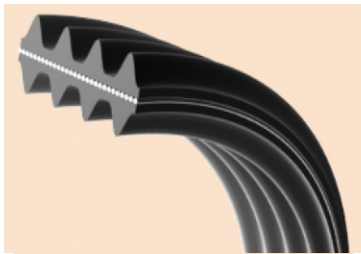
## BELTS WITH SPECIAL CONSTRUCTION

### DOUBLE COG BELT



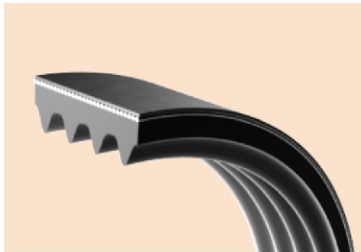
This special construction allows the use of belt on small pulley diameters due to increased flexibility.

### DOUBLE POLY BELT



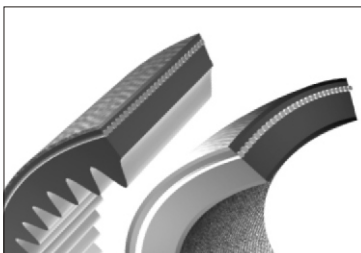
These belts are recommended to be used on applications demanding clockwise & anti-clockwise rotations. Belts can be used from both the sides. It facilitates use of very small diameter pulleys.

### ELASTICATED BELT (PJ & PH)



Specially designed poly belts of PJ & PH section for washing machines. These belts are with elastic properties which are useful in certain applications like washing machines.

### HEAVY DUTY VARIABLE SPEED BELTS



Specially designed to withstand the high ambient temperature & oily conditions, generally encountered in adjustable speed applications.

## FREE SET CONCEPT

### FEW GOOD REASONS FOR USING IT

- No length code
- Low variation in length tolerance
- Less Centre adjustment
- Low stretch
- Low variation in elongation within a set of belts.
- Power transmitted more evenly
- Longer life
- Longer maintenance intervals
- Less inventory

### PIX FREE SET BELT TENSIONING

PIX free set belts are built with exceptionally close belt length tolerances by virtue of latest belt manufacturing technology. Further PIX belt length remains matched during storage and on the drive.

Install PIX belts on the pulleys by giving correct tensioning (Ref. Table A, Page 90). Run the belts under full load for approx. 24 hours. Stop the drive and check the tension. If necessary retension the belts (Ref. Table A, Page 90). Normally no further retensioning is required in Pix Free Set Belts in future.

## PIX' FREE SET V-BELTS

| Nominal Length                   |                              | Tolerance in Length<br>(In mm) |
|----------------------------------|------------------------------|--------------------------------|
| Up to 1905 mm                    | (75 inches)                  | $\pm 1$                        |
| Beyond 1905 mm<br>Up to 3150 mm  | (75 inches)<br>(124 inches)  | $\pm 2$                        |
| Beyond 3150 mm<br>Up to 5004 mm  | (124 inches)<br>(197 inches) | $\pm 3$                        |
| Beyond 5004 mm<br>Up to 8992 mm  | (197 inches)<br>(354 inches) | $\pm 4$                        |
| Beyond 8992 mm<br>Up to 16002 mm | (354 inches)<br>(630 inches) | $\pm 6$                        |

All 'PIX FREE SET' V-Belts are produced in the above length Tolerance Range. However, V-Belts normally shrink during storage which varies due to varying climate conditions. This shrinkage is a reversible process and the FREE SET V-BELTS would resume their original length on fitment and after initial run. Also this does not affect the working performance of the FREE SET V-Belts in anyway.

**Tolerances maintained for FREE SET belts are more stringent than BS-3790.**

## DRIVE DESIGN PROCEDURE FOR V-BELTS

To obtain the best performance from V-Belts, It is necessary to design the drive correctly.

The procedure for the same is as follows.

### STEP 1 Calculate Speed Ratio ( $S_r$ )

$$\text{Speed Ratio } (S_r) = \frac{\text{r. p. m. of faster shaft } (R)}{\text{r. p. m. of slower shaft } (r)}$$

### STEP 2 Select Service Factor (K)

Service factor is obtained from Table 1 on page 42

### STEP 3 Calculate Design Power ( $P_d$ )

$$\text{Design Power } (P_d) = \text{Power } (P) \times \text{Service Factor } (K)$$

### STEP 4 Select Belt Cross Section

Belt cross section is obtained from charts I, II & III on pages 43 to 45. When the point of intersection falls on or near the dividing line, feasibility of both cross sections should be checked.

### STEP 5 Select Pulley Pitch Diameters

Refer Tables 2 & 3 on pages 46 & 47 for selecting pulley pitch diameters. Try to avoid use of non standards pulleys but in some cases, it is necessary if the exact ratios are not covered by standard pulleys.

### STEP 6 Calculate Belt Pitch Length ( $L_p$ ) and Centre Distance (C)

$$\text{Belt Pitch Length } (L_p) = 2C + 1.57 (D+d) + \frac{(D-d)^2}{4C}$$

Where D & d are pitch diameters of larger & smaller pulleys respectively.

If the Belt Pitch Length comes in a fraction, use next whole / round-off length.

If there is a space constraint or centre distance limitation, use the same calculated length. If so, exact centre distance calculations are not required again.

Calculate the exact centre distance by the formula

$$C = A + \sqrt{A^2 - B}$$

$$\text{Where, } A = \frac{L}{4} - 0.3925 (D + d) \text{ and}$$

$$B = \frac{(D - d)^2}{8}$$

### STEP 7 Determine Power Rating (P)

Refer power rating Tables from 4 to 26 on pages 48 to 83 for different belt sections.

Power rating per belt (P) = Rated power + Additional power for speed ratio

### STEP 8 Find Arc of Contact Correction Factor ( $F_c$ ) & Belt Length correction Factor ( $F_d$ )

Refer tables 27 & 28 on page 84 for Arc of Contact Correction Factor & Belt Pitch Length Correction Factor respectively.

### STEP 9 Find Number of Belts (N)

$$\text{Number of Belts } (N) = \frac{P_d}{P \times F_c \times F_d}$$

If the number of belts comes in a fraction, use next whole number.

### STEP 10 SUMMARY

- 1) Smaller & larger pulley pitch diameters & number of grooves obtained.
- 2) Number of belts along with size & section obtained.

## DRIVE DESIGN EXAMPLE (CLASSICAL)

**CONDITION 1 :** Prime mover A. C. Motor; 75kw, 1450 r.p.m. (DRIVER)

**CONDITION 2 :** Reciprocating pump, 310 r.p.m., 18 hrs. per day.

**CONDITION 3 :** Approximate centre distance 1050 mm

| STEPS          | FORMULAE   | CALCULATIONS  |
|----------------|--|---|
| <b>STEP 1</b>  | Speed Ratio ( $S_r$ ) = $R/r$  | See above given condition 1 & 2<br>$S_r = R/r = 1450/310 = 4.67$  |
| <b>STEP 2</b>  | Service factor (K) from Table 1 on page 42   | $K = 1.4$   |
| <b>STEP 3</b>  | Design power ( $P_d$ ) = $P \times K$  | $P_d = 75 \times 1.4 = 105 \text{ kw}$  |
| <b>STEP 4</b>  | Belt cross section refer chart I on page 43  | Belt section indicated is "C"   |
| <b>STEP 5</b>  | Pulley pitch diameters from Table 2 page 46  | $d = 212 \text{ mm}, D = 990 \text{ mm}$  |
| <b>STEP 6</b>  | Belt pitch length ( $L_p$ ) & Centre dist. (C)<br>$L_p = 2C + 1.57 (D + d) + \frac{(D - d)^2}{4C}$<br>Choose the nearest standard $L_p$ from page 10.<br>$C = A + \sqrt{A^2 - B}$<br>$A = \frac{L}{4} - 0.3925 (D + d)$<br>$B = \frac{(D - d)^2}{8}$ | $L_p = 2(1050) + 1.57 (990 + 212) + \frac{(990 - 212)^2}{4 \times 1050}$<br>$L_p = 4131.25 \text{ mm}$<br>Standard $L_p = 4120 \text{ mm}$<br>$C = A + \sqrt{A^2 - B}$<br>$A = \frac{4120}{4} - 0.3925 (990 + 212)$<br>$= 1030 - 471.78 \quad A = 558.22$<br>$B = \frac{(990 - 212)^2}{8} = 75660.5$<br>$C = 558.22 + \sqrt{(558.22)^2 - (75660.5)}$<br>$C = 1044 \text{ mm}$ |
| <b>STEP 7</b>  | Power rating (P) = Rated power + Additional power for speed ratio from Table 9 on page 56  | $P = 10.94 \text{ kw} + 1.48 \text{ kw}$<br>$P = 12.42 \text{ kw}$  |
| <b>STEP 8</b>  | Arc of contact correction factor ( $F_c$ ) from table 27 on page 84<br>Belt pitch length correction factor ( $F_d$ ) from table 28 on page 84  | $F_c = 0.88$<br>$F_d = 1.03$  |
| <b>STEP 9</b>  | Number of belts (N) = $\frac{P_d}{P \times F_c \times F_d}$  | $N = \frac{105}{12.42 \times 0.88 \times 1.03} = 9.32 \text{ (say 10 belts)}$   |
| <b>STEP 10</b> | <b>Summary :</b><br>1. Smaller pulley fitted to prime mover<br>2. Larger pulley fitted to reciprocating pump<br>3. Classical belts required<br>4. Centre Distance  | Smaller pulley of 212 mm pitch dia. with 10 grooves of "C" section.<br>Larger pulley of 990 mm pitch dia. with 10 grooves of "C" section.<br>10 belts of "C" section each of 4120 mm pitch length<br>1044 mm  |

## DRIVE DESIGN EXAMPLE (WEDGE)

**CONDITION 1 :** Normal torque A. C. Electric Motor 6 kw, 1440 rpm (DRIVER)

**CONDITION 2 :** Centrifugal pump 720 rpm, continuous running

**CONDITION 3 :** Approximate centre distance 550 mm

| STEPS          | FORMULAE   | CALCULATIONS  |
|----------------|--|---|
| <b>STEP 1</b>  | Speed Ratio ( $S_r$ ) = $R/r$  | See above given condition 1 & 2<br>$S_r = R/r = 1440/720 = 2$   |
| <b>STEP 2</b>  | Service factor (K) from Table 1 on page 42   | $K = 1.2$   |
| <b>STEP 3</b>  | Design power ( $P_d$ ) = $P \times K$  | $P_d = 6 \times 1.2 = 7.2 \text{ kw}$   |
| <b>STEP 4</b>  | Belt cross section refer chart II on page 44   | Belt section indicated is "SPZ"   |
| <b>STEP 5</b>  | Pulley pitch diameters from Table 2 page 46  | $d = 80 \text{ mm}, D = 160 \text{ mm}$   |
| <b>STEP 6</b>  | Belt pitch length ( $L_p$ ) & Centre dist. (C)<br><br>$L_p = 2C + 1.57 (D + d) + \frac{(D - d)^2}{4C}$<br><br>Choose the nearest standard $L_p$ from page 14.<br><br>$C = A + \sqrt{A^2 - B}$<br><br>$A = \frac{L}{4} - 0.3925 (D + d)$<br><br>$B = \frac{(D - d)^2}{8}$ | $L_p = 2(550) + 1.57 (160 + 80) + \frac{(160 - 80)^2}{4 \times 550}$<br><br>$L_p = 1480 \text{ mm}$<br>Standard $L_p = 1500 \text{ mm}$<br><br>$C = A + \sqrt{A^2 - B}$<br><br>$A = \frac{1500}{4} - 0.3925 (160 + 80)$<br>$= 375 - 94.2 \quad A = 280.8$<br><br>$B = \frac{(160 - 80)^2}{8} = 800$<br>$C = 280.8 + \sqrt{(280.8)^2 - (800)}$<br>$C = 560 \text{ mm}$ |
| <b>STEP 7</b>  | Power rating (P) = Rated power + Additional power for speed ratio from Table 13 on page 63   | $P = 1.79 \text{ kw} + 0.23 \text{ kw}$<br>$= 2.02 \text{ kw}$  |
| <b>STEP 8</b>  | Arc of contact correction factor ( $F_c$ ) from table 27 on page 84<br>Belt pitch length correction factor ( $F_d$ ) from table 28 on page 84  | $F_c = 0.98$<br>$F_d = 0.99$  |
| <b>STEP 9</b>  | Number of belts (N) = $\frac{P_d}{P \times F_c \times F_d}$  | $N = \frac{7.2}{2.02 \times 0.98 \times 0.99} = 3.67 \text{ (say 4 belts)}$   |
| <b>STEP 10</b> | <b>Summary :</b><br><br>1. Smaller pulley fitted to electric motor shaft<br><br>2. Larger pulley fitted to pump shaft<br><br>3. Wedge belts required<br><br>4. Centre distance   | Smaller pulley of 80 mm pitch dia. With 4 grooves of "SPZ" section.<br><br>Larger pulley of 160 mm pitch dia. With 4 grooves of "SPZ" section.<br><br>4 belts of "SPZ" section each of 1500 mm pitch length.<br><br>560 mm  |

## DRIVE DESIGN EXAMPLE (CUT EDGE COGGED)

**CONDITION 1 :** Prime mover A. C. Motor; 75 kw, 1450 r.p.m. (DRIVER)

**CONDITION 2 :** Reciprocating pump, 310 r.p.m., 18 hrs. per day.

**CONDITION 3 :** Approximate centre distance 900 mm

| STEPS          | FORMULAE   | CALCULATIONS   |
|----------------|--|--|
| <b>STEP 1</b>  | Speed Ratio ( $S_r$ ) = $R/r$  | See above given condition 1 & 2<br>$S_r = R/r = 1450/310 = 4.67$   |
| <b>STEP 2</b>  | Service factor (K) from Table 1 on page 42   | $K = 1.4$  |
| <b>STEP 3</b>  | Design power ( $P_d$ ) = $P \times K$  | $P_d = 75 \times 1.4 = 105 \text{ kw}$   |
| <b>STEP 4</b>  | Belt cross section refer chart II on page 44   | Belt section indicated is "XPB"  |
| <b>STEP 5</b>  | Pulley pitch diameters from Table 3, page 47   | $d = 125 \text{ mm}, D = 584 \text{ mm}$   |
| <b>STEP 6</b>  | Belt pitch length ( $L_p$ ) & Centre dist. (C)<br>$L_p = 2C + 1.57 (D + d) + \frac{(D - d)^2}{4C}$<br>Choose the nearest standard $L_p$ from page 31.<br>$C = A + \sqrt{A^2 - B}$<br>$A = \frac{L}{4} - 0.3925 (D + d)$<br>$B = \frac{(D - d)^2}{8}$ | $L_p = 2(900) + 1.57 (584 + 125) + \frac{(584 - 125)^2}{4 \times 900}$<br>$L_p = 2972 \text{ mm}$<br>Standard $L_p = 3000 \text{ mm}$<br>$C = A + \sqrt{A^2 - B}$<br>$A = \frac{3000}{4} - 0.3925 (584 + 125)$<br>$= 750 - 278.28 \quad A = 471.72$<br>$B = \frac{(584 - 125)^2}{8} = 26335.125$<br>$C = 471.72 + \sqrt{(471.72)^2 - (26335.125)}$<br>$C = 915 \text{ mm}$ |
| <b>STEP 7</b>  | Power rating (P) = Rated power + Additional power for speed ratio from Table 25 on page 80 & 81  | $P = 6.97 \text{ kw} + 1.03 \text{ kw}$<br>$P = 8 \text{ kw}$  |
| <b>STEP 8</b>  | Arc of contact correction factor ( $F_c$ ) from table 27 on page 84<br>Belt pitch length correction factor ( $F_d$ ) from table 28 on page 84  | $F_c = 0.93$<br>$F_d = 0.99$   |
| <b>STEP 9</b>  | Number of belts (N) = $\frac{P_d}{P \times F_c \times F_d}$  | $N = \frac{105}{8 \times 0.93 \times 0.99} = 14.25 \text{ (say 15 belts)}$   |
| <b>STEP 10</b> | <b>Summary:</b><br><br>1. Smaller pulley fitted to prime mover<br><br>2. Larger pulley fitted to reciprocating pump<br><br>3. Cut Edge Cogged belts required<br><br>4. Centre distance   | <br><br>Smaller pulley of 125 mm pitch diameter with 15 grooves of "XPB" section.<br><br>Larger pulley of 584 mm pitch diameter with 15 grooves of "XPB" section.<br><br>15 belts of "XPB" section each of 3000 mm pitch length.<br><br>915 mm   |

**TABLE 1**  
**SERVICE FACTORS FOR BELT DRIVES (SEE NOTE 1)**

| TYPE OF DRIVEN MACHINE  |               | SERVICE FACTOR |               |         |               |               |         |
|---|---------------|----------------|---------------|---------|---------------|---------------|---------|
| EXAMPLES  | WORKING HOURS | SOFT START +   |               |         | HEAVY START # |               |         |
|   |               | 10 & UNDER     | OVER 10 TO 16 | OVER 16 | 10 & UNDER    | OVER 10 TO 16 | OVER 16 |
| <b>Class 1 : LIGHT DUTY</b><br>Agitators (uniform density), Blowers<br>Exhausts & fans (up to 7.5 kw), Centrifugal compressors & pumps, Belt conveyors (uniformly loaded)   |               | 1.0            | 1.1           | 1.2     | 1.1           | 1.2           | 1.3     |
| <b>Class 2 : MEDIUM DUTY</b><br>Agitators & mixers (variable density), Blowers, Exhausts & fans (over 7.5 kw), Rotary compressors & pumps (other than centrifugal), Belt conveyors (not uniformly loaded), Generators & exciters, laundry machinery, line shafts, machine tools, printing machinery, saw mill & wood working machinery, screens (rotary). |               | 1.1            | 1.2           | 1.3     | 1.2           | 1.3           | 1.4     |
| <b>Class 3 : HEAVY DUTY</b><br>Brick machinery, bucket elevators, compressors & pumps (reciprocating), conveyors (heavy duty), hoists, mills (hammer), pulverisers, punches, presses, shears, quarry plant, rubber machinery, screens (vibrating), textile machinery  |               | 1.2            | 1.3           | 1.4     | 1.4           | 1.5           | 1.6     |
| <b>Class 4 : EXTRA HEAVY DUTY</b><br>Crushers (gyratory jaw - roll)<br>Mills (ball - rod - tube)  |               | 1.3            | 1.4           | 1.5     | 1.5           | 1.6           | 1.8     |

**FOR SPEED - INCREASING DRIVES OF**

Speed ratio 1.00 to 1.24 : Multiply service factor by 1.00  
 Speed ratio 1.25 to 1.74 : Multiply service factor by 1.05  
 Speed ratio 1.75 to 2.49 : Multiply service factor by 1.11  
 Speed ratio 2.50 to 3.49 : Multiply service factor by 1.18  
 Speed ratio 3.50 & over : Multiply service factor by 1.25

+ E.g. electric motors (a.c. start, delta start, d.c. shunt wound), internal combustion engines with four or more cylinders, all prime movers fitted with centrifugal clutches, dry or fluid couplings.

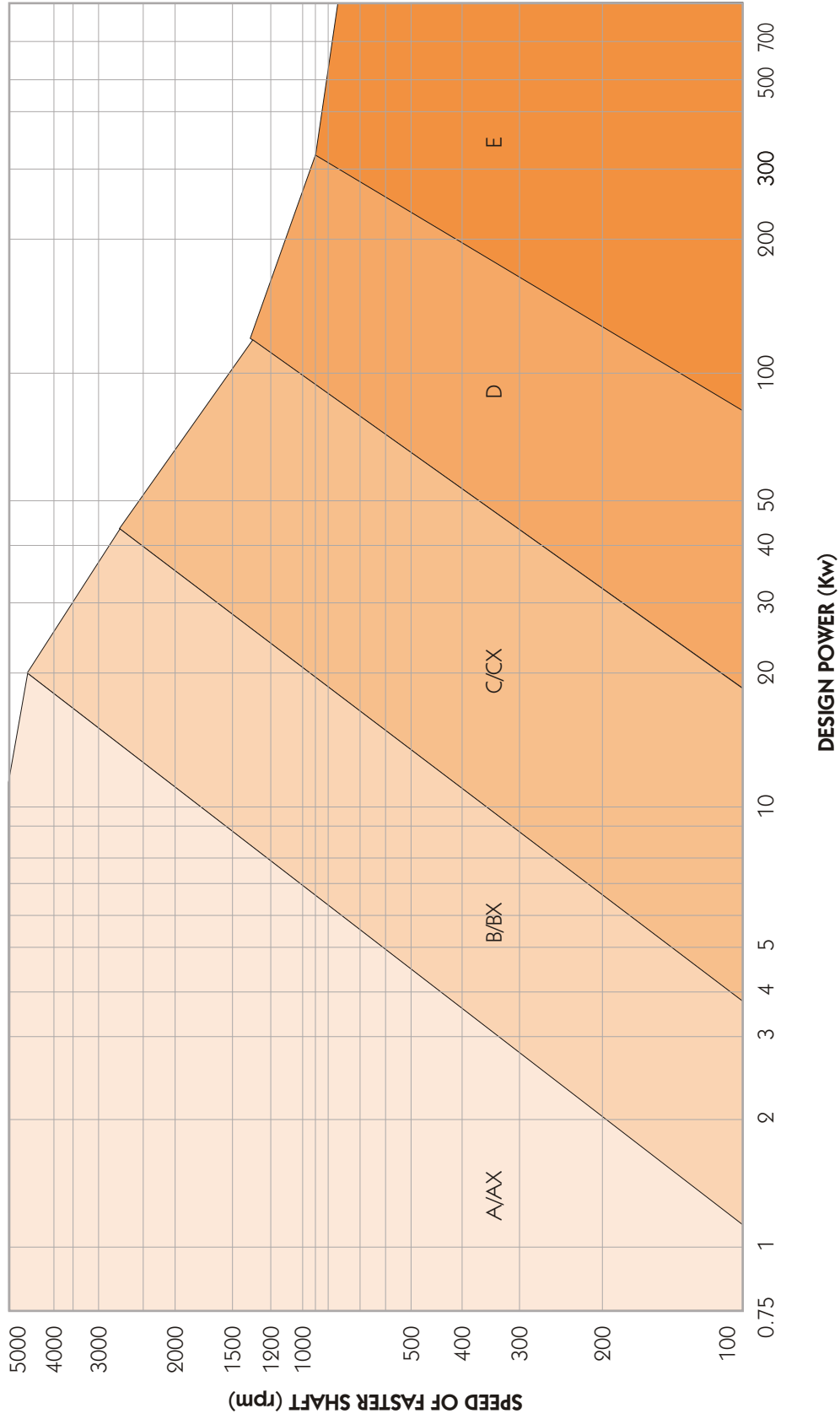
+ E.g. Electric motors (a.c. direct -on - line start, d.c. series & compound wound), internal combustion engines with less than four cylinders.

**SPECIAL CONDITIONS**

- 1) For reversing drives, except where high torque is not present on starting, add 20% to the factors.
- 2) Idler pulley on slack side (internal), no addition to the factors.
- 3) Idler pulley on tight side (internal), add 0.1 to the factors.

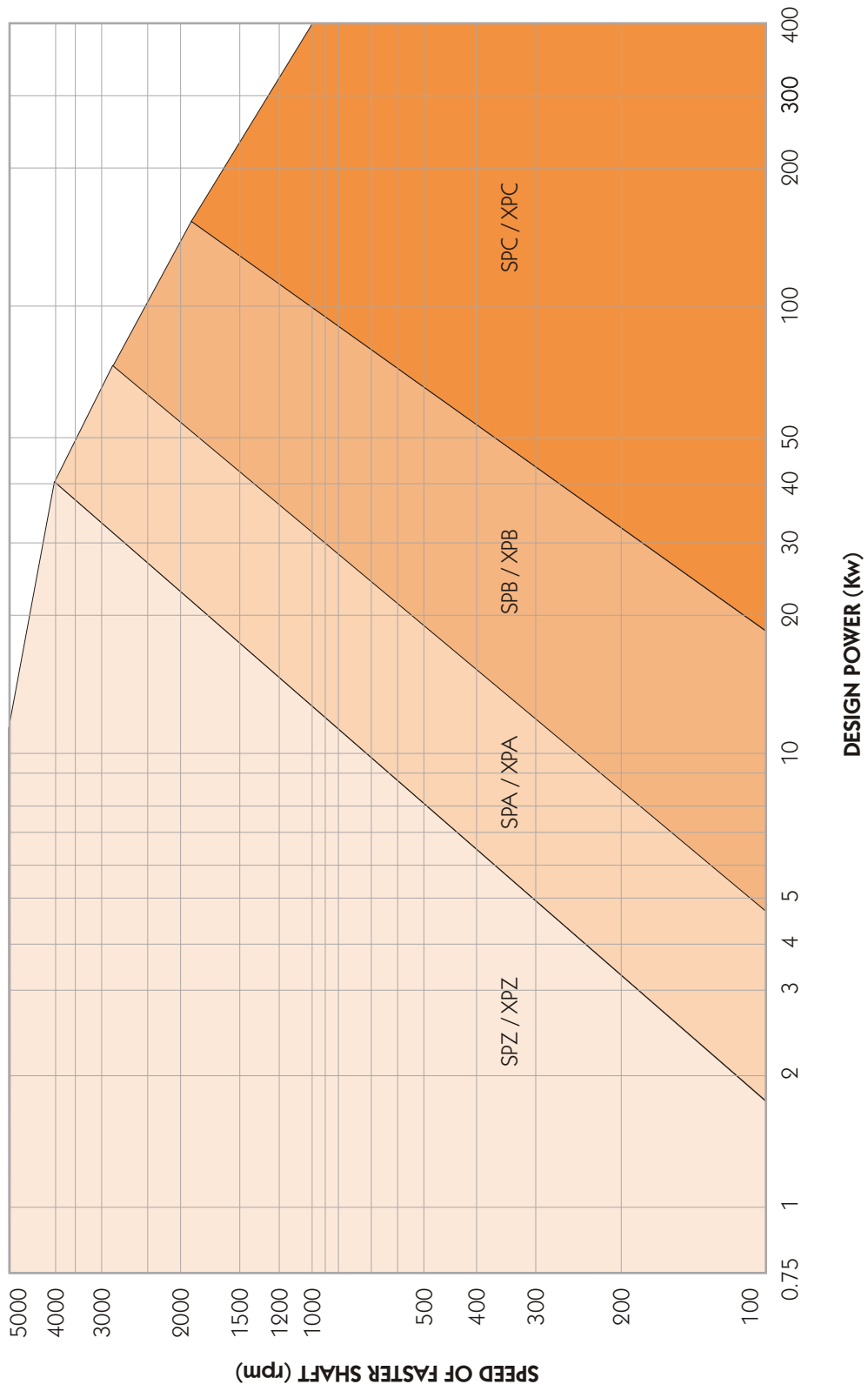
NOTE 1 : The service factors in table 1 do not apply to light duty drives using Z or Y section belts; PIX should be consulted.

NOTE 2 : The use of an idler pulley on the outside of belt is not recommended.



**NOTE :** Z section belts should be used for low power, small pulley diameter applications and should be selected only when pulley diameters are smaller than the recommended minimum for A section belts.

**CHART I : SELECTION OF V-BELTS CROSS SECTION**



CHARTII : SELECTION OF V-BELTS CROSS SECTION

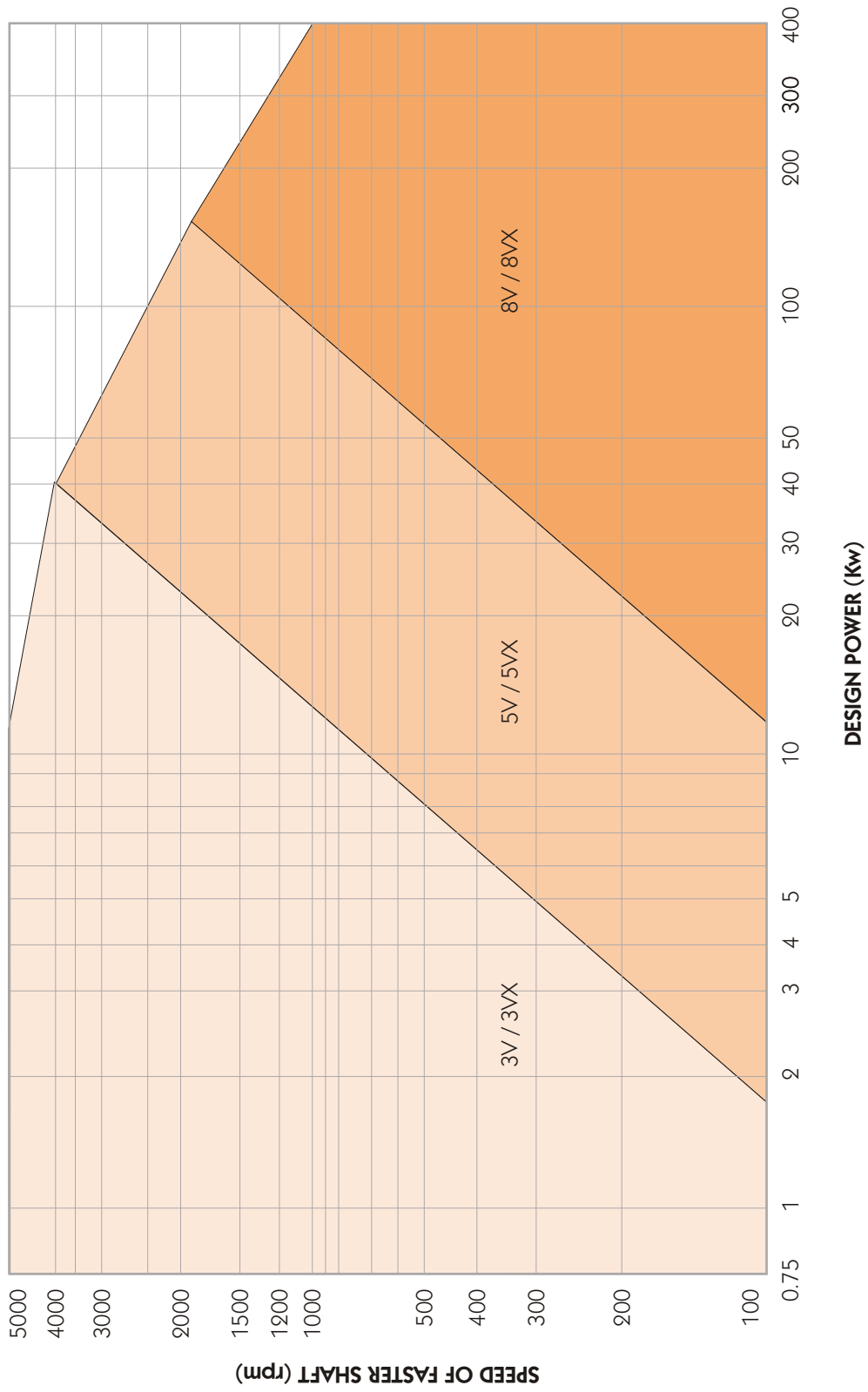


CHART III : SELECTION OF V-BELTS CROSS SECTION

**TABLE 2 - STANDARD PULLEY DIAMETERS FOR FASTER SHAFT  
(V-BELTS)**

| 8  | Z   | A   | B   | 20  | C   | 25  | D    | E    | SPZ/3V | SPA | SPB/5V | 19  | SPC  | 8V  |
|----|-----|-----|-----|-----|-----|-----|------|------|--------|-----|--------|-----|------|-----|
| 35 | 45  | 71  | 106 | 140 | 170 | 224 | 315  | 400  | 63     | 80  | 125    | 180 | 200  | 315 |
| 40 | 50  | 75  | 112 | 160 | 180 | 236 | 335  | 500  | 67     | 85  | 132    | 200 | 224  | 335 |
| 45 | 53  | 80  | 118 | 180 | 190 | 250 | 355  | 560  | 71     | 90  | 140    | 224 | 236  | 355 |
| 50 | 56  | 85  | 125 | 200 | 200 | 280 | 375  | 630  | 75     | 95  | 150    | 236 | 250  | 375 |
| 56 | 60  | 90  | 132 | 224 | 212 | 315 | 400  | 670  | 80     | 100 | 160    | 250 | 265  | 400 |
| 63 | 63  | 95  | 140 | 236 | 224 | 355 | 425  | 710  | 85     | 106 | 170    | 280 | 280  | 425 |
| 71 | 67  | 100 | 150 | 250 | 236 | 400 | 450  | 750  | 90     | 112 | 180    | 315 | 300  | 450 |
| 80 | 71  | 106 | 160 | 280 | 250 | 450 | 475  | 800  | 95     | 118 | 190    | 355 | 315  | 475 |
| 90 | 75  | 112 | 170 | 315 | 265 | 500 | 500  | 860  | 100    | 125 | 200    | 375 | 335  | 500 |
|    | 80  | 118 | 180 | 355 | 280 | 560 | 530  | 900  | 106    | 132 | 212    | 400 | 355  | 530 |
|    | 85  | 125 | 190 | 400 | 300 | 630 | 560  | 950  | 112    | 140 | 224    | 450 | 375  | 560 |
|    | 90  | 132 | 200 | 450 | 315 | 710 | 600  | 1000 | 118    | 150 | 236    | 500 | 400  | 600 |
|    | 95  | 140 | 212 | 500 | 335 | 800 | 630  | 1120 | 125    | 160 | 250    | 560 | 450  | 630 |
|    | 100 | 150 | 224 |     | 355 |     | 670  | 1250 | 132    | 170 | 265    | 630 | 500  | 670 |
|    | 112 | 160 | 236 |     | 375 |     | 710  | 1400 | 140    | 180 | 280    |     | 560  | 710 |
|    | 125 | 180 | 250 |     | 400 |     | 750  | 1600 | 150    | 190 | 315    |     | 630  | 750 |
|    | 140 | 200 | 280 |     | 450 |     | 800  |      | 160    | 200 | 355    |     | 710  | 800 |
|    | 160 | 224 | 315 |     | 500 |     | 900  |      | 180    | 224 | 375    |     | 800  |     |
|    | 180 |     | 355 |     | 560 |     | 1000 |      | 200    | 250 | 400    |     | 1000 |     |
|    |     |     |     |     | 630 |     |      |      | 224    | 280 | 450    |     |      |     |
|    |     |     |     |     | 800 |     |      |      |        | 315 | 500    |     |      |     |

**TABLE 3 - STANDARD PULLEY DIAMETERS FOR FASTER SHAFT  
(CUT EDGE COGGED)**

| ZX  | AX  | BX  | CX  | XPZ/3VX | XPA | XPB/5VX | XPC |
|-----|-----|-----|-----|---------|-----|---------|-----|
| 40  | 63  | 90  | 140 | 50      | 63  | 100     | 160 |
| 45  | 71  | 100 | 150 | 56      | 71  | 112     | 180 |
| 50  | 80  | 106 | 160 | 60      | 75  | 118     | 190 |
| 56  | 90  | 112 | 180 | 63      | 80  | 125     | 200 |
| 63  | 95  | 118 | 200 | 71      | 85  | 132     | 212 |
| 71  | 100 | 125 | 224 | 80      | 90  | 140     | 224 |
| 80  | 106 | 132 | 250 | 85      | 95  | 150     | 236 |
| 90  | 112 | 140 | 280 | 90      | 100 | 160     | 250 |
| 100 | 118 | 160 | 315 | 95      | 106 | 170     | 265 |
| 112 | 125 | 180 | 335 | 100     | 112 | 180     | 280 |
| 125 | 132 | 190 | 355 | 112     | 118 | 190     | 315 |
| 140 | 140 | 200 | 400 | 125     | 125 | 200     | 335 |
| 160 | 150 | 212 | 450 | 140     | 132 | 212     | 355 |
|     | 160 | 224 | 500 | 160     | 140 | 224     | 400 |
|     | 180 | 250 | 630 | 180     | 150 | 236     | 450 |
|     | 200 | 280 |     | 200     | 160 | 250     | 500 |
|     |     | 315 |     |         | 170 | 280     | 560 |
|     |     |     |     |         | 180 | 315     | 630 |
|     |     |     |     |         | 190 | 355     | 710 |
|     |     |     |     |         | 200 | 400     |     |
|     |     |     |     |         | 224 |         |     |
|     |     |     |     |         | 250 |         |     |
|     |     |     |     |         | 280 |         |     |

**TABLE 4 Section 8**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |      |      |      |      |      |      |      |      | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |                  |
|----------|---|------|------|------|------|------|------|------|------|--|--------------------|--------------------|------------------|
|          | 35  | 40   | 45   | 50   | 56   | 63   | 71   | 80   | 90   | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>><br>1.57 |
| 700      | 0.12                                      | 0.15 | 0.18 | 0.21 | 0.25 | 0.29 | 0.33 | 0.39 | 0.44 | 0.00   | 0.01               | 0.01               | 0.01             |
| 950      | 0.15                                      | 0.18 | 0.22 | 0.26 | 0.31 | 0.36 | 0.43 | 0.49 | 0.56 | 0.00   | 0.01               | 0.02               | 0.02             |
| 1450     | 0.19                                      | 0.25 | 0.30 | 0.36 | 0.43 | 0.50 | 0.59 | 0.68 | 0.68 | 0.00   | 0.02               | 0.03               | 0.03             |
| 2850     | 0.28                                      | 0.37 | 0.47 | 0.57 | 0.68 | 0.81 | 0.95 | 1.10 | 1.26 | 0.01   | 0.03               | 0.05               | 0.06             |
| 100      | 0.02                                      | 0.03 | 0.03 | 0.04 | 0.05 | 0.05 | 0.06 | 0.07 | 0.08 | 0.00   | 0.00               | 0.00               | 0.00             |
| 200      | 0.04                                      | 0.05 | 0.06 | 0.07 | 0.09 | 0.10 | 0.12 | 0.14 | 0.16 | 0.00   | 0.00               | 0.00               | 0.00             |
| 300      | 0.06                                      | 0.07 | 0.09 | 0.10 | 0.12 | 0.14 | 0.17 | 0.19 | 0.22 | 0.00   | 0.01               | 0.01               | 0.01             |
| 400      | 0.08                                      | 0.09 | 0.11 | 0.13 | 0.16 | 0.18 | 0.21 | 0.24 | 0.28 | 0.00   | 0.01               | 0.01               | 0.01             |
| 500      | 0.09                                      | 0.11 | 0.14 | 0.16 | 0.19 | 0.22 | 0.25 | 0.29 | 0.34 | 0.00   | 0.01               | 0.01               | 0.01             |
| 600      | 0.10                                      | 0.13 | 0.16 | 0.18 | 0.22 | 0.25 | 0.30 | 0.34 | 0.39 | 0.00   | 0.01               | 0.01               | 0.01             |
| 700      | 0.12                                      | 0.15 | 0.18 | 0.21 | 0.25 | 0.29 | 0.33 | 0.39 | 0.44 | 0.00   | 0.01               | 0.01               | 0.01             |
| 800      | 0.13                                      | 0.16 | 0.20 | 0.23 | 0.27 | 0.32 | 0.37 | 0.43 | 0.49 | 0.00   | 0.01               | 0.01               | 0.02             |
| 900      | 0.14                                      | 0.18 | 0.21 | 0.25 | 0.30 | 0.35 | 0.41 | 0.47 | 0.54 | 0.00   | 0.02               | 0.02               | 0.02             |
| 1000     | 0.15                                      | 0.19 | 0.23 | 0.27 | 0.32 | 0.38 | 0.44 | 0.51 | 0.59 | 0.00   | 0.02               | 0.02               | 0.02             |
| 1100     | 0.16                                      | 0.20 | 0.25 | 0.29 | 0.35 | 0.41 | 0.48 | 0.55 | 0.63 | 0.00   | 0.02               | 0.02               | 0.02             |
| 1200     | 0.17                                      | 0.22 | 0.27 | 0.31 | 0.37 | 0.44 | 0.51 | 0.59 | 0.68 | 0.00   | 0.02               | 0.02               | 0.02             |
| 1300     | 0.18                                      | 0.23 | 0.28 | 0.33 | 0.39 | 0.46 | 0.54 | 0.63 | 0.72 | 0.00   | 0.02               | 0.02               | 0.03             |
| 1400     | 0.19                                      | 0.24 | 0.30 | 0.35 | 0.42 | 0.49 | 0.57 | 0.66 | 0.76 | 0.00   | 0.03               | 0.03               | 0.03             |
| 1500     | 0.20                                      | 0.25 | 0.31 | 0.37 | 0.44 | 0.52 | 0.60 | 0.70 | 0.80 | 0.00   | 0.03               | 0.03               | 0.03             |
| 1600     | 0.20                                      | 0.25 | 0.33 | 0.39 | 0.46 | 0.54 | 0.63 | 0.73 | 0.84 | 0.00   | 0.03               | 0.03               | 0.03             |
| 1700     | 0.21                                      | 0.27 | 0.34 | 0.40 | 0.48 | 0.57 | 0.66 | 0.77 | 0.88 | 0.00   | 0.03               | 0.03               | 0.04             |
| 1800     | 0.22                                      | 0.28 | 0.35 | 0.42 | 0.50 | 0.59 | 0.69 | 0.80 | 0.92 | 0.00   | 0.03               | 0.03               | 0.04             |
| 1900     | 0.23                                      | 0.29 | 0.37 | 0.44 | 0.52 | 0.61 | 0.72 | 0.83 | 0.95 | 0.00   | 0.04               | 0.04               | 0.04             |
| 2000     | 0.23                                      | 0.30 | 0.38 | 0.45 | 0.54 | 0.63 | 0.74 | 0.86 | 0.99 | 0.00   | 0.04               | 0.04               | 0.04             |
| 2100     | 0.24                                      | 0.31 | 0.39 | 0.47 | 0.56 | 0.66 | 0.77 | 0.89 | 1.02 | 0.01   | 0.04               | 0.04               | 0.04             |
| 2200     | 0.25                                      | 0.32 | 0.40 | 0.48 | 0.57 | 0.68 | 0.80 | 0.92 | 1.06 | 0.01   | 0.04               | 0.04               | 0.05             |
| 2300     | 0.25                                      | 0.33 | 0.41 | 0.50 | 0.59 | 0.70 | 0.82 | 0.95 | 1.09 | 0.01   | 0.04               | 0.04               | 0.05             |
| 2400     | 0.26                                      | 0.34 | 0.43 | 0.51 | 0.61 | 0.72 | 0.84 | 0.98 | 1.12 | 0.01   | 0.04               | 0.04               | 0.05             |
| 2500     | 0.26                                      | 0.35 | 0.44 | 0.52 | 0.63 | 0.74 | 0.87 | 1.01 | 1.16 | 0.01   | 0.05               | 0.05               | 0.05             |
| 2600     | 0.27                                      | 0.36 | 0.45 | 0.54 | 0.64 | 0.76 | 0.89 | 1.03 | 1.19 | 0.01   | 0.05               | 0.05               | 0.05             |
| 2700     | 0.28                                      | 0.36 | 0.46 | 0.55 | 0.66 | 0.78 | 0.92 | 1.06 | 1.22 | 0.01   | 0.05               | 0.05               | 0.06             |
| 2800     | 0.28                                      | 0.37 | 0.47 | 0.56 | 0.67 | 0.80 | 0.94 | 1.09 | 1.25 | 0.01   | 0.05               | 0.05               | 0.06             |
| 2900     | 0.28                                      | 0.38 | 0.48 | 0.58 | 0.69 | 0.82 | 0.96 | 1.11 | 1.28 | 0.01   | 0.05               | 0.05               | 0.06             |
| 3000     | 0.29                                      | 0.38 | 0.49 | 0.59 | 0.70 | 0.84 | 0.98 | 1.14 | 1.30 | 0.01   | 0.06               | 0.06               | 0.06             |
| 3100     | 0.29                                      | 0.30 | 0.50 | 0.60 | 0.72 | 0.85 | 1.00 | 1.16 | 1.33 | 0.01   | 0.06               | 0.06               | 0.06             |
| 3200     | 0.30                                      | 0.40 | 0.51 | 0.61 | 0.73 | 0.87 | 1.02 | 1.19 | 1.36 | 0.01   | 0.06               | 0.06               | 0.07             |
| 3300     | 0.30                                      | 0.40 | 0.52 | 0.62 | 0.75 | 0.89 | 1.04 | 1.21 | 1.38 | 0.01   | 0.06               | 0.06               | 0.07             |
| 3400     | 0.31                                      | 0.41 | 0.52 | 0.63 | 0.76 | 0.90 | 1.06 | 1.23 | 1.41 | 0.01   | 0.06               | 0.06               | 0.07             |
| 3500     | 0.31                                      | 0.42 | 0.53 | 0.64 | 0.77 | 0.92 | 1.08 | 1.25 | 1.43 | 0.01   | 0.06               | 0.06               | 0.07             |
| 3600     | 0.31                                      | 0.42 | 0.54 | 0.65 | 0.79 | 0.94 | 1.10 | 1.27 | 1.46 | 0.01   | 0.07               | 0.07               | 0.07             |
| 3700     | 0.32                                      | 0.43 | 0.55 | 0.67 | 0.80 | 0.95 | 1.12 | 1.30 | 1.48 | 0.01   | 0.07               | 0.07               | 0.08             |
| 3800     | 0.32                                      | 0.43 | 0.56 | 0.68 | 0.81 | 0.97 | 1.14 | 1.32 | 1.50 | 0.01   | 0.07               | 0.07               | 0.08             |
| 3900     | 0.32                                      | 0.44 | 0.56 | 0.68 | 0.82 | 0.98 | 1.15 | 1.34 | 1.52 | 0.01   | 0.07               | 0.07               | 0.08             |
| 4000     | 0.33                                      | 0.44 | 0.57 | 0.69 | 0.84 | 1.00 | 1.17 | 1.35 | 1.55 | 0.01   | 0.07               | 0.07               | 0.08             |
| 4100     | 0.33                                      | 0.45 | 0.58 | 0.70 | 0.85 | 1.01 | 1.19 | 1.37 | 1.57 | 0.01   | 0.08               | 0.08               | 0.09             |
| 4200     | 0.33                                      | 0.45 | 0.59 | 0.71 | 0.86 | 1.02 | 1.20 | 1.39 | 1.59 | 0.01   | 0.08               | 0.08               | 0.09             |
| 4300     | 0.33                                      | 0.46 | 0.59 | 0.72 | 0.87 | 1.04 | 1.22 | 1.41 | 1.61 | 0.01   | 0.08               | 0.08               | 0.09             |
| 4400     | 0.34                                      | 0.46 | 0.60 | 0.73 | 0.88 | 1.05 | 1.23 | 1.43 | 1.62 | 0.01   | 0.08               | 0.08               | 0.09             |
| 4500     | 0.34                                      | 0.47 | 0.61 | 0.74 | 0.89 | 1.06 | 1.25 | 1.44 | 1.64 | 0.01   | 0.08               | 0.08               | 0.09             |
| 4600     | 0.34                                      | 0.47 | 0.61 | 0.75 | 0.90 | 1.08 | 1.26 | 1.46 | 1.66 | 0.01   | 0.09               | 0.09               | 0.10             |
| 4700     | 0.34                                      | 0.47 | 0.62 | 0.75 | 0.91 | 1.09 | 1.28 | 1.47 | 1.67 | 0.01   | 0.09               | 0.09               | 0.10             |
| 4800     | 0.34                                      | 0.48 | 0.62 | 0.76 | 0.92 | 1.10 | 1.29 | 1.49 | 1.69 | 0.01   | 0.09               | 0.09               | 0.10             |
| 4900     | 0.35                                      | 0.48 | 0.63 | 0.77 | 0.93 | 1.11 | 1.30 | 1.50 | 1.70 | 0.01   | 0.09               | 0.09               | 0.10             |
| 5000     | 0.36                                      | 0.49 | 0.63 | 0.78 | 0.94 | 1.12 | 1.31 | 1.52 | 1.72 | 0.01   | 0.09               | 0.09               | 0.10             |
| 5100     | 0.35                                      | 0.49 | 0.64 | 0.78 | 0.95 | 1.13 | 1.33 | 1.53 | 1.73 | 0.01   | 0.09               | 0.09               | 0.11             |
| 5200     | 0.35                                      | 0.49 | 0.64 | 0.79 | 0.96 | 1.14 | 1.34 | 1.54 | 1.74 | 0.01   | 0.10               | 0.10               | 0.11             |
| 5300     | 0.35                                      | 0.49 | 0.65 | 0.80 | 0.97 | 1.15 | 1.35 | 1.55 | 1.76 | 0.01   | 0.10               | 0.10               | 0.11             |
| 5400     | 0.35                                      | 0.50 | 0.65 | 0.80 | 0.97 | 1.16 | 1.36 | 1.56 | 1.77 | 0.01   | 0.01               | 0.01               | 0.11             |
| 5500     | 0.35                                      | 0.50 | 0.66 | 0.81 | 0.98 | 1.17 | 1.37 | 1.57 | 1.78 | 0.01   | 0.01               | 0.01               | 0.11             |
| 5600     | 0.35                                      | 0.50 | 0.68 | 0.81 | 0.99 | 1.18 | 1.38 | 1.59 | 1.79 | 0.01   | 0.01               | 0.01               | 0.12             |
| 5700     | 0.35                                      | 0.51 | 0.67 | 0.82 | 1.00 | 1.19 | 1.39 | 1.59 | 1.80 | 0.01   | 0.11               | 0.11               | 0.12             |
| 5800     | 0.35                                      | 0.51 | 0.67 | 0.83 | 1.00 | 1.20 | 1.40 | 1.60 | 1.80 | 0.01   | 0.11               | 0.11               | 0.12             |
| 5900     | 0.35                                      | 0.51 | 0.67 | 0.83 | 1.01 | 1.20 | 1.41 | 1.61 | 1.81 | 0.01   | 0.11               | 0.11               | 0.12             |
| 6000     | 0.35                                      | 0.51 | 0.68 | 0.84 | 1.02 | 1.21 | 1.41 | 1.62 | 1.82 | 0.01   | 0.11               | 0.11               | 0.12             |
| 6200     | 0.35                                      | 0.51 | 0.68 | 0.84 | 1.03 | 1.22 | 1.43 | 1.63 | 1.83 | 0.01   | 0.11               | 0.12               | 0.13             |
| 6400     | 0.35                                      | 0.52 | 0.69 | 0.85 | 1.04 | 1.24 | 1.44 | 1.65 | 1.83 | 0.01   | 0.12               | 0.12               | 0.13             |
| 6600     | 0.35                                      | 0.52 | 0.70 | 0.86 | 1.05 | 1.25 | 1.45 | 1.65 | 1.84 | 0.02   | 0.12               | 0.13               | 0.14             |
| 6800     | 0.35                                      | 0.52 | 0.70 | 0.87 | 1.06 | 1.26 | 1.46 | 1.66 | 1.84 | 0.02   | 0.13               | 0.13               | 0.14             |
| 7000     | 0.35                                      | 0.52 | 0.70 | 0.87 | 1.06 | 1.27 | 1.47 | 1.67 | 1.84 | 0.02   | 0.13               | 0.13               | 0.15             |
| 7200     | 0.35                                      | 0.52 | 0.71 | 0.88 | 1.07 | 1.27 | 1.48 | 1.67 | 1.83 | 0.02   | 0.13               | 0.14               | 0.15             |
| 7400     | 0.35                                      | 0.52 | 0.71 | 0.88 | 1.08 | 1.28 | 1.48 | 1.67 | 1.82 | 0.02   | 0.14               | 0.14               | 0.15             |
| 7600     | 0.34                                      | 0.52 | 0.71 | 0.89 | 1.08 | 1.28 | 1.48 | 1.66 | 1.81 | 0.02   | 0.14               | 0.14               | 0.16             |
| 7800     | 0.34                                      | 0.52 | 0.71 | 0.89 | 1.08 | 1.28 | 1.48 | 1.66 | 1.79 | 0.02   | 0.09               | 0.15               | 0.16             |
| 8000     | 0.33                                      | 0.52 | 0.71 | 0.89 | 1.08 | 1.29 | 1.48 | 1.65 | 1.77 | 0.02   | 0.09               | 0.15               | 0.17             |

**TABLE 5 Section Z**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |      |      |      |      |      |      |      |      |      |      |      | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |               |
|----------|---|------|------|------|------|------|------|------|------|------|------|------|--|--------------------|--------------------|---------------|
|          | 45  | 50   | 53   | 56   | 60   | 63   | 67   | 71   | 75   | 80   | 85   | 90   | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>> 1.57 |
| 700      | 0.19                                      | 0.25 | 0.28 | 0.32 | 0.35 | 0.38 | 0.41 | 0.46 | 0.51 | 0.55 | 0.58 | 0.66 | 0.00   | 0.02               | 0.03               | 0.03          |
| 950      | 0.24                                      | 0.32 | 0.35 | 0.40 | 0.44 | 0.49 | 0.53 | 0.60 | 0.64 | 0.72 | 0.75 | 0.85 | 0.00   | 0.02               | 0.04               | 0.04          |
| 1450     | 0.33                                      | 0.43 | 0.47 | 0.54 | 0.60 | 0.68 | 0.74 | 0.84 | 0.86 | 1.01 | 1.04 | 1.20 | 0.01   | 0.03               | 0.06               | 0.06          |
| 2850     | 0.48                                      | 0.66 | 0.75 | 0.87 | 0.98 | 1.11 | 1.19 | 1.38 | 1.44 | 1.67 | 1.74 | 1.99 | 0.01   | 0.07               | 0.11               | 0.12          |
| 100      | 0.03                                      | 0.05 | 0.06 | 0.06 | 0.07 | 0.07 | 0.08 | 0.09 | 0.10 | 0.10 | 0.11 | 0.12 | 0.00   | 0.00               | 0.00               | 0.00          |
| 200      | 0.07                                      | 0.09 | 0.10 | 0.11 | 0.13 | 0.14 | 0.15 | 0.16 | 0.17 | 0.19 | 0.12 | 0.23 | 0.00   | 0.00               | 0.01               | 0.01          |
| 300      | 0.10                                      | 0.12 | 0.14 | 0.16 | 0.18 | 0.19 | 0.21 | 0.23 | 0.24 | 0.27 | 0.29 | 0.32 | 0.00   | 0.01               | 0.01               | 0.01          |
| 400      | 0.12                                      | 0.16 | 0.17 | 0.20 | 0.23 | 0.24 | 0.26 | 0.29 | 0.31 | 0.35 | 0.37 | 0.41 | 0.00   | 0.01               | 0.02               | 0.02          |
| 500      | 0.15                                      | 0.19 | 0.22 | 0.24 | 0.27 | 0.29 | 0.31 | 0.35 | 0.38 | 0.42 | 0.44 | 0.50 | 0.00   | 0.01               | 0.02               | 0.02          |
| 600      | 0.17                                      | 0.21 | 0.25 | 0.27 | 0.32 | 0.34 | 0.36 | 0.41 | 0.43 | 0.50 | 0.52 | 0.58 | 0.00   | 0.01               | 0.03               | 0.03          |
| 700      | 0.19                                      | 0.25 | 0.28 | 0.32 | 0.35 | 0.38 | 0.41 | 0.46 | 0.51 | 0.55 | 0.58 | 0.66 | 0.00   | 0.02               | 0.03               | 0.03          |
| 800      | 0.21                                      | 0.27 | 0.31 | 0.35 | 0.39 | 0.43 | 0.46 | 0.52 | 0.54 | 0.62 | 0.65 | 0.73 | 0.00   | 0.02               | 0.03               | 0.03          |
| 900      | 0.24                                      | 0.31 | 0.34 | 0.38 | 0.43 | 0.47 | 0.51 | 0.58 | 0.63 | 0.69 | 0.72 | 0.81 | 0.00   | 0.02               | 0.04               | 0.04          |
| 1000     | 0.25                                      | 0.33 | 0.36 | 0.41 | 0.47 | 0.51 | 0.55 | 0.62 | 0.65 | 0.85 | 0.77 | 0.88 | 0.00   | 0.02               | 0.04               | 0.04          |
| 1100     | 0.27                                      | 0.35 | 0.39 | 0.44 | 0.49 | 0.55 | 0.59 | 0.68 | 0.74 | 0.81 | 0.83 | 0.96 | 0.01   | 0.03               | 0.05               | 0.05          |
| 1200     | 0.28                                      | 0.37 | 0.41 | 0.47 | 0.53 | 0.59 | 0.65 | 0.72 | 0.75 | 0.87 | 0.89 | 1.03 | 0.01   | 0.03               | 0.05               | 0.05          |
| 1300     | 0.31                                      | 0.40 | 0.44 | 0.50 | 0.55 | 0.63 | 0.67 | 0.77 | 0.79 | 0.93 | 0.96 | 1.10 | 0.01   | 0.03               | 0.05               | 0.06          |
| 1400     | 0.32                                      | 0.42 | 0.46 | 0.53 | 0.59 | 0.67 | 0.73 | 0.81 | 0.84 | 0.98 | 1.02 | 1.16 | 0.01   | 0.03               | 0.06               | 0.06          |
| 1500     | 0.33                                      | 0.43 | 0.49 | 0.55 | 0.63 | 0.70 | 0.75 | 0.86 | 0.89 | 1.04 | 1.06 | 1.22 | 0.01   | 0.04               | 0.06               | 0.06          |
| 1600     | 0.34                                      | 0.45 | 0.51 | 0.59 | 0.65 | 0.73 | 0.78 | 0.90 | 0.95 | 1.08 | 1.14 | 1.29 | 0.01   | 0.04               | 0.07               | 0.07          |
| 1700     | 0.36                                      | 0.47 | 0.53 | 0.61 | 0.68 | 0.77 | 0.82 | 0.95 | 0.98 | 1.14 | 1.17 | 1.36 | 0.01   | 0.04               | 0.07               | 0.07          |
| 1800     | 0.37                                      | 0.50 | 0.55 | 0.63 | 0.71 | 0.80 | 0.85 | 0.98 | 1.03 | 1.19 | 1.22 | 1.41 | 0.01   | 0.04               | 0.07               | 0.08          |
| 1900     | 0.38                                      | 0.51 | 0.57 | 0.66 | 0.73 | 0.84 | 0.89 | 1.03 | 1.06 | 1.24 | 1.28 | 1.47 | 0.01   | 0.05               | 0.08               | 0.08          |
| 2000     | 0.40                                      | 0.53 | 0.59 | 0.69 | 0.77 | 0.87 | 0.93 | 1.07 | 1.12 | 1.29 | 1.35 | 1.54 | 0.01   | 0.05               | 0.08               | 0.09          |
| 2100     | 0.41                                      | 0.54 | 0.61 | 0.71 | 0.78 | 0.89 | 0.96 | 1.11 | 1.14 | 1.34 | 1.39 | 1.59 | 0.01   | 0.05               | 0.08               | 0.09          |
| 2200     | 0.42                                      | 0.57 | 0.63 | 0.73 | 0.82 | 0.93 | 0.99 | 1.14 | 1.18 | 1.39 | 1.43 | 1.65 | 0.01   | 0.05               | 0.09               | 0.10          |
| 2300     | 0.43                                      | 0.58 | 0.65 | 0.76 | 0.83 | 0.96 | 1.03 | 1.19 | 1.23 | 1.44 | 1.48 | 1.71 | 0.01   | 0.06               | 0.09               | 0.10          |
| 2400     | 0.44                                      | 0.59 | 0.67 | 0.78 | 0.86 | 0.98 | 1.05 | 1.22 | 1.27 | 1.48 | 1.52 | 1.75 | 0.01   | 0.06               | 0.10               | 0.10          |
| 2500     | 0.44                                      | 0.61 | 0.68 | 0.80 | 0.88 | 1.02 | 1.08 | 1.25 | 1.31 | 1.53 | 1.57 | 1.81 | 0.01   | 0.06               | 0.10               | 0.11          |
| 2600     | 0.45                                      | 0.62 | 0.70 | 0.81 | 0.92 | 1.04 | 1.13 | 1.29 | 1.34 | 1.57 | 1.62 | 1.86 | 0.01   | 0.06               | 0.10               | 0.11          |
| 2700     | 0.46                                      | 0.63 | 0.72 | 0.84 | 0.93 | 1.07 | 1.15 | 1.32 | 1.37 | 1.60 | 1.66 | 1.91 | 0.01   | 0.06               | 0.11               | 0.12          |
| 2800     | 0.47                                      | 0.66 | 0.74 | 0.86 | 0.95 | 1.10 | 1.17 | 1.36 | 1.41 | 1.65 | 1.71 | 1.97 | 0.01   | 0.07               | 0.11               | 0.12          |
| 2900     | 0.49                                      | 0.67 | 0.75 | 0.88 | 0.99 | 1.12 | 1.22 | 1.39 | 1.46 | 1.70 | 1.75 | 2.01 | 0.01   | 0.07               | 0.12               | 0.13          |
| 3000     | 0.49                                      | 0.68 | 0.77 | 0.89 | 1.01 | 1.15 | 1.24 | 1.42 | 1.48 | 1.73 | 1.79 | 2.06 | 0.01   | 0.07               | 0.12               | 0.13          |
| 3100     | 0.50                                      | 0.69 | 0.78 | 0.92 | 1.02 | 1.18 | 1.25 | 1.46 | 1.52 | 1.77 | 1.84 | 2.10 | 0.02   | 0.07               | 0.12               | 0.13          |
| 3200     | 0.51                                      | 0.70 | 0.80 | 0.94 | 1.04 | 1.20 | 1.29 | 1.49 | 1.56 | 1.81 | 1.88 | 2.15 | 0.02   | 0.08               | 0.13               | 0.14          |
| 3300     | 0.51                                      | 0.71 | 0.81 | 0.95 | 1.06 | 1.22 | 1.32 | 1.53 | 1.59 | 1.84 | 1.93 | 2.19 | 0.02   | 0.08               | 0.13               | 0.14          |
| 3400     | 0.52                                      | 0.72 | 0.83 | 0.97 | 1.11 | 1.24 | 1.34 | 1.55 | 1.62 | 1.89 | 1.96 | 2.24 | 0.02   | 0.08               | 0.13               | 0.15          |
| 3500     | 0.52                                      | 0.73 | 0.84 | 0.98 | 1.12 | 1.27 | 1.37 | 1.58 | 1.65 | 1.92 | 2.02 | 2.28 | 0.02   | 0.08               | 0.14               | 0.15          |
| 3600     | 0.53                                      | 0.75 | 0.85 | 1.01 | 1.13 | 1.29 | 1.39 | 1.60 | 1.68 | 1.95 | 2.04 | 2.32 | 0.02   | 0.09               | 0.14               | 0.16          |
| 3700     | 0.53                                      | 0.76 | 0.87 | 1.02 | 1.14 | 1.31 | 1.42 | 1.64 | 1.71 | 1.99 | 2.08 | 2.36 | 0.02   | 0.09               | 0.15               | 0.16          |
| 3800     | 0.54                                      | 0.77 | 0.88 | 1.03 | 1.16 | 1.33 | 1.44 | 1.66 | 1.75 | 2.02 | 2.14 | 2.40 | 0.02   | 0.09               | 0.15               | 0.16          |
| 3900     | 0.54                                      | 0.78 | 0.84 | 1.05 | 1.18 | 1.36 | 1.47 | 1.68 | 1.77 | 2.06 | 2.16 | 2.43 | 0.02   | 0.09               | 0.15               | 0.17          |
| 4000     | 0.55                                      | 0.79 | 0.91 | 1.06 | 1.21 | 1.37 | 1.49 | 1.72 | 1.81 | 2.08 | 2.19 | 2.47 | 0.02   | 0.10               | 0.16               | 0.17          |
| 4100     | 0.55                                      | 0.79 | 0.92 | 1.07 | 1.22 | 1.39 | 1.51 | 1.74 | 1.83 | 2.11 | 2.23 | 2.51 | 0.02   | 0.10               | 0.16               | 0.18          |
| 4200     | 0.55                                      | 0.80 | 0.93 | 1.08 | 1.24 | 1.41 | 1.53 | 1.76 | 1.86 | 2.15 | 2.28 | 2.54 | 0.02   | 0.10               | 0.17               | 0.18          |
| 4300     | 0.57                                      | 0.81 | 0.94 | 1.11 | 1.25 | 1.42 | 1.56 | 1.79 | 1.89 | 2.17 | 2.31 | 2.58 | 0.02   | 0.10               | 0.17               | 0.19          |
| 4400     | 0.57                                      | 0.82 | 0.95 | 1.12 | 1.28 | 1.45 | 1.59 | 1.81 | 1.93 | 2.20 | 2.34 | 2.60 | 0.02   | 0.11               | 0.17               | 0.19          |
| 4500     | 0.57                                      | 0.82 | 0.97 | 1.13 | 1.29 | 1.47 | 1.61 | 1.83 | 1.95 | 2.23 | 2.37 | 2.63 | 0.02   | 0.11               | 0.18               | 0.19          |
| 4600     | 0.58                                      | 0.84 | 0.98 | 1.14 | 1.31 | 1.48 | 1.63 | 1.85 | 1.99 | 2.25 | 2.42 | 2.67 | 0.02   | 0.11               | 0.18               | 0.20          |
| 4700     | 0.58                                      | 0.84 | 0.99 | 1.15 | 1.32 | 1.49 | 1.65 | 1.88 | 2.01 | 2.27 | 2.44 | 2.69 | 0.02   | 0.11               | 0.18               | 0.20          |
| 4800     | 0.58                                      | 0.85 | 1.01 | 1.16 | 1.34 | 1.51 | 1.68 | 1.90 | 2.05 | 2.29 | 2.47 | 2.71 | 0.02   | 0.12               | 0.19               | 0.21          |
| 4900     | 0.58                                      | 0.86 | 1.01 | 1.18 | 1.36 | 1.53 | 1.69 | 1.91 | 2.07 | 2.32 | 2.52 | 2.75 | 0.02   | 0.12               | 0.19               | 0.21          |
| 5000     | 0.58                                      | 0.86 | 1.02 | 1.19 | 1.39 | 1.54 | 1.73 | 1.93 | 2.09 | 2.34 | 2.54 | 2.77 | 0.02   | 0.12               | 0.20               | 0.22          |
| 5100     | 0.59                                      | 0.87 | 1.02 | 1.19 | 1.41 | 1.56 | 1.75 | 1.95 | 2.11 | 2.26 | 2.56 | 2.79 | 0.02   | 0.12               | 0.20               | 0.22          |
| 5200     | 0.59                                      | 0.87 | 1.03 | 1.20 | 1.43 | 1.57 | 1.76 | 1.97 | 2.11 | 2.26 | 2.56 | 2.79 | 0.03   | 0.13               | 0.20               | 0.23          |
| 5300     | 0.59                                      | 0.87 | 1.04 | 1.21 | 1.44 | 1.58 | 1.78 | 1.98 | 2.14 | 2.41 | 2.58 | 2.83 | 0.03   | 0.13               | 0.21               | 0.23          |
| 5400     | 0.59                                      | 0.88 | 1.05 | 1.22 | 1.45 | 1.59 | 1.81 | 2.00 | 2.15 | 2.42 | 2.59 | 2.85 | 0.03   | 0.13               | 0.21               | 0.23          |
| 5500     | 0.59                                      | 0.88 | 1.05 | 1.22 | 1.46 | 1.60 | 1.82 | 2.01 | 2.18 | 2.44 | 2.61 | 2.87 | 0.03   | 0.13               | 0.22               | 0.24          |
| 5600     | 0.59                                      | 0.88 | 1.07 | 1.23 | 1.47 | 1.62 | 1.83 | 2.02 | 2.19 | 2.45 | 2.62 | 2.88 | 0.03   | 0.13               | 0.22               | 0.24          |
| 5800     | 0.59                                      | 0.89 | 1.08 | 1.24 | 1.49 | 1.64 | 1.85 | 2.06 | 2.22 | 2.49 | 2.63 | 2.90 | 0.03   | 0.14               | 0.23               | 0.25          |
| 6000     | 0.59                                      | 0.89 | 1.09 | 1.25 | 1.51 | 1.65 | 1.88 | 2.08 | 2.24 | 2.51 | 2.65 | 2.93 | 0.03   | 0.14               | 0.24               | 0.26          |
| 6200     | 0.58                                      | 0.90 | 1.11 | 1.27 | 1.52 | 1.67 | 1.91 | 2.09 | 2.26 | 2.53 | 2.68 | 2.95 | 0.03   | 0.15               | 0.25               | 0.27          |
| 6400     | 0.58                                      | 0.90 | 1.13 | 1.28 | 1.54 | 1.68 | 1.93 | 2.11 | 2.27 | 2.54 | 2.69 | 2.96 | 0.03   | 0.15               | 0.25               | 0.28          |
| 6600     | 0.58                                      | 0.90 | 1.15 | 1.29 | 1.55 | 1.70 | 1.95 | 2.12 | 2.28 | 2.55 | 2.69 | 2.96 | 0.03   | 0.16               | 0.26               | 0.29          |
| 6800     | 0.57                                      | 0.90 | 1.15 | 1.29 | 1.57 | 1.71 | 1.96 | 2.14 | 2.31 | 2.57 | 2.69 | 2.96 | 0.03   | 0.16               | 0.27               | 0.29          |
| 7000     | 0.57                                      | 0.90 | 1.15 | 1.29 | 1.57 | 1.71 | 1.97 | 2.15 | 2.31 | 2.57 | 2.68 | 2.95 | 0.03   | 0.17               | 0.28               | 0.30          |
| 7200     | 0.55                                      | 0.90 | 1.15 | 1.29 | 1.59 | 1.72 | 1.97 | 2.15 | 2.31 | 2.57 | 2.67 | 2.94 | 0.03   | 0.17               | 0.28               | 0.31          |
| 7400     | 0.54                                      | 0.89 | 1.15 | 1.29 | 1.59 | 1.72 | 1.97 | 2.15 | 2.28 | 2.55 | 2.64 | 2.92 | 0.04   | 0.18               | 0.29               | 0.32          |
| 7600     | 0.53                                      | 0.89 | 1.15 | 1.29 | 1.59 | 1.72 | 1.97 | 2.15 | 2.28 | 2.55 | 2.63 | 2.89 | 0.04   | 0.18               | 0.30               | 0.33          |
| 7800     | 0.52                                      | 0.88 | 1.13 | 1.28 | 1.57 | 1.71 | 1.96 | 2.14 | 2.26 | 2.53 | 2.60 | 2.86 | 0.04   | 0.19               | 0.31               | 0.34          |
| 8000     | 0.51                                      | 0.87 | 1.13 | 1.28 | 1.57 | 1.71 | 1.95 | 2.12 | 2.24 | 2.51 | 2.58 | 2.83 | 0.04   | 0.19               | 0.31               | 0.35          |
| 8200     | 0.50                                      | 0.85 | 1.11 | 1.27 | 1.55 | 1.70 | 1.93 | 2.11 | 2.22 | 2.49 | 2.58 | 2.83 | 0.04   | 0.20               | 0.32               | 0.35          |
| 8400     | 0.47                                      | 0.85 | 1.09 | 1.25 | 1.54 | 1.68 | 1.91 | 2.09 | 2.19 | 2.45 |      |      | 0.04   | 0.20               | 0.32               | 0.36          |

**TABLE 5 Section Z**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |      |      |      |      |      |      | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |                  |
|----------|---|------|------|------|------|------|------|--|--------------------|--------------------|------------------|
|          | 95  | 100  | 112  | 125  | 140  | 160  | 180  | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>><br>1.57 |
| 700      | 0.68                                      | 0.76 | 0.87 | 0.91 | 1.06 | 1.17 | 1.33 | 0.00   | 0.02               | 0.03               | 0.03             |
| 950      | 0.88                                      | 0.97 | 1.13 | 1.15 | 1.34 | 1.56 | 1.58 | 0.00   | 0.02               | 0.04               | 0.04             |
| 1450     | 1.23                                      | 1.38 | 1.59 | 1.62 | 1.87 | 2.16 | 2.32 | 0.01   | 0.03               | 0.06               | 0.06             |
| 2850     | 2.04                                      | 2.29 | 2.64 | 2.66 | 3.01 | 3.41 | 3.69 | 0.01   | 0.07               | 0.11               | 0.12             |
| 100      | 0.13                                      | 0.14 | 0.16 | 0.16 | 0.28 | 0.42 | 0.48 | 0.00   | 0.00               | 0.00               | 0.00             |
| 200      | 0.24                                      | 0.26 | 0.29 | 0.30 | 0.40 | 0.52 | 0.50 | 0.00   | 0.00               | 0.01               | 0.01             |
| 300      | 0.33                                      | 0.37 | 0.42 | 0.43 | 0.50 | 0.65 | 0.70 | 0.00   | 0.01               | 0.01               | 0.01             |
| 400      | 0.44                                      | 0.47 | 0.54 | 0.55 | 0.59 | 0.70 | 0.80 | 0.00   | 0.01               | 0.02               | 0.02             |
| 500      | 0.52                                      | 0.57 | 0.66 | 0.67 | 0.72 | 0.85 | 0.97 | 0.00   | 0.01               | 0.02               | 0.02             |
| 600      | 0.61                                      | 0.67 | 0.77 | 0.78 | 0.85 | 1.00 | 1.14 | 0.00   | 0.01               | 0.03               | 0.03             |
| 700      | 0.68                                      | 0.76 | 0.87 | 0.91 | 1.06 | 1.17 | 1.33 | 0.00   | 0.02               | 0.03               | 0.03             |
| 800      | 0.76                                      | 0.85 | 0.97 | 0.98 | 1.15 | 1.33 | 1.51 | 0.00   | 0.02               | 0.03               | 0.03             |
| 900      | 0.84                                      | 0.94 | 1.07 | 1.08 | 1.27 | 1.47 | 1.56 | 0.00   | 0.02               | 0.04               | 0.04             |
| 1000     | 0.89                                      | 1.02 | 1.18 | 1.19 | 1.38 | 1.61 | 1.61 | 0.00   | 0.02               | 0.04               | 0.04             |
| 1100     | 0.99                                      | 1.10 | 1.28 | 1.30 | 1.50 | 1.74 | 1.65 | 0.01   | 0.03               | 0.05               | 0.05             |
| 1200     | 1.05                                      | 1.19 | 1.37 | 1.40 | 1.61 | 1.88 | 1.70 | 0.01   | 0.03               | 0.05               | 0.05             |
| 1300     | 1.12                                      | 1.27 | 1.46 | 1.46 | 1.71 | 2.00 | 1.94 | 0.01   | 0.03               | 0.05               | 0.06             |
| 1400     | 1.21                                      | 1.33 | 1.55 | 1.55 | 1.82 | 2.12 | 2.18 | 0.01   | 0.03               | 0.06               | 0.06             |
| 1500     | 1.26                                      | 1.41 | 1.64 | 1.65 | 1.92 | 2.23 | 2.42 | 0.01   | 0.04               | 0.06               | 0.06             |
| 1600     | 1.31                                      | 1.49 | 1.72 | 1.77 | 2.02 | 2.35 | 2.66 | 0.01   | 0.04               | 0.07               | 0.07             |
| 1700     | 1.39                                      | 1.56 | 1.81 | 1.85 | 2.11 | 2.46 | 2.78 | 0.01   | 0.04               | 0.07               | 0.07             |
| 1800     | 1.44                                      | 1.63 | 1.89 | 1.94 | 2.21 | 2.57 | 2.90 | 0.01   | 0.04               | 0.07               | 0.08             |
| 1900     | 1.52                                      | 1.70 | 1.97 | 2.02 | 2.30 | 2.67 | 3.01 | 0.01   | 0.05               | 0.08               | 0.08             |
| 2000     | 1.55                                      | 1.76 | 2.05 | 2.15 | 2.39 | 2.78 | 3.13 | 0.01   | 0.05               | 0.08               | 0.09             |
| 2100     | 1.62                                      | 1.83 | 2.12 | 2.22 | 2.48 | 2.87 | 3.22 | 0.01   | 0.05               | 0.08               | 0.09             |
| 2200     | 1.68                                      | 1.90 | 2.19 | 2.28 | 2.56 | 2.96 | 3.31 | 0.01   | 0.05               | 0.09               | 0.10             |
| 2300     | 1.78                                      | 1.97 | 2.27 | 2.35 | 2.65 | 3.05 | 3.39 | 0.01   | 0.06               | 0.09               | 0.10             |
| 2400     | 1.81                                      | 2.02 | 2.34 | 2.41 | 2.73 | 3.14 | 3.48 | 0.01   | 0.06               | 0.10               | 0.10             |
| 2500     | 1.89                                      | 2.09 | 2.41 | 2.43 | 2.79 | 3.20 | 3.53 | 0.01   | 0.06               | 0.10               | 0.11             |
| 2600     | 1.91                                      | 2.15 | 2.47 | 2.49 | 2.85 | 3.26 | 3.58 | 0.01   | 0.06               | 0.10               | 0.11             |
| 2700     | 1.97                                      | 2.20 | 2.54 | 2.55 | 2.91 | 3.31 | 3.62 | 0.01   | 0.06               | 0.11               | 0.12             |
| 2800     | 2.02                                      | 2.26 | 2.61 | 2.61 | 2.97 | 3.37 | 3.67 | 0.01   | 0.07               | 0.11               | 0.12             |
| 2900     | 2.06                                      | 2.32 | 2.67 | 2.67 | 3.03 | 3.43 | 3.72 | 0.01   | 0.07               | 0.12               | 0.13             |
| 3000     | 2.12                                      | 2.37 | 2.73 | 2.73 | 3.09 | 3.49 | 3.77 | 0.01   | 0.07               | 0.12               | 0.13             |
| 3100     | 2.19                                      | 2.43 | 2.79 | 2.79 | 3.15 | 3.54 | 3.81 | 0.02   | 0.07               | 0.12               | 0.13             |
| 3200     | 2.22                                      | 2.47 | 2.85 | 2.90 | 3.21 | 3.60 | 3.86 | 0.02   | 0.08               | 0.13               | 0.14             |
| 3300     | 2.31                                      | 2.52 | 2.90 | 2.95 | 3.25 | 3.61 | 3.86 | 0.02   | 0.08               | 0.13               | 0.14             |
| 3400     | 2.34                                      | 2.58 | 2.96 | 2.99 | 3.29 | 3.63 | 3.86 | 0.02   | 0.08               | 0.13               | 0.15             |
| 3500     | 2.39                                      | 2.62 | 3.01 | 3.04 | 3.32 | 3.64 | 3.85 | 0.02   | 0.08               | 0.14               | 0.15             |
| 3600     | 2.42                                      | 2.67 | 3.06 | 3.08 | 3.36 | 3.65 | 3.85 | 0.02   | 0.09               | 0.14               | 0.16             |
| 3700     | 2.45                                      | 2.71 | 3.11 | 3.12 | 3.39 | 3.66 |      | 0.02   | 0.09               | 0.15               | 0.16             |
| 3800     | 2.48                                      | 2.76 | 3.15 | 3.20 | 3.43 | 3.67 |      | 0.02   | 0.09               | 0.15               | 0.16             |
| 3900     | 2.54                                      | 2.79 | 3.20 | 3.28 | 3.46 | 3.68 |      | 0.02   | 0.09               | 0.15               | 0.17             |
| 4000     | 2.59                                      | 2.84 | 3.24 | 3.35 | 3.49 | 3.69 |      | 0.02   | 0.10               | 0.16               | 0.17             |
| 4100     | 2.62                                      | 2.87 | 3.28 | 3.38 |      |      |      | 0.02   | 0.10               | 0.16               | 0.18             |
| 4200     | 2.66                                      | 2.90 | 3.32 | 3.42 |      |      |      | 0.02   | 0.10               | 0.17               | 0.18             |
| 4300     | 2.72                                      | 2.95 | 3.36 | 3.48 |      |      |      | 0.02   | 0.10               | 0.17               | 0.19             |
| 4400     | 2.75                                      | 2.98 | 3.39 | 3.50 |      |      |      | 0.02   | 0.11               | 0.17               | 0.19             |
| 4500     | 2.79                                      | 3.01 | 3.42 | 3.52 |      |      |      | 0.02   | 0.11               | 0.18               | 0.19             |
| 4600     | 2.83                                      | 3.04 | 3.45 | 3.55 |      |      |      | 0.02   | 0.11               | 0.18               | 0.20             |
| 4700     | 2.88                                      | 3.07 | 3.48 | 3.58 |      |      |      | 0.02   | 0.11               | 0.18               | 0.20             |
| 4800     | 2.92                                      | 3.10 | 3.50 | 3.59 |      |      |      | 0.02   | 0.12               | 0.19               | 0.21             |
| 4900     | 2.99                                      | 3.12 | 3.53 | 3.61 |      |      |      | 0.02   | 0.12               | 0.19               | 0.21             |
| 5000     | 3.04                                      | 3.14 | 3.55 | 3.61 |      |      |      | 0.02   | 0.12               | 0.20               | 0.22             |
| 5100     | 3.06                                      | 3.16 | 3.57 |      |      |      |      | 0.02   | 0.12               | 0.20               | 0.22             |
| 5200     | 3.06                                      | 3.16 | 3.58 |      |      |      |      | 0.03   | 0.13               | 0.20               | 0.23             |
| 5300     | 3.09                                      | 3.21 | 3.60 |      |      |      |      | 0.03   | 0.13               | 0.21               | 0.23             |
| 5400     | 3.11                                      | 3.22 | 3.62 |      |      |      |      | 0.03   | 0.13               | 0.21               | 0.23             |
| 5500     | 3.13                                      | 3.24 | 3.62 |      |      |      |      | 0.03   | 0.13               | 0.22               | 0.24             |
| 5600     | 3.14                                      | 3.25 | 3.63 |      |      |      |      | 0.03   | 0.13               | 0.22               | 0.24             |
| 5800     | 3.16                                      | 3.28 | 3.64 |      |      |      |      | 0.03   | 0.14               | 0.23               | 0.25             |
| 6000     | 3.17                                      | 3.29 | 3.63 |      |      |      |      | 0.03   | 0.14               | 0.24               | 0.26             |
| 6200     | 3.19                                      | 3.30 | 3.62 |      |      |      |      | 0.03   | 0.15               | 0.25               | 0.27             |
| 6400     | 3.19                                      | 3.30 | 3.59 |      |      |      |      | 0.03   | 0.15               | 0.25               | 0.28             |
| 6600     | 3.17                                      | 3.29 | 3.56 |      |      |      |      | 0.03   | 0.16               | 0.26               | 0.29             |
| 6800     | 3.16                                      | 3.28 | 3.51 |      |      |      |      | 0.03   | 0.16               | 0.27               | 0.29             |
| 7000     | 3.13                                      | 3.24 | 3.46 |      |      |      |      | 0.03   | 0.17               | 0.28               | 0.30             |
| 7200     | 3.09                                      | 3.21 | 3.39 |      |      |      |      | 0.03   | 0.17               | 0.28               | 0.31             |
| 7400     | 3.08                                      | 3.18 | 3.31 |      |      |      |      | 0.04   | 0.18               | 0.29               | 0.32             |

**TABLE 6 Section A**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |      |      |      |      |      |      |      | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |                  |
|----------|---|------|------|------|------|------|------|------|--|--------------------|--------------------|------------------|
|          | 71  | 75   | 80   | 85   | 90   | 95   | 100  | 106  | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>><br>1.57 |
| 700      | 0.58                                      | 0.71 | 0.82 | 0.89 | 1.09 | 1.22 | 1.34 | 1.50 | 0.02   | 0.08               | 0.12               | 0.14             |
| 950      | 0.71                                      | 0.84 | 1.02 | 1.11 | 1.37 | 1.55 | 1.71 | 1.92 | 0.02   | 0.10               | 0.16               | 0.18             |
| 1450     | 0.91                                      | 1.07 | 1.36 | 1.49 | 1.87 | 2.11 | 2.35 | 2.64 | 0.03   | 0.16               | 0.25               | 0.28             |
| 2850     | 1.15                                      | 1.36 | 1.96 | 2.20 | 2.81 | 3.23 | 3.64 | 4.11 | 0.06   | 0.31               | 0.49               | 0.55             |
| 100      | 0.13                                      | 0.16 | 0.17 | 0.19 | 0.21 | 0.25 | 0.27 | 0.29 | 0.00   | 0.01               | 0.02               | 0.02             |
| 200      | 0.24                                      | 0.29 | 0.31 | 0.33 | 0.39 | 0.44 | 0.48 | 0.53 | 0.00   | 0.02               | 0.03               | 0.04             |
| 300      | 0.31                                      | 0.39 | 0.43 | 0.46 | 0.55 | 0.62 | 0.67 | 0.75 | 0.01   | 0.03               | 0.05               | 0.06             |
| 400      | 0.39                                      | 0.48 | 0.54 | 0.57 | 0.69 | 0.77 | 0.85 | 0.95 | 0.01   | 0.04               | 0.07               | 0.08             |
| 500      | 0.46                                      | 0.56 | 0.64 | 0.69 | 0.83 | 0.93 | 1.03 | 1.14 | 0.01   | 0.05               | 0.09               | 0.10             |
| 600      | 0.52                                      | 0.63 | 0.73 | 0.79 | 0.96 | 1.08 | 1.19 | 1.32 | 0.01   | 0.06               | 0.10               | 0.12             |
| 700      | 0.58                                      | 0.71 | 0.82 | 0.89 | 1.09 | 1.22 | 1.34 | 1.50 | 0.02   | 0.08               | 0.12               | 0.14             |
| 800      | 0.63                                      | 0.77 | 0.91 | 0.98 | 1.20 | 1.36 | 1.50 | 1.67 | 0.02   | 0.09               | 0.14               | 0.16             |
| 900      | 0.68                                      | 0.81 | 0.99 | 1.06 | 1.31 | 1.48 | 1.65 | 1.84 | 0.02   | 0.10               | 0.16               | 0.18             |
| 1000     | 0.73                                      | 0.87 | 1.06 | 1.16 | 1.42 | 1.60 | 1.78 | 1.99 | 0.02   | 0.11               | 0.17               | 0.19             |
| 1100     | 0.77                                      | 0.91 | 1.13 | 1.23 | 1.52 | 1.72 | 1.92 | 2.15 | 0.02   | 0.12               | 0.19               | 0.21             |
| 1200     | 0.81                                      | 0.96 | 1.20 | 1.32 | 1.62 | 1.84 | 2.05 | 2.30 | 0.03   | 0.13               | 0.21               | 0.23             |
| 1300     | 0.85                                      | 1.03 | 1.27 | 1.39 | 1.72 | 1.95 | 2.17 | 2.44 | 0.03   | 0.14               | 0.22               | 0.25             |
| 1400     | 0.88                                      | 1.04 | 1.33 | 1.46 | 1.81 | 2.06 | 2.30 | 2.58 | 0.03   | 0.15               | 0.24               | 0.27             |
| 1500     | 0.92                                      | 1.08 | 1.39 | 1.53 | 1.91 | 2.16 | 2.41 | 2.71 | 0.03   | 0.16               | 0.26               | 0.29             |
| 1600     | 0.95                                      | 1.12 | 1.44 | 1.59 | 1.99 | 2.26 | 2.53 | 2.84 | 0.03   | 0.17               | 0.28               | 0.31             |
| 1700     | 0.97                                      | 1.14 | 1.50 | 1.65 | 2.07 | 2.35 | 2.63 | 2.97 | 0.04   | 0.18               | 0.29               | 0.33             |
| 1800     | 1.01                                      | 1.16 | 1.56 | 1.72 | 2.15 | 2.45 | 2.74 | 3.09 | 0.04   | 0.19               | 0.31               | 0.35             |
| 1900     | 1.03                                      | 1.19 | 1.60 | 1.77 | 2.23 | 2.54 | 2.84 | 3.20 | 0.04   | 0.21               | 0.33               | 0.37             |
| 2000     | 1.05                                      | 1.21 | 1.65 | 1.84 | 2.31 | 2.63 | 2.95 | 3.33 | 0.04   | 0.22               | 0.35               | 0.39             |
| 2100     | 1.08                                      | 1.24 | 1.69 | 1.89 | 2.37 | 2.71 | 3.04 | 3.43 | 0.05   | 0.23               | 0.36               | 0.41             |
| 2200     | 1.09                                      | 1.26 | 1.74 | 1.94 | 2.44 | 2.79 | 3.14 | 3.54 | 0.05   | 0.24               | 0.38               | 0.43             |
| 2300     | 1.11                                      | 1.28 | 1.78 | 1.98 | 2.51 | 2.87 | 3.21 | 3.64 | 0.05   | 0.25               | 0.40               | 0.45             |
| 2400     | 1.12                                      | 1.29 | 1.81 | 2.03 | 2.56 | 2.93 | 3.30 | 3.73 | 0.05   | 0.26               | 0.42               | 0.47             |
| 2500     | 1.13                                      | 1.31 | 1.85 | 2.07 | 2.63 | 3.01 | 3.38 | 3.83 | 0.05   | 0.27               | 0.43               | 0.49             |
| 2600     | 1.14                                      | 1.32 | 1.88 | 2.12 | 2.69 | 3.08 | 3.46 | 3.91 | 0.06   | 0.28               | 0.45               | 0.51             |
| 2700     | 1.15                                      | 1.34 | 1.92 | 2.14 | 2.73 | 3.14 | 3.53 | 4.00 | 0.06   | 0.29               | 0.47               | 0.53             |
| 2800     | 1.15                                      | 1.35 | 1.94 | 2.19 | 2.79 | 3.20 | 3.61 | 4.08 | 0.06   | 0.30               | 0.48               | 0.54             |
| 2900     | 1.16                                      | 1.36 | 1.97 | 2.21 | 2.83 | 3.26 | 3.66 | 4.16 | 0.06   | 0.31               | 0.50               | 0.56             |
| 3000     | 1.16                                      | 1.36 | 1.99 | 2.24 | 2.88 | 3.30 | 3.73 | 4.22 | 0.06   | 0.32               | 0.52               | 0.58             |
| 3100     | 1.16                                      | 1.37 | 2.02 | 2.28 | 2.91 | 3.36 | 3.79 | 4.29 | 0.07   | 0.34               | 0.54               | 0.60             |
| 3200     | 1.16                                      | 1.37 | 2.03 | 2.29 | 2.96 | 3.40 | 3.84 | 4.35 | 0.07   | 0.35               | 0.55               | 0.62             |
| 3300     | 1.16                                      | 1.38 | 2.05 | 2.32 | 2.99 | 3.44 | 3.89 | 4.40 | 0.07   | 0.36               | 0.57               | 0.64             |
| 3400     | 1.15                                      | 1.39 | 2.06 | 2.35 | 3.02 | 3.48 | 3.93 | 4.46 | 0.07   | 0.37               | 0.59               | 0.66             |
| 3500     | 1.15                                      | 1.39 | 2.07 | 2.36 | 3.05 | 3.52 | 3.98 | 4.50 | 0.08   | 0.38               | 0.61               | 0.68             |
| 3600     | 1.14                                      | 1.39 | 2.08 | 2.37 | 3.07 | 3.55 | 4.01 | 4.55 | 0.08   | 0.39               | 0.62               | 0.70             |
| 3700     | 1.13                                      | 1.39 | 2.08 | 2.38 | 3.09 | 3.57 | 4.04 | 4.58 | 0.08   | 0.40               | 0.64               | 0.72             |
| 3800     | 1.12                                      | 1.39 | 2.08 | 2.39 | 3.11 | 3.60 | 4.07 | 4.61 | 0.08   | 0.41               | 0.66               | 0.74             |
| 3900     | 1.11                                      | 1.41 | 2.09 | 2.41 | 3.12 | 3.62 | 4.10 | 4.65 | 0.08   | 0.42               | 0.67               | 0.76             |
| 4000     | 1.09                                      | 1.39 | 2.08 | 2.41 | 3.14 | 3.63 | 4.11 | 4.67 | 0.09   | 0.43               | 0.69               | 0.78             |
| 4100     | 1.08                                      | 1.39 | 2.08 | 2.42 | 3.15 | 3.64 | 4.13 | 4.68 | 0.09   | 0.44               | 0.71               | 0.80             |
| 4200     | 1.05                                      | 1.38 | 2.07 | 2.42 | 3.15 | 3.65 | 4.14 | 4.69 | 0.09   | 0.45               | 0.73               | 0.82             |
| 4300     | 1.03                                      | 1.38 | 2.07 | 2.42 | 3.15 | 3.65 | 4.14 | 4.70 | 0.09   | 0.46               | 0.74               | 0.84             |
| 4400     | 1.01                                      | 1.38 | 2.06 | 2.42 | 3.15 | 3.65 | 4.14 | 4.70 | 0.10   | 0.48               | 0.76               | 0.86             |
| 4500     | 0.99                                      | 1.37 | 2.04 | 2.41 | 3.14 | 3.65 | 4.14 | 4.69 | 0.10   | 0.49               | 0.78               | 0.88             |
| 4600     | 0.95                                      | 1.37 | 2.03 | 2.41 | 3.12 | 3.64 | 4.13 | 4.68 | 0.10   | 0.50               | 0.80               | 0.89             |
| 4700     | 0.92                                      | 1.36 | 2.00 | 2.39 | 3.11 | 3.63 | 4.12 | 4.67 | 0.10   | 0.51               | 0.81               | 0.91             |
| 4800     | 0.90                                      | 1.36 | 1.98 | 2.38 | 3.09 | 3.61 | 4.08 | 4.61 | 0.10   | 0.52               | 0.83               | 0.93             |
| 4900     | 0.85                                      | 1.35 | 1.96 | 2.37 | 3.07 | 3.58 | 4.08 | 4.61 | 0.11   | 0.53               | 0.85               | 0.95             |
| 5000     | 0.82                                      | 1.35 | 1.93 | 2.36 | 3.05 | 3.56 | 4.04 | 4.58 | 0.11   | 0.54               | 0.87               | 0.97             |
| 5100     | 0.78                                      | 1.33 | 1.89 | 2.35 | 3.01 | 3.53 | 4.01 | 4.55 | 0.11   | 0.55               | 0.88               | 0.99             |
| 5200     | 0.74                                      | 1.32 | 1.86 | 2.33 | 2.98 | 3.49 | 3.98 | 4.50 | 0.11   | 0.56               | 0.90               | 1.01             |
| 5300     | 0.69                                      | 1.31 | 1.83 | 2.31 | 2.95 | 3.46 | 3.93 | 4.45 | 0.11   | 0.57               | 0.92               | 1.03             |
| 5400     | 0.65                                      | 1.28 | 1.78 | 2.29 | 2.90 | 3.42 | 3.88 | 4.39 | 0.12   | 0.58               | 0.93               | 1.05             |
| 5500     | 0.60                                      | 1.26 | 1.74 | 2.26 | 2.86 | 3.36 | 3.82 | 4.32 | 0.12   | 0.59               | 0.95               | 1.07             |
| 5600     | 0.56                                      | 1.24 | 1.69 | 2.22 | 2.81 | 3.30 | 3.76 | 4.24 | 0.12   | 0.61               | 0.97               | 1.09             |
| 5700     | 0.50                                      | 1.21 | 1.65 | 2.19 | 2.76 | 3.25 | 3.70 | 4.17 | 0.12   | 0.62               | 0.99               | 1.11             |
| 5800     | 0.45                                      | 1.20 | 1.59 | 2.14 | 2.70 | 3.18 | 3.62 | 4.09 | 0.13   | 0.63               | 1.00               | 1.13             |
| 5900     | 0.39                                      | 1.18 | 1.53 | 2.09 | 2.63 | 3.11 | 3.54 | 3.99 | 0.13   | 0.64               | 1.02               | 1.15             |
| 6000     | 0.34                                      | 1.14 | 1.48 | 2.03 | 2.56 | 3.04 | 3.46 | 3.89 | 0.13   | 0.65               | 1.04               | 1.17             |

**TABLE 6 Section A**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |      |      |      |      |      |      |      |       |       | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |                  |
|----------|---|------|------|------|------|------|------|------|-------|-------|--|--------------------|--------------------|------------------|
|          | 112                                       | 118  | 125  | 132  | 140  | 150  | 160  | 180  | 200   | 224   | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>><br>1.57 |
| 700      | 1.66                                      | 1.81 | 1.99 | 2.16 | 2.36 | 2.61 | 2.92 | 3.21 | 3.56  | 4.01  | 0.02   | 0.08               | 0.12               | 0.14             |
| 950      | 2.12                                      | 2.32 | 2.55 | 2.78 | 3.05 | 3.36 | 3.68 | 4.31 | 4.59  | 5.21  | 0.02   | 0.10               | 0.16               | 0.18             |
| 1450     | 2.93                                      | 3.21 | 3.55 | 3.88 | 4.24 | 4.69 | 5.14 | 6.05 | 6.48  | 7.45  | 0.03   | 0.16               | 0.25               | 0.28             |
| 2850     | 4.58                                      | 5.04 | 5.56 | 6.06 | 6.61 | 7.26 | 7.87 | 8.99 | 10.06 |       | 0.06   | 0.31               | 0.49               | 0.55             |
| 100      | 0.31                                      | 0.35 | 0.37 | 0.40 | 0.44 | 0.48 | 0.53 | 0.62 | 0.82  | 1.02  | 0.00   | 0.01               | 0.02               | 0.02             |
| 200      | 0.58                                      | 0.63 | 0.68 | 0.75 | 0.81 | 0.90 | 0.97 | 1.13 | 1.35  | 1.63  | 0.00   | 0.02               | 0.03               | 0.04             |
| 300      | 0.82                                      | 0.90 | 0.97 | 1.06 | 1.15 | 1.27 | 1.39 | 1.62 | 1.82  | 2.01  | 0.01   | 0.03               | 0.05               | 0.06             |
| 400      | 1.04                                      | 1.14 | 1.24 | 1.36 | 1.48 | 1.62 | 1.78 | 2.08 | 2.12  | 2.45  | 0.01   | 0.04               | 0.07               | 0.08             |
| 500      | 1.25                                      | 1.37 | 1.50 | 1.64 | 1.78 | 1.97 | 2.15 | 2.52 | 2.59  | 2.98  | 0.01   | 0.05               | 0.09               | 0.10             |
| 600      | 1.46                                      | 1.59 | 1.75 | 1.90 | 2.08 | 2.30 | 2.51 | 2.93 | 3.05  | 3.51  | 0.01   | 0.06               | 0.10               | 0.12             |
| 700      | 1.66                                      | 1.81 | 1.99 | 2.16 | 2.36 | 2.61 | 2.92 | 3.21 | 3.56  | 4.01  | 0.02   | 0.08               | 0.12               | 0.14             |
| 800      | 1.85                                      | 2.02 | 2.22 | 2.42 | 2.64 | 2.92 | 3.20 | 3.74 | 3.94  | 4.51  | 0.02   | 0.09               | 0.14               | 0.16             |
| 900      | 2.03                                      | 2.22 | 2.44 | 2.67 | 2.91 | 3.21 | 3.53 | 4.12 | 4.35  | 4.98  | 0.02   | 0.10               | 0.16               | 0.18             |
| 1000     | 2.21                                      | 2.42 | 2.65 | 2.90 | 3.17 | 3.51 | 3.84 | 4.49 | 4.75  | 5.45  | 0.02   | 0.11               | 0.17               | 0.19             |
| 1100     | 2.37                                      | 2.60 | 2.87 | 3.12 | 3.42 | 3.79 | 4.14 | 4.85 | 5.16  | 5.92  | 0.02   | 0.12               | 0.19               | 0.21             |
| 1200     | 2.54                                      | 2.79 | 3.07 | 3.35 | 3.66 | 4.05 | 4.45 | 5.20 | 5.56  | 6.39  | 0.03   | 0.13               | 0.21               | 0.23             |
| 1300     | 2.70                                      | 2.97 | 3.27 | 3.56 | 3.90 | 4.31 | 4.73 | 5.53 | 5.93  | 6.81  | 0.03   | 0.14               | 0.22               | 0.25             |
| 1400     | 2.86                                      | 3.14 | 3.46 | 3.77 | 4.13 | 4.57 | 5.01 | 5.85 | 6.31  | 7.22  | 0.03   | 0.15               | 0.24               | 0.27             |
| 1500     | 3.01                                      | 3.30 | 3.64 | 3.98 | 4.36 | 4.82 | 5.28 | 6.16 | 6.68  | 7.64  | 0.03   | 0.16               | 0.26               | 0.29             |
| 1600     | 3.16                                      | 3.46 | 3.82 | 4.17 | 4.57 | 5.05 | 5.53 | 6.45 | 7.05  | 8.05  | 0.03   | 0.17               | 0.28               | 0.31             |
| 1700     | 3.29                                      | 3.62 | 3.99 | 4.36 | 4.77 | 5.29 | 5.78 | 6.74 | 7.36  | 8.40  | 0.04   | 0.18               | 0.29               | 0.33             |
| 1800     | 3.43                                      | 3.77 | 4.16 | 4.55 | 4.97 | 5.50 | 6.01 | 7.01 | 7.67  | 8.74  | 0.04   | 0.19               | 0.31               | 0.35             |
| 1900     | 3.56                                      | 3.92 | 4.32 | 4.72 | 5.16 | 5.71 | 6.25 | 7.27 | 7.98  | 9.09  | 0.04   | 0.21               | 0.33               | 0.37             |
| 2000     | 3.70                                      | 4.05 | 4.48 | 4.89 | 5.35 | 5.91 | 6.46 | 7.52 | 8.29  | 9.43  | 0.04   | 0.22               | 0.35               | 0.39             |
| 2100     | 3.82                                      | 4.19 | 4.63 | 5.05 | 5.53 | 6.10 | 6.68 | 7.74 | 8.56  | 9.71  | 0.05   | 0.23               | 0.36               | 0.41             |
| 2200     | 3.93                                      | 4.32 | 4.77 | 5.21 | 5.70 | 6.29 | 6.87 | 7.95 | 8.83  | 10.00 | 0.05   | 0.24               | 0.38               | 0.43             |
| 2300     | 4.04                                      | 4.45 | 4.91 | 5.35 | 5.86 | 6.47 | 7.06 | 8.15 | 9.09  | 10.28 | 0.05   | 0.25               | 0.40               | 0.45             |
| 2400     | 4.16                                      | 4.57 | 5.04 | 5.50 | 6.01 | 6.63 | 7.24 | 8.34 | 9.36  | 10.56 | 0.05   | 0.26               | 0.42               | 0.47             |
| 2500     | 4.26                                      | 4.68 | 5.16 | 5.63 | 6.16 | 6.79 | 7.39 | 8.51 | 9.51  |       | 0.05   | 0.27               | 0.43               | 0.49             |
| 2600     | 4.36                                      | 4.79 | 5.29 | 5.77 | 6.29 | 6.94 | 7.55 | 8.67 | 9.66  |       | 0.06   | 0.28               | 0.45               | 0.51             |
| 2700     | 4.45                                      | 4.89 | 5.40 | 5.89 | 6.43 | 7.08 | 7.69 | 8.81 | 9.81  |       | 0.06   | 0.29               | 0.47               | 0.53             |
| 2800     | 4.54                                      | 5.00 | 5.51 | 6.00 | 6.55 | 7.20 | 7.82 | 8.94 | 9.97  |       | 0.06   | 0.30               | 0.48               | 0.54             |
| 2900     | 4.63                                      | 5.08 | 5.60 | 6.10 | 6.66 | 7.31 | 7.93 | 9.04 | 10.12 |       | 0.06   | 0.31               | 0.50               | 0.56             |
| 3000     | 4.70                                      | 5.17 | 5.70 | 6.20 | 6.76 | 7.43 | 8.04 | 9.13 | 10.27 |       | 0.06   | 0.32               | 0.52               | 0.58             |
| 3100     | 4.77                                      | 5.25 | 5.78 | 6.29 | 6.85 | 7.52 | 8.13 | 9.20 | 10.42 |       | 0.07   | 0.34               | 0.54               | 0.60             |
| 3200     | 4.85                                      | 5.32 | 5.87 | 6.38 | 6.94 | 7.60 | 8.10 | 9.25 | 10.57 |       | 0.07   | 0.35               | 0.55               | 0.62             |
| 3300     | 4.91                                      | 5.39 | 5.94 | 6.45 | 7.02 | 7.67 | 8.27 | 9.28 |       |       | 0.07   | 0.36               | 0.57               | 0.64             |
| 3400     | 4.96                                      | 5.45 | 6.00 | 6.52 | 7.08 | 7.73 | 8.32 | 9.30 |       |       | 0.07   | 0.37               | 0.59               | 0.66             |
| 3500     | 5.02                                      | 5.51 | 6.06 | 6.59 | 7.13 | 7.78 | 8.36 | 9.30 |       |       | 0.08   | 0.38               | 0.61               | 0.68             |
| 3600     | 5.06                                      | 5.56 | 6.12 | 6.63 | 7.18 | 7.82 | 8.38 |      |       |       | 0.08   | 0.39               | 0.62               | 0.70             |
| 3700     | 5.11                                      | 5.60 | 6.15 | 6.68 | 7.22 | 7.84 | 8.38 |      |       |       | 0.08   | 0.40               | 0.64               | 0.72             |
| 3800     | 5.14                                      | 5.63 | 6.18 | 6.70 | 7.25 | 7.85 | 8.38 |      |       |       | 0.08   | 0.41               | 0.66               | 0.74             |
| 3900     | 5.17                                      | 5.67 | 6.22 | 6.72 | 7.26 | 7.85 | 8.36 |      |       |       | 0.08   | 0.42               | 0.67               | 0.76             |
| 4000     | 5.20                                      | 5.69 | 6.24 | 6.74 | 7.26 | 7.83 | 8.31 |      |       |       | 0.09   | 0.43               | 0.69               | 0.78             |
| 4100     | 5.21                                      | 5.70 | 6.25 | 6.74 | 7.26 | 7.81 |      |      |       |       | 0.09   | 0.44               | 0.71               | 0.80             |
| 4200     | 5.22                                      | 5.71 | 6.25 | 6.73 | 7.24 | 7.76 |      |      |       |       | 0.09   | 0.45               | 0.73               | 0.82             |
| 4300     | 5.23                                      | 5.71 | 6.24 | 6.72 | 7.20 | 7.71 |      |      |       |       | 0.09   | 0.46               | 0.74               | 0.84             |
| 4400     | 5.22                                      | 5.71 | 6.23 | 6.70 | 7.16 | 7.64 |      |      |       |       | 0.10   | 0.48               | 0.76               | 0.86             |
| 4500     | 5.22                                      | 5.70 | 6.20 | 6.66 | 7.11 | 7.55 |      |      |       |       | 0.10   | 0.49               | 0.78               | 0.88             |
| 4600     | 5.20                                      | 5.68 | 6.17 | 6.62 |      |      |      |      |       |       | 0.10   | 0.50               | 0.80               | 0.89             |
| 4700     | 5.17                                      | 5.64 | 6.14 | 6.56 |      |      |      |      |       |       | 0.10   | 0.51               | 0.81               | 0.91             |
| 4800     | 5.12                                      | 5.61 | 6.03 | 6.42 |      |      |      |      |       |       | 0.10   | 0.52               | 0.83               | 0.93             |
| 4900     | 5.12                                      | 5.57 | 6.03 | 6.42 |      |      |      |      |       |       | 0.11   | 0.53               | 0.85               | 0.95             |
| 5000     | 5.07                                      | 5.51 | 5.96 | 6.33 |      |      |      |      |       |       | 0.11   | 0.54               | 0.87               | 0.97             |
| 5100     | 5.03                                      | 5.45 |      |      |      |      |      |      |       |       | 0.11   | 0.55               | 0.88               | 0.99             |
| 5200     | 4.97                                      | 5.38 |      |      |      |      |      |      |       |       | 0.11   | 0.56               | 0.90               | 1.01             |
| 5300     | 4.91                                      | 5.31 |      |      |      |      |      |      |       |       | 0.11   | 0.57               | 0.92               | 1.03             |
| 5400     | 4.84                                      | 5.22 |      |      |      |      |      |      |       |       | 0.12   | 0.58               | 0.93               | 1.05             |
| 5500     | 4.76                                      | 5.12 |      |      |      |      |      |      |       |       | 0.12   | 0.59               | 0.95               | 1.07             |

**TABLE 7 Section B**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |      |      |      |      |      |      | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |                  |
|----------|---|------|------|------|------|------|------|--|--------------------|--------------------|------------------|
|          | 106                                       | 112  | 118  | 125  | 132  | 140  | 150  | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>><br>1.57 |
| 700      | 1.36                                      | 1.63 | 1.77 | 2.15 | 2.43 | 2.74 | 3.14 | 0.03   | 0.17               | 0.27               | 0.30             |
| 950      | 1.61                                      | 2.01 | 2.19 | 2.68 | 3.05 | 3.45 | 3.96 | 0.05   | 0.23               | 0.37               | 0.41             |
| 1450     | 1.97                                      | 2.61 | 2.98 | 3.58 | 4.08 | 4.66 | 5.37 | 0.07   | 0.35               | 0.56               | 0.63             |
| 2850     | 2.36                                      | 3.28 | 3.76 | 4.81 | 5.59 | 6.45 | 7.47 | 0.14   | 0.69               | 1.10               | 1.24             |
| 100      | 0.34                                      | 0.36 | 0.38 | 0.45 | 0.50 | 0.55 | 0.62 | 0.00   | 0.02               | 0.04               | 0.04             |
| 200      | 0.59                                      | 0.63 | 0.68 | 0.80 | 0.89 | 0.99 | 1.12 | 0.01   | 0.05               | 0.08               | 0.09             |
| 300      | 0.78                                      | 0.87 | 0.92 | 1.11 | 1.24 | 1.39 | 1.57 | 0.01   | 0.07               | 0.12               | 0.13             |
| 400      | 0.96                                      | 1.08 | 1.18 | 1.40 | 1.56 | 1.76 | 1.99 | 0.02   | 0.10               | 0.15               | 0.17             |
| 500      | 1.11                                      | 1.28 | 1.39 | 1.66 | 1.87 | 2.10 | 2.39 | 0.02   | 0.12               | 0.19               | 0.22             |
| 600      | 1.23                                      | 1.46 | 1.57 | 1.91 | 2.16 | 2.43 | 2.77 | 0.03   | 0.14               | 0.23               | 0.26             |
| 700      | 1.36                                      | 1.63 | 1.77 | 2.15 | 2.43 | 2.74 | 3.14 | 0.03   | 0.17               | 0.27               | 0.30             |
| 800      | 1.46                                      | 1.79 | 1.98 | 2.38 | 2.68 | 3.04 | 3.48 | 0.04   | 0.19               | 0.31               | 0.35             |
| 900      | 1.55                                      | 1.94 | 2.12 | 2.59 | 2.93 | 3.32 | 3.81 | 0.04   | 0.22               | 0.35               | 0.39             |
| 1000     | 1.65                                      | 2.08 | 2.42 | 2.78 | 3.17 | 3.59 | 4.11 | 0.05   | 0.24               | 0.39               | 0.43             |
| 1100     | 1.74                                      | 2.21 | 2.58 | 2.98 | 3.39 | 3.85 | 4.42 | 0.05   | 0.27               | 0.42               | 0.48             |
| 1200     | 1.81                                      | 2.33 | 2.69 | 3.16 | 3.60 | 4.09 | 4.71 | 0.06   | 0.29               | 0.46               | 0.52             |
| 1300     | 1.87                                      | 2.44 | 2.88 | 3.33 | 3.80 | 4.32 | 4.98 | 0.06   | 0.31               | 0.50               | 0.56             |
| 1400     | 1.93                                      | 2.55 | 2.93 | 3.50 | 3.99 | 4.55 | 5.25 | 0.07   | 0.34               | 0.54               | 0.61             |
| 1500     | 1.99                                      | 2.65 | 3.08 | 3.64 | 4.17 | 4.76 | 5.49 | 0.07   | 0.36               | 0.58               | 0.65             |
| 1600     | 2.03                                      | 2.75 | 3.16 | 3.80 | 4.35 | 4.96 | 5.73 | 0.08   | 0.39               | 0.62               | 0.69             |
| 1700     | 2.09                                      | 2.84 | 3.28 | 3.93 | 4.50 | 5.15 | 5.95 | 0.08   | 0.41               | 0.66               | 0.74             |
| 1800     | 2.14                                      | 2.92 | 3.36 | 4.05 | 4.65 | 5.32 | 6.16 | 0.09   | 0.43               | 0.70               | 0.78             |
| 1900     | 2.16                                      | 2.98 | 3.41 | 4.17 | 4.80 | 5.50 | 6.35 | 0.09   | 0.46               | 0.73               | 0.82             |
| 2000     | 2.19                                      | 3.05 | 3.48 | 4.28 | 4.93 | 5.65 | 6.53 | 0.10   | 0.48               | 0.77               | 0.87             |
| 2100     | 2.23                                      | 3.10 | 3.55 | 4.38 | 5.04 | 5.79 | 6.70 | 0.10   | 0.51               | 0.81               | 0.91             |
| 2200     | 2.26                                      | 3.15 | 3.62 | 4.47 | 5.15 | 5.92 | 6.85 | 0.11   | 0.53               | 0.85               | 0.96             |
| 2300     | 2.27                                      | 3.19 | 3.65 | 4.54 | 5.25 | 6.04 | 6.99 | 0.11   | 0.56               | 0.89               | 1.00             |
| 2400     | 2.28                                      | 3.22 | 3.69 | 4.61 | 5.34 | 6.14 | 7.12 | 0.12   | 0.58               | 0.95               | 1.04             |
| 2500     | 2.29                                      | 3.25 | 3.72 | 4.68 | 5.41 | 6.24 | 7.22 | 0.12   | 0.60               | 0.97               | 1.09             |
| 2600     | 2.31                                      | 3.27 | 3.74 | 4.72 | 5.48 | 6.31 | 7.32 | 0.13   | 0.63               | 1.00               | 1.13             |
| 2700     | 2.33                                      | 3.28 | 3.75 | 4.76 | 5.53 | 6.38 | 7.39 | 0.13   | 0.65               | 1.04               | 1.17             |
| 2800     | 2.35                                      | 3.28 | 3.76 | 4.80 | 5.57 | 6.42 | 7.45 | 0.14   | 0.68               | 1.08               | 1.22             |
| 2900     | 2.38                                      | 3.28 | 3.76 | 4.82 | 5.60 | 6.47 | 7.49 | 0.14   | 0.70               | 1.12               | 1.26             |
| 3000     | 2.26                                      | 3.27 | 3.77 | 4.82 | 5.62 | 6.49 | 7.51 | 0.14   | 0.72               | 1.16               | 1.30             |
| 3100     | 2.19                                      | 3.25 | 3.77 | 4.82 | 5.62 | 6.50 | 7.52 | 0.15   | 0.75               | 1.20               | 1.35             |
| 3200     | 2.16                                      | 3.21 | 3.76 | 4.81 | 5.61 | 6.49 | 7.51 | 0.15   | 0.77               | 1.24               | 1.39             |
| 3300     | 2.14                                      | 3.17 | 3.76 | 4.79 | 5.59 | 6.47 | 7.48 | 0.16   | 0.80               | 1.27               | 1.43             |
| 3400     | 2.06                                      | 3.12 | 3.75 | 4.74 | 5.56 | 6.44 | 7.44 | 0.16   | 0.82               | 1.31               | 1.48             |
| 3500     | 1.99                                      | 3.07 | 3.73 | 4.70 | 5.51 | 6.38 | 7.37 | 0.17   | 0.84               | 1.35               | 1.52             |
| 3600     | 1.94                                      | 3.00 | 3.71 | 4.64 | 5.45 | 6.31 | 7.29 | 0.17   | 0.87               | 1.39               | 1.56             |
| 3700     | 1.89                                      | 2.93 | 3.69 | 4.57 | 5.37 | 6.23 | 7.18 | 0.18   | 0.89               | 1.43               | 1.61             |
| 3800     | 1.86                                      | 2.85 | 3.65 | 4.48 | 5.28 | 6.12 | 7.06 | 0.18   | 0.92               | 1.47               | 1.65             |
| 3900     | 1.84                                      | 2.75 | 3.62 | 4.39 | 5.17 | 6.01 | 6.91 | 0.19   | 0.94               | 1.51               | 1.69             |
| 4000     | 1.79                                      | 2.65 | 3.52 | 4.28 | 5.06 | 5.86 | 6.74 | 0.19   | 0.97               | 1.55               | 1.74             |
| 4100     | 1.77                                      | 2.54 | 3.41 | 4.15 | 4.92 | 5.71 | 6.56 | 0.20   | 0.99               | 1.58               | 1.78             |
| 4200     | 1.71                                      | 2.42 | 3.38 | 4.02 | 4.77 | 5.53 | 6.35 | 0.20   | 1.01               | 1.62               | 1.82             |
| 4300     | 1.69                                      | 2.29 | 3.28 | 3.86 | 4.60 | 5.35 | 6.11 | 0.21   | 1.04               | 1.66               | 1.87             |
| 4400     | 1.67                                      | 2.15 | 3.16 | 3.71 | 4.42 | 5.14 | 5.85 | 0.21   | 1.06               | 1.70               | 1.91             |
| 4500     | 1.65                                      | 1.99 | 3.08 | 3.52 | 4.22 | 4.91 | 5.58 | 0.22   | 1.09               | 1.74               | 1.95             |
| 4600     | 1.61                                      | 1.83 | 2.88 | 3.33 | 4.00 | 4.89 |      | 0.22   | 1.11               | 1.78               | 2.00             |
| 4700     | 1.58                                      | 1.65 | 2.81 | 3.12 | 3.77 | 4.85 |      | 0.23   | 1.13               | 1.82               | 2.04             |
| 4800     | 1.56                                      | 1.47 | 2.42 | 2.90 | 3.53 | 4.75 |      | 0.23   | 1.16               | 1.85               | 2.08             |
| 4900     | 1.55                                      | 1.28 | 2.22 | 2.67 | 3.26 |      |      | 0.24   | 1.18               | 1.89               | 2.13             |
| 5000     | 1.54                                      | 1.07 | 2.05 | 2.42 | 2.97 |      |      | 0.24   | 1.21               | 1.93               | 2.17             |

**TABLE 7 Section B**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |      |       |       |       |       |       |       |       |       |       |       | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |                  |
|----------|---|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--------------------|--------------------|------------------|
|          | 160                                       | 170  | 180   | 190   | 200   | 212   | 224   | 236   | 250   | 280   | 315   | 355   | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>><br>1.57 |
| 700      | 3.52                                      | 3.89 | 4.28  | 4.65  | 5.03  | 5.47  | 5.91  | 6.35  | 6.85  | 7.91  | 8.23  | 9.46  | 0.03   | 0.17               | 0.27               | 0.30             |
| 950      | 4.47                                      | 4.96 | 5.45  | 5.93  | 6.41  | 6.97  | 7.54  | 8.09  | 8.76  | 10.05 | 10.56 | 12.06 | 0.05   | 0.23               | 0.37               | 0.41             |
| 1450     | 6.06                                      | 6.75 | 7.43  | 8.09  | 8.73  | 9.49  | 10.23 | 10.96 | 11.84 | 13.42 | 14.16 | 15.91 | 0.07   | 0.35               | 0.56               | 0.63             |
| 2850     | 8.44                                      | 9.33 | 10.15 | 10.92 | 11.62 | 12.34 | 12.96 | 13.45 |       |       |       |       | 0.14   | 0.69               | 1.10               | 1.24             |
| 100      | 0.68                                      | 0.75 | 0.81  | 0.89  | 0.96  | 1.03  | 1.11  | 1.19  | 1.28  | 1.47  | 1.63  | 2.32  | 0.00   | 0.02               | 0.04               | 0.04             |
| 200      | 1.24                                      | 1.38 | 1.50  | 1.62  | 1.75  | 1.89  | 2.04  | 2.19  | 2.35  | 2.72  | 2.75  | 3.11  | 0.01   | 0.05               | 0.08               | 0.09             |
| 300      | 1.76                                      | 1.94 | 2.11  | 2.30  | 2.48  | 2.68  | 2.89  | 3.11  | 3.36  | 3.87  | 3.93  | 4.51  | 0.01   | 0.07               | 0.12               | 0.13             |
| 400      | 2.23                                      | 2.46 | 2.70  | 2.93  | 3.16  | 3.43  | 3.71  | 3.98  | 4.29  | 4.95  | 5.11  | 5.91  | 0.02   | 0.10               | 0.15               | 0.17             |
| 500      | 2.68                                      | 2.97 | 3.25  | 3.53  | 3.81  | 4.15  | 4.48  | 4.81  | 5.18  | 5.98  | 6.16  | 7.13  | 0.02   | 0.12               | 0.19               | 0.22             |
| 600      | 3.11                                      | 3.44 | 3.77  | 4.10  | 4.43  | 4.82  | 5.21  | 5.59  | 6.04  | 6.97  | 7.21  | 8.35  | 0.03   | 0.14               | 0.23               | 0.26             |
| 700      | 3.52                                      | 3.89 | 4.28  | 4.65  | 5.03  | 5.47  | 5.91  | 6.35  | 6.85  | 7.91  | 8.23  | 9.46  | 0.03   | 0.17               | 0.27               | 0.30             |
| 800      | 3.91                                      | 4.33 | 4.76  | 5.18  | 5.60  | 6.09  | 6.59  | 7.07  | 7.62  | 8.80  | 9.24  | 10.56 | 0.04   | 0.19               | 0.31               | 0.35             |
| 900      | 4.28                                      | 4.75 | 5.23  | 5.69  | 6.15  | 6.69  | 7.23  | 7.76  | 8.37  | 9.65  | 10.08 | 11.58 | 0.04   | 0.22               | 0.35               | 0.39             |
| 1000     | 4.64                                      | 5.16 | 5.67  | 6.17  | 6.67  | 7.26  | 7.84  | 8.42  | 9.08  | 10.45 | 10.91 | 12.59 | 0.05   | 0.24               | 0.39               | 0.43             |
| 1100     | 4.98                                      | 5.54 | 6.09  | 6.63  | 7.17  | 7.80  | 8.43  | 9.04  | 9.74  | 11.20 | 11.75 | 13.61 | 0.05   | 0.27               | 0.42               | 0.48             |
| 1200     | 5.31                                      | 5.91 | 6.49  | 7.07  | 7.65  | 8.32  | 8.98  | 9.63  | 10.37 | 11.90 | 12.58 | 14.62 | 0.06   | 0.29               | 0.46               | 0.52             |
| 1300     | 5.62                                      | 6.26 | 6.89  | 7.49  | 8.10  | 8.81  | 9.50  | 10.19 | 10.96 | 12.55 | 13.19 | 15.13 | 0.06   | 0.31               | 0.50               | 0.56             |
| 1400     | 5.92                                      | 6.59 | 7.25  | 7.90  | 8.53  | 9.27  | 10.00 | 10.70 | 11.51 | 13.15 | 13.80 | 15.63 | 0.07   | 0.34               | 0.54               | 0.61             |
| 1500     | 6.20                                      | 6.91 | 7.59  | 8.27  | 8.93  | 9.70  | 10.46 | 11.19 | 12.01 | 13.68 | 14.41 | 16.14 | 0.07   | 0.36               | 0.58               | 0.65             |
| 1600     | 6.48                                      | 7.21 | 7.92  | 8.50  | 9.31  | 10.11 | 10.89 | 11.64 | 12.49 | 14.17 | 15.02 | 16.64 | 0.08   | 0.39               | 0.62               | 0.69             |
| 1700     | 6.73                                      | 7.49 | 8.23  | 8.95  | 9.66  | 10.48 | 11.28 | 12.05 | 12.90 | 14.59 | 15.35 |       | 0.08   | 0.41               | 0.66               | 0.74             |
| 1800     | 6.96                                      | 7.76 | 8.51  | 9.26  | 9.99  | 10.84 | 11.64 | 12.41 | 13.27 | 14.94 | 15.69 |       | 0.09   | 0.43               | 0.70               | 0.78             |
| 1900     | 7.18                                      | 8.00 | 8.79  | 9.55  | 10.29 | 11.14 | 11.96 | 12.74 | 13.60 | 15.24 | 16.02 |       | 0.09   | 0.46               | 0.73               | 0.82             |
| 2000     | 7.39                                      | 8.23 | 9.03  | 9.81  | 10.56 | 11.43 | 12.24 | 13.02 | 13.87 | 15.46 | 16.35 |       | 0.10   | 0.48               | 0.77               | 0.87             |
| 2100     | 7.58                                      | 8.44 | 9.25  | 10.04 | 10.80 | 11.67 | 12.50 | 13.26 | 14.09 | 15.61 |       |       | 0.10   | 0.51               | 0.81               | 0.91             |
| 2200     | 7.76                                      | 8.62 | 9.45  | 10.25 | 11.02 | 11.88 | 12.69 | 13.45 | 14.26 | 15.69 |       |       | 0.11   | 0.53               | 0.85               | 0.96             |
| 2300     | 7.91                                      | 8.79 | 9.64  | 10.44 | 11.20 | 12.06 | 12.86 | 13.60 | 14.37 | 15.69 |       |       | 0.11   | 0.56               | 0.89               | 1.00             |
| 2400     | 8.04                                      | 8.93 | 9.79  | 10.59 | 11.35 | 12.20 | 12.98 | 13.68 | 14.42 | 15.61 |       |       | 0.12   | 0.58               | 0.95               | 1.04             |
| 2500     | 8.16                                      | 9.06 | 9.91  | 10.71 | 11.47 | 12.30 | 13.06 | 13.73 | 14.41 | 15.44 |       |       | 0.12   | 0.60               | 0.97               | 1.09             |
| 2600     | 8.26                                      | 9.16 | 10.02 | 10.81 | 11.55 | 12.36 | 13.09 | 13.72 |       |       |       |       | 0.13   | 0.63               | 1.00               | 1.13             |
| 2700     | 8.35                                      | 9.25 | 10.10 | 10.88 | 11.61 | 12.39 | 13.07 | 13.66 |       |       |       |       | 0.13   | 0.65               | 1.04               | 1.17             |
| 2800     | 8.40                                      | 9.31 | 10.14 | 10.91 | 11.62 | 12.36 | 13.01 | 13.54 |       |       |       |       | 0.14   | 0.68               | 1.08               | 1.22             |
| 2900     | 8.45                                      | 9.35 | 10.16 | 10.92 | 11.59 | 12.31 | 12.89 | 13.35 |       |       |       |       | 0.14   | 0.70               | 1.12               | 1.26             |
| 3000     | 8.47                                      | 9.36 | 10.16 | 10.89 | 11.54 | 12.20 | 12.73 | 13.12 |       |       |       |       | 0.14   | 0.72               | 1.16               | 1.30             |
| 3100     | 8.47                                      | 9.35 | 10.13 | 10.84 | 11.44 |       |       |       |       |       |       |       | 0.15   | 0.75               | 1.20               | 1.35             |
| 3200     | 8.46                                      | 9.31 | 10.07 | 10.74 | 11.31 |       |       |       |       |       |       |       | 0.15   | 0.77               | 1.24               | 1.39             |
| 3300     | 8.42                                      | 9.24 | 9.98  | 10.60 | 11.13 |       |       |       |       |       |       |       | 0.16   | 0.80               | 1.27               | 1.43             |
| 3400     | 8.35                                      | 9.15 | 9.86  | 10.44 | 10.91 |       |       |       |       |       |       |       | 0.16   | 0.82               | 1.31               | 1.48             |
| 3500     | 8.26                                      | 9.04 | 9.70  | 10.24 | 10.65 |       |       |       |       |       |       |       | 0.17   | 0.84               | 1.35               | 1.52             |
| 3600     | 8.15                                      | 8.90 |       |       |       |       |       |       |       |       |       |       | 0.17   | 0.87               | 1.39               | 1.56             |
| 3700     | 8.02                                      | 8.72 |       |       |       |       |       |       |       |       |       |       | 0.18   | 0.89               | 1.43               | 1.61             |
| 3800     | 7.87                                      | 8.53 |       |       |       |       |       |       |       |       |       |       | 0.18   | 0.92               | 1.47               | 1.65             |
| 3900     | 7.68                                      | 8.29 |       |       |       |       |       |       |       |       |       |       | 0.19   | 0.94               | 1.51               | 1.69             |
| 4000     | 7.47                                      | 8.03 |       |       |       |       |       |       |       |       |       |       | 0.19   | 0.97               | 1.55               | 1.74             |

**TABLE 8 Section 20**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |      |      |      |       |       |       |       |       |       |       |       |       | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |               |
|----------|---|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--------------------|--------------------|---------------|
|          | 140                                       | 160  | 180  | 200  | 224   | 236   | 250   | 280   | 315   | 355   | 400   | 450   | 500   | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>> 1.57 |
| 700      | 2.83                                      | 3.60 | 4.34 | 5.08 | 5.93  | 6.34  | 6.83  | 7.83  | 8.96  | 10.20 | 12.43 | 14.04 | 16.42 | 0.04   | 0.18               | 0.29               | 0.32          |
| 950      | 3.46                                      | 4.43 | 5.38 | 6.31 | 7.35  | 7.87  | 8.47  | 9.69  | 11.03 | 12.45 | 15.27 | 17.03 | 19.05 | 0.05   | 0.24               | 0.39               | 0.44          |
| 1450     | 4.41                                      | 5.72 | 6.98 | 8.16 | 9.49  | 10.13 | 10.83 | 12.21 | 13.62 | 14.91 | 18.65 |       |       | 0.07   | 0.37               | 0.59               | 0.67          |
| 2850     | 5.02                                      | 6.61 | 7.87 | 8.81 | 9.45  |       |       |       |       |       |       |       |       | 0.15   | 0.73               | 1.17               | 1.31          |
| 50       | 0.36                                      | 0.43 | 0.52 | 0.59 | 0.68  | 0.72  | 0.78  | 0.89  | 1.02  | 1.16  | 1.60  | 2.04  | 3.67  | 0.00   | 0.01               | 0.02               | 0.02          |
| 100      | 0.64                                      | 0.78 | 0.93 | 1.07 | 1.23  | 1.32  | 1.41  | 1.61  | 1.85  | 2.11  | 2.45  | 2.93  | 4.52  | 0.01   | 0.03               | 0.04               | 0.05          |
| 150      | 0.89                                      | 1.09 | 1.30 | 1.50 | 1.73  | 1.85  | 1.99  | 2.28  | 2.60  | 2.97  | 3.06  | 3.68  | 5.61  | 0.01   | 0.04               | 0.06               | 0.07          |
| 200      | 1.11                                      | 1.38 | 1.64 | 1.90 | 2.20  | 2.35  | 2.53  | 2.89  | 3.32  | 3.79  | 4.35  | 4.98  | 6.75  | 0.01   | 0.05               | 0.08               | 0.09          |
| 250      | 1.33                                      | 1.64 | 1.97 | 2.28 | 2.65  | 2.83  | 3.03  | 3.48  | 3.99  | 4.56  | 5.24  | 6.00  | 7.88  | 0.01   | 0.06               | 0.10               | 0.12          |
| 300      | 1.52                                      | 1.90 | 2.27 | 2.64 | 3.07  | 3.27  | 3.52  | 4.04  | 4.63  | 5.29  | 6.14  | 7.02  | 8.97  | 0.02   | 0.08               | 0.12               | 0.14          |
| 350      | 1.72                                      | 2.14 | 2.56 | 2.98 | 3.47  | 3.72  | 3.99  | 4.58  | 5.25  | 5.99  | 6.99  | 7.99  | 10.15 | 0.02   | 0.09               | 0.14               | 0.16          |
| 400      | 1.89                                      | 2.38 | 2.85 | 3.32 | 3.86  | 4.13  | 4.44  | 5.10  | 5.84  | 6.67  | 7.92  | 9.06  | 11.13 | 0.02   | 0.10               | 0.16               | 0.18          |
| 450      | 2.06                                      | 2.59 | 3.12 | 3.63 | 4.23  | 4.53  | 4.87  | 5.59  | 6.42  | 7.32  | 8.70  | 9.93  | 12.22 | 0.02   | 0.12               | 0.18               | 0.21          |
| 500      | 2.22                                      | 2.81 | 3.38 | 3.94 | 4.59  | 4.91  | 5.29  | 6.07  | 6.97  | 7.95  | 9.57  | 10.91 | 13.09 | 0.03   | 0.13               | 0.21               | 0.23          |
| 550      | 2.39                                      | 2.01 | 3.63 | 4.23 | 4.95  | 5.29  | 5.69  | 6.53  | 7.48  | 8.54  | 10.29 | 11.70 | 14.05 | 0.03   | 0.14               | 0.23               | 0.25          |
| 600      | 2.54                                      | 3.22 | 3.88 | 4.53 | 5.28  | 5.66  | 6.08  | 6.99  | 8.00  | 9.12  | 11.05 | 12.54 | 14.84 | 0.03   | 0.15               | 0.25               | 0.28          |
| 650      | 2.69                                      | 3.41 | 4.11 | 4.81 | 5.61  | 6.11  | 6.46  | 7.41  | 8.49  | 9.67  | 11.74 | 13.29 | 15.63 | 0.03   | 0.17               | 0.27               | 0.30          |
| 700      | 2.83                                      | 3.60 | 4.34 | 5.08 | 5.93  | 6.34  | 6.83  | 7.83  | 8.96  | 10.20 | 12.43 | 14.04 | 16.42 | 0.04   | 0.18               | 0.29               | 0.32          |
| 750      | 2.96                                      | 3.77 | 4.56 | 5.34 | 6.23  | 6.67  | 7.18  | 8.23  | 9.41  | 10.69 | 13.11 | 14.79 | 17.21 | 0.04   | 0.19               | 0.31               | 0.35          |
| 800      | 3.09                                      | 3.94 | 4.77 | 5.58 | 6.52  | 6.99  | 7.52  | 8.62  | 9.84  | 11.17 | 13.80 | 15.54 | 17.67 | 0.04   | 0.21               | 0.33               | 0.37          |
| 850      | 3.22                                      | 4.11 | 4.98 | 5.83 | 6.81  | 7.29  | 7.84  | 8.97  | 10.26 | 11.62 | 14.29 | 16.04 | 18.13 | 0.04   | 0.22               | 0.35               | 0.39          |
| 900      | 3.34                                      | 4.28 | 5.18 | 6.07 | 7.10  | 7.59  | 8.16  | 9.34  | 10.65 | 12.05 | 14.78 | 16.53 | 18.59 | 0.05   | 0.23               | 0.37               | 0.42          |
| 950      | 3.46                                      | 4.43 | 5.38 | 6.31 | 7.35  | 7.87  | 8.47  | 9.69  | 11.03 | 12.45 | 15.27 | 17.03 | 19.05 | 0.05   | 0.24               | 0.39               | 0.44          |
| 1000     | 3.57                                      | 4.59 | 5.56 | 6.51 | 7.61  | 8.15  | 8.76  | 10.01 | 10.38 | 12.82 | 15.76 | 17.53 | 19.51 | 0.05   | 0.26               | 0.41               | 0.46          |
| 1050     | 3.68                                      | 4.73 | 5.75 | 6.73 | 7.86  | 8.41  | 9.04  | 10.31 | 10.72 | 13.18 | 16.24 | 18.02 | 19.97 | 0.05   | 0.27               | 0.43               | 0.48          |
| 1100     | 3.78                                      | 4.87 | 5.92 | 6.93 | 8.10  | 8.66  | 9.31  | 10.62 | 12.03 | 13.49 | 16.73 | 18.52 | 20.43 | 0.06   | 0.28               | 0.45               | 0.51          |
| 1150     | 3.89                                      | 5.01 | 6.09 | 7.14 | 8.33  | 8.91  | 9.56  | 10.89 | 12.32 | 13.78 | 17.22 | 19.01 | 20.89 | 0.06   | 0.29               | 0.47               | 0.53          |
| 1200     | 3.99                                      | 5.14 | 6.25 | 7.32 | 8.55  | 9.14  | 9.81  | 11.16 | 12.59 | 14.05 | 17.71 | 19.51 |       | 0.06   | 0.31               | 0.49               | 0.55          |
| 1250     | 4.07                                      | 5.27 | 6.42 | 7.51 | 8.76  | 9.35  | 10.03 | 11.40 | 12.84 | 14.28 | 17.90 |       |       | 0.06   | 0.32               | 0.51               | 0.58          |
| 1300     | 4.16                                      | 5.39 | 6.56 | 7.68 | 8.95  | 9.57  | 10.25 | 11.63 | 13.07 | 14.48 | 18.09 |       |       | 0.07   | 0.33               | 0.53               | 0.60          |
| 1350     | 4.24                                      | 5.51 | 6.71 | 7.85 | 9.15  | 9.76  | 10.45 | 11.85 | 13.27 | 14.66 | 18.27 |       |       | 0.07   | 0.35               | 0.55               | 0.62          |
| 1400     | 4.33                                      | 5.62 | 6.85 | 8.00 | 9.33  | 9.95  | 10.65 | 12.04 | 13.46 | 14.80 | 18.46 |       |       | 0.07   | 0.36               | 0.57               | 0.65          |
| 1450     | 4.41                                      | 5.72 | 6.98 | 8.16 | 9.49  | 10.13 | 10.83 | 12.21 | 13.62 | 14.91 | 18.65 |       |       | 0.07   | 0.37               | 0.59               | 0.67          |
| 1500     | 4.48                                      | 5.82 | 7.10 | 8.31 | 9.66  | 10.29 | 10.99 | 12.38 | 13.75 | 14.99 | 18.84 |       |       | 0.08   | 0.38               | 0.62               | 0.69          |
| 1550     | 4.55                                      | 5.92 | 7.21 | 8.43 | 9.81  | 10.44 | 11.15 | 12.52 | 13.86 | 15.03 | 19.02 |       |       | 0.08   | 0.40               | 0.64               | 0.71          |
| 1600     | 4.61                                      | 6.02 | 7.33 | 8.56 | 9.94  | 10.58 | 11.29 | 12.65 | 13.94 | 15.03 | 19.21 |       |       | 0.08   | 0.41               | 0.66               | 0.74          |
| 1650     | 4.68                                      | 6.10 | 7.43 | 8.68 | 10.07 | 10.74 | 11.40 | 12.74 | 14.01 | 15.01 |       |       |       | 0.08   | 0.42               | 0.68               | 0.76          |
| 1700     | 4.73                                      | 6.18 | 7.54 | 8.79 | 10.18 | 10.82 | 11.51 | 12.83 | 14.04 | 14.95 |       |       |       | 0.09   | 0.44               | 0.70               | 0.78          |
| 1750     | 4.80                                      | 6.25 | 7.62 | 8.90 | 10.28 | 10.92 | 11.61 | 12.90 | 14.04 | 14.84 |       |       |       | 0.09   | 0.45               | 0.72               | 0.81          |
| 1800     | 4.84                                      | 6.33 | 7.71 | 9.00 | 10.38 | 11.02 | 11.71 | 12.95 | 14.02 | 14.71 |       |       |       | 0.09   | 0.46               | 0.74               | 0.83          |
| 1850     | 4.89                                      | 6.39 | 7.80 | 9.08 | 10.47 | 11.09 | 11.76 | 12.97 | 13.98 | 14.53 |       |       |       | 0.09   | 0.47               | 0.76               | 0.85          |
| 1900     | 4.94                                      | 6.46 | 7.86 | 9.16 | 10.53 | 11.16 | 11.82 | 12.97 | 13.90 | 14.31 |       |       |       | 0.10   | 0.49               | 0.78               | 0.88          |
| 1950     | 4.97                                      | 6.51 | 7.94 | 9.22 | 10.59 | 11.22 | 11.85 | 12.96 | 13.79 | 14.05 |       |       |       | 0.10   | 0.50               | 0.80               | 0.90          |
| 2000     | 5.01                                      | 6.57 | 7.99 | 9.29 | 10.64 | 11.24 | 11.86 | 12.93 | 13.65 | 13.76 |       |       |       | 0.10   | 0.51               | 0.82               | 0.92          |
| 2050     | 5.04                                      | 6.61 | 8.05 | 9.33 | 10.68 | 11.26 | 11.87 | 12.86 | 13.49 |       |       |       |       | 0.11   | 0.53               | 0.84               | 0.95          |
| 2100     | 5.07                                      | 6.65 | 8.09 | 9.37 | 10.70 | 11.26 | 11.85 | 12.79 | 13.29 |       |       |       |       | 0.11   | 0.54               | 0.86               | 0.97          |
| 2150     | 5.09                                      | 6.69 | 8.13 | 9.41 | 10.71 | 11.26 | 11.82 | 12.68 | 13.06 |       |       |       |       | 0.11   | 0.55               | 0.88               | 0.99          |
| 2200     | 5.11                                      | 6.72 | 8.16 | 9.43 | 10.71 | 11.24 | 11.77 | 12.55 | 13.80 |       |       |       |       | 0.11   | 0.56               | 0.90               | 1.01          |
| 2250     | 5.13                                      | 6.74 | 8.19 | 9.44 | 10.69 | 11.21 | 11.71 | 12.40 | 13.51 |       |       |       |       | 0.12   | 0.58               | 0.92               | 1.04          |
| 2300     | 5.14                                      | 6.76 | 8.20 | 9.45 | 10.67 | 11.16 | 11.63 | 12.23 |       |       |       |       |       | 0.12   | 0.59               | 0.94               | 1.06          |
| 2350     | 5.15                                      | 6.77 | 8.21 | 9.44 | 10.63 | 11.09 | 11.52 | 12.03 |       |       |       |       |       | 0.12   | 0.60               | 0.96               | 1.08          |
| 2400     | 5.15                                      | 6.78 | 8.21 | 9.43 | 10.57 | 11.02 | 11.40 | 11.80 |       |       |       |       |       | 0.12   | 0.62               | 0.98               | 1.11          |
| 2450     | 5.15                                      | 6.78 | 8.21 | 9.40 | 10.51 | 10.92 | 11.28 | 11.56 |       |       |       |       |       | 0.13   | 0.63               | 1.01               | 1.13          |
| 2500     | 5.15                                      | 6.78 | 8.19 | 9.36 | 10.42 | 10.81 | 11.12 | 11.29 |       |       |       |       |       | 0.13   | 0.64               | 1.03               | 1.15          |
| 2550     | 5.14                                      | 6.77 | 8.18 | 9.31 | 10.32 | 10.68 |       |       |       |       |       |       |       | 0.13   | 0.65               | 1.05               | 1.18          |
| 2600     | 5.13                                      | 6.76 | 8.14 | 9.26 | 10.22 | 10.53 |       |       |       |       |       |       |       | 0.13   | 0.67               | 1.07               | 1.20          |
| 2650     | 5.11                                      | 6.74 | 8.10 | 9.19 | 10.10 | 10.37 |       |       |       |       |       |       |       | 0.14   | 0.68               | 1.09               | 1.22          |
| 2700     | 5.09                                      | 6.71 | 8.06 | 9.12 | 9.96  | 10.21 |       |       |       |       |       |       |       | 0.14   | 0.69               | 1.11               | 1.25          |
| 2750     | 5.07                                      | 6.67 | 8.00 | 9.02 | 9.81  | 10.02 |       |       |       |       |       |       |       | 0.14   | 0.71               | 1.13               | 1.27          |
| 2800     | 5.03                                      | 6.64 | 7.94 | 8.92 | 9.63  |       |       |       |       |       |       |       |       | 0.14   | 0.72               | 1.15               | 1.29          |
| 2850     | 5.02                                      | 6.61 | 7.87 | 8.81 | 9.45  |       |       |       |       |       |       |       |       | 0.15   | 0.73               | 1.17               | 1.31          |
| 2900     | 4.96                                      | 6.54 | 7.80 | 8.68 | 9.26  |       |       |       |       |       |       |       |       | 0.15   | 0.74               | 1.19               | 1.34          |
| 2950     | 4.92                                      | 6.49 | 7.71 | 8.55 | 9.04  |       |       |       |       |       |       |       |       | 0.15   | 0.76               | 1.21               | 1.36          |
| 3000     | 4.87                                      | 6.43 | 7.61 | 8.41 | 8.80  |       |       |       |       |       |       |       |       | 0.15   | 0.77               | 1.23               | 1.38          |

**TABLE 9 Section C**  
**Power Rating P (kw) for arc of contact 180**

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |      |      |       |       |       |       |       |       |       | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |                  |
|----------|---|------|------|-------|-------|-------|-------|-------|-------|-------|--|--------------------|--------------------|------------------|
|          | 170                                       | 180  | 190  | 200   | 212   | 224   | 236   | 250   | 265   | 280   | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>><br>1.57 |
| 700      | 4.18                                      | 4.74 | 5.23 | 5.94  | 6.66  | 7.37  | 8.07  | 8.88  | 9.74  | 10.59 | 0.08   | 0.40               | 0.63               | 0.71             |
| 950      | 4.92                                      | 5.87 | 6.51 | 7.43  | 8.35  | 9.25  | 10.14 | 11.17 | 12.25 | 13.32 | 0.11   | 0.54               | 0.86               | 0.97             |
| 1450     | 6.13                                      | 7.58 | 8.51 | 9.70  | 10.94 | 12.14 | 13.30 | 14.64 | 16.06 | 17.31 | 0.16   | 0.82               | 1.31               | 1.48             |
| 2850     | 7.28                                      | 7.93 | 9.15 | 10.30 | 11.50 | 12.51 |       |       |       |       | 0.32   | 1.61               | 2.58               | 2.90             |
| 50       | 0.55                                      | 0.56 | 0.59 | 0.66  | 0.74  | 0.80  | 0.86  | 0.95  | 1.02  | 1.10  | 0.01   | 0.03               | 0.05               | 0.05             |
| 100      | 0.98                                      | 1.00 | 1.08 | 1.21  | 1.33  | 1.46  | 1.59  | 1.73  | 1.88  | 2.04  | 0.01   | 0.06               | 0.09               | 0.10             |
| 150      | 1.38                                      | 1.40 | 1.52 | 1.70  | 1.89  | 2.07  | 2.25  | 2.46  | 2.69  | 2.91  | 0.02   | 0.08               | 0.14               | 0.15             |
| 200      | 1.72                                      | 1.77 | 1.92 | 2.17  | 2.40  | 2.65  | 2.88  | 3.15  | 3.44  | 3.73  | 0.02   | 0.11               | 0.18               | 0.20             |
| 250      | 2.03                                      | 2.13 | 2.31 | 2.61  | 2.91  | 3.19  | 3.48  | 3.81  | 4.17  | 4.52  | 0.03   | 0.14               | 0.23               | 0.25             |
| 300      | 2.35                                      | 2.47 | 2.68 | 3.03  | 3.38  | 3.72  | 4.05  | 4.45  | 4.86  | 5.28  | 0.03   | 0.17               | 0.27               | 0.31             |
| 350      | 2.58                                      | 2.78 | 3.05 | 3.44  | 3.83  | 4.22  | 4.61  | 5.06  | 5.54  | 6.02  | 0.04   | 0.20               | 0.32               | 0.36             |
| 400      | 2.82                                      | 3.10 | 3.38 | 3.83  | 4.27  | 4.71  | 5.16  | 5.66  | 6.20  | 6.73  | 0.05   | 0.23               | 0.36               | 0.41             |
| 450      | 3.09                                      | 3.39 | 3.69 | 4.22  | 4.70  | 5.19  | 5.67  | 6.24  | 6.83  | 7.42  | 0.05   | 0.25               | 0.41               | 0.46             |
| 500      | 3.31                                      | 3.68 | 3.09 | 4.59  | 5.12  | 5.65  | 6.18  | 6.79  | 7.44  | 8.10  | 0.06   | 0.28               | 0.45               | 0.51             |
| 550      | 3.52                                      | 3.96 | 4.32 | 4.94  | 5.52  | 6.10  | 6.68  | 7.34  | 8.04  | 8.75  | 0.06   | 0.31               | 0.50               | 0.56             |
| 600      | 3.72                                      | 4.22 | 4.63 | 5.28  | 5.91  | 6.54  | 7.15  | 7.88  | 8.63  | 9.38  | 0.07   | 0.34               | 0.54               | 0.61             |
| 650      | 3.94                                      | 4.48 | 4.92 | 5.62  | 6.29  | 6.96  | 7.62  | 8.39  | 9.20  | 10.00 | 0.07   | 0.37               | 0.59               | 0.66             |
| 700      | 4.18                                      | 4.74 | 5.23 | 5.94  | 6.66  | 7.37  | 8.07  | 8.88  | 9.74  | 10.59 | 0.08   | 0.40               | 0.63               | 0.71             |
| 750      | 4.28                                      | 4.98 | 5.48 | 6.26  | 7.02  | 7.77  | 8.52  | 9.38  | 10.28 | 11.18 | 0.08   | 0.42               | 0.68               | 0.76             |
| 800      | 4.43                                      | 5.22 | 5.76 | 6.56  | 7.37  | 8.16  | 8.95  | 9.85  | 10.80 | 11.74 | 0.09   | 0.45               | 0.72               | 0.81             |
| 850      | 4.65                                      | 5.44 | 6.04 | 6.87  | 7.71  | 8.54  | 9.36  | 10.30 | 11.30 | 12.29 | 0.10   | 0.48               | 0.77               | 0.87             |
| 900      | 4.75                                      | 5.66 | 6.26 | 7.15  | 8.03  | 8.90  | 9.75  | 10.74 | 11.78 | 12.81 | 0.10   | 0.51               | 0.81               | 0.92             |
| 950      | 4.92                                      | 5.87 | 6.51 | 7.43  | 8.35  | 9.25  | 10.14 | 11.17 | 12.25 | 13.32 | 0.11   | 0.54               | 0.86               | 0.97             |
| 1000     | 5.05                                      | 6.08 | 6.74 | 7.70  | 8.65  | 9.60  | 10.52 | 11.59 | 12.72 | 13.81 | 0.11   | 0.57               | 0.91               | 1.02             |
| 1050     | 5.19                                      | 6.28 | 6.98 | 7.96  | 8.95  | 9.92  | 10.89 | 11.99 | 13.15 | 14.28 | 0.12   | 0.59               | 0.95               | 1.07             |
| 1100     | 5.34                                      | 6.47 | 7.21 | 8.21  | 9.24  | 10.25 | 11.24 | 12.38 | 13.57 | 14.73 | 0.12   | 0.62               | 1.00               | 1.12             |
| 1150     | 5.44                                      | 6.65 | 7.42 | 8.45  | 9.51  | 10.55 | 11.57 | 12.75 | 13.97 | 15.60 | 0.13   | 0.65               | 1.04               | 1.17             |
| 1200     | 5.55                                      | 6.83 | 7.63 | 8.68  | 9.78  | 10.85 | 11.90 | 13.10 | 14.35 | 15.58 | 0.14   | 0.68               | 1.09               | 1.22             |
| 1250     | 5.69                                      | 6.99 | 7.82 | 8.90  | 10.03 | 11.13 | 12.21 | 13.44 | 14.72 | 15.97 | 0.14   | 0.71               | 1.13               | 1.27             |
| 1300     | 5.79                                      | 7.15 | 7.99 | 9.12  | 10.27 | 11.40 | 12.51 | 13.77 | 15.07 | 16.34 | 0.15   | 0.74               | 1.18               | 1.32             |
| 1350     | 5.92                                      | 7.51 | 8.18 | 9.32  | 10.50 | 11.66 | 12.79 | 14.07 | 15.40 | 16.68 | 0.15   | 0.76               | 1.22               | 1.37             |
| 1400     | 6.09                                      | 7.44 | 8.36 | 9.52  | 10.73 | 11.91 | 13.05 | 14.35 | 15.71 | 17.01 | 0.16   | 0.79               | 1.27               | 1.42             |
| 1450     | 6.13                                      | 7.58 | 8.51 | 9.70  | 10.94 | 12.14 | 13.30 | 14.64 | 16.06 | 17.31 | 0.16   | 0.82               | 1.31               | 1.48             |
| 1500     | 6.19                                      | 7.72 | 8.67 | 9.88  | 11.14 | 12.36 | 13.55 | 14.89 | 16.28 | 17.60 | 0.17   | 0.85               | 1.36               | 1.53             |
| 1550     | 6.29                                      | 7.83 | 8.82 | 10.05 | 11.32 | 12.57 | 13.77 | 15.13 | 16.53 | 17.86 | 0.18   | 0.88               | 1.40               | 1.58             |
| 1600     | 6.37                                      | 7.95 | 8.98 | 10.20 | 11.50 | 12.76 | 13.98 | 15.35 | 16.76 | 18.09 | 0.18   | 0.91               | 1.45               | 1.63             |
| 1650     | 6.45                                      | 8.05 | 9.11 | 10.34 | 11.67 | 12.94 | 14.18 | 15.55 | 16.97 | 18.30 | 0.19   | 0.93               | 1.49               | 1.68             |
| 1700     | 6.53                                      | 8.16 | 9.21 | 10.48 | 11.81 | 13.10 | 14.35 | 15.74 | 17.15 | 18.48 | 0.19   | 0.96               | 1.54               | 1.73             |
| 1750     | 6.59                                      | 8.24 | 9.33 | 10.61 | 11.96 | 13.26 | 14.51 | 15.91 | 17.31 | 18.65 | 0.20   | 0.99               | 1.58               | 1.78             |
| 1800     | 6.66                                      | 8.33 | 9.45 | 10.17 | 12.09 | 13.40 | 14.66 | 16.05 | 17.46 | 18.77 | 0.20   | 1.02               | 1.63               | 1.83             |
| 1850     | 6.72                                      | 8.40 | 9.55 | 10.82 | 12.20 | 13.51 | 14.78 | 16.18 | 17.59 | 18.88 | 0.21   | 1.05               | 1.67               | 1.88             |
| 1900     | 6.78                                      | 8.46 | 9.63 | 10.91 | 12.30 | 13.63 | 14.89 | 16.29 | 17.68 | 18.96 | 0.22   | 1.07               | 1.72               | 1.93             |
| 1950     | 6.86                                      | 8.53 | 9.71 | 10.99 | 12.39 | 13.72 | 14.98 | 16.38 | 17.76 | 19.02 | 0.22   | 1.10               | 1.77               | 1.98             |
| 2000     | 6.89                                      | 8.57 | 9.78 | 11.06 | 12.46 | 13.80 | 15.06 | 16.44 | 17.81 | 19.04 | 0.23   | 1.13               | 1.81               | 2.04             |
| 2050     | 6.92                                      | 8.61 | 9.82 | 11.12 | 12.53 | 13.86 | 15.12 | 16.49 | 17.83 | 19.04 | 0.23   | 1.16               | 1.86               | 2.09             |
| 2100     | 6.98                                      | 8.64 | 9.88 | 11.16 | 12.57 | 13.90 | 15.16 | 16.52 | 17.83 | 19.01 | 0.24   | 1.19               | 1.90               | 2.14             |
| 2150     | 7.02                                      | 8.66 | 9.92 | 11.19 | 12.61 | 13.93 | 15.18 | 16.52 | 17.81 | 18.93 | 0.24   | 1.22               | 1.95               | 2.19             |
| 2200     | 7.07                                      | 8.67 | 9.96 | 11.21 | 12.63 | 13.95 | 15.18 | 16.50 | 17.76 | 18.84 | 0.25   | 1.24               | 1.99               | 2.24             |
| 2250     | 7.09                                      | 8.67 | 9.97 | 11.22 | 12.63 | 13.94 | 15.16 | 16.45 | 17.67 | 18.72 | 0.25   | 1.27               | 2.04               | 2.29             |
| 2300     | 7.13                                      | 8.66 | 9.98 | 11.22 | 12.62 | 13.93 | 15.13 | 16.39 | 17.57 |       | 0.26   | 1.30               | 2.08               | 2.34             |
| 2350     | 7.15                                      | 8.65 | 9.97 | 11.20 | 12.60 | 13.89 | 15.07 | 16.30 | 17.43 |       | 0.27   | 1.33               | 2.13               | 2.39             |
| 2400     | 7.17                                      | 8.62 | 9.97 | 11.17 | 12.56 | 13.84 | 14.99 | 16.19 | 17.27 |       | 0.27   | 1.36               | 2.17               | 2.44             |
| 2450     | 7.19                                      | 8.59 | 9.95 | 11.13 | 12.51 | 13.77 | 14.90 | 16.05 | 17.08 |       | 0.28   | 1.39               | 2.22               | 2.49             |
| 2500     | 7.22                                      | 8.54 | 9.92 | 11.08 | 12.44 | 13.67 | 14.77 | 15.89 | 16.86 |       | 0.28   | 1.41               | 2.26               | 2.54             |
| 2550     | 7.22                                      | 8.48 | 9.89 | 11.00 | 12.36 | 13.57 | 14.64 |       |       |       | 0.29   | 1.44               | 2.31               | 2.60             |
| 2600     | 7.25                                      | 8.42 | 9.83 | 10.93 | 12.25 | 13.44 | 14.48 |       |       |       | 0.29   | 1.47               | 2.35               | 2.65             |
| 2650     | 7.29                                      | 8.44 | 9.75 | 10.83 | 12.14 | 13.29 | 14.29 |       |       |       | 0.30   | 1.50               | 2.40               | 2.70             |
| 2700     | 7.31                                      | 8.25 | 9.69 | 10.72 | 12.00 | 13.13 | 14.09 |       |       |       | 0.31   | 1.53               | 2.44               | 2.75             |
| 2750     | 7.38                                      | 8.16 | 9.55 | 10.59 | 11.85 | 12.94 | 13.86 |       |       |       | 0.31   | 1.56               | 2.49               | 2.80             |
| 2800     | 7.34                                      | 8.04 | 9.21 | 10.46 | 11.69 | 12.74 |       |       |       |       | 0.32   | 1.58               | 2.53               | 2.85             |
| 2850     | 7.28                                      | 7.93 | 9.15 | 10.30 | 11.50 | 12.51 |       |       |       |       | 0.32   | 1.61               | 2.58               | 2.90             |
| 2900     | 7.22                                      | 7.79 | 8.99 | 10.13 | 11.30 | 12.26 |       |       |       |       | 0.33   | 1.64               | 2.63               | 2.95             |
| 2950     | 7.18                                      | 7.65 | 8.72 | 9.95  | 11.08 | 12.06 |       |       |       |       | 0.33   | 1.67               | 2.67               | 3.00             |
| 3000     | 7.05                                      | 7.50 | 8.65 | 9.75  | 10.84 | 11.71 |       |       |       |       | 0.34   | 1.70               | 2.72               | 3.05             |
| 3050     | 7.01                                      | 7.34 | 8.38 | 9.53  | 10.81 |       |       |       |       |       | 0.35   | 1.73               | 2.76               | 3.10             |
| 3100     | 6.92                                      | 7.16 | 8.21 | 9.30  | 10.75 |       |       |       |       |       | 0.35   | 1.75               | 2.81               | 3.15             |
| 3150     | 6.85                                      | 6.97 | 7.84 | 9.06  | 10.63 |       |       |       |       |       | 0.36   | 1.78               | 2.85               | 3.21             |
| 3200     | 6.69                                      | 6.77 | 7.74 | 8.80  | 10.51 |       |       |       |       |       | 0.36   | 1.81               | 2.90               | 3.26             |
| 3250     | 6.42                                      | 6.55 | 7.59 | 8.52  | 10.04 |       |       |       |       |       | 0.37   | 1.84               | 2.94               | 3.31             |

**TABLE 9 Section C**  
**Power Rating P (kw) for arc of contact 180**

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |       |       |       |       |       |       |       |       |       |       | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |                  |
|----------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--------------------|--------------------|------------------|
|          | 300                                       | 315   | 335   | 355   | 375   | 400   | 450   | 500   | 560   | 630   | 800   | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>><br>1.57 |
| 700      | 11.72                                     | 12.54 | 13.63 | 14.70 | 15.75 | 17.03 | 19.51 | 20.59 | 23.12 | 27.82 | 32.85 | 0.08   | 0.40               | 0.63               | 0.71             |
| 950      | 14.71                                     | 15.73 | 17.05 | 18.34 | 19.59 | 21.11 | 23.93 | 24.76 | 28.12 | 31.35 |       | 0.11   | 0.54               | 0.86               | 0.97             |
| 1450     | 18.98                                     | 20.17 | 21.65 | 23.03 | 24.29 | 25.69 | 27.90 |       |       |       |       | 0.16   | 0.82               | 1.31               | 1.48             |
| 2850     |   |       |       |       |       |       |       |       |       |       |       | 0.32   | 1.61               | 2.58               | 2.90             |
| 50       | 1.21                                      | 1.29  | 1.40  | 1.50  | 1.62  | 1.74  | 2.01  | 2.83  | 3.65  | 5.35  | 6.87  | 0.01   | 0.03               | 0.05               | 0.05             |
| 100      | 2.24                                      | 2.39  | 2.59  | 2.79  | 2.99  | 3.24  | 3.74  | 4.23  | 5.32  | 7.62  | 9.77  | 0.01   | 0.06               | 0.09               | 0.10             |
| 150      | 2.20                                      | 3.42  | 3.71  | 4.00  | 4.28  | 4.65  | 5.36  | 5.92  | 6.87  | 9.89  | 12.67 | 0.02   | 0.08               | 0.14               | 0.15             |
| 200      | 4.11                                      | 4.40  | 4.77  | 5.15  | 5.52  | 5.99  | 6.90  | 7.25  | 8.25  | 11.96 | 15.28 | 0.02   | 0.11               | 0.18               | 0.20             |
| 250      | 4.98                                      | 5.33  | 5.80  | 6.25  | 6.70  | 7.27  | 8.38  | 8.78  | 10.02 | 14.03 | 17.88 | 0.03   | 0.14               | 0.23               | 0.25             |
| 300      | 5.83                                      | 6.24  | 6.77  | 7.31  | 7.84  | 8.51  | 9.81  | 10.31 | 11.78 | 15.92 | 20.20 | 0.03   | 0.17               | 0.27               | 0.31             |
| 350      | 6.64                                      | 7.11  | 7.73  | 8.34  | 8.95  | 9.70  | 11.18 | 11.78 | 13.41 | 17.80 | 22.51 | 0.04   | 0.20               | 0.32               | 0.36             |
| 400      | 7.43                                      | 7.96  | 8.65  | 9.33  | 10.02 | 10.86 | 12.52 | 13.24 | 15.04 | 19.50 | 24.50 | 0.05   | 0.23               | 0.36               | 0.41             |
| 450      | 8.20                                      | 8.78  | 9.54  | 10.30 | 11.06 | 11.98 | 13.80 | 14.58 | 16.55 | 21.20 | 26.48 | 0.05   | 0.25               | 0.41               | 0.46             |
| 500      | 8.95                                      | 9.58  | 10.42 | 11.24 | 12.05 | 13.06 | 15.04 | 15.92 | 18.05 | 22.71 | 28.09 | 0.06   | 0.28               | 0.45               | 0.51             |
| 550      | 9.67                                      | 10.35 | 11.26 | 12.15 | 13.03 | 14.11 | 16.23 | 17.17 | 19.44 | 24.21 | 29.69 | 0.06   | 0.31               | 0.50               | 0.56             |
| 600      | 10.37                                     | 11.11 | 12.08 | 13.02 | 13.97 | 15.12 | 17.38 | 18.42 | 20.82 | 25.50 | 30.90 | 0.07   | 0.34               | 0.54               | 0.61             |
| 650      | 11.06                                     | 11.83 | 12.86 | 13.86 | 14.87 | 16.10 | 18.47 | 19.50 | 21.97 | 26.78 | 32.11 | 0.07   | 0.37               | 0.59               | 0.66             |
| 700      | 11.72                                     | 12.54 | 13.63 | 14.70 | 15.75 | 17.03 | 19.51 | 20.59 | 23.12 | 27.82 | 32.85 | 0.08   | 0.40               | 0.63               | 0.71             |
| 750      | 12.36                                     | 13.23 | 14.36 | 15.49 | 16.59 | 17.92 | 20.51 | 21.67 | 24.27 | 28.86 | 33.59 | 0.08   | 0.42               | 0.68               | 0.76             |
| 800      | 12.98                                     | 13.89 | 15.08 | 16.24 | 17.39 | 18.78 | 21.44 | 22.75 | 25.42 | 29.63 | 33.84 | 0.09   | 0.45               | 0.72               | 0.81             |
| 850      | 13.58                                     | 14.52 | 15.76 | 16.98 | 18.17 | 19.60 | 22.33 | 23.42 | 25.84 | 30.39 | 34.08 | 0.10   | 0.48               | 0.77               | 0.87             |
| 900      | 14.15                                     | 15.14 | 16.42 | 17.67 | 18.90 | 20.37 | 23.16 | 24.09 | 26.04 | 30.87 |       | 0.10   | 0.51               | 0.81               | 0.92             |
| 950      | 14.71                                     | 15.73 | 17.05 | 18.34 | 19.59 | 21.11 | 23.93 | 24.76 | 28.12 | 31.35 |       | 0.11   | 0.54               | 0.86               | 0.97             |
| 1000     | 15.25                                     | 16.30 | 17.66 | 18.97 | 20.25 | 21.79 | 24.63 | 25.44 | 28.31 | 31.50 |       | 0.11   | 0.57               | 0.91               | 1.02             |
| 1050     | 15.76                                     | 16.83 | 18.23 | 19.57 | 20.87 | 22.43 | 25.28 | 26.11 | 28.42 | 31.65 |       | 0.12   | 0.59               | 0.95               | 1.07             |
| 1100     | 16.24                                     | 17.35 | 18.77 | 20.14 | 21.45 | 23.02 | 25.86 | 26.78 | 28.34 | 31.47 |       | 0.12   | 0.62               | 1.00               | 1.12             |
| 1150     | 16.72                                     | 17.84 | 19.28 | 20.66 | 22.00 | 23.56 | 26.38 | 27.45 | 28.06 | 31.29 |       | 0.13   | 0.65               | 1.04               | 1.17             |
| 1200     | 17.16                                     | 18.29 | 19.76 | 21.16 | 22.49 | 24.06 | 26.82 | 28.12 |       |       |       | 0.14   | 0.68               | 1.09               | 1.22             |
| 1250     | 17.57                                     | 18.73 | 20.21 | 21.61 | 22.94 | 24.49 | 27.18 |       |       |       |       | 0.14   | 0.71               | 1.13               | 1.27             |
| 1300     | 17.97                                     | 19.13 | 20.62 | 22.03 | 23.35 | 24.87 | 27.48 |       |       |       |       | 0.15   | 0.74               | 1.18               | 1.32             |
| 1350     | 18.33                                     | 19.51 | 21.00 | 22.41 | 23.71 | 25.20 | 27.70 |       |       |       |       | 0.15   | 0.76               | 1.22               | 1.37             |
| 1400     | 18.67                                     | 19.86 | 21.35 | 22.73 | 24.02 | 25.47 | 27.84 |       |       |       |       | 0.16   | 0.79               | 1.27               | 1.42             |
| 1450     | 18.98                                     | 20.17 | 21.65 | 23.03 | 24.29 | 25.69 | 27.90 |       |       |       |       | 0.16   | 0.82               | 1.31               | 1.48             |
| 1500     | 19.27                                     | 20.45 | 21.92 | 23.28 | 24.50 | 25.84 | 27.87 |       |       |       |       | 0.17   | 0.85               | 1.36               | 1.53             |
| 1550     | 19.53                                     | 20.71 | 22.16 | 23.48 | 24.66 | 25.94 | 27.76 |       |       |       |       | 0.18   | 0.88               | 1.40               | 1.58             |
| 1600     | 19.76                                     | 20.93 | 22.35 | 23.64 | 24.77 | 25.97 | 27.55 |       |       |       |       | 0.18   | 0.91               | 1.45               | 1.63             |
| 1650     | 19.96                                     | 21.11 | 22.51 | 23.75 | 24.82 | 25.92 | 27.27 |       |       |       |       | 0.19   | 0.93               | 1.49               | 1.68             |
| 1700     | 20.13                                     | 21.26 | 22.62 | 23.81 | 24.82 | 25.83 | 26.88 |       |       |       |       | 0.19   | 0.96               | 1.54               | 1.73             |
| 1750     | 20.27                                     | 21.38 | 22.69 | 23.82 | 24.77 | 25.65 | 26.40 |       |       |       |       | 0.20   | 0.99               | 1.58               | 1.78             |
| 1800     | 20.38                                     | 21.45 | 22.72 | 23.79 |       |       |       |       |       |       |       | 0.20   | 1.02               | 1.63               | 1.83             |
| 1850     | 20.45                                     | 21.49 | 22.71 | 23.71 |       |       |       |       |       |       |       | 0.21   | 1.05               | 1.67               | 1.88             |
| 1900     | 20.50                                     | 21.50 | 22.65 | 23.56 |       |       |       |       |       |       |       | 0.22   | 1.07               | 1.72               | 1.93             |
| 1950     | 20.51                                     | 21.47 | 22.55 | 23.37 |       |       |       |       |       |       |       | 0.22   | 1.10               | 1.77               | 1.98             |
| 2000     | 20.49                                     | 21.40 | 22.40 | 23.12 |       |       |       |       |       |       |       | 0.23   | 1.13               | 1.81               | 2.04             |
| 2050     | 20.42                                     |       |       |       |       |       |       |       |       |       |       | 0.23   | 1.16               | 1.86               | 2.09             |
| 2100     | 20.33                                     |       |       |       |       |       |       |       |       |       |       | 0.24   | 1.19               | 1.90               | 2.14             |
| 2150     | 20.19                                     |       |       |       |       |       |       |       |       |       |       | 0.24   | 1.22               | 1.95               | 2.19             |
| 2200     | 20.02                                     |       |       |       |       |       |       |       |       |       |       | 0.25   | 1.24               | 1.99               | 2.24             |
| 2250     | 19.82                                     |       |       |       |       |       |       |       |       |       |       | 0.25   | 1.27               | 2.04               | 2.29             |

**TABLE 10 Section 25**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |       |       |       |       |       |       |       |       |       |       |       |       | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |               |
|----------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--------------------|--------------------|---------------|
|          | 224                                       | 236   | 250   | 280   | 315   | 355   | 400   | 450   | 500   | 560   | 630   | 710   | 800   | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>> 1.57 |
| 700      | 6.08                                      | 6.91  | 7.89  | 9.93  | 12.24 | 14.81 | 17.57 | 20.49 | 23.25 | 26.33 | 31.16 | 34.53 | 37.65 | 0.12   | 0.61               | 0.97               | 1.09          |
| 950      | 7.34                                      | 8.40  | 9.62  | 12.17 | 15.01 | 18.08 | 21.29 | 24.54 | 27.42 | 30.36 |       |       |       | 0.16   | 0.82               | 1.32               | 1.48          |
| 1450     | 8.72                                      | 10.09 | 11.63 | 14.73 | 17.99 | 21.15 | 23.97 | 26.07 |       |       |       |       |       | 0.25   | 1.26               | 2.01               | 2.26          |
| 50       | 0.75                                      | 0.83  | 0.92  | 1.11  | 1.34  | 1.59  | 1.88  | 2.19  | 2.50  | 2.88  | 3.56  | 4.35  | 5.23  | 0.01   | 0.04               | 0.07               | 0.08          |
| 100      | 1.35                                      | 1.50  | 1.67  | 2.03  | 2.46  | 2.94  | 3.48  | 4.07  | 4.65  | 5.34  | 6.16  | 7.05  | 8.09  | 0.02   | 0.09               | 0.14               | 0.16          |
| 150      | 1.88                                      | 2.10  | 2.34  | 2.08  | 3.50  | 4.19  | 4.96  | 5.81  | 6.66  | 7.65  | 8.78  | 10.05 | 11.46 | 0.03   | 0.13               | 0.21               | 0.23          |
| 200      | 2.36                                      | 2.65  | 2.97  | 3.67  | 4.46  | 5.37  | 6.37  | 7.47  | 8.55  | 9.83  | 11.39 | 13.05 | 14.83 | 0.03   | 0.17               | 0.28               | 0.31          |
| 250      | 2.84                                      | 3.18  | 3.57  | 4.42  | 5.39  | 6.49  | 7.71  | 9.04  | 10.36 | 11.91 | 13.76 | 15.74 | 17.88 | 0.04   | 0.22               | 0.35               | 0.39          |
| 300      | 3.26                                      | 3.67  | 4.14  | 5.14  | 6.28  | 7.56  | 9.00  | 10.56 | 12.09 | 13.90 | 16.12 | 18.42 | 20.93 | 0.05   | 0.26               | 0.42               | 0.47          |
| 350      | 3.68                                      | 4.14  | 4.68  | 5.82  | 7.13  | 8.60  | 10.23 | 12.01 | 13.75 | 15.79 | 18.27 | 20.84 | 23.64 | 0.06   | 0.30               | 0.49               | 0.55          |
| 400      | 4.07                                      | 4.59  | 5.20  | 6.47  | 7.95  | 9.60  | 11.43 | 13.41 | 15.33 | 17.59 | 20.42 | 23.25 | 26.35 | 0.07   | 0.50               | 0.55               | 0.62          |
| 450      | 4.44                                      | 5.02  | 5.69  | 7.12  | 8.74  | 10.56 | 12.56 | 14.73 | 16.85 | 19.30 | 22.36 | 25.41 | 28.64 | 0.08   | 0.39               | 0.62               | 0.70          |
| 500      | 4.80                                      | 5.44  | 6.17  | 7.73  | 9.50  | 11.48 | 13.66 | 16.02 | 18.29 | 20.92 | 24.30 | 27.56 | 30.92 | 0.09   | 0.43               | 0.69               | 0.78          |
| 550      | 5.15                                      | 5.83  | 6.62  | 8.30  | 10.23 | 12.37 | 14.71 | 17.23 | 19.66 | 22.44 | 26.00 | 29.37 | 32.80 | 0.10   | 0.48               | 0.76               | 0.86          |
| 600      | 5.47                                      | 6.21  | 7.06  | 8.87  | 10.92 | 13.21 | 15.72 | 18.38 | 20.94 | 23.85 | 27.70 | 31.18 | 34.68 | 0.10   | 0.52               | 0.83               | 0.94          |
| 650      | 5.78                                      | 6.57  | 7.49  | 9.41  | 11.60 | 14.03 | 16.67 | 19.47 | 22.14 | 25.15 | 29.43 | 32.85 | 36.17 | 0.11   | 0.56               | 0.90               | 1.01          |
| 700      | 6.08                                      | 6.91  | 7.89  | 9.93  | 12.24 | 14.81 | 17.57 | 20.49 | 23.25 | 26.33 | 31.16 | 34.53 | 37.65 | 0.12   | 0.61               | 0.97               | 1.09          |
| 750      | 6.36                                      | 7.24  | 8.27  | 10.42 | 12.86 | 15.54 | 18.43 | 21.45 | 24.28 | 27.40 | 32.89 | 36.20 | 39.14 | 0.13   | 0.65               | 1.04               | 1.17          |
| 800      | 6.53                                      | 7.55  | 8.63  | 10.89 | 13.44 | 16.24 | 19.23 | 22.34 | 25.22 | 28.34 |       |       |       | 0.14   | 0.69               | 1.11               | 1.25          |
| 850      | 6.88                                      | 7.85  | 8.99  | 11.34 | 14.00 | 16.90 | 19.97 | 23.14 | 26.05 | 29.15 |       |       |       | 0.15   | 0.74               | 1.18               | 1.33          |
| 900      | 7.12                                      | 8.13  | 9.31  | 11.77 | 14.52 | 17.51 | 20.66 | 23.88 | 26.79 | 29.82 |       |       |       | 0.16   | 0.78               | 1.25               | 1.40          |
| 950      | 7.34                                      | 8.40  | 9.62  | 12.17 | 15.01 | 18.08 | 21.29 | 24.54 | 27.42 | 30.36 |       |       |       | 0.16   | 0.82               | 1.32               | 1.48          |
| 1000     | 7.54                                      | 8.65  | 9.91  | 12.54 | 15.47 | 18.61 | 21.86 | 25.11 | 27.94 | 30.73 |       |       |       | 0.17   | 0.87               | 1.39               | 1.56          |
| 1050     | 7.74                                      | 8.88  | 10.19 | 12.89 | 15.89 | 19.09 | 22.37 | 25.61 | 28.34 | 30.96 |       |       |       | 0.18   | 0.91               | 1.46               | 1.64          |
| 1100     | 7.92                                      | 9.10  | 10.44 | 13.23 | 16.29 | 19.53 | 22.82 | 26.00 | 28.63 | 31.01 |       |       |       | 0.19   | 0.95               | 1.53               | 1.72          |
| 1150     | 8.08                                      | 9.30  | 10.67 | 13.52 | 16.64 | 19.91 | 23.20 | 26.31 | 28.80 | 30.90 |       |       |       | 0.20   | 1.00               | 1.60               | 1.79          |
| 1200     | 8.23                                      | 9.58  | 10.88 | 13.79 | 16.96 | 20.26 | 23.51 | 26.53 | 28.85 | 30.61 |       |       |       | 0.21   | 1.04               | 1.66               | 1.87          |
| 1250     | 8.36                                      | 9.63  | 11.07 | 14.04 | 17.24 | 20.54 | 23.75 | 26.64 | 28.75 | 30.14 |       |       |       | 0.22   | 1.08               | 1.73               | 1.95          |
| 1300     | 8.47                                      | 9.77  | 11.25 | 14.26 | 17.48 | 20.78 | 23.93 | 26.65 |       |       |       |       |       | 0.23   | 1.13               | 1.80               | 2.03          |
| 1350     | 8.57                                      | 9.90  | 11.40 | 14.45 | 17.69 | 20.96 | 24.01 | 26.57 |       |       |       |       |       | 0.23   | 1.17               | 1.87               | 2.10          |
| 1400     | 8.66                                      | 10.00 | 11.52 | 14.61 | 17.86 | 21.08 | 24.03 | 26.36 |       |       |       |       |       | 0.24   | 1.21               | 1.94               | 2.18          |
| 1450     | 8.72                                      | 10.09 | 11.63 | 14.73 | 17.99 | 21.15 | 23.97 | 26.07 |       |       |       |       |       | 0.25   | 1.26               | 2.01               | 2.26          |
| 1500     | 8.77                                      | 10.15 | 11.72 | 14.84 | 18.06 | 21.16 | 23.82 | 25.64 |       |       |       |       |       | 0.26   | 1.30               | 2.08               | 2.34          |
| 1550     | 8.80                                      | 10.21 | 11.78 | 14.91 | 18.10 | 21.11 |       |       |       |       |       |       |       | 0.27   | 1.34               | 2.15               | 2.42          |
| 1600     | 8.82                                      | 10.23 | 11.81 | 14.94 | 18.09 | 20.99 |       |       |       |       |       |       |       | 0.28   | 1.39               | 2.22               | 2.49          |
| 1650     | 8.81                                      | 10.24 | 11.82 | 14.94 | 18.04 | 20.82 |       |       |       |       |       |       |       | 0.29   | 1.43               | 2.29               | 2.57          |
| 1700     | 8.78                                      | 10.22 | 11.81 | 14.92 | 17.94 | 20.58 |       |       |       |       |       |       |       | 0.29   | 1.47               | 2.36               | 2.65          |
| 1750     | 8.74                                      | 10.19 | 11.77 | 14.84 | 17.80 | 20.27 |       |       |       |       |       |       |       | 0.30   | 1.52               | 2.43               | 2.73          |
| 1800     | 8.68                                      | 10.12 | 11.71 | 14.74 | 17.60 |       |       |       |       |       |       |       |       | 0.31   | 1.56               | 2.50               | 2.81          |
| 1850     | 8.60                                      | 10.05 | 11.62 | 14.61 | 17.37 |       |       |       |       |       |       |       |       | 0.32   | 1.60               | 2.57               | 2.88          |
| 1900     | 8.50                                      | 9.94  | 11.50 | 14.43 | 17.07 |       |       |       |       |       |       |       |       | 0.33   | 1.65               | 2.64               | 2.96          |
| 1950     | 8.38                                      | 9.81  | 11.36 | 14.22 | 16.71 |       |       |       |       |       |       |       |       | 0.34   | 1.69               | 2.70               | 3.04          |
| 2000     | 8.24                                      | 9.66  | 11.19 | 13.97 | 16.32 |       |       |       |       |       |       |       |       | 0.35   | 1.73               | 2.77               | 3.12          |
| 2050     | 8.08                                      | 9.48  | 10.99 | 13.69 |       |       |       |       |       |       |       |       |       | 0.36   | 1.78               | 2.84               | 3.20          |
| 2100     | 7.89                                      | 9.28  | 10.75 | 13.36 |       |       |       |       |       |       |       |       |       | 0.36   | 1.82               | 2.91               | 3.27          |
| 2150     | 7.68                                      | 9.05  | 10.50 | 12.99 |       |       |       |       |       |       |       |       |       | 0.37   | 1.86               | 2.98               | 3.35          |
| 2200     | 7.46                                      | 8.81  | 10.21 | 12.58 |       |       |       |       |       |       |       |       |       | 0.38   | 1.91               | 3.05               | 3.43          |
| 2250     | 7.20                                      | 8.53  | 9.89  | 12.13 |       |       |       |       |       |       |       |       |       | 0.39   | 1.95               | 3.12               | 3.51          |
| 2300     | 6.93                                      | 8.22  | 9.53  |       |       |       |       |       |       |       |       |       |       | 0.40   | 1.99               | 3.19               | 3.59          |
| 2350     | 6.63                                      | 7.89  | 9.16  |       |       |       |       |       |       |       |       |       |       | 0.41   | 2.04               | 3.26               | 3.66          |
| 2400     | 6.31                                      | 7.53  | 8.74  |       |       |       |       |       |       |       |       |       |       | 0.42   | 2.08               | 3.33               | 3.74          |
| 2450     | 5.97                                      | 7.15  | 8.29  |       |       |       |       |       |       |       |       |       |       | 0.42   | 2.12               | 3.40               | 3.82          |
| 2500     | 5.60                                      | 6.73  | 7.81  |       |       |       |       |       |       |       |       |       |       | 0.43   | 2.17               | 3.47               | 3.90          |

**TABLE 11 Section D**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |       |       |       |       |       |       |       |       |       | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |                  |
|----------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--------------------|--------------------|------------------|
|          | 315                                       | 335   | 355   | 375   | 400   | 425   | 450   | 475   | 500   | 530   | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>><br>1.57 |
| 700      | 16.05                                     | 17.41 | 20.12 | 22.10 | 24.53 | 26.89 | 29.20 | 30.36 | 33.65 | 34.92 | 0.23   | 1.14               | 1.82               | 2.05             |
| 950      | 19.43                                     | 21.38 | 24.35 | 26.71 | 29.56 | 32.28 | 34.88 | 35.92 | 39.69 | 40.72 | 0.31   | 1.154              | 2.47               | 2.78             |
| 20       | 0.83                                      | 0.98  | 1.01  | 1.09  | 1.20  | 1.30  | 1.41  | 1.52  | 1.62  | 1.75  | 0.01   | 0.03               | 0.05               | 0.06             |
| 40       | 1.53                                      | 1.76  | 1.86  | 2.02  | 2.22  | 2.42  | 2.61  | 2.84  | 3.01  | 3.33  | 0.01   | 0.06               | 0.10               | 0.12             |
| 60       | 2.18                                      | 2.47  | 2.65  | 2.89  | 3.17  | 3.47  | 3.76  | 4.07  | 4.33  | 4.72  | 0.02   | 0.10               | 0.16               | 0.18             |
| 80       | 2.79                                      | 3.05  | 3.40  | 3.71  | 4.08  | 4.46  | 4.84  | 5.09  | 5.59  | 5.91  | 0.03   | 0.13               | 0.21               | 0.23             |
| 100      | 3.38                                      | 3.63  | 4.13  | 4.50  | 4.97  | 5.43  | 5.89  | 6.12  | 6.80  | 7.11  | 0.03   | 0.16               | 0.26               | 0.29             |
| 120      | 3.95                                      | 4.21  | 4.83  | 5.27  | 5.82  | 6.36  | 6.91  | 7.15  | 7.98  | 8.31  | 0.04   | 0.19               | 0.31               | 0.35             |
| 140      | 4.49                                      | 4.79  | 5.51  | 6.02  | 6.65  | 7.28  | 7.90  | 8.17  | 9.14  | 9.50  | 0.05   | 0.23               | 0.36               | 0.41             |
| 160      | 5.03                                      | 5.37  | 6.17  | 6.75  | 7.47  | 8.17  | 8.87  | 9.20  | 10.26 | 10.70 | 0.05   | 0.26               | 0.42               | 0.47             |
| 180      | 5.54                                      | 5.95  | 6.83  | 7.47  | 8.25  | 9.04  | 9.82  | 10.22 | 11.36 | 11.89 | 0.06   | 0.29               | 0.47               | 0.53             |
| 200      | 6.05                                      | 6.53  | 7.47  | 8.16  | 9.03  | 9.89  | 10.75 | 11.25 | 12.44 | 13.09 | 0.06   | 0.32               | 0.52               | 0.58             |
| 220      | 6.55                                      | 7.05  | 8.09  | 8.85  | 9.80  | 10.73 | 11.67 | 12.18 | 13.51 | 14.14 | 0.07   | 0.36               | 0.57               | 0.64             |
| 240      | 7.04                                      | 7.56  | 8.69  | 9.81  | 10.54 | 11.55 | 12.56 | 13.11 | 14.55 | 15.19 | 0.08   | 0.39               | 0.62               | 0.70             |
| 260      | 7.51                                      | 8.08  | 9.29  | 10.17 | 11.28 | 12.36 | 13.44 | 14.03 | 15.57 | 16.25 | 0.08   | 0.42               | 0.68               | 0.76             |
| 280      | 7.98                                      | 8.59  | 9.88  | 10.83 | 11.99 | 13.16 | 14.30 | 14.96 | 16.58 | 17.30 | 0.09   | 0.45               | 0.73               | 0.82             |
| 300      | 8.43                                      | 9.11  | 10.46 | 11.46 | 12.71 | 13.93 | 15.15 | 15.89 | 17.57 | 18.35 | 0.10   | 0.49               | 0.78               | 0.88             |
| 320      | 8.88                                      | 9.58  | 11.03 | 12.09 | 13.40 | 14.70 | 15.99 | 16.73 | 18.53 | 19.33 | 0.10   | 0.52               | 0.83               | 0.94             |
| 340      | 9.32                                      | 10.04 | 11.58 | 12.71 | 14.08 | 15.46 | 16.81 | 17.58 | 19.49 | 20.31 | 0.11   | 0.55               | 0.88               | 0.99             |
| 360      | 9.77                                      | 10.51 | 12.14 | 13.30 | 14.75 | 16.19 | 17.62 | 18.42 | 20.42 | 21.28 | 0.12   | 0.58               | 0.94               | 1.05             |
| 380      | 10.19                                     | 10.97 | 12.67 | 13.90 | 15.41 | 16.93 | 18.41 | 19.27 | 21.34 | 22.26 | 0.12   | 0.62               | 0.99               | 1.11             |
| 400      | 10.61                                     | 11.44 | 13.20 | 14.48 | 16.07 | 17.64 | 19.19 | 20.11 | 22.24 | 23.24 | 0.13   | 0.65               | 1.04               | 1.17             |
| 420      | 11.01                                     | 11.88 | 13.72 | 15.06 | 16.71 | 18.31 | 19.96 | 20.87 | 23.13 | 24.11 | 0.14   | 0.68               | 1.09               | 1.23             |
| 440      | 11.42                                     | 12.32 | 14.24 | 15.62 | 17.34 | 19.04 | 20.71 | 21.62 | 23.99 | 24.99 | 0.14   | 0.71               | 1.14               | 1.29             |
| 460      | 11.82                                     | 12.75 | 14.74 | 16.18 | 17.96 | 19.71 | 21.45 | 22.38 | 24.84 | 25.86 | 0.15   | 0.75               | 1.20               | 1.34             |
| 480      | 12.21                                     | 13.19 | 15.24 | 16.73 | 18.56 | 20.38 | 22.18 | 23.13 | 25.68 | 26.74 | 0.16   | 0.78               | 1.25               | 1.40             |
| 500      | 12.59                                     | 13.63 | 15.72 | 17.26 | 19.16 | 21.03 | 22.88 | 23.89 | 26.49 | 27.61 | 0.16   | 0.81               | 1.30               | 1.46             |
| 520      | 12.97                                     | 14.03 | 16.20 | 17.79 | 19.75 | 21.68 | 23.58 | 24.54 | 27.29 | 28.40 | 0.17   | 0.84               | 1.35               | 1.52             |
| 540      | 13.35                                     | 14.44 | 16.67 | 18.30 | 20.33 | 22.31 | 24.27 | 25.19 | 28.08 | 29.19 | 0.18   | 0.88               | 1.40               | 1.58             |
| 560      | 13.70                                     | 14.84 | 17.14 | 18.82 | 20.88 | 22.92 | 24.93 | 25.84 | 28.83 | 29.97 | 0.18   | 0.91               | 1.46               | 1.64             |
| 580      | 14.06                                     | 15.25 | 17.59 | 19.31 | 21.44 | 23.53 | 25.59 | 26.49 | 29.58 | 30.76 | 0.19   | 0.94               | 1.51               | 1.69             |
| 600      | 14.41                                     | 15.65 | 18.03 | 19.80 | 21.98 | 24.13 | 26.23 | 27.34 | 30.30 | 31.55 | 0.19   | 0.97               | 1.56               | 1.75             |
| 620      | 14.75                                     | 16.00 | 18.47 | 20.29 | 22.51 | 24.71 | 26.85 | 27.94 | 31.02 | 32.22 | 0.20   | 1.01               | 1.61               | 1.81             |
| 640      | 15.09                                     | 16.35 | 18.89 | 20.75 | 23.04 | 25.27 | 27.46 | 28.55 | 31.70 | 32.90 | 0.21   | 1.04               | 1.66               | 1.87             |
| 660      | 15.42                                     | 16.71 | 19.31 | 21.21 | 23.54 | 25.82 | 28.06 | 29.15 | 32.37 | 33.57 | 0.21   | 1.07               | 1.72               | 1.93             |
| 680      | 15.74                                     | 17.06 | 19.72 | 21.66 | 24.03 | 26.37 | 28.63 | 29.76 | 33.02 | 34.25 | 0.22   | 1.10               | 1.77               | 1.99             |
| 700      | 16.05                                     | 17.41 | 20.12 | 22.10 | 24.53 | 26.89 | 29.20 | 30.36 | 33.65 | 34.92 | 0.23   | 1.14               | 1.82               | 2.05             |
| 720      | 16.37                                     | 17.79 | 20.52 | 22.53 | 25.00 | 27.41 | 29.76 | 30.86 | 34.25 | 35.49 | 0.23   | 1.17               | 1.87               | 2.10             |
| 740      | 16.67                                     | 18.04 | 20.90 | 22.95 | 25.46 | 27.91 | 30.28 | 31.36 | 34.84 | 36.05 | 0.24   | 1.20               | 1.92               | 2.16             |
| 760      | 16.97                                     | 18.33 | 21.27 | 23.36 | 25.90 | 28.39 | 30.81 | 31.86 | 35.41 | 36.62 | 0.25   | 1.23               | 1.98               | 2.22             |
| 780      | 17.25                                     | 18.41 | 21.63 | 23.76 | 26.34 | 28.86 | 31.31 | 32.36 | 35.95 | 37.18 | 0.25   | 1.27               | 2.03               | 2.28             |
| 800      | 17.54                                     | 18.63 | 21.98 | 24.15 | 26.78 | 29.33 | 31.79 | 32.86 | 36.48 | 37.75 | 0.26   | 1.30               | 2.08               | 2.34             |
| 820      | 17.81                                     | 19.09 | 22.33 | 24.53 | 27.18 | 29.77 | 32.26 | 32.91 | 36.98 | 38.18 | 0.27   | 1.33               | 2.13               | 2.40             |
| 840      | 18.08                                     | 19.28 | 22.67 | 24.89 | 27.58 | 30.20 | 32.71 | 33.46 | 37.46 | 38.61 | 0.27   | 1.36               | 2.18               | 2.45             |
| 860      | 18.34                                     | 19.67 | 23.00 | 25.24 | 27.97 | 30.61 | 33.15 | 34.02 | 37.92 | 39.03 | 0.28   | 1.40               | 2.24               | 2.51             |
| 880      | 18.60                                     | 19.89 | 23.32 | 25.59 | 28.35 | 31.01 | 33.46 | 34.57 | 38.36 | 39.46 | 0.29   | 1.43               | 2.29               | 2.57             |
| 900      | 18.84                                     | 20.04 | 23.63 | 25.92 | 28.71 | 31.40 | 33.96 | 35.12 | 38.77 | 39.89 | 0.29   | 1.46               | 2.34               | 2.63             |
| 920      | 19.08                                     | 20.44 | 23.93 | 26.25 | 29.06 | 31.76 | 34.35 | 35.45 | 39.15 | 40.20 | 0.30   | 1.49               | 2.39               | 2.69             |
| 940      | 19.31                                     | 21.31 | 24.21 | 26.57 | 29.40 | 32.11 | 34.70 | 35.77 | 39.59 | 40.51 | 0.31   | 1.53               | 2.44               | 2.75             |
| 960      | 19.53                                     | 21.43 | 24.50 | 26.86 | 29.72 | 32.45 | 35.05 | 36.10 | 39.86 | 40.83 | 0.31   | 1.56               | 2.50               | 2.81             |
| 980      | 19.75                                     | 21.54 | 24.76 | 27.15 | 30.03 | 32.77 | 35.37 | 36.42 | 40.16 | 41.14 | 0.32   | 1.59               | 2.55               | 2.86             |
| 1000     | 19.96                                     | 22.04 | 25.02 | 27.43 | 30.32 | 33.08 | 35.69 | 36.75 | 40.46 | 41.45 | 0.32   | 1.62               | 2.60               | 2.92             |
| 1020     | 20.16                                     | 22.14 | 25.26 | 27.69 | 30.60 | 33.36 | 35.97 | 36.97 | 40.72 | 41.61 | 0.33   | 1.66               | 2.65               | 2.98             |
| 1040     | 20.36                                     | 22.31 | 25.50 | 27.95 | 30.87 | 33.63 | 36.24 | 37.19 | 40.95 | 41.77 | 0.34   | 1.69               | 2.70               | 3.04             |
| 1060     | 20.54                                     | 22.69 | 25.74 | 28.19 | 31.12 | 33.88 | 36.49 | 37.41 | 41.16 | 41.92 | 0.34   | 1.72               | 2.76               | 3.10             |
| 1080     | 20.72                                     | 22.81 | 25.95 | 28.41 | 31.35 | 34.13 | 36.72 | 37.63 | 41.35 | 42.08 | 0.35   | 1.75               | 2.81               | 3.16             |
| 1100     | 20.90                                     | 23.98 | 26.16 | 28.63 | 31.57 | 34.35 | 36.93 | 37.85 | 41.51 | 42.24 | 0.36   | 1.79               | 2.86               | 3.21             |
| 1120     | 20.05                                     | 24.12 | 26.36 | 28.83 | 31.78 | 34.55 | 37.12 | 37.96 | 41.63 | 42.26 | 0.36   | 1.82               | 2.91               | 3.27             |
| 1140     | 20.21                                     | 24.21 | 26.53 | 29.03 | 31.97 | 34.73 | 37.28 | 38.08 | 41.74 | 42.29 | 0.37   | 1.85               | 2.96               | 3.33             |
| 1160     | 20.36                                     | 24.36 | 26.71 | 29.21 | 32.14 | 34.89 | 37.42 | 38.19 | 41.80 | 42.31 | 0.38   | 1.88               | 3.02               | 3.39             |
| 1180     | 21.49                                     | 24.44 | 26.87 | 29.37 | 32.32 | 35.04 | 37.55 | 38.31 | 41.85 | 42.34 | 0.38   | 1.92               | 3.07               | 3.45             |
| 1200     | 21.62                                     | 24.98 | 27.02 | 29.53 | 32.46 | 35.18 | 37.65 | 38.42 | 41.86 | 42.36 | 0.39   | 1.95               | 3.12               | 3.51             |
| 1220     | 21.75                                     | 25.06 | 27.15 | 29.66 | 32.59 | 35.28 | 37.73 | 38.41 | 41.84 | 42.18 | 0.40   | 1.98               | 3.17               | 3.56             |
| 1240     | 21.85                                     | 25.44 | 27.29 | 29.79 | 32.71 | 35.37 | 37.79 | 38.40 | 41.80 | 42.31 | 0.40   | 2.01               | 3.22               | 3.62             |
| 1260     | 21.96                                     | 25.54 | 27.39 | 29.89 | 32.80 | 35.45 | 37.82 | 38.38 | 41.73 | 41.82 | 0.41   | 2.05               | 3.28               | 3.68             |
| 1280     | 22.05                                     | 25.61 | 27.50 | 30.01 | 32.88 | 35.51 | 37.83 | 38.37 | 41.62 | 41.64 | 0.42   | 2.08               | 3.33               | 3.74             |
| 1300     | 22.14                                     | 25.78 | 27.59 | 30.08 | 32.95 | 35.53 | 37.82 | 38.36 | 41.49 | 41.46 | 0.42   | 2.11               | 3.38               | 3.80             |
| 1320     | 22.22                                     | 25.81 | 27.67 | 30.15 | 32.99 | 35.54 | 37.79 | 38.22 | 41.14 | 41.12 | 0.43   | 2.14               | 3.43               | 3.86             |
| 1340     | 22.29                                     | 25.89 | 27.74 | 30.20 | 33.02 | 35.53 | 37.74 | 38.08 | 40.22 | 40.78 | 0.44   | 2.18               | 3.48               | 3.92             |
| 1360     | 22.34                                     | 25.98 | 27.79 | 30.24 | 33.03 | 35.51 | 37.65 | 37.93 | 39.94 | 40.43 | 0.44   | 2.21               | 3.53               | 3.97             |
| 1380     | 22.40                                     | 26.09 | 27.84 | 30.27 | 33.03 | 35.46 | 37.55 | 37.79 | 39.04 | 40.09 | 0.45   | 2.24               | 3.59               | 4.03             |
| 1400     | 22.44                                     | 26.09 | 27.86 | 30.29 | 33.23 | 35.39 | 37.41 | 37.65 | 38.09 | 39.75 | 0.45   | 2.27               | 3.64               | 4.09             |

**TABLE 11 Section D**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |       |       |       |       |       |       |       |       | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |                  |
|----------|---|-------|-------|-------|-------|-------|-------|-------|-------|--|--------------------|--------------------|------------------|
|          | 560                                       | 600   | 630   | 670   | 710   | 750   | 800   | 900   | 1000  | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>><br>1.57 |
| 700      | 38.65                                     | 40.35 | 44.01 | 46.81 | 49.43 | 51.85 | 54.57 | 58.98 |       | 0.23   | 1.14               | 1.82               | 2.05             |
| 950      | 44.72                                     | 45.72 | 49.48 | 51.61 |       |       |       |       |       | 0.31   | 1.154              | 2.47               | 2.78             |
|          |   |       |       |       |       |       |       |       |       |  |                    |                    |                  |
| 20       | 1.86                                      | 1.99  | 2.15  | 2.31  | 2.48  | 2.64  | 2.84  | 3.23  | 3.94  | 0.01   | 0.03               | 0.05               | 0.06             |
| 40       | 3.49                                      | 3.98  | 4.02  | 4.34  | 4.64  | 4.95  | 5.32  | 6.07  | 6.53  | 0.01   | 0.06               | 0.10               | 0.12             |
| 60       | 5.01                                      | 5.55  | 5.80  | 6.24  | 6.68  | 7.12  | 7.67  | 8.76  | 8.06  | 0.02   | 0.10               | 0.16               | 0.18             |
| 80       | 6.47                                      | 6.93  | 7.49  | 8.06  | 8.64  | 9.22  | 9.92  | 11.34 | 10.35 | 0.03   | 0.13               | 0.21               | 0.23             |
| 100      | 7.89                                      | 8.32  | 9.14  | 9.84  | 10.54 | 11.25 | 12.11 | 13.83 | 12.63 | 0.03   | 0.16               | 0.26               | 0.29             |
| 120      | 9.26                                      | 9.71  | 10.73 | 11.56 | 12.39 | 13.22 | 14.24 | 16.25 | 14.92 | 0.04   | 0.19               | 0.31               | 0.35             |
| 140      | 10.61                                     | 11.09 | 12.30 | 13.25 | 14.20 | 15.14 | 16.31 | 18.62 | 17.02 | 0.05   | 0.23               | 0.36               | 0.41             |
| 160      | 11.92                                     | 12.48 | 13.82 | 14.89 | 15.96 | 17.01 | 18.39 | 20.92 | 19.12 | 0.05   | 0.26               | 0.42               | 0.47             |
| 180      | 13.20                                     | 13.86 | 15.31 | 16.50 | 17.68 | 18.85 | 20.30 | 23.16 | 21.22 | 0.06   | 0.29               | 0.47               | 0.53             |
| 200      | 14.46                                     | 15.25 | 16.77 | 18.07 | 19.36 | 20.64 | 22.23 | 25.35 | 23.20 | 0.06   | 0.32               | 0.52               | 0.58             |
| 220      | 15.70                                     | 16.51 | 18.20 | 19.61 | 21.01 | 22.40 | 24.12 | 27.49 | 25.17 | 0.07   | 0.36               | 0.57               | 0.64             |
| 240      | 16.91                                     | 17.77 | 19.60 | 21.13 | 22.63 | 24.12 | 25.96 | 29.57 | 27.15 | 0.08   | 0.39               | 0.62               | 0.70             |
| 260      | 18.09                                     | 19.02 | 20.98 | 22.61 | 24.21 | 25.80 | 27.76 | 31.59 | 28.98 | 0.08   | 0.42               | 0.68               | 0.76             |
| 280      | 19.26                                     | 20.28 | 22.33 | 24.06 | 25.76 | 27.44 | 29.52 | 33.56 | 30.81 | 0.09   | 0.45               | 0.73               | 0.82             |
| 300      | 20.41                                     | 21.54 | 23.66 | 25.47 | 27.27 | 29.04 | 31.23 | 35.47 | 32.64 | 0.10   | 0.49               | 0.78               | 0.88             |
| 320      | 21.54                                     | 22.68 | 24.95 | 26.86 | 28.75 | 30.61 | 32.90 | 37.32 | 34.33 | 0.10   | 0.52               | 0.83               | 0.94             |
| 340      | 22.64                                     | 23.83 | 26.22 | 28.22 | 30.20 | 32.13 | 34.51 | 39.11 | 36.03 | 0.11   | 0.55               | 0.88               | 0.99             |
| 360      | 23.72                                     | 24.97 | 27.46 | 29.55 | 31.61 | 33.62 | 36.09 | 40.85 | 37.72 | 0.12   | 0.58               | 0.94               | 1.05             |
| 380      | 24.78                                     | 26.12 | 29.68 | 30.85 | 32.98 | 35.06 | 37.61 | 42.51 | 39.48 | 0.12   | 0.62               | 0.99               | 1.11             |
| 400      | 25.82                                     | 27.26 | 29.86 | 32.11 | 34.31 | 36.47 | 39.09 | 44.11 | 41.24 | 0.13   | 0.65               | 1.04               | 1.17             |
| 420      | 26.84                                     | 28.27 | 31.02 | 33.34 | 35.62 | 37.83 | 40.53 | 45.65 | 42.99 | 0.14   | 0.68               | 1.09               | 1.23             |
| 440      | 27.83                                     | 29.27 | 32.05 | 34.55 | 36.88 | 39.14 | 41.91 | 47.11 | 44.75 | 0.14   | 0.71               | 1.14               | 1.29             |
| 460      | 28.80                                     | 30.28 | 33.25 | 35.71 | 38.09 | 40.43 | 43.23 | 48.51 | 46.51 | 0.15   | 0.75               | 1.20               | 1.34             |
| 480      | 29.76                                     | 31.28 | 34.32 | 36.83 | 39.28 | 41.65 | 44.50 | 49.84 | 47.86 | 0.16   | 0.78               | 1.25               | 1.40             |
| 500      | 30.68                                     | 32.29 | 35.36 | 37.94 | 40.43 | 42.83 | 45.73 | 51.09 | 49.21 | 0.16   | 0.81               | 1.30               | 1.46             |
| 520      | 31.59                                     | 33.16 | 36.37 | 39.00 | 41.53 | 43.96 | 46.88 | 52.26 | 50.56 | 0.17   | 0.84               | 1.35               | 1.52             |
| 540      | 32.48                                     | 34.03 | 37.36 | 40.02 | 42.59 | 45.06 | 48.00 | 53.35 | 51.91 | 0.18   | 0.88               | 1.40               | 1.58             |
| 560      | 33.34                                     | 34.90 | 38.30 | 41.00 | 43.61 | 46.08 | 49.04 | 54.37 | 53.26 | 0.18   | 0.91               | 1.46               | 1.64             |
| 580      | 33.17                                     | 35.77 | 39.22 | 41.96 | 44.57 | 47.07 | 50.02 | 55.29 | 54.13 | 0.19   | 0.94               | 1.51               | 1.69             |
| 600      | 34.98                                     | 36.64 | 40.11 | 42.87 | 45.51 | 48.01 | 50.95 | 56.13 | 55.00 | 0.19   | 0.97               | 1.56               | 1.75             |
| 620      | 35.76                                     | 37.38 | 40.95 | 43.74 | 46.39 | 48.89 | 51.89 | 56.89 | 55.88 | 0.20   | 1.01               | 1.61               | 1.81             |
| 640      | 36.53                                     | 38.12 | 41.77 | 44.57 | 47.22 | 49.71 | 52.59 | 57.55 | 56.75 | 0.21   | 1.04               | 1.66               | 1.87             |
| 660      | 37.26                                     | 38.87 | 42.55 | 45.36 | 48.01 | 50.48 | 53.33 | 58.13 | 57.62 | 0.21   | 1.07               | 1.72               | 1.93             |
| 680      | 37.97                                     | 39.61 | 43.29 | 46.11 | 48.74 | 51.19 | 53.98 | 58.60 |       | 0.22   | 1.10               | 1.77               | 1.99             |
| 700      | 38.65                                     | 40.35 | 44.01 | 46.81 | 49.43 | 51.85 | 54.57 | 58.98 |       | 0.23   | 1.14               | 1.82               | 2.05             |
| 720      | 39.30                                     | 40.93 | 44.68 | 47.47 | 50.06 | 52.44 | 55.09 | 59.25 |       | 0.23   | 1.17               | 1.87               | 2.10             |
| 740      | 39.93                                     | 41.51 | 45.31 | 48.09 | 50.64 | 52.97 | 55.53 | 59.43 |       | 0.24   | 1.20               | 1.92               | 2.16             |
| 760      | 40.53                                     | 42.10 | 45.91 | 48.66 | 51.18 | 53.45 | 55.90 | 59.50 |       | 0.25   | 1.23               | 1.98               | 2.22             |
| 780      | 41.10                                     | 42.68 | 46.45 | 49.18 | 51.65 | 53.84 | 55.90 | 59.50 |       | 0.25   | 1.27               | 2.03               | 2.28             |
| 800      | 41.64                                     | 43.26 | 46.97 | 49.65 | 52.07 | 54.19 | 56.41 | 59.33 |       | 0.26   | 1.30               | 2.08               | 2.34             |
| 820      | 42.16                                     | 43.66 | 47.45 | 50.09 | 52.43 | 54.46 |       |       |       | 0.27   | 1.33               | 2.13               | 2.40             |
| 840      | 42.63                                     | 44.06 | 47.88 | 50.46 | 52.73 | 54.66 |       |       |       | 0.27   | 1.36               | 2.18               | 2.45             |
| 860      | 43.08                                     | 44.45 | 48.27 | 50.79 | 52.97 | 54.80 |       |       |       | 0.28   | 1.40               | 2.24               | 2.51             |
| 880      | 43.50                                     | 44.85 | 48.62 | 51.06 | 53.15 | 54.86 |       |       |       | 0.29   | 1.43               | 2.29               | 2.57             |
| 900      | 43.89                                     | 45.25 | 48.92 | 51.29 | 53.28 | 54.86 |       |       |       | 0.29   | 1.46               | 2.34               | 2.63             |
| 920      | 44.25                                     | 45.46 | 49.17 | 51.46 |       |       |       |       |       | 0.30   | 1.49               | 2.39               | 2.69             |
| 940      | 44.56                                     | 45.68 | 49.38 | 51.58 |       |       |       |       |       | 0.31   | 1.53               | 2.44               | 2.75             |
| 960      | 44.86                                     | 45.89 | 49.55 | 51.63 |       |       |       |       |       | 0.31   | 1.56               | 2.50               | 2.81             |
| 980      | 44.11                                     | 46.11 | 49.67 | 51.64 |       |       |       |       |       | 0.32   | 1.59               | 2.55               | 2.86             |
| 1000     | 45.33                                     | 46.32 | 49.74 | 51.59 |       |       |       |       |       | 0.32   | 1.62               | 2.60               | 2.92             |
| 1020     | 45.52                                     | 46.35 | 49.76 |       |       |       |       |       |       | 0.33   | 1.66               | 2.65               | 2.98             |
| 1040     | 45.66                                     | 46.39 | 49.73 |       |       |       |       |       |       | 0.34   | 1.69               | 2.70               | 3.04             |
| 1060     | 45.78                                     | 46.42 | 49.64 |       |       |       |       |       |       | 0.34   | 1.72               | 2.76               | 3.10             |
| 1080     | 45.85                                     | 46.46 | 49.52 |       |       |       |       |       |       | 0.35   | 1.75               | 2.81               | 3.16             |
| 1100     | 45.89                                     | 46.49 | 49.33 |       |       |       |       |       |       | 0.36   | 1.79               | 2.86               | 3.21             |
| 1120     | 45.90                                     | 46.26 |       |       |       |       |       |       |       | 0.36   | 1.82               | 2.91               | 3.27             |
| 1140     | 45.85                                     | 46.04 |       |       |       |       |       |       |       | 0.37   | 1.85               | 2.96               | 3.33             |
| 1160     | 45.78                                     | 45.81 |       |       |       |       |       |       |       | 0.38   | 1.88               | 3.02               | 3.39             |
| 1180     | 45.65                                     | 45.59 |       |       |       |       |       |       |       | 0.38   | 1.92               | 3.07               | 3.45             |
| 1200     | 45.50                                     | 45.36 |       |       |       |       |       |       |       | 0.39   | 1.95               | 3.12               | 3.51             |

**TABLE 12 Section E**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |       |       |       |       |       |       |       |       | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |                  |
|----------|---|-------|-------|-------|-------|-------|-------|-------|-------|--|--------------------|--------------------|------------------|
|          | 400                                       | 500   | 560   | 630   | 670   | 710   | 750   | 800   | 860   | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>><br>1.57 |
| 700      | 28.03                                     | 33.59 | 39.81 | 46.41 | 49.82 | 52.97 | 55.83 | 59.00 | 61.69 | 0.38   | 1.92               | 3.07               | 3.45             |
| 950      | 31.56                                     | 37.41 | 43.40 | 48.83 |       |       |       |       |       | 0.52   | 2.60               | 4.16               | 4.68             |
| 20       | 1.55                                      | 1.82  | 2.14  | 2.51  | 2.71  | 2.93  | 3.13  | 3.39  | 3.65  | 0.01   | 0.05               | 0.09               | 0.10             |
| 40       | 2.85                                      | 3.36  | 3.96  | 4.65  | 5.06  | 5.45  | 5.83  | 6.32  | 6.81  | 0.02   | 0.11               | 0.18               | 0.20             |
| 60       | 4.05                                      | 4.79  | 5.66  | 6.67  | 7.24  | 7.80  | 8.37  | 9.07  | 9.77  | 0.03   | 0.16               | 0.26               | 0.30             |
| 80       | 5.18                                      | 6.14  | 7.27  | 8.59  | 9.33  | 10.06 | 10.80 | 11.70 | 12.61 | 0.04   | 0.22               | 0.35               | 0.39             |
| 100      | 6.28                                      | 7.44  | 8.83  | 10.43 | 11.34 | 12.24 | 13.13 | 14.25 | 15.35 | 0.05   | 0.27               | 0.44               | 0.49             |
| 120      | 7.32                                      | 8.70  | 10.34 | 12.22 | 13.28 | 14.34 | 15.40 | 16.71 | 18.00 | 0.07   | 0.33               | 0.53               | 0.59             |
| 140      | 8.33                                      | 9.92  | 11.80 | 13.96 | 15.18 | 16.40 | 17.60 | 19.09 | 20.57 | 0.08   | 0.38               | 0.61               | 0.69             |
| 160      | 9.32                                      | 11.10 | 13.22 | 15.65 | 17.02 | 18.38 | 19.74 | 21.41 | 23.08 | 0.09   | 0.44               | 0.70               | 0.79             |
| 180      | 10.27                                     | 12.25 | 14.60 | 17.30 | 18.82 | 20.33 | 21.83 | 23.68 | 25.51 | 0.10   | 0.49               | 0.79               | 0.89             |
| 200      | 11.20                                     | 13.38 | 15.95 | 18.90 | 20.56 | 22.22 | 23.85 | 25.87 | 27.88 | 0.11   | 0.55               | 0.88               | 0.98             |
| 220      | 12.12                                     | 14.48 | 17.27 | 20.47 | 22.27 | 24.06 | 25.83 | 28.02 | 30.18 | 0.12   | 0.60               | 0.96               | 1.08             |
| 240      | 13.00                                     | 15.55 | 18.55 | 22.01 | 23.95 | 25.86 | 27.76 | 30.10 | 32.40 | 0.13   | 0.66               | 1.05               | 1.18             |
| 260      | 13.86                                     | 16.59 | 19.81 | 23.49 | 25.57 | 27.61 | 29.63 | 32.12 | 34.58 | 0.14   | 0.71               | 1.14               | 1.28             |
| 280      | 14.71                                     | 17.62 | 21.04 | 24.95 | 27.15 | 29.32 | 31.45 | 34.09 | 36.68 | 0.15   | 0.77               | 1.23               | 1.38             |
| 300      | 15.53                                     | 18.61 | 22.24 | 26.37 | 28.69 | 30.97 | 33.22 | 35.99 | 38.70 | 0.16   | 0.82               | 1.31               | 1.48             |
| 320      | 16.33                                     | 19.59 | 23.40 | 27.75 | 30.19 | 32.58 | 34.94 | 37.83 | 40.66 | 0.18   | 0.88               | 1.40               | 1.58             |
| 340      | 17.12                                     | 20.54 | 24.55 | 29.11 | 31.65 | 34.15 | 36.60 | 39.61 | 42.55 | 0.19   | 0.93               | 1.49               | 1.67             |
| 360      | 17.89                                     | 21.47 | 25.66 | 30.41 | 33.06 | 35.67 | 38.21 | 41.33 | 44.36 | 0.20   | 0.99               | 1.58               | 1.77             |
| 380      | 18.65                                     | 22.38 | 26.74 | 31.68 | 34.44 | 37.13 | 39.77 | 42.98 | 46.10 | 0.21   | 1.04               | 1.66               | 1.87             |
| 400      | 19.37                                     | 23.26 | 27.79 | 32.92 | 35.76 | 38.55 | 41.27 | 44.56 | 47.76 | 0.22   | 1.09               | 1.75               | 1.97             |
| 420      | 20.08                                     | 24.12 | 28.82 | 34.12 | 37.06 | 39.92 | 42.71 | 46.08 | 49.34 | 0.23   | 1.15               | 1.84               | 2.07             |
| 440      | 20.78                                     | 24.95 | 29.82 | 35.28 | 38.30 | 41.22 | 44.09 | 47.53 | 50.84 | 0.24   | 1.20               | 1.93               | 2.17             |
| 460      | 21.44                                     | 25.77 | 30.78 | 36.40 | 39.49 | 42.48 | 45.40 | 48.90 | 52.26 | 0.25   | 1.26               | 2.02               | 2.27             |
| 480      | 22.10                                     | 26.55 | 31.72 | 37.47 | 40.63 | 43.69 | 46.65 | 50.20 | 53.58 | 0.26   | 1.31               | 2.10               | 2.36             |
| 500      | 22.74                                     | 27.32 | 32.62 | 38.51 | 41.73 | 44.85 | 47.84 | 51.42 | 54.82 | 0.27   | 1.37               | 2.19               | 2.46             |
| 520      | 23.36                                     | 28.06 | 33.49 | 39.51 | 42.78 | 45.94 | 48.97 | 52.58 | 55.97 | 0.28   | 1.42               | 2.28               | 2.56             |
| 540      | 23.96                                     | 28.64 | 34.33 | 40.45 | 43.78 | 46.97 | 50.02 | 53.64 | 57.02 | 0.30   | 1.48               | 2.37               | 2.66             |
| 560      | 24.54                                     | 29.47 | 35.14 | 41.36 | 44.73 | 47.94 | 51.01 | 54.62 | 57.97 | 0.31   | 1.53               | 2.45               | 2.76             |
| 580      | 25.09                                     | 30.14 | 35.91 | 42.22 | 45.62 | 48.86 | 51.93 | 55.51 | 58.82 | 0.32   | 1.59               | 2.54               | 2.86             |
| 600      | 25.63                                     | 30.78 | 36.64 | 43.04 | 46.46 | 49.70 | 52.77 | 56.33 | 59.57 | 0.33   | 1.64               | 2.63               | 2.95             |
| 620      | 26.15                                     | 31.40 | 37.35 | 43.81 | 47.24 | 50.50 | 53.54 | 57.05 | 60.22 | 0.34   | 1.70               | 2.72               | 3.05             |
| 640      | 26.65                                     | 31.99 | 38.02 | 44.53 | 47.98 | 51.21 | 54.23 | 57.69 | 60.76 | 0.35   | 1.75               | 2.80               | 3.15             |
| 660      | 27.14                                     | 32.55 | 38.66 | 45.21 | 48.65 | 51.87 | 54.84 | 58.22 | 61.18 | 0.36   | 1.81               | 2.89               | 3.25             |
| 680      | 27.59                                     | 33.08 | 39.25 | 45.82 | 49.26 | 52.45 | 55.37 | 58.66 | 61.50 | 0.37   | 1.86               | 2.98               | 3.35             |
| 700      | 28.03                                     | 33.59 | 39.81 | 46.41 | 49.82 | 52.97 | 55.83 | 59.00 | 61.69 | 0.38   | 1.92               | 3.07               | 3.45             |
| 720      | 28.44                                     | 34.07 | 40.34 | 46.93 | 50.31 | 53.40 | 56.20 | 59.24 |       | 0.39   | 1.97               | 3.15               | 3.55             |
| 740      | 28.83                                     | 34.52 | 40.82 | 47.39 | 50.74 | 53.77 | 56.48 | 59.38 |       | 0.41   | 2.03               | 3.24               | 3.64             |
| 760      | 29.20                                     | 34.95 | 41.27 | 47.81 | 51.10 | 54.06 | 56.68 | 59.42 |       | 0.42   | 2.08               | 3.33               | 3.74             |
| 780      | 29.55                                     | 35.34 | 41.67 | 48.17 | 51.40 | 54.28 | 56.78 | 59.35 |       | 0.43   | 2.14               | 3.42               | 3.84             |
| 800      | 29.88                                     | 35.70 | 42.04 | 48.46 | 51.63 | 54.42 | 56.79 | 59.17 |       | 0.44   | 2.19               | 3.50               | 3.94             |
| 820      | 30.18                                     | 36.03 | 42.36 | 48.71 | 51.80 | 54.47 |       |       |       | 0.45   | 2.24               | 3.59               | 4.04             |
| 840      | 30.46                                     | 36.34 | 42.64 | 48.90 | 51.90 | 54.45 |       |       |       | 0.46   | 2.30               | 3.68               | 4.14             |
| 860      | 30.72                                     | 36.60 | 42.88 | 49.03 | 51.92 | 54.35 |       |       |       | 0.47   | 2.35               | 3.77               | 4.24             |
| 880      | 30.94                                     | 36.84 | 43.08 | 49.09 | 51.88 | 54.16 |       |       |       | 0.48   | 2.41               | 3.86               | 4.33             |
| 900      | 31.15                                     | 37.05 | 43.23 | 49.10 | 51.76 | 53.87 |       |       |       | 0.49   | 2.46               | 3.94               | 4.43             |
| 920      | 31.33                                     | 37.22 | 43.33 | 49.04 |       |       |       |       |       | 0.50   | 2.52               | 4.03               | 4.53             |
| 940      | 31.49                                     | 37.35 | 43.39 | 48.92 |       |       |       |       |       | 0.51   | 2.57               | 4.12               | 4.63             |
| 960      | 31.62                                     | 37.46 | 43.40 | 48.73 |       |       |       |       |       | 0.53   | 2.63               | 4.21               | 4.73             |
| 980      | 31.73                                     | 37.52 | 43.36 | 48.47 |       |       |       |       |       | 0.54   | 2.68               | 4.29               | 4.83             |
| 1000     | 31.80                                     | 37.56 | 43.28 | 48.16 |       |       |       |       |       | 0.55   | 2.74               | 4.38               | 4.92             |
| 1020     | 31.85                                     | 37.56 | 43.14 | 47.76 |       |       |       |       |       | 0.56   | 2.79               | 4.47               | 5.02             |
| 1040     | 31.87                                     | 37.51 | 42.96 | 47.31 |       |       |       |       |       | 0.57   | 2.85               | 4.56               | 5.12             |
| 1060     | 31.87                                     | 37.44 | 42.73 | 46.78 |       |       |       |       |       | 0.58   | 2.90               | 4.64               | 5.22             |
| 1080     | 31.84                                     | 37.33 | 42.44 | 46.17 |       |       |       |       |       | 0.59   | 2.96               | 4.73               | 5.32             |
| 1100     | 31.78                                     | 37.17 | 42.11 | 45.50 |       |       |       |       |       | 0.60   | 3.01               | 4.82               | 5.42             |
| 1120     | 31.69                                     | 36.98 | 41.71 |       |       |       |       |       |       | 0.61   | 3.07               | 4.91               | 5.52             |
| 1140     | 31.58                                     | 36.76 | 41.27 |       |       |       |       |       |       | 0.62   | 3.12               | 4.99               | 5.61             |
| 1160     | 31.43                                     | 36.49 | 40.76 |       |       |       |       |       |       | 0.64   | 3.18               | 5.08               | 5.71             |
| 1180     | 31.25                                     | 36.18 | 40.21 |       |       |       |       |       |       | 0.65   | 3.23               | 5.17               | 5.81             |
| 1200     | 31.04                                     | 35.83 | 39.59 |       |       |       |       |       |       | 0.66   | 3.28               | 5.26               | 5.91             |
| 1220     | 30.83                                     | 35.44 |       |       |       |       |       |       |       | 0.67   | 3.34               | 5.34               | 6.01             |
| 1240     | 30.53                                     | 35.12 |       |       |       |       |       |       |       | 0.68   | 3.39               | 5.43               | 6.11             |
| 1260     | 30.22                                     | 34.52 |       |       |       |       |       |       |       | 0.69   | 3.45               | 5.52               | 6.21             |
| 1280     | 29.89                                     | 34.14 |       |       |       |       |       |       |       | 0.70   | 3.50               | 5.61               | 6.30             |
| 1300     | 29.52                                     | 33.44 |       |       |       |       |       |       |       | 0.71   | 3.56               | 5.70               | 6.11             |

**TABLE 12 Section E**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |       |       |       |       |       |       | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |                  |
|----------|---|-------|-------|-------|-------|-------|-------|--|--------------------|--------------------|------------------|
|          | 900                                       | 950   | 1000  | 1120  | 1250  | 1400  | 1600  | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>><br>1.57 |
| 700      | 63.88                                     | 65.54 |       |       |       |       |       | 0.38   | 1.92               | 3.07               | 3.45             |
| 950      |   |       |       |       |       |       |       | 0.52   | 2.60               | 4.16               | 4.68             |
| 20       | 3.90                                      | 4.16  | 4.41  | 5.26  | 5.91  | 6.71  | 7.74  | 0.01   | 0.05               | 0.09               | 0.10             |
| 40       | 7.28                                      | 7.76  | 8.24  | 8.58  | 9.69  | 10.98 | 12.67 | 0.02   | 0.11               | 0.18               | 0.20             |
| 60       | 10.46                                     | 11.16 | 11.84 | 11.90 | 13.47 | 15.24 | 17.59 | 0.03   | 0.16               | 0.26               | 0.30             |
| 80       | 13.52                                     | 14.41 | 15.30 | 15.24 | 17.25 | 19.52 | 22.51 | 0.04   | 0.22               | 0.35               | 0.39             |
| 100      | 16.45                                     | 17.53 | 18.62 | 18.57 | 21.03 | 23.81 | 27.42 | 0.05   | 0.27               | 0.44               | 0.49             |
| 120      | 19.29                                     | 20.56 | 21.84 | 21.91 | 24.81 | 28.09 | 32.34 | 0.07   | 0.33               | 0.53               | 0.59             |
| 140      | 22.05                                     | 23.50 | 24.95 | 24.96 | 28.24 | 31.95 | 36.75 | 0.08   | 0.38               | 0.61               | 0.69             |
| 160      | 24.73                                     | 26.35 | 27.97 | 28.01 | 31.67 | 35.81 | 41.16 | 0.09   | 0.44               | 0.70               | 0.79             |
| 180      | 27.33                                     | 29.13 | 30.90 | 31.06 | 35.10 | 39.67 | 45.57 | 0.10   | 0.49               | 0.79               | 0.89             |
| 200      | 29.85                                     | 31.81 | 33.74 | 33.86 | 38.23 | 43.13 | 49.41 | 0.11   | 0.55               | 0.88               | 0.98             |
| 220      | 32.31                                     | 34.41 | 36.49 | 36.65 | 41.35 | 46.60 | 53.25 | 0.12   | 0.60               | 0.96               | 1.08             |
| 240      | 34.68                                     | 36.93 | 39.14 | 39.45 | 44.48 | 50.06 | 57.09 | 0.13   | 0.66               | 1.05               | 1.18             |
| 260      | 36.98                                     | 39.36 | 41.69 | 41.97 | 47.25 | 53.07 | 60.33 | 0.14   | 0.71               | 1.14               | 1.28             |
| 280      | 39.21                                     | 41.70 | 44.15 | 44.48 | 50.01 | 56.07 | 63.56 | 0.15   | 0.77               | 1.23               | 1.38             |
| 300      | 41.36                                     | 43.96 | 46.50 | 47.00 | 52.78 | 59.08 | 66.80 | 0.16   | 0.82               | 1.31               | 1.48             |
| 320      | 43.43                                     | 46.13 | 48.76 | 49.24 | 55.20 | 61.61 | 69.36 | 0.18   | 0.88               | 1.40               | 1.58             |
| 340      | 45.41                                     | 48.20 | 50.91 | 51.48 | 57.63 | 64.15 | 71.92 | 0.19   | 0.93               | 1.49               | 1.67             |
| 360      | 47.31                                     | 50.17 | 52.95 | 53.72 | 60.05 | 66.68 | 74.48 | 0.20   | 0.99               | 1.58               | 1.77             |
| 380      | 49.12                                     | 52.05 | 54.87 | 55.67 | 62.05 | 68.67 | 76.23 | 0.21   | 1.04               | 1.66               | 1.87             |
| 400      | 50.85                                     | 53.82 | 56.67 | 57.63 | 64.05 | 70.66 | 77.98 | 0.22   | 1.09               | 1.75               | 1.97             |
| 420      | 52.48                                     | 55.48 | 58.35 | 59.58 | 66.05 | 72.65 | 79.73 | 0.23   | 1.15               | 1.84               | 2.07             |
| 440      | 54.01                                     | 57.03 | 59.90 | 61.19 | 67.60 | 74.06 | 80.61 | 0.24   | 1.20               | 1.93               | 2.17             |
| 460      | 55.45                                     | 58.47 | 61.33 | 62.79 | 69.14 | 75.35 | 81.49 | 0.25   | 1.26               | 2.02               | 2.27             |
| 480      | 56.78                                     | 59.79 | 62.61 | 64.40 | 70.69 | 76.71 | 82.37 | 0.26   | 1.31               | 2.10               | 2.36             |
| 500      | 58.01                                     | 61.20 | 63.77 | 65.64 | 71.76 | 77.39 |       | 0.27   | 1.37               | 2.19               | 2.46             |
| 520      | 59.14                                     | 62.07 | 64.78 | 66.88 | 72.83 | 78.09 |       | 0.28   | 1.42               | 2.28               | 2.56             |
| 540      | 60.14                                     | 63.03 | 65.64 | 68.12 | 73.90 | 78.78 |       | 0.30   | 1.48               | 2.37               | 2.66             |
| 560      | 61.05                                     | 63.84 | 66.35 | 68.97 | 74.42 |       |       | 0.31   | 1.53               | 2.45               | 2.76             |
| 580      | 61.83                                     | 64.52 | 66.89 | 69.83 | 74.95 |       |       | 0.32   | 1.59               | 2.54               | 2.86             |
| 600      | 62.49                                     | 65.06 | 67.28 | 70.68 | 75.47 |       |       | 0.33   | 1.64               | 2.63               | 2.95             |
| 620      | 63.03                                     | 65.47 |       |       |       |       |       | 0.34   | 1.70               | 2.72               | 3.05             |
| 640      | 63.44                                     | 65.71 |       |       |       |       |       | 0.35   | 1.75               | 2.80               | 3.15             |
| 660      | 63.72                                     | 65.80 |       |       |       |       |       | 0.36   | 1.81               | 2.89               | 3.25             |
| 680      | 63.87                                     | 65.75 |       |       |       |       |       | 0.37   | 1.86               | 2.98               | 3.35             |
| 700      | 63.88                                     | 65.54 |       |       |       |       |       | 0.38   | 1.92               | 3.07               | 3.45             |

**TABLE13 Section SPZ, 3V**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |      |      |      |      |      |      |      |      | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |                  |
|----------|---|------|------|------|------|------|------|------|------|--|--------------------|--------------------|------------------|
|          | 63  | 67   | 71   | 75   | 80   | 85   | 90   | 95   | 100  | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>><br>1.57 |
| 700      | 0.55                                      | 0.65 | 0.75 | 0.79 | 0.97 | 1.10 | 1.22 | 1.34 | 1.46 | 0.01   | 0.06               | 0.09               | 0.11             |
| 950      | 0.69                                      | 0.83 | 0.96 | 1.02 | 1.25 | 1.42 | 1.58 | 1.75 | 1.91 | 0.01   | 0.09               | 0.12               | 0.15             |
| 1450     | 0.96                                      | 1.11 | 1.35 | 1.43 | 1.79 | 2.02 | 2.27 | 2.51 | 2.74 | 0.02   | 0.13               | 0.19               | 0.23             |
| 2850     | 1.53                                      | 1.81 | 2.24 | 2.41 | 3.03 | 3.45 | 3.88 | 4.31 | 4.71 | 0.04   | 0.26               | 0.37               | 0.46             |
| 100      | 0.11                                      | 0.13 | 0.14 | 0.15 | 0.18 | 0.20 | 0.22 | 0.23 | 0.25 | 0.00   | 0.01               | 0.01               | 0.02             |
| 200      | 0.20                                      | 0.23 | 0.25 | 0.28 | 0.33 | 0.36 | 0.41 | 0.44 | 0.48 | 0.00   | 0.02               | 0.03               | 0.03             |
| 300      | 0.28                                      | 0.33 | 0.36 | 0.38 | 0.46 | 0.53 | 0.58 | 0.64 | 0.69 | 0.00   | 0.03               | 0.04               | 0.05             |
| 400      | 0.34                                      | 0.42 | 0.46 | 0.49 | 0.61 | 0.67 | 0.75 | 0.83 | 0.89 | 0.01   | 0.04               | 0.05               | 0.06             |
| 500      | 0.42                                      | 0.51 | 0.56 | 0.59 | 0.73 | 0.81 | 0.91 | 1.00 | 1.09 | 0.01   | 0.05               | 0.07               | 0.08             |
| 600      | 0.48                                      | 0.59 | 0.66 | 0.69 | 0.85 | 0.96 | 1.07 | 1.18 | 1.28 | 0.01   | 0.06               | 0.08               | 0.10             |
| 700      | 0.55                                      | 0.65 | 0.75 | 0.79 | 0.97 | 1.10 | 1.22 | 1.34 | 1.46 | 0.01   | 0.06               | 0.09               | 0.11             |
| 800      | 0.61                                      | 0.73 | 0.84 | 0.88 | 1.09 | 1.23 | 1.36 | 1.51 | 1.65 | 0.01   | 0.07               | 0.11               | 0.13             |
| 900      | 0.66                                      | 0.79 | 0.92 | 0.97 | 1.21 | 1.36 | 1.52 | 1.67 | 1.83 | 0.01   | 0.08               | 0.12               | 0.15             |
| 1000     | 0.73                                      | 0.87 | 1.02 | 1.07 | 1.31 | 1.49 | 1.66 | 1.83 | 1.99 | 0.01   | 0.09               | 0.13               | 0.16             |
| 1100     | 0.78                                      | 0.93 | 1.08 | 1.15 | 1.42 | 1.61 | 1.79 | 1.98 | 2.17 | 0.02   | 0.10               | 0.14               | 0.18             |
| 1200     | 0.83                                      | 0.99 | 1.17 | 1.24 | 1.53 | 1.74 | 1.94 | 2.13 | 2.33 | 0.02   | 0.11               | 0.16               | 0.19             |
| 1300     | 0.88                                      | 1.05 | 1.24 | 1.31 | 1.64 | 1.85 | 2.07 | 2.29 | 2.50 | 0.02   | 0.12               | 0.17               | 0.21             |
| 1400     | 0.94                                      | 1.09 | 1.31 | 1.39 | 1.74 | 1.97 | 2.20 | 2.43 | 2.66 | 0.02   | 0.13               | 0.18               | 0.23             |
| 1500     | 0.98                                      | 1.16 | 1.39 | 1.48 | 1.84 | 2.09 | 2.33 | 2.57 | 2.82 | 0.02   | 0.14               | 0.20               | 0.24             |
| 1600     | 1.03                                      | 1.22 | 1.46 | 1.54 | 1.94 | 2.20 | 2.46 | 2.72 | 2.98 | 0.02   | 0.15               | 0.21               | 0.26             |
| 1700     | 1.08                                      | 1.28 | 1.53 | 1.63 | 2.04 | 2.31 | 2.59 | 2.86 | 3.14 | 0.02   | 0.16               | 0.22               | 0.27             |
| 1800     | 1.12                                      | 1.33 | 1.60 | 1.69 | 2.13 | 2.42 | 2.71 | 2.99 | 3.28 | 0.03   | 0.17               | 0.24               | 0.29             |
| 1900     | 1.17                                      | 1.36 | 1.66 | 1.79 | 2.22 | 2.53 | 2.83 | 3.14 | 3.43 | 0.03   | 0.18               | 0.25               | 0.31             |
| 2000     | 1.21                                      | 1.41 | 1.74 | 1.85 | 2.31 | 2.63 | 2.95 | 3.27 | 3.58 | 0.03   | 0.19               | 0.26               | 0.32             |
| 2100     | 1.25                                      | 1.46 | 1.79 | 1.92 | 2.41 | 2.74 | 3.07 | 3.40 | 3.72 | 0.03   | 0.19               | 0.28               | 0.34             |
| 2200     | 1.29                                      | 1.54 | 1.86 | 1.99 | 2.50 | 2.84 | 3.18 | 3.52 | 3.86 | 0.03   | 0.19               | 0.28               | 0.34             |
| 2300     | 1.33                                      | 1.57 | 1.93 | 2.06 | 2.59 | 2.94 | 3.30 | 3.65 | 4.00 | 0.03   | 0.21               | 0.30               | 0.37             |
| 2400     | 1.36                                      | 1.61 | 1.98 | 2.13 | 2.66 | 3.04 | 3.41 | 3.77 | 4.14 | 0.03   | 0.22               | 0.32               | 0.39             |
| 2500     | 1.41                                      | 1.68 | 2.05 | 2.18 | 2.75 | 3.14 | 3.52 | 3.89 | 4.27 | 0.04   | 0.23               | 0.33               | 0.40             |
| 2600     | 1.44                                      | 1.71 | 2.10 | 2.25 | 2.83 | 3.23 | 3.62 | 4.02 | 4.40 | 0.04   | 0.24               | 0.34               | 0.42             |
| 2700     | 1.47                                      | 1.75 | 2.16 | 2.32 | 2.92 | 3.32 | 3.73 | 4.13 | 4.52 | 0.04   | 0.25               | 0.35               | 0.44             |
| 2800     | 1.51                                      | 1.79 | 2.21 | 2.38 | 2.99 | 3.41 | 3.83 | 4.25 | 4.65 | 0.04   | 0.26               | 0.367              | 0.45             |
| 2900     | 1.54                                      | 1.84 | 2.27 | 2.42 | 3.07 | 3.50 | 3.93 | 4.36 | 4.77 | 0.04   | 0.27               | 0.38               | 0.47             |
| 3000     | 1.57                                      | 1.88 | 2.32 | 2.49 | 3.15 | 3.59 | 4.03 | 4.47 | 4.90 | 0.04   | 0.28               | 0.39               | 0.48             |
| 3100     | 1.61                                      | 1.92 | 2.38 | 2.54 | 3.21 | 3.67 | 4.13 | 4.58 | 5.01 | 0.04   | 0.29               | 0.41               | 0.50             |
| 3200     | 1.64                                      | 1.94 | 2.42 | 2.59 | 3.29 | 3.75 | 4.22 | 4.68 | 5.13 | 0.05   | 0.30               | 0.42               | 0.52             |
| 3300     | 1.67                                      | 1.99 | 2.48 | 2.65 | 3.36 | 3.84 | 4.31 | 4.77 | 5.24 | 0.05   | 0.31               | 0.43               | 0.53             |
| 3400     | 1.69                                      | 2.04 | 2.52 | 2.73 | 3.42 | 3.92 | 4.40 | 4.87 | 5.35 | 0.05   | 0.31               | 0.45               | 0.55             |
| 3500     | 1.73                                      | 2.07 | 2.56 | 2.76 | 3.49 | 3.99 | 4.49 | 4.97 | 5.45 | 0.05   | 0.32               | 0.46               | 0.56             |
| 3600     | 1.75                                      | 2.12 | 2.61 | 2.82 | 3.55 | 4.07 | 4.58 | 5.06 | 5.56 | 0.05   | 0.33               | 0.47               | 0.58             |
| 3700     | 1.77                                      | 2.15 | 2.65 | 2.86 | 3.62 | 4.15 | 4.65 | 5.16 | 5.65 | 0.05   | 0.34               | 0.49               | 0.60             |
| 3800     | 1.79                                      | 2.18 | 2.70 | 2.93 | 3.69 | 4.21 | 4.73 | 5.25 | 5.74 | 0.05   | 0.35               | 0.50               | 0.61             |
| 3900     | 1.82                                      | 2.22 | 2.74 | 2.97 | 3.74 | 4.28 | 4.81 | 5.34 | 5.84 | 0.06   | 0.36               | 0.51               | 0.63             |
| 4000     | 1.84                                      | 2.25 | 2.78 | 3.01 | 3.80 | 4.35 | 4.88 | 5.41 | 5.93 | 0.06   | 0.37               | 0.53               | 0.64             |
| 4100     | 1.86                                      | 2.28 | 2.82 | 3.05 | 3.85 | 4.41 | 4.96 | 5.49 | 6.02 | 0.06   | 0.38               | 0.54               | 0.66             |
| 4200     | 1.88                                      | 2.33 | 2.85 | 3.09 | 3.91 | 4.48 | 5.03 | 5.57 | 6.09 | 0.06   | 0.39               | 0.55               | 0.68             |
| 4300     | 1.90                                      | 2.36 | 2.89 | 3.14 | 3.96 | 4.53 | 5.09 | 5.64 | 6.17 | 0.06   | 0.40               | 0.57               | 0.69             |
| 4400     | 1.91                                      | 2.38 | 2.93 | 3.19 | 4.02 | 4.60 | 5.16 | 5.72 | 6.25 | 0.06   | 0.41               | 0.58               | 0.71             |
| 4500     | 1.94                                      | 2.42 | 2.96 | 3.21 | 4.06 | 4.65 | 5.23 | 5.79 | 6.33 | 0.06   | 0.42               | 0.59               | 0.73             |
| 4600     | 1.95                                      | 2.44 | 2.99 | 3.24 | 4.10 | 4.71 | 5.28 | 5.85 | 6.39 | 0.06   | 0.42               | 0.59               | 0.73             |
| 4700     | 1.97                                      | 2.49 | 3.01 | 3.26 | 4.15 | 4.75 | 5.35 | 5.91 | 6.46 | 0.07   | 0.44               | 0.62               | 0.76             |
| 4800     | 1.98                                      | 2.51 | 3.05 | 3.32 | 4.19 | 4.81 | 5.40 | 5.97 | 6.52 | 0.07   | 0.44               | 0.63               | 0.77             |
| 4900     | 1.99                                      | 2.54 | 3.07 | 3.34 | 4.24 | 4.85 | 5.45 | 6.03 | 6.58 | 0.07   | 0.45               | 0.64               | 0.79             |
| 5000     | 2.00                                      | 2.56 | 3.09 | 3.38 | 4.24 | 4.90 | 5.50 | 6.08 | 6.63 | 0.07   | 0.46               | 0.66               | 0.81             |
| 5100     | 2.01                                      | 2.61 | 3.12 | 3.46 | 4.30 | 4.94 | 5.54 | 6.13 | 6.69 | 0.07   | 0.47               | 0.67               | 0.82             |
| 5200     | 2.02                                      | 2.63 | 3.15 | 3.49 | 4.35 | 4.97 | 5.59 | 6.17 | 6.73 | 0.07   | 0.48               | 0.68               | 0.84             |
| 5300     | 2.02                                      | 2.68 | 3.17 | 3.51 | 4.38 | 5.02 | 5.63 | 6.22 | 6.78 | 0.08   | 0.49               | 0.70               | 0.85             |
| 5400     | 2.04                                      | 2.71 | 3.18 | 3.53 | 4.40 | 5.05 | 5.67 | 6.26 | 6.82 | 0.08   | 0.50               | 0.71               | 0.87             |
| 5500     | 2.04                                      | 2.73 | 3.20 | 3.55 | 4.43 | 5.08 | 5.70 | 6.29 | 6.85 | 0.08   | 0.51               | 0.72               | 0.89             |
| 5600     | 2.05                                      | 2.74 | 3.21 | 3.57 | 4.46 | 5.10 | 5.73 | 6.33 | 6.89 | 0.08   | 0.52               | 0.74               | 0.90             |
| 5800     | 2.05                                      | 2.76 | 3.25 | 3.59 | 4.50 | 5.16 | 5.79 | 6.38 | 6.94 | 0.08   | 0.54               | 0.76               | 0.93             |
| 6000     | 2.05                                      | 2.77 | 3.28 | 3.62 | 4.53 | 5.19 | 5.83 | 6.41 | 6.97 | 0.09   | 0.56               | 0.79               | 0.97             |
| 6200     | 2.05                                      | 2.77 | 3.28 | 3.64 | 4.57 | 5.23 | 5.85 | 6.45 | 6.99 | 0.09   | 0.59               | 0.84               | 1.03             |
| 6400     | 2.04                                      | 2.77 | 3.28 | 3.65 | 4.58 | 5.25 | 5.86 | 6.45 | 6.99 | 0.09   | 0.61               | 0.87               | 1.06             |
| 6600     | 2.01                                      | 2.78 | 3.28 | 3.66 | 4.59 | 5.25 | 5.87 | 6.45 | 6.96 | 0.10   | 0.63               | 0.89               | 1.10             |
| 6800     | 1.99                                      | 2.78 | 3.28 | 3.66 | 4.58 | 5.25 | 5.85 | 6.42 | 6.93 | 0.10   | 0.62               | 0.92               | 1.13             |
| 7000     | 1.97                                      | 2.76 | 3.26 | 3.64 | 4.57 | 5.23 | 5.83 | 6.38 | 6.88 | 0.10   | 0.67               | 0.95               | 1.16             |
| 7200     | 1.94                                      | 2.75 | 3.23 | 3.62 | 4.54 | 5.19 | 5.79 | 6.33 | 6.80 | 0.11   | 0.69               | 0.97               | 1.19             |
| 7400     | 1.90                                      | 2.73 | 3.20 | 3.60 | 4.51 | 5.15 | 5.73 | 6.25 | 6.70 | 0.11   | 0.70               | 1.00               | 1.22             |
| 7600     | 1.86                                      | 2.68 | 3.17 | 3.58 | 4.47 | 5.09 | 5.67 | 6.16 | 6.59 | 0.11   | 0.72               | 1.03               | 1.26             |
| 7800     | 1.80                                      | 2.61 | 3.12 | 3.53 | 4.40 | 5.03 | 5.58 | 6.05 | 6.45 | 0.11   | 0.74               | 1.05               | 1.29             |
| 8000     | 1.75                                      | 2.54 | 3.07 | 3.48 | 4.33 | 4.94 | 5.47 | 5.92 | 6.28 | 0.11   | 0.76               | 1.08               | 1.32             |
| 8200     | 1.69                                      | 2.52 | 3.00 | 3.42 | 4.26 | 4.85 | 5.36 | 5.78 | 6.11 | 0.12   | 0.78               | 1.10               | 1.35             |
| 8400     | 1.63                                      | 2.38 | 2.93 | 3.36 | 4.17 | 4.73 | 5.21 | 5.61 | 5.90 | 0.14   | 0.79               | 1.13               | 1.38             |

**TABLE13 Section SPZ, 3V**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |      |      |      |      |       |       |       |       |       |       | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |                  |
|----------|---|------|------|------|------|-------|-------|-------|-------|-------|-------|--|--------------------|--------------------|------------------|
|          | 106                                       | 112  | 118  | 125  | 132  | 140   | 150   | 160   | 180   | 200   | 224   | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>><br>1.57 |
| 700      | 1.48                                      | 1.76 | 1.79 | 2.07 | 2.23 | 2.43  | 2.66  | 2.89  | 3.37  | 3.82  | 3.93  | 0.01   | 0.06               | 0.09               | 0.11             |
| 950      | 1.95                                      | 2.31 | 2.35 | 2.71 | 2.93 | 3.18  | 3.49  | 3.80  | 4.40  | 4.98  | 5.19  | 0.01   | 0.09               | 0.12               | 0.15             |
| 1450     | 2.79                                      | 3.32 | 3.38 | 3.91 | 4.22 | 4.58  | 5.03  | 5.47  | 6.34  | 7.17  | 7.26  | 0.02   | 0.13               | 0.19               | 0.23             |
| 2850     | 4.82                                      | 5.68 | 5.78 | 6.69 | 7.22 | 7.81  | 8.51  | 9.21  | 10.48 | 11.64 | 11.59 | 0.04   | 0.26               | 0.37               | 0.46             |
| 100      | 0.26                                      | 0.31 | 0.32 | 0.35 | 0.39 | 0.42  | 0.45  | 0.50  | 0.57  | 1.65  | 0.70  | 0.00   | 0.01               | 0.01               | 0.02             |
| 200      | 0.49                                      | 0.57 | 0.58 | 0.67 | 0.73 | 0.78  | 0.86  | 0.94  | 1.08  | 1.22  | 1.26  | 0.00   | 0.02               | 0.03               | 0.03             |
| 300      | 0.72                                      | 0.83 | 0.84 | 0.97 | 1.05 | 1.13  | 1.24  | 1.35  | 1.56  | 1.77  | 1.82  | 0.00   | 0.03               | 0.04               | 0.05             |
| 400      | 0.93                                      | 1.07 | 1.12 | 1.25 | 1.35 | 1.46  | 1.61  | 1.75  | 2.04  | 2.31  | 2.35  | 0.01   | 0.04               | 0.05               | 0.06             |
| 500      | 1.13                                      | 1.30 | 1.34 | 1.53 | 1.66 | 1.79  | 1.97  | 2.15  | 2.49  | 2.83  | 2.89  | 0.01   | 0.05               | 0.07               | 0.08             |
| 600      | 1.31                                      | 1.53 | 1.56 | 1.80 | 1.95 | 2.11  | 2.32  | 2.52  | 2.93  | 3.33  | 3.42  | 0.01   | 0.06               | 0.08               | 0.10             |
| 700      | 1.48                                      | 1.76 | 1.79 | 2.07 | 2.23 | 2.43  | 2.66  | 2.89  | 3.37  | 3.82  | 3.93  | 0.01   | 0.06               | 0.09               | 0.11             |
| 800      | 1.68                                      | 1.98 | 2.05 | 2.33 | 2.52 | 2.73  | 3.00  | 3.27  | 3.78  | 4.30  | 4.43  | 0.01   | 0.07               | 0.11               | 0.13             |
| 900      | 1.86                                      | 2.19 | 2.22 | 2.59 | 2.79 | 3.04  | 3.32  | 3.62  | 4.20  | 4.77  | 4.90  | 0.01   | 0.08               | 0.12               | 0.15             |
| 1000     | 2.05                                      | 2.40 | 2.45 | 2.83 | 3.06 | 3.32  | 3.65  | 3.97  | 4.61  | 5.24  | 5.37  | 0.01   | 0.09               | 0.13               | 0.16             |
| 1100     | 2.23                                      | 2.61 | 2.69 | 3.08 | 3.33 | 3.61  | 3.97  | 4.31  | 5.01  | 5.69  | 5.83  | 0.02   | 0.10               | 0.14               | 0.18             |
| 1200     | 2.39                                      | 2.81 | 2.88 | 3.32 | 3.59 | 3.89  | 4.28  | 4.65  | 5.40  | 6.13  | 6.30  | 0.02   | 0.11               | 0.16               | 0.19             |
| 1300     | 2.56                                      | 3.01 | 3.08 | 3.55 | 3.85 | 4.17  | 4.58  | 4.98  | 5.78  | 6.56  | 6.67  | 0.02   | 0.12               | 0.17               | 0.21             |
| 1400     | 2.74                                      | 3.20 | 3.28 | 3.78 | 4.09 | 4.44  | 4.88  | 5.31  | 6.15  | 6.97  | 7.05  | 0.02   | 0.13               | 0.18               | 0.23             |
| 1500     | 2.89                                      | 3.40 | 3.46 | 4.02 | 4.35 | 4.72  | 5.17  | 5.62  | 6.51  | 7.38  | 7.42  | 0.02   | 0.14               | 0.20               | 0.24             |
| 1600     | 3.09                                      | 3.59 | 3.65 | 4.24 | 4.59 | 4.97  | 5.46  | 5.94  | 6.88  | 7.78  | 7.79  | 0.02   | 0.15               | 0.21               | 0.26             |
| 1700     | 3.21                                      | 3.77 | 3.89 | 4.46 | 4.83 | 5.24  | 5.74  | 6.24  | 7.22  | 8.16  | 8.19  | 0.02   | 0.16               | 0.22               | 0.27             |
| 1800     | 3.35                                      | 3.96 | 4.09 | 4.68 | 5.06 | 5.49  | 6.02  | 6.53  | 7.56  | 8.54  | 8.59  | 0.03   | 0.17               | 0.24               | 0.29             |
| 1900     | 3.49                                      | 4.14 | 4.21 | 4.88 | 5.29 | 5.73  | 6.29  | 6.83  | 7.89  | 8.89  | 8.99  | 0.03   | 0.18               | 0.25               | 0.31             |
| 2000     | 3.66                                      | 4.31 | 4.41 | 5.09 | 5.51 | 5.97  | 6.55  | 7.12  | 8.21  | 9.24  | 9.39  | 0.03   | 0.19               | 0.26               | 0.32             |
| 2100     | 3.79                                      | 4.49 | 4.59 | 5.30 | 5.73 | 6.22  | 6.81  | 7.39  | 8.51  | 9.58  | 9.72  | 0.03   | 0.19               | 0.28               | 0.34             |
| 2200     | 3.95                                      | 4.65 | 4.68 | 5.50 | 5.94 | 6.45  | 6.81  | 7.39  | 8.51  | 9.58  | 10.05 | 0.03   | 0.19               | 0.28               | 0.34             |
| 2300     | 4.09                                      | 4.83 | 4.92 | 5.70 | 6.16 | 6.67  | 7.30  | 7.92  | 9.10  | 10.21 | 10.37 | 0.03   | 0.21               | 0.30               | 0.37             |
| 2400     | 4.23                                      | 4.98 | 5.08 | 5.89 | 6.36 | 6.89  | 7.50  | 8.17  | 9.37  | 10.51 | 10.70 | 0.03   | 0.22               | 0.32               | 0.39             |
| 2500     | 4.38                                      | 5.15 | 5.31 | 6.07 | 6.56 | 7.11  | 7.77  | 8.42  | 9.64  | 10.78 | 10.90 | 0.04   | 0.23               | 0.33               | 0.40             |
| 2600     | 4.49                                      | 5.30 | 5.39 | 6.26 | 6.75 | 7.32  | 8.00  | 8.66  | 9.90  | 11.04 | 11.10 | 0.04   | 0.24               | 0.34               | 0.42             |
| 2700     | 4.65                                      | 5.46 | 5.60 | 6.44 | 6.94 | 7.51  | 8.21  | 8.88  | 10.14 | 11.30 | 11.29 | 0.04   | 0.25               | 0.35               | 0.44             |
| 2800     | 4.79                                      | 5.61 | 5.72 | 6.61 | 7.13 | 7.71  | 8.42  | 9.10  | 10.37 | 11.53 | 11.49 | 0.04   | 0.26               | 0.367              | 0.45             |
| 2900     | 4.89                                      | 5.75 | 5.83 | 6.78 | 7.30 | 7.90  | 8.61  | 9.31  | 10.59 | 11.74 | 11.69 | 0.04   | 0.27               | 0.38               | 0.47             |
| 3000     | 4.97                                      | 5.90 | 6.01 | 6.94 | 7.48 | 8.09  | 8.81  | 9.50  | 10.79 | 11.95 | 11.89 | 0.04   | 0.28               | 0.39               | 0.48             |
| 3100     | 5.16                                      | 6.04 | 6.18 | 7.10 | 7.65 | 8.26  | 9.00  | 9.70  | 10.99 | 12.12 | 12.08 | 0.04   | 0.29               | 0.41               | 0.50             |
| 3200     | 5.24                                      | 6.17 | 6.25 | 7.25 | 7.71 | 8.44  | 9.17  | 9.88  | 11.17 | 12.29 | 12.28 | 0.05   | 0.30               | 0.42               | 0.52             |
| 3300     | 5.33                                      | 6.30 | 6.41 | 7.40 | 7.96 | 8.59  | 9.34  | 10.05 | 11.34 | 12.44 | 12.25 | 0.05   | 0.31               | 0.43               | 0.53             |
| 3400     | 5.46                                      | 6.42 | 6.52 | 7.55 | 8.12 | 8.76  | 9.50  | 10.22 | 11.50 | 12.56 | 12.22 | 0.05   | 0.31               | 0.45               | 0.55             |
| 3500     | 5.59                                      | 6.56 | 6.61 | 7.69 | 8.26 | 8.90  | 9.66  | 10.36 | 11.63 | 12.67 | 12.18 | 0.05   | 0.32               | 0.46               | 0.56             |
| 3600     | 5.69                                      | 6.67 | 6.82 | 7.82 | 8.40 | 9.04  | 9.80  | 10.51 | 11.76 | 12.76 | 12.15 | 0.05   | 0.33               | 0.47               | 0.58             |
| 3700     | 5.79                                      | 6.79 | 6.93 | 7.94 | 8.54 | 9.17  | 9.93  | 10.64 | 11.87 | 12.84 | 12.13 | 0.05   | 0.34               | 0.49               | 0.60             |
| 3800     | 5.84                                      | 6.90 | 6.99 | 8.06 | 8.66 | 9.31  | 10.07 | 10.76 | 11.96 | 12.88 | 12.10 | 0.05   | 0.35               | 0.50               | 0.61             |
| 3900     | 5.96                                      | 7.01 | 7.13 | 8.18 | 8.78 | 9.43  | 10.18 | 10.87 | 12.03 | 12.90 | 12.08 | 0.06   | 0.36               | 0.51               | 0.63             |
| 4000     | 6.09                                      | 7.11 | 7.24 | 8.29 | 8.89 | 9.54  | 10.29 | 10.97 | 12.10 | 12.91 | 12.05 | 0.06   | 0.37               | 0.53               | 0.64             |
| 4100     | 6.16                                      | 7.21 | 7.33 | 8.40 | 9.00 | 9.64  | 10.38 | 11.06 | 12.14 | 12.90 |       | 0.06   | 0.38               | 0.54               | 0.66             |
| 4200     | 6.19                                      | 7.30 | 7.43 | 8.50 | 9.10 | 9.74  | 10.47 | 11.12 | 12.18 | 12.86 |       | 0.06   | 0.39               | 0.55               | 0.68             |
| 4300     | 6.29                                      | 7.39 | 7.56 | 8.59 | 9.19 | 9.82  | 10.55 | 11.19 | 12.19 | 12.79 |       | 0.06   | 0.40               | 0.57               | 0.69             |
| 4400     | 6.35                                      | 7.47 | 7.63 | 8.68 | 9.27 | 9.90  | 10.62 | 11.23 | 12.19 | 12.72 |       | 0.06   | 0.41               | 0.58               | 0.71             |
| 4500     | 6.46                                      | 7.56 | 7.71 | 8.76 | 9.35 | 9.98  | 10.67 | 11.28 | 12.17 | 12.61 |       | 0.06   | 0.42               | 0.59               | 0.73             |
| 4600     | 6.49                                      | 7.62 | 7.79 | 8.83 | 9.42 | 10.03 | 10.71 | 11.30 | 12.12 |       |       | 0.06   | 0.42               | 0.59               | 0.73             |
| 4700     | 6.59                                      | 7.70 | 7.83 | 8.90 | 9.48 | 10.09 | 10.75 | 11.31 | 12.07 |       |       | 0.07   | 0.44               | 0.62               | 0.76             |
| 4800     | 6.63                                      | 7.77 | 7.95 | 8.97 | 9.54 | 10.13 | 10.77 | 11.31 | 11.99 |       |       | 0.07   | 0.44               | 0.63               | 0.77             |
| 4900     | 6.69                                      | 7.82 | 8.01 | 9.01 | 9.58 | 10.16 | 10.79 | 11.29 | 11.89 |       |       | 0.07   | 0.45               | 0.64               | 0.79             |
| 5000     | 6.78                                      | 7.88 | 8.09 | 9.06 | 9.63 | 10.19 | 10.79 | 11.25 | 11.77 |       |       | 0.07   | 0.46               | 0.66               | 0.81             |
| 5100     | 6.89                                      | 7.93 | 8.11 | 9.10 | 9.65 | 10.21 | 10.78 | 11.21 |       |       |       | 0.07   | 0.47               | 0.67               | 0.82             |
| 5200     | 6.98                                      | 7.98 | 8.14 | 9.13 | 9.67 | 10.21 | 10.76 | 11.15 |       |       |       | 0.07   | 0.48               | 0.68               | 0.84             |
| 5300     | 7.01                                      | 8.02 | 8.16 | 9.16 | 9.68 | 10.21 | 10.71 | 11.08 |       |       |       | 0.08   | 0.49               | 0.70               | 0.85             |
| 5400     | 7.04                                      | 8.05 | 8.18 | 9.17 | 9.69 | 10.19 | 10.67 | 10.99 |       |       |       | 0.08   | 0.50               | 0.71               | 0.87             |
| 5500     | 7.09                                      | 8.09 | 8.21 | 9.19 | 9.69 | 10.16 | 10.62 | 10.89 |       |       |       | 0.08   | 0.51               | 0.72               | 0.89             |
| 5600     | 7.14                                      | 8.11 | 8.23 | 9.20 | 9.67 | 10.13 | 10.54 |       |       |       |       | 0.08   | 0.52               | 0.74               | 0.90             |
| 5800     | 7.16                                      | 8.13 | 8.18 | 9.17 | 9.63 | 10.08 | 10.35 |       |       |       |       | 0.08   | 0.54               | 0.76               | 0.93             |
| 6000     | 7.18                                      | 8.14 | 8.16 | 9.13 | 9.54 | 10.98 | 10.12 |       |       |       |       | 0.09   | 0.56               | 0.79               | 0.97             |
| 6200     | 7.24                                      | 8.13 | 8.14 | 9.05 | 9.41 | 9.68  |       |       |       |       |       | 0.09   | 0.59               | 0.84               | 1.03             |
| 6400     | 7.08                                      | 8.09 | 8.12 | 8.93 | 9.24 | 9.45  |       |       |       |       |       | 0.09   | 0.61               | 0.87               | 1.06             |
| 6600     | 7.04                                      | 8.02 | 8.09 | 8.79 |      |       |       |       |       |       |       | 0.10   | 0.63               | 0.89               | 1.10             |
| 6800     | 6.98                                      | 7.93 | 7.98 | 8.60 |      |       |       |       |       |       |       | 0.10   | 0.62               | 0.92               | 1.13             |
| 7000     | 6.86                                      | 7.81 | 7.89 | 8.38 |      |       |       |       |       |       |       | 0.10   | 0.67               | 0.95               | 1.16             |
| 7200     | 6.78                                      | 7.67 |      |      |      |       |       |       |       |       |       | 0.11   | 0.69               | 0.97               | 1.19             |
| 7400     | 6.62                                      | 7.49 |      |      |      |       |       |       |       |       |       | 0.11   | 0.70               | 1.00               | 1.22             |
| 7600     | 6.58                                      | 7.28 |      |      |      |       |       |       |       |       |       | 0.11   | 0.72               | 1.03               | 1.26             |
| 7800     | 6.45                                      | 7.05 |      |      |      |       |       |       |       |       |       | 0.11   | 0.74               | 1.05               | 1.29             |
|          |   |      |      |      |      |       |       |       |       |       |       | 0.11   | 0.76               | 1.08               | 1.32             |

**TABLE 14 Section SPA**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |      |      |      |      |      |      |      |      |       |       | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |               |
|----------|---|------|------|------|------|------|------|------|------|-------|-------|--|--------------------|--------------------|---------------|
|          | 80  | 85   | 90   | 95   | 100  | 106  | 112  | 118  | 125  | 132   | 140   | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>> 1.57 |
| 700      | 0.95                                      | 1.11 | 1.23 | 1.45 | 1.62 | 1.79 | 2.09 | 2.32 | 2.58 | 2.86  | 3.16  | 0.02   | 0.15               | 0.21               | 0.26          |
| 950      | 1.17                                      | 1.37 | 1.55 | 1.79 | 2.08 | 2.32 | 2.69 | 2.99 | 3.35 | 3.71  | 4.11  | 0.03   | 0.20               | 0.29               | 0.36          |
| 1450     | 1.52                                      | 1.82 | 2.13 | 2.43 | 2.90 | 3.25 | 3.79 | 4.23 | 4.75 | 5.26  | 5.84  | 0.05   | 0.31               | 0.44               | 0.54          |
| 2850     | 2.11                                      | 2.68 | 3.29 | 3.79 | 4.62 | 5.24 | 6.17 | 6.93 | 7.79 | 8.64  | 9.58  | 0.09   | 0.61               | 0.87               | 1.07          |
| 100      | 0.23                                      | 0.22 | 0.24 | 0.29 | 0.30 | 0.34 | 0.38 | 0.42 | 0.46 | 0.50  | 0.56  | 0.00   | 0.02               | 0.03               | 0.04          |
| 200      | 0.38                                      | 0.42 | 0.44 | 0.53 | 0.56 | 0.61 | 0.70 | 0.78 | 0.86 | 0.95  | 1.04  | 0.01   | 0.04               | 0.06               | 0.07          |
| 300      | 0.52                                      | 0.59 | 0.62 | 0.75 | 0.80 | 0.89 | 1.01 | 1.11 | 1.24 | 1.35  | 1.50  | 0.01   | 0.06               | 0.09               | 0.11          |
| 400      | 0.64                                      | 0.73 | 0.78 | 0.94 | 1.02 | 1.11 | 1.29 | 1.43 | 1.60 | 1.75  | 1.93  | 0.01   | 0.09               | 0.12               | 0.15          |
| 500      | 0.74                                      | 0.86 | 0.93 | 1.11 | 1.23 | 1.34 | 1.56 | 1.73 | 1.93 | 2.13  | 2.35  | 0.02   | 0.11               | 0.15               | 0.19          |
| 600      | 0.84                                      | 0.99 | 1.08 | 1.29 | 1.43 | 1.59 | 1.83 | 2.03 | 2.27 | 2.50  | 2.76  | 0.02   | 0.13               | 0.18               | 0.22          |
| 700      | 0.95                                      | 1.11 | 1.23 | 1.45 | 1.62 | 1.79 | 2.09 | 2.32 | 2.58 | 2.86  | 3.16  | 0.02   | 0.15               | 0.21               | 0.26          |
| 800      | 1.04                                      | 1.23 | 1.37 | 1.59 | 1.81 | 1.99 | 2.33 | 2.59 | 2.90 | 3.20  | 3.54  | 0.03   | 0.17               | 0.24               | 0.30          |
| 900      | 1.16                                      | 1.33 | 1.49 | 1.75 | 1.98 | 2.21 | 2.57 | 2.87 | 3.20 | 3.54  | 3.92  | 0.03   | 0.19               | 0.27               | 0.34          |
| 1000     | 1.19                                      | 1.42 | 1.62 | 1.89 | 2.16 | 2.39 | 2.80 | 3.13 | 3.50 | 3.86  | 4.28  | 0.03   | 0.22               | 0.31               | 0.37          |
| 1100     | 1.29                                      | 1.55 | 1.74 | 1.99 | 2.33 | 2.59 | 3.03 | 3.38 | 3.79 | 4.19  | 4.65  | 0.04   | 0.24               | 0.34               | 0.41          |
| 1200     | 1.35                                      | 1.59 | 1.86 | 2.13 | 2.50 | 2.78 | 3.26 | 3.63 | 4.07 | 4.50  | 5.00  | 0.04   | 0.03               | 0.37               | 0.45          |
| 1300     | 1.42                                      | 1.68 | 1.97 | 2.25 | 2.66 | 2.96 | 3.48 | 3.89 | 4.35 | 4.81  | 5.34  | 0.04   | 0.28               | 0.40               | 0.49          |
| 1400     | 1.48                                      | 1.78 | 2.08 | 2.39 | 2.81 | 3.15 | 3.69 | 4.12 | 4.62 | 5.11  | 5.68  | 0.05   | 0.03               | 0.43               | 0.52          |
| 1500     | 1.56                                      | 1.85 | 2.18 | 2.48 | 2.97 | 3.36 | 3.90 | 4.36 | 4.88 | 5.41  | 6.01  | 0.05   | 0.32               | 0.46               | 0.56          |
| 1600     | 1.59                                      | 1.93 | 2.29 | 2.59 | 3.12 | 3.49 | 4.10 | 4.58 | 5.13 | 5.69  | 6.32  | 0.05   | 0.34               | 0.49               | 0.60          |
| 1700     | 1.64                                      | 1.99 | 2.39 | 2.73 | 3.27 | 3.65 | 4.29 | 4.80 | 5.39 | 5.97  | 6.64  | 0.06   | 0.37               | 0.52               | 0.64          |
| 1800     | 1.69                                      | 2.07 | 2.49 | 2.85 | 3.40 | 3.82 | 4.48 | 5.02 | 5.64 | 6.25  | 6.93  | 0.06   | 0.39               | 0.55               | 0.67          |
| 1900     | 1.75                                      | 2.15 | 2.57 | 2.99 | 3.54 | 3.99 | 4.67 | 5.23 | 5.87 | 6.51  | 7.22  | 0.06   | 0.41               | 0.58               | 0.71          |
| 2000     | 1.79                                      | 2.19 | 2.67 | 3.08 | 3.66 | 4.13 | 4.85 | 5.43 | 6.10 | 6.76  | 7.52  | 0.07   | 0.43               | 0.61               | 0.75          |
| 2100     | 1.84                                      | 2.28 | 2.75 | 3.11 | 3.80 | 4.26 | 5.03 | 5.63 | 6.33 | 7.01  | 7.79  | 0.07   | 0.45               | 0.64               | 0.79          |
| 2200     | 1.88                                      | 2.31 | 2.84 | 3.21 | 3.92 | 4.41 | 4.36 | 5.78 | 6.54 | 7.26  | 8.06  | 0.07   | 0.47               | 0.67               | 0.82          |
| 2300     | 1.92                                      | 2.37 | 2.91 | 3.33 | 4.04 | 4.55 | 5.37 | 6.01 | 6.76 | 7.50  | 8.32  | 0.08   | 0.49               | 0.70               | 0.86          |
| 2400     | 1.95                                      | 2.41 | 2.99 | 3.42 | 4.16 | 4.67 | 5.52 | 6.20 | 6.96 | 7.72  | 8.57  | 0.08   | 0.52               | 0.73               | 0.90          |
| 2500     | 1.99                                      | 2.49 | 3.05 | 3.49 | 4.26 | 4.82 | 5.68 | 6.36 | 7.16 | 7.94  | 8.81  | 0.08   | 0.54               | 0.76               | 0.94          |
| 2600     | 2.04                                      | 2.54 | 3.13 | 3.59 | 4.37 | 4.92 | 5.83 | 6.53 | 7.35 | 8.15  | 9.04  | 0.09   | 0.56               | 0.79               | 0.97          |
| 2700     | 2.08                                      | 2.59 | 3.19 | 3.68 | 4.47 | 5.06 | 5.96 | 6.70 | 7.53 | 8.35  | 9.26  | 0.09   | 0.58               | 0.82               | 1.01          |
| 2800     | 2.09                                      | 2.65 | 3.26 | 3.75 | 4.58 | 5.18 | 6.11 | 6.86 | 7.71 | 8.55  | 9.48  | 0.09   | 0.60               | 0.86               | 1.05          |
| 2900     | 2.13                                      | 2.69 | 3.32 | 3.85 | 4.66 | 5.26 | 6.24 | 7.00 | 7.88 | 8.73  | 9.68  | 0.10   | 0.62               | 0.89               | 1.09          |
| 3000     | 2.15                                      | 2.74 | 3.37 | 3.89 | 4.76 | 5.38 | 6.36 | 7.15 | 8.03 | 8.90  | 9.87  | 0.10   | 0.65               | 0.92               | 1.12          |
| 3100     | 2.19                                      | 2.79 | 3.42 | 3.98 | 4.84 | 5.47 | 6.49 | 7.28 | 8.19 | 9.07  | 10.05 | 0.10   | 0.67               | 0.95               | 1.16          |
| 3200     | 2.22                                      | 2.83 | 3.48 | 4.06 | 4.92 | 5.58 | 6.59 | 7.41 | 8.34 | 9.23  | 10.23 | 0.11   | 0.69               | 0.98               | 1.20          |
| 3300     | 2.23                                      | 2.89 | 3.52 | 4.14 | 5.00 | 5.68 | 6.71 | 7.53 | 8.47 | 9.38  | 10.38 | 0.11   | 0.71               | 1.01               | 1.24          |
| 3400     | 2.27                                      | 2.95 | 3.56 | 4.19 | 5.07 | 5.76 | 6.80 | 7.64 | 8.60 | 9.52  | 10.53 | 0.11   | 0.73               | 1.04               | 1.27          |
| 3500     | 2.28                                      | 2.95 | 3.59 | 4.28 | 5.13 | 5.83 | 6.91 | 7.76 | 8.72 | 9.65  | 10.63 | 0.12   | 0.75               | 1.07               | 1.31          |
| 3600     | 2.31                                      | 2.98 | 3.63 | 4.35 | 5.20 | 5.92 | 6.99 | 7.85 | 8.83 | 9.77  | 10.79 | 0.12   | 0.77               | 1.10               | 1.35          |
| 3700     | 2.33                                      | 3.03 | 3.65 | 4.39 | 5.25 | 5.99 | 7.08 | 7.95 | 8.94 | 9.88  | 10.91 | 0.12   | 0.80               | 1.13               | 1.39          |
| 3800     |   | 3.06 | 3.69 | 4.48 | 5.30 | 6.04 | 7.15 | 8.03 | 9.03 | 9.98  | 11.01 | 0.13   | 0.82               | 1.16               | 1.42          |
| 3900     |   | 3.09 | 3.71 | 4.59 | 5.36 | 6.09 | 7.22 | 8.12 | 9.11 | 10.07 | 11.10 | 0.13   | 0.84               | 1.19               | 1.46          |
| 4000     |   | 3.14 | 3.73 | 4.59 | 5.40 | 6.16 | 7.29 | 8.18 | 9.19 | 10.14 | 11.17 | 0.13   | 0.86               | 1.22               | 1.50          |
| 4100     |   | 3.18 | 3.74 | 4.66 | 5.43 | 6.19 | 7.34 | 8.24 | 9.25 | 10.21 | 11.25 | 0.14   | 0.88               | 1.25               | 1.54          |
| 4200     |   | 3.19 | 3.75 | 4.73 | 5.46 | 6.24 | 7.39 | 8.30 | 9.30 | 10.27 | 11.29 | 0.14   | 0.90               | 1.28               | 1.57          |
| 4300     |   |      | 3.76 | 4.79 | 5.49 | 6.26 | 7.42 | 8.34 | 9.36 | 10.31 | 11.33 | 0.14   | 0.93               | 1.31               | 1.61          |
| 4400     |   |      | 3.76 | 4.84 | 5.50 | 6.29 | 7.47 | 8.38 | 9.39 | 10.34 | 11.35 | 0.15   | 0.95               | 1.34               | 1.65          |
| 4500     |   |      | 3.76 | 4.88 | 5.52 | 6.32 | 7.49 | 8.40 | 9.42 | 10.36 | 11.36 | 0.15   | 0.97               | 1.37               | 1.69          |
| 4600     |   |      | 3.75 | 4.94 | 5.53 | 6.33 | 7.51 | 8.42 | 9.43 | 10.37 | 11.36 | 0.15   | 0.99               | 1.41               | 1.72          |
| 4700     |   |      | 3.74 | 4.99 | 5.53 | 6.34 | 7.52 | 8.43 | 9.44 | 10.37 | 11.34 | 0.16   | 1.01               | 1.44               | 1.76          |
| 4800     |   |      | 3.73 | 4.99 | 5.53 | 6.35 | 7.52 | 8.43 | 9.43 | 10.35 | 11.31 | 0.16   | 1.03               | 1.47               | 1.80          |
| 4900     |   |      | 3.71 | 4.98 | 5.52 | 6.35 | 7.52 | 8.43 | 9.42 | 10.32 | 11.26 | 0.16   | 1.05               | 1.50               | 1.84          |
| 5000     |   |      | 3.69 | 4.97 | 5.51 | 6.34 | 7.50 | 8.41 | 9.39 | 10.28 | 11.19 | 0.17   | 1.08               | 1.53               | 1.87          |
| 5100     |   |      | 3.65 | 4.95 | 5.49 | 6.31 | 7.48 | 8.38 | 9.36 | 10.23 | 11.11 | 0.17   | 1.10               | 1.56               | 1.91          |
| 5200     |   |      | 3.62 | 4.91 | 5.46 | 6.28 | 7.44 | 8.35 | 9.30 | 10.16 | 11.01 | 0.17   | 1.12               | 1.59               | 1.95          |
| 5300     |   |      | 3.58 | 4.89 | 5.43 | 6.24 | 7.41 | 8.30 | 9.24 | 10.08 | 10.91 | 0.18   | 1.14               | 1.62               | 1.99          |
| 5400     |   |      | 3.54 | 4.82 | 5.40 | 6.18 | 7.36 | 8.24 | 9.17 | 9.99  | 10.77 | 0.18   | 1.16               | 1.65               | 2.02          |
| 5500     |   |      | 3.50 | 4.71 | 5.34 | 6.17 | 7.31 | 8.17 | 9.08 | 9.87  | 10.64 | 0.18   | 1.18               | 1.68               | 2.06          |
| 5600     |   |      | 3.44 | 4.63 | 5.29 | 6.12 | 7.25 | 8.10 | 8.99 | 9.75  | 10.47 | 0.19   | 1.21               | 1.71               | 2.10          |
| 5700     |   |      | 3.39 | 4.58 | 5.24 | 6.02 | 7.17 | 8.01 | 8.87 | 9.62  | 10.29 | 0.19   | 1.23               | 1.74               | 2.13          |
| 5800     |   |      | 3.33 | 4.55 | 5.18 | 5.98 | 7.09 | 7.91 | 8.76 | 9.46  | 10.10 | 0.19   | 1.25               | 1.77               | 2.17          |
| 5900     |   |      | 3.26 | 4.42 | 5.10 | 5.92 | 6.99 | 7.80 | 8.62 | 9.29  | 9.88  | 0.20   | 1.27               | 1.80               | 2.21          |
| 6000     |   |      | 3.18 | 4.21 | 5.02 | 5.81 | 6.89 | 7.69 | 8.47 | 9.11  | 9.65  | 0.20   | 1.29               | 1.83               | 2.25          |
| 6100     |   |      | 3.11 | 4.09 | 4.94 | 5.74 | 6.78 | 7.55 | 8.31 | 8.91  | 9.41  | 0.20   | 1.31               | 1.86               | 2.28          |
| 6200     |   |      | 3.02 | 3.98 | 4.84 | 5.63 | 6.66 | 7.40 | 8.14 | 8.70  | 9.14  | 0.21   | 1.33               | 1.89               | 2.32          |
| 6300     |   |      | 2.94 | 3.86 | 4.75 | 5.49 | 6.53 | 7.26 | 7.95 | 8.47  | 8.85  | 0.21   | 1.36               | 1.92               | 2.36          |
| 6400     |   |      | 2.85 | 3.82 | 4.64 | 5.41 | 6.38 | 7.09 | 7.75 | 8.25  | 8.55  | 0.21   | 1.38               | 1.96               | 2.40          |
| 6500     |   |      | 2.75 | 3.72 | 4.53 | 5.26 | 6.24 | 6.91 | 7.53 | 7.97  | 8.19  | 0.22   | 1.40               | 1.99               | 2.43          |
| 6600     |   |      | 2.65 | 3.58 | 4.40 | 5.17 | 6.08 | 6.72 | 7.30 |       |       | 0.22   | 1.42               | 2.02               | 2.47          |
| 6700     |   |      | 2.53 | 3.47 | 4.27 | 4.98 | 5.90 | 6.52 | 7.06 |       |       | 0.22   | 1.44               | 2.05               | 2.51          |
| 6800     |   |      | 2.42 | 3.12 | 3.82 | 4.84 | 5.72 | 6.31 | 6.80 |       |       | 0.23   | 1.46               | 2.08               | 2.55          |
| 6900     |   |      | 2.30 | 3.09 | 3.99 | 4.68 | 5.53 | 6.08 | 6.53 |       |       | 0.23   | 1.48               | 2.11               | 2.58          |
| 7000     |   |      | 2.10 | 3.01 | 3.84 | 4.46 | 5.32 | 5.84 | 6.24 |       |       | 0.23   | 1.51               | 2.14               | 2.62          |

**TABLE 14 Section SPA**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |       |       |       |       |       |       |       |       |       | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |                  |
|----------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--------------------|--------------------|------------------|
|          | 150                                       | 160   | 170   | 180   | 190   | 200   | 224   | 250   | 280   | 315   | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>><br>1.57 |
| 700      | 3.54                                      | 3.91  | 4.14  | 4.65  | 4.83  | 5.39  | 6.26  | 7.19  | 8.25  | 9.46  | 0.02   | 0.15               | 0.21               | 0.26             |
| 950      | 4.60                                      | 5.09  | 5.36  | 6.07  | 6.29  | 7.02  | 8.16  | 9.37  | 10.72 | 12.25 | 0.03   | 0.20               | 0.29               | 0.36             |
| 1450     | 6.55                                      | 7.27  | 7.65  | 8.65  | 8.95  | 10.00 | 11.57 | 13.21 | 15.02 | 16.99 | 0.05   | 0.31               | 0.44               | 0.54             |
| 2850     | 10.72                                     | 11.81 | 12.45 | 13.86 | 14.29 | 15.72 | 17.65 | 19.35 | 20.77 | 21.60 | 0.09   | 0.61               | 0.87               | 1.07             |
| 100      | 0.62                                      | 0.68  | 0.72  | 0.81  | 0.84  | 0.92  | 1.07  | 1.23  | 1.41  | 1.62  | 0.00   | 0.02               | 0.03               | 0.04             |
| 200      | 1.17                                      | 1.28  | 1.34  | 1.51  | 1.59  | 1.75  | 2.03  | 2.33  | 2.67  | 3.07  | 0.01   | 0.04               | 0.06               | 0.07             |
| 300      | 1.67                                      | 1.85  | 1.95  | 2.18  | 2.28  | 2.53  | 2.93  | 3.37  | 3.86  | 4.44  | 0.01   | 0.06               | 0.09               | 0.11             |
| 400      | 2.16                                      | 2.38  | 2.51  | 2.84  | 2.95  | 3.28  | 3.80  | 4.37  | 5.01  | 5.75  | 0.01   | 0.09               | 0.12               | 0.15             |
| 500      | 2.64                                      | 2.91  | 3.08  | 3.45  | 3.59  | 4.00  | 4.64  | 5.33  | 6.12  | 7.04  | 0.02   | 0.11               | 0.15               | 0.19             |
| 600      | 3.09                                      | 3.41  | 3.59  | 4.06  | 4.26  | 4.70  | 5.46  | 6.28  | 7.20  | 8.26  | 0.02   | 0.13               | 0.18               | 0.22             |
| 700      | 3.54                                      | 3.91  | 4.14  | 4.65  | 4.83  | 5.39  | 6.26  | 7.19  | 8.25  | 9.46  | 0.02   | 0.15               | 0.21               | 0.26             |
| 800      | 3.97                                      | 4.39  | 4.65  | 5.23  | 5.46  | 6.06  | 7.04  | 8.09  | 9.26  | 10.61 | 0.03   | 0.17               | 0.24               | 0.30             |
| 900      | 4.39                                      | 4.86  | 5.13  | 5.80  | 6.05  | 6.71  | 7.79  | 8.95  | 10.24 | 11.72 | 0.03   | 0.19               | 0.27               | 0.34             |
| 1000     | 4.81                                      | 5.32  | 5.62  | 6.34  | 6.59  | 7.35  | 8.53  | 9.78  | 11.19 | 12.79 | 0.03   | 0.22               | 0.31               | 0.37             |
| 1100     | 5.21                                      | 5.78  | 6.09  | 6.88  | 7.21  | 7.96  | 9.24  | 10.59 | 12.11 | 13.81 | 0.04   | 0.24               | 0.34               | 0.41             |
| 1200     | 5.61                                      | 6.29  | 6.56  | 7.40  | 7.71  | 8.57  | 9.93  | 11.37 | 12.98 | 14.78 | 0.04   | 0.26               | 0.37               | 0.45             |
| 1300     | 6.00                                      | 6.64  | 6.99  | 7.91  | 8.26  | 9.16  | 10.61 | 12.13 | 13.82 | 15.70 | 0.04   | 0.28               | 0.40               | 0.49             |
| 1400     | 6.37                                      | 7.06  | 7.46  | 8.40  | 8.73  | 9.72  | 11.26 | 12.85 | 14.63 | 16.78 | 0.05   | 0.30               | 0.43               | 0.52             |
| 1500     | 6.74                                      | 7.47  | 7.89  | 8.88  | 9.25  | 10.27 | 11.88 | 13.56 | 15.38 | 17.39 | 0.05   | 0.32               | 0.46               | 0.56             |
| 1600     | 7.10                                      | 7.85  | 8.26  | 9.36  | 9.71  | 10.80 | 12.48 | 14.22 | 16.11 | 18.14 | 0.05   | 0.34               | 0.49               | 0.60             |
| 1700     | 7.44                                      | 8.24  | 8.69  | 9.81  | 10.26 | 11.32 | 13.06 | 14.85 | 16.78 | 18.85 | 0.06   | 0.37               | 0.52               | 0.64             |
| 1800     | 7.78                                      | 8.62  | 9.12  | 10.25 | 10.63 | 11.81 | 13.61 | 15.45 | 17.41 | 19.48 | 0.06   | 0.39               | 0.55               | 0.67             |
| 1900     | 8.12                                      | 8.98  | 9.49  | 10.67 | 11.09 | 12.29 | 14.13 | 16.01 | 18.00 | 20.06 | 0.06   | 0.41               | 0.58               | 0.71             |
| 2000     | 8.43                                      | 9.33  | 9.86  | 11.08 | 11.49 | 12.75 | 14.64 | 16.54 | 18.53 | 20.55 | 0.07   | 0.43               | 0.61               | 0.75             |
| 2100     | 8.75                                      | 9.67  | 10.19 | 11.47 | 11.89 | 13.18 | 15.11 | 17.03 | 19.02 | 20.98 | 0.07   | 0.45               | 0.64               | 0.79             |
| 2200     | 9.04                                      | 10.00 | 10.58 | 11.84 | 12.29 | 13.60 | 15.58 | 17.48 | 19.44 | 21.34 | 0.07   | 0.47               | 0.67               | 0.82             |
| 2300     | 9.33                                      | 10.31 | 10.91 | 12.21 | 12.58 | 13.99 | 15.96 | 17.89 | 19.81 | 21.61 | 0.08   | 0.49               | 0.70               | 0.86             |
| 2400     | 9.61                                      | 10.62 | 11.19 | 12.55 | 12.96 | 14.35 | 16.34 | 18.26 | 20.13 | 21.81 | 0.08   | 0.52               | 0.73               | 0.90             |
| 2500     | 9.87                                      | 10.91 | 11.52 | 12.87 | 13.28 | 14.70 | 16.70 | 18.59 | 20.38 | 21.91 | 0.08   | 0.54               | 0.76               | 0.94             |
| 2600     | 10.13                                     | 11.18 | 11.79 | 13.18 | 13.58 | 15.03 | 17.01 | 18.86 | 20.57 | 21.95 | 0.09   | 0.56               | 0.79               | 0.97             |
| 2700     | 10.37                                     | 11.45 | 12.09 | 13.47 | 13.89 | 15.32 | 17.29 | 19.09 | 20.71 | 21.87 | 0.09   | 0.58               | 0.82               | 1.01             |
| 2800     | 10.61                                     | 11.70 | 12.31 | 13.73 | 14.16 | 15.59 | 17.54 | 19.28 | 20.77 | 21.71 | 0.09   | 0.60               | 0.86               | 1.05             |
| 2900     | 10.83                                     | 11.93 | 12.56 | 13.99 | 14.38 | 15.83 | 17.75 | 19.41 | 20.76 | 21.46 | 0.10   | 0.62               | 0.89               | 1.09             |
| 3000     | 11.04                                     | 12.15 | 12.76 | 14.22 | 14.57 | 16.05 | 17.92 | 19.50 | 20.69 | 21.11 | 0.10   | 0.65               | 0.92               | 1.12             |
| 3100     | 11.24                                     | 12.36 | 12.94 | 14.43 | 14.76 | 16.24 | 18.06 | 19.53 |       |       | 0.10   | 0.67               | 0.95               | 1.16             |
| 3200     | 11.41                                     | 12.55 | 13.19 | 14.61 | 14.94 | 16.40 | 18.15 | 19.51 |       |       | 0.11   | 0.69               | 0.98               | 1.20             |
| 3300     | 11.58                                     | 12.72 | 13.29 | 14.77 | 15.08 | 16.54 | 18.21 | 19.44 |       |       | 0.11   | 0.71               | 1.01               | 1.24             |
| 3400     | 11.74                                     | 12.87 | 13.41 | 14.92 | 15.21 | 16.63 | 18.22 | 19.30 |       |       | 0.11   | 0.73               | 1.04               | 1.27             |
| 3500     | 11.89                                     | 13.02 | 13.56 | 15.04 | 15.32 | 16.71 | 18.20 | 19.11 |       |       | 0.12   | 0.75               | 1.07               | 1.31             |
| 3600     | 12.01                                     | 13.14 | 13.63 | 15.13 | 15.39 | 16.75 | 18.12 |       |       |       | 0.12   | 0.77               | 1.10               | 1.35             |
| 3700     | 12.13                                     | 13.25 | 13.75 | 15.20 | 15.41 | 16.75 | 18.00 |       |       |       | 0.12   | 0.80               | 1.13               | 1.39             |
| 3800     | 12.22                                     | 13.34 | 13.82 | 15.26 | 15.43 | 16.73 | 17.84 |       |       |       | 0.13   | 0.82               | 1.16               | 1.42             |
| 3900     | 12.31                                     | 13.41 | 13.86 | 15.28 | 15.42 | 16.66 | 17.63 |       |       |       | 0.13   | 0.84               | 1.19               | 1.46             |
| 4000     | 12.37                                     | 13.46 | 13.88 | 15.28 | 15.38 | 16.57 | 17.37 |       |       |       | 0.13   | 0.86               | 1.22               | 1.50             |
| 4100     | 12.43                                     | 13.49 | 13.89 | 15.25 | 15.34 | 16.44 |       |       |       |       | 0.14   | 0.88               | 1.25               | 1.54             |
| 4200     | 12.46                                     | 13.51 | 13.89 | 15.18 | 15.29 | 16.28 |       |       |       |       | 0.14   | 0.90               | 1.28               | 1.57             |
| 4300     | 12.48                                     | 13.50 | 13.85 | 15.11 | 15.21 | 16.07 |       |       |       |       | 0.14   | 0.93               | 1.31               | 1.61             |
| 4400     | 12.48                                     | 13.48 | 13.76 | 14.99 | 15.19 | 15.82 |       |       |       |       | 0.15   | 0.95               | 1.34               | 1.65             |
| 4500     | 12.47                                     | 13.44 | 13.68 | 14.86 | 15.04 | 15.54 |       |       |       |       | 0.15   | 0.97               | 1.37               | 1.69             |
| 4600     | 12.44                                     | 13.37 | 13.44 | 14.69 | 14.98 |       |       |       |       |       | 0.15   | 0.99               | 1.41               | 1.72             |
| 4700     | 12.40                                     | 13.28 | 13.34 | 14.49 | 14.86 |       |       |       |       |       | 0.16   | 1.01               | 1.44               | 1.76             |
| 4800     | 12.34                                     | 13.18 | 13.24 | 14.26 | 14.79 |       |       |       |       |       | 0.16   | 1.03               | 1.47               | 1.80             |
| 4900     | 12.25                                     | 13.04 | 13.16 | 14.00 |       |       |       |       |       |       | 0.16   | 1.05               | 1.50               | 1.84             |
| 5000     | 12.15                                     | 12.89 | 13.01 | 13.70 |       |       |       |       |       |       | 0.17   | 1.08               | 1.53               | 1.87             |
| 5100     | 12.02                                     | 12.72 | 12.94 |       |       |       |       |       |       |       | 0.17   | 1.10               | 1.56               | 1.91             |
| 5200     | 11.89                                     | 12.52 | 12.89 |       |       |       |       |       |       |       | 0.17   | 1.12               | 1.59               | 1.95             |
| 5300     | 11.73                                     | 12.30 | 12.74 |       |       |       |       |       |       |       | 0.18   | 1.14               | 1.62               | 1.99             |
| 5400     | 11.55                                     | 12.05 |       |       |       |       |       |       |       |       | 0.18   | 1.16               | 1.65               | 2.02             |
| 5500     | 11.34                                     | 11.78 |       |       |       |       |       |       |       |       | 0.18   | 1.18               | 1.68               | 2.06             |
| 5600     | 11.12                                     |       |       |       |       |       |       |       |       |       | 0.19   | 1.21               | 1.71               | 2.10             |
| 5700     | 10.88                                     |       |       |       |       |       |       |       |       |       | 0.19   | 1.23               | 1.74               | 2.13             |
| 5800     | 10.62                                     |       |       |       |       |       |       |       |       |       | 0.19   | 1.25               | 1.77               | 2.17             |
| 5900     | 10.33                                     |       |       |       |       |       |       |       |       |       | 0.20   | 1.27               | 1.80               | 2.21             |
| 6000     | 10.03                                     |       |       |       |       |       |       |       |       |       | 0.20   | 1.29               | 1.83               | 2.25             |

**TABLE 15 Section SPB, 5V**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |      |      |       |       |       |       |       |       |       | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |               |
|----------|---|------|------|-------|-------|-------|-------|-------|-------|-------|--|--------------------|--------------------|---------------|
|          | 125                                       | 132  | 140  | 150   | 160   | 170   | 180   | 190   | 200   | 212   | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>> 1.57 |
| 700      | 2.89                                      | 3.22 | 3.62 | 4.24  | 4.85  | 5.25  | 6.06  | 6.66  | 7.26  | 7.96  | 0.05   | 0.33               | 0.47               | 0.58          |
| 950      | 3.56                                      | 4.09 | 4.63 | 5.44  | 6.24  | 6.74  | 7.82  | 8.61  | 9.39  | 10.31 | 0.07   | 0.45               | 0.64               | 0.78          |
| 1450     | 4.79                                      | 5.45 | 6.39 | 7.56  | 8.71  | 9.44  | 10.96 | 12.06 | 13.16 | 14.44 | 0.11   | 0.69               | 0.97               | 1.20          |
| 2850     | 7.16                                      | 8.29 | 9.52 | 11.37 | 13.16 | 14.29 | 16.49 | 18.04 | 19.50 | 21.14 | 0.21   | 1.35               | 1.92               | 2.35          |
| 100      | 0.62                                      | 0.67 | 0.69 | 0.79  | 0.89  | 0.95  | 1.09  | 1.19  | 1.29  | 1.41  | 0.01   | 0.05               | 0.07               | 0.08          |
| 200      | 1.09                                      | 1.19 | 1.26 | 1.45  | 1.65  | 1.76  | 2.03  | 2.22  | 2.40  | 2.64  | 0.01   | 0.09               | 0.13               | 0.16          |
| 300      | 1.48                                      | 1.65 | 1.79 | 2.07  | 2.34  | 2.53  | 2.90  | 3.18  | 3.45  | 3.78  | 0.02   | 0.14               | 0.20               | 0.25          |
| 400      | 1.88                                      | 2.09 | 2.28 | 2.65  | 3.01  | 3.23  | 3.74  | 4.10  | 4.45  | 4.88  | 0.03   | 0.19               | 0.27               | 0.33          |
| 500      | 2.22                                      | 2.53 | 2.75 | 3.20  | 3.64  | 3.96  | 4.54  | 4.98  | 5.42  | 5.94  | 0.04   | 0.24               | 0.34               | 0.41          |
| 600      | 2.54                                      | 2.86 | 3.19 | 3.73  | 4.25  | 4.62  | 5.31  | 5.83  | 6.35  | 6.97  | 0.04   | 0.28               | 0.40               | 0.49          |
| 700      | 2.89                                      | 3.22 | 3.62 | 4.24  | 4.85  | 5.25  | 6.06  | 6.66  | 7.26  | 7.96  | 0.05   | 0.33               | 0.47               | 0.58          |
| 800      | 3.18                                      | 3.61 | 4.04 | 4.74  | 5.42  | 5.89  | 6.78  | 7.46  | 8.13  | 8.93  | 0.06   | 0.38               | 0.54               | 0.66          |
| 900      | 3.46                                      | 3.89 | 4.44 | 5.21  | 5.97  | 6.49  | 7.49  | 8.23  | 8.97  | 9.86  | 0.07   | 0.43               | 0.61               | 0.74          |
| 1000     | 3.69                                      | 4.26 | 4.82 | 5.67  | 6.51  | 7.12  | 8.16  | 8.98  | 9.80  | 10.75 | 0.07   | 0.47               | 0.67               | 0.82          |
| 1100     | 3.98                                      | 4.49 | 5.20 | 6.11  | 7.02  | 7.62  | 8.82  | 9.71  | 10.58 | 11.63 | 0.08   | 0.52               | 0.74               | 0.91          |
| 1200     | 4.19                                      | 4.81 | 5.55 | 6.54  | 7.53  | 8.19  | 9.46  | 10.42 | 11.35 | 12.47 | 0.09   | 0.57               | 0.81               | 0.99          |
| 1300     | 4.44                                      | 5.09 | 5.90 | 6.96  | 8.01  | 8.77  | 10.07 | 11.09 | 12.10 | 13.28 | 0.10   | 0.62               | 0.87               | 1.07          |
| 1400     | 4.66                                      | 5.38 | 6.24 | 7.36  | 8.47  | 9.23  | 10.67 | 11.75 | 12.81 | 14.06 | 0.10   | 0.66               | 0.94               | 1.15          |
| 1500     | 4.89                                      | 5.65 | 6.55 | 7.75  | 8.93  | 9.71  | 11.25 | 12.38 | 13.49 | 14.82 | 0.11   | 0.71               | 1.01               | 1.24          |
| 1600     | 5.09                                      | 5.89 | 6.86 | 8.12  | 9.36  | 10.19 | 11.79 | 12.98 | 14.14 | 15.53 | 0.12   | 0.76               | 1.08               | 1.32          |
| 1700     | 5.32                                      | 6.14 | 7.15 | 8.47  | 9.78  | 10.65 | 12.32 | 13.56 | 14.77 | 16.20 | 0.12   | 0.81               | 1.14               | 1.40          |
| 1800     | 5.49                                      | 6.31 | 7.43 | 8.81  | 10.17 | 11.13 | 12.82 | 14.10 | 15.37 | 16.85 | 0.13   | 0.85               | 1.21               | 1.48          |
| 1900     | 5.69                                      | 6.59 | 7.70 | 9.14  | 10.55 | 11.49 | 13.29 | 14.63 | 15.93 | 17.46 | 0.14   | 0.90               | 1.28               | 1.57          |
| 2000     | 5.88                                      | 6.82 | 7.95 | 9.45  | 10.91 | 11.89 | 13.76 | 15.12 | 16.46 | 18.03 | 0.15   | 0.95               | 1.34               | 1.65          |
| 2100     | 6.09                                      | 6.99 | 8.19 | 9.74  | 11.26 | 12.26 | 14.18 | 15.59 | 16.96 | 18.55 | 0.15   | 0.99               | 1.41               | 1.73          |
| 2200     | 6.22                                      | 6.26 | 8.42 | 10.02 | 11.57 | 12.61 | 14.57 | 16.02 | 17.42 | 19.05 | 0.16   | 1.04               | 1.48               | 1.81          |
| 2300     | 6.39                                      | 7.41 | 8.63 | 10.27 | 11.88 | 12.92 | 14.95 | 16.42 | 17.85 | 19.49 | 0.17   | 1.09               | 1.55               | 1.90          |
| 2400     | 6.56                                      | 7.59 | 8.83 | 10.51 | 12.16 | 13.26 | 15.30 | 16.79 | 18.24 | 19.90 | 0.18   | 1.14               | 1.61               | 1.98          |
| 2500     | 6.64                                      | 7.79 | 9.01 | 10.74 | 12.42 | 13.51 | 15.61 | 17.14 | 18.59 | 20.25 | 0.18   | 1.18               | 1.68               | 2.06          |
| 2600     | 6.79                                      | 7.95 | 9.18 | 10.94 | 12.65 | 13.79 | 15.91 | 17.43 | 18.90 | 20.57 | 0.19   | 1.23               | 1.75               | 2.14          |
| 2700     | 6.94                                      | 8.11 | 9.32 | 11.13 | 12.87 | 13.99 | 16.16 | 17.70 | 19.17 | 20.83 | 0.20   | 1.28               | 1.82               | 2.23          |
| 2800     | 7.09                                      | 8.23 | 9.46 | 11.30 | 13.06 | 14.23 | 16.39 | 17.93 | 19.40 | 21.05 | 0.21   | 1.33               | 1.88               | 2.31          |
| 2900     | 7.18                                      | 8.41 | 9.58 | 11.45 | 13.24 | 14.39 | 16.58 | 18.13 | 19.58 | 21.21 | 0.21   | 1.37               | 1.95               | 2.39          |
| 3000     | 7.31                                      | 8.56 | 9.68 | 11.57 | 13.39 | 14.56 | 16.75 | 18.29 | 19.73 | 21.33 | 0.22   | 1.42               | 2.02               | 2.47          |
| 3100     | 7.38                                      | 8.69 | 9.77 | 11.68 | 13.50 | 14.69 | 16.87 | 18.41 | 19.82 | 21.39 | 0.23   | 1.47               | 2.08               | 2.56          |
| 3200     | 7.49                                      | 8.79 | 9.83 | 11.76 | 13.60 | 14.75 | 16.97 | 18.48 | 19.88 | 21.40 | 0.23   | 1.52               | 2.15               | 2.64          |
| 3300     | 7.59                                      | 8.91 | 9.88 | 11.83 | 13.67 | 14.79 | 17.02 | 18.51 | 19.88 | 21.35 | 0.24   | 1.56               | 2.22               | 2.72          |
| 3400     | 7.69                                      | 8.99 | 9.91 | 11.88 | 13.72 | 14.83 | 17.04 | 18.51 | 19.83 | 21.23 | 0.25   | 1.61               | 2.29               | 2.80          |
| 3500     |   | 9.11 | 9.92 | 11.90 | 13.73 | 14.85 | 17.03 | 18.46 | 19.74 | 21.06 | 0.26   | 1.66               | 2.35               | 2.89          |
| 3600     |   |      | 9.91 | 11.89 | 13.72 | 14.80 | 16.97 | 18.36 | 19.59 | 20.83 | 0.26   | 1.71               | 2.42               | 2.97          |
| 3700     |   |      | 9.89 | 11.87 | 13.69 | 14.74 | 16.88 | 18.23 | 19.39 | 20.55 | 0.27   | 1.75               | 2.49               | 3.05          |
| 3800     |   |      | 9.85 | 11.81 | 13.63 | 14.62 | 16.75 | 18.04 | 19.13 | 20.19 | 0.28   | 1.80               | 2.55               | 3.13          |
| 3900     |   |      | 9.78 | 11.74 | 13.53 | 14.51 | 16.57 | 17.80 | 18.83 | 19.77 | 0.29   | 1.85               | 2.62               | 3.21          |
| 4000     |   |      | 9.69 | 11.64 | 13.41 | 14.44 | 16.36 | 17.51 | 18.46 | 19.28 | 0.29   | 1.89               | 2.69               | 3.30          |
| 4100     |   |      | 9.59 | 11.52 | 13.25 | 14.31 | 16.10 | 17.18 | 18.03 |       | 0.30   | 1.94               | 2.76               | 3.38          |
| 4200     |   |      | 9.46 | 11.36 | 13.06 | 13.98 | 15.79 | 16.80 | 17.55 |       | 0.31   | 1.99               | 2.82               | 3.46          |
| 4300     |   |      | 9.30 | 11.18 | 12.84 | 13.62 | 15.45 | 16.36 | 17.00 |       | 0.32   | 2.04               | 2.89               | 3.54          |
| 4400     |   |      | 9.14 | 10.98 | 12.59 | 13.21 | 15.05 | 15.87 | 16.40 |       | 0.32   | 2.08               | 2.96               | 3.63          |
| 4500     |   |      | 8.94 | 10.75 | 12.31 | 12.94 | 14.62 | 15.33 | 15.73 |       | 0.33   | 2.13               | 3.03               | 3.71          |
| 4600     |   |      | 8.72 | 10.49 | 11.99 | 12.36 | 14.12 |       |       |       | 0.34   | 2.18               | 3.09               | 3.79          |
| 4700     |   |      | 8.47 | 10.20 | 11.63 | 12.04 | 13.59 |       |       |       | 0.34   | 2.23               | 3.16               | 3.87          |
| 4800     |   |      | 8.21 | 9.88  | 11.26 | 11.89 | 13.01 |       |       |       | 0.35   | 2.27               | 3.23               | 3.96          |
| 4900     |   |      | 7.92 | 9.53  | 10.83 | 11.42 | 12.37 |       |       |       | 0.36   | 2.32               | 3.29               | 4.04          |
| 5000     |   |      | 7.60 | 9.16  | 10.36 | 11.09 | 11.69 |       |       |       | 0.37   | 2.37               | 3.36               | 4.12          |
| 5100     |   |      | 7.27 | 8.75  | 9.87  | 10.94 |       |       |       |       | 0.37   | 2.42               | 3.43               | 4.20          |
| 5200     |   |      | 6.90 | 8.31  | 9.33  | 10.71 |       |       |       |       | 0.38   | 2.46               | 3.50               | 4.29          |
| 5300     |   |      | 6.50 | 7.83  | 8.77  |       |       |       |       |       | 0.39   | 2.51               | 3.56               | 4.37          |
| 5400     |   |      | 6.08 | 7.33  | 8.15  |       |       |       |       |       | 0.40   | 2.56               | 3.63               | 4.45          |
| 5500     |   |      | 5.64 | 6.79  | 7.50  |       |       |       |       |       | 0.40   | 2.61               | 3.70               | 4.53          |

**TABLE 15 Section SPB, 5V**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |       |       |       |       |       |       |       |       |       |       | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |                  |
|----------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--------------------|--------------------|------------------|
|          | 224                                       | 236   | 250   | 265   | 280   | 315   | 355   | 375   | 400   | 450   | 500   | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>><br>1.57 |
| 700      | 8.66                                      | 9.37  | 10.17 | 10.61 | 11.90 | 13.86 | 16.07 | 17.14 | 18.47 | 19.73 | 22.07 | 0.05   | 0.33               | 0.47               | 0.58             |
| 950      | 11.22                                     | 12.14 | 13.18 | 13.67 | 15.38 | 17.88 | 20.21 | 21.99 | 23.61 | 25.30 | 28.07 | 0.07   | 0.45               | 0.64               | 0.78             |
| 1450     | 15.71                                     | 16.95 | 18.38 | 19.04 | 21.30 | 24.53 | 28.24 | 29.48 | 31.32 | 32.72 | 34.56 | 0.11   | 0.69               | 0.97               | 1.20             |
| 2850     | 22.64                                     | 24.01 | 25.41 | 25.61 | 27.72 | 29.06 |       |       |       |       |       | 0.21   | 1.35               | 1.92               | 2.35             |
| 100      | 1.52                                      | 1.64  | 1.77  | 1.85  | 2.07  | 2.40  | 2.79  | 2.98  | 3.21  | 3.25  | 3.30  | 0.01   | 0.05               | 0.07               | 0.08             |
| 200      | 2.86                                      | 3.08  | 3.34  | 3.47  | 3.90  | 4.54  | 5.26  | 5.63  | 6.07  | 6.60  | 4.50  | 0.01   | 0.09               | 0.13               | 0.16             |
| 300      | 4.11                                      | 4.44  | 4.82  | 4.99  | 5.62  | 6.55  | 7.60  | 8.13  | 8.78  | 9.46  | 9.20  | 0.02   | 0.14               | 0.20               | 0.25             |
| 400      | 5.31                                      | 5.73  | 6.23  | 6.49  | 7.28  | 8.48  | 9.85  | 10.52 | 11.36 | 12.32 | 13.90 | 0.03   | 0.19               | 0.27               | 0.33             |
| 500      | 6.47                                      | 6.98  | 7.59  | 7.87  | 8.87  | 10.34 | 12.00 | 12.82 | 13.84 | 14.79 | 16.62 | 0.04   | 0.24               | 0.34               | 0.41             |
| 600      | 7.58                                      | 8.20  | 8.90  | 9.28  | 10.41 | 12.14 | 14.07 | 15.03 | 16.21 | 17.26 | 19.35 | 0.04   | 0.28               | 0.40               | 0.49             |
| 700      | 8.66                                      | 9.37  | 10.17 | 10.61 | 11.90 | 13.86 | 16.07 | 17.14 | 18.47 | 19.73 | 22.07 | 0.05   | 0.33               | 0.47               | 0.58             |
| 800      | 9.71                                      | 10.50 | 11.41 | 11.89 | 13.34 | 15.52 | 17.97 | 19.15 | 20.62 | 22.20 | 24.79 | 0.06   | 0.38               | 0.54               | 0.66             |
| 900      | 10.73                                     | 11.60 | 12.60 | 13.14 | 14.71 | 17.12 | 19.77 | 21.06 | 22.65 | 24.12 | 26.72 | 0.07   | 0.43               | 0.61               | 0.74             |
| 1000     | 11.71                                     | 12.66 | 13.76 | 14.31 | 16.04 | 18.64 | 21.49 | 22.87 | 24.55 | 26.05 | 28.66 | 0.07   | 0.47               | 0.67               | 0.82             |
| 1100     | 12.66                                     | 13.68 | 14.86 | 15.49 | 17.31 | 20.09 | 23.11 | 24.56 | 26.32 | 27.97 | 30.59 | 0.08   | 0.52               | 0.74               | 0.91             |
| 1200     | 13.58                                     | 14.67 | 15.92 | 16.49 | 18.53 | 21.46 | 24.62 | 26.13 | 27.94 | 29.89 | 32.52 | 0.09   | 0.57               | 0.81               | 0.99             |
| 1300     | 14.46                                     | 15.61 | 16.94 | 17.58 | 19.69 | 22.75 | 26.03 | 27.57 | 29.42 | 30.92 | 33.34 | 0.10   | 0.62               | 0.87               | 1.07             |
| 1400     | 15.30                                     | 16.52 | 17.90 | 18.58 | 20.78 | 23.96 | 27.31 | 28.89 | 30.72 | 31.96 | 34.16 | 0.10   | 0.66               | 0.94               | 1.15             |
| 1500     | 16.11                                     | 17.38 | 18.83 | 19.52 | 21.81 | 25.07 | 28.48 | 30.04 | 31.87 | 32.99 | 34.98 | 0.11   | 0.71               | 1.01               | 1.24             |
| 1600     | 16.87                                     | 18.20 | 19.70 | 20.39 | 22.77 | 26.09 | 29.52 | 31.06 | 32.82 | 34.02 | 35.80 | 0.12   | 0.76               | 1.08               | 1.32             |
| 1700     | 17.61                                     | 18.97 | 20.52 | 21.19 | 23.67 | 27.03 | 30.41 | 31.91 | 33.59 | 34.32 |       | 0.12   | 0.81               | 1.14               | 1.40             |
| 1800     | 18.29                                     | 19.70 | 21.28 | 21.96 | 24.48 | 27.85 | 31.16 | 32.59 | 34.16 | 34.62 |       | 0.13   | 0.85               | 1.21               | 1.48             |
| 1900     | 18.94                                     | 20.37 | 21.99 | 22.65 | 25.22 | 28.56 | 31.76 | 33.11 | 34.50 |       |       | 0.14   | 0.90               | 1.28               | 1.57             |
| 2000     | 19.54                                     | 21.00 | 22.64 | 23.29 | 25.87 | 29.16 | 32.21 | 33.43 | 34.64 |       |       | 0.15   | 0.95               | 1.34               | 1.65             |
| 2100     | 20.10                                     | 21.58 | 23.22 | 23.84 | 26.45 | 29.65 | 32.49 | 33.56 | 34.53 |       |       | 0.15   | 0.99               | 1.41               | 1.73             |
| 2200     | 20.60                                     | 22.09 | 23.74 | 24.33 | 26.93 | 30.01 | 32.60 | 33.50 | 34.20 |       |       | 0.16   | 1.04               | 1.48               | 1.81             |
| 2300     | 21.06                                     | 22.55 | 24.19 | 24.76 | 27.32 | 30.25 | 32.53 | 33.21 | 33.60 |       |       | 0.17   | 1.09               | 1.55               | 1.90             |
| 2400     | 21.47                                     | 22.96 | 24.58 | 25.12 | 27.63 | 30.36 | 32.28 | 32.72 | 32.74 |       |       | 0.18   | 1.14               | 1.61               | 1.98             |
| 2500     | 21.83                                     | 23.31 | 24.91 | 25.39 | 27.83 | 30.32 | 31.83 | 31.99 | 31.62 |       |       | 0.18   | 1.18               | 1.68               | 2.06             |
| 2600     | 22.13                                     | 23.58 | 25.15 | 25.56 | 27.93 | 30.15 |       |       |       |       |       | 0.19   | 1.23               | 1.75               | 2.14             |
| 2700     | 22.38                                     | 23.80 | 25.32 | 25.62 | 27.93 | 29.83 |       |       |       |       |       | 0.20   | 1.28               | 1.82               | 2.23             |
| 2800     | 22.56                                     | 23.96 | 25.40 | 25.63 | 27.81 | 29.36 |       |       |       |       |       | 0.21   | 1.33               | 1.88               | 2.31             |
| 2900     | 22.70                                     | 24.05 | 25.41 | 25.51 | 27.59 | 28.73 |       |       |       |       |       | 0.21   | 1.37               | 1.95               | 2.39             |
| 3000     | 22.77                                     | 24.06 | 25.34 | 25.48 | 27.26 | 27.94 |       |       |       |       |       | 0.22   | 1.42               | 2.02               | 2.47             |
| 3100     | 22.79                                     | 23.99 | 25.18 |       |       |       |       |       |       |       |       | 0.23   | 1.47               | 2.08               | 2.56             |
| 3200     | 22.72                                     | 23.86 | 24.93 |       |       |       |       |       |       |       |       | 0.23   | 1.52               | 2.15               | 2.64             |
| 3300     | 22.61                                     | 23.65 | 24.59 |       |       |       |       |       |       |       |       | 0.24   | 1.56               | 2.22               | 2.72             |
| 3400     | 22.42                                     | 23.36 | 24.16 |       |       |       |       |       |       |       |       | 0.25   | 1.61               | 2.29               | 2.80             |
| 3500     | 22.16                                     | 23.00 | 23.64 |       |       |       |       |       |       |       |       | 0.26   | 1.66               | 2.35               | 2.89             |
| 3600     | 21.82                                     | 22.84 |       |       |       |       |       |       |       |       |       | 0.26   | 1.71               | 2.42               | 2.97             |
| 3700     | 21.42                                     | 22.71 |       |       |       |       |       |       |       |       |       | 0.27   | 1.75               | 2.49               | 3.05             |
| 3800     | 20.94                                     | 21.99 |       |       |       |       |       |       |       |       |       | 0.28   | 1.80               | 2.55               | 3.13             |
| 3900     | 20.38                                     |       |       |       |       |       |       |       |       |       |       | 0.29   | 1.85               | 2.62               | 3.21             |
| 4000     | 19.75                                     |       |       |       |       |       |       |       |       |       |       | 0.29   | 1.89               | 2.69               | 3.30             |

**TABLE 16 Section 19**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |       |       |       |       |       |       |       |       |       |       |       |       |       | Additional Power (Kw) per belt for speed ratio |              |              |            |
|----------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--------------|--------------|------------|
|          | 180                                       | 200   | 224   | 236   | 250   | 280   | 315   | 355   | 375   | 400   | 450   | 500   | 560   | 630   | 1.01 to 1.05                                   | 1.06 to 1.26 | 1.27 to 1.57 | For > 1.57 |
| 700      | 6.37                                      | 8.04  | 10.03 | 11.01 | 12.15 | 14.56 | 17.31 | 20.39 | 21.90 | 23.76 | 27.37 | 30.84 | 31.49 | 34.11 | 0.09   | 0.60         | 0.85         | 1.05       |
| 950      | 8.19                                      | 10.38 | 12.96 | 14.23 | 15.70 | 18.78 | 22.27 | 26.10 | 27.95 | 30.20 | 34.46 | 38.38 | 38.64 | 40.51 | 0.13   | 0.82         | 1.16         | 1.42       |
| 1450     | 11.26                                     | 14.32 | 17.87 | 19.60 | 21.56 | 25.58 | 29.93 | 34.40 | 36.43 | 38.74 | 42.61 | 45.36 | 43.39 |       | 0.19   | 1.25         | 1.77         | 2.17       |
| 2850     | 14.70                                     | 18.55 | 22.36 | 23.91 | 25.39 | 27.31 | 26.21 | 23.53 |       |       |       |       |       |       | 0.38   | 2.45         | 3.48         | 4.26       |
| 50       | 0.61                                      | 0.75  | 0.92  | 1.00  | 1.10  | 1.30  | 1.54  | 1.81  | 1.95  | 2.12  | 2.45  | 2.79  | 2.83  | 2.89  | 0.01   | 0.04         | 0.06         | 0.07       |
| 100      | 1.15                                      | 1.42  | 1.74  | 1.90  | 2.09  | 2.49  | 2.95  | 3.47  | 3.73  | 4.06  | 4.70  | 5.35  | 5.40  | 5.45  | 0.01   | 0.09         | 0.12         | 0.15       |
| 150      | 1.65                                      | 2.05  | 2.52  | 2.76  | 3.03  | 3.62  | 4.29  | 5.06  | 5.45  | 5.92  | 6.87  | 7.81  | 7.86  | 7.90  | 0.02   | 0.13         | 0.18         | 0.22       |
| 200      | 2.14                                      | 2.66  | 3.28  | 3.59  | 3.95  | 4.72  | 5.60  | 6.61  | 7.11  | 7.74  | 8.98  | 10.21 | 10.45 | 12.00 | 0.03   | 0.17         | 0.24         | 0.30       |
| 250      | 2.61                                      | 3.25  | 4.02  | 4.40  | 4.84  | 5.79  | 6.88  | 8.12  | 8.74  | 9.51  | 11.03 | 12.54 | 12.74 | 14.60 | 0.03   | 0.21         | 0.31         | 0.37       |
| 300      | 3.06                                      | 3.83  | 4.74  | 5.19  | 5.71  | 6.84  | 8.13  | 9.60  | 10.33 | 11.24 | 13.04 | 14.82 | 15.03 | 17.20 | 0.04   | 0.26         | 0.37         | 0.45       |
| 350      | 3.51                                      | 4.39  | 5.44  | 5.96  | 6.57  | 7.86  | 9.36  | 11.05 | 11.89 | 12.94 | 15.00 | 17.04 | 17.19 | 19.60 | 0.05   | 0.30         | 0.43         | 0.52       |
| 400      | 3.94                                      | 4.94  | 6.13  | 6.72  | 7.41  | 8.87  | 10.57 | 12.48 | 13.42 | 14.60 | 16.92 | 19.21 | 19.34 | 22.00 | 0.05   | 0.34         | 0.49         | 0.60       |
| 450      | 4.37                                      | 5.48  | 6.81  | 7.47  | 8.24  | 9.87  | 11.75 | 13.87 | 14.92 | 16.22 | 18.79 | 21.31 | 21.59 | 24.13 | 0.06   | 0.39         | 0.55         | 0.67       |
| 500      | 4.78                                      | 6.01  | 7.48  | 8.20  | 9.05  | 10.84 | 12.91 | 15.23 | 16.38 | 17.81 | 20.61 | 23.35 | 23.83 | 26.25 | 0.07   | 0.43         | 0.61         | 0.75       |
| 550      | 5.19                                      | 6.53  | 8.13  | 8.92  | 9.84  | 11.80 | 14.04 | 16.57 | 17.81 | 19.36 | 22.38 | 25.33 | 26.08 | 28.38 | 0.07   | 0.47         | 0.67         | 0.82       |
| 600      | 5.59                                      | 7.05  | 8.77  | 9.63  | 10.63 | 12.73 | 15.16 | 17.87 | 19.21 | 20.87 | 24.10 | 27.24 | 28.32 | 30.50 | 0.08   | 0.52         | 0.73         | 0.90       |
| 650      | 5.98                                      | 7.55  | 9.41  | 10.33 | 11.39 | 13.65 | 16.25 | 19.15 | 20.58 | 22.33 | 25.77 | 29.08 | 29.90 | 32.31 | 0.09   | 0.56         | 0.79         | 0.97       |
| 700      | 6.37                                      | 8.04  | 10.03 | 11.01 | 12.15 | 14.56 | 17.31 | 20.39 | 21.90 | 23.76 | 27.37 | 30.84 | 31.49 | 34.11 | 0.09   | 0.60         | 0.85         | 1.05       |
| 750      | 6.75                                      | 8.53  | 10.64 | 11.68 | 12.89 | 15.44 | 18.36 | 21.61 | 23.19 | 25.14 | 28.92 | 32.53 | 33.07 | 35.92 | 0.10   | 0.64         | 0.92         | 1.12       |
| 800      | 7.12                                      | 9.00  | 11.23 | 12.34 | 13.61 | 16.31 | 19.38 | 22.78 | 24.45 | 26.48 | 30.41 | 34.13 | 34.65 | 37.72 | 0.11   | 0.69         | 0.98         | 1.20       |
| 850      | 7.48                                      | 9.47  | 11.82 | 12.98 | 14.32 | 17.15 | 20.37 | 23.93 | 25.66 | 27.77 | 31.83 | 35.64 | 35.98 | 38.65 | 0.11   | 0.73         | 1.04         | 1.27       |
| 900      | 7.84                                      | 9.93  | 12.40 | 13.61 | 15.02 | 17.98 | 21.33 | 25.03 | 26.83 | 29.01 | 33.18 | 37.06 | 37.31 | 39.58 | 0.12   | 0.77         | 1.10         | 1.35       |
| 950      | 8.19                                      | 10.38 | 12.96 | 14.23 | 15.70 | 18.78 | 22.27 | 26.10 | 27.95 | 30.20 | 34.46 | 38.38 | 38.64 | 40.51 | 0.13   | 0.82         | 1.16         | 1.42       |
| 1000     | 8.53                                      | 10.82 | 13.51 | 14.83 | 16.36 | 19.57 | 23.18 | 27.13 | 29.03 | 31.33 | 35.66 | 39.61 | 39.98 | 41.44 | 0.13   | 0.86         | 1.22         | 1.50       |
| 1050     | 8.86                                      | 11.25 | 14.05 | 15.42 | 17.01 | 20.33 | 24.06 | 28.12 | 30.06 | 32.41 | 36.79 | 40.73 | 41.31 | 42.37 | 0.14   | 0.90         | 1.28         | 1.57       |
| 1100     | 9.19                                      | 11.67 | 14.57 | 16.00 | 17.64 | 21.07 | 24.91 | 29.07 | 31.05 | 33.43 | 37.83 | 41.74 | 42.64 | 43.30 | 0.15   | 0.95         | 1.34         | 1.65       |
| 1150     | 9.51                                      | 12.08 | 15.09 | 16.56 | 18.26 | 21.79 | 25.73 | 29.97 | 31.98 | 34.39 | 38.79 | 42.63 | 43.97 | 44.23 | 0.15   | 0.99         | 1.40         | 1.72       |
| 1200     | 9.82                                      | 12.48 | 15.58 | 17.11 | 18.85 | 22.48 | 26.52 | 30.83 | 32.87 | 35.28 | 39.67 | 43.41 | 45.30 | 45.16 | 0.16   | 1.03         | 1.46         | 1.80       |
| 1250     | 10.12                                     | 12.87 | 16.07 | 17.64 | 19.43 | 22.15 | 27.27 | 31.65 | 33.69 | 36.11 | 40.45 | 44.06 | 44.92 |       | 0.17   | 1.07         | 1.53         | 1.87       |
| 1300     | 10.42                                     | 13.25 | 16.54 | 18.15 | 19.99 | 23.80 | 27.99 | 32.41 | 34.46 | 36.88 | 41.14 | 44.59 | 44.54 |       | 0.17   | 1.12         | 1.59         | 1.94       |
| 1350     | 10.71                                     | 13.62 | 17.00 | 18.65 | 20.53 | 24.42 | 28.67 | 33.13 | 35.18 | 37.57 | 41.73 | 44.98 | 44.15 |       | 0.18   | 1.16         | 1.65         | 2.02       |
| 1400     | 10.99                                     | 13.97 | 17.45 | 19.13 | 21.06 | 25.01 | 29.32 | 33.79 | 35.83 | 38.19 | 42.22 | 45.24 | 43.77 |       | 0.19   | 1.20         | 1.71         | 2.09       |
| 1450     | 11.26                                     | 14.32 | 17.87 | 19.60 | 21.56 | 25.58 | 29.93 | 34.40 | 36.43 | 38.74 | 42.61 | 45.36 | 43.39 |       | 0.19   | 1.25         | 1.77         | 2.17       |
| 1500     | 11.52                                     | 14.66 | 18.29 | 20.04 | 22.04 | 26.12 | 30.50 | 34.96 | 36.96 | 39.21 | 42.89 | 45.33 | 43.01 |       | 0.20   | 1.29         | 1.83         | 2.24       |
| 1550     | 11.77                                     | 14.98 | 18.69 | 20.47 | 22.50 | 26.63 | 31.03 | 35.46 | 37.42 | 39.61 | 43.05 | 45.15 | 42.62 |       | 0.21   | 1.33         | 1.89         | 2.32       |
| 1600     | 12.02                                     | 15.30 | 19.07 | 20.88 | 22.94 | 27.11 | 31.52 | 35.90 | 37.82 | 39.92 | 43.11 | 44.81 | 42.24 |       | 0.21   | 1.38         | 1.95         | 2.39       |
| 1650     | 12.25                                     | 15.60 | 19.43 | 21.28 | 23.36 | 27.56 | 31.96 | 36.29 | 38.14 | 40.15 | 43.05 | 44.32 |       |       | 0.22   | 1.42         | 2.01         | 2.47       |
| 1700     | 12.48                                     | 15.89 | 19.78 | 21.65 | 23.75 | 27.98 | 32.37 | 36.61 | 38.40 | 40.29 | 42.86 | 43.66 |       |       | 0.23   | 1.46         | 2.07         | 2.54       |
| 1750     | 12.69                                     | 16.16 | 20.12 | 22.00 | 24.13 | 28.36 | 33.05 | 36.88 | 38.58 | 40.35 | 42.55 | 42.83 |       |       | 0.23   | 1.50         | 2.14         | 2.62       |
| 1800     | 12.90                                     | 16.43 | 20.43 | 22.34 | 24.48 | 28.72 | 33.31 | 37.07 | 38.69 | 40.31 | 42.12 | 41.82 |       |       | 0.24   | 1.55         | 2.20         | 2.69       |
| 1850     | 13.10                                     | 16.68 | 20.73 | 22.65 | 24.80 | 29.04 | 33.54 | 37.21 | 38.72 | 40.18 | 41.55 | 40.64 |       |       | 0.25   | 1.59         | 2.26         | 2.77       |
| 1900     | 13.28                                     | 16.91 | 21.01 | 22.94 | 25.10 | 29.33 | 33.71 | 37.27 | 38.68 | 39.96 | 40.85 | 39.27 |       |       | 0.25   | 1.63         | 2.32         | 2.84       |
| 1950     | 13.46                                     | 17.14 | 21.27 | 23.22 | 25.38 | 29.59 | 33.83 | 37.27 | 38.55 | 39.64 | 40.01 | 37.72 |       |       | 0.26   | 1.68         | 2.38         | 2.92       |
| 2000     | 13.63                                     | 17.35 | 21.51 | 23.46 | 25.63 | 29.80 | 33.90 | 37.20 | 38.34 | 39.22 | 39.03 | 35.97 |       |       | 0.27   | 1.72         | 2.44         | 2.99       |
| 2050     | 13.78                                     | 17.54 | 21.74 | 23.69 | 25.85 | 29.99 | 33.92 | 37.05 | 38.04 | 38.70 | 37.90 |       |       |       | 0.27   | 1.76         | 2.50         | 3.07       |
| 2100     | 13.93                                     | 17.73 | 21.94 | 23.90 | 26.05 | 30.13 | 33.89 | 36.83 | 37.66 | 38.07 | 36.63 |       |       |       | 0.28   | 1.81         | 2.56         | 3.14       |
| 2150     | 14.07                                     | 17.89 | 22.12 | 24.08 | 26.21 | 30.24 | 33.80 | 36.53 | 37.19 | 37.33 | 35.20 |       |       |       | 0.29   | 1.85         | 2.62         | 3.22       |
| 2200     | 14.19                                     | 18.05 | 22.29 | 24.23 | 26.36 | 30.31 | 33.66 | 36.16 | 36.63 | 36.49 | 33.62 |       |       |       | 0.29   | 1.89         | 2.68         | 3.29       |
| 2250     | 14.30                                     | 18.18 | 22.43 | 24.37 | 26.47 | 30.34 | 33.46 | 35.71 | 35.97 | 35.53 | 31.88 |       |       |       | 0.30   | 1.93         | 2.75         | 3.37       |
| 2300     | 14.40                                     | 18.31 | 22.55 | 24.48 | 26.55 | 30.32 | 33.20 | 35.18 | 35.22 | 34.66 |       |       |       |       | 0.31   | 1.98         | 2.81         | 3.44       |
| 2350     | 14.49                                     | 18.41 | 22.65 | 24.56 | 26.61 | 30.27 | 32.88 | 34.56 | 34.38 | 33.27 |       |       |       |       | 0.31   | 2.02         | 2.87         | 3.52       |
| 2400     | 14.57                                     | 18.50 | 22.73 | 24.62 | 26.63 | 30.18 | 32.50 | 33.86 | 33.43 | 31.96 |       |       |       |       | 0.32   | 2.06         | 2.93         | 3.59       |
| 2450     | 14.63                                     | 18.58 | 22.78 | 24.65 | 26.62 | 30.04 | 32.07 | 33.08 | 32.39 | 30.53 |       |       |       |       | 0.33   | 2.11         | 2.99         | 3.67       |
| 2500     | 14.69                                     | 18.63 | 22.81 | 24.66 | 26.58 | 29.86 | 31.56 | 32.21 | 31.24 | 28.98 |       |       |       |       | 0.33   | 2.15         | 3.05         | 3.74       |
| 2550     | 14.73                                     | 18.67 | 22.82 | 24.63 | 26.51 | 29.64 | 31.00 | 31.25 |       |       |       |       |       |       | 0.34   | 2.19         | 3.11         | 3.81       |
| 2600     | 14.76                                     | 18.70 | 22.81 | 24.58 | 26.41 | 29.37 | 30.37 | 30.20 |       |       |       |       |       |       | 0.35   | 2.23         | 3.17         | 3.89       |
| 2650     | 14.77                                     | 18.71 | 22.77 | 24.51 | 26.28 | 29.05 | 29.67 | 29.06 |       |       |       |       |       |       | 0.35   | 2.28         | 3.23         | 3.96       |
| 2700     | 14.77                                     | 18.69 | 22.70 | 24.40 | 26.11 | 28.69 | 28.91 | 27.82 |       |       |       |       |       |       | 0.36   | 2.32         | 3.29         | 4.04       |
| 2750     | 14.76                                     | 18.66 | 22.62 | 24.27 | 25.90 | 28.28 | 28.08 | 26.49 |       |       |       |       |       |       | 0.37   | 2.36         | 3.36         | 4.11       |
| 2800     | 14.74                                     | 18.62 | 22.50 | 24.10 | 25.67 | 27.82 | 27.18 | 25.06 |       |       |       |       |       |       | 0.37   | 2.41         | 3.42         | 4.19       |
| 2850     | 14.70                                     | 18.55 | 22.36 | 23.91 | 25.39 | 27.31 | 26.21 | 23.53 |       |       |       |       |       |       | 0.38   | 2.45         | 3.48         | 4.26       |
| 2900     | 14.65                                     | 18.47 | 22.20 | 23.69 | 25.08 | 26.75 | 25.16 | 21.90 |       |       |       |       |       |       | 0.39   | 2.49         | 3.54         | 4.34       |
| 2950     | 14.58                                     | 18.36 | 22.01 | 23.43 | 24.74 | 26.14 | 24.04 | 20.16 |       |       |       |       |       |       | 0.39   | 2.54         | 3.60         | 4.41       |
| 3000     | 14.50                                     | 18.24 | 21.79 | 23.15 | 24.35 | 25.48 | 21.58 | 18.33 |       |       |       |       |       |       | 0.40   | 2.58         | 3.66         | 4.49       |
| 3100     | 14.29                                     | 17.93 | 21.27 | 22.48 | 23.47 | 24.00 | 18.82 |       |       |       |       |       |       |       | 0.41   | 2.66         | 3.78         | 4.64       |
| 3200     | 14.03                                     | 17.55 | 20.64 | 21.68 | 22.44 | 22.31 |       |       |       |       |       |       |       |       | 0.43   | 2.75         | 3.90         | 4.79       |
| 3300     | 13.70                                     | 17.08 | 19.89 | 20.74 | 21.24 | 20.39 |       |       |       |       |       |       |       |       | 0.44   | 2.84         | 4.03         | 4.94       |
| 3400     | 13.31                                     | 16.52 | 19.02 | 19.67 | 19.89 | 18.24 |       |       |       |       |       |       |       |       | 0.45   | 2.92         | 4.15         | 5.09       |
| 3500     | 12.86                                     | 15.88 | 18.03 | 18.45 | 18.36 | 15.85 |       |       |       |       |       |       |       |       | 0.47   | 3.01         | 4.27         | 5.24       |
| 3600     | 12.34                                     | 15.14 | 16.91 | 17.09 | 16.65 |       |       |       |       |       |       |       |       |       | 0.48   | 3.09         | 4.39         | 5.39       |
| 3700     | 11.75                                     | 14.32 | 15.67 | 15.58 | 14.77 |       |       |       |       |       |       |       |       |       | 0.49   | 3.18         |              |            |

**TABLE 17 Section SPC**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |       |       |       |       |       |       |       |       |       | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |                  |
|----------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--------------------|--------------------|------------------|
|          | 200                                       | 224   | 236   | 250   | 265   | 280   | 300   | 315   | 335   | 355   | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>><br>1.57 |
| 700      | 9.19                                      | 11.72 | 12.09 | 14.68 | 14.81 | 18.05 | 20.28 | 21.93 | 24.10 | 26.25 | 0.14   | 0.90               | 1.28               | 1.57             |
| 950      | 11.36                                     | 14.86 | 15.11 | 18.70 | 18.96 | 23.05 | 25.88 | 27.97 | 30.71 | 33.40 | 0.19   | 1.22               | 1.73               | 2.13             |
| 1450     | 15.11                                     | 19.92 | 20.01 | 25.18 | 25.43 | 30.96 | 34.63 | 37.30 | 40.71 | 43.97 | 0.29   | 1.86               | 2.65               | 3.25             |
| 2850     |   | 23.11 | 23.56 | 28.58 | 29.03 | 33.13 |       |       |       |       | 0.57   | 3.67               | 5.20               | 6.38             |
| 50       | 1.11                                      | 1.20  | 1.45  | 1.47  | 1.61  | 1.76  | 1.96  | 2.11  | 2.31  | 2.50  | 0.01   | 0.06               | 0.09               | 0.11             |
| 100      | 2.12                                      | 2.23  | 2.54  | 2.72  | 2.78  | 3.29  | 3.67  | 3.95  | 4.32  | 4.70  | 0.02   | 0.13               | 0.18               | 0.22             |
| 200      | 3.56                                      | 4.08  | 4.43  | 5.03  | 5.14  | 6.12  | 6.83  | 7.37  | 8.09  | 8.80  | 0.04   | 0.26               | 0.37               | 0.45             |
| 300      | 4.81                                      | 5.78  | 6.21  | 7.16  | 7.31  | 8.75  | 9.79  | 10.57 | 11.61 | 12.64 | 0.06   | 0.39               | 0.55               | 0.67             |
| 350      | 5.46                                      | 6.59  | 7.01  | 8.19  | 8.36  | 10.00 | 11.21 | 12.11 | 13.31 | 14.49 | 0.07   | 0.45               | 0.64               | 0.78             |
| 400      | 6.04                                      | 7.38  | 7.79  | 9.18  | 9.35  | 11.23 | 12.60 | 13.61 | 14.95 | 16.30 | 0.08   | 0.51               | 0.73               | 0.90             |
| 450      | 6.56                                      | 8.14  | 8.49  | 10.15 | 10.39 | 12.44 | 13.96 | 15.08 | 16.58 | 18.05 | 0.09   | 0.58               | 0.82               | 1.01             |
| 500      | 7.15                                      | 8.89  | 9.32  | 11.10 | 11.24 | 13.62 | 15.28 | 16.51 | 18.16 | 19.78 | 0.10   | 0.64               | 0.91               | 1.12             |
| 550      | 7.62                                      | 9.62  | 10.06 | 12.03 | 12.29 | 14.76 | 16.56 | 17.91 | 19.69 | 21.46 | 0.11   | 0.71               | 1.00               | 1.23             |
| 600      | 8.09                                      | 10.34 | 10.76 | 12.94 | 13.19 | 15.89 | 17.83 | 19.29 | 21.20 | 23.09 | 0.12   | 0.77               | 1.10               | 1.34             |
| 650      | 8.63                                      | 11.03 | 11.32 | 13.82 | 13.99 | 16.99 | 19.07 | 20.62 | 22.67 | 24.70 | 0.13   | 0.84               | 1.19               | 1.45             |
| 700      | 9.19                                      | 11.72 | 12.09 | 14.68 | 14.81 | 18.05 | 20.28 | 21.93 | 24.10 | 26.25 | 0.14   | 0.90               | 1.28               | 1.57             |
| 750      | 9.59                                      | 12.38 | 12.66 | 15.52 | 15.73 | 19.11 | 21.46 | 23.21 | 25.50 | 27.76 | 0.15   | 0.96               | 1.37               | 1.68             |
| 800      | 10.06                                     | 13.01 | 13.21 | 16.35 | 16.54 | 20.13 | 22.61 | 24.44 | 26.86 | 29.24 | 0.16   | 1.03               | 1.46               | 1.79             |
| 850      | 10.52                                     | 13.65 | 13.78 | 17.16 | 17.31 | 21.12 | 23.73 | 25.65 | 28.18 | 30.68 | 0.17   | 1.09               | 1.55               | 1.90             |
| 900      | 10.93                                     | 14.27 | 14.36 | 17.94 | 18.19 | 22.10 | 24.82 | 26.82 | 29.47 | 32.07 | 0.18   | 1.16               | 1.64               | 2.01             |
| 950      | 11.36                                     | 14.86 | 15.11 | 18.70 | 18.96 | 23.05 | 25.88 | 27.97 | 30.71 | 33.40 | 0.19   | 1.22               | 1.73               | 2.13             |
| 1000     | 11.75                                     | 15.44 | 15.63 | 19.45 | 19.71 | 23.97 | 26.90 | 29.08 | 31.91 | 34.70 | 0.20   | 1.29               | 1.83               | 2.24             |
| 1050     | 12.16                                     | 16.02 | 16.16 | 20.17 | 20.43 | 24.85 | 27.90 | 30.14 | 33.07 | 35.94 | 0.21   | 1.35               | 1.92               | 2.35             |
| 1100     | 12.60                                     | 16.56 | 16.67 | 20.88 | 21.11 | 25.73 | 28.86 | 31.18 | 34.19 | 37.13 | 0.22   | 1.41               | 2.01               | 2.46             |
| 1150     | 13.01                                     | 17.09 | 17.21 | 21.56 | 21.83 | 26.56 | 29.79 | 32.17 | 35.27 | 38.27 | 0.23   | 1.48               | 2.10               | 2.57             |
| 1200     | 13.32                                     | 17.61 | 17.73 | 22.22 | 22.43 | 27.37 | 30.69 | 33.13 | 36.30 | 39.37 | 0.24   | 1.54               | 2.19               | 2.69             |
| 1250     | 13.63                                     | 18.11 | 18.18 | 22.86 | 23.12 | 28.15 | 31.55 | 34.05 | 37.27 | 40.40 | 0.25   | 1.61               | 2.28               | 2.80             |
| 1300     | 14.01                                     | 18.59 | 18.66 | 23.48 | 23.71 | 28.90 | 32.38 | 34.92 | 38.21 | 41.38 | 0.26   | 1.67               | 2.37               | 2.91             |
| 1350     | 14.38                                     | 19.05 | 19.16 | 24.07 | 24.29 | 29.61 | 33.17 | 35.76 | 39.10 | 42.30 | 0.27   | 1.74               | 2.46               | 3.02             |
| 1400     | 14.69                                     | 19.50 | 19.63 | 24.63 | 24.89 | 30.30 | 33.92 | 36.55 | 39.93 | 43.16 | 0.28   | 1.80               | 2.56               | 3.13             |
| 1450     | 15.11                                     | 19.92 | 20.01 | 25.18 | 25.43 | 30.96 | 34.63 | 37.30 | 40.71 | 43.97 | 0.29   | 1.86               | 2.65               | 3.25             |
| 1500     | 15.38                                     | 20.34 | 20.53 | 25.69 | 25.84 | 31.57 | 35.31 | 38.00 | 41.44 | 44.71 | 0.30   | 1.93               | 2.74               | 3.36             |
| 1550     | 15.66                                     | 20.73 | 21.09 | 26.20 | 26.43 | 32.17 | 35.94 | 38.66 | 42.12 | 45.39 | 0.31   | 1.99               | 2.83               | 3.47             |
| 1600     | 15.99                                     | 21.10 | 21.46 | 26.67 | 26.91 | 32.73 | 36.53 | 39.27 | 42.74 | 46.00 | 0.32   | 2.06               | 2.92               | 3.58             |
| 1650     | 16.26                                     | 21.46 | 21.83 | 27.10 | 27.33 | 33.24 | 37.08 | 39.83 | 43.30 | 46.55 | 0.33   | 2.12               | 3.01               | 3.69             |
| 1700     | 16.49                                     | 21.78 | 22.26 | 27.53 | 27.69 | 33.72 | 37.59 | 40.34 | 43.80 | 47.03 | 0.34   | 2.19               | 3.10               | 3.80             |
| 1750     | 16.78                                     | 22.10 | 22.66 | 27.91 | 28.15 | 34.17 | 38.06 | 40.80 | 44.25 | 47.43 | 0.35   | 2.25               | 3.19               | 3.92             |
| 1800     | 17.12                                     | 22.39 | 22.94 | 28.28 | 28.46 | 34.59 | 38.47 | 41.22 | 44.63 | 47.77 | 0.36   | 2.31               | 3.29               | 4.03             |
| 1850     | 17.36                                     | 22.66 | 23.36 | 28.62 | 28.86 | 34.96 | 38.84 | 41.57 | 44.96 | 48.03 | 0.37   | 2.38               | 3.38               | 4.14             |
| 1900     | 17.59                                     | 22.92 | 23.55 | 28.92 | 29.16 | 35.29 | 39.17 | 41.88 | 45.21 | 48.20 | 0.38   | 2.44               | 3.47               | 4.25             |
| 1950     | 17.88                                     | 23.14 | 24.16 | 29.20 | 29.32 | 35.58 | 39.45 | 42.13 | 45.40 | 48.32 | 0.39   | 2.51               | 3.56               | 4.36             |
| 2000     | 18.05                                     | 23.35 | 24.27 | 29.44 | 29.68 | 35.84 | 39.67 | 42.32 | 45.53 | 48.34 | 0.40   | 2.57               | 3.65               | 4.48             |
| 2050     | 18.21                                     | 23.53 | 24.64 | 29.67 | 29.73 | 36.04 | 39.85 | 42.46 | 45.58 | 48.28 | 0.41   | 2.64               | 3.74               | 4.59             |
| 2100     | 18.46                                     | 23.70 | 24.93 | 29.86 | 29.89 | 36.22 | 39.98 | 42.54 | 45.56 | 48.15 | 0.42   | 2.70               | 3.83               | 4.70             |
| 2150     | 18.63                                     | 23.83 | 25.11 | 30.02 | 30.14 | 36.34 | 40.05 | 42.55 | 45.48 | 47.92 | 0.43   | 2.77               | 3.92               | 4.81             |
| 2200     | 18.79                                     | 23.95 | 25.53 | 30.14 | 30.32 | 36.42 | 40.07 | 42.50 | 45.32 | 47.62 | 0.44   | 2.83               | 4.02               | 4.92             |
| 2250     | 19.18                                     | 24.04 | 25.81 | 30.23 | 30.39 | 36.47 | 40.04 | 42.40 | 45.08 | 47.22 | 0.45   | 2.89               | 4.11               | 5.04             |
| 2300     | 19.26                                     | 24.10 | 26.04 | 30.28 | 30.31 | 36.46 | 39.95 | 42.22 | 44.78 | 46.74 | 0.46   | 2.96               | 4.20               | 5.15             |
| 2350     | 19.42                                     | 24.15 | 26.21 | 30.31 | 30.31 | 36.40 | 39.80 | 41.99 | 44.39 | 46.17 | 0.47   | 3.02               | 4.29               | 5.26             |
| 2400     | 19.91                                     | 24.16 | 26.55 | 30.31 | 30.31 | 36.30 | 39.60 | 41.69 | 43.93 | 45.49 | 0.48   | 3.09               | 4.38               | 5.37             |
| 2450     |   | 24.16 | 26.73 | 30.26 | 30.29 | 36.15 | 39.35 | 41.32 | 43.38 | 44.72 | 0.49   | 3.15               | 4.47               | 5.48             |
| 2500     |   | 24.11 | 26.88 | 30.18 | 30.25 | 35.95 | 39.02 | 40.88 | 42.75 | 43.86 | 0.50   | 3.22               | 4.56               | 5.60             |
| 2550     |   | 24.06 | 25.76 | 30.06 | 30.18 | 35.71 | 38.64 | 40.38 |       |       | 0.51   | 3.28               | 4.66               | 5.71             |
| 2600     |   | 23.97 | 24.84 | 29.92 | 30.02 | 35.41 | 38.20 | 39.79 |       |       | 0.52   | 3.34               | 4.75               | 5.82             |
| 2650     |   | 23.86 | 24.68 | 29.72 | 29.95 | 35.07 | 37.70 | 39.14 |       |       | 0.53   | 3.41               | 4.84               | 5.93             |
| 2700     |   | 23.71 | 24.32 | 29.50 | 29.82 | 34.66 | 37.13 | 38.43 |       |       | 0.54   | 3.47               | 4.93               | 6.04             |
| 2750     |   | 23.54 | 24.18 | 29.23 | 29.68 | 34.20 | 36.49 | 37.62 |       |       | 0.55   | 3.54               | 5.02               | 6.16             |
| 2800     |   | 23.34 | 24.04 | 28.93 | 29.42 | 33.70 |       |       |       |       | 0.56   | 3.60               | 5.11               | 6.27             |
| 2850     |   | 23.11 | 23.56 | 28.58 | 29.03 | 33.13 |       |       |       |       | 0.57   | 3.67               | 5.20               | 6.38             |
| 2900     |   | 22.85 | 23.04 | 28.20 | 28.82 | 32.51 |       |       |       |       | 0.58   | 3.73               | 5.29               | 6.49             |
| 2950     |   | 22.57 | 22.79 | 27.78 | 28.17 | 31.84 |       |       |       |       | 0.59   | 3.79               | 5.39               | 6.60             |
| 3000     |   | 22.24 | 22.59 | 27.31 | 27.97 | 31.10 |       |       |       |       | 0.60   | 3.86               | 5.48               | 6.70             |
| 3050     |   | 21.90 | 22.04 | 26.80 | 27.54 | 30.31 |       |       |       |       | 0.61   | 3.92               | 5.57               | 6.83             |
| 3100     |   | 21.52 | 21.94 | 26.25 | 27.50 | 29.46 |       |       |       |       | 0.62   | 3.99               | 5.66               | 6.94             |
| 3150     |   | 21.10 | 21.79 | 25.65 | 26.43 | 28.55 |       |       |       |       | 0.63   | 4.05               | 5.75               | 7.05             |
| 3200     |   | 20.65 | 21.64 | 25.01 | 26.12 | 27.57 |       |       |       |       | 0.64   | 4.12               | 5.84               | 7.16             |
| 3250     |   | 20.18 | 21.52 | 24.33 | 25.56 | 26.54 |       |       |       |       | 0.65   | 4.18               | 5.93               | 7.27             |
| 3300     |   | 19.67 | 21.01 | 23.60 | 24.92 |       |       |       |       |       | 0.66   | 4.24               | 6.02               | 7.39             |
| 3350     |   | 19.13 | 20.86 | 22.83 | 24.26 |       |       |       |       |       | 0.67   | 4.31               | 6.12               | 7.50             |
| 3400     |   | 18.55 | 20.74 | 22.01 |       |       |       |       |       |       | 0.68   | 4.37               | 6.21               | 7.61             |
| 3450     |   | 17.94 | 20.68 | 21.15 |       |       |       |       |       |       | 0.69   | 4.44               | 6.30               | 7.72             |
| 3500     |   | 17.29 | 19.72 | 20.23 |       |       |       |       |       |       | 0.70   | 4.50               | 6.39               | 7.80             |

**TABLE 17 Section SPC**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |       |       |       |       |       |       |       |       | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |                  |
|----------|---|-------|-------|-------|-------|-------|-------|-------|-------|--|--------------------|--------------------|------------------|
|          | 375                                       | 400   | 450   | 500   | 560   | 630   | 710   | 800   | 1000  | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>><br>1.57 |
| 700      | 28.38                                     | 30.99 | 36.11 | 41.04 | 46.70 | 52.95 | 59.57 | 62.14 | 74.29 | 0.14   | 0.90               | 1.28               | 1.57             |
| 950      | 36.04                                     | 39.26 | 45.42 | 51.18 | 57.55 | 64.14 | 70.47 | 72.42 |       | 0.19   | 1.22               | 1.73               | 2.13             |
| 1450     | 47.06                                     | 50.69 | 57.06 | 62.17 | 66.49 | 68.75 |       |       |       | 0.29   | 1.86               | 2.65               | 3.25             |
| 2850     |   |       |       |       |       |       |       |       |       | 0.57   | 3.67               | 5.20               | 6.38             |
| 50       | 2.69                                      | 2.93  | 3.42  | 3.90  | 4.47  | 5.12  | 5.87  |       |       | 0.01   | 0.06               | 0.09               | 0.11             |
| 100      | 5.07                                      | 5.53  | 6.45  | 7.37  | 8.46  | 9.71  | 11.14 | 11.86 | 15.06 | 0.02   | 0.13               | 0.18               | 0.22             |
| 200      | 9.51                                      | 10.38 | 12.13 | 13.87 | 15.93 | 18.30 | 20.98 | 22.19 | 28.14 | 0.04   | 0.26               | 0.37               | 0.45             |
| 300      | 13.66                                     | 14.94 | 17.47 | 19.96 | 22.92 | 26.31 | 30.13 | 31.72 | 39.99 | 0.06   | 0.39               | 0.55               | 0.67             |
| 350      | 15.67                                     | 17.12 | 20.03 | 22.88 | 26.26 | 30.13 | 34.45 | 36.13 | 45.38 | 0.07   | 0.45               | 0.64               | 0.78             |
| 400      | 17.62                                     | 19.26 | 22.52 | 25.73 | 29.50 | 33.81 | 38.62 | 40.53 | 50.76 | 0.08   | 0.51               | 0.73               | 0.90             |
| 450      | 19.52                                     | 21.35 | 24.95 | 28.49 | 32.65 | 37.37 | 42.60 | 44.55 | 55.48 | 0.09   | 0.58               | 0.82               | 1.01             |
| 500      | 21.38                                     | 23.39 | 27.32 | 31.17 | 35.68 | 40.79 | 46.41 | 48.57 | 60.19 | 0.10   | 0.64               | 0.91               | 1.12             |
| 550      | 23.21                                     | 25.37 | 29.61 | 33.77 | 38.61 | 44.06 | 50.02 | 52.17 | 64.16 | 0.11   | 0.71               | 1.00               | 1.23             |
| 600      | 24.98                                     | 27.29 | 31.85 | 36.28 | 41.43 | 47.19 | 53.42 | 55.77 | 68.12 | 0.12   | 0.77               | 1.10               | 1.34             |
| 650      | 26.70                                     | 29.18 | 34.01 | 38.71 | 44.13 | 50.15 | 56.62 | 58.96 | 71.21 | 0.13   | 0.84               | 1.19               | 1.45             |
| 700      | 28.38                                     | 30.99 | 36.11 | 41.04 | 46.70 | 52.95 | 59.57 | 62.14 | 74.29 | 0.14   | 0.90               | 1.28               | 1.57             |
| 750      | 30.00                                     | 32.76 | 38.12 | 43.27 | 49.16 | 55.57 | 62.28 | 64.75 |       | 0.15   | 0.96               | 1.37               | 1.68             |
| 800      | 31.60                                     | 34.47 | 40.06 | 45.40 | 51.46 | 58.02 | 64.75 | 67.36 |       | 0.16   | 1.03               | 1.46               | 1.79             |
| 850      | 33.13                                     | 36.13 | 41.93 | 47.44 | 53.64 | 60.26 | 66.94 | 69.38 |       | 0.17   | 1.09               | 1.55               | 1.90             |
| 900      | 34.61                                     | 37.72 | 43.71 | 49.37 | 55.68 | 62.31 | 68.85 | 71.39 |       | 0.18   | 1.16               | 1.64               | 2.01             |
| 950      | 36.04                                     | 39.26 | 45.42 | 51.18 | 57.55 | 64.14 | 70.47 | 72.42 |       | 0.19   | 1.22               | 1.73               | 2.13             |
| 1000     | 37.41                                     | 40.72 | 47.03 | 52.88 | 59.27 | 65.76 | 71.77 |       |       | 0.20   | 1.29               | 1.83               | 2.24             |
| 1050     | 38.73                                     | 42.12 | 48.54 | 54.45 | 60.82 | 67.13 | 72.76 |       |       | 0.21   | 1.35               | 1.92               | 2.35             |
| 1100     | 40.00                                     | 43.46 | 49.97 | 55.91 | 62.20 | 68.28 | 73.39 |       |       | 0.22   | 1.41               | 2.01               | 2.46             |
| 1150     | 41.19                                     | 44.72 | 51.31 | 57.23 | 63.40 | 69.17 | 73.68 |       |       | 0.23   | 1.48               | 2.10               | 2.57             |
| 1200     | 42.34                                     | 45.91 | 52.53 | 58.42 | 64.42 | 69.81 | 73.61 |       |       | 0.24   | 1.54               | 2.19               | 2.69             |
| 1250     | 43.41                                     | 47.02 | 53.66 | 59.47 | 65.25 | 70.18 | 73.16 |       |       | 0.25   | 1.61               | 2.28               | 2.80             |
| 1300     | 44.43                                     | 48.06 | 54.68 | 60.38 | 65.88 | 70.26 |       |       |       | 0.26   | 1.67               | 2.37               | 2.91             |
| 1350     | 45.38                                     | 49.02 | 55.59 | 61.13 | 66.29 | 70.06 |       |       |       | 0.27   | 1.74               | 2.46               | 3.02             |
| 1400     | 46.26                                     | 49.90 | 56.38 | 61.73 | 66.51 | 69.55 |       |       |       | 0.28   | 1.80               | 2.56               | 3.13             |
| 1450     | 47.06                                     | 50.69 | 57.06 | 62.17 | 66.49 | 68.75 |       |       |       | 0.29   | 1.86               | 2.65               | 3.25             |
| 1500     | 47.80                                     | 51.39 | 57.61 | 62.45 | 66.25 | 67.61 |       |       |       | 0.30   | 1.93               | 2.74               | 3.36             |
| 1550     | 48.46                                     | 52.00 | 58.05 | 62.56 |       |       |       |       |       | 0.31   | 1.99               | 2.83               | 3.47             |
| 1600     | 49.04                                     | 52.53 | 58.35 | 62.51 |       |       |       |       |       | 0.32   | 2.06               | 2.92               | 3.58             |
| 1650     | 49.56                                     | 52.96 | 58.52 | 62.26 |       |       |       |       |       | 0.33   | 2.12               | 3.01               | 3.69             |
| 1700     | 49.99                                     | 53.30 | 58.56 | 61.85 |       |       |       |       |       | 0.34   | 2.19               | 3.10               | 3.80             |
| 1750     | 50.32                                     | 53.54 | 58.45 | 61.23 |       |       |       |       |       | 0.35   | 2.25               | 3.19               | 3.92             |
| 1800     | 50.59                                     | 53.66 | 58.22 |       |       |       |       |       |       | 0.36   | 2.31               | 3.29               | 4.03             |
| 1850     | 50.76                                     | 53.69 | 57.83 |       |       |       |       |       |       | 0.37   | 2.38               | 3.38               | 4.14             |
| 1900     | 50.85                                     | 53.61 | 57.29 |       |       |       |       |       |       | 0.38   | 2.44               | 3.47               | 4.25             |
| 1950     | 50.84                                     | 53.44 | 56.59 |       |       |       |       |       |       | 0.39   | 2.51               | 3.56               | 4.36             |
| 2000     | 50.74                                     | 53.13 | 55.74 |       |       |       |       |       |       | 0.40   | 2.57               | 3.65               | 4.48             |
| 2050     | 50.55                                     | 52.72 |       |       |       |       |       |       |       | 0.41   | 2.64               | 3.74               | 4.59             |
| 2100     | 50.25                                     | 52.19 |       |       |       |       |       |       |       | 0.42   | 2.70               | 3.83               | 4.70             |
| 2150     | 49.86                                     | 51.54 |       |       |       |       |       |       |       | 0.43   | 2.77               | 3.92               | 4.81             |
| 2200     | 49.38                                     | 50.78 |       |       |       |       |       |       |       | 0.44   | 2.83               | 4.02               | 4.92             |
| 2250     | 48.79                                     | 49.88 |       |       |       |       |       |       |       | 0.45   | 2.89               | 4.11               | 5.04             |

**TABLE 18 Section 8V**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |                  |
|----------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--------------------|--------------------|------------------|
|          | 315                                       | 335   | 355   | 375   | 400   | 425   | 450   | 475   | 500   | 530   | 560   | 600   | 630   | 670   | 710   | 750   | 800   | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>><br>1.57 |
| 700      | 22.81                                     | 26.17 | 29.27 | 32.33 | 35.53 | 39.82 | 43.46 | 47.05 | 50.57 | 54.69 | 58.73 | 63.95 | 67.73 | 70.34 | 77.24 | 79.12 | 86.90 | 0.28   | 1.83               | 2.60               | 3.18             |
| 950      | 28.71                                     | 32.72 | 36.59 | 40.39 | 44.28 | 49.55 | 53.92 | 58.15 | 62.23 | 66.93 | 71.40 | 76.98 | 80.87 | 82.96 | 89.94 | 91.23 | 97.65 | 0.38   | 2.48               | 3.52               | 4.32             |
| 1450     | 36.24                                     | 41.29 | 46.00 | 50.47 | 54.61 | 60.52 | 64.91 | 68.84 | 72.28 | 75.76 | 78.48 | 80.85 |       |       |       |       |       | 0.59   | 3.79               | 5.38               | 6.60             |
| 50       | 2.41                                      | 2.68  | 2.96  | 3.24  | 3.56  | 3.94  | 4.28  | 4.63  | 4.97  | 5.38  | 5.79  | 6.33  | 6.73  | 7.15  | 7.81  | 8.22  | 9.01  | 0.02   | 0.13               | 0.19               | 0.23             |
| 100      | 4.35                                      | 4.98  | 5.51  | 6.05  | 6.59  | 7.37  | 8.03  | 8.69  | 9.35  | 10.13 | 10.91 | 11.95 | 12.72 | 13.42 | 14.77 | 15.31 | 17.05 | 0.04   | 0.26               | 0.37               | 0.45             |
| 150      | 6.32                                      | 7.12  | 7.90  | 8.68  | 9.41  | 10.62 | 11.58 | 12.54 | 13.49 | 14.64 | 15.77 | 17.27 | 18.40 | 19.28 | 21.37 | 22.13 | 24.68 | 0.06   | 0.39               | 0.56               | 0.68             |
| 200      | 7.88                                      | 9.16  | 10.17 | 11.19 | 12.28 | 13.72 | 14.97 | 16.22 | 17.47 | 18.95 | 20.43 | 22.39 | 23.85 | 24.78 | 27.70 | 28.69 | 31.98 | 0.08   | 0.52               | 0.74               | 0.91             |
| 250      | 9.78                                      | 11.11 | 12.37 | 13.62 | 14.88 | 16.72 | 18.26 | 19.79 | 21.30 | 23.12 | 24.93 | 27.32 | 29.10 | 30.54 | 33.79 | 34.79 | 38.99 | 0.10   | 0.65               | 0.93               | 1.14             |
| 300      | 11.17                                     | 13.01 | 14.49 | 15.96 | 17.44 | 19.62 | 21.43 | 23.24 | 25.02 | 27.16 | 29.28 | 32.08 | 34.17 | 35.85 | 39.65 | 40.98 | 45.70 | 0.12   | 0.78               | 1.11               | 1.36             |
| 350      | 13.06                                     | 14.84 | 16.54 | 18.24 | 19.78 | 22.44 | 24.52 | 26.58 | 28.62 | 31.07 | 33.48 | 36.69 | 39.06 | 40.91 | 45.28 | 46.72 | 52.10 | 0.14   | 0.91               | 1.30               | 1.59             |
| 400      | 14.55                                     | 16.61 | 18.53 | 20.44 | 22.46 | 25.17 | 27.50 | 29.82 | 32.12 | 34.85 | 37.55 | 41.12 | 43.76 | 45.82 | 50.67 | 53.21 | 58.20 | 0.16   | 1.05               | 1.48               | 1.82             |
| 450      | 16.19                                     | 18.33 | 20.46 | 22.59 | 24.73 | 27.81 | 30.40 | 32.96 | 35.49 | 38.50 | 41.48 | 45.38 | 48.28 | 50.53 | 55.81 | 58.43 | 63.96 | 0.18   | 1.18               | 1.67               | 2.05             |
| 500      | 17.15                                     | 20.00 | 22.33 | 24.66 | 27.23 | 30.39 | 33.20 | 35.99 | 38.75 | 42.02 | 45.24 | 49.48 | 52.59 | 54.94 | 60.69 | 62.41 | 69.35 | 0.20   | 1.31               | 1.86               | 2.27             |
| 550      | 18.88                                     | 21.62 | 24.16 | 26.67 | 29.31 | 32.87 | 35.91 | 38.92 | 41.88 | 45.40 | 48.87 | 53.39 | 56.71 | 59.11 | 65.29 | 67.43 | 74.37 | 0.22   | 1.44               | 2.04               | 2.50             |
| 600      | 20.36                                     | 23.18 | 25.91 | 28.62 | 31.46 | 35.27 | 38.52 | 41.74 | 44.91 | 48.65 | 52.32 | 57.11 | 60.62 | 63.24 | 69.58 | 71.45 | 78.99 | 0.24   | 1.57               | 2.23               | 2.73             |
| 650      | 21.54                                     | 24.71 | 27.63 | 30.51 | 33.49 | 37.59 | 41.04 | 44.46 | 47.81 | 51.75 | 55.62 | 60.63 | 64.29 | 66.91 | 73.58 | 75.46 | 83.17 | 0.26   | 1.70               | 2.41               | 2.96             |
| 700      | 22.81                                     | 26.17 | 29.27 | 32.33 | 35.53 | 39.82 | 43.46 | 47.05 | 50.57 | 54.69 | 58.73 | 63.95 | 67.73 | 70.34 | 77.24 | 79.12 | 86.90 | 0.28   | 1.83               | 2.60               | 3.18             |
| 750      | 24.06                                     | 27.58 | 30.86 | 34.08 | 37.54 | 41.96 | 45.78 | 49.53 | 53.19 | 57.49 | 61.67 | 67.03 | 70.91 | 73.58 | 80.56 | 82.21 | 90.13 | 0.30   | 1.96               | 2.78               | 3.41             |
| 800      | 24.81                                     | 28.95 | 32.38 | 35.77 | 39.29 | 44.00 | 47.99 | 51.88 | 55.68 | 60.11 | 64.41 | 69.89 | 73.83 | 76.23 | 83.50 | 84.92 | 92.85 | 0.32   | 2.09               | 2.97               | 3.64             |
| 850      | 26.46                                     | 30.26 | 33.85 | 37.39 | 40.78 | 45.95 | 50.07 | 54.11 | 58.02 | 62.57 | 66.95 | 72.51 | 76.47 | 78.81 | 86.06 | 87.23 | 95.04 | 0.34   | 2.22               | 3.15               | 3.87             |
| 900      | 27.62                                     | 31.51 | 35.26 | 38.93 | 42.56 | 47.80 | 52.06 | 56.20 | 60.21 | 64.84 | 69.28 | 74.88 | 78.82 | 80.88 | 88.21 | 89.21 | 96.64 | 0.36   | 2.35               | 3.34               | 4.09             |
| 950      | 28.71                                     | 32.72 | 36.59 | 40.39 | 44.28 | 49.55 | 53.92 | 58.15 | 62.23 | 66.93 | 71.40 | 76.98 | 80.87 | 82.96 | 89.94 | 91.23 | 97.65 | 0.38   | 2.48               | 3.52               | 4.32             |
| 1000     | 29.68                                     | 33.86 | 37.87 | 41.79 | 45.73 | 51.19 | 55.65 | 59.96 | 64.09 | 68.82 | 73.28 | 78.80 | 82.60 | 84.35 | 91.22 | 93.35 | 98.03 | 0.40   | 2.61               | 3.71               | 4.55             |
| 1050     | 30.66                                     | 34.94 | 39.07 | 43.10 | 47.22 | 52.72 | 57.26 | 61.61 | 65.78 | 70.51 | 74.94 | 80.35 | 84.01 | 85.46 | 92.03 | 92.84 | 97.74 | 0.42   | 2.74               | 3.90               | 4.78             |
| 1100     | 31.52                                     | 35.96 | 40.20 | 44.33 | 48.43 | 54.13 | 58.73 | 63.12 | 67.28 | 71.99 | 76.35 | 81.59 | 85.07 | 86.33 | 92.36 | 92.86 | 96.78 | 0.44   | 2.88               | 4.08               | 5.00             |
| 1150     | 32.43                                     | 36.93 | 41.27 | 45.49 | 49.57 | 55.43 | 60.07 | 64.46 | 68.62 | 73.25 | 77.49 | 82.51 | 85.76 | 86.24 | 92.18 | 92.31 | 95.09 | 0.46   | 3.01               | 4.27               | 5.23             |
| 1200     | 32.51                                     | 37.82 | 42.25 | 46.55 | 50.75 | 56.61 | 61.26 | 65.65 | 69.74 | 74.28 | 78.38 | 83.12 | 86.10 | 86.19 | 91.48 | 91.98 | 92.64 | 0.49   | 3.14               | 4.45               | 5.46             |
| 1250     | 33.78                                     | 38.65 | 43.17 | 47.52 | 51.59 | 57.66 | 62.31 | 66.64 | 70.68 | 75.09 | 78.99 | 83.38 | 86.04 | 86.11 | 89.32 | 90.42 | 91.43 | 0.51   | 3.27               | 4.64               | 5.69             |
| 1300     | 34.45                                     | 39.42 | 44.00 | 48.41 | 52.49 | 58.58 | 63.20 | 67.47 | 71.41 | 75.63 | 79.32 | 83.30 |       |       |       |       |       | 0.53   | 3.40               | 4.82               | 5.91             |
| 1350     | 35.36                                     | 40.11 | 44.75 | 49.19 | 53.45 | 59.37 | 63.93 | 68.12 | 71.93 | 75.94 | 79.34 | 82.87 |       |       |       |       |       | 0.55   | 3.53               | 5.01               | 6.14             |
| 1400     | 35.62                                     | 40.74 | 45.42 | 49.89 | 54.22 | 60.02 | 64.50 | 68.58 | 72.22 | 75.99 | 79.07 | 82.05 |       |       |       |       |       | 0.57   | 3.66               | 5.19               | 6.37             |
| 1450     | 36.24                                     | 41.29 | 46.00 | 50.47 | 54.61 | 60.52 | 64.91 | 68.84 | 72.28 | 75.76 | 78.48 | 80.85 |       |       |       |       |       | 0.59   | 3.79               | 5.38               | 6.60             |
| 1500     | 36.62                                     | 41.77 | 46.49 | 50.97 | 55.09 | 60.89 | 65.14 | 68.90 | 72.12 |       |       |       |       |       |       |       |       | 0.61   | 3.92               | 5.57               | 6.82             |
| 1550     | 37.23                                     | 42.17 | 46.90 | 51.35 | 55.38 | 61.10 | 65.21 | 68.75 | 71.72 |       |       |       |       |       |       |       |       | 0.63   | 4.05               | 5.75               | 7.05             |
| 1600     | 37.54                                     | 42.49 | 47.22 | 51.62 | 55.48 | 61.15 | 65.08 | 68.39 | 71.06 |       |       |       |       |       |       |       |       | 0.65   | 4.18               | 5.94               | 7.28             |
| 1650     | 37.66                                     | 42.74 | 47.43 | 51.79 | 55.62 | 61.06 | 64.76 | 67.81 | 70.16 |       |       |       |       |       |       |       |       | 0.67   | 4.31               | 6.12               | 7.51             |
| 1700     | 37.85                                     | 42.89 | 47.55 | 51.84 | 55.45 | 60.80 | 64.26 | 67.00 | 68.99 |       |       |       |       |       |       |       |       | 0.69   | 4.44               | 6.31               | 7.73             |
| 1750     | 37.93                                     | 42.97 | 47.58 | 51.78 | 55.23 | 60.36 | 63.56 | 65.96 | 67.55 |       |       |       |       |       |       |       |       | 0.71   | 4.57               | 6.49               | 7.96             |
| 1800     | 38.12                                     | 42.96 | 47.49 | 51.59 | 54.79 | 59.76 | 62.64 |       |       |       |       |       |       |       |       |       |       | 0.73   | 4.70               | 6.68               | 8.19             |
| 1850     | 37.96                                     | 42.86 | 47.31 | 51.28 | 54.23 | 58.98 | 61.53 |       |       |       |       |       |       |       |       |       |       | 0.75   | 4.84               | 6.86               | 8.42             |
| 1900     | 37.83                                     | 42.67 | 47.02 | 50.85 | 53.62 | 58.01 | 60.21 |       |       |       |       |       |       |       |       |       |       | 0.77   | 4.97               | 7.05               | 8.64             |
| 1950     | 37.64                                     | 42.39 | 46.62 | 50.30 | 52.24 | 56.87 | 58.66 |       |       |       |       |       |       |       |       |       |       | 0.79   | 5.10               | 7.23               | 8.87             |
| 2000     | 37.46                                     | 42.01 | 46.11 | 49.60 | 51.48 | 55.53 | 56.89 |       |       |       |       |       |       |       |       |       |       | 0.81   | 5.23               | 7.42               | 9.10             |
| 2050     | 37.02                                     | 41.54 | 45.48 | 48.77 | 49.80 |       |       |       |       |       |       |       |       |       |       |       |       | 0.83   | 5.36               | 7.61               | 9.33             |
| 2100     | 36.64                                     | 40.96 | 44.73 | 47.82 | 49.24 |       |       |       |       |       |       |       |       |       |       |       |       | 0.85   | 5.49               | 7.79               | 9.55             |
| 2150     | 36.01                                     | 40.29 | 43.87 | 46.71 | 48.84 |       |       |       |       |       |       |       |       |       |       |       |       | 0.87   | 5.62               | 7.98               | 9.78             |
| 2200     | 35.34                                     | 39.52 | 42.88 | 45.47 | 46.09 |       |       |       |       |       |       |       |       |       |       |       |       | 0.89   | 5.75               | 8.16               | 10.01            |

**TABLE 19 Section ZX**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |      |      |      |      |      |      |      |      |      |      |      |      | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |               |
|----------|---|------|------|------|------|------|------|------|------|------|------|------|------|--|--------------------|--------------------|---------------|
|          | 40  | 45   | 50   | 56   | 63   | 71   | 80   | 90   | 100  | 112  | 125  | 140  | 160  | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>> 1.57 |
| 700      | 0.25                                      | 0.31 | 0.35 | 0.42 | 0.49 | 0.57 | 0.66 | 0.76 | 0.85 | 0.96 | 1.01 | 1.14 | 1.31 | 0.00   | 0.02               | 0.03               | 0.04          |
| 950      | 0.31                                      | 0.37 | 0.44 | 0.53 | 0.62 | 0.72 | 0.84 | 0.96 | 1.08 | 1.22 | 1.32 | 1.46 | 1.66 | 0.01   | 0.02               | 0.04               | 0.05          |
| 1450     | 0.41                                      | 0.51 | 0.60 | 0.71 | 0.85 | 0.99 | 1.15 | 1.32 | 1.49 | 1.68 | 1.88 | 2.03 | 2.38 | 0.01   | 0.04               | 0.05               | 0.08          |
| 2850     | 0.61                                      | 0.78 | 0.94 | 1.13 | 1.34 | 1.59 | 1.85 | 2.12 | 2.40 | 2.69 | 2.96 | 3.28 | 3.68 | 0.02   | 0.07               | 0.11               | 0.16          |
| 100      | 0.05                                      | 0.06 | 0.07 | 0.08 | 0.09 | 0.11 | 0.12 | 0.15 | 0.17 | 0.19 | 0.26 | 0.34 | 0.39 | 0.00   | 0.00               | 0.00               | 0.01          |
| 200      | 0.09                                      | 0.11 | 0.12 | 0.15 | 0.18 | 0.20 | 0.24 | 0.27 | 0.31 | 0.34 | 0.37 | 0.43 | 0.55 | 0.00   | 0.01               | 0.01               | 0.01          |
| 300      | 0.12                                      | 0.16 | 0.18 | 0.21 | 0.25 | 0.28 | 0.33 | 0.37 | 0.43 | 0.49 | 0.53 | 0.58 | 0.63 | 0.00   | 0.01               | 0.01               | 0.02          |
| 400      | 0.16                                      | 0.19 | 0.23 | 0.27 | 0.32 | 0.36 | 0.42 | 0.47 | 0.54 | 0.61 | 0.66 | 0.70 | 0.80 | 0.00   | 0.01               | 0.01               | 0.02          |
| 500      | 0.19                                      | 0.23 | 0.27 | 0.32 | 0.37 | 0.44 | 0.50 | 0.58 | 0.64 | 0.73 | 0.76 | 0.86 | 0.97 | 0.00   | 0.01               | 0.02               | 0.03          |
| 600      | 0.21                                      | 0.27 | 0.32 | 0.37 | 0.43 | 0.51 | 0.59 | 0.67 | 0.75 | 0.85 | 0.86 | 1.02 | 1.13 | 0.00   | 0.02               | 0.02               | 0.03          |
| 700      | 0.25                                      | 0.31 | 0.35 | 0.42 | 0.49 | 0.57 | 0.66 | 0.76 | 0.85 | 0.96 | 1.01 | 1.14 | 1.31 | 0.00   | 0.02               | 0.03               | 0.04          |
| 800      | 0.27                                      | 0.33 | 0.40 | 0.46 | 0.54 | 0.63 | 0.73 | 0.84 | 0.95 | 1.07 | 1.16 | 1.26 | 1.46 | 0.01   | 0.02               | 0.03               | 0.05          |
| 900      | 0.29                                      | 0.36 | 0.43 | 0.51 | 0.60 | 0.69 | 0.80 | 0.92 | 1.04 | 1.18 | 1.27 | 1.40 | 1.62 | 0.01   | 0.02               | 0.03               | 0.05          |
| 1000     | 0.32                                      | 0.38 | 0.46 | 0.54 | 0.64 | 0.75 | 0.87 | 0.99 | 1.12 | 1.28 | 1.38 | 1.53 | 1.79 | 0.01   | 0.03               | 0.04               | 0.06          |
| 1100     | 0.34                                      | 0.42 | 0.50 | 0.59 | 0.69 | 0.80 | 0.94 | 1.07 | 1.21 | 1.37 | 1.49 | 1.67 | 1.95 | 0.01   | 0.03               | 0.04               | 0.06          |
| 1200     | 0.36                                      | 0.44 | 0.50 | 0.59 | 0.69 | 0.80 | 0.94 | 1.07 | 1.21 | 1.37 | 1.60 | 1.80 | 2.11 | 0.01   | 0.03               | 0.04               | 0.07          |
| 1300     | 0.37                                      | 0.47 | 0.55 | 0.67 | 0.78 | 0.92 | 1.06 | 1.22 | 1.38 | 1.56 | 1.71 | 1.90 | 2.22 | 0.01   | 0.03               | 0.05               | 0.07          |
| 1400     | 0.40                                      | 0.50 | 0.59 | 0.70 | 0.82 | 0.97 | 1.12 | 1.29 | 1.46 | 1.64 | 1.81 | 2.00 | 2.33 | 0.01   | 0.04               | 0.05               | 0.08          |
| 1500     | 0.42                                      | 0.52 | 0.62 | 0.73 | 0.87 | 1.02 | 1.19 | 1.36 | 1.53 | 1.73 | 1.92 | 2.10 | 2.44 | 0.01   | 0.04               | 0.06               | 0.09          |
| 1600     | 0.43                                      | 0.54 | 0.64 | 0.77 | 0.92 | 1.06 | 1.24 | 1.42 | 1.60 | 1.81 | 2.02 | 2.20 | 2.55 | 0.01   | 0.04               | 0.06               | 0.09          |
| 1700     | 0.45                                      | 0.57 | 0.68 | 0.80 | 0.95 | 1.12 | 1.30 | 1.49 | 1.67 | 1.90 | 2.11 | 2.30 | 2.67 | 0.01   | 0.04               | 0.06               | 0.10          |
| 1800     | 0.46                                      | 0.59 | 0.70 | 0.84 | 0.99 | 1.16 | 1.34 | 1.55 | 1.75 | 1.98 | 2.19 | 2.40 | 2.79 | 0.01   | 0.05               | 0.07               | 0.10          |
| 1900     | 0.49                                      | 0.61 | 0.72 | 0.87 | 1.03 | 1.21 | 1.40 | 1.62 | 1.82 | 2.06 | 2.28 | 2.50 | 2.90 | 0.01   | 0.05               | 0.07               | 0.11          |
| 2000     | 0.50                                      | 0.62 | 0.75 | 0.89 | 1.06 | 1.25 | 1.46 | 1.67 | 1.89 | 2.12 | 2.36 | 2.60 | 3.02 | 0.01   | 0.05               | 0.07               | 0.11          |
| 2100     | 0.51                                      | 0.64 | 0.78 | 0.93 | 1.11 | 1.30 | 1.50 | 1.73 | 1.94 | 2.20 | 2.43 | 2.71 | 3.11 | 0.02   | 0.05               | 0.08               | 0.12          |
| 2200     | 0.52                                      | 0.67 | 0.80 | 0.96 | 1.14 | 1.33 | 1.56 | 1.79 | 2.01 | 2.27 | 2.51 | 2.81 | 3.20 | 0.02   | 0.06               | 0.08               | 0.13          |
| 2300     | 0.54                                      | 0.68 | 0.82 | 0.98 | 1.18 | 1.38 | 1.60 | 1.84 | 2.08 | 2.34 | 2.58 | 2.92 | 3.29 | 0.02   | 0.06               | 0.08               | 0.13          |
| 2400     | 0.55                                      | 0.70 | 0.85 | 1.02 | 1.21 | 1.42 | 1.65 | 1.90 | 2.14 | 2.41 | 2.65 | 3.02 | 3.38 | 0.02   | 0.06               | 0.09               | 0.14          |
| 2500     | 0.57                                      | 0.72 | 0.87 | 1.04 | 1.24 | 1.46 | 1.70 | 1.95 | 2.14 | 2.47 | 2.72 | 3.08 | 3.45 | 0.02   | 0.06               | 0.09               | 0.14          |
| 2600     | 0.58                                      | 0.73 | 0.89 | 1.07 | 1.28 | 1.50 | 1.74 | 2.00 | 2.25 | 2.54 | 2.79 | 3.14 | 3.51 | 0.02   | 0.07               | 0.10               | 0.15          |
| 2700     | 0.59                                      | 0.75 | 0.90 | 1.10 | 1.30 | 1.54 | 1.79 | 2.06 | 2.31 | 2.60 | 2.86 | 3.20 | 3.58 | 0.02   | 0.07               | 0.10               | 0.15          |
| 2800     | 0.60                                      | 0.77 | 0.93 | 1.12 | 1.33 | 1.57 | 1.83 | 2.10 | 2.36 | 2.67 | 2.93 | 3.26 | 3.64 | 0.02   | 0.07               | 0.10               | 0.16          |
| 2900     | 0.61                                      | 0.78 | 0.95 | 1.14 | 1.37 | 1.60 | 1.88 | 2.15 | 2.42 | 2.72 | 2.99 | 3.32 | 3.71 | 0.02   | 0.07               | 0.11               | 0.17          |
| 3000     | 0.62                                      | 0.80 | 0.97 | 1.16 | 1.39 | 1.64 | 1.91 | 2.19 | 2.47 | 2.78 | 3.06 | 3.38 | 3.77 | 0.02   | 0.08               | 0.11               | 0.17          |
| 3100     | 0.63                                      | 0.81 | 0.98 | 1.20 | 1.42 | 1.68 | 1.95 | 2.25 | 2.52 | 2.84 | 3.13 | 3.44 | 3.84 | 0.02   | 0.08               | 0.11               | 0.18          |
| 3200     | 0.64                                      | 0.82 | 1.01 | 1.22 | 1.45 | 1.71 | 1.99 | 2.28 | 2.57 | 2.89 | 3.20 | 3.50 | 3.90 | 0.02   | 0.08               | 0.12               | 0.18          |
| 3300     | 0.66                                      | 0.84 | 1.03 | 1.24 | 1.48 | 1.74 | 2.03 | 2.33 | 2.62 | 2.94 | 3.23 | 3.54 | 3.91 | 0.02   | 0.08               | 0.12               | 0.19          |
| 3400     | 0.66                                      | 0.86 | 1.04 | 1.27 | 1.50 | 1.77 | 2.07 | 2.37 | 2.67 | 2.99 | 3.26 | 3.58 | 3.92 | 0.02   | 0.09               | 0.13               | 0.19          |
| 3500     | 0.67                                      | 0.87 | 1.06 | 1.28 | 1.54 | 1.81 | 2.10 | 2.42 | 2.71 | 3.04 | 3.29 | 3.61 | 3.92 | 0.02   | 0.09               | 0.13               | 0.20          |
| 3600     | 0.68                                      | 0.88 | 1.07 | 1.30 | 1.56 | 1.84 | 2.14 | 2.45 | 2.75 | 3.08 | 3.32 | 3.65 | 3.93 | 0.02   | 0.09               | 0.13               | 0.21          |
| 3700     | 0.69                                      | 0.89 | 1.10 | 1.32 | 1.58 | 1.86 | 2.17 | 2.50 | 2.79 | 3.13 | 3.37 | 3.71 | 3.92 | 0.03   | 0.09               | 0.14               | 0.21          |
| 3800     | 0.69                                      | 0.90 | 1.11 | 1.34 | 1.60 | 1.90 | 2.20 | 2.53 | 2.84 | 3.18 | 3.42 | 3.78 | 3.92 | 0.03   | 0.10               | 0.14               | 0.22          |
| 3900     | 0.70                                      | 0.92 | 1.12 | 1.37 | 1.63 | 1.92 | 2.24 | 2.57 | 2.87 | 3.21 | 3.47 | 3.84 | 3.91 | 0.03   | 0.10               | 0.14               | 0.22          |
| 4000     | 0.71                                      | 0.93 | 1.14 | 1.38 | 1.65 | 1.95 | 2.27 | 2.60 | 2.92 | 3.25 | 3.52 | 3.90 | 3.90 | 0.03   | 0.10               | 0.15               | 0.23          |
| 4100     | 0.71                                      | 0.94 | 1.15 | 1.40 | 1.67 | 1.98 | 2.31 | 2.63 | 2.95 | 3.29 | 3.52 | 3.88 |      | 0.03   | 0.10               | 0.15               | 0.23          |
| 4200     | 0.72                                      | 0.95 | 1.16 | 1.41 | 1.70 | 2.01 | 2.33 | 2.67 | 2.98 | 3.32 | 3.52 | 3.85 |      | 0.03   | 0.11               | 0.15               | 0.24          |
| 4300     | 0.72                                      | 0.96 | 1.18 | 1.44 | 1.72 | 2.03 | 2.36 | 2.70 | 3.02 | 3.36 | 3.51 | 3.83 |      | 0.03   | 0.11               | 0.16               | 0.25          |
| 4400     | 0.73                                      | 0.97 | 1.19 | 1.45 | 1.74 | 2.06 | 2.38 | 2.73 | 3.05 | 3.39 | 3.51 | 3.80 |      | 0.03   | 0.11               | 0.16               | 0.25          |
| 4500     | 0.73                                      | 0.97 | 1.21 | 1.47 | 1.76 | 2.08 | 2.42 | 2.76 | 3.07 | 3.41 | 3.51 | 3.78 |      | 0.03   | 0.12               | 0.17               | 0.26          |
| 4600     | 0.75                                      | 0.98 | 1.22 | 1.48 | 1.79 | 2.10 | 2.44 | 2.79 | 3.11 | 3.45 | 3.51 | 3.75 |      | 0.03   | 0.12               | 0.17               | 0.26          |
| 4700     | 0.75                                      | 0.99 | 1.23 | 1.50 | 1.80 | 2.12 | 2.46 | 2.81 | 3.13 | 3.47 | 3.51 | 3.73 |      | 0.03   | 0.12               | 0.17               | 0.27          |
| 4800     | 0.76                                      | 1.01 | 1.24 | 1.51 | 1.82 | 2.15 | 2.49 | 2.84 | 3.16 | 3.49 | 3.50 | 3.70 |      | 0.03   | 0.12               | 0.18               | 0.27          |
| 4900     | 0.76                                      | 1.01 | 1.25 | 1.53 | 1.84 | 2.17 | 2.52 | 2.87 | 3.19 | 3.51 | 3.50 | 3.68 |      | 0.03   | 0.13               | 0.18               | 0.28          |
| 5000     | 0.77                                      | 1.02 | 1.27 | 1.55 | 1.85 | 2.19 | 2.54 | 2.89 | 3.21 | 3.54 | 3.60 | 3.65 |      | 0.03   | 0.13               | 0.18               | 0.29          |
| 5100     | 0.77                                      | 1.03 | 1.28 | 1.56 | 1.88 | 2.20 | 2.55 | 2.92 | 3.23 | 3.56 | 3.57 | 3.58 |      | 0.03   | 0.13               | 0.19               | 0.29          |
| 5200     | 0.77                                      | 1.03 | 1.29 | 1.57 | 1.89 | 2.23 | 2.58 | 2.94 | 3.24 | 3.57 |      |      |      | 0.04   | 0.13               | 0.19               | 0.30          |
| 5300     | 0.78                                      | 1.04 | 1.29 | 1.58 | 1.90 | 2.25 | 2.60 | 2.95 | 3.27 | 3.58 |      |      |      | 0.04   | 0.14               | 0.20               | 0.30          |
| 5400     | 0.78                                      | 1.05 | 1.30 | 1.59 | 1.92 | 2.26 | 2.62 | 2.97 | 3.29 | 3.59 |      |      |      | 0.04   | 0.14               | 0.20               | 0.31          |
| 5500     | 0.78                                      | 1.05 | 1.31 | 1.60 | 1.93 | 2.28 | 2.63 | 2.99 | 3.30 | 3.60 |      |      |      | 0.04   | 0.14               | 0.20               | 0.31          |
| 5600     | 0.78                                      | 1.06 | 1.32 | 1.62 | 1.94 | 2.29 | 2.66 |      |      |      |      |      |      |  |                    |                    |               |

**TABLE 20 Section AX**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |                  |
|----------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|--|--------------------|--------------------|------------------|
|          | 63  | 71   | 80   | 90   | 95   | 100  | 106  | 112  | 118  | 125  | 132  | 140  | 150  | 160  | 180  | 200   | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>><br>1.57 |
| 700      | 0.70                                      | 0.90 | 1.11 | 1.35 | 1.47 | 1.59 | 1.72 | 1.86 | 1.98 | 2.14 | 2.30 | 2.47 | 2.68 | 2.89 | 3.31 | 3.78  | 0.02   | 0.08               | 0.12               | 0.16             |
| 950      | 0.86                                      | 1.11 | 1.39 | 1.69 | 1.84 | 1.98 | 2.16 | 2.33 | 2.51 | 2.71 | 2.90 | 3.12 | 3.39 | 3.65 | 4.18 | 4.81  | 0.03   | 0.11               | 0.16               | 0.24             |
| 1450     | 1.09                                      | 1.45 | 1.85 | 2.27 | 2.48 | 2.69 | 2.93 | 3.17 | 3.40 | 3.68 | 3.95 | 4.25 | 4.62 | 4.98 | 5.68 | 6.84  | 0.04   | 0.17               | 0.24               | 0.37             |
| 2850     | 1.46                                      | 2.06 | 2.70 | 3.39 | 3.73 | 4.05 | 4.43 | 4.81 | 5.17 | 5.58 | 5.96 | 6.39 | 6.90 | 7.38 | 8.23 | 10.92 | 0.09   | 0.33               | 0.47               | 0.73             |
| 100      | 0.16                                      | 0.20 | 0.24 | 0.28 | 0.30 | 0.33 | 0.36 | 0.38 | 0.41 | 0.43 | 0.46 | 0.49 | 0.54 | 0.58 | 0.66 | 0.75  | 0.00   | 0.01               | 0.02               | 0.03             |
| 200      | 0.28                                      | 0.35 | 0.42 | 0.50 | 0.55 | 0.59 | 0.63 | 0.68 | 0.72 | 0.78 | 0.83 | 0.89 | 0.97 | 1.04 | 1.19 | 1.26  | 0.01   | 0.02               | 0.03               | 0.05             |
| 300      | 0.39                                      | 0.48 | 0.59 | 0.70 | 0.76 | 0.82 | 0.88 | 0.95 | 1.02 | 1.09 | 1.17 | 1.25 | 1.35 | 1.46 | 1.67 | 1.72  | 0.01   | 0.03               | 0.05               | 0.08             |
| 400      | 0.47                                      | 0.60 | 0.74 | 0.88 | 0.96 | 1.03 | 1.11 | 1.20 | 1.28 | 1.38 | 1.47 | 1.59 | 1.72 | 1.85 | 2.11 | 2.26  | 0.01   | 0.05               | 0.07               | 0.10             |
| 500      | 0.56                                      | 0.70 | 0.87 | 1.05 | 1.13 | 1.22 | 1.32 | 1.43 | 1.53 | 1.65 | 1.76 | 1.89 | 2.06 | 2.22 | 2.53 | 2.98  | 0.02   | 0.06               | 0.08               | 0.13             |
| 600      | 0.63                                      | 0.81 | 1.00 | 1.21 | 1.30 | 1.41 | 1.52 | 1.65 | 1.76 | 1.90 | 2.04 | 2.18 | 2.37 | 2.56 | 2.93 | 3.69  | 0.02   | 0.07               | 0.10               | 0.15             |
| 700      | 0.70                                      | 0.90 | 1.11 | 1.35 | 1.47 | 1.59 | 1.72 | 1.86 | 1.98 | 2.14 | 2.30 | 2.47 | 2.68 | 2.89 | 3.31 | 3.78  | 0.02   | 0.08               | 0.12               | 0.18             |
| 800      | 0.77                                      | 0.99 | 1.23 | 1.49 | 1.62 | 1.75 | 1.90 | 2.05 | 2.21 | 2.37 | 2.54 | 2.74 | 2.97 | 3.21 | 3.66 | 4.30  | 0.02   | 0.09               | 0.13               | 0.21             |
| 900      | 0.83                                      | 1.07 | 1.33 | 1.63 | 1.76 | 1.91 | 2.08 | 2.25 | 2.40 | 2.59 | 2.78 | 2.99 | 3.26 | 3.51 | 4.01 | 4.70  | 0.03   | 0.10               | 0.15               | 0.23             |
| 1000     | 0.88                                      | 1.14 | 1.44 | 1.75 | 1.91 | 2.06 | 2.25 | 2.43 | 2.60 | 2.81 | 3.01 | 3.24 | 3.53 | 3.80 | 4.35 | 5.10  | 0.03   | 0.11               | 0.17               | 0.26             |
| 1100     | 0.93                                      | 1.22 | 1.53 | 1.88 | 2.05 | 2.21 | 2.40 | 2.60 | 2.79 | 3.01 | 3.23 | 3.48 | 3.78 | 4.08 | 4.66 | 5.50  | 0.03   | 0.13               | 0.18               | 0.28             |
| 1200     | 0.99                                      | 1.29 | 1.63 | 2.00 | 2.17 | 2.35 | 2.56 | 2.77 | 2.97 | 3.21 | 3.44 | 3.71 | 4.03 | 4.35 | 4.97 | 5.90  | 0.04   | 0.14               | 0.20               | 0.31             |
| 1300     | 1.03                                      | 1.35 | 1.72 | 2.11 | 2.30 | 2.49 | 2.71 | 2.93 | 3.15 | 3.40 | 3.65 | 3.93 | 4.27 | 4.61 | 5.26 | 6.25  | 0.04   | 0.15               | 0.22               | 0.33             |
| 1400     | 1.07                                      | 1.42 | 1.81 | 2.22 | 2.42 | 2.63 | 2.86 | 3.09 | 3.32 | 3.59 | 3.85 | 4.15 | 4.50 | 4.86 | 5.54 | 6.60  | 0.04   | 0.16               | 0.23               | 0.36             |
| 1500     | 1.11                                      | 1.48 | 1.89 | 2.32 | 2.53 | 2.75 | 2.99 | 3.24 | 3.49 | 3.77 | 4.04 | 4.35 | 4.73 | 5.09 | 5.81 | 6.95  | 0.05   | 0.17               | 0.25               | 0.38             |
| 1600     | 1.16                                      | 1.54 | 1.96 | 2.43 | 2.65 | 2.87 | 3.13 | 3.39 | 3.64 | 3.94 | 4.22 | 4.55 | 4.95 | 5.32 | 6.07 | 7.30  | 0.05   | 0.18               | 0.26               | 0.41             |
| 1700     | 1.19                                      | 1.60 | 2.04 | 2.52 | 2.75 | 2.98 | 3.27 | 3.53 | 3.80 | 4.11 | 4.40 | 4.74 | 5.15 | 5.54 | 6.31 | 7.64  | 0.05   | 0.20               | 0.28               | 0.44             |
| 1800     | 1.22                                      | 1.65 | 2.11 | 2.61 | 2.86 | 3.10 | 3.38 | 3.66 | 3.95 | 4.26 | 4.57 | 4.92 | 5.34 | 5.75 | 6.54 | 7.98  | 0.05   | 0.21               | 0.30               | 0.46             |
| 1900     | 1.25                                      | 1.70 | 2.18 | 2.70 | 2.96 | 3.21 | 3.51 | 3.80 | 4.08 | 4.41 | 4.74 | 5.09 | 5.53 | 5.95 | 6.76 | 8.31  | 0.06   | 0.22               | 0.31               | 0.49             |
| 2000     | 1.28                                      | 1.74 | 2.25 | 2.79 | 3.06 | 3.32 | 3.62 | 3.93 | 4.22 | 4.56 | 4.89 | 5.26 | 5.71 | 6.14 | 6.97 | 8.65  | 0.06   | 0.23               | 0.33               | 0.51             |
| 2100     | 1.31                                      | 1.79 | 2.31 | 2.88 | 3.15 | 3.41 | 3.74 | 4.04 | 4.35 | 4.70 | 5.04 | 5.42 | 5.88 | 6.33 | 7.17 | 8.95  | 0.06   | 0.24               | 0.35               | 0.54             |
| 2200     | 1.33                                      | 1.83 | 2.37 | 2.95 | 3.23 | 3.52 | 3.84 | 4.16 | 4.47 | 4.84 | 5.19 | 5.58 | 6.05 | 6.50 | 7.35 | 9.25  | 0.07   | 0.25               | 0.36               | 0.56             |
| 2300     | 1.35                                      | 1.87 | 2.43 | 3.02 | 3.32 | 3.61 | 3.95 | 4.27 | 4.60 | 4.97 | 5.32 | 5.72 | 6.21 | 6.67 | 7.52 | 9.55  | 0.07   | 0.26               | 0.38               | 0.59             |
| 2400     | 1.38                                      | 1.91 | 2.49 | 3.10 | 3.40 | 3.70 | 4.04 | 4.38 | 4.71 | 5.09 | 5.46 | 5.86 | 6.35 | 6.81 | 7.68 | 9.85  | 0.07   | 0.28               | 0.40               | 0.62             |
| 2500     | 1.40                                      | 1.94 | 2.54 | 3.17 | 3.48 | 3.78 | 4.14 | 4.48 | 4.82 | 5.21 | 5.58 | 6.00 | 6.49 | 6.96 | 7.82 | 10.08 | 0.08   | 0.29               | 0.41               | 0.64             |
| 2600     | 1.42                                      | 1.97 | 2.58 | 3.23 | 3.56 | 3.86 | 4.23 | 4.58 | 4.92 | 5.32 | 5.70 | 6.12 | 6.62 | 7.09 | 7.96 | 10.30 | 0.08   | 0.30               | 0.43               | 0.67             |
| 2700     | 1.44                                      | 2.01 | 2.64 | 3.31 | 3.62 | 3.95 | 4.32 | 4.67 | 5.03 | 5.43 | 5.81 | 6.24 | 6.74 | 7.21 | 8.07 | 10.53 | 0.08   | 0.31               | 0.45               | 0.69             |
| 2800     | 1.45                                      | 2.04 | 2.68 | 3.36 | 3.70 | 4.02 | 4.40 | 4.77 | 5.12 | 5.52 | 5.91 | 6.34 | 6.85 | 7.33 | 8.18 | 10.75 | 0.09   | 0.32               | 0.46               | 0.72             |
| 2900     | 1.46                                      | 2.07 | 2.72 | 3.42 | 3.76 | 4.08 | 4.47 | 4.85 | 5.21 | 5.62 | 6.02 | 6.45 | 6.95 | 7.42 | 8.27 | 10.98 | 0.09   | 0.33               | 0.48               | 0.74             |
| 3000     | 1.47                                      | 2.09 | 2.76 | 3.48 | 3.82 | 4.16 | 4.55 | 4.92 | 5.29 | 5.71 | 6.11 | 6.54 | 7.05 | 7.52 | 8.35 | 11.20 | 0.09   | 0.34               | 0.50               | 0.77             |
| 3100     | 1.48                                      | 2.12 | 2.80 | 3.53 | 3.87 | 4.22 | 4.62 | 5.00 | 5.38 | 5.80 | 6.20 | 6.63 | 7.13 | 7.60 | 8.41 | 11.43 | 0.09   | 0.36               | 0.51               | 0.80             |
| 3200     | 1.49                                      | 2.14 | 2.84 | 3.58 | 3.94 | 4.28 | 4.68 | 5.07 | 5.45 | 5.87 | 6.27 | 6.70 | 7.21 | 7.68 | 8.46 | 11.65 | 0.10   | 0.37               | 0.53               | 0.82             |
| 3300     | 1.49                                      | 2.15 | 2.87 | 3.62 | 3.99 | 4.34 | 4.75 | 5.13 | 5.51 | 5.94 | 6.34 | 6.77 | 7.28 | 7.73 | 8.49 | 11.71 | 0.10   | 0.80               | 0.55               | 0.85             |
| 3400     | 1.50                                      | 2.17 | 2.90 | 3.66 | 4.03 | 4.39 | 4.80 | 5.20 | 5.58 | 6.01 | 6.41 | 6.84 | 7.33 | 7.78 | 8.52 | 11.78 | 0.10   | 0.39               | 0.56               | 0.87             |
| 3500     | 1.50                                      | 2.19 | 2.93 | 3.71 | 4.07 | 4.44 | 4.85 | 5.25 | 5.64 | 6.06 | 6.47 | 6.89 | 7.38 | 7.81 | 8.52 |       | 0.11   | 0.40               | 0.58               | 0.90             |
| 3600     | 1.50                                      | 2.21 | 2.95 | 3.74 | 4.12 | 4.48 | 4.90 | 5.30 | 5.69 | 6.11 | 6.51 | 6.94 | 7.41 | 7.84 |      |       | 0.11   | 0.41               | 0.60               | 0.92             |
| 3700     | 1.50                                      | 2.22 | 2.98 | 3.78 | 4.16 | 4.53 | 4.95 | 5.36 | 5.73 | 6.16 | 6.55 | 6.97 | 7.44 | 7.85 |      |       | 0.11   | 0.42               | 0.61               | 0.95             |
| 3800     | 1.50                                      | 2.23 | 3.00 | 3.81 | 4.19 | 4.56 | 4.99 | 5.40 | 5.78 | 6.20 | 6.59 | 7.00 | 7.47 | 7.85 |      |       | 0.12   | 0.44               | 0.63               | 0.98             |
| 3900     | 1.50                                      | 2.24 | 3.02 | 3.83 | 4.22 | 4.60 | 5.02 | 5.43 | 5.82 | 6.24 | 6.63 | 7.02 | 7.47 | 7.84 |      |       | 0.12   | 0.45               | 0.65               | 1.00             |
| 4000     | 1.50                                      | 2.25 | 3.03 | 3.86 | 4.25 | 4.62 | 5.05 | 5.46 | 5.84 | 6.26 | 6.65 | 7.04 | 7.47 | 7.82 |      |       | 0.12   | 0.46               | 0.66               | 1.03             |
| 4100     | 1.49                                      | 2.25 | 3.05 | 3.89 | 4.27 | 4.65 | 5.08 | 5.48 | 5.87 | 6.28 | 6.66 | 7.05 | 7.46 |      |      |       | 0.12   | 0.47               | 0.68               | 1.05             |
| 4200     | 1.48                                      | 2.25 | 3.07 | 3.90 | 4.29 | 4.67 | 5.10 | 5.50 | 5.88 | 6.29 | 6.66 | 7.04 | 7.43 |      |      |       | 0.13   | 0.48               | 0.70               | 1.08             |
| 4300     | 1.48                                      | 2.25 | 3.07 | 3.92 | 4.32 | 4.69 | 5.12 | 5.52 | 5.90 | 6.30 | 6.66 | 7.02 | 7.39 |      |      |       | 0.13   | 0.49               | 0.71               | 1.10             |
| 4400     | 1.47                                      | 2.25 | 3.08 | 3.93 | 4.33 | 4.70 | 5.13 | 5.53 | 5.90 | 6.30 | 6.65 | 6.99 | 7.35 |      |      |       | 0.13   | 0.51               | 0.73               | 1.13             |
| 4500     | 1.45                                      | 2.25 | 3.09 | 3.94 | 4.34 | 4.71 | 5.15 | 5.53 | 5.90 | 6.29 | 6.63 | 6.96 | 7.29 |      |      |       | 0.14   | 0.52               | 0.74               | 1.15             |
| 4600     | 1.44                                      | 2.25 | 3.09 | 3.95 | 4.35 | 4.73 | 5.15 | 5.53 | 5.90 | 6.28 | 6.60 |      |      |      |      |       | 0.14   | 0.53               | 0.76               | 1.18             |
| 4700     | 1.43                                      | 2.24 | 3.09 | 3.95 | 4.35 | 4.73 | 5.15 | 5.53 | 5.88 | 6.25 | 6.57 |      |      |      |      |       | 0.14   | 0.54               | 0.78               | 1.21             |
| 4800     | 1.41                                      | 2.23 | 3.08 | 3.95 | 4.35 | 4.73 | 5.13 | 5.52 | 5.87 | 6.23 | 6.53 |      |      |      |      |       | 0.15   | 0.55               | 0.79               | 1.23             |
| 4900     | 1.40                                      | 2.22 | 3.08 | 3.95 | 4.34 | 4.71 | 5.12 | 5.50 | 5.84 | 6.18 | 6.48 |      |      |      |      |       | 0.15   | 0.56               | 0.81               | 1.26             |
| 5000     | 1.38                                      | 2.21 | 3.07 | 3.94 | 4.34 | 4.70 | 5.11 | 5.48 | 5.81 | 6.14 | 6.42 |      |      |      |      |       | 0.15   | 0.57               | 0.83               | 1.28             |
| 5100     | 1.35                                      | 2.19 | 3.06 | 3.93 | 4.33 | 4.68 | 5.09 | 5.45 | 5.78 |      |      |      |      |      |      |       | 0.16   | 0.59               | 0.84               | 1.31             |
| 5200     | 1.33                                      | 2.17 | 3.05 | 3.92 | 4.31 | 4.67 | 5.07 | 5.42 | 5.73 |      |      |      |      |      |      |       | 0.16   | 0.60               | 0.86               | 1.33             |
| 5300     | 1.30                                      | 2.15 | 3.03 | 3.90 | 4.28 | 4.64 | 5.04 | 5.39 | 5.68 |      |      |      |      |      |      |       | 0.16   | 0.61               | 0.88               | 1.36             |
| 5400     | 1.28                                      | 2.14 | 3.01 | 3.87 | 4.26 | 4.62 | 5.00 | 5.33 | 5.62 |      |      |      |      |      |      |       | 0.16   | 0.62               | 0.89               | 1.39             |
| 5500     | 1.26                                      | 2.11 | 2.99 | 3.85 | 4.23 | 4.59 | 4.96 | 5.28 | 5.55 |      |      |      |      |      |      |       | 0.17   | 0.63               | 0.91               | 1.41             |
| 5600     | 1.23                                      | 2.09 | 2.97 | 3.82 | 4.20 | 4.55 | 4.91 |      |      |      |      |      |      |      |      |       | 0.17   | 0.64               | 0.93               | 1.44             |
| 5700     | 1.20                                      | 2.07 | 2.94 | 3.80 | 4.17 | 4.50 | 4.86 |      |      |      |      |      |      |      |      |       | 0.17   | 0.65               | 0.94               | 1.46             |
| 5800     | 1.17                                      | 2.04 | 2.92 | 3.76 | 4.13 | 4.46 | 4.81 |      |      |      |      |      |      |      |      |       | 0.18   | 0.67               | 0.96               | 1.49             |
| 5900     | 1.13                                      | 2.01 | 2.89 | 3.73 | 4.08 | 4.41 | 4.75 |      |      |      |      |      |      |      |      |       | 0.18   | 0.68               | 0.98               | 1.51             |
| 6000     | 1.10                                      | 1.97 | 2.86 | 3.69 | 4.04 | 4.36 | 4.68 |      |      |      |      |      |      |      |      |       | 0.18   | 0.69               | 0.99               | 1.54             |

**TABLE 21 Section BX**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |                  |
|----------|---|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--------------------|--------------------|------------------|
|          | 90  | 100  | 106  | 112  | 118  | 125  | 132  | 140  | 160   | 180   | 190   | 200   | 212   | 224   | 250   | 280   | 315   | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>><br>1.57 |
| 700      | 1.77                                      | 2.11 | 2.30 | 2.49 | 2.69 | 2.91 | 3.12 | 3.37 | 3.98  | 4.57  | 4.85  | 5.15  | 5.48  | 5.82  | 6.53  | 7.33  | 8.95  | 0.03   | 0.12               | 0.18               | 0.28             |
| 950      | 2.22                                      | 2.64 | 2.89 | 3.14 | 3.38 | 3.66 | 3.95 | 4.26 | 5.03  | 5.78  | 6.14  | 6.51  | 6.93  | 7.35  | 8.24  | 9.22  | 11.40 | 0.04   | 0.17               | 0.24               | 0.37             |
| 1450     | 2.96                                      | 3.56 | 3.91 | 4.25 | 4.59 | 4.98 | 5.37 | 5.80 | 6.85  | 7.85  | 8.35  | 8.82  | 9.38  | 9.92  | 11.05 | 12.24 | 15.31 | 0.07   | 0.26               | 0.37               | 0.57             |
| 2850     | 4.36                                      | 5.31 | 5.87 | 6.41 | 6.93 | 7.52 | 8.09 | 8.72 | 10.15 | 11.40 | 11.96 | 12.46 | 13.01 | 13.46 | 14.17 |       |       | 0.13   | 0.5                | 0.72               | 1.12             |
| 100      | 0.38                                      | 0.44 | 0.47 | 0.51 | 0.55 | 0.59 | 0.63 | 0.68 | 0.80  | 0.91  | 0.97  | 1.02  | 1.09  | 1.16  | 1.30  | 1.46  | 1.52  | 0  | 0.02               | 0.03               | 0.04             |
| 200      | 0.67                                      | 0.79 | 0.85 | 0.91 | 0.99 | 1.06 | 1.13 | 1.22 | 1.44  | 1.64  | 1.74  | 1.85  | 1.96  | 2.09  | 2.34  | 2.64  | 2.70  | 0.01   | 0.04               | 0.05               | 0.08             |
| 300      | 0.93                                      | 1.09 | 1.19 | 1.28 | 1.38 | 1.48 | 1.59 | 1.71 | 2.01  | 2.30  | 2.45  | 2.59  | 2.76  | 2.93  | 3.30  | 3.71  | 3.78  | 0.01   | 0.05               | 0.08               | 0.12             |
| 400      | 1.17                                      | 1.37 | 1.49 | 1.61 | 1.73 | 1.87 | 2.01 | 2.16 | 2.54  | 2.92  | 3.10  | 3.29  | 3.50  | 3.72  | 4.17  | 4.69  | 5.57  | 0.02   | 0.07               | 0.1                | 0.16             |
| 500      | 1.39                                      | 1.63 | 1.77 | 1.92 | 2.07 | 2.24 | 2.39 | 2.58 | 3.05  | 3.50  | 3.72  | 3.94  | 4.20  | 4.45  | 5.00  | 5.62  | 6.74  | 0.02   | 0.09               | 0.13               | 0.2              |
| 600      | 1.59                                      | 1.88 | 2.05 | 2.22 | 2.38 | 2.57 | 2.77 | 2.98 | 3.52  | 4.04  | 4.29  | 4.56  | 4.85  | 5.16  | 5.79  | 6.50  | 7.90  | 0.03   | 0.11               | 0.15               | 0.24             |
| 700      | 1.77                                      | 2.11 | 2.30 | 2.49 | 2.69 | 2.91 | 3.12 | 3.37 | 3.98  | 4.57  | 4.85  | 5.15  | 5.48  | 5.82  | 6.53  | 7.33  | 8.95  | 0.03   | 0.12               | 0.18               | 0.28             |
| 800      | 1.96                                      | 2.33 | 2.54 | 2.76 | 2.97 | 3.21 | 3.47 | 3.74 | 4.41  | 5.07  | 5.39  | 5.70  | 6.08  | 6.46  | 7.23  | 8.12  | 10.00 | 0.04   | 0.14               | 0.2                | 0.32             |
| 900      | 2.13                                      | 2.54 | 2.78 | 3.01 | 3.24 | 3.52 | 3.79 | 4.08 | 4.83  | 5.54  | 5.90  | 6.25  | 6.66  | 7.06  | 7.92  | 8.86  | 10.91 | 0.04   | 0.16               | 0.23               | 0.35             |
| 1000     | 2.30                                      | 2.74 | 3.00 | 3.26 | 3.52 | 3.81 | 4.10 | 4.43 | 5.23  | 6.01  | 6.38  | 6.76  | 7.20  | 7.64  | 8.56  | 9.57  | 11.83 | 0.05   | 0.18               | 0.25               | 0.39             |
| 1100     | 2.46                                      | 2.93 | 3.21 | 3.50 | 3.77 | 4.08 | 4.40 | 4.76 | 5.62  | 6.45  | 6.86  | 7.26  | 7.73  | 8.19  | 9.17  | 10.24 | 12.74 | 0.05   | 0.19               | 0.28               | 0.43             |
| 1200     | 2.61                                      | 3.12 | 3.42 | 3.72 | 4.01 | 4.36 | 4.68 | 5.06 | 5.99  | 6.88  | 7.31  | 7.73  | 8.23  | 8.72  | 9.74  | 10.86 | 13.65 | 0.06   | 0.21               | 0.31               | 0.47             |
| 1300     | 2.75                                      | 3.30 | 3.62 | 3.94 | 4.25 | 4.61 | 4.97 | 5.37 | 6.34  | 7.28  | 7.74  | 8.18  | 8.70  | 9.22  | 10.29 | 11.45 | 14.30 | 0.06   | 0.23               | 0.33               | 0.51             |
| 1400     | 2.84                                      | 3.48 | 3.81 | 4.15 | 4.47 | 4.86 | 5.24 | 5.66 | 6.69  | 7.67  | 8.15  | 8.61  | 9.16  | 9.69  | 10.79 | 11.99 | 14.95 | 0.07   | 0.25               | 0.36               | 0.55             |
| 1500     | 3.02                                      | 3.63 | 3.99 | 4.35 | 4.69 | 5.10 | 5.49 | 5.93 | 7.01  | 8.04  | 8.54  | 9.03  | 9.60  | 10.14 | 11.28 | 12.48 | 15.60 | 0.07   | 0.26               | 0.38               | 0.59             |
| 1600     | 3.16                                      | 3.79 | 4.17 | 4.55 | 4.90 | 5.33 | 5.74 | 6.21 | 7.33  | 8.40  | 8.91  | 9.42  | 10.00 | 10.56 | 11.73 | 12.95 | 16.25 | 0.07   | 0.28               | 0.41               | 0.63             |
| 1700     | 3.28                                      | 3.95 | 4.35 | 4.74 | 5.11 | 5.55 | 5.99 | 6.47 | 7.63  | 8.74  | 9.27  | 9.79  | 10.38 | 10.96 | 12.14 | 13.36 | 16.64 | 0.08   | 0.3                | 0.43               | 0.67             |
| 1800     | 3.39                                      | 4.10 | 4.50 | 4.91 | 5.31 | 5.76 | 6.22 | 6.71 | 7.92  | 9.06  | 9.61  | 10.13 | 10.74 | 11.33 | 12.52 | 13.73 | 17.03 | 0.08   | 0.32               | 0.46               | 0.71             |
| 1900     | 3.51                                      | 4.24 | 4.66 | 5.08 | 5.50 | 5.97 | 6.44 | 6.95 | 8.20  | 9.37  | 9.92  | 10.47 | 11.09 | 11.68 | 12.86 | 14.05 | 17.41 | 0.09   | 0.33               | 0.48               | 0.75             |
| 2000     | 3.62                                      | 4.38 | 4.82 | 5.25 | 5.68 | 6.16 | 6.65 | 7.18 | 8.46  | 9.66  | 10.23 | 10.77 | 11.39 | 11.99 | 13.17 | 14.32 | 17.80 | 0.09   | 0.35               | 0.51               | 0.79             |
| 2100     | 3.72                                      | 4.50 | 4.97 | 5.41 | 5.85 | 6.35 | 6.85 | 7.40 | 8.72  | 9.93  | 10.50 | 11.06 | 11.69 | 12.27 | 13.44 | 14.55 | 17.78 | 0.1  | 0.37               | 0.53               | 0.83             |
| 2200     | 3.82                                      | 4.63 | 5.10 | 5.57 | 6.02 | 6.54 | 7.05 | 7.60 | 8.95  | 10.19 | 10.76 | 11.32 | 11.95 | 12.54 | 13.67 | 14.72 | 17.75 | 0.1  | 0.39               | 0.56               | 0.87             |
| 2300     | 3.92                                      | 4.75 | 5.24 | 5.71 | 6.17 | 6.71 | 7.22 | 7.80 | 9.17  | 10.43 | 11.00 | 11.56 | 12.18 | 12.77 | 13.86 | 14.85 | 17.73 | 0.11   | 0.41               | 0.58               | 0.91             |
| 2400     | 4.01                                      | 4.86 | 5.37 | 5.85 | 6.33 | 6.88 | 7.40 | 7.99 | 9.38  | 10.65 | 11.22 | 11.78 | 12.40 | 12.97 | 14.02 | 14.91 | 17.70 | 0.11   | 0.42               | 0.61               | 0.95             |
| 2500     | 4.10                                      | 4.98 | 5.48 | 5.99 | 6.48 | 7.04 | 7.57 | 8.17 | 9.58  | 10.85 | 11.42 | 11.97 | 12.58 | 13.14 | 14.13 | 14.93 |       | 0.12   | 0.44               | 0.64               | 0.99             |
| 2600     | 4.18                                      | 5.08 | 5.60 | 6.11 | 6.62 | 7.18 | 7.73 | 8.34 | 9.75  | 11.03 | 11.60 | 12.15 | 12.74 | 13.27 | 14.20 |       |       | 0.13   | 0.46               | 0.66               | 1.02             |
| 2700     | 4.25                                      | 5.18 | 5.71 | 6.24 | 6.74 | 7.32 | 7.89 | 8.49 | 9.92  | 11.19 | 11.77 | 12.30 | 12.86 | 13.37 | 14.23 |       |       | 0.13   | 0.48               | 0.69               | 1.06             |
| 2800     | 4.33                                      | 5.27 | 5.82 | 6.35 | 6.87 | 7.46 | 8.02 | 8.64 | 10.08 | 11.34 | 11.91 | 12.41 | 12.97 | 13.44 | 14.21 |       |       | 0.14   | 0.49               | 0.71               | 1.1              |
| 2900     | 4.40                                      | 5.36 | 5.91 | 6.46 | 6.98 | 7.58 | 8.15 | 8.78 | 10.22 | 11.47 | 12.01 | 12.52 | 13.04 | 13.48 | 14.14 |       |       | 0.14   | 0.51               | 0.74               | 1.14             |
| 3000     | 4.46                                      | 5.44 | 6.01 | 6.56 | 7.10 | 7.70 | 8.27 | 8.90 | 10.34 | 11.57 | 12.11 | 12.59 | 13.07 | 13.48 | 14.04 |       |       | 0.15   | 0.53               | 0.76               | 1.18             |
| 3100     | 4.52                                      | 5.52 | 6.10 | 6.66 | 7.19 | 7.80 | 8.39 | 9.02 | 10.46 | 11.67 | 12.18 | 12.63 |       |       |       |       |       | 0.15   | 0.55               | 0.79               | 1.22             |
| 3200     | 4.58                                      | 5.60 | 6.17 | 6.74 | 7.29 | 7.91 | 8.49 | 9.12 | 10.55 | 11.73 | 12.22 | 12.65 |       |       |       |       |       | 0.15   | 0.56               | 0.81               | 1.26             |
| 3300     | 4.63                                      | 5.66 | 6.26 | 6.83 | 7.38 | 7.99 | 8.58 | 9.22 | 10.63 | 11.78 | 12.24 | 12.64 |       |       |       |       |       | 0.16   | 0.58               | 0.84               | 1.3              |
| 3400     | 4.68                                      | 5.72 | 6.32 | 6.90 | 7.46 | 8.07 | 8.66 | 9.30 | 10.70 | 11.80 | 12.24 | 12.60 |       |       |       |       |       | 0.16   | 0.6                | 0.86               | 1.34             |
| 3500     | 4.73                                      | 5.79 | 6.38 | 6.97 | 7.53 | 8.15 | 8.74 | 9.38 | 10.74 | 11.80 | 12.21 | 12.54 |       |       |       |       |       | 0.17   | 0.62               | 0.89               | 1.38             |
| 3600     | 4.77                                      | 5.84 | 6.45 | 7.04 | 7.59 | 8.22 | 8.81 | 9.43 | 10.77 | 11.79 |       |       |       |       |       |       |       | 0.17   | 0.63               | 0.92               | 1.42             |
| 3700     | 4.80                                      | 5.88 | 6.50 | 7.09 | 7.65 | 8.27 | 8.86 | 9.48 | 10.79 | 11.75 |       |       |       |       |       |       |       | 0.18   | 0.65               | 0.94               | 1.46             |
| 3800     | 4.83                                      | 5.92 | 6.54 | 7.14 | 7.71 | 8.33 | 8.90 | 9.51 | 10.79 | 11.69 |       |       |       |       |       |       |       | 0.18   | 0.67               | 0.97               | 1.5              |
| 3900     | 4.86                                      | 5.96 | 6.58 | 7.18 | 7.74 | 8.36 | 8.94 | 9.53 | 10.77 | 11.60 |       |       |       |       |       |       |       | 0.19   | 0.69               | 0.99               | 1.54             |
| 4000     | 4.88                                      | 6.00 | 6.62 | 7.21 | 7.78 | 8.39 | 8.96 | 9.54 | 10.74 | 11.49 |       |       |       |       |       |       |       | 0.19   | 0.71               | 1.02               | 1.58             |
| 4100     | 4.90                                      | 6.02 | 6.65 | 7.25 | 7.80 | 8.41 | 8.97 | 9.54 | 10.69 |       |       |       |       |       |       |       |       | 0.20   | 0.72               | 1.04               | 1.62             |
| 4200     | 4.91                                      | 6.04 | 6.67 | 7.27 | 7.82 | 8.42 | 8.98 | 9.53 | 10.62 |       |       |       |       |       |       |       |       | 0.20   | 0.74               | 1.07               | 1.65             |
| 4300     | 4.92                                      | 6.06 | 6.69 | 7.28 | 7.83 | 8.42 | 8.97 | 9.51 | 10.53 |       |       |       |       |       |       |       |       | 0.21   | 0.76               | 1.09               | 1.69             |
| 4400     | 4.94                                      | 6.07 | 6.69 | 7.29 | 7.83 | 8.42 | 8.95 | 9.47 | 10.42 |       |       |       |       |       |       |       |       | 0.21   | 0.78               | 1.12               | 1.73             |
| 4500     | 4.94                                      | 6.07 | 6.70 | 7.28 | 7.82 | 8.40 | 8.91 | 9.42 | 10.29 |       |       |       |       |       |       |       |       | 0.22   | 0.79               | 1.14               | 1.77             |
| 4600     | 4.92                                      | 6.07 | 6.69 | 7.28 | 7.80 | 8.37 | 8.87 |      |       |       |       |       |       |       |       |       |       | 0.22   | 0.81               | 1.17               | 1.81             |
| 4700     | 4.92                                      | 6.06 | 6.68 | 7.26 | 7.78 | 8.34 | 8.81 |      |       |       |       |       |       |       |       |       |       | 0.22   | 0.83               | 1.19               | 1.85             |
| 4800     | 4.91                                      | 6.05 | 6.67 | 7.23 | 7.75 | 8.28 | 8.75 |      |       |       |       |       |       |       |       |       |       | 0.23   | 0.85               | 1.23               | 1.89             |
| 4900     | 4.89                                      | 6.03 | 6.64 | 7.20 | 7.71 | 8.23 | 8.67 |      |       |       |       |       |       |       |       |       |       | 0.23   | 0.86               | 1.25               | 1.93             |
| 5000     | 4.87                                      | 6.01 | 6.60 | 7.16 | 7.65 | 8.16 | 8.58 |      |       |       |       |       |       |       |       |       |       |  | 0.88               | 1.27               | 1.97             |

**TABLE 22 Section CX**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |       |       |       |       |       |       |       |       |       |       |       |       |       |       | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |                  |
|----------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--------------------|--------------------|------------------|
|          | 140                                       | 150   | 160   | 180   | 200   | 224   | 250   | 280   | 315   | 335   | 355   | 400   | 450   | 500   | 630   | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>><br>1.57 |
| 700      | 5.05                                      | 5.55  | 6.05  | 7.02  | 7.97  | 9.08  | 10.26 | 11.58 | 13.07 | 13.90 | 14.72 | 16.50 | 18.36 | 20.13 | 24.23 | 0.06   | 0.23               | 0.33               | 0.52             |
| 950      | 6.37                                      | 7.01  | 7.64  | 8.88  | 10.09 | 11.49 | 12.96 | 14.60 | 16.41 | 17.41 | 18.38 | 20.44 | 22.55 | 24.45 | 28.35 | 0.08   | 0.32               | 0.45               | 0.70             |
| 1450     | 8.64                                      | 9.52  | 10.38 | 12.06 | 13.66 | 15.50 | 17.37 | 19.37 | 21.49 | 22.61 | 23.63 | 25.62 | 27.30 | 26.78 |       | 0.13   | 0.48               | 0.69               | 1.07             |
| 2850     | 12.77                                     | 14.01 | 15.18 | 17.28 | 19.06 | 20.73 |       |       |       |       |       |       |       |       |       | 0.25   | 0.95               | 1.36               | 2.11             |
| 50       | 0.57                                      | 0.62  | 0.67  | 0.77  | 0.87  | 0.99  | 1.11  | 1.25  | 1.42  | 1.51  | 1.60  | 1.81  | 2.03  | 2.26  | 2.81  | 0.00   | 0.02               | 0.02               | 0.04             |
| 100      | 1.03                                      | 1.12  | 1.22  | 1.40  | 1.59  | 1.80  | 2.03  | 2.29  | 2.59  | 2.76  | 2.93  | 3.31  | 3.72  | 4.12  | 5.15  | 0.01   | 0.03               | 0.05               | 0.07             |
| 150      | 1.45                                      | 1.59  | 1.71  | 1.97  | 2.24  | 2.54  | 2.88  | 3.24  | 3.68  | 3.92  | 4.15  | 4.68  | 5.26  | 5.83  | 7.27  | 0.01   | 0.05               | 0.07               | 0.11             |
| 200      | 1.84                                      | 2.02  | 2.18  | 2.52  | 2.86  | 3.24  | 3.66  | 4.15  | 4.69  | 5.00  | 5.30  | 5.99  | 6.72  | 7.44  | 9.26  | 0.02   | 0.07               | 0.10               | 0.15             |
| 250      | 2.22                                      | 2.43  | 2.64  | 3.05  | 3.44  | 3.92  | 4.43  | 5.01  | 5.66  | 6.04  | 6.41  | 7.21  | 8.11  | 8.98  | 11.15 | 0.02   | 0.08               | 0.12               | 0.19             |
| 300      | 2.57                                      | 2.81  | 3.06  | 3.54  | 4.01  | 4.57  | 5.16  | 5.83  | 6.59  | 7.02  | 7.46  | 8.40  | 9.43  | 10.44 | 12.95 | 0.03   | 0.10               | 0.14               | 0.22             |
| 350      | 2.92                                      | 3.19  | 3.48  | 4.02  | 4.56  | 5.19  | 5.86  | 6.63  | 7.50  | 7.99  | 8.47  | 9.54  | 10.70 | 11.83 | 14.65 | 0.03   | 0.12               | 0.17               | 0.26             |
| 400      | 3.24                                      | 3.56  | 3.87  | 4.48  | 5.08  | 5.80  | 6.54  | 7.39  | 8.37  | 8.91  | 9.45  | 10.65 | 11.93 | 13.18 | 16.26 | 0.04   | 0.13               | 0.19               | 0.30             |
| 450      | 3.57                                      | 3.92  | 4.25  | 4.94  | 5.60  | 6.37  | 7.20  | 8.14  | 9.21  | 9.81  | 10.41 | 11.71 | 13.10 | 14.47 | 17.81 | 0.04   | 0.15               | 0.22               | 0.33             |
| 500      | 3.89                                      | 4.26  | 4.63  | 5.38  | 6.09  | 6.95  | 7.85  | 8.87  | 10.03 | 10.68 | 11.32 | 12.73 | 14.24 | 15.71 | 19.26 | 0.04   | 0.17               | 0.24               | 0.37             |
| 550      | 4.19                                      | 4.60  | 5.00  | 5.80  | 6.58  | 7.50  | 8.47  | 9.58  | 10.83 | 11.52 | 12.21 | 13.72 | 15.34 | 16.88 | 20.63 | 0.05   | 0.18               | 0.26               | 0.41             |
| 600      | 4.48                                      | 4.92  | 5.36  | 6.22  | 7.06  | 8.04  | 9.08  | 10.26 | 11.59 | 12.34 | 13.07 | 14.68 | 16.39 | 18.02 | 21.92 | 0.05   | 0.20               | 0.29               | 0.44             |
| 650      | 4.77                                      | 5.24  | 5.70  | 6.63  | 7.52  | 8.57  | 9.68  | 10.93 | 12.35 | 13.14 | 13.91 | 15.60 | 17.40 | 19.10 | 23.12 | 0.06   | 0.22               | 0.31               | 0.48             |
| 700      | 5.05                                      | 5.55  | 6.05  | 7.02  | 7.97  | 9.08  | 10.26 | 11.58 | 13.07 | 13.90 | 14.72 | 16.50 | 18.36 | 20.13 | 24.23 | 0.06   | 0.23               | 0.33               | 0.52             |
| 750      | 5.32                                      | 5.86  | 6.38  | 7.41  | 8.41  | 9.59  | 10.83 | 12.22 | 13.79 | 14.65 | 15.50 | 17.35 | 19.29 | 21.11 | 25.25 | 0.07   | 0.25               | 0.36               | 0.56             |
| 800      | 5.60                                      | 6.15  | 6.71  | 7.79  | 8.84  | 10.08 | 11.38 | 12.83 | 14.47 | 15.37 | 16.26 | 18.18 | 20.17 | 22.03 | 26.18 | 0.07   | 0.27               | 0.38               | 0.59             |
| 850      | 5.86                                      | 6.45  | 7.02  | 8.16  | 9.27  | 10.56 | 11.92 | 13.44 | 15.14 | 16.08 | 16.99 | 18.96 | 21.01 | 22.89 | 27.01 | 0.07   | 0.28               | 0.41               | 0.63             |
| 900      | 6.12                                      | 6.73  | 7.34  | 8.53  | 9.68  | 11.03 | 12.44 | 14.02 | 15.78 | 16.76 | 17.69 | 19.72 | 21.80 | 23.70 | 27.73 | 0.08   | 0.30               | 0.43               | 0.67             |
| 950      | 6.37                                      | 7.01  | 7.64  | 8.88  | 10.09 | 11.49 | 12.96 | 14.60 | 16.41 | 17.41 | 18.38 | 20.44 | 22.55 | 24.45 | 28.35 | 0.08   | 0.32               | 0.45               | 0.70             |
| 1000     | 6.63                                      | 7.29  | 7.95  | 9.23  | 10.48 | 11.94 | 13.46 | 15.14 | 17.01 | 18.04 | 19.03 | 21.13 | 23.25 | 25.14 | 28.86 | 0.09   | 0.33               | 0.48               | 0.74             |
| 1050     | 6.87                                      | 7.56  | 8.24  | 9.58  | 10.87 | 12.37 | 13.94 | 15.68 | 17.60 | 18.65 | 19.66 | 21.78 | 23.91 | 25.77 | 29.26 | 0.09   | 0.35               | 0.50               | 0.78             |
| 1100     | 7.11                                      | 7.82  | 8.53  | 9.91  | 11.25 | 12.80 | 14.42 | 16.20 | 18.17 | 19.23 | 20.25 | 22.40 | 24.52 | 26.33 | 29.55 | 0.10   | 0.36               | 0.53               | 0.82             |
| 1150     | 7.34                                      | 8.09  | 8.81  | 10.24 | 11.62 | 13.22 | 14.88 | 16.71 | 18.70 | 19.78 | 20.82 | 22.97 | 25.07 | 26.84 | 29.70 | 0.10   | 0.38               | 0.55               | 0.85             |
| 1200     | 7.57                                      | 8.34  | 9.09  | 10.56 | 11.98 | 13.62 | 15.33 | 17.19 | 19.23 | 20.32 | 21.36 | 23.52 | 25.58 | 27.27 | 29.75 | 0.11   | 0.40               | 0.57               | 0.89             |
| 1250     | 7.79                                      | 8.58  | 9.36  | 10.88 | 12.34 | 14.02 | 15.76 | 17.66 | 19.72 | 20.83 | 21.87 | 24.01 | 26.03 | 27.64 | 29.65 | 0.11   | 0.41               | 0.60               | 0.93             |
| 1300     | 8.01                                      | 8.82  | 9.63  | 11.18 | 12.68 | 14.41 | 16.18 | 18.11 | 20.20 | 21.32 | 22.35 | 24.48 | 26.43 | 25.58 |       | 0.11   | 0.43               | 0.62               | 0.96             |
| 1350     | 8.22                                      | 9.06  | 9.88  | 11.48 | 13.02 | 14.78 | 16.59 | 18.55 | 20.65 | 21.77 | 22.82 | 24.91 | 26.78 | 26.03 |       | 0.12   | 0.45               | 0.65               | 1.00             |
| 1400     | 8.44                                      | 9.29  | 10.14 | 11.77 | 13.35 | 15.14 | 16.99 | 18.97 | 21.08 | 22.20 | 23.24 | 25.28 | 27.07 | 26.43 |       | 0.12   | 0.46               | 0.67               | 1.04             |
| 1450     | 8.64                                      | 9.52  | 10.38 | 12.06 | 13.66 | 15.50 | 17.37 | 19.37 | 21.49 | 22.61 | 23.63 | 25.62 | 27.30 | 26.78 |       | 0.13   | 0.48               | 0.69               | 1.07             |
| 1500     | 8.85                                      | 9.75  | 10.64 | 12.34 | 13.98 | 15.84 | 17.73 | 19.76 | 21.88 | 22.98 | 23.99 | 25.92 | 27.47 | 27.07 |       | 0.13   | 0.50               | 0.72               | 1.11             |
| 1550     | 9.05                                      | 9.96  | 10.87 | 12.62 | 14.28 | 16.17 | 18.09 | 20.13 | 22.25 | 23.33 | 24.32 | 26.18 |       |       |       | 0.14   | 0.51               | 0.74               | 1.15             |
| 1600     | 9.24                                      | 10.19 | 11.11 | 12.88 | 14.57 | 16.50 | 18.43 | 20.48 | 22.59 | 23.66 | 24.61 | 26.38 |       |       |       | 0.14   | 0.53               | 0.77               | 1.19             |
| 1650     | 9.43                                      | 10.40 | 11.33 | 13.15 | 14.87 | 16.81 | 18.76 | 20.81 | 22.90 | 23.95 | 24.87 | 26.54 |       |       |       | 0.15   | 0.55               | 0.79               | 1.22             |
| 1700     | 9.62                                      | 10.59 | 11.55 | 13.40 | 15.14 | 17.10 | 19.07 | 21.12 | 23.18 | 24.21 | 25.11 | 26.66 |       |       |       | 0.15   | 0.56               | 0.81               | 1.26             |
| 1750     | 9.80                                      | 10.79 | 11.77 | 13.64 | 15.41 | 17.40 | 19.37 | 21.41 | 23.45 | 24.44 | 25.31 | 26.72 |       |       |       | 0.15   | 0.58               | 0.84               | 1.30             |
| 1800     | 9.98                                      | 10.99 | 11.98 | 13.88 | 15.68 | 17.67 | 19.66 | 21.68 | 23.69 | 24.64 |       |       |       |       |       | 0.16   | 0.60               | 0.86               | 1.33             |
| 1850     | 10.15                                     | 11.18 | 12.19 | 14.12 | 15.93 | 17.94 | 19.93 | 21.95 | 23.90 | 24.82 |       |       |       |       |       | 0.16   | 0.61               | 0.88               | 1.37             |
| 1900     | 10.32                                     | 11.37 | 12.39 | 14.34 | 16.17 | 18.20 | 20.18 | 22.18 | 24.09 | 24.96 |       |       |       |       |       | 0.17   | 0.63               | 0.91               | 1.41             |
| 1950     | 10.49                                     | 11.55 | 12.59 | 14.56 | 16.41 | 18.45 | 20.42 | 22.40 | 24.24 | 25.06 |       |       |       |       |       | 0.17   | 0.65               | 0.93               | 1.45             |
| 2000     | 10.65                                     | 11.73 | 12.78 | 14.77 | 16.63 | 18.68 | 20.64 | 22.59 | 24.37 | 25.15 |       |       |       |       |       | 0.18   | 0.66               | 0.96               | 1.48             |
| 2050     | 10.80                                     | 11.91 | 12.97 | 14.98 | 16.85 | 18.90 | 20.85 | 22.76 | 24.48 |       |       |       |       |       |       | 0.18   | 0.68               | 0.98               | 1.52             |
| 2100     | 10.96                                     | 12.08 | 13.15 | 15.18 | 17.06 | 19.11 | 22.10 | 22.92 | 24.55 |       |       |       |       |       |       | 0.18   | 0.70               | 1.00               | 1.56             |
| 2150     | 11.11                                     | 12.23 | 13.32 | 15.37 | 17.26 | 19.31 | 21.23 | 23.05 | 24.59 |       |       |       |       |       |       | 0.19   | 0.71               | 1.03               | 1.59             |
| 2200     | 11.26                                     | 12.39 | 13.49 | 15.56 | 17.45 | 19.49 | 21.39 | 23.16 | 24.60 |       |       |       |       |       |       | 0.19   | 0.73               | 1.05               | 1.63             |
| 2250     | 11.39                                     | 12.55 | 13.65 | 15.74 | 16.58 | 19.67 | 21.54 | 23.25 | 24.59 |       |       |       |       |       |       | 0.20   | 0.75               | 1.08               | 1.67             |
| 2300     | 11.54                                     | 12.69 | 13.81 | 15.91 | 17.81 | 19.82 | 21.67 | 23.32 |       |       |       |       |       |       |       | 0.20   | 0.76               | 1.10               | 1.70             |
| 2350     | 11.67                                     | 12.84 | 13.97 | 16.07 | 17.97 | 19.97 | 21.78 | 23.36 |       |       |       |       |       |       |       | 0.21   | 0.78               | 1.12               | 1.74             |
| 2400     | 11.80                                     | 12.98 | 14.11 | 16.22 | 18.12 | 20.11 | 21.87 | 23.38 |       |       |       |       |       |       |       | 0.21   | 0.80               | 1.15               | 1.78             |
| 2450     | 11.92                                     | 13.11 | 14.25 | 16.37 | 18.27 | 20.23 | 21.96 | 23.38 |       |       |       |       |       |       |       | 0.22   | 0.81               | 1.17               | 1.82             |
| 2500     | 12.04                                     | 13.24 | 14.39 | 16.52 | 18.40 | 20.34 | 22.02 | 23.35 |       |       |       |       |       |       |       |  |                    |                    |                  |

**TABLE 23 Section XPZ, 3VX**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |      |      |      |      |      |      |      |      |      |      |       |       |       |       |       | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |                  |
|----------|---|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|--|--------------------|--------------------|------------------|
|          | 50  | 56   | 60   | 63   | 71   | 80   | 85   | 90   | 95   | 100  | 112  | 125   | 140   | 160   | 180   | 200   | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>><br>1.57 |
| 700      | 0.41                                      | 0.64 | 0.74 | 0.81 | 1.02 | 1.25 | 1.39 | 1.52 | 1.64 | 1.76 | 2.06 | 2.38  | 2.74  | 3.22  | 3.69  | 4.15  | 0.01   | 0.06               | 0.08               | 0.10             |
| 950      | 0.51                                      | 0.80 | 0.94 | 1.05 | 1.32 | 1.62 | 1.78 | 1.96 | 2.12 | 2.28 | 2.67 | 3.09  | 3.56  | 4.18  | 4.79  | 5.39  | 0.01   | 0.08               | 0.11               | 0.13             |
| 1450     | 0.68                                      | 1.09 | 1.29 | 1.44 | 1.84 | 2.28 | 2.52 | 2.76 | 3.00 | 3.23 | 3.80 | 4.40  | 5.07  | 5.95  | 6.81  | 7.65  | 0.02   | 0.12               | 0.16               | 0.20             |
| 2850     | 1.08                                      | 1.71 | 2.07 | 2.34 | 3.05 | 3.83 | 4.26 | 4.68 | 5.09 | 5.50 | 6.46 | 7.47  | 8.58  | 9.99  | 11.29 | 12.50 | 0.04   | 0.23               | 0.32               | 0.40             |
| 100      | 0.11                                      | 0.13 | 0.14 | 0.15 | 0.20 | 0.23 | 0.25 | 0.28 | 0.30 | 0.32 | 0.37 | 0.43  | 0.50  | 0.57  | 0.66  | 0.74  | 0.00   | 0.01               | 0.01               | 0.01             |
| 200      | 0.14                                      | 0.23 | 0.26 | 0.29 | 0.35 | 0.43 | 0.47 | 0.52 | 0.56 | 0.59 | 0.69 | 0.79  | 0.91  | 1.07  | 1.22  | 1.38  | 0.00   | 0.02               | 0.02               | 0.03             |
| 300      | 0.21                                      | 0.32 | 0.37 | 0.41 | 0.51 | 0.62 | 0.67 | 0.74 | 0.79 | 0.85 | 0.99 | 1.14  | 1.31  | 1.54  | 1.76  | 1.98  | 0.00   | 0.02               | 0.03               | 0.04             |
| 400      | 0.25                                      | 0.41 | 0.47 | 0.52 | 0.65 | 0.78 | 0.86 | 0.94 | 1.01 | 1.09 | 1.28 | 1.46  | 1.68  | 1.98  | 2.27  | 2.55  | 0.00   | 0.03               | 0.05               | 0.06             |
| 500      | 0.31                                      | 0.48 | 0.56 | 0.63 | 0.78 | 0.95 | 1.05 | 1.13 | 1.23 | 1.32 | 1.54 | 1.78  | 2.05  | 2.41  | 2.75  | 3.10  | 0.01   | 0.04               | 0.06               | 0.07             |
| 600      | 0.36                                      | 0.56 | 0.65 | 0.73 | 0.90 | 1.11 | 1.22 | 1.33 | 1.44 | 1.55 | 1.80 | 2.09  | 2.40  | 2.82  | 3.22  | 3.63  | 0.01   | 0.05               | 0.07               | 0.08             |
| 700      | 0.41                                      | 0.64 | 0.74 | 0.81 | 1.02 | 1.25 | 1.39 | 1.52 | 1.64 | 1.76 | 2.06 | 2.38  | 2.74  | 3.22  | 3.69  | 4.15  | 0.01   | 0.06               | 0.08               | 0.10             |
| 800      | 0.46                                      | 0.70 | 0.83 | 0.91 | 1.14 | 1.41 | 1.55 | 1.69 | 1.84 | 1.98 | 2.31 | 2.67  | 3.08  | 3.61  | 4.14  | 4.65  | 0.01   | 0.06               | 0.09               | 0.11             |
| 900      | 0.49                                      | 0.77 | 0.90 | 1.00 | 1.25 | 1.55 | 1.71 | 1.87 | 2.02 | 2.18 | 2.55 | 2.95  | 3.40  | 3.99  | 4.58  | 5.15  | 0.01   | 0.07               | 0.10               | 0.03             |
| 1000     | 0.52                                      | 0.83 | 0.98 | 1.08 | 1.38 | 1.69 | 1.86 | 2.04 | 2.21 | 2.39 | 2.79 | 3.22  | 3.72  | 4.37  | 5.01  | 5.62  | 0.01   | 0.08               | 0.11               | 0.14             |
| 1100     | 0.55                                      | 0.89 | 1.05 | 1.17 | 1.47 | 1.83 | 2.01 | 2.20 | 2.40 | 2.57 | 3.03 | 3.50  | 4.03  | 4.73  | 5.42  | 6.09  | 0.01   | 0.09               | 0.12               | 0.15             |
| 1200     | 0.58                                      | 0.95 | 1.12 | 1.24 | 1.58 | 1.96 | 2.17 | 2.37 | 2.57 | 2.77 | 3.25 | 3.76  | 4.33  | 5.09  | 5.83  | 6.56  | 0.01   | 0.10               | 0.14               | 0.17             |
| 1300     | 0.62                                      | 1.00 | 1.19 | 1.33 | 1.68 | 2.09 | 2.31 | 2.53 | 2.75 | 2.96 | 3.48 | 4.02  | 4.63  | 5.45  | 6.23  | 7.00  | 0.02   | 0.10               | 0.15               | 0.18             |
| 1400     | 0.66                                      | 1.06 | 1.25 | 1.41 | 1.79 | 2.22 | 2.45 | 2.68 | 2.92 | 3.15 | 3.70 | 4.27  | 4.93  | 5.79  | 6.62  | 7.44  | 0.02   | 0.11               | 0.16               | 0.19             |
| 1500     | 0.69                                      | 1.11 | 1.32 | 1.47 | 1.89 | 2.34 | 2.60 | 2.84 | 3.09 | 3.33 | 3.91 | 4.52  | 5.21  | 6.13  | 7.01  | 7.85  | 0.02   | 0.12               | 0.17               | 0.21             |
| 1600     | 0.73                                      | 1.17 | 1.39 | 1.55 | 1.98 | 2.46 | 2.73 | 2.99 | 3.26 | 3.51 | 4.11 | 4.76  | 5.50  | 6.45  | 7.38  | 8.27  | 0.02   | 0.13               | 0.18               | 0.22             |
| 1700     | 0.76                                      | 1.22 | 1.45 | 1.62 | 2.08 | 2.59 | 2.86 | 3.14 | 3.41 | 3.69 | 4.32 | 5.01  | 5.78  | 6.78  | 7.74  | 8.68  | 0.02   | 0.14               | 0.19               | 0.24             |
| 1800     | 0.80                                      | 1.27 | 1.51 | 1.69 | 2.18 | 2.71 | 2.99 | 3.29 | 3.58 | 3.86 | 4.53 | 5.25  | 6.05  | 7.10  | 8.10  | 9.08  | 0.02   | 0.14               | 0.20               | 0.25             |
| 1900     | 0.83                                      | 1.31 | 1.57 | 1.76 | 2.27 | 2.83 | 3.12 | 3.43 | 3.73 | 4.03 | 4.73 | 5.49  | 6.31  | 7.40  | 8.45  | 9.45  | 0.02   | 0.15               | 0.22               | 0.26             |
| 2000     | 0.86                                      | 1.36 | 1.63 | 1.83 | 2.35 | 2.94 | 3.26 | 3.58 | 3.88 | 4.19 | 4.93 | 5.70  | 6.58  | 7.70  | 8.79  | 9.82  | 0.02   | 0.16               | 0.23               | 0.28             |
| 2100     | 0.89                                      | 1.41 | 1.68 | 1.89 | 2.44 | 3.05 | 3.38 | 3.71 | 4.04 | 4.36 | 5.12 | 5.93  | 6.83  | 8.00  | 9.11  | 10.19 | 0.03   | 0.17               | 0.24               | 0.29             |
| 2200     | 0.92                                      | 1.45 | 1.74 | 1.96 | 2.53 | 3.16 | 3.51 | 3.85 | 4.18 | 4.52 | 5.31 | 6.15  | 7.08  | 8.28  | 9.44  | 10.53 | 0.03   | 0.18               | 0.25               | 0.31             |
| 2300     | 0.95                                      | 1.50 | 1.79 | 2.02 | 2.61 | 3.27 | 3.63 | 3.98 | 4.33 | 4.68 | 5.50 | 6.36  | 7.33  | 8.57  | 9.75  | 10.87 | 0.03   | 0.18               | 0.26               | 0.32             |
| 2400     | 0.98                                      | 1.53 | 1.85 | 2.08 | 2.70 | 3.38 | 3.74 | 4.11 | 4.48 | 4.83 | 5.68 | 6.57  | 7.57  | 8.84  | 10.04 | 11.19 | 0.03   | 0.19               | 0.27               | 0.33             |
| 2500     | 1.00                                      | 1.57 | 1.90 | 2.15 | 2.77 | 3.48 | 3.86 | 4.25 | 4.62 | 4.98 | 5.86 | 6.78  | 7.80  | 9.11  | 10.45 | 11.51 | 0.03   | 0.20               | 0.28               | 0.35             |
| 2600     | 1.03                                      | 1.62 | 1.95 | 2.20 | 2.86 | 3.59 | 3.98 | 4.37 | 4.75 | 5.14 | 6.04 | 6.99  | 8.03  | 9.36  | 10.63 | 11.80 | 0.03   | 0.21               | 0.30               | 0.36             |
| 2700     | 1.05                                      | 1.65 | 2.00 | 2.26 | 2.94 | 3.69 | 4.09 | 4.50 | 4.90 | 5.28 | 6.21 | 7.18  | 8.25  | 9.61  | 10.90 | 12.09 | 0.03   | 0.22               | 0.31               | 0.38             |
| 2800     | 1.07                                      | 1.68 | 2.05 | 2.31 | 3.01 | 3.78 | 4.20 | 4.62 | 5.03 | 5.43 | 6.38 | 7.37  | 8.47  | 9.87  | 11.17 | 12.36 | 0.03   | 0.22               | 0.32               | 0.39             |
| 2900     | 1.09                                      | 1.73 | 2.09 | 2.37 | 3.09 | 3.88 | 4.31 | 4.74 | 5.16 | 5.58 | 6.55 | 7.56  | 8.69  | 10.10 | 11.42 | 12.63 | 0.04   | 0.23               | 0.33               | 0.40             |
| 3000     | 1.12                                      | 1.76 | 2.15 | 2.42 | 3.16 | 3.97 | 4.42 | 4.85 | 5.29 | 5.71 | 6.71 | 7.74  | 8.90  | 10.33 | 11.66 | 12.87 | 0.04   | 0.24               | 0.34               | 0.42             |
| 3100     | 1.14                                      | 1.79 | 2.19 | 2.48 | 3.23 | 4.07 | 4.52 | 4.97 | 5.41 | 5.85 | 6.86 | 7.93  | 9.10  | 10.55 | 11.89 | 13.10 | 0.04   | 0.25               | 0.35               | 0.43             |
| 3200     | 1.16                                      | 1.83 | 2.23 | 2.53 | 3.31 | 4.16 | 4.63 | 5.08 | 5.53 | 5.98 | 7.03 | 8.11  | 9.30  | 10.77 | 12.11 | 13.32 | 0.04   | 0.26               | 0.36               | 0.45             |
| 3300     | 1.18                                      | 1.86 | 2.28 | 2.57 | 3.38 | 4.26 | 4.73 | 5.20 | 5.67 | 6.12 | 7.17 | 8.27  | 9.48  | 10.98 | 12.32 | 13.53 | 0.04   | 0.26               | 0.37               | 0.46             |
| 3400     | 1.21                                      | 1.89 | 2.31 | 2.63 | 3.44 | 4.35 | 4.83 | 5.31 | 5.78 | 6.25 | 7.33 | 8.45  | 9.67  | 11.18 | 12.53 | 13.72 | 0.04   | 0.27               | 0.39               | 0.47             |
| 3500     | 1.23                                      | 1.93 | 2.35 | 2.67 | 3.51 | 4.43 | 4.93 | 5.41 | 5.90 | 6.37 | 7.47 | 8.61  | 9.85  | 11.36 | 12.72 | 13.89 | 0.04   | 0.28               | 0.40               | 0.49             |
| 3600     | 1.26                                      | 1.96 | 2.40 | 2.72 | 3.58 | 4.51 | 5.03 | 5.52 | 6.02 | 6.49 | 7.61 | 8.77  | 10.02 | 11.54 | 12.89 | 14.06 | 0.04   | 0.29               | 0.41               | 0.50             |
| 3700     | 1.28                                      | 1.98 | 2.43 | 2.77 | 3.64 | 4.60 | 5.12 | 5.62 | 6.13 | 6.61 | 7.76 | 8.92  | 10.19 | 11.72 | 13.06 | 14.20 | 0.05   | 0.30               | 0.42               | 0.52             |
| 3800     | 1.30                                      | 2.01 | 2.48 | 2.82 | 3.71 | 4.68 | 5.20 | 5.73 | 6.24 | 6.73 | 7.89 | 9.08  | 10.34 | 11.88 | 13.21 | 14.32 | 0.05   | 0.30               | 0.43               | 0.53             |
| 3900     | 1.33                                      | 2.04 | 2.51 | 2.86 | 3.76 | 4.76 | 5.30 | 5.83 | 6.34 | 6.85 | 8.02 | 9.22  | 10.49 | 12.03 | 13.35 | 14.44 | 0.05   | 0.31               | 0.44               | 0.54             |
| 4000     | 1.35                                      | 2.07 | 2.54 | 2.90 | 3.83 | 4.84 | 5.39 | 5.92 | 6.45 | 6.96 | 8.15 | 9.35  | 10.65 | 12.18 | 13.49 | 14.53 | 0.05   | 0.32               | 0.45               | 0.56             |
| 4100     | 1.37                                      | 2.09 | 2.57 | 2.94 | 3.88 | 4.92 | 5.47 | 6.02 | 6.55 | 7.07 | 8.27 | 9.49  | 10.79 | 12.31 | 13.60 | 14.61 | 0.05   | 0.33               | 0.47               | 0.57             |
| 4200     | 1.39                                      | 2.11 | 2.62 | 2.98 | 3.95 | 4.99 | 5.56 | 6.11 | 6.64 | 7.17 | 8.39 | 9.63  | 10.92 | 12.44 | 13.71 | 14.67 | 0.05   | 0.34               | 0.48               | 0.58             |
| 4300     | 1.41                                      | 2.13 | 2.65 | 3.03 | 4.00 | 5.06 | 5.63 | 6.19 | 6.74 | 7.28 | 8.50 | 9.75  | 11.04 | 12.56 | 13.79 | 14.72 | 0.05   | 0.34               | 0.49               | 0.60             |
| 4400     | 1.43                                      | 2.16 | 2.67 | 3.06 | 4.06 | 5.14 | 5.72 | 6.28 | 6.84 | 7.38 | 8.62 | 9.87  | 11.17 | 12.67 | 13.87 | 14.74 | 0.05   | 0.35               | 0.50               | 0.61             |
| 4500     | 1.45                                      | 2.19 | 2.71 | 3.10 | 4.11 | 5.20 | 5.80 | 6.37 | 6.93 | 7.48 | 8.73 | 9.98  | 11.29 | 12.76 | 13.93 | 14.75 | 0.06   | 0.36               | 0.51               | 0.63             |
| 4600     | 1.46                                      | 2.20 | 2.74 | 3.14 | 4.16 | 5.27 | 5.87 | 6.46 | 7.02 | 7.58 | 8.83 | 10.09 | 11.39 | 12.85 | 13.98 |       | 0.06   | 0.37               | 0.5                |                  |

**TABLE 24 Section XPA**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |      |      |      |      |      |      |      |       |       |       |       | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |               |
|----------|---|------|------|------|------|------|------|------|-------|-------|-------|-------|--|--------------------|--------------------|---------------|
|          | 63  | 71   | 75   | 80   | 85   | 90   | 95   | 100  | 106   | 112   | 118   | 125   | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>> 1.57 |
| 700      | 0.55                                      | 0.88 | 1.05 | 1.25 | 1.55 | 1.66 | 1.92 | 2.07 | 2.35  | 2.55  | 2.79  | 3.08  | 0.02   | 0.13               | 0.19               | 0.23          |
| 950      | 0.69                                      | 1.11 | 1.33 | 1.61 | 1.97 | 2.15 | 2.56 | 2.69 | 3.09  | 3.33  | 3.65  | 4.02  | 0.03   | 0.18               | 0.26               | 0.31          |
| 1450     | 0.90                                      | 1.52 | 1.85 | 2.25 | 2.86 | 3.06 | 3.59 | 3.84 | 4.49  | 4.78  | 5.25  | 5.79  | 0.04   | 0.27               | 0.39               | 0.48          |
| 2850     | 1.27                                      | 2.37 | 2.96 | 3.70 | 4.93 | 5.15 | 6.34 | 6.56 | 7.84  | 8.22  | 9.03  | 9.96  | 0.08   | 0.54               | 0.77               | 0.94          |
| 100      | 0.11                                      | 0.18 | 0.20 | 0.24 | 0.28 | 0.30 | 0.35 | 0.37 | 0.41  | 0.45  | 0.48  | 0.54  | 0.00   | 0.02               | 0.03               | 0.03          |
| 200      | 0.26                                      | 0.32 | 0.37 | 0.43 | 0.52 | 0.56 | 0.65 | 0.69 | 0.76  | 0.84  | 0.91  | 1.00  | 0.01   | 0.04               | 0.05               | 0.07          |
| 300      | 0.32                                      | 0.45 | 0.53 | 0.62 | 0.78 | 0.80 | 0.93 | 0.99 | 1.12  | 1.21  | 1.31  | 1.44  | 0.01   | 0.06               | 0.08               | 0.10          |
| 400      | 0.37                                      | 0.57 | 0.66 | 0.79 | 0.97 | 1.03 | 1.18 | 1.27 | 1.44  | 1.55  | 1.70  | 1.87  | 0.01   | 0.08               | 0.11               | 0.13          |
| 500      | 0.43                                      | 0.67 | 0.80 | 0.95 | 1.18 | 1.25 | 1.43 | 1.54 | 1.76  | 1.90  | 2.08  | 2.28  | 0.01   | 0.09               | 0.13               | 0.16          |
| 600      | 0.48                                      | 0.78 | 0.92 | 1.10 | 1.42 | 1.46 | 1.67 | 1.81 | 2.09  | 2.23  | 2.44  | 2.68  | 0.02   | 0.11               | 0.16               | 0.20          |
| 700      | 0.55                                      | 0.88 | 1.05 | 1.25 | 1.55 | 1.66 | 1.92 | 2.07 | 2.35  | 2.55  | 2.79  | 3.08  | 0.02   | 0.13               | 0.19               | 0.23          |
| 800      | 0.62                                      | 0.98 | 1.17 | 1.40 | 1.78 | 1.86 | 2.15 | 2.32 | 2.66  | 2.87  | 3.14  | 3.45  | 0.02   | 0.15               | 0.22               | 0.26          |
| 900      | 0.67                                      | 1.07 | 1.28 | 1.54 | 1.93 | 2.06 | 2.39 | 2.57 | 2.93  | 3.18  | 3.49  | 3.83  | 0.03   | 0.17               | 0.24               | 0.30          |
| 1000     | 0.72                                      | 1.16 | 1.39 | 1.68 | 2.12 | 2.25 | 2.68 | 2.81 | 3.23  | 3.49  | 3.81  | 4.20  | 0.03   | 0.19               | 0.27               | 0.33          |
| 1100     | 0.76                                      | 1.24 | 1.49 | 1.81 | 2.22 | 2.44 | 2.83 | 3.05 | 3.56  | 3.78  | 4.15  | 4.57  | 0.03   | 0.21               | 0.30               | 0.36          |
| 1200     | 0.81                                      | 1.32 | 1.60 | 1.94 | 2.39 | 2.61 | 3.12 | 3.28 | 3.78  | 4.07  | 4.46  | 4.92  | 0.04   | 0.23               | 0.32               | 0.40          |
| 1300     | 0.85                                      | 1.41 | 1.70 | 2.07 | 2.62 | 2.79 | 3.29 | 3.51 | 4.11  | 4.36  | 4.79  | 5.27  | 0.04   | 0.25               | 0.35               | 0.43          |
| 1400     | 0.88                                      | 1.48 | 1.80 | 2.18 | 2.78 | 2.96 | 3.49 | 3.73 | 4.33  | 4.64  | 5.09  | 5.62  | 0.04   | 0.27               | 0.38               | 0.46          |
| 1500     | 0.92                                      | 1.55 | 1.89 | 2.31 | 2.93 | 3.14 | 3.72 | 3.95 | 4.58  | 4.92  | 5.40  | 5.95  | 0.04   | 0.28               | 0.40               | 0.49          |
| 1600     | 0.95                                      | 1.63 | 1.98 | 2.43 | 3.16 | 3.31 | 3.93 | 4.17 | 4.88  | 5.20  | 5.70  | 6.29  | 0.05   | 0.30               | 0.43               | 0.53          |
| 1700     | 0.99                                      | 1.70 | 2.08 | 2.54 | 3.29 | 3.47 | 4.16 | 4.38 | 5.13  | 5.46  | 6.00  | 6.62  | 0.05   | 0.32               | 0.46               | 0.56          |
| 1800     | 1.04                                      | 1.77 | 2.16 | 2.66 | 3.39 | 3.63 | 4.29 | 4.59 | 5.38  | 5.72  | 6.29  | 6.94  | 0.05   | 0.34               | 0.48               | 0.59          |
| 1900     | 1.08                                      | 1.84 | 2.25 | 2.76 | 3.56 | 3.79 | 4.58 | 4.80 | 5.64  | 5.99  | 6.57  | 7.26  | 0.06   | 0.36               | 0.51               | 0.63          |
| 2000     | 1.12                                      | 1.90 | 2.33 | 2.88 | 3.73 | 3.94 | 4.78 | 5.00 | 5.89  | 6.24  | 6.86  | 7.57  | 0.06   | 0.38               | 0.54               | 0.66          |
| 2100     | 1.14                                      | 1.96 | 2.42 | 2.98 | 3.89 | 4.10 | 4.93 | 5.20 | 6.14  | 6.49  | 7.13  | 7.88  | 0.06   | 0.40               | 0.56               | 0.69          |
| 2200     | 1.16                                      | 2.03 | 2.50 | 3.09 | 3.99 | 4.24 | 5.16 | 5.39 | 6.38  | 6.74  | 7.40  | 8.17  | 0.06   | 0.42               | 0.59               | 0.73          |
| 2300     | 1.17                                      | 2.08 | 2.57 | 3.18 | 4.18 | 4.39 | 5.34 | 5.58 | 6.59  | 6.98  | 7.67  | 8.46  | 0.07   | 0.44               | 0.62               | 0.76          |
| 2400     | 1.19                                      | 2.14 | 2.65 | 3.29 | 4.32 | 4.54 | 5.49 | 5.76 | 6.83  | 7.21  | 7.93  | 8.75  | 0.07   | 0.45               | 0.65               | 0.79          |
| 2500     | 1.21                                      | 2.19 | 2.72 | 3.38 | 4.43 | 4.67 | 5.69 | 5.94 | 7.04  | 7.44  | 8.18  | 9.03  | 0.07   | 0.47               | 0.67               | 0.82          |
| 2600     | 1.23                                      | 2.25 | 2.79 | 3.48 | 4.53 | 4.81 | 5.88 | 6.13 | 7.29  | 7.68  | 8.43  | 9.30  | 0.08   | 0.49               | 0.70               | 0.86          |
| 2700     | 1.24                                      | 2.30 | 2.87 | 3.56 | 4.68 | 4.95 | 6.09 | 6.30 | 7.49  | 7.90  | 8.67  | 9.58  | 0.08   | 0.51               | 0.73               | 0.89          |
| 2800     | 1.26                                      | 2.34 | 2.93 | 3.65 | 4.88 | 5.08 | 6.23 | 6.48 | 7.69  | 8.12  | 8.91  | 9.84  | 0.08   | 0.53               | 0.75               | 0.92          |
| 2900     | 1.28                                      | 2.39 | 2.99 | 3.74 | 4.97 | 5.21 | 6.39 | 6.65 | 7.91  | 8.33  | 9.16  | 10.10 | 0.08   | 0.55               | 0.78               | 0.96          |
| 3000     | 1.30                                      | 2.44 | 3.06 | 3.82 | 5.06 | 5.33 | 6.54 | 6.80 | 8.13  | 8.54  | 9.38  | 10.35 | 0.09   | 0.57               | 0.81               | 0.99          |
| 3100     | 1.31                                      | 2.48 | 3.12 | 3.91 | 5.19 | 5.46 | 6.72 | 6.97 | 8.35  | 8.74  | 9.61  | 10.59 | 0.09   | 0.59               | 0.83               | 1.02          |
| 3200     | 1.33                                      | 2.52 | 3.18 | 3.99 | 5.32 | 5.58 | 6.89 | 7.13 | 8.56  | 8.94  | 9.82  | 10.83 | 0.09   | 0.61               | 0.86               | 1.05          |
| 3300     | 1.34                                      | 2.56 | 3.23 | 4.06 | 5.45 | 5.69 | 7.06 | 7.28 | 8.76  | 9.14  | 10.03 | 11.06 | 0.10   | 0.63               | 0.89               | 1.09          |
| 3400     | 1.36                                      | 2.60 | 3.29 | 4.14 | 5.58 | 5.81 | 7.23 | 7.43 | 8.96  | 9.31  | 10.24 | 11.29 | 0.10   | 0.64               | 0.91               | 1.12          |
| 3500     | 1.37                                      | 2.64 | 3.34 | 4.21 | 5.73 | 5.92 | 7.41 | 7.57 | 9.16  | 9.50  | 10.44 | 11.51 | 0.10   | 0.66               | 0.94               | 1.15          |
| 3600     | 1.38                                      | 2.67 | 3.39 | 4.28 | 5.88 | 6.03 | 7.59 | 7.72 | 9.36  | 9.68  | 10.63 | 11.72 | 0.11   | 0.68               | 0.97               | 1.19          |
| 3700     | 1.38                                      | 2.71 | 3.44 | 4.35 | 6.01 | 6.13 | 7.69 | 7.85 | 9.56  | 9.85  | 10.82 | 11.92 | 0.11   | 0.70               | 0.99               | 1.22          |
| 3800     | 1.39                                      | 2.73 | 3.49 | 4.42 | 6.13 | 6.23 | 7.78 | 7.99 | 9.75  | 10.02 | 10.99 | 12.12 | 0.11   | 0.72               | 1.02               | 1.25          |
| 3900     | 1.39                                      | 2.76 | 3.53 | 4.48 | 6.21 | 6.33 | 7.96 | 8.12 | 9.91  | 10.17 | 11.17 | 12.30 | 0.11   | 0.74               | 1.05               | 1.29          |
| 4000     | 1.39                                      | 2.79 | 3.57 | 4.54 | 6.28 | 6.43 | 8.13 | 8.24 | 10.07 | 10.33 | 11.34 | 12.48 | 0.12   | 0.76               | 1.08               | 1.32          |
| 4100     | 1.38                                      | 2.81 | 3.61 | 4.60 | 6.36 | 6.51 | 8.21 | 8.36 | 10.26 | 10.48 | 11.51 | 12.65 | 0.12   | 0.78               | 1.10               | 1.35          |
| 4200     | 1.38                                      | 2.84 | 3.65 | 4.65 | 6.44 | 6.60 | 8.29 | 8.48 | 10.44 | 10.63 | 11.66 | 12.82 | 0.12   | 0.80               | 1.13               | 1.38          |
| 4300     | 1.37                                      | 2.86 | 3.69 | 4.70 | 6.55 | 6.69 | 8.47 | 8.59 | 10.59 | 10.76 | 11.80 | 12.98 | 0.13   | 0.81               | 1.16               | 1.42          |
| 4400     | 1.36                                      | 2.88 | 3.72 | 4.76 | 6.66 | 6.77 | 8.65 | 8.69 | 10.74 | 10.90 | 11.95 | 13.13 | 0.13   | 0.83               | 1.18               | 1.45          |
| 4500     | 1.36                                      | 2.90 | 3.75 | 4.81 | 6.75 | 6.85 | 8.77 | 8.80 | 10.92 | 11.03 | 12.09 | 13.27 | 0.13   | 0.85               | 1.21               | 1.48          |
| 4600     | 1.35                                      | 2.91 | 3.78 | 4.85 | 6.83 | 6.92 | 8.89 | 8.90 | 11.09 | 11.14 | 12.21 | 13.40 | 0.13   | 0.87               | 1.24               | 1.52          |
| 4700     | 1.34                                      | 2.93 | 3.81 | 4.89 | 6.94 | 6.99 | 8.96 | 9.00 | 11.23 | 11.26 | 12.33 | 13.52 | 0.14   | 0.89               | 1.26               | 1.55          |
| 4800     | 1.33                                      | 2.94 | 3.83 | 4.94 | 7.05 | 7.06 | 9.04 | 9.08 | 11.36 | 11.36 | 12.44 | 13.55 | 0.14   | 0.91               | 1.29               | 1.58          |
| 4900     | 1.33                                      | 2.95 | 3.85 | 4.98 | 7.11 | 7.12 | 9.11 | 9.17 | 11.39 | 11.47 | 12.55 | 13.76 | 0.14   | 0.93               | 1.32               | 1.62          |
| 5000     | 1.32                                      | 2.96 | 3.87 | 5.01 | 7.16 | 7.18 | 9.21 | 9.25 | 11.42 | 11.56 | 12.64 | 13.85 | 0.15   | 0.95               | 1.34               | 1.65          |
| 5100     | 1.30                                      | 2.96 | 3.90 | 5.04 | 7.15 | 7.25 | 9.29 | 9.32 | 11.46 | 11.64 | 12.74 | 13.94 | 0.15   | 0.97               | 1.37               | 1.68          |
| 5200     | 1.29                                      | 2.96 | 3.91 | 5.07 | 7.24 | 7.30 | 9.36 | 9.39 | 11.54 | 11.73 | 12.82 | 14.02 | 0.15   | 0.98               | 1.40               | 1.71          |
| 5300     | 1.27                                      | 2.97 | 3.93 | 5.09 | 7.29 | 7.34 | 9.42 | 9.46 | 11.61 | 11.80 | 12.89 | 14.09 | 0.16   | 1.00               | 1.42               | 1.75          |
| 5400     | 1.25                                      | 2.96 | 3.94 | 5.11 | 7.31 | 7.39 | 9.48 | 9.51 | 11.67 | 11.87 | 12.96 | 14.15 | 0.16   | 1.02               | 1.45               | 1.78          |
| 5500     | 1.24                                      | 2.96 | 3.95 | 5.13 | 7.35 | 7.42 | 9.51 | 9.57 | 11.71 | 11.93 | 13.02 | 14.21 | 0.16   | 1.04               | 1.48               | 1.81          |
| 5600     | 1.22                                      | 2.96 | 3.95 | 5.16 | 7.41 | 7.47 | 9.58 | 9.62 | 11.75 | 11.98 | 13.06 | 14.25 | 0.16   | 1.06               | 1.51               | 1.85          |
| 5700     | 1.20                                      | 2.95 | 3.95 | 5.18 | 7.46 | 7.50 | 9.62 | 9.66 | 11.78 | 12.02 | 13.10 | 14.28 | 0.17   | 1.08               | 1.53               | 1.88          |
| 5800     | 1.18                                      | 2.94 | 3.96 | 5.19 | 7.49 | 7.53 | 9.68 | 9.70 | 11.88 | 12.06 | 13.15 | 14.30 | 0.17   | 1.10               | 1.56               | 1.91          |
| 5900     | 1.17                                      | 2.93 | 3.95 | 5.20 | 7.52 | 7.55 | 9.71 | 9.73 | 11.95 | 12.10 | 13.17 | 14.31 | 0.17   | 1.12               | 1.59               | 1.94          |
| 6000     | 1.15                                      | 2.92 | 3.95 | 5.20 | 7.54 | 7.57 | 9.75 | 9.77 | 12.02 | 12.12 | 13.18 | 14.31 | 0.18   | 1.14               | 1.61               | 1.98          |
| 6100     |   | 2.90 | 3.94 | 5.21 | 7.58 | 7.59 | 9.76 | 9.79 | 12.04 | 12.14 | 13.19 | 14.31 | 0.18   | 1.16               | 1.64               | 2.01          |
| 6200     |   | 2.89 | 3.94 | 5.21 | 7.58 | 7.60 | 9.79 | 9.80 | 12.06 | 12.14 | 13.19 | 14.29 | 0.18   | 1.17               | 1.67               | 2.04          |
| 6300     |   | 2.87 | 3.92 | 5.20 | 7.59 | 7.61 | 9.81 | 9.81 | 12.09 | 12.14 | 13.18 | 14.26 | 0.18   | 1.19               | 1.69               | 2.08          |
| 6400     |   | 2.85 | 3.91 | 5.20 | 7.61 | 7.61 | 9.83 | 9.82 | 12.12 | 12.14 | 13.16 | 14.22 | 0.19   | 1.21               | 1.72               | 2.11          |
| 6500     |   | 2.81 | 3.89 | 5.19 | 7.63 | 7.61 | 9.83 | 9.82 | 12.09 | 12.12 | 13.13 | 14.16 | 0.19   | 1.23               | 1.75               | 2.14          |
| 6600     |   | 2.79 | 3.87 | 5.18 | 7.59 | 7.61 | 9.81 | 9.81 | 12.04 | 12.10 | 13.08 | 14.10 | 0.19   | 1.25               | 1.77               | 2.18          |
| 6700     |   | 2.76 | 3.84 | 5.16 | 7.57 | 7.60 | 9.78 | 9.80 | 12.01 | 12.06 | 13.04 | 14.03 | 0.20   | 1.27               | 1.80               | 2.21          |
| 6800     |   | 2.73 | 3.82 | 5.13 | 7.54 | 7.59 | 9.71 | 9.78 | 11.98 | 12.02 | 12.98 | 13.94 | 0.20   | 1.29               | 1.83               | 2.24          |
| 6900     |   | 2.69 | 3.79 | 5.11 | 7.53 | 7.57 | 9.65 | 9.74 | 11.87 | 11.97 | 12.90 | 13.85 | 0.20   | 1.31               | 1.86               | 2.27          |
| 7000     |   | 2.66 | 3.76 | 5.09 | 7.52 | 7.55 | 9.59 | 9.71 | 11.89 | 11.92 | 12.83 | 13.73 | 0.21   | 1.33               | 1.88               | 2.31          |

**TABLE 24 Section XPA**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |       |       |       |       |       |       |       |       |       |       | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |                  |
|----------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--------------------|--------------------|------------------|
|          | 132                                       | 140   | 150   | 160   | 170   | 180   | 190   | 200   | 224   | 250   | 280   | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>><br>1.57 |
| 700      | 3.34                                      | 3.66  | 4.09  | 4.45  | 4.84  | 5.23  | 5.59  | 6.00  | 6.91  | 7.89  | 8.99  | 0.02   | 0.13               | 0.19               | 0.23             |
| 950      | 4.43                                      | 4.73  | 5.36  | 5.84  | 6.35  | 6.86  | 7.38  | 7.86  | 9.06  | 10.33 | 11.77 | 0.03   | 0.18               | 0.26               | 0.31             |
| 1450     | 6.45                                      | 6.93  | 7.78  | 8.43  | 9.24  | 9.90  | 10.68 | 11.34 | 13.02 | 14.78 | 16.76 | 0.04   | 0.27               | 0.39               | 0.48             |
| 2850     | 11.33                                     | 11.92 | 13.68 | 14.40 | 16.09 | 16.72 | 18.43 | 18.88 | 21.25 | 23.50 | 25.66 | 0.08   | 0.54               | 0.77               | 0.94             |
| 100      | 0.57                                      | 0.63  | 0.68  | 0.76  | 0.80  | 0.88  | 0.94  | 1.01  | 1.17  | 1.32  | 1.51  | 0.00   | 0.02               | 0.03               | 0.03             |
| 200      | 1.08                                      | 1.19  | 1.28  | 1.43  | 1.54  | 1.68  | 1.76  | 1.92  | 2.21  | 2.52  | 2.87  | 0.01   | 0.04               | 0.05               | 0.07             |
| 300      | 1.56                                      | 1.71  | 1.88  | 2.07  | 2.22  | 2.43  | 2.56  | 2.78  | 3.20  | 3.65  | 4.17  | 0.01   | 0.06               | 0.08               | 0.10             |
| 400      | 2.03                                      | 2.23  | 2.41  | 2.69  | 2.89  | 3.16  | 3.34  | 3.61  | 4.17  | 4.76  | 5.43  | 0.01   | 0.08               | 0.11               | 0.13             |
| 500      | 2.46                                      | 2.72  | 2.96  | 3.30  | 3.45  | 3.86  | 4.14  | 4.43  | 5.10  | 5.82  | 6.65  | 0.01   | 0.09               | 0.13               | 0.16             |
| 600      | 2.96                                      | 3.20  | 3.55  | 3.87  | 4.19  | 4.56  | 4.82  | 5.22  | 6.02  | 6.87  | 7.83  | 0.02   | 0.11               | 0.16               | 0.20             |
| 700      | 3.34                                      | 3.66  | 4.09  | 4.45  | 4.84  | 5.23  | 5.59  | 6.00  | 6.91  | 7.89  | 8.99  | 0.02   | 0.13               | 0.19               | 0.23             |
| 800      | 3.82                                      | 4.13  | 4.57  | 5.02  | 5.48  | 5.89  | 6.29  | 6.75  | 7.78  | 8.88  | 10.12 | 0.02   | 0.15               | 0.22               | 0.26             |
| 900      | 4.24                                      | 4.58  | 5.08  | 5.57  | 6.13  | 6.54  | 6.86  | 7.50  | 8.64  | 9.85  | 11.22 | 0.03   | 0.17               | 0.24               | 0.30             |
| 1000     | 4.63                                      | 5.03  | 5.62  | 6.11  | 6.64  | 7.18  | 7.69  | 8.23  | 9.47  | 10.80 | 12.30 | 0.03   | 0.19               | 0.27               | 0.33             |
| 1100     | 5.01                                      | 5.46  | 6.12  | 6.65  | 7.24  | 7.80  | 8.38  | 8.95  | 10.29 | 11.73 | 13.35 | 0.03   | 0.21               | 0.30               | 0.36             |
| 1200     | 5.46                                      | 5.89  | 6.59  | 7.16  | 7.83  | 8.42  | 9.09  | 9.65  | 11.10 | 12.63 | 14.36 | 0.04   | 0.23               | 0.32               | 0.40             |
| 1300     | 5.88                                      | 6.31  | 7.08  | 7.68  | 8.39  | 9.02  | 9.74  | 10.33 | 11.88 | 13.51 | 15.34 | 0.04   | 0.25               | 0.35               | 0.43             |
| 1400     | 6.26                                      | 6.73  | 7.50  | 8.18  | 8.96  | 9.61  | 10.36 | 11.00 | 12.64 | 14.37 | 16.30 | 0.04   | 0.27               | 0.38               | 0.46             |
| 1500     | 6.63                                      | 7.13  | 8.04  | 8.67  | 9.49  | 10.19 | 10.99 | 11.67 | 13.39 | 15.20 | 17.21 | 0.04   | 0.28               | 0.40               | 0.49             |
| 1600     | 7.09                                      | 7.54  | 8.46  | 9.17  | 10.13 | 10.75 | 11.64 | 12.31 | 14.11 | 16.00 | 18.10 | 0.05   | 0.30               | 0.43               | 0.53             |
| 1700     | 7.42                                      | 7.93  | 8.94  | 9.64  | 10.55 | 11.31 | 12.24 | 12.93 | 14.82 | 16.79 | 18.95 | 0.05   | 0.32               | 0.46               | 0.56             |
| 1800     | 7.79                                      | 8.32  | 9.38  | 10.10 | 11.18 | 11.84 | 12.85 | 13.55 | 15.50 | 17.54 | 19.76 | 0.05   | 0.34               | 0.48               | 0.59             |
| 1900     | 8.14                                      | 8.69  | 9.82  | 10.56 | 11.69 | 12.38 | 13.41 | 14.13 | 16.16 | 18.26 | 20.53 | 0.06   | 0.36               | 0.51               | 0.63             |
| 2000     | 8.47                                      | 9.06  | 10.26 | 11.01 | 12.19 | 12.89 | 13.98 | 14.71 | 16.80 | 18.95 | 21.26 | 0.06   | 0.38               | 0.54               | 0.66             |
| 2100     | 8.83                                      | 9.43  | 10.68 | 11.45 | 12.66 | 13.40 | 14.45 | 15.28 | 17.42 | 19.61 | 21.96 | 0.06   | 0.40               | 0.56               | 0.69             |
| 2200     | 9.23                                      | 9.79  | 11.14 | 11.88 | 13.18 | 13.89 | 15.19 | 15.81 | 18.02 | 20.24 | 22.61 | 0.06   | 0.42               | 0.59               | 0.73             |
| 2300     | 5.58                                      | 10.13 | 11.52 | 12.30 | 13.68 | 14.36 | 15.68 | 16.34 | 18.59 | 20.84 | 23.21 | 0.07   | 0.44               | 0.62               | 0.76             |
| 2400     | 9.86                                      | 10.48 | 11.93 | 12.69 | 14.08 | 14.83 | 16.25 | 16.84 | 19.13 | 21.41 | 23.76 | 0.07   | 0.45               | 0.65               | 0.79             |
| 2500     | 10.23                                     | 10.82 | 12.34 | 13.09 | 14.64 | 15.27 | 16.75 | 17.34 | 19.65 | 21.93 | 24.28 | 0.07   | 0.47               | 0.67               | 0.82             |
| 2600     | 10.55                                     | 11.14 | 12.72 | 13.48 | 15.09 | 15.71 | 17.25 | 17.80 | 20.14 | 22.43 | 24.74 | 0.08   | 0.49               | 0.70               | 0.86             |
| 2700     | 10.86                                     | 11.46 | 13.08 | 13.85 | 15.45 | 16.12 | 17.75 | 18.25 | 20.60 | 22.89 | 25.15 | 0.08   | 0.51               | 0.73               | 0.89             |
| 2800     | 11.19                                     | 11.77 | 13.49 | 14.22 | 15.89 | 16.53 | 18.19 | 18.68 | 21.04 | 23.31 | 25.50 | 0.08   | 0.53               | 0.75               | 0.92             |
| 2900     | 11.51                                     | 12.06 | 13.84 | 14.56 | 16.31 | 16.91 | 18.66 | 19.08 | 21.45 | 23.69 | 25.80 | 0.08   | 0.55               | 0.78               | 0.96             |
| 3000     | 11.83                                     | 12.36 | 14.18 | 14.91 | 16.73 | 17.28 | 19.13 | 19.47 | 21.83 | 24.02 | 26.05 | 0.09   | 0.57               | 0.81               | 0.99             |
| 3100     | 12.11                                     | 12.64 | 14.53 | 15.24 | 17.11 | 17.63 | 19.55 | 19.82 | 22.18 | 24.32 |       | 0.09   | 0.59               | 0.83               | 1.02             |
| 3200     | 12.39                                     | 12.93 | 14.88 | 15.55 | 17.48 | 17.97 | 19.96 | 20.17 | 22.49 | 24.57 |       | 0.09   | 0.61               | 0.86               | 1.05             |
| 3300     | 12.68                                     | 13.19 | 15.22 | 15.84 | 17.86 | 18.29 | 20.35 | 20.49 | 22.77 | 24.78 |       | 0.10   | 0.63               | 0.89               | 1.09             |
| 3400     | 12.96                                     | 13.45 | 15.56 | 16.14 | 18.23 | 18.59 | 20.73 | 20.77 | 23.02 | 24.95 |       | 0.10   | 0.64               | 0.91               | 1.12             |
| 3500     | 13.23                                     | 13.69 | 15.86 | 16.41 | 18.57 | 18.87 | 21.01 | 21.04 | 23.24 | 25.06 |       | 0.10   | 0.66               | 0.94               | 1.15             |
| 3600     | 13.49                                     | 13.93 | 16.16 | 16.67 | 18.91 | 19.13 | 21.21 | 21.28 | 23.42 |       |       | 0.11   | 0.68               | 0.97               | 1.19             |
| 3700     | 13.79                                     | 14.16 | 16.44 | 16.93 | 19.23 | 19.37 | 21.36 | 21.49 | 23.56 |       |       | 0.11   | 0.70               | 0.99               | 1.22             |
| 3800     | 14.09                                     | 14.39 | 16.72 | 17.16 | 19.54 | 19.60 | 21.59 | 21.68 | 23.67 |       |       | 0.11   | 0.72               | 1.02               | 1.25             |
| 3900     | 14.29                                     | 14.60 | 16.99 | 17.38 | 19.65 | 19.80 | 21.75 | 21.85 | 23.74 |       |       | 0.11   | 0.74               | 1.05               | 1.29             |
| 4000     | 14.48                                     | 14.79 | 17.25 | 17.58 | 19.85 | 19.99 | 21.82 | 21.99 | 23.78 |       |       | 0.12   | 0.76               | 1.08               | 1.32             |
| 4100     | 14.70                                     | 14.98 | 17.51 | 17.77 | 20.05 | 20.15 | 22.04 | 22.09 |       |       |       | 0.12   | 0.78               | 1.10               | 1.35             |
| 4200     | 14.91                                     | 15.16 | 17.76 | 17.94 | 20.25 | 20.30 | 22.13 | 22.17 |       |       |       | 0.12   | 0.80               | 1.13               | 1.38             |
| 4300     | 15.14                                     | 15.33 | 17.94 | 18.10 | 20.31 | 20.41 | 22.19 | 22.22 |       |       |       | 0.13   | 0.81               | 1.16               | 1.42             |
| 4400     | 15.36                                     | 15.49 | 18.11 | 18.24 | 20.38 | 20.51 | 22.21 | 22.23 |       |       |       | 0.13   | 0.83               | 1.18               | 1.45             |
| 4500     | 15.55                                     | 15.63 | 18.26 | 18.38 | 20.46 | 20.58 | 22.24 | 22.22 |       |       |       | 0.13   | 0.85               | 1.21               | 1.48             |
| 4600     | 15.74                                     | 15.77 | 18.41 | 18.48 | 20.51 | 20.63 | 21.71 |       |       |       |       | 0.13   | 0.87               | 1.24               | 1.52             |
| 4700     | 15.81                                     | 15.89 | 18.51 | 18.57 | 20.54 | 20.66 |       |       |       |       |       | 0.14   | 0.89               | 1.26               | 1.55             |
| 4800     | 15.85                                     | 16.00 | 18.58 | 18.65 | 20.58 | 20.66 |       |       |       |       |       | 0.14   | 0.91               | 1.29               | 1.58             |
| 4900     | 15.95                                     | 16.10 | 18.61 | 18.71 | 20.55 | 20.64 |       |       |       |       |       | 0.14   | 0.93               | 1.32               | 1.62             |
| 5000     | 16.02                                     | 16.19 | 18.69 | 18.74 | 20.49 | 20.60 |       |       |       |       |       | 0.15   | 0.95               | 1.34               | 1.65             |
| 5100     | 19.11                                     | 16.26 | 18.72 | 18.77 |       |       |       |       |       |       |       | 0.15   | 0.97               | 1.37               | 1.68             |
| 5200     | 16.19                                     | 16.33 | 18.73 | 18.77 |       |       |       |       |       |       |       | 0.15   | 0.98               | 1.40               | 1.71             |
| 5300     | 16.23                                     | 16.37 | 18.73 | 18.76 |       |       |       |       |       |       |       | 0.16   | 1.00               | 1.42               | 1.75             |
| 5400     | 16.32                                     | 16.41 | 18.69 | 18.72 |       |       |       |       |       |       |       | 0.16   | 1.02               | 1.45               | 1.78             |
| 5500     | 16.39                                     | 16.43 | 18.64 | 18.67 |       |       |       |       |       |       |       | 0.16   | 1.04               | 1.48               | 1.81             |
| 5600     | 16.35                                     | 16.44 | 18.61 |       |       |       |       |       |       |       |       | 0.16   | 1.06               | 1.51               | 1.85             |
| 5700     | 16.29                                     | 16.44 |       |       |       |       |       |       |       |       |       | 0.17   | 1.08               | 1.53               | 1.88             |
| 5800     | 16.26                                     | 16.42 |       |       |       |       |       |       |       |       |       | 0.17   | 1.10               | 1.56               | 1.91             |
| 5900     | 16.19                                     | 16.39 |       |       |       |       |       |       |       |       |       | 0.17   | 1.12               | 1.59               | 1.94             |
| 6000     | 16.12                                     | 16.34 |       |       |       |       |       |       |       |       |       | 0.18   | 1.14               | 1.61               | 1.98             |
| 6100     | 16.09                                     | 16.29 |       |       |       |       |       |       |       |       |       | 0.18   | 1.16               | 1.64               | 2.01             |
| 6200     | 16.05                                     | 16.21 |       |       |       |       |       |       |       |       |       | 0.18   | 1.17               | 1.67               | 2.04             |
| 6300     | 16.01                                     | 16.12 |       |       |       |       |       |       |       |       |       | 0.18   | 1.19               | 1.69               | 2.08             |
| 6400     | 15.88                                     | 16.01 |       |       |       |       |       |       |       |       |       | 0.19   | 1.21               | 1.72               | 2.11             |
| 6500     | 15.42                                     | 15.90 |       |       |       |       |       |       |       |       |       | 0.19   | 1.23               | 1.75               | 2.14             |

**TABLE 25 Section XPB, 5VX**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |       |       |       |       |       |       |       |       |       |       | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |                  |
|----------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--------------------|--------------------|------------------|
|          | 100                                       | 112   | 118   | 125   | 132   | 140   | 150   | 160   | 170   | 180   | 190   | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>><br>1.57 |
| 700      | 1.79                                      | 2.75  | 3.15  | 3.61  | 4.07  | 4.59  | 5.24  | 5.89  | 6.72  | 7.19  | 7.95  | 0.04   | 0.29               | 0.41               | 0.50             |
| 950      | 2.27                                      | 3.62  | 4.16  | 4.77  | 5.39  | 6.09  | 6.95  | 7.82  | 8.79  | 9.54  | 10.43 | 0.06   | 0.39               | 0.55               | 0.68             |
| 1450     | 3.11                                      | 5.27  | 6.06  | 6.97  | 7.89  | 8.93  | 10.21 | 11.49 | 12.74 | 14.02 | 15.06 | 0.09   | 0.59               | 0.84               | 1.03             |
| 2850     | 4.75                                      | 9.20  | 10.63 | 12.27 | 13.90 | 15.73 | 17.98 | 20.17 | 21.79 | 24.41 | 25.64 | 0.18   | 1.17               | 1.65               | 2.03             |
| 100      | 0.45                                      | 0.46  | 0.51  | 0.59  | 0.66  | 0.74  | 0.84  | 0.93  | 1.14  | 1.13  | 1.32  | 0.01   | 0.04               | 0.06               | 0.07             |
| 200      | 0.70                                      | 0.87  | 0.99  | 1.13  | 1.27  | 1.43  | 1.62  | 1.82  | 2.16  | 2.21  | 2.54  | 0.01   | 0.08               | 0.12               | 0.14             |
| 300      | 0.92                                      | 1.27  | 1.45  | 1.65  | 1.85  | 2.08  | 2.37  | 2.66  | 3.14  | 3.23  | 3.68  | 0.02   | 0.12               | 0.17               | 0.21             |
| 400      | 1.14                                      | 1.66  | 1.89  | 2.15  | 2.43  | 2.73  | 3.11  | 3.49  | 4.09  | 4.24  | 4.79  | 0.03   | 0.16               | 0.23               | 0.28             |
| 500      | 1.36                                      | 2.03  | 2.31  | 2.65  | 2.98  | 3.36  | 3.83  | 4.31  | 4.98  | 5.24  | 5.86  | 0.03   | 0.20               | 0.29               | 0.36             |
| 600      | 1.58                                      | 2.39  | 2.74  | 3.13  | 3.53  | 3.98  | 4.55  | 5.10  | 5.88  | 6.23  | 6.94  | 0.04   | 0.25               | 0.35               | 0.43             |
| 700      | 1.79                                      | 2.75  | 3.15  | 3.61  | 4.07  | 4.59  | 5.24  | 5.89  | 6.72  | 7.19  | 7.95  | 0.04   | 0.29               | 0.41               | 0.50             |
| 800      | 1.99                                      | 3.11  | 3.56  | 4.08  | 4.60  | 5.20  | 5.93  | 6.68  | 7.55  | 8.14  | 8.94  | 0.05   | 0.33               | 0.46               | 0.57             |
| 900      | 2.18                                      | 3.45  | 3.96  | 4.55  | 5.12  | 5.79  | 6.62  | 7.44  | 8.39  | 9.08  | 9.93  | 0.06   | 0.37               | 0.52               | 0.64             |
| 1000     | 2.36                                      | 3.80  | 4.36  | 5.00  | 5.64  | 6.37  | 7.29  | 8.20  | 9.24  | 10.01 | 10.91 | 0.06   | 0.41               | 0.58               | 0.71             |
| 1100     | 2.55                                      | 4.14  | 4.75  | 5.45  | 6.15  | 6.96  | 7.96  | 8.95  | 9.98  | 10.92 | 11.86 | 0.07   | 0.45               | 0.64               | 0.78             |
| 1200     | 2.73                                      | 4.46  | 5.12  | 5.89  | 6.66  | 7.53  | 8.61  | 9.69  | 10.82 | 11.82 | 12.79 | 0.08   | 0.49               | 0.70               | 0.85             |
| 1300     | 2.88                                      | 4.80  | 5.50  | 6.33  | 7.15  | 8.10  | 9.26  | 10.42 | 11.56 | 12.72 | 13.74 | 0.08   | 0.53               | 0.75               | 0.93             |
| 1400     | 3.04                                      | 5.11  | 5.88  | 6.76  | 7.64  | 8.65  | 9.89  | 11.13 | 12.32 | 13.59 | 14.64 | 0.09   | 0.57               | 0.81               | 1.00             |
| 1500     | 3.19                                      | 5.43  | 6.25  | 7.19  | 8.13  | 9.20  | 10.52 | 11.84 | 13.09 | 14.45 | 15.56 | 0.09   | 0.61               | 0.87               | 1.07             |
| 1600     | 3.34                                      | 5.74  | 6.60  | 7.61  | 8.60  | 9.73  | 11.14 | 12.54 | 13.82 | 15.30 | 16.37 | 0.10   | 0.65               | 0.93               | 1.14             |
| 1700     | 3.48                                      | 6.05  | 6.96  | 8.02  | 9.07  | 10.27 | 11.75 | 13.22 | 14.54 | 16.13 | 17.23 | 0.11   | 0.70               | 0.99               | 1.21             |
| 1800     | 3.61                                      | 6.36  | 7.32  | 8.43  | 9.53  | 10.79 | 12.35 | 13.89 | 15.19 | 16.94 | 18.04 | 0.11   | 0.74               | 1.05               | 1.28             |
| 1900     | 3.75                                      | 6.65  | 7.65  | 8.83  | 9.99  | 11.31 | 12.94 | 14.55 | 15.94 | 17.73 | 18.89 | 0.12   | 0.78               | 1.10               | 1.35             |
| 2000     | 3.88                                      | 6.94  | 8.00  | 9.22  | 10.44 | 11.81 | 13.52 | 15.20 | 16.62 | 18.52 | 19.69 | 0.13   | 0.82               | 1.16               | 1.42             |
| 2100     | 4.00                                      | 7.22  | 8.33  | 9.61  | 10.88 | 12.32 | 14.09 | 15.84 | 17.26 | 19.29 | 20.45 | 0.13   | 0.86               | 1.22               | 1.50             |
| 2200     | 4.12                                      | 7.51  | 8.66  | 9.99  | 11.31 | 12.80 | 14.65 | 16.46 | 17.94 | 20.03 | 21.26 | 0.14   | 0.90               | 1.28               | 1.57             |
| 2300     | 4.23                                      | 7.78  | 8.98  | 10.36 | 11.73 | 13.28 | 15.19 | 17.07 | 18.56 | 20.76 | 21.94 | 0.15   | 0.94               | 1.34               | 1.64             |
| 2400     | 4.35                                      | 8.05  | 9.29  | 10.72 | 12.14 | 13.74 | 15.73 | 17.67 | 19.19 | 21.47 | 22.66 | 0.15   | 0.98               | 1.39               | 1.71             |
| 2500     | 4.43                                      | 8.32  | 9.60  | 11.08 | 12.55 | 14.21 | 16.24 | 18.26 | 19.77 | 22.17 | 23.36 | 0.16   | 1.02               | 1.45               | 1.78             |
| 2600     | 4.51                                      | 8.58  | 9.90  | 11.43 | 12.95 | 14.66 | 16.76 | 18.83 | 20.36 | 22.83 | 24.05 | 0.16   | 1.06               | 1.51               | 1.85             |
| 2700     | 4.59                                      | 8.83  | 10.20 | 11.77 | 13.34 | 15.09 | 17.25 | 19.37 | 20.93 | 23.48 | 24.72 | 0.17   | 1.10               | 1.57               | 1.92             |
| 2800     | 4.67                                      | 9.08  | 10.49 | 12.11 | 13.71 | 15.52 | 17.73 | 19.91 | 21.48 | 24.11 | 25.34 | 0.18   | 1.15               | 1.63               | 1.99             |
| 2900     | 4.74                                      | 9.32  | 10.76 | 12.43 | 14.08 | 15.94 | 18.21 | 20.43 | 22.09 | 24.72 | 25.94 | 0.18   | 1.19               | 1.68               | 2.06             |
| 3000     | 4.82                                      | 9.56  | 11.05 | 12.76 | 14.45 | 16.34 | 18.67 | 20.94 | 22.54 | 25.29 | 26.53 | 0.19   | 1.23               | 1.74               | 2.14             |
| 3100     | 4.90                                      | 9.79  | 11.31 | 13.06 | 14.79 | 16.74 | 19.11 | 21.42 | 22.14 | 25.85 | 27.08 | 0.20   | 1.27               | 1.80               | 2.21             |
| 3200     | 4.98                                      | 10.01 | 11.57 | 13.37 | 15.13 | 17.12 | 19.54 | 21.89 | 23.56 | 26.39 | 27.64 | 0.20   | 1.31               | 1.86               | 2.28             |
| 3300     | 5.03                                      | 10.22 | 11.82 | 13.66 | 15.47 | 17.48 | 19.95 | 22.34 | 23.98 | 26.90 | 28.14 | 0.21   | 1.35               | 1.92               | 2.35             |
| 3400     | 5.08                                      | 10.43 | 12.06 | 13.93 | 15.78 | 17.84 | 20.35 | 22.79 | 24.45 | 27.38 | 28.64 | 0.22   | 1.39               | 1.97               | 2.42             |
| 3500     | 5.13                                      | 10.63 | 12.30 | 14.21 | 16.09 | 18.19 | 20.74 | 23.19 | 24.86 | 27.84 | 29.18 | 0.22   | 1.43               | 2.03               | 2.49             |
| 3600     | 5.18                                      | 10.83 | 12.53 | 14.48 | 16.38 | 18.52 | 21.11 | 23.59 | 25.26 | 28.27 | 29.52 | 0.23   | 1.47               | 2.09               | 2.56             |
| 3700     | 5.22                                      | 11.01 | 12.75 | 14.73 | 16.67 | 18.84 | 21.45 | 23.97 | 25.66 | 28.68 | 29.92 | 0.23   | 1.51               | 2.15               | 2.63             |
| 3800     | 5.25                                      | 11.19 | 12.96 | 14.97 | 16.95 | 19.14 | 21.79 | 24.33 | 26.08 | 29.04 | 30.31 | 0.24   | 1.55               | 2.21               | 2.71             |
| 3900     | 5.29                                      | 11.36 | 13.16 | 15.20 | 17.21 | 19.43 | 22.10 | 24.66 | 26.38 | 29.39 | 30.64 | 0.25   | 1.60               | 2.26               | 2.78             |
| 4000     | 5.32                                      | 11.53 | 13.35 | 15.42 | 17.45 | 19.70 | 22.41 | 24.98 | 26.69 | 29.72 | 30.98 | 0.25   | 1.64               | 2.32               | 2.85             |
| 4100     | 5.31                                      | 11.69 | 13.53 | 15.65 | 17.69 | 19.96 | 22.68 | 25.27 | 26.99 | 30.00 |       | 0.26   | 1.68               | 2.38               | 2.92             |
| 4200     | 5.29                                      | 11.83 | 13.71 | 15.84 | 17.91 | 20.21 | 22.94 | 25.54 | 27.28 | 30.25 |       | 0.27   | 1.72               | 2.44               | 2.99             |
| 4300     | 5.28                                      | 11.97 | 13.87 | 16.03 | 18.13 | 20.43 | 23.19 | 25.79 | 27.54 | 30.48 |       | 0.27   | 1.76               | 2.50               | 3.06             |
| 4400     | 5.26                                      | 12.11 | 14.03 | 16.21 | 18.32 | 20.65 | 23.42 | 26.02 | 27.79 | 30.67 |       | 0.28   | 1.80               | 2.56               | 3.13             |
| 4500     | 5.25                                      | 12.23 | 14.18 | 16.38 | 18.51 | 20.85 | 23.63 | 26.22 | 27.82 | 30.83 |       | 0.28   | 1.84               | 2.61               | 3.20             |
| 4600     | 5.23                                      | 12.35 | 14.31 | 16.54 | 18.68 | 21.03 | 23.81 | 26.40 | 27.89 | 30.95 |       | 0.29   | 1.88               | 2.67               | 3.28             |
| 4700     | 5.22                                      | 12.45 | 14.44 | 16.68 | 18.84 | 21.20 | 23.97 | 26.55 | 27.98 | 31.04 |       | 0.30   | 1.92               | 2.73               | 3.35             |
| 4800     | 5.20                                      | 12.55 | 14.55 | 16.81 | 18.98 | 21.35 | 24.12 | 26.68 | 28.01 | 31.09 |       | 0.30   | 1.96               | 2.79               | 3.42             |
| 4900     | 5.19                                      | 12.63 | 14.66 | 16.94 | 19.11 | 21.48 | 24.24 | 26.79 | 28.09 | 31.11 |       | 0.31   | 2.00               | 2.85               | 3.49             |
| 5000     | 5.17                                      | 12.72 | 14.75 | 17.04 | 19.23 | 21.59 | 24.35 | 26.86 | 28.12 | 31.10 |       | 0.32   | 2.05               | 2.90               | 3.56             |
| 5100     | 5.07                                      | 12.79 | 14.84 | 17.14 | 19.32 | 21.69 | 24.43 | 26.91 | 28.16 |       |       | 0.32   | 2.09               | 2.96               | 3.63             |
| 5200     | 4.97                                      | 12.84 | 14.91 | 17.21 | 19.40 | 21.77 | 24.49 | 26.93 | 28.24 |       |       | 0.33   | 2.13               | 3.02               | 3.70             |
| 5300     | 4.87                                      | 12.89 | 14.96 | 17.28 | 19.48 | 21.83 | 24.53 | 26.93 |       |       |       | 0.34   | 2.17               | 3.08               | 3.77             |
| 5400     | 4.77                                      | 12.94 | 15.02 | 17.34 | 19.53 | 21.87 | 24.54 | 26.90 |       |       |       | 0.34   | 2.21               | 3.14               | 3.84             |
| 5500     | 4.68                                      | 12.97 | 15.06 | 17.38 | 19.56 | 21.89 | 24.53 | 26.85 |       |       |       | 0.35   | 2.25               | 3.19               | 3.92             |
| 5600     | 4.58                                      | 12.99 | 15.08 | 17.40 | 19.58 | 21.89 |       |       |       |       |       | 0.35   | 2.29               | 3.25               | 3.99             |
| 5700     | 4.48                                      | 13.00 | 15.10 | 17.41 | 19.58 | 21.87 |       |       |       |       |       | 0.36   | 2.33               | 3.31               | 4.06             |
| 5800     | 4.38                                      | 13.00 | 15.10 | 17.41 | 19.57 | 21.84 |       |       |       |       |       | 0.37   | 2.37               | 3.37               | 4.13             |
| 5900     | 4.28                                      | 12.99 | 15.09 | 17.39 | 19.54 | 21.78 |       |       |       |       |       | 0.37   | 2.41               | 3.43               | 4.20             |
| 6000     | 4.18                                      | 12.97 | 15.06 | 17.36 | 19.49 | 21.69 |       |       |       |       |       | 0.38   | 2.45               | 3.48               | 4.27             |

**TABLE 25 Section XPB, 5VX**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |       |       |       |       |       |       |       |       | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |                  |
|----------|---|-------|-------|-------|-------|-------|-------|-------|-------|--|--------------------|--------------------|------------------|
|          | 200                                       | 212   | 224   | 236   | 250   | 280   | 315   | 355   | 400   | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>><br>1.57 |
| 700      | 8.47                                      | 9.28  | 10.01 | 10.71 | 11.66 | 13.55 | 15.72 | 18.18 | 20.90 | 0.04   | 0.29               | 0.41               | 0.50             |
| 950      | 11.26                                     | 12.19 | 13.29 | 14.19 | 15.47 | 17.94 | 20.79 | 24.11 | 27.64 | 0.06   | 0.39               | 0.55               | 0.68             |
| 1450     | 16.52                                     | 17.63 | 19.46 | 20.35 | 22.56 | 26.07 | 30.01 | 34.62 | 38.78 | 0.09   | 0.59               | 0.84               | 1.03             |
| 2850     | 28.42                                     | 29.66 | 32.91 | 33.75 | 37.33 | 41.79 | 46.04 |       |       | 0.18   | 1.17               | 1.65               | 2.03             |
| 100      | 1.33                                      | 1.56  | 1.58  | 1.81  | 1.83  | 2.12  | 2.47  | 2.86  | 3.29  | 0.01   | 0.04               | 0.06               | 0.07             |
| 200      | 2.59                                      | 2.96  | 3.06  | 3.41  | 3.55  | 4.13  | 4.79  | 5.55  | 6.39  | 0.01   | 0.08               | 0.12               | 0.14             |
| 300      | 3.81                                      | 4.26  | 4.49  | 4.96  | 5.23  | 6.08  | 7.06  | 8.18  | 9.43  | 0.02   | 0.12               | 0.17               | 0.21             |
| 400      | 5.00                                      | 5.59  | 5.90  | 6.44  | 6.88  | 7.99  | 9.28  | 10.75 | 12.39 | 0.03   | 0.16               | 0.23               | 0.28             |
| 500      | 6.17                                      | 6.85  | 7.29  | 7.93  | 8.49  | 9.87  | 11.47 | 13.28 | 15.30 | 0.03   | 0.20               | 0.29               | 0.36             |
| 600      | 7.33                                      | 8.09  | 8.66  | 9.38  | 10.09 | 11.72 | 13.61 | 15.75 | 18.13 | 0.04   | 0.25               | 0.35               | 0.43             |
| 700      | 8.47                                      | 9.28  | 10.01 | 10.71 | 11.66 | 13.55 | 15.72 | 18.18 | 20.90 | 0.04   | 0.29               | 0.41               | 0.50             |
| 800      | 9.60                                      | 10.46 | 11.33 | 12.11 | 13.20 | 15.33 | 17.78 | 20.54 | 23.59 | 0.05   | 0.33               | 0.46               | 0.57             |
| 900      | 10.71                                     | 11.63 | 12.64 | 13.45 | 14.72 | 17.08 | 19.80 | 22.85 | 26.21 | 0.06   | 0.37               | 0.52               | 0.64             |
| 1000     | 11.80                                     | 12.76 | 13.93 | 14.79 | 16.21 | 18.81 | 21.78 | 25.10 | 28.74 | 0.06   | 0.41               | 0.58               | 0.71             |
| 1100     | 12.87                                     | 13.89 | 15.19 | 16.13 | 17.67 | 20.49 | 23.70 | 27.28 | 31.17 | 0.07   | 0.45               | 0.64               | 0.78             |
| 1200     | 13.93                                     | 14.99 | 16.44 | 17.39 | 19.11 | 22.13 | 25.58 | 29.39 | 33.52 | 0.08   | 0.49               | 0.70               | 0.85             |
| 1300     | 14.98                                     | 16.04 | 17.66 | 18.58 | 20.52 | 23.74 | 27.39 | 31.43 | 35.75 | 0.08   | 0.53               | 0.75               | 0.93             |
| 1400     | 16.00                                     | 17.13 | 18.86 | 19.76 | 21.89 | 25.31 | 29.16 | 33.38 | 37.87 | 0.09   | 0.57               | 0.81               | 1.00             |
| 1500     | 17.01                                     | 18.18 | 20.03 | 20.98 | 23.24 | 26.83 | 30.86 | 35.25 | 39.87 | 0.09   | 0.61               | 0.87               | 1.07             |
| 1600     | 18.00                                     | 19.16 | 21.19 | 22.15 | 24.55 | 28.30 | 32.50 | 37.02 | 41.75 | 0.10   | 0.65               | 0.93               | 1.14             |
| 1700     | 18.97                                     | 20.13 | 22.30 | 23.29 | 25.82 | 29.73 | 34.06 | 38.70 | 43.49 | 0.11   | 0.70               | 0.99               | 1.21             |
| 1800     | 19.92                                     | 21.09 | 23.40 | 24.29 | 27.05 | 31.09 | 35.55 | 40.29 | 47.19 | 0.11   | 0.74               | 1.05               | 1.28             |
| 1900     | 20.84                                     | 22.03 | 24.47 | 25.38 | 28.25 | 32.41 | 36.98 | 41.76 | 46.54 | 0.12   | 0.78               | 1.10               | 1.35             |
| 2000     | 21.75                                     | 22.96 | 25.50 | 26.42 | 29.40 | 33.67 | 38.33 | 43.12 | 47.83 | 0.13   | 0.82               | 1.16               | 1.42             |
| 2100     | 22.63                                     | 23.84 | 26.50 | 27.45 | 30.51 | 34.88 | 39.59 | 44.37 | 48.95 | 0.13   | 0.86               | 1.22               | 1.50             |
| 2200     | 23.49                                     | 24.74 | 27.48 | 28.38 | 31.58 | 36.03 | 40.75 | 45.50 | 49.91 | 0.14   | 0.90               | 1.28               | 1.57             |
| 2300     | 24.32                                     | 25.54 | 28.41 | 29.34 | 32.61 | 37.11 | 41.84 | 46.50 | 50.67 | 0.15   | 0.94               | 1.34               | 1.64             |
| 2400     | 25.13                                     | 26.36 | 29.32 | 30.19 | 33.58 | 38.12 | 42.83 | 47.37 | 51.26 | 0.15   | 0.98               | 1.39               | 1.71             |
| 2500     | 25.91                                     | 27.18 | 30.19 | 31.09 | 34.50 | 39.06 | 43.72 | 48.10 | 51.66 | 0.16   | 1.02               | 1.45               | 1.78             |
| 2600     | 26.67                                     | 27.94 | 31.02 | 31.89 | 35.39 | 39.93 | 44.52 |       |       | 0.16   | 1.06               | 1.51               | 1.85             |
| 2700     | 27.39                                     | 28.65 | 31.80 | 32.65 | 36.20 | 40.73 | 45.21 |       |       | 0.17   | 1.10               | 1.57               | 1.92             |
| 2800     | 28.09                                     | 29.32 | 32.55 | 33.39 | 36.97 | 41.45 | 45.79 |       |       | 0.18   | 1.15               | 1.63               | 1.99             |
| 2900     | 28.76                                     | 29.98 | 33.26 | 34.09 | 37.67 | 42.09 | 46.26 |       |       | 0.18   | 1.19               | 1.68               | 2.06             |
| 3000     | 29.39                                     | 30.65 | 33.93 | 34.79 | 38.33 | 42.66 | 46.61 |       |       | 0.19   | 1.23               | 1.74               | 2.14             |
| 3100     | 30.00                                     | 31.23 | 34.55 | 35.39 | 38.91 |       |       |       |       | 0.20   | 1.27               | 1.80               | 2.21             |
| 3200     | 30.57                                     | 31.82 | 35.12 | 35.93 | 39.44 |       |       |       |       | 0.20   | 1.31               | 1.86               | 2.28             |
| 3300     | 31.10                                     | 32.35 | 35.65 | 36.11 | 39.90 |       |       |       |       | 0.21   | 1.35               | 1.92               | 2.35             |
| 3400     | 31.61                                     | 32.85 | 36.13 | 36.32 | 40.30 |       |       |       |       | 0.22   | 1.39               | 1.97               | 2.42             |
| 3500     | 32.08                                     | 33.36 | 36.56 | 36.89 | 40.62 |       |       |       |       | 0.22   | 1.43               | 2.03               | 2.49             |
| 3600     | 32.51                                     | 33.74 | 36.95 | 37.08 |       |       |       |       |       | 0.23   | 1.47               | 2.09               | 2.56             |
| 3700     | 32.90                                     | 33.96 | 37.28 | 37.42 |       |       |       |       |       | 0.23   | 1.51               | 2.15               | 2.63             |
| 3800     | 33.25                                     | 34.05 | 37.55 | 37.89 |       |       |       |       |       | 0.24   | 1.55               | 2.21               | 2.71             |
| 3900     | 33.57                                     | 34.24 | 37.77 | 38.21 |       |       |       |       |       | 0.25   | 1.60               | 2.26               | 2.78             |
| 4000     | 33.85                                     | 34.46 | 37.94 | 38.44 |       |       |       |       |       | 0.25   | 1.64               | 2.32               | 2.85             |

**TABLE 26 Section XPC**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |       |       |       |       |       |       |       |       |       |       | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |               |
|----------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--------------------|--------------------|---------------|
|          | 160                                       | 180   | 190   | 200   | 212   | 224   | 236   | 250   | 265   | 280   | 315   | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>> 1.57 |
| 700      | 6.09                                      | 9.38  | 10.55 | 11.26 | 13.11 | 13.50 | 15.65 | 15.91 | 17.58 | 18.67 | 21.86 | 0.08   | 0.49               | 0.70               | 0.85          |
| 950      | 7.78                                      | 12.53 | 13.69 | 15.03 | 16.94 | 18.01 | 20.46 | 21.20 | 23.93 | 24.84 | 29.01 | 0.10   | 0.67               | 0.95               | 1.16          |
| 1450     | 10.81                                     | 18.50 | 19.33 | 22.15 | 24.02 | 26.46 | 29.04 | 31.02 | 35.03 | 36.12 | 41.86 | 0.16   | 1.02               | 1.44               | 1.77          |
| 2850     | 16.15                                     | 31.91 | 32.75 | 37.65 | 35.03 | 43.99 | 45.96 | 50.10 | 53.74 | 56.06 |       | 0.31   | 2.00               | 2.84               | 3.48          |
| 50       | 0.69                                      | 0.73  | 0.77  | 0.87  | 0.98  | 1.04  | 1.11  | 1.22  | 1.32  | 1.43  | 1.68  | 0.01   | 0.04               | 0.05               | 0.06          |
| 100      | 1.32                                      | 1.43  | 1.54  | 1.71  | 1.95  | 2.05  | 2.22  | 2.41  | 2.64  | 2.83  | 3.32  | 0.01   | 0.07               | 0.10               | 0.12          |
| 150      | 1.73                                      | 2.12  | 2.54  | 2.54  | 2.91  | 3.04  | 2.38  | 3.58  | 3.81  | 4.20  | 4.93  | 0.02   | 0.11               | 0.15               | 0.18          |
| 200      | 2.14                                      | 2.80  | 3.54  | 3.36  | 3.86  | 4.02  | 2.54  | 4.74  | 4.98  | 5.57  | 6.53  | 0.02   | 0.14               | 0.20               | 0.24          |
| 250      | 2.55                                      | 3.48  | 4.17  | 4.17  | 4.58  | 5.00  | 4.64  | 5.89  | 6.31  | 6.92  | 8.12  | 0.03   | 0.18               | 0.25               | 0.31          |
| 300      | 2.97                                      | 4.15  | 4.79  | 4.98  | 5.99  | 5.96  | 6.73  | 7.03  | 7.63  | 8.26  | 9.69  | 0.03   | 0.21               | 0.30               | 0.37          |
| 350      | 3.38                                      | 4.82  | 5.64  | 5.78  | 6.52  | 6.93  | 7.80  | 8.17  | 8.91  | 9.59  | 11.25 | 0.04   | 0.25               | 0.35               | 0.43          |
| 400      | 3.79                                      | 5.48  | 6.49  | 6.57  | 7.75  | 7.88  | 8.86  | 9.30  | 10.18 | 10.92 | 12.81 | 0.04   | 0.28               | 0.40               | 0.49          |
| 450      | 4.18                                      | 6.14  | 7.21  | 7.37  | 8.72  | 8.83  | 9.92  | 10.42 | 11.37 | 12.23 | 14.35 | 0.05   | 0.32               | 0.45               | 0.55          |
| 500      | 4.58                                      | 6.80  | 7.92  | 8.15  | 9.69  | 9.78  | 10.98 | 11.53 | 12.56 | 13.54 | 15.87 | 0.05   | 0.35               | 0.50               | 0.61          |
| 550      | 4.97                                      | 7.45  | 8.58  | 8.94  | 10.52 | 10.72 | 12.26 | 12.64 | 13.80 | 14.84 | 17.39 | 0.06   | 0.39               | 0.55               | 0.67          |
| 600      | 5.36                                      | 8.10  | 9.23  | 9.71  | 11.34 | 11.65 | 13.54 | 13.73 | 15.04 | 16.13 | 18.89 | 0.07   | 0.42               | 0.60               | 0.73          |
| 650      | 5.73                                      | 8.74  | 9.89  | 10.49 | 12.23 | 12.58 | 14.60 | 14.83 | 16.31 | 17.40 | 20.39 | 0.07   | 0.46               | 0.65               | 0.79          |
| 700      | 6.09                                      | 9.38  | 10.55 | 11.26 | 13.11 | 13.50 | 15.65 | 15.91 | 17.58 | 18.67 | 21.86 | 0.08   | 0.49               | 0.70               | 0.85          |
| 750      | 6.46                                      | 10.02 | 11.20 | 12.02 | 13.88 | 14.41 | 16.64 | 16.99 | 18.82 | 19.93 | 23.32 | 0.08   | 0.53               | 0.75               | 0.92          |
| 800      | 6.82                                      | 10.65 | 11.85 | 12.78 | 14.64 | 15.32 | 17.62 | 18.05 | 20.05 | 21.17 | 24.77 | 0.09   | 0.56               | 0.80               | 0.98          |
| 850      | 7.14                                      | 11.28 | 12.49 | 13.54 | 15.43 | 16.22 | 18.59 | 19.11 | 21.08 | 22.41 | 26.20 | 0.09   | 0.60               | 0.85               | 1.04          |
| 900      | 7.46                                      | 11.91 | 13.13 | 14.29 | 16.22 | 17.12 | 19.55 | 20.16 | 22.11 | 23.63 | 27.62 | 0.10   | 0.63               | 0.90               | 1.10          |
| 950      | 7.78                                      | 12.53 | 13.69 | 15.03 | 16.94 | 18.01 | 20.46 | 21.20 | 23.93 | 24.84 | 29.01 | 0.10   | 0.67               | 0.95               | 1.16          |
| 1000     | 8.11                                      | 13.14 | 14.24 | 15.77 | 17.65 | 18.89 | 21.36 | 22.23 | 25.75 | 26.03 | 30.39 | 0.11   | 0.70               | 1.00               | 1.22          |
| 1050     | 8.43                                      | 13.76 | 14.85 | 16.50 | 18.39 | 19.76 | 21.26 | 23.25 | 26.82 | 27.22 | 31.75 | 0.11   | 0.74               | 1.05               | 1.28          |
| 1100     | 8.75                                      | 14.37 | 15.45 | 17.23 | 19.12 | 20.63 | 21.15 | 24.26 | 27.89 | 28.39 | 33.09 | 0.12   | 0.77               | 1.10               | 1.34          |
| 1150     | 9.07                                      | 14.97 | 16.04 | 17.95 | 19.89 | 21.49 | 23.05 | 25.26 | 29.01 | 29.54 | 34.41 | 0.12   | 0.81               | 1.15               | 1.40          |
| 1200     | 9.39                                      | 15.57 | 16.63 | 18.67 | 20.65 | 22.34 | 24.94 | 26.25 | 30.12 | 30.68 | 35.71 | 0.13   | 0.84               | 1.20               | 1.47          |
| 1250     | 9.67                                      | 16.17 | 17.17 | 19.38 | 21.37 | 23.18 | 25.77 | 27.23 | 31.14 | 31.80 | 36.99 | 0.14   | 0.88               | 1.25               | 1.53          |
| 1300     | 9.96                                      | 16.76 | 17.71 | 20.08 | 22.09 | 24.01 | 26.59 | 28.19 | 32.15 | 32.91 | 38.24 | 0.14   | 0.91               | 1.29               | 1.59          |
| 1350     | 10.24                                     | 17.34 | 18.27 | 20.78 | 22.72 | 24.84 | 27.41 | 29.15 | 33.12 | 34.00 | 39.37 | 0.15   | 0.95               | 1.34               | 1.65          |
| 1400     | 10.53                                     | 17.92 | 18.82 | 21.47 | 23.35 | 25.65 | 28.23 | 30.09 | 34.09 | 35.07 | 40.68 | 0.15   | 0.98               | 1.39               | 1.71          |
| 1450     | 10.81                                     | 18.50 | 19.33 | 22.15 | 24.02 | 26.46 | 29.04 | 31.02 | 35.03 | 36.12 | 41.86 | 0.16   | 1.02               | 1.44               | 1.77          |
| 1500     | 11.09                                     | 19.07 | 19.84 | 22.83 | 24.69 | 27.25 | 29.84 | 31.93 | 35.96 | 37.16 | 43.01 | 0.16   | 1.05               | 1.49               | 1.83          |
| 1550     | 11.38                                     | 19.63 | 20.40 | 23.50 | 25.41 | 28.04 | 30.65 | 32.83 | 36.89 | 38.18 | 44.14 | 0.17   | 1.09               | 1.54               | 1.89          |
| 1600     | 11.66                                     | 20.19 | 20.96 | 24.16 | 26.13 | 28.81 | 31.46 | 33.72 | 37.82 | 39.17 | 45.24 | 0.17   | 1.12               | 1.59               | 1.95          |
| 1650     | 11.90                                     | 20.74 | 21.44 | 24.81 | 26.69 | 29.58 | 32.21 | 34.59 | 38.70 | 40.15 | 46.31 | 0.18   | 1.16               | 1.64               | 2.02          |
| 1700     | 12.14                                     | 21.29 | 21.92 | 25.46 | 27.25 | 30.33 | 32.95 | 35.45 | 39.58 | 41.11 | 47.35 | 0.18   | 1.19               | 1.69               | 2.08          |
| 1750     | 12.37                                     | 21.83 | 22.38 | 26.09 | 27.86 | 31.07 | 33.72 | 36.29 | 40.43 | 42.04 | 48.37 | 0.19   | 1.23               | 1.74               | 2.14          |
| 1800     | 12.61                                     | 22.36 | 22.83 | 26.72 | 28.46 | 31.80 | 34.49 | 37.11 | 41.27 | 42.96 | 49.35 | 0.20   | 1.30               | 1.79               | 2.20          |
| 1850     | 12.85                                     | 22.89 | 23.32 | 27.34 | 29.06 | 32.52 | 35.18 | 37.92 | 42.08 | 43.85 | 50.30 | 0.20   | 1.33               | 1.84               | 2.26          |
| 1900     | 13.09                                     | 23.41 | 23.81 | 27.95 | 29.66 | 33.23 | 35.86 | 38.72 | 42.88 | 44.71 | 51.21 | 0.21   | 1.37               | 1.89               | 2.32          |
| 1950     | 13.32                                     | 23.93 | 24.25 | 28.56 | 30.21 | 33.93 | 36.53 | 39.49 | 43.74 | 45.56 | 52.10 | 0.21   | 1.40               | 1.94               | 2.38          |
| 2000     | 13.56                                     | 24.44 | 24.69 | 29.15 | 30.75 | 34.61 | 37.19 | 40.25 | 44.59 | 46.38 | 52.95 | 0.22   | 1.44               | 1.99               | 2.44          |
| 2050     | 13.77                                     | 24.94 | 25.16 | 29.74 | 31.27 | 35.28 | 37.83 | 40.99 | 45.39 | 47.17 | 53.76 | 0.22   | 1.47               | 2.04               | 2.50          |
| 2100     | 13.98                                     | 25.44 | 25.63 | 30.31 | 31.79 | 35.93 | 38.46 | 41.71 | 46.18 | 47.94 | 54.54 | 0.23   | 1.51               | 2.09               | 2.56          |
| 2150     | 14.19                                     | 25.92 | 26.06 | 30.88 | 32.38 | 36.58 | 39.08 | 42.42 | 46.81 | 48.69 | 55.29 | 0.23   | 1.54               | 2.14               | 2.63          |
| 2200     | 14.40                                     | 26.40 | 26.48 | 31.43 | 32.96 | 37.20 | 39.69 | 43.10 | 47.44 | 49.40 | 55.99 | 0.24   | 1.58               | 2.19               | 2.69          |
| 2250     | 14.61                                     | 26.88 | 26.98 | 31.98 | 33.43 | 37.82 | 40.26 | 43.77 | 47.94 | 50.09 | 56.66 | 0.24   | 1.61               | 2.24               | 2.75          |
| 2300     | 14.82                                     | 27.34 | 27.46 | 32.51 | 33.89 | 38.42 | 40.82 | 44.42 | 48.44 | 50.76 | 57.28 | 0.25   | 1.65               | 2.29               | 2.81          |
| 2350     | 15.03                                     | 27.80 | 27.98 | 33.04 | 34.38 | 39.00 | 41.36 | 45.04 | 49.27 | 51.39 | 57.87 | 0.26   | 1.68               | 2.34               | 2.87          |
| 2400     | 15.24                                     | 28.25 | 28.36 | 33.55 | 34.86 | 39.58 | 41.89 | 45.65 | 50.09 | 52.00 | 58.42 | 0.26   | 1.72               | 2.39               | 2.93          |
| 2450     | 15.34                                     | 28.69 | 28.73 | 34.05 | 35.30 | 40.13 | 42.49 | 46.23 | 50.67 | 52.57 | 58.92 | 0.27   | 1.75               | 2.44               | 2.99          |
| 2500     | 15.44                                     | 29.12 | 29.68 | 34.54 | 35.74 | 40.67 | 43.09 | 46.79 | 51.25 | 53.12 | 59.39 | 0.27   | 1.79               | 2.49               | 3.05          |
| 2550     | 15.54                                     | 29.55 | 29.95 | 35.02 | 36.20 | 41.19 | 43.58 | 47.33 | 51.65 | 53.64 | 59.80 | 0.28   | 1.82               | 2.54               | 3.11          |
| 2600     | 15.65                                     | 29.96 | 30.65 | 35.49 | 36.66 | 41.70 | 44.06 | 47.85 | 51.83 | 54.12 | 60.18 | 0.28   | 1.86               | 2.59               | 3.18          |
| 2650     | 15.75                                     | 30.37 | 31.05 | 35.95 | 37.14 | 42.19 | 44.47 | 48.35 | 52.04 | 54.57 | 60.51 | 0.29   | 1.89               | 2.64               | 3.24          |
| 2700     | 15.85                                     | 30.77 | 31.12 | 36.39 | 37.61 | 42.67 | 44.88 | 48.82 | 52.29 | 54.99 | 60.79 | 0.29   | 1.93               | 2.69               | 3.30          |
| 2750     | 15.95                                     | 31.16 | 31.46 | 36.83 | 37.99 | 43.13 | 45.32 | 49.27 | 52.84 | 55.38 | 61.03 | 0.30   | 1.96               | 2.74               | 3.36          |
| 2800     | 16.05                                     | 31.54 | 32.25 | 37.25 | 38.43 | 43.57 | 45.76 | 49.70 | 53.19 | 55.74 |       | 0.30   | 2.00               | 2.79               | 3.42          |
| 2850     | 16.15                                     | 31.91 | 32.75 | 37.65 | 38.89 | 43.99 | 46.18 | 50.10 | 53.74 | 56.06 |       | 0.31   | 2.04               | 2.84               | 3.48          |
| 2900     | 16.25                                     | 32.27 | 33.05 | 38.05 | 39.39 | 44.39 | 46.60 | 50.47 | 54.11 | 56.34 |       | 0.31   | 2.06               | 2.89               | 3.54          |
| 2950     | 16.35                                     | 32.63 | 33.26 | 38.43 | 39.92 | 44.78 | 47.02 | 50.82 | 54.32 | 56.59 |       | 0.32   | 2.07               | 2.94               | 3.60          |
| 3000     | 16.46                                     | 32.97 | 33.52 | 38.80 | 40.47 | 45.15 | 47.44 | 51.15 | 54.55 | 56.80 |       | 0.33   | 2.11               | 2.99               | 3.66          |
| 3050     | 16.56                                     | 33.30 | 33.96 | 39.15 | 40.98 | 45.50 | 47.82 | 51.45 | 54.69 |       |       | 0.33   | 2.14               | 3.04               | 3.72          |
| 3100     | 16.66                                     | 33.62 | 34.08 | 39.49 | 41.46 | 45.83 | 48.23 | 51.72 | 54.81 |       |       | 0.34   | 2.18               | 3.09               | 3.79          |
| 3150     | 16.76                                     | 33.94 | 34.21 | 39.82 | 41.97 | 46.14 | 48.61 | 52.02 | 55.02 |       |       | 0.34   | 2.21               | 3.14               | 3.85          |
| 3200     | 16.86                                     | 34.24 | 34.46 | 40.13 | 42.38 | 46.43 | 48.93 | 52.28 | 55.12 |       |       | 0.35   | 2.25               | 3.19               | 3.91          |
| 3250     | 16.87                                     | 34.53 | 34.95 | 40.43 | 42.82 | 46.70 | 49.34 | 52.57 | 55.61 |       |       | 0.35   | 2.28               | 3.24               | 3.97          |
| 3300     | 16.88                                     | 34.81 | 35.09 | 40.72 | 43.26 | 46.95 | 49.75 |       |       |       |       | 0.36   | 2.32               | 3.29               | 4.03          |
| 3350     | 16.89                                     | 35.08 | 35.88 | 40.99 | 43.69 | 47.18 | 49.94 |       |       |       |       | 0.36   | 2.35               | 3.34               | 4.09          |
| 3400     | 16.89                                     | 35.34 | 36.12 | 41.24 | 44.05 | 47.39 | 49.94 |       |       |       |       | 0.37   | 2.39               | 3.39               | 4.15          |
| 3450     | 16.90                                     | 35.59 | 36.66 | 41.48 | 44.38 | 47.58 |       |       |       |       |       | 0.37   | 2.42               | 3.44               | 4.21          |
| 3500     | 16.91                                     | 35.83 | 37.15 | 41.70 | 44.68 | 47.74 |       |       |       |       |       | 0.38   | 2.46               | 3.49               | 4.27          |

**TABLE 26 Section XPC**  
Power Rating P (kw) for arc of contact 180

| N<br>RPM | Pitch diameter of the smaller pulley (mm) |       |       |       |       |       |       |       | Additional Power<br>(Kw) per belt for<br>speed ratio |                    |                    |                  |
|----------|---|-------|-------|-------|-------|-------|-------|-------|--|--------------------|--------------------|------------------|
|          | 335                                       | 355   | 400   | 450   | 500   | 560   | 630   | 710   | 1.01<br>to<br>1.05                                   | 1.06<br>to<br>1.26 | 1.27<br>to<br>1.57 | For<br>><br>1.57 |
| 700      | 23.67                                     | 25.46 | 29.46 | 33.82 | 38.08 | 43.06 | 48.67 | 54.77 | 0.08   | 0.49               | 0.70               | 0.85             |
| 950      | 31.36                                     | 33.68 | 38.80 | 44.29 | 49.56 | 55.56 | 62.06 | 68.76 | 0.10   | 0.67               | 0.95               | 1.16             |
| 1450     | 45.01                                     | 48.08 | 54.60 | 61.20 | 67.02 | 72.89 | 78.01 |       | 0.16   | 1.02               | 1.44               | 1.77             |
| 2850     |   |       |       |       |       |       |       |       | 0.31   | 2.00               | 2.84               | 3.48             |
| 50       | 1.82                                      | 1.96  | 2.28  | 2.63  | 2.98  | 3.40  | 3.89  | 4.44  | 0.01   | 0.04               | 0.05               | 0.06             |
| 100      | 3.60                                      | 3.87  | 4.50  | 5.19  | 5.88  | 6.71  | 7.67  | 8.77  | 0.01   | 0.07               | 0.10               | 0.12             |
| 150      | 5.35                                      | 5.76  | 6.69  | 7.72  | 8.74  | 9.97  | 11.40 | 13.03 | 0.02   | 0.11               | 0.15               | 0.18             |
| 200      | 7.08                                      | 7.63  | 8.86  | 10.22 | 11.22 | 13.20 | 15.09 | 17.23 | 0.02   | 0.14               | 0.20               | 0.24             |
| 250      | 8.80                                      | 9.48  | 11.01 | 12.70 | 14.38 | 16.39 | 18.73 | 21.38 | 0.03   | 0.18               | 0.25               | 0.31             |
| 300      | 10.50                                     | 11.32 | 13.14 | 15.15 | 17.16 | 19.55 | 22.32 | 25.45 | 0.03   | 0.21               | 0.30               | 0.37             |
| 350      | 12.20                                     | 13.14 | 15.25 | 17.59 | 19.91 | 22.67 | 25.86 | 29.46 | 0.04   | 0.25               | 0.35               | 0.43             |
| 400      | 13.88                                     | 14.95 | 17.35 | 19.99 | 22.62 | 25.74 | 29.34 | 33.39 | 0.04   | 0.28               | 0.40               | 0.49             |
| 450      | 15.55                                     | 16.74 | 19.42 | 22.37 | 25.30 | 28.77 | 32.75 | 37.22 | 0.05   | 0.32               | 0.45               | 0.55             |
| 500      | 17.20                                     | 18.52 | 21.48 | 24.73 | 27.94 | 31.74 | 36.10 | 40.96 | 0.05   | 0.35               | 0.50               | 0.61             |
| 550      | 18.84                                     | 20.28 | 23.51 | 27.05 | 30.54 | 34.66 | 39.37 | 44.60 | 0.06   | 0.39               | 0.55               | 0.67             |
| 600      | 20.47                                     | 22.03 | 25.52 | 29.34 | 33.10 | 37.53 | 42.56 | 48.12 | 0.07   | 0.42               | 0.60               | 0.73             |
| 650      | 22.08                                     | 23.76 | 27.50 | 31.60 | 35.61 | 40.33 | 45.66 | 51.51 | 0.07   | 0.46               | 0.65               | 0.79             |
| 700      | 23.67                                     | 25.46 | 29.46 | 33.82 | 38.08 | 43.06 | 48.67 | 54.77 | 0.08   | 0.49               | 0.70               | 0.85             |
| 750      | 25.25                                     | 27.15 | 31.39 | 36.00 | 40.49 | 45.72 | 51.57 | 57.89 | 0.08   | 0.53               | 0.75               | 0.92             |
| 800      | 26.80                                     | 28.82 | 33.29 | 38.14 | 42.85 | 48.31 | 54.37 | 60.86 | 0.09   | 0.56               | 0.80               | 0.98             |
| 850      | 28.34                                     | 30.46 | 35.16 | 40.23 | 45.15 | 50.81 | 57.06 | 63.67 | 0.09   | 0.60               | 0.85               | 1.04             |
| 900      | 29.86                                     | 32.09 | 37.00 | 42.29 | 47.39 | 53.23 | 59.62 | 66.30 | 0.10   | 0.63               | 0.90               | 1.10             |
| 950      | 31.36                                     | 33.68 | 38.80 | 44.29 | 49.56 | 55.56 | 62.06 | 68.76 | 0.10   | 0.67               | 0.95               | 1.16             |
| 1000     | 32.84                                     | 35.26 | 40.57 | 46.25 | 51.67 | 57.79 | 64.36 | 71.02 | 0.11   | 0.70               | 1.00               | 1.22             |
| 1050     | 34.29                                     | 36.80 | 42.30 | 48.15 | 53.70 | 59.93 | 66.53 | 73.09 | 0.11   | 0.74               | 1.05               | 1.28             |
| 1100     | 35.73                                     | 38.32 | 43.99 | 49.99 | 55.66 | 61.96 | 68.55 | 74.95 | 0.12   | 0.77               | 1.10               | 1.34             |
| 1150     | 37.13                                     | 39.81 | 45.64 | 51.79 | 57.54 | 63.89 | 70.41 | 76.58 | 0.12   | 0.81               | 1.15               | 1.40             |
| 1200     | 38.51                                     | 41.27 | 47.25 | 53.52 | 59.35 | 65.70 | 72.12 | 78.00 | 0.13   | 0.84               | 1.20               | 1.47             |
| 1250     | 39.87                                     | 42.69 | 48.81 | 55.19 | 61.06 | 67.39 | 73.65 | 79.17 | 0.14   | 0.88               | 1.25               | 1.53             |
| 1300     | 41.20                                     | 44.09 | 50.33 | 56.79 | 62.69 | 68.96 | 75.02 |       | 0.14   | 0.91               | 1.29               | 1.59             |
| 1350     | 42.50                                     | 45.45 | 51.80 | 58.33 | 64.23 | 70.40 | 76.20 |       | 0.15   | 0.95               | 1.34               | 1.65             |
| 1400     | 43.77                                     | 46.78 | 53.23 | 59.80 | 65.68 | 71.72 | 77.20 |       | 0.15   | 0.98               | 1.39               | 1.71             |
| 1450     | 45.01                                     | 48.08 | 54.60 | 61.20 | 67.02 | 72.89 | 78.01 |       | 0.16   | 1.02               | 1.44               | 1.77             |
| 1500     | 46.22                                     | 49.33 | 55.92 | 62.52 | 68.27 | 73.93 | 78.61 |       | 0.16   | 1.05               | 1.49               | 1.83             |
| 1550     | 47.40                                     | 50.55 | 57.19 | 63.77 | 69.41 |       |       |       | 0.17   | 1.09               | 1.54               | 1.89             |
| 1600     | 48.55                                     | 51.73 | 58.40 | 64.94 | 70.45 |       |       |       | 0.17   | 1.12               | 1.59               | 1.95             |
| 1650     | 49.66                                     | 52.87 | 59.55 | 66.02 | 71.37 |       |       |       | 0.18   | 1.16               | 1.64               | 2.02             |
| 1700     | 50.73                                     | 53.96 | 60.65 | 67.03 | 72.18 |       |       |       | 0.18   | 1.19               | 1.69               | 2.08             |
| 1750     | 51.77                                     | 55.02 | 61.68 | 67.95 | 72.88 |       |       |       | 0.19   | 1.23               | 1.74               | 2.14             |
| 1800     | 52.78                                     | 56.03 | 62.65 | 68.78 |       |       |       |       | 0.20   | 1.30               | 1.79               | 2.20             |
| 1850     | 53.74                                     | 56.99 | 63.56 | 69.52 |       |       |       |       | 0.20   | 1.33               | 1.84               | 2.26             |
| 1900     | 54.67                                     | 57.91 | 64.40 | 70.16 |       |       |       |       | 0.21   | 1.37               | 1.89               | 2.32             |
| 1950     | 55.55                                     | 58.78 | 65.18 | 70.71 |       |       |       |       | 0.21   | 1.40               | 1.94               | 2.38             |
| 2000     | 56.40                                     | 59.61 | 65.88 | 71.16 |       |       |       |       | 0.22   | 1.44               | 1.99               | 2.44             |
| 2050     | 57.20                                     | 60.38 | 66.52 |       |       |       |       |       | 0.22   | 1.47               | 2.04               | 2.50             |
| 2100     | 57.96                                     | 61.10 | 67.08 |       |       |       |       |       | 0.23   | 1.51               | 2.09               | 2.56             |
| 2150     | 58.68                                     | 61.77 | 67.57 |       |       |       |       |       | 0.23   | 1.54               | 2.14               | 2.63             |
| 2200     | 59.35                                     | 62.39 | 67.98 |       |       |       |       |       | 0.24   | 1.58               | 2.19               | 2.69             |
| 2250     | 59.97                                     | 62.95 | 68.31 |       |       |       |       |       | 0.24   | 1.61               | 2.24               | 2.75             |
| 2300     | 60.55                                     |       |       |       |       |       |       |       | 0.25   | 1.65               | 2.29               | 2.81             |
| 2350     | 61.08                                     |       |       |       |       |       |       |       | 0.26   | 1.68               | 2.34               | 2.87             |
| 2400     | 61.56                                     |       |       |       |       |       |       |       | 0.26   | 1.72               | 2.39               | 2.93             |
| 2450     | 61.99                                     |       |       |       |       |       |       |       | 0.27   | 1.75               | 2.44               | 2.99             |
| 2500     | 62.37                                     |       |       |       |       |       |       |       | 0.27   | 1.79               | 2.49               | 3.05             |

**TABLE 27**  
**POWER CORRECTION FACTORS ARC OF CONTACT**

| $\frac{D-d}{C}$ | ARC OF CONTACT<br>ON SMALLER PULLEY<br>(DEGREES) | CORRECTION FACTOR<br>i.e. PROPORTION OF<br>180° RATING |
|-----------------|--|--|
| 0.00            | 180  | 1.00   |
| 0.05            | 177  | 0.99   |
| 0.10            | 174  | 0.99   |
| 0.15            | 171  | 0.98   |
| 0.20            | 169  | 0.97   |
| 0.25            | 166  | 0.97   |
| 0.30            | 163  | 0.96   |
| 0.35            | 160  | 0.95   |
| 0.40            | 157  | 0.94   |
| 0.45            | 154  | 0.93   |
| 0.50            | 151  | 0.93   |
| 0.55            | 148  | 0.92   |
| 0.60            | 145  | 0.91   |
| 0.65            | 142  | 0.90   |
| 0.70            | 139  | 0.89   |
| 0.75            | 136  | 0.88   |
| 0.80            | 133  | 0.87   |
| 0.85            | 130  | 0.86   |
| 0.90            | 127  | 0.85   |
| 0.95            | 123  | 0.83   |
| 1.00            | 120  | 0.82   |

**TABLE 28**  
**POWER CORRECTION FACTORS FOR BELT PITCH LENGTH (Fd)**

| POWER<br>CORREC-<br>TION<br>FACTORS | BELT PITCH LENGTH |       |       |            |       |       |                     |          |                     |          |       |
|-------------------------------------|-------------------|-------|-------|------------|-------|-------|---------------------|----------|---------------------|----------|-------|
|                                     | V-BELTS           |       |       |            |       |       | WEDGE BELTS         |          |                     |          |       |
|                                     | Z, ZX             | A, AX | B, BX | 90,C,95,OX | D     | E     | SPZ, 3V<br>XPZ, 3VX | SPA, XPA | SPB, 5V<br>XPB, 5VX | SPC, XPC | 8V    |
| 0.80                                |                   | 630   |       |            |       |       |                     |          |                     |          |       |
| 0.81                                |                   |       | 930   |            |       |       |                     |          |                     |          |       |
| 0.82                                |                   | 700   |       | 1550       | 2740  |       |                     | 800      |                     |          |       |
| 0.83                                |                   |       | 1000  |            |       |       | 630                 |          |                     |          |       |
| 0.84                                |                   | 790   |       | 1760       |       |       |                     | 900      |                     |          |       |
| 0.85                                |                   |       | 1100  |            |       |       | 710                 | 1250     |                     |          |       |
| 0.86                                | 405               | 890   |       | 3130       |       |       | 800                 | 1000     |                     | 2000     | 2540  |
| 0.87                                |                   |       | 1210  | 1950       | 3330  |       |                     |          | 1400                | 2240     | 3000  |
| 0.88                                |                   | 990   |       |            |       |       | 900                 | 1120     | 1600                | 2500     | 3350  |
| 0.89                                |                   |       | 1370  | 2190       | 3730  |       |                     | 1250     | 1800                | 2800     | 3600  |
| 0.90                                | 475               | 1100  |       | 2340       |       |       |                     |          | 2090                | 3150     | 4060  |
| 0.91                                |                   |       | 1560  | 2490       | 4080  |       | 1000                | 1400     | 2240                | 3550     |       |
| 0.92                                | 530               | 1250  |       |            |       |       |                     |          | 2500                | 4000     | 5080  |
| 0.93                                |                   |       |       | 2720       | 4620  | 5334  | 1120                | 1600     | 2800                | 4500     | 6000  |
| 0.94                                |                   |       | 1760  | 2800       |       |       |                     |          | 3150                | 5000     | 7100  |
| 0.95                                | 625               | 1430  |       | 3080       | 5400  | 6045  | 1250                | 1800     | 2500                | 4000     | 5080  |
| 0.96                                |                   |       | 1950  |            |       |       | 1400                | 2000     | 2800                | 4500     | 6000  |
| 0.97                                | 700               | 1550  |       | 3310       |       |       |                     |          | 3150                | 5000     | 7100  |
| 0.98                                |                   | 1640  | 2180  | 3520       | 6100  | 6807  | 1600                | 2240     | 3150                | 5000     | 7100  |
| 0.99                                | 780               | 1750  | 2300  |            |       |       | 1800                | 2500     | 3550                | 5600     | 8000  |
| 1.00                                |                   | 1940  | 2500  | 4060       | 6840  | 7569  | 2000                | 2800     | 4090                | 6300     | 9000  |
| 1.02                                |                   |       |       |            |       | 8331  |                     |          |                     | 7100     | 9000  |
| 1.03                                | 920               | 2050  | 2700  |            |       |       |                     |          | 4500                | 8000     | 10160 |
| 1.04                                |                   | 2200  | 2850  | 4600       | 7620  | 9093  |                     | 3150     | 5000                | 9000     | 11430 |
| 1.05                                |                   | 2300  |       |            |       |       |                     |          | 5600                | 9000     | 12700 |
| 1.06                                |                   |       |       |            |       |       |                     |          | 6300                | 10000    |       |
| 1.07                                | 1080              |       |       | 6100       |       |       | 2800                | 4500     | 7100                | 12500    |       |
| 1.08                                |                   | 2480  | 3200  | 5380       | 8410  | 9855  | 3150                | 4500     | 5000                | 8000     | 10160 |
| 1.09                                |                   | 2570  |       |            | 9140  | 10617 | 2500                | 3550     | 5600                | 9000     | 11430 |
| 1.10                                |                   | 2700  | 3600  |            |       |       |                     | 4000     | 6300                | 10000    | 12700 |
| 1.11                                |                   |       |       | 6100       |       |       | 2800                | 4500     | 7100                | 12500    |       |
| 1.12                                |                   | 2910  |       |            | 10700 | 12141 |                     |          |                     |          |       |
| 1.13                                |                   | 3080  | 4060  |            |       |       | 3150                |          |                     |          |       |
| 1.14                                |                   | 3290  |       | 6860       |       | 13665 |                     |          |                     |          |       |
| 1.15                                |                   |       | 4430  |            |       |       | 3550                |          | 7880                |          |       |
| 1.16                                |                   | 3540  | 4820  | 7600       | 12200 | 15189 |                     |          |                     |          |       |
| 1.18                                |                   |       | 5000  |            | 13700 |       |                     |          |                     |          |       |
| 1.19                                |                   |       | 5370  |            |       | 16713 |                     |          |                     |          |       |
| 1.20                                |                   |       | 6070  |            | 15200 |       |                     |          |                     |          |       |
| 1.21                                |                   |       |       | 9100       |       |       |                     |          |                     |          |       |
| 1.24                                |                   |       |       | 10700      |       |       |                     |          |                     |          |       |

## Idlers / Tension Pulleys

Idlers are basically no loaded wheels that are used in a drive system under the following conditions.

- 1) Fixed centre distance, so as to provide the required installation & take-up allowances.
- 2) On long & unsupported spans, as dampers & guides where the chances of vibrations are more.
- 3) As outside idlers when the arc of contact on one of the drive pulleys is too low. Also helps in reducing the slippage & the need to increase the number of required belts.
- 4) As guide idlers where the drive system pulleys are not in the same plane.
- 5) To guide the belts past obstructions.
- 6) As pneumatically, or spring loaded idlers to maintain the constant tension in the drive.
- 7) As clutches where the driven pulley can be engaged or disengaged.

The usage of idlers should be as far as possible avoided as they generate additional bending stresses in the belt, leading to drastic reduction in the belt life. However, under the conditions listed above where it may be absolutely essential to use the idlers the following criteria must be observed when designing drive.

1. Idler configuration
2. Position of idler in the belt span
3. Shape of idler
4. Allowance for idler travel
5. Correction of power rating

### Idler Configuration

Principally idlers can be used internally or externally depending on the drive conditions. However, unless the drive requirement calls for an outside idler, possibly inside idler should be used. The inside idler can be either flat or grooved pulley depending on the type of belt used in the drive system. It is suggested that the flat inside idler be used only when classical section is used while in all other cases a grooved pulley be used. However the usage of inside idler reduces the arc of contact on the loaded wheels and with it consequently the arc of contact correction factor. Hence when designing the drive with inside idler the arc of contact correction factor should be selected for the position of the idler at the point of maximum belt stretch.

Refer to table on Page 86

Outside idlers should always be flat one because they run on the back of the belt. Outside idlers invariably increase the arc of contact. Care should however be taken to see that the maximum belt stretch is achieved and the contact with the opposite side of the span is avoided. The reverse bending caused because of the usage of the outside idler reduces the life of the belt.

**We suggest the usage of special construction Pix belts on these drives. Please contact our Technical Services Deptt.**

### Idler Positioning

Practice has shown that the placement of idler, whether it is an inside idler or an outside idler, should be on the slack side of the drive. This helps in significant reduction in the tension idler force.

In the case of inside idlers, grooved pulley can be placed anywhere in the entire span length on the slack side of the drive. However to obtain the best from your drive it is suggested that wherever possible the arc of contact on both the drive pulleys should be brought as close as possible to each other when the idler reaches its limit position.

Flat pulleys, used as inside or outside idlers are to be placed as far as possible away from the the grooved pulley on which the belt runs next. This will avoid any alignment errors between the idler & the pulley & the resultant sideways movement of the belts on the pulley. Refer figures below.

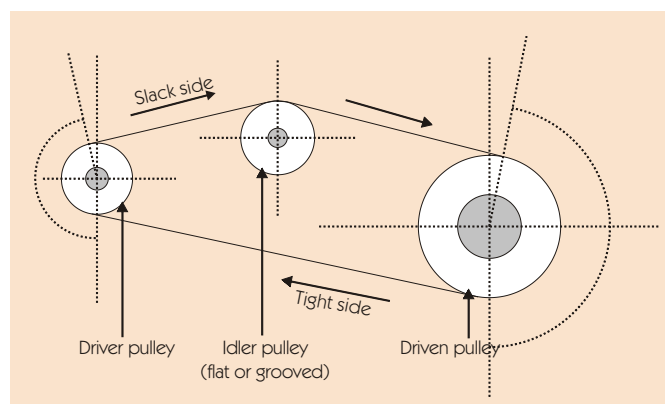
On drives where inside idler are used to break long spans, it is suggested that a grooved pulley be used because the usage of flat idler can result in transverse vibrations leading to the belt turnover.

### Minimum diameter recommended for idlers.

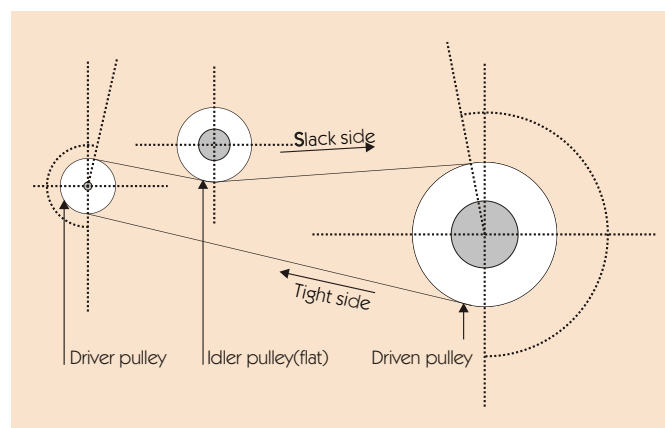
**Inside Idler** > smallest loaded pulley in the drive system or smallest permissible pulley diameter for section used.

**Outside Idler** > 1.5 times the smallest pulley in the drive system.

### Inside Idler



### Outside Idler



## IDLER DESIGN

Grooved idlers should have the standard groove dimensions for optimum results. In case of long spans & the drives with severe vibrations, however, deep grooved pulleys are recommended. Flat pulleys on the other hand should always be cylindrical & not crowned. Wherever idlers are used as belt guides, it is suggested that a flanged pulley be used with sharp corners to avoid the running over of the belt over the flange causing turnover.

The distance between two flanges is governed by the the following formula :

$$b = b_2 + m$$

where  $b$  = required face width (mm)  
 $b_2$  = face width of grooved pulley (mm)  
 $m$  = additional value (mm)

| Section                       | m (mm) |
|-------------------------------|--------|
| SPZ / XPZ / 3V / 3VX / Z / ZX | 15     |
| SPA / XPA / A / AX            | 20     |
| SPB / XPB / 5V / 5VX / B / BX | 25     |
| SPC / XPC / C / CX            | 30     |
| 8V / 8VX                      | 35     |
| D                             | 40     |
| E                             | 45     |

## Drive Calculations

The calculations for the length required is same as for the drive with two pulleys. However the following details are required to be noted when designing the same.

- 1) The required belt length is calculated using the standard procedure. ( $L_p$ )
- 2) If the belt has to be used with fixed centre distance, then double the installation allowance be added to the pitch length calculated above, i.e.,  $L_{p_1} = L_p + 2Y$   
 where,  $L_{p_1}$  is the length considering installation allowances.  
 $L_p$  is the pitch length calculated in step 1.  
 $Y$  is the installation allowance (see table no.29)
- 3) The next largest standard length  $L_p$  (standard) is to be chosen near to  $L_{p_1}$ , however care be taken to check that the belt can be adequately tensioned with the idler in the outermost position. Length of the belt for idler in the end position can be calculated as follows:  
 $L_d(f) = L_p(\text{standard}) + 2X$   
 where,  $L_d(f)$  is the length for idler end position that is after max. belt stretch (final).  $L_p(\text{standard})$  is the standard length selected as above.  
 $X$  is the take-up allowance (see table no.29)

## Number of belts required

The usage of idlers invariably decreases the service life of belts. To avoid a reduction in the belt service life, idler correction factor is also to be considered while calculating the number of belts required.

| Arc of contact correction factor c1 |      |                |      |                |      |
|-------------------------------------|------|----------------|------|----------------|------|
| Angle (degree)                      | C1   | Angle (degree) | C1   | Angle (degree) | C1   |
| 75                                  | 0.82 | 140            | 0.96 | 195            | 1.01 |
| 80                                  | 0.84 | 145            | 0.97 | 200            | 1.01 |
| 85                                  | 0.86 | 150            | 0.97 | 205            | 1.01 |
| 90                                  | 0.88 | 155            | 0.98 | 210            | 1.01 |
| 95                                  | 0.90 | 160            | 0.98 | 215            | 1.01 |
| 100                                 | 0.91 | 165            | 0.99 | 220            | 1.01 |
| 105                                 | 0.92 | 170            | 0.99 | 225            | 1.01 |
| 110                                 | 0.93 | 175            | 0.99 | 230            | 1.01 |
| 115                                 | 0.94 | 180            | 1.00 | 240            | 1.02 |
| 125                                 | 0.95 | 185            | 1.00 | 250            | 1.02 |
| 130                                 | 0.96 | 190            | 1.00 |                |      |

| No. of idlers | C4   |
|---------------|------|
| 0             | 1.00 |
| 1             | 0.91 |
| 2             | 0.86 |
| 3             | 0.81 |

No. of required belts :

$$N = \frac{P \times c_2}{p \times c_1 \times c_3 \times c_4}$$

$N$  = No. of required belts:

$P$  = Power in KW

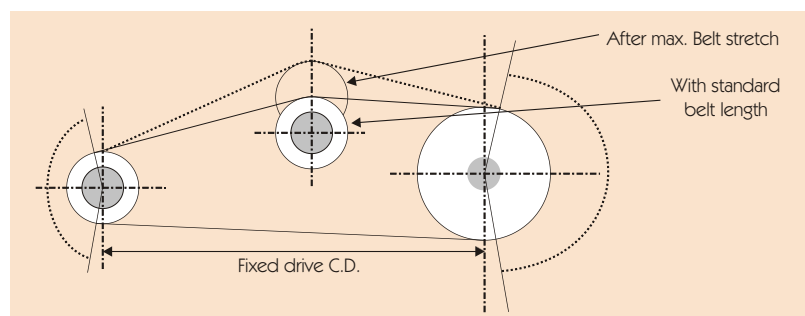
$p$  = Power rating of the belt

$c_1$  = From above table

$c_2$  = Service factor

$c_3$  = Belt length factor

$c_4$  = Idler correction factor as above



## V-Flat Drives

The V - flat drive comprises of one grooved pulley & one flat pulley. V - flat drives are generally used where, under certain conditions intermittent loading & large moment of inertia have to be considered. The conversion from a flat drive to a V - flat drive is a relatively low cost exercise because of the presence of the existing flat pulley.

### Prerequisites for a V - flat drive :

- 1) The smaller pulley should always be V - grooved pulley.
- 2) When using single belts, only classical belts are to be used because of higher top width to height ratio (1.6:1).
- 3) Wedge belts should never be used on these drives because of their lower top width to height ratio ( 1.2 : 1), which makes these belts more vulnerable to turning on their sides.
- 4) Pix banded belts are more justifiable on these drives. The reinforced band over the belts provides the required lateral rigidity preventing the belt from turning over even under the extreme adverse conditions.
- 5) V - flat drives are economical when K lies between 0.5 & 1.15,

$$\text{where } K = \frac{(D_a - d_d / d_a)}{a}$$

$D_a$  = outside diameter of flat pulley (mm)

$d_d$  = pitch diameter of grooved pulley (mm)

$d_a$  = outside diameter of grooved pulley (mm)

$a$  = centre distance (mm)

The ideal drive is achieved when  $K = 0.85$

The design procedure for V - flat drive is similar to that of normal V belt drives, except that the arc of contact correction factor has to be modified.

| $K = \frac{(D_a - d_d / d_a)}{a}$ | B (degree) | $c_1$ |
|-----------------------------------|------------|-------|
| 0.00                              | 180        | 0.75  |
| 0.07                              | 176        | 0.76  |
| 0.15                              | 170        | 0.77  |
| 0.22                              | 167        | 0.79  |
| 0.29                              | 163        | 0.79  |
| 0.35                              | 160        | 0.80  |
| 0.40                              | 156        | 0.81  |
| 0.45                              | 153        | 0.81  |
| 0.50                              | 150        | 0.82  |
| 0.57                              | 146        | 0.83  |
| 0.64                              | 143        | 0.84  |
| 0.70                              | 140        | 0.85  |
| 0.75                              | 137        | 0.85  |
| 0.80                              | 134        | 0.86  |
| 0.85                              | 130        | 0.86  |
| 0.92                              | 125        | 0.84  |
| 1.00                              | 120        | 0.82  |
| 1.07                              | 115        | 0.80  |
| 1.15                              | 110        | 0.78  |
| 1.21                              | 106        | 0.77  |
| 1.30                              | 100        | 0.73  |
| 1.36                              | 96         | 0.72  |
| 1.45                              | 90         | 0.70  |

### Classical V-belts

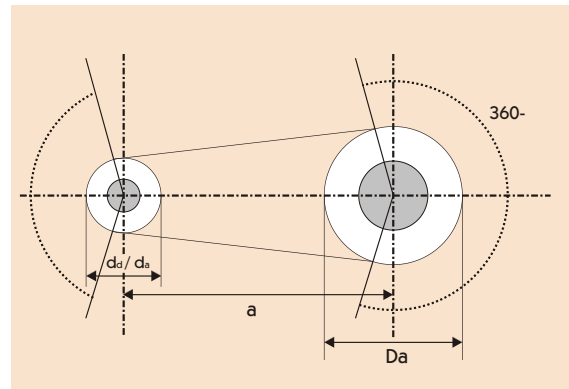
| Section | Z | A  | B  | C  | D  | E  |
|---------|---|----|----|----|----|----|
| Dz      | 7 | 10 | 13 | 18 | 23 | 25 |

### Banded belts

| Section | SPZ/3V | SPA | SPB/5V | SPC | 8V |
|---------|--------|-----|--------|-----|----|
| Dz      | 13     | 18  | 23     | 36  | 41 |

### Calculation of Pitch Length

$$L_p = 2a + 1.57 (d_d + D_a + D_z) + \frac{(D_a + D_z - d_d)^2}{4a}$$



### Calculation of outside length for banded belt :

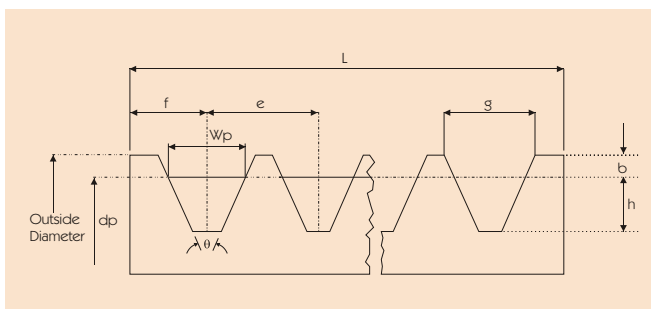
$$L_a = 2a + 1.57 (d_a + D_a + D_z) + \frac{(D_a + D_z - d_a)^2}{4a}$$

Based on above, the following recommendations are made to obtain the best from your V-flat drive.

|                       | V-Belts                       | Banded Belts                  |
|-----------------------|-------------------------------|-------------------------------|
| Speed Ratio           | $r = \frac{D_a}{d_d} \quad 3$ | $r = \frac{D_a}{d_a} \quad 3$ |
| Drive Centre Distance | $a = \frac{D_a - d_d}{0.85}$  | $a = \frac{D_a - d_a}{0.85}$  |
| "K" - Factor          | $K = \frac{D_a - d_d}{a}$     | $K = \frac{D_a - d_a}{a}$     |

## DIMENSIONS OF STANDARD V-GROOVED PULLEY

The maximum distance 'L' between the outside edges of the pulley, i.e. the face width is equal to  $(x-1)e + 2f$  (where x is the number of grooves)



## MULTI GROOVED PULLEY CROSS SECTION

| CROSS SECTION SYMBOL   | GROOVE PITCH WIDTH (Wp) | MINIMUM DISTANCE FROM OUTSIDE DIAMETER TO PITCH DIAMETER (b) mm | MINIMUM GROOVE DEPTH BELOW PITCH DIAMETER (NOTE 4) (h) mm | CENTRE TO CENTRE OF GROOVE (SEE NOTE 2) (e) mm | EDGE OF PULLEY TO 1ST GROOVE CENTRE (SEE NOTE 3) (f) mm | PITCH DIAMETER (dp) mm                          | GROOVE ANGLE (θ ) mm   | MINIMUM TOP WIDTH OF GROOVE (g) mm |
|------------------------|-------------------------|---|---|--|---|---|--|------------------------------------|
| <b>Z, SPZ, ZX, XPZ</b> | 8.5                     | 2.0   | 9.0   | $12 \pm 0.3$                                   | $8.0 \pm 1.0$   | Upto 80<br>Over 80                              | $34 \pm 0.5$<br>$38 \pm 0.5$                                 | 9.7<br>9.9                         |
| <b>A, SPA, AX, XPA</b> | 11.0                    | 2.75  | 11.0  | $15 \pm 0.3$                                   | $10.0 + 2.0$<br>$- 1.0$                                 | Upto 118<br>Over 118                            | $34 \pm 0.5$<br>$38 \pm 0.5$                                 | 12.7<br>12.9                       |
| <b>B, SPB, BX, XPB</b> | 14.0                    | 3.5   | 14.0  | $19 \pm 0.4$                                   | $12.5 + 2.0$<br>$- 1.0$                                 | Upto 190<br>Over 190                            | $34 \pm 0.5$<br>$38 \pm 0.5$                                 | 16.1<br>16.4                       |
| <b>C, SPC, CX, XPC</b> | 19.0                    | 4.8   | 19.0  | $25.5 \pm 0.5$                                 | $17.0 + 2.0$<br>$- 1.0$                                 | Upto 315<br>Over 315                            | $34 \pm 0.5$<br>$38 \pm 0.5$                                 | 21.9<br>22.3                       |
| <b>D</b>               | 27.0                    | 8.1   | 19.9  | $37 \pm 0.6$                                   | $24.0 + 3.0$<br>$- 1.0$                                 | Upto 475<br>475 & over                          | $36 \pm 0.5$<br>$38 \pm 0.5$                                 | 32.3<br>32.6                       |
| <b>E</b>               | 32.0                    | 9.6   | 23.4  | $44.5 \pm 0.7$                                 | $29.0 + 4.0$<br>$- 1.0$                                 | Upto 610<br>Over 610                            | $36 \pm 0.5$<br>$38 \pm 0.5$                                 | 38.8<br>39.3                       |
| <b>3V, 3VX</b>         |                         | 0.64  | 8.0   | $10.3 \pm 0.4$                                 | $8.7 + 2.0$<br>$- 0.8$                                  | Upto 88<br>88 to 152<br>152 to 305<br>above 305 | $36 \pm 0.5$<br>$38 \pm 0.5$<br>$40 \pm 0.5$<br>$42 \pm 0.5$ | 8.9                                |
| <b>5V, 5VX</b>         |                         | 1.27  | 13.7  | $17.5 \pm 0.4$                                 | $12.7 + 3.0$<br>$- 1.0$                                 | Upto 254<br>254 to 406<br>above 406             | $38 \pm 0.5$<br>$40 \pm 0.5$<br>$42 \pm 0.5$                 | 15.2                               |
| <b>8V, 8VX</b>         |                         | 2.54  | 22.6  | $28.6 \pm 0.4$                                 | $19.0 + 6.0$<br>$- 1.5$                                 | Upto 406<br>406 to 569                          | $38 \pm 0.5$<br>$40 \pm 0.5$                                 | 25.4                               |

### NOTE :

- 1) See figure for symbol.
- 2) The tolerance on dimension apply to the distance between the centre of any two grooves whether adjacent or not.
- 3) It is recommended that the tolerance on dimension should be taken into account in the alignment of the pulleys.
- 4) When the pulleys are to be used for V-Belts Z, A, B, C only, dimension 'h' may be reduced by 20 %.
- 5) Only above dimension pulleys should be used for Banded belts except for 'A' section, where  $e = 15.9$  mm.  
The tolerance for side wobble and for run out (eccentricity), in mm per millimetre of pulley diameter shall be as follows :  
Pulley diameter < 500 mm  $\pm 0.001$  mm  
500 mm < Pulley diameter < 1500 mm  $\pm 0.0015$  mm  
Pulley diameter > 1500 mm  $\pm 0.002$  mm

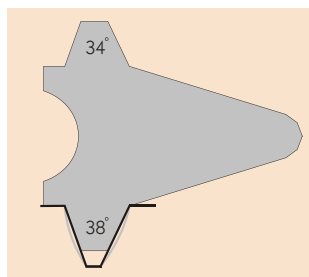
## SERVICE EQUIPMENTS

### PIX PULLEY GAUGES

PIX Pulley Gauges are specially designed for checking the profiles of the grooves of various sections.

#### GROOVE CHECKING PROCEDURE

1. Identify the pulley gauge to be used according to section and its diameter.
2. Measure the groove by inserting the gauge. Identify if any clearance lies between the side wall of groove & the gauge.
3. Measure the present clearance using the Feeler Gauge.



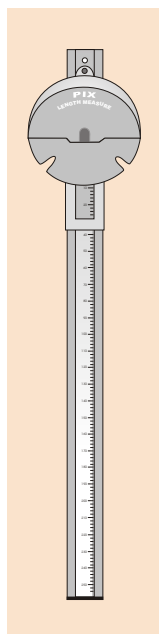
### PIX LENGTH FINDER

For checking the length where size on the belts are not clearly visible. It can also be used to confirm the size of the belt.

Note : Only approx. inside length measurement is possible up to (100 inches).

#### LENGTH MEASUREMENT PROCEDURE

1. Place the belt on the upper half of pulley which is fixed.
2. Slide down the lower half of pulley with the belt along the scale till the belt gets sufficiently stretched.
3. Marker at lower position of the bottom half will show the reading in mm / inches. Note down the reading and compare this value with the belt size mentioned on the belt.



### PIX V-BELT TENSION TESTER

#### GENERAL GUIDELINES FOR TENSION

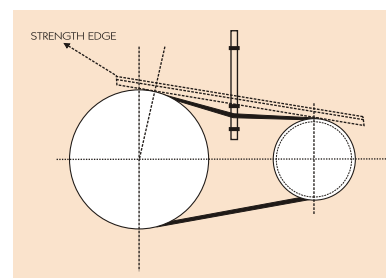
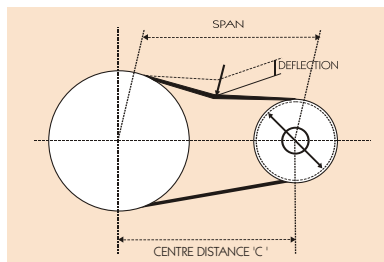
##### MEASUREMENT OF V-BELTS :

Proper belt tension is vital to the operation of the drive and the life of V-Belts. To ensure optimum V-belt drive operation, it is recommended to check the tension in the belts by measuring the deflection force value (N) with the help of a tension measuring device.

The belt tension in most drives can be checked with adequate reliability by means of Pix V-Belts Tension Tester.

#### TENSION MEASUREMENT PROCEDURE

1. Measure the span length of the belt in mm. (Ref. sketch).
2. Tie a string / thread on the two pulleys along the length of belts and mark center of the span on the belt.
3. Calculate 1.5% of the span (say x) for belt length less than 1000 mm & 1.0% of the span for belt length more than 1000 mm. Adjust lower ring on the tension tester on millimeter scale to coincide, "x" mm with the lower side of the ring. Adjust lower side of the upper ring at 0.00 N.
4. Place tension tester at the centre of the span of the belt. Apply force with the help of tension tester perpendicular to the span till the lower surface of the lower ring touches the string.
5. Read the deflection force value (N) on the Newton scale by taking reading at the lower side of the upper ring.
6. Compare the deflection force value (N) with the values given in the table 'A'. The deflection force value (N) should lie between the min. and max. values given in the table 'A'.
7. Deflection force less than minimum recommended value in the range indicates an under-tensioned drive & deflection force higher than maximum recommended value indicates an over-tensioned drive.



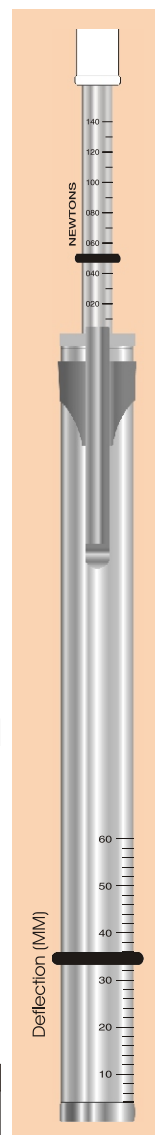
#### IMPORTANT :

- ◆ For new belts the deflection force value (N) should be kept at maximum.
- ◆ Maximum deflection force value (N) is recommended for pulsating & shock loads.
- ◆ After approximately 24 hrs. of running, check the belt tension and adjust if necessary.

**Table A**

**DEFLECTION FORCE REQUIRED FOR MEASURING TENSION IN V-BELT DRIVES**

| DEFLECTION FORCE REQUIRED FOR MEASURING TENSION IN V-BELT DRIVES |                        |                              |   |                            |                            |   |                            |                            |
|--|------------------------|------------------------------|---|----------------------------|----------------------------|---|----------------------------|----------------------------|
|  | Cross Section          | Smaller Pulley Diameter (mm) | Condition 1<br>Deflection @ 1.0% of span, if span length is more than 1000 mm |                            |                            | Condition 2<br>Deflection @ 1.5% of span, if span length is less than 1000 mm |                            |                            |
|  |                        |                              | Required deflection force F at the centre of span for belt speed              |                            |                            | Required deflection force F at the centre of span for belt speed              |                            |                            |
|  |                        |                              | 0 m/s to 10 m/s Range (N)   | 10 m/s to 20 m/s Range (N) | 20 m/s to 30 m/s Range (N) | 0 m/s to 10 m/s Range (N)   | 10 m/s to 20 m/s Range (N) | 20 m/s to 30 m/s Range (N) |
| WRAPPED BELTS  | CLASSICAL V-BELTS      |                              |   |                            |                            |   |                            |                            |
|  | Z                      | 50-100<br>100 & above        | 4-6<br>6-9  | 4-5<br>6-7                 | 3-4<br>5-6                 | 5-8<br>8-12   | 5-7<br>8-9                 | 4-5<br>7-8                 |
|  | A                      | 71-140<br>140 & above        | 8-12<br>12-18   | 7-10<br>10-14              | 6-8<br>8-12                | 11-16<br>16-24  | 9-13<br>13-19              | 8-11<br>11-16              |
|  | B                      | 112-200<br>200 & above       | 16-24<br>24-35  | 13-19<br>19-29             | 10-16<br>16-24             | 21-32<br>32-47  | 17-25<br>25-39             | 13-21<br>21-32             |
|  | C                      | 180-400<br>400 & above       | 31-46<br>46-70  | 26-38<br>38-58             | 20-31<br>31-46             | 41-61<br>61-93  | 35-51<br>51-77             | 27-41<br>41-61             |
|  | D                      | 315-600<br>600 & above       | 62-90<br>90-134   | 52-76<br>76-115            | 42-62<br>62-90             | 83-120<br>120-179   | 69-101<br>101-153          | 56-83<br>83-120            |
|  | E                      | 450-915<br>915 & above       | 108-160<br>160-240  | 90-137<br>137-205          | 73-109<br>109-160          | 144-213<br>213-320  | 120-183<br>183-273         | 97-145<br>145-213          |
|  | WEDGE / NARROW V-BELTS |                              |   |                            |                            |   |                            |                            |
|  | SPZ / 3V               | 63-95<br>95 & above          | 8-12<br>12-17   | 7-10<br>10-16              | 6-9<br>9-14                | 11-16<br>16-23  | 9-13<br>13-21              | 8-12<br>12-19              |
|  | SPA                    | 90-140<br>140 & above        | 14-20<br>20-31  | 12-17<br>17-26             | 10-14<br>14-22             | 19-27<br>27-41  | 16-23<br>23-35             | 13-19<br>19-29             |
|  | SPB / 5V               | 140-265<br>265 & above       | 25-36<br>36-46  | 20-32<br>32-41             | 18-27<br>27-37             | 33-48<br>48-61  | 27-43<br>43-55             | 24-36<br>36-49             |
|  | SPC                    | 224-355<br>355 & above       | 46-66<br>66-85  | 38-58<br>58-76             | 32-52<br>52-70             | 61-88<br>88-113   | 51-77<br>77-101            | 43-69<br>69-93             |
|  | 8V                     | 335-520<br>520 & above       | 81-107<br>107-167   | 68-90<br>90-140            | 56-73<br>73-113            | 108-143<br>143-223  | 91-120<br>120-187          | 75-97<br>97-151            |
| CUT EDGE BELTS   | CLASSICAL V-BELTS      |                              |   |                            |                            |   |                            |                            |
|  | ZX                     | 40-100<br>100 & above        | 5-7<br>7-10   | 5-6<br>7-8                 | 3-5<br>6-7                 | 6-9<br>9-14   | 6-8<br>9-11                | 5-6<br>8-9                 |
|  | AX                     | 63-140<br>140 & above        | 9-14<br>14-21   | 8-12<br>12-16              | 7-9<br>9-14                | 12-18<br>18-28  | 11-15<br>15-21             | 9-12<br>12-18              |
|  | BX                     | 90-200<br>200 & above        | 18-28<br>28-40  | 15-22<br>22-33             | 12-18<br>18-28             | 25-37<br>37-54  | 20-29<br>29-44             | 15-25<br>25-37             |
|  | CX                     | 140-400<br>400 & above       | 36-53<br>53-81  | 30-44<br>44-67             | 23-36<br>36-53             | 48-71<br>71-107   | 40-58<br>58-89             | 31-48<br>48-71             |
|  | WEDGE / NARROW V-BELTS |                              |   |                            |                            |   |                            |                            |
|  | XPZ / 3VX              | 56-95<br>95 & above          | 9-14<br>14-20   | 8-12<br>12-18              | 7-10<br>10-16              | 12-18<br>18-26  | 11-15<br>15-25             | 9-14<br>14-21              |
|  | XPA                    | 71-140<br>140 & above        | 16-23<br>23-36  | 14-20<br>20-30             | 12-16<br>16-25             | 21-31<br>31-48  | 18-26<br>26-40             | 15-21<br>21-34             |
|  | XPB / 5VX              | 112-265<br>265 & above       | 29-41<br>41-53  | 23-37<br>37-47             | 21-31<br>31-43             | 38-55<br>55-71  | 31-49<br>49-63             | 28-41<br>41-57             |
|  | XPC                    | 180-355<br>355 & above       | 53-76<br>76-98  | 44-67<br>67-87             | 37-60<br>60-81             | 71-101<br>101-130   | 58-89<br>89-117            | 49-80<br>80-107            |



## MAINTENANCE OF V-BELTS

### V-BELT TENSIONING

#### General guidelines for tensioning of V-Belt :

- 1) Ideal tension is the lowest tension at which the belt will not slip under peak load conditions.
- 2) Check tension frequently during the first two days of operation.
- 3) Over tensioning shortens belt and bearing life.
- 4) Keep belts free from foreign material which may cause slip.
- 5) Make V-drive inspection on a periodic basis.
- 6) Adjust tension when slipping. Never apply belt dressing as this will damage the belt and cause early failure.

### IDLERS

An idler used in V-Belt drives is a wheel that is not 'loaded' and may be grooved/flat pulley used for various reasons such as :

- a. To provide take up for fixed centre drives.
- b. To clear obstruction.
- c. To break up long spans where belt vibrations may be a problem.
- d. To maintain tension to act as a clutching device.

**NOTE** - Diameter of outside idler should be one and half times that of smaller pulley diameter or more and diameter of inside idler should be approximately same as that of smaller pulley diameter or more.

### INSTALLATION & TAKE UP ALLOWANCE

The limiting values for adjustment of centres for the two transmissions pulley shall be as follows:

#### LOWER LIMITING VALUE:

nominal centre distance minus 1.5% Lp

#### HIGHER LIMITING VALUE:

nominal centre distance plus 3% Lp. Where Lp is the Pitch Length of the belt.

## STORAGE OF V-BELTS

### GENERAL GUIDELINES

Maintaining the proper storage conditions at the users place as well as at the manufacturers place is an important parameter which requires due attention from the concerned. Under favourable storage conditions, PIX belts retain their initial serviceability and dimensions. Good storage facilities and practices will allow the users to achieve the best value from belts.

PIX V-belt should be stored in a cool & dry place with no direct sunlight. When stacked on shelves the stacks should be small enough to avoid excess weight on the bottom belts which may cause distortion. When stored in containers the container size & contents should be sufficiently limited to avoid distortion.

### DONT'S

Do not store the belts on floor unless a suitable container is provided. They may be exposed to moisture.

Do not store belts near windows which may permit exposure to sunlight or moisture. Do not store belts near radiators or heater.

Do not store belts in the vicinity of transformers & electrical motors. these devices may generate ozone.

Do not store belts in heavy bent condition.

### METHODS OF STORAGE

The common method of storing the v-belts is to hang them in crescent shaped pegs or pin racks.

Long v-belt should be coiled for easy distortion free storage.

Variable speed belts are more sensitive to distortion, it is recommended that these belts should never be stored on pegs. These belts should be always stored on shelves.

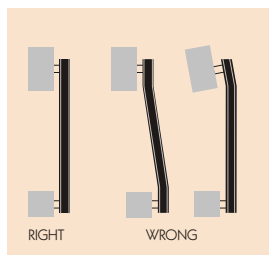
### EFFECTS OF STORAGE

The shelf life of 6 years can be obtained if proper storage conditions are maintained i.e., ambient temp. not more than 30°C & relative humidity not more than 70%. If the storage temp. increases then the service expectancy from the belts gets reduced. Under rough estimates it can be said that for an increase of 20°C temp. above the standard temp. range the belt life will be reduced by 50%.

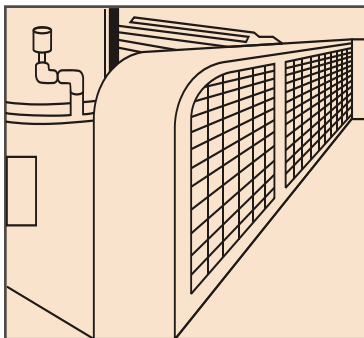
It is always recommended that if a drive is out of use for a prolonged period, then the belt tension should be relaxed & the necessary tension be provided when the drive is to be restarted.

## DO'S AND DON'T'S

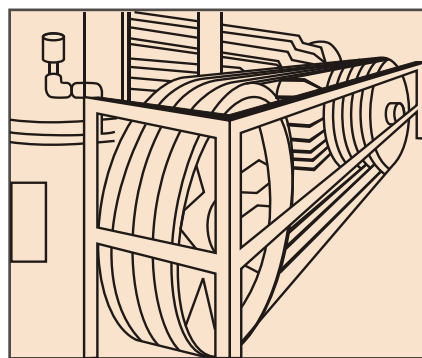
1. Ensure perfect alignment of pulleys.



2. The grooves should be free from burrs, sharp edges, rust, oil and grease. To prevent this guard should be provided.

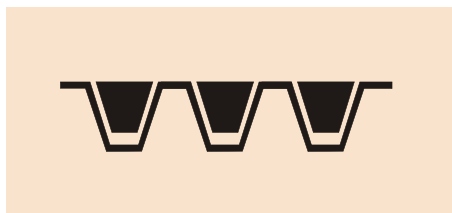


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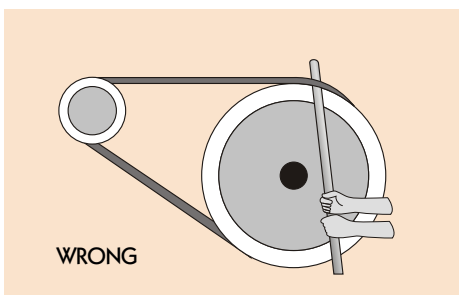


NOT THIS

3. Belts used in multiple drive should be of same manufacturer.



4. Do not pry or roll V-belts into the pulley grooves, if done so, the belts get damaged internally as a result of which belt life is affected. Using drive take-up allowance enable the belts to be easily mounted on the pulleys.

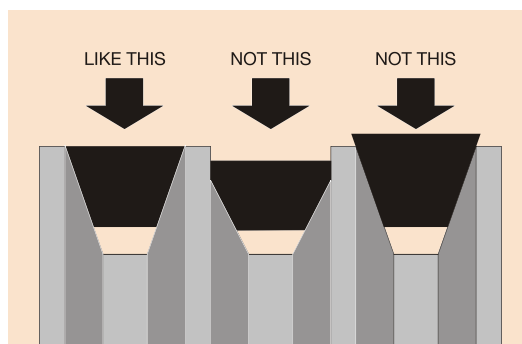


## DO'S AND DON'T'S (CONTD.)

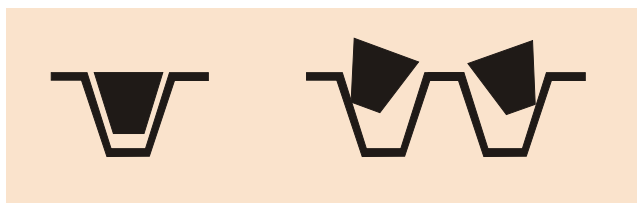
5. For multiple drive, use as many V-belts required for better service life and low maintenance cost. For best results one should use PIX FREE SET belts. The whole set should be replaced if one belt fails. PIX belts should not be lubricated.



6. A change in ride out indicates uneven belt wear or worn sheaves. Change belt/sheave with new set.



7. Pulley should be checked whether it is manufactured as per international standards or not, and should also be checked for worn out sheaves. Bearings should also be checked for lubrication.



8. If the groove angle is too large, the canvas cover is quickly worn out along the lower side walls and if possible, the upper canvas gets worn out.

### PLEASE REMEMBER

1. Belt dressing should never be used.
2. Proper ventilation of belts driving unit is a must.
3. Tensioning should be checked from time to time.

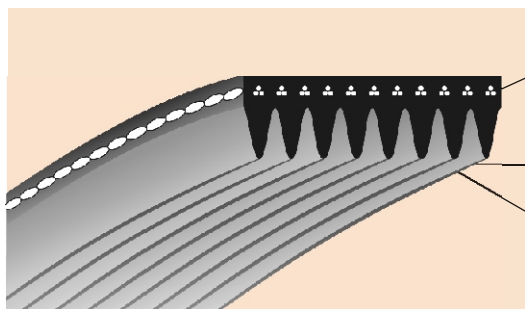
## SERVICE GUIDE

| PROBLEMS                              | CAUSES  | REMEDIES  |
|---------------------------------------|---|---|
| <b>1. BELT TURN OVER IN PULLEYS</b>   | <ul style="list-style-type: none"> <li>a) Poor drive alignment.</li> <li>b) Incorrect pulley groove or excessive wear in grooves.</li> <li>c) Excessive belt flap.</li> <li>d) Low belt tension.</li> <li>e) Worn out belt.</li> <li>f) Ingress of foreign material.</li> </ul> | <ul style="list-style-type: none"> <li>: Realign</li> <li>: Modify or replace pulleys.</li> <li>: Use an inside idler on slack side</li> <li>: Retension</li> <li>: Replace with new belts.</li> <li>: Use more effective drive guard.</li> </ul>   |
| <b>2. EXCESSIVE WEAR</b>              | <ul style="list-style-type: none"> <li>a) Incorrect pulley section.</li> <li>b) Excessive wear in pulley groove.</li> <li>c) Poor drive alignment.</li> <li>d) Small pulley diameter below Recommended.</li> <li>e) Belt catching or protruding parts.</li> </ul>               | <ul style="list-style-type: none"> <li>: Modify or replace pulleys.</li> <li>: Modify or replace pulleys.</li> <li>: Realign.</li> <li>: Redesign using correct pulley diameter/</li> <li>: Remove protrusion or move drive away.</li> </ul>        |
| <b>3. EXCESSIVE NOISE</b>             | <ul style="list-style-type: none"> <li>a) Poor drive alignment.</li> <li>b) Incorrect belt tension.</li> <li>c) Overloaded drive.</li> <li>d) Unbalanced pulleys.</li> </ul>  | <ul style="list-style-type: none"> <li>: Realign.</li> <li>: Retension.</li> <li>: Check drive details &amp; redesign.</li> <li>: Redesign, if necessary balance the pulleys.</li> </ul>  |
| <b>4. BELT SWELLING OR SOFTENING</b>  | <ul style="list-style-type: none"> <li>a) Contamination by oil or other chemicals.</li> </ul>   | <ul style="list-style-type: none"> <li>: Protect drive from contamination clean pulley grooves with petrol or alcohol before fitting new belts. If contamination cannot be prevented use PIX AOH construction V-Belts.</li> </ul>                   |
| <b>5. UN-USUAL BELT STRETCH</b>       | <ul style="list-style-type: none"> <li>a) Worn out badly damaged grooves.</li> <li>b) Used belts with new belts on drive.</li> <li>c) Belts from different manufacturers.</li> </ul>  | <ul style="list-style-type: none"> <li>: Modify or replace pulleys.</li> <li>: Replace with completely new set of belts.</li> <li>: For use in a set, belts must be from one manufacturer.</li> </ul>   |
| <b>6. BELT BREAKING AFTER FITMENT</b> | <ul style="list-style-type: none"> <li>a) Forcing belt over pulley when fitting, damaging cord &amp; cover.</li> <li>b) Ingress of a foreign material.</li> <li>c) Insufficient belts or wrong section for drive.</li> <li>d) Drive stalled.</li> </ul>                         | <ul style="list-style-type: none"> <li>: Reduce drive centre distance to fit belt.</li> <li>: Fit an effective guard.</li> <li>: Check drive design &amp; fit correct no. or section of belts.</li> <li>: Ascertain cause &amp; rectify.</li> </ul> |

## SERVICE GUIDE

| PROBLEMS                                  | CAUSES  | REMEDIES  |
|---|---|---|
| <b>7. CUTS AND SPLITS<br/>IN THE BASE</b> | <ul style="list-style-type: none"> <li>a) Outside idler pulley in use.</li> <li>b) Pulley diameter too small.</li> <li>c) Ambient temperature too high.</li> <li>d) Ambient temperature too low.</li> <li>e) Abnormal belt slip.</li> <li>f) Contamination by oil or chemical.</li> </ul>                     | <ul style="list-style-type: none"> <li>: Replace with inside idler pulley on the slack side of drive.</li> <li>: Redesign using recommended minimum pulley pitch diameters</li> <li>: Ensure good ventilation &amp; protect the belts from direct heat/ Use PIX AOH construction V-belts.</li> <li>: Warm area surrounding drive.</li> <li>: Check drive design to ensure correct no. of belts, redesign if necessary, check drive tension.</li> <li>: Protect drive from contamination.</li> </ul> |
| <b>8. SEVERE BELT<br/>VIBRATION</b>       | <ul style="list-style-type: none"> <li>a) Drive has insufficient belts.</li> <li>b) Centre distance more than recommended.</li> <li>c) High shock loading.</li> <li>d) Too low belt tension.</li> <li>e) Unbalanced pulleys.</li> </ul>   | <ul style="list-style-type: none"> <li>: Check drive design &amp; modify if necessary</li> <li>: Shorten centre distance, use an inside idler in the drive slack side.</li> <li>: Use Banded belts/ Use an inside idler pulley in the slack side.</li> <li>: Retension the belt.</li> <li>: Balance the pulleys.</li> </ul>   |
| <b>9. CANNOT BE<br/>RETENSIONED</b>       | <ul style="list-style-type: none"> <li>a) Insufficient allowance for stretch in drive design.</li> <li>b) Excessive stretch caused by insufficient belts or wrong belt Section for drive.</li> <li>c) Incorrect belt length.</li> <li>d) Belt from different manufacturers used on the same drive.</li> </ul> | <ul style="list-style-type: none"> <li>: Give sufficient allowance for take up.</li> <li>: Recalculate drive design &amp; modify.</li> <li>: Use a belt of proper length.</li> <li>: For use in a set, belts must be from one manufacturer.</li> </ul>  |

## RIBBED BELTS (RMA/MPTA IP-26) CROSS SECTIONAL VIEW



High tensile tension member across full width of belt for maximum utilisation of face width.

Ribbed driving surface for maximum area of contact and reduced face pressure

Special rubber compound for high frictional grip and maximum tractive effort.

### Applications :

- ◆ **House Keeping Electrical Appliances :**  
Dryers, Health keeping equipments
- ◆ **Work Tools :**  
Harvester combines, Power driven sprayers and Engines for work tools.
- ◆ **Machine Tools :**  
N C lathes, Milling Machines, Drilling Machines and Grinding Machines.
- ◆ **Industrial Machines :**  
High speed Printing Machines, Flour Grinders, Agitators, Air blowers, Generators, P U Compressors
- ◆ **Others :**  
Broadcasting Equipment Drives & Hovercrafts

### Size Designation :

**Size - 550 J 8**

|            |         |        |
|------------|---------|--------|
| 550        | J       | 8      |
| ↑          | ↑       | ↑      |
| 55"        | J       | No. of |
| Effective  | Section | Ribs   |
| Length, Le |         |        |

### Characteristics :

- ◆ Good flexibility with high power carrying capacity per unit width.
- ◆ Low stretch
- ◆ Speed ratios over 1 : 30 are possible
- ◆ High maximum belt speed upto 60 m/s. depending upon the section.
- ◆ Only five sections cover the large power range from 0.1 kw upto more than 600 kw.
- ◆ Combines the advantages of flat belts with those of v-belts.
- ◆ Premium Quality with heat, oil resistant and anti-static properties

**Size - 10 PJ 1397**

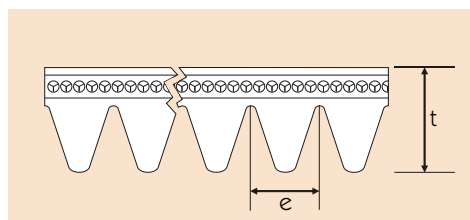
|        |         |            |
|--------|---------|------------|
| 10     | PJ      | 1397       |
| ↑      | ↑       | ↑          |
| No. of | PJ      | 1397 mm    |
| Ribs   | Section | Effective  |
|        |         | Length, Le |

## PRODUCT RANGE

### SECTION PH

#### LOW POWER DRIVES (DOMESTIC APPLIANCES)

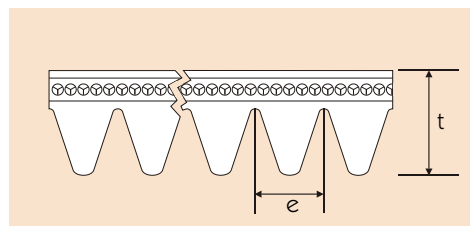
|                         |       |            |
|-------------------------|-------|------------|
| BELT THICKNESS 't'      | (mm)  | 2.90       |
| RIB PITCH 'e'           | (mm)  | 1.6        |
| MAXIMUM BELT SPEED      | (m/s) | 60         |
| MINIMUM RECOMMENDED DIA | (mm)  | 13         |
| RANGE                   | (mm)  | 280 - 5080 |



### SECTION PJ

#### LOW POWER DRIVES (INDUSTRIAL & DOMESTIC APPLIANCES)

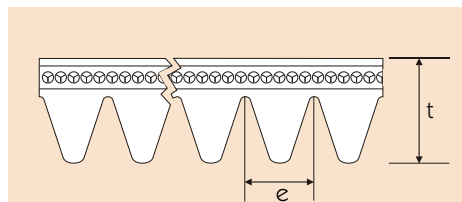
|                         |       |            |
|-------------------------|-------|------------|
| BELT THICKNESS 't'      | (mm)  | 3.80       |
| RIB PITCH 'e'           | (mm)  | 2.34       |
| MAXIMUM BELT SPEED      | (m/s) | 60         |
| MINIMUM RECOMMENDED DIA | (mm)  | 20         |
| RANGE                   | (mm)  | 280 - 5080 |



### SECTION PK

#### MEDIUM POWER DRIVES (AUTOMOTIVE & INDUSTRIAL)

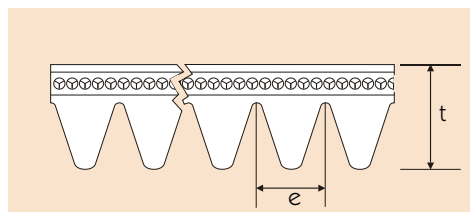
|                         |       | Auto       | Industrial (I) |
|-------------------------|-------|------------|----------------|
| BELT THICKNESS 't'      | (mm)  | 4.50       | 5.8            |
| RIB PITCH 'e'           | (mm)  | 3.56       | 3.56           |
| MAXIMUM BELT SPEED      | (m/s) | 55         | 55             |
| MINIMUM RECOMMENDED DIA | (mm)  | 50         | 50             |
| RANGE                   | (mm)  | 280 - 5080 | 280 - 5080     |



### SECTION PL

#### MEDIUM & HIGH POWER DRIVES (AGRICULTURAL & INDUSTRIAL)

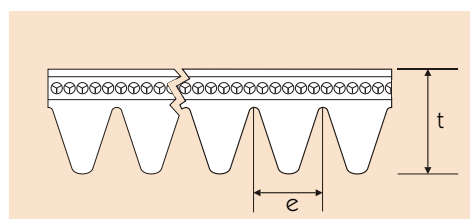
|                         |       |            |
|-------------------------|-------|------------|
| BELT THICKNESS 't'      | (mm)  | 7.6        |
| RIB PITCH 'e'           | (mm)  | 4.7        |
| MAXIMUM BELT SPEED      | (m/s) | 50         |
| MINIMUM RECOMMENDED DIA | (mm)  | 75         |
| RANGE                   | (mm)  | 280 - 5080 |



### SECTION PM

#### VERY HIGH POWER DRIVES ( HEAVY AGRICULTURAL EQUIPMENTS, INDUSTRIAL APPLICATIONS INVOLVING VERY HIGH TORQUE RATINGS.

|                         |       |            |
|-------------------------|-------|------------|
| BELT THICKNESS 't'      | (mm)  | 13.3       |
| RIB PITCH 'e'           | (mm)  | 9.4        |
| MAXIMUM BELT SPEED      | (m/s) | 40         |
| MINIMUM RECOMMENDED DIA | (mm)  | 180        |
| RANGE                   | (mm)  | 280 - 5080 |



## DRIVE DESIGN PROCEDURE FOR RIBBED BELTS

This Design Manual should be used for industrial drive calculation with two standard pulleys only.  
Please contact us to know about more complex drive designs.

### STEP 1 Application Data

1. Type of machine to be driven
2. Nominal Power (kw), P
3. Type & nominal speed of motor
4. Driven Shaft speed
5. Duty cycle category
6. Approximate centre distance

### STEP 2 Determine the service factor & the design power

- 1 To determine the service factor (K) refer table 29 on pg.100
- 2 Design power :  $P_d = P \times K$

### STEP 3 Select the Ribbed Belt Section

Refer to the cross section selection chart IV on page 100

### STEP 4 Select the effective diameter of the small pulley (de)

Refer table 30 on page 102

### STEP 5 Determine the speed ratio

$S_R = R / r$   
 $R$  = speed of faster shaft  
 $r$  = speed of slower shaft

### STEP 6 Calculate the Large pulley effective diameter (De)

$d_p = d_e + (2 \times h)$ , for h refer page 102  
 $D_p = d_p \times S_R$   
 $D_e = D_p - (2 \times h)$   
 Select the nearest pulley diameter from table 31 on page 103  
 $D_p$  = Pitch Diameter of large pulley in mm

### STEP 7 Calculate the belt linear speed

$$V = \frac{\pi \times d_p \times n}{60000} \text{ m/s}$$

where,  $d_p$  - Pitch Diameter of smaller pulley in mm  
 $n$  - Speed of faster shaft (rpm)

### STEP 8 Calculate the effective belt length

$$L_e = 2C + \left[ \frac{\pi}{2} \times (D_e + d_e) \right] + \frac{(D_e - d_e)^2}{4C}$$

### STEP 9 Calculate the centre distance corresponding to the standard effective length

$$C = \frac{X}{4} + \left[ \frac{1}{2} \times \sqrt{\frac{X^2}{4} - \frac{(D_e - d_e)^2}{2}} \right]$$

$$\text{where } X = L - \left[ \frac{\pi}{2} \times (D_e + d_e) \right]$$

### STEP 10 Calculate the number of belt ribs

1. Determine the length correction factor,  $C_l$
2. Determine the arc of contact on the small pulley  

$$a = 180 - \frac{60 \times (D_e - d_e)}{C}$$
3. Determine the arc of contact correction factor,  $C_a$
4. Determine the speed ratio correction factor,  $C_r$
5. Determine the basic power rating per rib (BPR)  
 (Please refer appropriate tables for BPR)
6. Calculate the corrected power rating per rib (CPR)  

$$CPR = (BPR + C_r) \times C_l \times C_a$$
7. Calculate the number of belt ribs  

$$\text{Number} = \frac{\text{Design power}}{CPR}$$

(If the no. of Ribs comes in fraction, use next whole no.)

## DRIVE DESIGN EXAMPLE FOR RIBBED BELTS

This Design Manual should be used for industrial drive calculation with two standard pulleys only.

Please contact us to know about more complex drive designs.

### STEP 1 Application Data

1. Type of driven machine : Printing Machine
2. Nominal Power (kw), P : 20 kw
3. Type & nominal speed of motor : DC Motor, 1450 rpm
4. Driven Shaft speed : 884 rpm
5. Duty cycle category : Continuous, 24 hrs / day
6. Approximate centre distance : 500 mm

### STEP 2 Determine the service factor & the design power

1. To determine the service factor (K) refer table 29 on Page 100.  $K=1.5$
2. Design power :  $P_d = P \times K$   
 $P_d = 20 \times 1.5$   
 $P_d = 30 \text{ kw}$

### STEP 3 Select Ribbed Belt Section

Section selected from the chart 4 on page 100 is PL ( $P_d=30 \text{ kw}$ ,  $n=1450$ )

### STEP 4 Select the effective diameter of the small pulley ( $d_e$ )

Refer to table 30 on page 102  $d_e = 140 \text{ mm}$

### STEP 5 Determine the speed ratio

$S_R = n/N$   $S_R = 1450 / 884$   
 $n = \text{speed of faster shaft}$   $S_R = 1.64$   
 $N = \text{speed of slower shaft}$

### STEP 6 Calculate the large pulley effective diameter ( $D_e$ )

$$d_p = d_e + (2 \times h) \quad d_p = 140 + (2 \times 2.3)$$

for h refer page 102  $d_p = 144.6 \text{ mm}$

$$D_p = d_p \times S_R \quad D_p = 144.6 \times 1.64$$

$$D_p = 237.14 \text{ mm}$$

$$D_e = D_p - (2 \times h) \quad D_e = 237.14 - (2 \times 2.3)$$

$$D_e = 232.54 \text{ mm}$$

Select the nearest pulley diameter from table 31 on page 103  
 Recommended standard pulley diameter  $D_e = 236 \text{ mm}$

### STEP 7 Calculate the belt linear speed

$$V = \frac{\pi \times d_p \times n}{60000} \text{ m/s}$$

$$V = 3.14 \times 144.60 \times 1450 / 60000$$

$$V = 10.97 \text{ m/s}$$

### STEP 8 Calculate the effective belt length

$$L_e = 2C + \frac{\pi}{2} \times (D_e + d_e) + \frac{(D_e - d_e)^2}{4C}$$

$$L_e = 2 \times 500 + [1.57 (236 + 140)] + \frac{(236 - 140)^2}{4 \times 500}$$

$$L_e = 1594.92 \text{ mm}$$

Standard effective length,  $L_e = 1595 \text{ mm}$

### STEP 9 Calculate the centre distance corresponding to the standard effective length

$$C = \frac{X}{4} + \left[ \frac{1}{2} \sqrt{\frac{X^2}{4} - \frac{(D_e - d_e)^2}{2}} \right]$$

$$\text{where } X = L_e - \left[ \frac{\pi}{2} \times (D_e + d_e) \right]$$

$$X = 1595 - [1.57(236 + 140)], \quad X = 1004.68$$

$$C = 1004.68 / 4 + \{0.5 \sqrt{[(1004.68)^2 / 4] - [(236 - 140)^2 / 2]}\}$$

$$C = 500 \text{ mm}$$

### STEP 10 Calculate the number of ribs

1. Determine the length correction factor from table 42, page 109  $C_l = 0.95$

2. Determine the arc of contact on the small pulley

$$a = [180 - 60 \times (D_e - d_e)] / C$$

$$a = [180 - 60 (236 - 140)] / 500 = 168.50^\circ$$

3. Determine the arc of contact correction factor from table 43, pg.109  $C_a=0.96$

4. Determine the speed ratio correction factor from table 41, pg. 109  $C_r=0.120$

5. Determine the basic power rating per rib (BPR) from table 40, pg.108 = 2.291 kw

6. Calculate the corrected power rating per rib (CPR)

$$CPR = (BPR + C_r) \times C_l \times C_a = (2.291 + 0.12) \times 0.95 \times 0.96$$

$$CPR = 2.199 \text{ kw / rib}$$

7. Calculate the number of belt ribs

$$\text{Number} = \text{Design power} / \text{Corrected Power Rating}$$

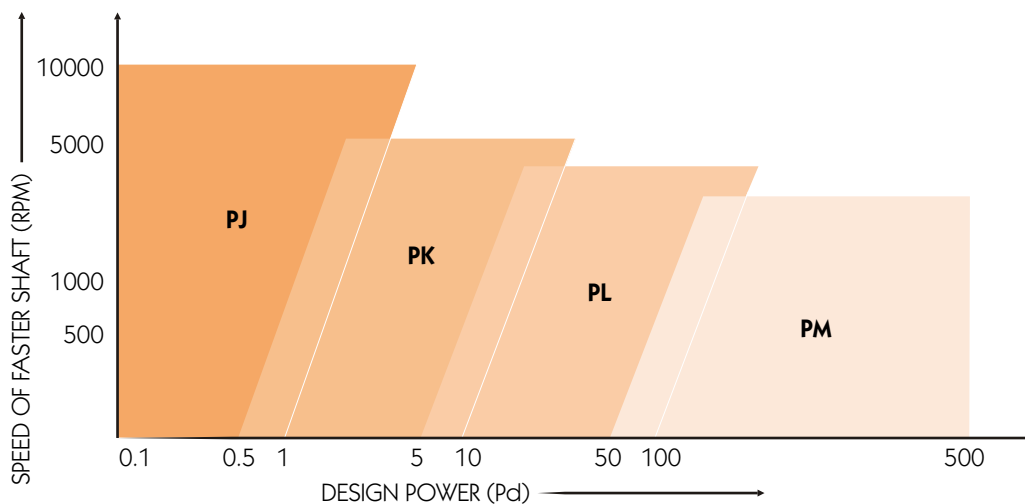
$$= 30 / 2.199 = 13.64$$

Standard no. of ribs = 14

**Table 29**  
**Service Factor Selection**

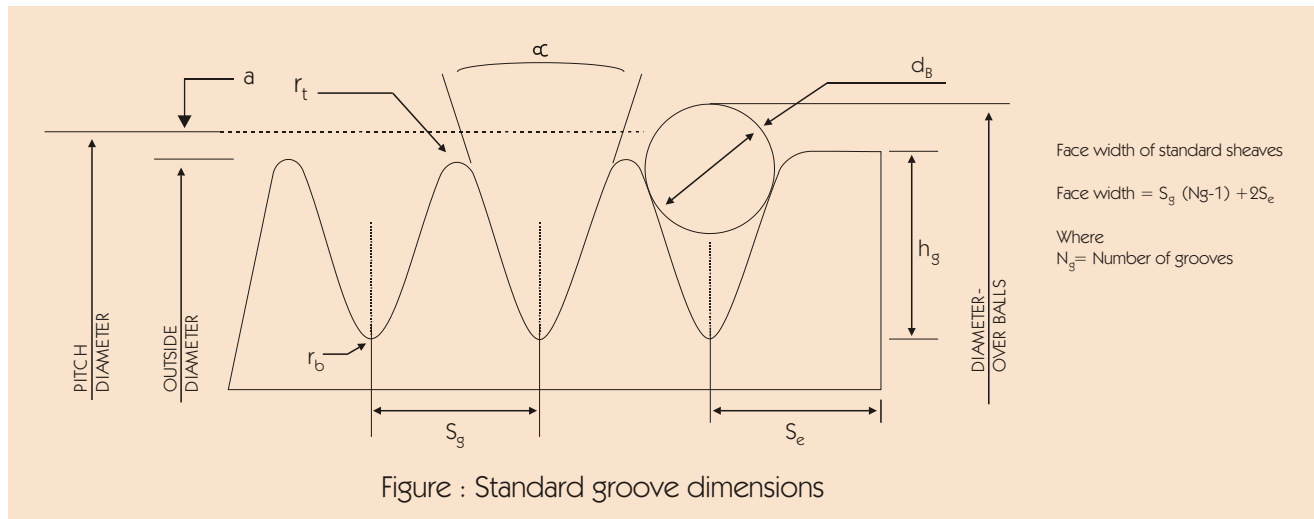
| <div> <div>Motor Class</div> <div>Driven Machine</div> </div>  | Class A   |          |        | Class B   |           |        |
|--|---|----------|--------|---|-----------|--------|
|  | D.C.Motors<br>Shunt wound<br>A.C. Motors<br>Normal Torque<br>Synchronous or Asynchronous<br>DC Brushless Motors<br>IC Engines Speed > 700 rpm<br>Turbines |          |        | DC Motors<br>Compound & Series wound<br>AC Motors<br>High Torque<br>Vector Control<br>Reluctance motors<br>IC engines single cylinder<br>Speed < 700 rpm<br>Line shafts, clutches |           |        |
| DUTY CYCLE CLASS   | <10 H   | 10 - 16H | > 16 H | < 10 H  | 10 - 16 H | > 16 H |
| <b>CLASS 1 : LOW EVEN TORQUE</b><br>Vacuum Cleaners, liquid agitators, belt-conveyors, blowers, centrifugal fans, Light Conveyors  | 1.0   | 1.1      | 1.2    | 1.1   | 1.2       | 1.3    |
| <b>CLASS 2 : MEDIUM EVEN TORQUE</b><br>Food agitators, mixers, laundry machines, generators, machine tools, blenders   | 1.1   | 1.2      | 1.3    | 1.2   | 1.3       | 1.4    |
| <b>CLASS3 : TORQUE</b><br>Bakery & woodwork m/c, brick m/c, rotary-compressors, pumps, heavy duty conveyors, exciters, printing m/c, spraying m/c, axial fan                           | 1.2   | 1.3      | 1.4    | 1.3   | 1.4       | 1.5    |
| <b>CLASS 4 : VERY UNEVEN TORQUE</b><br>Hammer mills, cement works, piston compressors, bucket elevators, hoists, flour mills, piston pumps, winches, paper mills                       | 1.4   | 1.5      | 1.6    | 1.5   | 1.6       | 1.8    |
| <b>CLASS 5 : VERY UNEVEN TORQUE WITH OVERLOADS</b><br>crushers, grinder m/c, ball grinders, dredging m/c, agricultural m/c, industrial rubber machinery (Calenders, extruders, mixers) | 1.6   | 1.7      | 1.8    | 1.7   | 1.8       | 2.0    |

**Chart IV - Cross Section Selection**



## PULLEY GROOVE DIMENSIONS - MILLIMETERS

| Cross Section | Minimum Recomm. Outside Diameter | Groove Angle<br>$\pm 0.25$ Degrees | $S_g$              | $r_t$<br>$+ 0.15$<br>$- 0.00$ | $2a$ | $r_b$                        | $h_g$<br>Minimum | $d_B$<br>$\pm 0.001$ | $S_e$                      |
|---------------|----------------------------------|------------------------------------|--------------------|-------------------------------|------|------------------------------|------------------|----------------------|----------------------------|
| H / PH        | 13                               | 40                                 | 1.60<br>$\pm 0.03$ | 0.15                          | 0.58 | 0.30<br>$+ 0.00$<br>$- 0.15$ | 1.04             | 1.00                 | 2.0<br>$+ 0.5$<br>$- 0.3$  |
| J / PJ        | 20                               | 40                                 | 2.34<br>$\pm 0.03$ | 0.20                          | 0.76 | 0.40<br>$+ 0.00$<br>$- 0.15$ | 1.77             | 1.50                 | 3.0<br>$+ 0.8$<br>$- 0.4$  |
| K / PK        | 40                               | 40                                 | 3.56<br>$\pm 0.05$ | 0.25                          | 0.96 | 0.50<br>$+ 0.00$<br>$- 0.15$ | 3.16             | 3.00                 | 3.0<br>$+ 1.5$<br>$- 0.0$  |
| L / PL        | 75                               | 40                                 | 4.70<br>$\pm 0.05$ | 0.40                          | 1.54 | 0.40<br>$+ 0.00$<br>$- 0.15$ | 4.63             | 4.00                 | 10.0<br>$+ 2.0$<br>$- 1.0$ |
| M / PM        | 180                              | 40                                 | 9.40<br>$\pm 0.08$ | 0.75                          | 2.88 | 0.75<br>$+ 0.00$<br>$- 0.25$ | 9.74             | 7.00                 | 13.0<br>$+ 3.0$<br>$- 1.0$ |



## DEFINITION OF THE SMALL PULLEY EFFECTIVE DIAMETER (mm)

$$\text{Pitch Diameter (mm)} = \text{Effective Diameter (mm)} + (2 \times h)$$

| Belt Section | PJ   | PK   | PL   | PM   |
|--------------|------|------|------|------|
| h (mm)       | 1.05 | 1.60 | 2.30 | 2.60 |

**Table 30**

**Determination of the Small Pulley effective diameter**

| n (rpm) | Design Power (Kw) |     |    |    |     |     |     |     |     |     |     |     |     |     |     |     |
|---------|-------------------|-----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|         | 0.25              | 0.5 | 1  | 2  | 4   | 7   | 10  | 20  | 30  | 50  | 75  | 100 | 125 | 150 | 175 | 200 |
| 100     | 45                | 60  | 75 | 95 | 125 | 160 | 180 | 224 | 250 | 315 | 355 | 400 | 450 | 500 | 500 | 500 |
| 300     | 40                | 50  | 63 | 80 | 106 | 125 | 140 | 180 | 212 | 250 | 280 | 315 | 355 | 355 | 400 | 400 |
| 500     | 35                | 45  | 60 | 75 | 95  | 112 | 125 | 160 | 180 | 224 | 250 | 280 | 315 | 315 | 355 | 355 |
| 750     | 35                | 45  | 56 | 67 | 85  | 106 | 118 | 150 | 170 | 200 | 224 | 250 | 280 | 280 | 315 | 315 |
| 1000    | 30                | 40  | 50 | 63 | 80  | 95  | 106 | 132 | 150 | 190 | 200 | 224 | 250 | 250 | 280 | 280 |
| 1500    | 30                | 35  | 45 | 60 | 71  | 85  | 95  | 125 | 140 | 170 | 180 | 200 | 212 | 224 | 236 | 250 |
| 2000    | 30                | 35  | 45 | 56 | 67  | 80  | 90  | 112 | 125 | 150 | 170 | 180 | 200 | 212 | 224 | 224 |
| 3000    | 25                | 30  | 40 | 50 | 60  | 71  | 80  | 100 | 112 | 132 | 150 | 160 | 170 | 180 | 190 | 200 |
| 4000    | 25                | 30  | 35 | 45 | 56  | 67  | 71  | 90  | 100 | 118 | 132 | 140 | 150 | 160 | 170 | 180 |
| 5000    | 20                | 30  | 35 | 40 | 50  | 60  | 67  | 80  | 95  | 106 | 125 | 132 | 140 | 150 |     |     |
| 6000    | 20                | 25  | 30 | 40 | 50  | 56  | 63  | 75  | 85  | 100 | 112 | 125 |     |     |     |     |
| 7000    | 20                | 25  | 30 | 40 | 45  | 56  | 60  | 75  | 85  | 95  | 106 | 118 |     |     |     |     |
| 8000    | 20                | 25  | 30 | 35 | 45  | 50  | 56  | 71  | 80  | 90  | 100 | 112 |     |     |     |     |
| 9000    | 20                | 20  | 30 | 35 | 40  | 50  | 56  | 67  | 75  | 85  | 95  |     |     |     |     |     |
| 10000   | 20                | 20  | 30 | 35 | 40  | 45  | 50  | 63  | 75  | 80  | 90  |     |     |     |     |     |

**TABLE 31**  
**STANDARD PULLEYS**

| Effective<br>Diameter<br>(mm) | SECTION PJ<br>No. of Ribs<br>4,8,12,16,20 | SECTION PK<br>No. of Ribs<br>6,8,10,12,16,20 | SECTION PL<br>No. of Ribs<br>6,8,10,12,16,20 | SECTION PM<br>No. of Ribs<br>6,10,16,20 |
|-------------------------------|---|--|--|---|
| 20                            | ●   |  |  |   |
| 25                            | ●   |  |  |   |
| 30                            | ●   |  |  |   |
| 35                            | ●   |  |  |   |
| 40                            | ●   |  |  |   |
| 45                            | ●   |  |  |   |
| 50                            | ●   |  |  |   |
| 56                            | ●   | ●  |  |   |
| 60                            | ●   | ●  |  |   |
| 63                            | ●   | ●  |  |   |
| 67                            | ●   | ●  |  |   |
| 71                            | ●   | ●  |  |   |
| 75                            | ●   | ●  | ●  |   |
| 80                            | ●   | ●  | ●  |   |
| 85                            | ●   | ●  | ●  |   |
| 90                            | ●   | ●  | ●  |   |
| 95                            | ●   | ●  | ●  |   |
| 100                           | ●   | ●  | ●  |   |
| 106                           | ●   | ●  | ●  |   |
| 112                           | ●   | ●  | ●  |   |
| 118                           | ●   | ●  | ●  |   |
| 125                           | ●   | ●  | ●  |   |
| 132                           | ●   | ●  | ●  |   |
| 140                           | ●   | ●  | ●  |   |
| 150                           |   | ●  | ●  |   |
| 160                           | ●   | ●  | ●  |   |
| 170                           |   | ●  | ●  |   |
| 180                           | ●   | ●  | ●  | ●                                       |
| 190                           |   | ●  | ●  | ●                                       |
| 200                           | ●   | ●  | ●  | ●                                       |
| 212                           |   | ●  | ●  | ●                                       |
| 224                           | ●   | ●  | ●  | ●                                       |
| 236                           |   | ●  | ●  |   |
| 250                           | ●   | ●  | ●  | ●                                       |
| 280                           | ●   | ●  | ●  | ●                                       |
| 315                           | ●   | ●  | ●  | ●                                       |
| 355                           | ●   | ●  | ●  | ●                                       |
| 400                           | ●   | ●  | ●  | ●                                       |
| 450                           |   | ●  | ●  | ●                                       |
| 500                           |   | ●  | ●  | ●                                       |
| 560                           |   |  |  | ●                                       |
| 630                           |   |  | ●  | ●                                       |
| 710                           |   |  |  | ●                                       |
| 800                           |   |  | ●  |   |

Table 32

Section PJ

Basic power rating per rib (kw) for small pulley effective diameter (mm)

|   | de     | 90    | 25    | 30    | 32    | 35    | 40    | 45    | 50    | 56    | 60    | 63    | 67    | 71    | 75    | 80    | 85    | 90    | 95    | 100   | 112   | 118   | 125   | 132   | 140   | 160   | 180   | 200   | 224   | 250   | 280   | 315   | 355   | 400   |
|---|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| S | 100    | 0.048 | 0.007 | 0.010 | 0.010 | 0.011 | 0.014 | 0.015 | 0.017 | 0.021 | 0.023 | 0.024 | 0.025 | 0.027 | 0.030 | 0.032 | 0.034 | 0.037 | 0.038 | 0.038 | 0.045 | 0.048 | 0.051 | 0.054 | 0.058 | 0.067 | 0.074 | 0.084 | 0.094 | 0.104 | 0.119 | 0.011 | 0.151 | 0.170 |
|   | 200    | 0.010 | 0.014 | 0.017 | 0.020 | 0.023 | 0.027 | 0.031 | 0.035 | 0.041 | 0.045 | 0.147 | 0.951 | 0.954 | 0.058 | 0.062 | 0.067 | 0.070 | 0.075 | 0.080 | 0.091 | 0.095 | 0.101 | 0.107 | 0.114 | 0.131 | 0.147 | 0.165 | 0.182 | 0.204 | 0.232 | 0.264 | 0.294 | 0.330 |
|   | 300    | 0.013 | 0.021 | 0.025 | 0.030 | 0.034 | 0.040 | 0.045 | 0.054 | 0.061 | 0.065 | 0.071 | 0.075 | 0.080 | 0.087 | 0.091 | 0.100 | 0.105 | 0.111 | 0.118 | 0.137 | 0.141 | 0.151 | 0.158 | 0.170 | 0.195 | 0.220 | 0.244 | 0.271 | 0.305 | 0.341 | 0.377 | 0.433 | 0.487 |
| P | 400    | 0.017 | 0.025 | 0.034 | 0.039 | 0.045 | 0.054 | 0.062 | 0.070 | 0.081 | 0.087 | 0.094 | 0.100 | 0.102 | 0.114 | 0.123 | 0.131 | 0.140 | 0.144 | 0.157 | 0.177 | 0.187 | 0.197 | 0.210 | 0.221 | 0.254 | 0.288 | 0.321 | 0.360 | 0.400 | 0.450 | 0.500 | 0.569 | 0.636 |
|   | 500    | 0.022 | 0.034 | 0.042 | 0.048 | 0.055 | 0.066 | 0.076 | 0.087 | 0.100 | 0.110 | 0.114 | 0.123 | 0.132 | 0.141 | 0.152 | 0.161 | 0.172 | 0.181 | 0.194 | 0.219 | 0.231 | 0.244 | 0.260 | 0.274 | 0.314 | 0.357 | 0.395 | 0.494 | 0.494 | 0.555 | 0.662 | 0.701 | 0.785 |
|   | 600    | 0.023 | 0.037 | 0.050 | 0.054 | 0.061 | 0.074 | 0.085 | 0.098 | 0.112 | 0.122 | 0.129 | 0.139 | 0.147 | 0.155 | 0.168 | 0.180 | 0.192 | 0.201 | 0.214 | 0.244 | 0.257 | 0.272 | 0.287 | 0.304 | 0.335 | 0.397 | 0.441 | 0.525 | 0.552 | 0.618 | 0.669 | 0.780 | 0.872 |
| D | 700    | 0.026 | 0.042 | 0.051 | 0.058 | 0.065 | 0.079 | 0.090 | 0.104 | 0.120 | 0.132 | 0.137 | 0.147 | 0.158 | 0.165 | 0.180 | 0.191 | 0.205 | 0.218 | 0.230 | 0.260 | 0.272 | 0.291 | 0.308 | 0.328 | 0.374 | 0.421 | 0.471 | 0.610 | 0.590 | 0.660 | 0.703 | 0.831 | 0.931 |
|   | 800    | 0.030 | 0.047 | 0.062 | 0.068 | 0.076 | 0.092 | 0.106 | 0.121 | 0.138 | 0.150 | 0.160 | 0.171 | 0.183 | 0.195 | 0.207 | 0.220 | 0.235 | 0.253 | 0.267 | 0.300 | 0.318 | 0.337 | 0.358 | 0.380 | 0.434 | 0.491 | 0.544 | 0.688 | 0.681 | 0.761 | 0.085 | 0.959 | 0.930 |
|   | 900    | 0.031 | 0.048 | 0.063 | 0.070 | 0.079 | 0.094 | 0.110 | 0.124 | 0.142 | 0.155 | 0.164 | 0.174 | 0.188 | 0.200 | 0.215 | 0.230 | 0.244 | 0.258 | 0.274 | 0.308 | 0.327 | 0.347 | 0.367 | 0.390 | 0.445 | 0.504 | 0.560 | 0.694 | 0.701 | 0.781 | 0.086 | 0.984 | 1.072 |
| O | 1000   | 0.035 | 0.053 | 0.070 | 0.076 | 0.086 | 0.104 | 0.121 | 0.137 | 0.157 | 0.172 | 0.180 | 0.195 | 0.208 | 0.221 | 0.236 | 0.254 | 0.270 | 0.287 | 0.301 | 0.342 | 0.361 | 0.384 | 0.404 | 0.431 | 0.495 | 0.555 | 0.680 | 0.774 | 0.772 | 0.861 | 0.095 | 1.082 | 1.100 |
|   | 2000   | 0.040 | 0.059 | 0.076 | 0.086 | 0.097 | 0.117 | 0.135 | 0.154 | 0.176 | 0.190 | 0.203 | 0.217 | 0.233 | 0.247 | 0.264 | 0.284 | 0.300 | 0.321 | 0.338 | 0.381 | 0.402 | 0.428 | 0.454 | 0.481 | 0.551 | 0.621 | 0.690 | 0.821 | 0.860 | 0.961 | 1.004 | 1.200 | 1.210 |
|   | 3000   | 0.041 | 0.061 | 0.082 | 0.090 | 0.103 | 0.123 | 0.143 | 0.165 | 0.187 | 0.204 | 0.215 | 0.232 | 0.247 | 0.263 | 0.281 | 0.301 | 0.321 | 0.341 | 0.360 | 0.404 | 0.428 | 0.454 | 0.480 | 0.511 | 0.587 | 0.662 | 0.734 | 0.855 | 0.914 | 1.080 | 0.113 | 1.975 | 1.343 |
| H | 4000   | 0.043 | 0.064 | 0.086 | 0.095 | 0.106 | 0.128 | 0.150 | 0.170 | 0.195 | 0.212 | 0.223 | 0.240 | 0.257 | 0.273 | 0.292 | 0.312 | 0.331 | 0.353 | 0.371 | 0.422 | 0.445 | 0.474 | 0.501 | 0.531 | 0.612 | 0.685 | 0.764 | 1.008 | 0.950 | 1.058 | 0.117 | 1.321 | 1.490 |
|   | 5000   | 0.051 | 0.075 | 0.103 | 0.112 | 0.128 | 0.153 | 0.177 | 0.202 | 0.231 | 0.251 | 0.267 | 0.285 | 0.306 | 0.325 | 0.348 | 0.372 | 0.395 | 0.420 | 0.441 | 0.501 | 0.530 | 0.560 | 0.594 | 0.631 | 0.721 | 0.814 | 0.904 | 1.152 | 1.121 | 1.247 | 0.138 | 1.545 | 1.711 |
|   | 6000   | 0.056 | 0.089 | 0.119 | 0.130 | 0.148 | 0.177 | 0.205 | 0.234 | 0.268 | 0.290 | 0.307 | 0.330 | 0.353 | 0.372 | 0.404 | 0.430 | 0.457 | 0.485 | 0.514 | 0.578 | 0.610 | 0.650 | 0.685 | 0.730 | 0.834 | 0.937 | 1.040 | 1.187 | 1.285 | 1.426 | 0.156 | 1.754 | 1.971 |
| S | 7000   | 0.060 | 0.091 | 0.121 | 0.133 | 0.151 | 0.182 | 0.211 | 0.240 | 0.241 | 0.297 | 0.317 | 0.340 | 0.362 | 0.384 | 0.414 | 0.441 | 0.470 | 0.500 | 0.527 | 0.595 | 0.627 | 0.665 | 0.704 | 0.745 | 0.854 | 0.962 | 1.067 | 1.304 | 1.317 | 1.460 | 0.160 | 1.792 | 1.932 |
|   | 8000   | 0.065 | 0.100 | 0.134 | 0.146 | 0.167 | 0.200 | 0.233 | 0.265 | 0.304 | 0.330 | 0.350 | 0.374 | 0.400 | 0.425 | 0.458 | 0.488 | 0.520 | 0.550 | 0.581 | 0.655 | 0.691 | 0.734 | 0.779 | 0.821 | 0.942 | 1.058 | 1.170 | 1.441 | 1.445 | 1.596 | 0.176 | 1.943 | 2.172 |
|   | 9000   | 0.075 | 0.111 | 0.150 | 0.165 | 0.187 | 0.224 | 0.260 | 0.297 | 0.340 | 0.369 | 0.390 | 0.418 | 0.445 | 0.475 | 0.511 | 0.544 | 0.581 | 0.615 | 0.650 | 0.731 | 0.771 | 0.820 | 0.865 | 0.917 | 1.050 | 1.176 | 1.300 | 1.576 | 1.592 | 1.755 | 0.192 | 2.114 | 2.195 |
| M | 10000  | 0.082 | 0.124 | 0.165 | 0.180 | 0.207 | 0.246 | 0.287 | 0.327 | 0.375 | 0.405 | 0.431 | 0.461 | 0.491 | 0.523 | 0.564 | 0.600 | 0.641 | 0.679 | 0.717 | 0.807 | 0.850 | 0.901 | 0.954 | 1.010 | 1.151 | 0.990 | 0.481 | 1.702 | 1.734 | 1.908 | 0.907 | 2.960 | 2.992 |
|   | 20000  | 0.090 | 0.133 | 0.180 | 0.198 | 0.226 | 0.270 | 0.314 | 0.357 | 0.410 | 0.444 | 0.474 | 0.504 | 0.540 | 0.574 | 0.614 | 0.654 | 0.700 | 0.741 | 0.781 | 0.880 | 0.928 | 0.984 | 1.037 | 1.101 | 1.252 | 1.400 | 1.541 | 1.822 | 1.864 | 2.038 | 0.920 | 2.384 | 2.426 |
|   | 30000  | 0.096 | 0.145 | 0.193 | 0.215 | 0.245 | 0.293 | 0.340 | 0.387 | 0.444 | 0.484 | 0.511 | 0.547 | 0.584 | 0.622 | 0.665 | 0.710 | 0.758 | 0.803 | 0.847 | 0.951 | 1.004 | 1.064 | 1.123 | 1.187 | 1.352 | 1.507 | 1.654 | 1.932 | 1.988 | 2.160 | 0.930 | 2.480 | 2.526 |
| P | 40000  | 0.104 | 0.156 | 0.210 | 0.232 | 0.265 | 0.315 | 0.366 | 0.419 | 0.480 | 0.530 | 0.550 | 0.590 | 0.630 | 0.667 | 0.718 | 0.765 | 0.815 | 0.863 | 0.910 | 1.024 | 1.077 | 1.141 | 1.204 | 1.275 | 1.445 | 1.608 | 1.762 | 2.036 | 2.100 | 2.267 | 0.948 | 2.578 | 2.588 |
|   | 50000  | 0.111 | 0.166 | 0.225 | 0.247 | 0.282 | 0.337 | 0.394 | 0.448 | 0.514 | 0.556 | 0.587 | 0.632 | 0.674 | 0.716 | 0.768 | 0.820 | 0.872 | 0.923 | 0.971 | 1.093 | 1.151 | 1.217 | 1.284 | 1.359 | 1.537 | 1.704 | 1.860 | 2.075 | 2.200 | 2.359 | 0.951 | 2.585 | 2.608 |
|   | 60000  | 0.114 | 0.171 | 0.231 | 0.254 | 0.290 | 0.345 | 0.403 | 0.460 | 0.526 | 0.572 | 0.605 | 0.647 | 0.692 | 0.735 | 0.788 | 0.840 | 0.892 | 0.947 | 0.995 | 1.120 | 1.180 | 1.247 | 1.314 | 1.391 | 1.573 | 1.745 | 1.902 | 2.130 | 2.237 | 2.391 | 0.954 | 2.589 | 2.585 |
| E | 70000  | 0.120 | 0.180 | 0.241 | 0.265 | 0.301 | 0.360 | 0.420 | 0.477 | 0.549 | 0.594 | 0.627 | 0.671 | 0.717 | 0.763 | 0.819 | 0.874 | 0.928 | 0.981 | 1.035 | 1.168 | 1.230 | 0.991 | 1.361 | 1.440 | 1.624 | 1.798 | 1.957 | 2.215 | 2.288 | 2.390 | 0.954 | 2.588 |       |
|   | 80000  | 0.125 | 0.190 | 0.253 | 0.281 | 0.320 | 0.383 | 0.444 | 0.507 | 0.580 | 0.626 | 0.665 | 0.713 | 0.763 | 0.808 | 0.865 | 0.924 | 0.981 | 1.040 | 1.093 | 1.228 | 1.292 | 1.365 | 1.437 | 1.518 | 1.710 | 1.886 | 2.071 | 2.287 | 2.364 | 2.432 | 0.955 | 2.554 |       |
|   | 90000  | 0.132 | 0.201 | 0.270 | 0.297 | 0.337 | 0.405 | 0.470 | 0.535 | 0.614 | 0.665 | 0.704 | 0.754 | 0.804 | 0.855 | 0.916 | 0.974 | 1.037 | 1.097 | 1.153 | 1.293 | 1.360 | 1.434 | 1.510 | 1.594 | 1.790 | 1.969 | 2.184 | 2.354 | 2.425 | 2.491 | 0.952 |       |       |
| Y | 100000 | 0.136 | 0.209 | 0.284 | 0.314 | 0.374 | 0.427 | 0.495 | 0.554 | 0.646 | 0.700 | 0.740 | 0.794 | 0.845 | 0.896 | 0.965 | 1.025 | 1.090 | 1.153 | 1.213 | 1.356 | 1.424 | 1.504 | 1.580 | 1.667 | 1.865 | 2.045 | 2.201 | 2.408 | 2.504 | 2.547 | 2.588 |       |       |
|   | 200000 | 0.146 | 0.223 | 0.304 | 0.330 | 0.392 | 0.448 | 0.521 | 0.595 | 0.680 | 0.735 | 0.778 | 0.833 | 0.888 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |

**Table 33 SECTION PJ**  
SPEED RATIO CORRECTION FACTOR

| SPEED RATIO | 1.00 to 1.01 | 1.02 to 1.04 | 1.05 to 1.09 | 1.10 to 1.16 | 1.17 to 1.26 | 1.27 to 1.40 | 1.41 to 1.65 | above 1.66 |
|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|
| 100         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00       |
| 200         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00       |
| 300         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00       |
| 400         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00       |
| 500         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00       |
| 560         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.01       |
| 600         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.01       |
| 700         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.01         | 0.01       |
| 720         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.01         | 0.01       |
| 800         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.01         | 0.01         | 0.01       |
| 900         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.01         | 0.01         | 0.01       |
| 960         | 0.00         | 0.00         | 0.00         | 0.00         | 0.01         | 0.01         | 0.01         | 0.01       |
| 1000        | 0.00         | 0.00         | 0.00         | 0.00         | 0.01         | 0.01         | 0.01         | 0.01       |
| 1200        | 0.00         | 0.00         | 0.00         | 0.00         | 0.01         | 0.01         | 0.01         | 0.01       |
| 1400        | 0.00         | 0.00         | 0.00         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01       |
| 1440        | 0.00         | 0.00         | 0.00         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01       |
| 1600        | 0.00         | 0.00         | 0.00         | 0.01         | 0.01         | 0.01         | 0.01         | 0.02       |
| 1800        | 0.00         | 0.00         | 0.00         | 0.01         | 0.01         | 0.01         | 0.01         | 0.02       |
| 2000        | 0.00         | 0.00         | 0.01         | 0.01         | 0.01         | 0.01         | 0.02         | 0.02       |
| 2200        | 0.00         | 0.00         | 0.01         | 0.01         | 0.01         | 0.01         | 0.02         | 0.02       |
| 2400        | 0.00         | 0.00         | 0.01         | 0.01         | 0.01         | 0.02         | 0.02         | 0.02       |
| 2600        | 0.00         | 0.00         | 0.01         | 0.01         | 0.01         | 0.02         | 0.02         | 0.02       |
| 2800        | 0.00         | 0.00         | 0.01         | 0.01         | 0.02         | 0.02         | 0.02         | 0.03       |
| 2880        | 0.00         | 0.00         | 0.01         | 0.01         | 0.02         | 0.02         | 0.02         | 0.03       |
| 3000        | 0.00         | 0.00         | 0.01         | 0.01         | 0.02         | 0.02         | 0.02         | 0.03       |
| 3200        | 0.00         | 0.00         | 0.01         | 0.01         | 0.02         | 0.02         | 0.03         | 0.03       |
| 3400        | 0.00         | 0.00         | 0.01         | 0.01         | 0.02         | 0.02         | 0.03         | 0.03       |
| 3600        | 0.00         | 0.01         | 0.01         | 0.01         | 0.02         | 0.02         | 0.03         | 0.03       |
| 3800        | 0.00         | 0.01         | 0.01         | 0.02         | 0.02         | 0.03         | 0.03         | 0.04       |
| 4000        | 0.00         | 0.01         | 0.01         | 0.02         | 0.02         | 0.03         | 0.03         | 0.04       |
| 4200        | 0.00         | 0.01         | 0.01         | 0.02         | 0.02         | 0.03         | 0.03         | 0.04       |
| 4400        | 0.00         | 0.01         | 0.01         | 0.02         | 0.02         | 0.03         | 0.04         | 0.04       |
| 4500        | 0.00         | 0.01         | 0.01         | 0.02         | 0.02         | 0.03         | 0.04         | 0.04       |
| 4600        | 0.00         | 0.01         | 0.01         | 0.02         | 0.02         | 0.03         | 0.04         | 0.04       |
| 4800        | 0.00         | 0.01         | 0.01         | 0.02         | 0.03         | 0.03         | 0.04         | 0.05       |
| 5000        | 0.00         | 0.01         | 0.01         | 0.02         | 0.03         | 0.03         | 0.04         | 0.05       |
| 5200        | 0.00         | 0.01         | 0.01         | 0.02         | 0.03         | 0.04         | 0.04         | 0.05       |
| 5400        | 0.00         | 0.01         | 0.01         | 0.02         | 0.03         | 0.04         | 0.04         | 0.05       |
| 5500        | 0.00         | 0.01         | 0.01         | 0.02         | 0.03         | 0.04         | 0.04         | 0.05       |
| 5600        | 0.00         | 0.01         | 0.02         | 0.02         | 0.03         | 0.04         | 0.05         | 0.05       |
| 5800        | 0.00         | 0.01         | 0.02         | 0.02         | 0.03         | 0.04         | 0.05         | 0.06       |
| 6000        | 0.00         | 0.01         | 0.02         | 0.02         | 0.03         | 0.04         | 0.05         | 0.06       |
| 6200        | 0.00         | 0.01         | 0.02         | 0.03         | 0.03         | 0.04         | 0.05         | 0.06       |
| 6400        | 0.00         | 0.01         | 0.02         | 0.03         | 0.03         | 0.04         | 0.05         | 0.06       |
| 6600        | 0.00         | 0.01         | 0.02         | 0.03         | 0.04         | 0.04         | 0.05         | 0.06       |
| 6800        | 0.00         | 0.01         | 0.02         | 0.03         | 0.04         | 0.05         | 0.06         | 0.06       |
| 7000        | 0.00         | 0.01         | 0.02         | 0.03         | 0.04         | 0.05         | 0.06         | 0.07       |
| 7200        | 0.00         | 0.01         | 0.02         | 0.03         | 0.04         | 0.05         | 0.06         | 0.07       |
| 7400        | 0.00         | 0.01         | 0.02         | 0.03         | 0.04         | 0.05         | 0.06         | 0.07       |
| 7400        | 0.00         | 0.01         | 0.02         | 0.03         | 0.04         | 0.05         | 0.06         | 0.07       |
| 7600        | 0.00         | 0.01         | 0.02         | 0.03         | 0.04         | 0.05         | 0.06         | 0.07       |
| 7800        | 0.00         | 0.01         | 0.02         | 0.03         | 0.04         | 0.05         | 0.06         | 0.07       |
| 8000        | 0.00         | 0.01         | 0.02         | 0.03         | 0.04         | 0.05         | 0.06         | 0.08       |
| 8200        | 0.00         | 0.01         | 0.02         | 0.03         | 0.04         | 0.06         | 0.06         | 0.08       |
| 8400        | 0.00         | 0.01         | 0.02         | 0.03         | 0.05         | 0.06         | 0.07         | 0.08       |
| 8600        | 0.00         | 0.01         | 0.02         | 0.04         | 0.05         | 0.06         | 0.07         | 0.08       |
| 8800        | 0.00         | 0.01         | 0.02         | 0.04         | 0.05         | 0.06         | 0.07         | 0.08       |
| 9000        | 0.00         | 0.01         | 0.02         | 0.04         | 0.05         | 0.06         | 0.07         | 0.09       |
| 9200        | 0.00         | 0.01         | 0.02         | 0.04         | 0.05         | 0.06         | 0.07         | 0.09       |
| 9400        | 0.00         | 0.01         | 0.03         | 0.04         | 0.05         | 0.06         | 0.08         | 0.09       |
| 9600        | 0.00         | 0.01         | 0.03         | 0.04         | 0.05         | 0.07         | 0.08         | 0.09       |
| 9800        | 0.00         | 0.01         | 0.03         | 0.04         | 0.05         | 0.07         | 0.08         | 0.09       |
| 10000       | 0.00         | 0.01         | 0.03         | 0.04         | 0.05         | 0.07         | 0.08         | 0.10       |

**Table 34**  
Length Correction Factor

| EFFECTIVE LENGTH | CORRECTION FACTOR |
|------------------|-------------------|
| upto 200         | 0.60              |
| 200 - 350        | 0.80              |
| 350 - 500        | 0.85              |
| 500 - 700        | 0.90              |
| 700 - 900        | 0.95              |
| 900 - 1200       | 1.00              |
| 1200 - 1500      | 1.05              |
| 1500 - 2000      | 1.10              |
| 2000 - 2500      | 1.15              |
| above 2500       | 1.20              |

**Table 35**  
Arc of contact  
Correction Factor

| ARC OF CONTACT ON SMALL PULLEY | CORRECTION FACTOR |
|--------------------------------|-------------------|
| 100                            | 0.72              |
| 110                            | 0.76              |
| 120                            | 0.80              |
| 130                            | 0.84              |
| 140                            | 0.88              |
| 150                            | 0.91              |
| 160                            | 0.94              |
| 170                            | 0.97              |
| 180                            | 1.00              |
| 190                            | 1.02              |
| 200                            | 1.05              |
| 210                            | 1.07              |
| 220                            | 1.09              |
| 230                            | 1.11              |

# Table 36 Section PK

Basic power rating per rib (kw) for small pulley effective diameter (mm)

| de   | 50    | 56    | 60    | 63    | 67    | 71    | 75    | 80    | 85    | 90    | 95    | 100   | 106   | 112   | 118   | 125   | 132   | 140   | 160   | 180   | 200   | 224   | 250   | 280   | 315   | 355   | 400   | 450   | 500   | 560   | 630   |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 100  | 0.022 | 0.031 | 0.034 | 0.037 | 0.041 | 0.047 | 0.051 | 0.057 | 0.064 | 0.068 | 0.074 | 0.080 | 0.877 | 0.094 | 0.101 | 0.107 | 0.114 | 0.125 | 0.144 | 0.167 | 0.191 | 0.215 | 0.244 | 0.275 | 0.314 | 0.354 | 0.401 | 0.454 | 0.504 | 0.567 | 0.636 |
| 200  | 0.044 | 0.056 | 0.064 | 0.074 | 0.082 | 0.091 | 0.100 | 0.110 | 0.120 | 0.132 | 0.144 | 0.154 | 0.167 | 0.180 | 0.193 | 0.207 | 0.221 | 0.240 | 0.281 | 0.325 | 0.365 | 0.414 | 0.470 | 0.531 | 0.602 | 0.684 | 0.774 | 0.874 | 0.975 | 1.091 | 1.285 |
| 300  | 0.065 | 0.084 | 0.094 | 0.104 | 0.120 | 0.132 | 0.145 | 0.160 | 0.175 | 0.192 | 0.210 | 0.225 | 0.244 | 0.262 | 0.282 | 0.304 | 0.324 | 0.351 | 0.411 | 0.475 | 0.535 | 0.610 | 0.689 | 0.778 | 0.881 | 1.002 | 1.134 | 1.280 | 1.424 | 1.597 | 1.794 |
| 400  | 0.081 | 0.108 | 0.125 | 0.138 | 0.154 | 0.171 | 0.190 | 0.211 | 0.230 | 0.251 | 0.275 | 0.295 | 0.321 | 0.344 | 0.366 | 0.398 | 0.425 | 0.460 | 0.540 | 0.621 | 0.701 | 0.800 | 0.902 | 1.021 | 1.157 | 1.312 | 1.484 | 1.673 | 1.861 | 2.084 | 2.337 |
| 500  | 0.100 | 0.132 | 0.154 | 0.170 | 0.190 | 0.211 | 0.231 | 0.258 | 0.284 | 0.310 | 0.334 | 0.361 | 0.391 | 0.424 | 0.455 | 0.490 | 0.525 | 0.567 | 0.665 | 0.765 | 0.866 | 0.985 | 1.112 | 1.255 | 1.425 | 1.612 | 1.895 | 2.054 | 2.281 | 2.550 | 2.850 |
| 600  | 0.111 | 0.147 | 0.170 | 0.187 | 0.211 | 0.235 | 0.256 | 0.286 | 0.314 | 0.345 | 0.374 | 0.403 | 0.435 | 0.471 | 0.502 | 0.538 | 0.584 | 0.630 | 0.741 | 0.851 | 0.961 | 1.094 | 1.234 | 1.394 | 1.581 | 1.792 | 2.024 | 2.280 | 2.530 | 2.892 | 3.156 |
| 700  | 0.118 | 0.153 | 0.181 | 0.200 | 0.225 | 0.250 | 0.275 | 0.305 | 0.335 | 0.366 | 0.398 | 0.428 | 0.465 | 0.501 | 0.538 | 0.581 | 0.621 | 0.670 | 0.791 | 0.908 | 1.025 | 1.167 | 1.314 | 1.488 | 1.685 | 1.910 | 2.157 | 2.427 | 2.691 | 3.000 | 3.351 |
| 800  | 0.134 | 0.178 | 0.208 | 0.230 | 0.256 | 0.287 | 0.315 | 0.351 | 0.385 | 0.424 | 0.460 | 0.495 | 0.536 | 0.580 | 0.622 | 0.671 | 0.718 | 0.774 | 0.914 | 1.048 | 1.184 | 1.344 | 1.518 | 1.714 | 1.941 | 2.198 | 2.478 | 2.784 | 3.082 | 3.428 | 3.817 |
| 900  | 0.150 | 0.191 | 0.224 | 0.252 | 0.283 | 0.316 | 0.354 | 0.394 | 0.436 | 0.478 | 0.520 | 0.564 | 0.608 | 0.655 | 0.704 | 0.758 | 0.814 | 0.872 | 1.031 | 1.187 | 1.341 | 1.521 | 1.717 | 1.938 | 2.193 | 2.475 | 2.792 | 3.130 | 3.454 | 3.834 | 4.251 |
| 1000 | 0.166 | 0.224 | 0.261 | 0.295 | 0.334 | 0.361 | 0.395 | 0.444 | 0.489 | 0.534 | 0.578 | 0.624 | 0.677 | 0.731 | 0.784 | 0.845 | 0.908 | 0.976 | 1.132 | 1.284 | 1.449 | 1.695 | 1.911 | 2.157 | 2.437 | 2.751 | 3.092 | 3.462 | 3.811 | 4.214 | 4.651 |
| 1100 | 0.182 | 0.246 | 0.286 | 0.316 | 0.356 | 0.394 | 0.438 | 0.487 | 0.537 | 0.585 | 0.637 | 0.685 | 0.741 | 0.796 | 0.861 | 0.932 | 1.001 | 1.077 | 1.268 | 1.455 | 1.644 | 1.864 | 2.104 | 2.371 | 2.674 | 3.015 | 3.384 | 3.777 | 4.148 | 4.566 | 5.013 |
| 1200 | 0.211 | 0.285 | 0.334 | 0.372 | 0.421 | 0.467 | 0.515 | 0.575 | 0.635 | 0.694 | 0.753 | 0.811 | 0.882 | 0.950 | 1.021 | 1.101 | 1.181 | 1.273 | 1.498 | 1.720 | 1.940 | 2.196 | 2.474 | 2.782 | 3.131 | 3.514 | 3.985 | 4.357 | 4.754 | 5.180 | 5.607 |
| 1300 | 0.244 | 0.329 | 0.385 | 0.424 | 0.481 | 0.536 | 0.592 | 0.659 | 0.730 | 0.796 | 0.864 | 0.934 | 1.012 | 1.094 | 1.172 | 1.264 | 1.355 | 1.462 | 1.721 | 1.971 | 2.225 | 2.518 | 2.825 | 3.170 | 3.560 | 3.981 | 4.420 | 4.861 | 5.257 | 5.652 | 6.010 |
| 1400 | 0.250 | 0.337 | 0.395 | 0.435 | 0.495 | 0.551 | 0.607 | 0.677 | 0.745 | 0.818 | 0.888 | 0.955 | 1.040 | 1.122 | 1.203 | 1.300 | 1.394 | 1.501 | 1.764 | 2.027 | 2.281 | 2.581 | 2.896 | 3.250 | 3.644 | 4.067 | 4.511 | 4.954 | 5.346 | 5.732 | 6.065 |
| 1500 | 0.273 | 0.366 | 0.431 | 0.480 | 0.541 | 0.604 | 0.666 | 0.743 | 0.823 | 0.900 | 0.977 | 1.051 | 1.144 | 1.235 | 1.333 | 1.428 | 1.530 | 1.650 | 1.940 | 2.224 | 2.500 | 2.824 | 3.165 | 3.541 | 3.955 | 4.396 | 4.851 | 5.285 | 5.647 | 5.975 | 6.189 |
| 1600 | 0.301 | 0.405 | 0.474 | 0.528 | 0.594 | 0.661 | 0.728 | 0.804 | 0.884 | 0.964 | 1.044 | 1.124 | 1.217 | 1.312 | 1.409 | 1.512 | 1.621 | 1.744 | 2.064 | 2.374 | 2.674 | 3.024 | 3.374 | 3.764 | 4.194 | 4.644 | 5.104 | 5.544 | 5.934 | 6.284 | 6.584 |
| 1700 | 0.331 | 0.441 | 0.514 | 0.574 | 0.644 | 0.714 | 0.784 | 0.864 | 0.944 | 1.024 | 1.104 | 1.184 | 1.274 | 1.364 | 1.464 | 1.564 | 1.674 | 1.794 | 2.144 | 2.444 | 2.744 | 3.144 | 3.494 | 3.894 | 4.344 | 4.794 | 5.264 | 5.714 | 6.104 | 6.444 | 6.744 |
| 1800 | 0.361 | 0.474 | 0.554 | 0.614 | 0.684 | 0.754 | 0.824 | 0.904 | 0.984 | 1.064 | 1.144 | 1.224 | 1.314 | 1.404 | 1.504 | 1.604 | 1.714 | 1.834 | 2.184 | 2.484 | 2.784 | 3.224 | 3.574 | 3.974 | 4.424 | 4.874 | 5.344 | 5.794 | 6.184 | 6.524 | 6.824 |
| 1900 | 0.391 | 0.504 | 0.584 | 0.644 | 0.714 | 0.784 | 0.854 | 0.934 | 1.014 | 1.094 | 1.174 | 1.254 | 1.344 | 1.434 | 1.534 | 1.634 | 1.744 | 1.864 | 2.214 | 2.514 | 2.814 | 3.294 | 3.644 | 4.044 | 4.494 | 4.944 | 5.414 | 5.864 | 6.254 | 6.594 | 6.894 |
| 2000 | 0.421 | 0.534 | 0.614 | 0.674 | 0.744 | 0.814 | 0.884 | 0.964 | 1.044 | 1.124 | 1.204 | 1.284 | 1.374 | 1.464 | 1.564 | 1.664 | 1.774 | 1.894 | 2.244 | 2.544 | 2.844 | 3.364 | 3.714 | 4.114 | 4.564 | 5.014 | 5.484 | 5.934 | 6.324 | 6.664 | 6.964 |
| 2100 | 0.451 | 0.564 | 0.644 | 0.704 | 0.774 | 0.844 | 0.914 | 0.994 | 1.074 | 1.154 | 1.234 | 1.314 | 1.404 | 1.494 | 1.594 | 1.694 | 1.804 | 1.924 | 2.274 | 2.574 | 2.874 | 3.414 | 3.764 | 4.164 | 4.614 | 5.064 | 5.534 | 5.984 | 6.374 | 6.714 | 7.014 |
| 2200 | 0.481 | 0.594 | 0.674 | 0.734 | 0.804 | 0.874 | 0.944 | 1.024 | 1.104 | 1.184 | 1.264 | 1.344 | 1.434 | 1.524 | 1.624 | 1.724 | 1.834 | 1.954 | 2.304 | 2.604 | 2.904 | 3.454 | 3.804 | 4.204 | 4.654 | 5.104 | 5.574 | 6.024 | 6.414 | 6.754 | 7.054 |
| 2300 | 0.511 | 0.624 | 0.704 | 0.764 | 0.834 | 0.904 | 0.974 | 1.054 | 1.134 | 1.214 | 1.294 | 1.374 | 1.464 | 1.554 | 1.654 | 1.754 | 1.864 | 1.984 | 2.334 | 2.634 | 2.934 | 3.484 | 3.834 | 4.234 | 4.684 | 5.134 | 5.604 | 6.054 | 6.444 | 6.784 | 7.084 |
| 2400 | 0.541 | 0.654 | 0.734 | 0.794 | 0.864 | 0.934 | 1.004 | 1.084 | 1.164 | 1.244 | 1.324 | 1.404 | 1.494 | 1.584 | 1.684 | 1.784 | 1.894 | 2.014 | 2.364 | 2.664 | 2.964 | 3.514 | 3.864 | 4.264 | 4.714 | 5.164 | 5.634 | 6.084 | 6.474 | 6.814 | 7.114 |
| 2500 | 0.571 | 0.684 | 0.764 | 0.824 | 0.894 | 0.964 | 1.034 | 1.114 | 1.194 | 1.274 | 1.354 | 1.434 | 1.524 | 1.614 | 1.714 | 1.814 | 1.924 | 2.044 | 2.394 | 2.694 | 2.994 | 3.544 | 3.894 | 4.294 | 4.744 | 5.194 | 5.664 | 6.114 | 6.504 | 6.844 | 7.144 |
| 2600 | 0.601 | 0.714 | 0.794 | 0.854 | 0.924 | 0.994 | 1.064 | 1.144 | 1.224 | 1.304 | 1.384 | 1.464 | 1.554 | 1.644 | 1.744 | 1.844 | 1.954 | 2.074 | 2.424 | 2.724 | 3.024 | 3.574 | 3.924 | 4.324 | 4.774 | 5.224 | 5.694 | 6.144 | 6.534 | 6.874 | 7.174 |
| 2700 | 0.631 | 0.744 | 0.824 | 0.884 | 0.954 | 1.024 | 1.094 | 1.174 | 1.254 | 1.334 | 1.414 | 1.494 | 1.584 | 1.674 | 1.774 | 1.874 | 1.984 | 2.104 | 2.454 | 2.754 | 3.054 | 3.604 | 3.954 | 4.354 | 4.804 | 5.254 | 5.724 | 6.174 | 6.564 | 6.904 | 7.204 |
| 2800 | 0.661 | 0.774 | 0.854 | 0.914 | 0.984 | 1.054 | 1.124 | 1.204 | 1.284 | 1.364 | 1.444 | 1.524 | 1.614 | 1.704 | 1.804 | 1.904 | 2.014 | 2.134 | 2.484 | 2.784 | 3.084 | 3.634 | 3.984 | 4.384 | 4.834 | 5.284 | 5.754 | 6.204 | 6.594 | 6.934 | 7.234 |
| 2900 | 0.691 | 0.804 | 0.884 | 0.944 | 1.014 | 1.084 | 1.154 | 1.234 | 1.314 | 1.394 | 1.474 | 1.554 | 1.644 | 1.734 | 1.834 | 1.934 | 2.044 | 2.164 | 2.514 | 2.814 | 3.114 | 3.664 | 4.014 | 4.414 | 4.864 | 5.314 | 5.784 | 6.234 | 6.624 | 6.964 | 7.264 |
| 3000 | 0.721 | 0.834 | 0.914 | 0.974 | 1.044 | 1.114 | 1.184 | 1.264 | 1.344 | 1.424 | 1.504 | 1.584 | 1.674 | 1.764 | 1.864 | 1.964 | 2.074 | 2.194 | 2.544 | 2.844 | 3.144 | 3.694 | 4.044 | 4.444 | 4.894 | 5.344 | 5.814 | 6.264 | 6.654 | 6.994 | 7.294 |
| 3100 | 0.751 | 0.864 | 0.944 | 1.004 | 1.074 | 1.144 | 1.214 | 1.294 | 1.374 | 1.454 | 1.534 | 1.614 | 1.704 | 1.794 | 1.894 | 1.994 | 2.104 | 2.224 | 2.574 | 2.874 | 3.174 | 3.724 | 4.074 | 4.474 | 4.924 | 5.374 | 5.844 | 6.294 | 6.684 | 7.024 | 7.324 |
| 3200 | 0.781 | 0.894 | 0.974 | 1.034 | 1.104 | 1.174 | 1.244 | 1.324 | 1.404 | 1.484 | 1.564 | 1.644 | 1.734 | 1.824 | 1.924 | 2.024 | 2.134 | 2.254 | 2.604 | 2.904 | 3.204 | 3.754 | 4.104 | 4.504 | 4.954 | 5.404 | 5.874 | 6.324 | 6.714 | 7.054 | 7.354 |
| 3300 | 0.811 | 0.924 | 1.004 | 1.064 | 1.134 | 1.204 | 1.274 | 1.354 | 1.434 | 1.514 | 1.594 | 1.674 | 1.764 | 1.854 | 1.954 | 2.054 | 2.164 | 2.284 | 2.634 | 2.934 | 3.234 | 3.784 | 4.134 | 4.534 | 4.984 | 5.434 | 5.904 | 6.354 | 6.744 | 7.084 | 7.384 |
| 3400 | 0.841 | 0.954 | 1.034 | 1.094 | 1.164 | 1.234 | 1.304 | 1.384 | 1.464 | 1.544 | 1.624 | 1.704 | 1.794 | 1.884 | 1.984 | 2.084 | 2.194 | 2.314 | 2.664 | 2.964 | 3.264 | 3.814 | 4.164 | 4.564 | 5.014 | 5.464 | 5.934 | 6.384 | 6.774 | 7.114 | 7.414 |
| 3500 | 0.871 | 0.984 | 1.064 | 1.124 | 1.194 | 1.264 | 1.334 | 1.414 | 1.494 | 1.574 | 1.654 | 1.734 | 1.824 | 1.914 | 2.014 | 2.114 | 2.224 | 2.344 | 2.694 | 2.994 | 3.294 | 3.844 | 4.194 | 4.594 | 5.044 | 5.494 | 5.964 | 6.414 | 6.804 | 7.144 | 7.444 |
| 3600 | 0.901 | 1.014 | 1.094 | 1.154 | 1.224 | 1.294 | 1.364 | 1.444 | 1.524 | 1.604 | 1.684 | 1.764 | 1.854 | 1.944 | 2.044 | 2.144 | 2.254 | 2.374 | 2.724 | 3.024 | 3.324 | 3.874 | 4.224 | 4.624 | 5.074 | 5.524 | 6.004 | 6.454 | 6.844 | 7.184 | 7.484 |
| 3700 | 0.931 | 1.044 | 1.124 | 1.184 | 1.254 | 1.324 | 1.394 | 1.474 | 1.554 | 1.634 | 1.714 | 1.794 | 1.884 | 1.974 | 2.074 | 2.174 | 2.284 | 2.404 | 2.754 | 3.054 | 3.354 | 3.904 | 4.254 | 4.654 | 5.    |       |       |       |       |       |       |

**Table 37 SECTION PK**  
SPEED RATIO CORRECTION FACTOR

| SPEED RATIO | 1.00 to 1.03 | 1.04 to 1.08 | 1.09 to 1.15 | 1.16 to 1.24 | 1.25 to 1.48 | 1.49 to 2.00 | 2.01 to 2.75 | above 2.76 |
|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|
| 100         | 0.00         | 0.00         | 0.00         | 0.00         | 0.01         | 0.01         | 0.01         | 0.01       |
| 200         | 0.00         | 0.00         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.02       |
| 300         | 0.00         | 0.00         | 0.01         | 0.01         | 0.01         | 0.02         | 0.02         | 0.02       |
| 400         | 0.00         | 0.01         | 0.01         | 0.02         | 0.02         | 0.03         | 0.03         | 0.03       |
| 500         | 0.00         | 0.01         | 0.01         | 0.02         | 0.03         | 0.03         | 0.04         | 0.04       |
| 560         | 0.00         | 0.01         | 0.02         | 0.02         | 0.03         | 0.04         | 0.04         | 0.05       |
| 600         | 0.00         | 0.01         | 0.02         | 0.02         | 0.03         | 0.04         | 0.04         | 0.05       |
| 700         | 0.00         | 0.01         | 0.02         | 0.03         | 0.04         | 0.04         | 0.05         | 0.06       |
| 720         | 0.00         | 0.01         | 0.02         | 0.03         | 0.04         | 0.05         | 0.05         | 0.06       |
| 800         | 0.00         | 0.01         | 0.02         | 0.03         | 0.04         | 0.05         | 0.06         | 0.06       |
| 900         | 0.00         | 0.01         | 0.02         | 0.04         | 0.05         | 0.06         | 0.06         | 0.07       |
| 960         | 0.00         | 0.01         | 0.03         | 0.04         | 0.05         | 0.06         | 0.07         | 0.08       |
| 1000        | 0.00         | 0.01         | 0.03         | 0.04         | 0.05         | 0.06         | 0.07         | 0.08       |
| 1200        | 0.00         | 0.02         | 0.03         | 0.05         | 0.06         | 0.08         | 0.09         | 0.10       |
| 1400        | 0.00         | 0.02         | 0.04         | 0.06         | 0.08         | 0.09         | 0.10         | 0.11       |
| 1440        | 0.00         | 0.02         | 0.04         | 0.06         | 0.08         | 0.09         | 0.10         | 0.12       |
| 1600        | 0.00         | 0.02         | 0.04         | 0.06         | 0.09         | 0.10         | 0.11         | 0.13       |
| 1800        | 0.00         | 0.02         | 0.05         | 0.07         | 0.10         | 0.12         | 0.13         | 0.15       |
| 2000        | 0.00         | 0.03         | 0.05         | 0.08         | 0.11         | 0.13         | 0.14         | 0.16       |
| 2200        | 0.00         | 0.03         | 0.06         | 0.09         | 0.12         | 0.14         | 0.16         | 0.18       |
| 2400        | 0.00         | 0.03         | 0.06         | 0.10         | 0.13         | 0.15         | 0.17         | 0.19       |
| 2600        | 0.00         | 0.04         | 0.07         | 0.11         | 0.14         | 0.17         | 0.18         | 0.21       |
| 2800        | 0.00         | 0.04         | 0.08         | 0.11         | 0.15         | 0.18         | 0.20         | 0.23       |
| 2880        | 0.00         | 0.04         | 0.08         | 0.12         | 0.16         | 0.18         | 0.20         | 0.23       |
| 3000        | 0.00         | 0.04         | 0.08         | 0.12         | 0.16         | 0.19         | 0.21         | 0.24       |
| 3200        | 0.00         | 0.04         | 0.09         | 0.13         | 0.17         | 0.21         | 0.23         | 0.26       |
| 3400        | 0.00         | 0.05         | 0.09         | 0.14         | 0.18         | 0.22         | 0.24         | 0.28       |
| 3600        | 0.00         | 0.05         | 0.10         | 0.15         | 0.19         | 0.23         | 0.26         | 0.29       |
| 3800        | 0.00         | 0.05         | 0.10         | 0.15         | 0.21         | 0.24         | 0.27         | 0.31       |
| 4000        | 0.00         | 0.05         | 0.11         | 0.16         | 0.22         | 0.26         | 0.28         | 0.32       |
| 4200        | 0.00         | 0.06         | 0.11         | 0.17         | 0.23         | 0.27         | 0.30         | 0.34       |
| 4400        | 0.00         | 0.06         | 0.12         | 0.18         | 0.24         | 0.28         | 0.31         | 0.36       |
| 4500        | 0.00         | 0.06         | 0.12         | 0.18         | 0.24         | 0.29         | 0.32         | 0.36       |
| 4600        | 0.00         | 0.06         | 0.12         | 0.19         | 0.25         | 0.29         | 0.33         | 0.37       |
| 4800        | 0.00         | 0.06         | 0.13         | 0.19         | 0.26         | 0.31         | 0.34         | 0.39       |
| 5000        | 0.00         | 0.07         | 0.14         | 0.20         | 0.27         | 0.32         | 0.35         | 0.41       |
| 5200        | 0.00         | 0.07         | 0.14         | 0.21         | 0.28         | 0.33         | 0.37         | 0.42       |
| 5400        | 0.00         | 0.07         | 0.15         | 0.22         | 0.29         | 0.35         | 0.38         | 0.44       |
| 5500        | 0.00         | 0.07         | 0.15         | 0.22         | 0.30         | 0.35         | 0.39         | 0.45       |
| 5600        | 0.00         | 0.08         | 0.15         | 0.23         | 0.30         | 0.36         | 0.40         | 0.45       |
| 5800        | 0.00         | 0.08         | 0.16         | 0.23         | 0.31         | 0.37         | 0.41         | 0.47       |
| 6000        | 0.00         | 0.08         | 0.16         | 0.24         | 0.32         | 0.38         | 0.43         | 0.49       |
| 6200        | 0.00         | 0.08         | 0.17         | 0.25         | 0.33         | 0.40         | 0.44         | 0.50       |
| 6400        | 0.00         | 0.09         | 0.17         | 0.26         | 0.35         | 0.41         | 0.45         | 0.52       |
| 6600        | 0.00         | 0.09         | 0.18         | 0.27         | 0.36         | 0.42         | 0.47         | 0.53       |
| 6800        | 0.00         | 0.09         | 0.18         | 0.28         | 0.37         | 0.44         | 0.48         | 0.55       |
| 7000        | 0.00         | 0.09         | 0.19         | 0.28         | 0.38         | 0.45         | 0.50         | 0.57       |
| 7200        | 0.00         | 0.10         | 0.19         | 0.29         | 0.39         | 0.46         | 0.51         | 0.58       |
| 7400        | 0.00         | 0.10         | 0.20         | 0.30         | 0.40         | 0.47         | 0.52         | 0.60       |
| 7600        | 0.00         | 0.10         | 0.21         | 0.31         | 0.41         | 0.49         | 0.54         | 0.62       |
| 7800        | 0.00         | 0.11         | 0.21         | 0.32         | 0.42         | 0.50         | 0.55         | 0.63       |
| 8000        | 0.00         | 0.11         | 0.22         | 0.32         | 0.43         | 0.51         | 0.57         | 0.65       |
| 8200        | 0.00         | 0.11         | 0.22         | 0.33         | 0.44         | 0.53         | 0.58         | 0.66       |
| 8400        | 0.00         | 0.11         | 0.23         | 0.34         | 0.45         | 0.54         | 0.60         | 0.68       |
| 8600        | 0.00         | 0.12         | 0.23         | 0.35         | 0.46         | 0.55         | 0.61         | 0.70       |
| 8800        | 0.00         | 0.12         | 0.24         | 0.36         | 0.48         | 0.56         | 0.62         | 0.71       |
| 9000        | 0.00         | 0.12         | 0.24         | 0.36         | 0.49         | 0.58         | 0.64         | 0.73       |
| 9200        | 0.00         | 0.12         | 0.25         | 0.37         | 0.50         | 0.59         | 0.65         | 0.75       |
| 9400        | 0.00         | 0.13         | 0.25         | 0.38         | 0.51         | 0.60         | 0.67         | 0.76       |
| 9600        | 0.00         | 0.13         | 0.26         | 0.39         | 0.52         | 0.62         | 0.68         | 0.78       |
| 9800        | 0.00         | 0.13         | 0.26         | 0.40         | 0.53         | 0.63         | 0.69         | 0.79       |
| 10000       | 0.00         | 0.14         | 0.27         | 0.41         | 0.54         | 0.64         | 0.71         | 0.81       |

**Table 38**  
Length Correction Factor

| EFFECTIVE LENGTH | CORRECTION FACTOR |
|------------------|-------------------|
| upto 1000        | 0.90              |
| 1000 - 1400      | 0.95              |
| 1400 - 2000      | 1.00              |
| 2000 - 2300      | 1.05              |
| 2300 - 2500      | 1.10              |
| above 2500       | 1.15              |

**Table 39**  
Arc of contact  
Correction Factor

| ARC OF CONTACT ON SMALL PULLEY | CORRECTION FACTOR |
|--------------------------------|-------------------|
| 100                            | 0.72              |
| 110                            | 0.76              |
| 120                            | 0.80              |
| 130                            | 0.84              |
| 140                            | 0.88              |
| 150                            | 0.91              |
| 160                            | 0.94              |
| 170                            | 0.97              |
| 180                            | 1.00              |
| 190                            | 1.02              |
| 200                            | 1.05              |
| 210                            | 1.07              |
| 220                            | 1.09              |
| 230                            | 1.11              |

**Table 40**

**Section PL**

Basic power rating per rib (kw) for small pulley effective diameter (mm)

| de   | 75    | 80    | 85    | 90    | 95    | 100   | 106   | 112   | 118   | 125   | 132   | 140   | 150   | 160   | 170   | 180   | 190   | 200   | 212   | 224   | 236   | 250   | 280   | 315   | 355   | 400   | 450   | 500   | 560   | 630   | 800   |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 100  | 0,079 | 0,088 | 0,097 | 0,102 | 0,112 | 0,123 | 0,134 | 0,144 | 0,154 | 0,167 | 0,179 | 0,194 | 0,211 | 0,227 | 0,244 | 0,261 | 0,279 | 0,294 | 0,316 | 0,335 | 0,356 | 0,380 | 0,430 | 0,488 | 0,554 | 0,627 | 0,708 | 0,788 | 0,886 | 0,997 | 1,265 |
| 200  | 0,119 | 0,169 | 0,184 | 0,200 | 0,218 | 0,233 | 0,256 | 0,275 | 0,297 | 0,320 | 0,342 | 0,370 | 0,403 | 0,435 | 0,470 | 0,502 | 0,535 | 0,568 | 0,607 | 0,642 | 0,684 | 0,729 | 0,825 | 0,937 | 1,061 | 1,205 | 1,361 | 1,516 | 1,695 | 1,911 | 2,420 |
| 300  | 0,149 | 0,242 | 0,268 | 0,291 | 0,319 | 0,344 | 0,372 | 0,401 | 0,432 | 0,466 | 0,501 | 0,541 | 0,588 | 0,648 | 0,685 | 0,734 | 0,781 | 0,830 | 0,885 | 0,941 | 1,001 | 1,065 | 1,139 | 1,221 | 1,353 | 1,501 | 1,667 | 1,846 | 2,041 | 2,254 | 2,880 |
| 400  | 0,184 | 0,316 | 0,350 | 0,378 | 0,412 | 0,443 | 0,488 | 0,526 | 0,566 | 0,610 | 0,652 | 0,706 | 0,769 | 0,835 | 0,895 | 0,960 | 1,020 | 1,085 | 1,160 | 1,235 | 1,310 | 1,396 | 1,579 | 1,790 | 2,031 | 2,300 | 2,591 | 2,880 | 3,221 | 3,612 | 4,599 |
| 500  | 0,219 | 0,386 | 0,427 | 0,471 | 0,510 | 0,550 | 0,600 | 0,646 | 0,692 | 0,750 | 0,803 | 0,870 | 0,944 | 1,025 | 1,103 | 1,181 | 1,259 | 1,336 | 1,427 | 1,519 | 1,611 | 1,716 | 1,941 | 2,201 | 2,496 | 2,821 | 3,176 | 3,525 | 3,936 | 4,402 | 5,475 |
| 600  | 0,255 | 0,428 | 0,472 | 0,520 | 0,563 | 0,607 | 0,662 | 0,719 | 0,770 | 0,831 | 0,892 | 0,962 | 1,052 | 1,139 | 1,223 | 1,311 | 1,390 | 1,481 | 1,586 | 1,686 | 1,788 | 1,904 | 2,156 | 2,442 | 2,750 | 3,125 | 3,515 | 3,901 | 4,349 | 4,854 | 6,000 |
| 700  | 0,292 | 0,485 | 0,532 | 0,581 | 0,631 | 0,681 | 0,742 | 0,802 | 0,861 | 0,925 | 0,992 | 1,062 | 1,149 | 1,234 | 1,317 | 1,407 | 1,494 | 1,586 | 1,682 | 1,780 | 1,906 | 2,030 | 2,296 | 2,601 | 2,946 | 3,324 | 3,741 | 4,146 | 4,614 | 5,142 | 6,332 |
| 800  | 0,330 | 0,536 | 0,588 | 0,639 | 0,692 | 0,746 | 0,813 | 0,881 | 0,946 | 1,010 | 1,080 | 1,154 | 1,241 | 1,325 | 1,407 | 1,494 | 1,579 | 1,668 | 1,760 | 1,862 | 1,966 | 2,071 | 2,337 | 2,641 | 2,990 | 3,384 | 3,814 | 4,281 | 4,734 | 5,252 | 6,336 |
| 900  | 0,369 | 0,588 | 0,643 | 0,695 | 0,750 | 0,806 | 0,876 | 0,946 | 1,011 | 1,076 | 1,146 | 1,220 | 1,306 | 1,389 | 1,470 | 1,554 | 1,641 | 1,730 | 1,822 | 1,916 | 2,012 | 2,110 | 2,376 | 2,679 | 3,028 | 3,422 | 3,852 | 4,317 | 4,766 | 5,295 | 6,379 |
| 1000 | 0,409 | 0,632 | 0,690 | 0,744 | 0,799 | 0,857 | 0,929 | 0,999 | 1,064 | 1,129 | 1,199 | 1,273 | 1,350 | 1,431 | 1,514 | 1,599 | 1,686 | 1,774 | 1,864 | 1,956 | 2,050 | 2,146 | 2,412 | 2,715 | 3,064 | 3,458 | 3,888 | 4,343 | 4,782 | 5,295 | 6,379 |
| 1100 | 0,449 | 0,676 | 0,737 | 0,792 | 0,848 | 0,907 | 0,981 | 1,051 | 1,116 | 1,181 | 1,251 | 1,325 | 1,402 | 1,482 | 1,564 | 1,648 | 1,734 | 1,822 | 1,912 | 1,999 | 2,088 | 2,180 | 2,446 | 2,749 | 3,098 | 3,492 | 3,922 | 4,361 | 4,790 | 5,295 | 6,379 |
| 1200 | 0,489 | 0,720 | 0,783 | 0,839 | 0,896 | 0,956 | 1,032 | 1,102 | 1,167 | 1,232 | 1,302 | 1,376 | 1,453 | 1,532 | 1,614 | 1,697 | 1,782 | 1,868 | 1,956 | 2,042 | 2,130 | 2,220 | 2,486 | 2,789 | 3,138 | 3,532 | 3,962 | 4,391 | 4,810 | 5,295 | 6,379 |
| 1300 | 0,529 | 0,763 | 0,828 | 0,885 | 0,943 | 1,003 | 1,079 | 1,149 | 1,214 | 1,279 | 1,349 | 1,423 | 1,499 | 1,577 | 1,657 | 1,738 | 1,820 | 1,904 | 1,989 | 2,074 | 2,160 | 2,250 | 2,516 | 2,819 | 3,168 | 3,562 | 3,992 | 4,421 | 4,840 | 5,295 | 6,379 |
| 1400 | 0,569 | 0,805 | 0,871 | 0,929 | 0,987 | 1,047 | 1,123 | 1,193 | 1,258 | 1,323 | 1,393 | 1,467 | 1,543 | 1,620 | 1,699 | 1,779 | 1,860 | 1,942 | 2,025 | 2,108 | 2,192 | 2,282 | 2,548 | 2,851 | 3,190 | 3,584 | 3,992 | 4,421 | 4,840 | 5,295 | 6,379 |
| 1500 | 0,609 | 0,846 | 0,913 | 0,971 | 1,030 | 1,089 | 1,165 | 1,235 | 1,300 | 1,365 | 1,435 | 1,509 | 1,584 | 1,660 | 1,738 | 1,816 | 1,895 | 1,976 | 2,057 | 2,138 | 2,219 | 2,300 | 2,566 | 2,869 | 3,208 | 3,592 | 3,990 | 4,421 | 4,840 | 5,295 | 6,379 |
| 1600 | 0,649 | 0,886 | 0,954 | 1,012 | 1,071 | 1,130 | 1,206 | 1,276 | 1,341 | 1,406 | 1,476 | 1,549 | 1,623 | 1,698 | 1,775 | 1,852 | 1,930 | 2,010 | 2,090 | 2,170 | 2,250 | 2,330 | 2,596 | 2,899 | 3,238 | 3,612 | 3,996 | 4,421 | 4,840 | 5,295 | 6,379 |
| 1700 | 0,689 | 0,926 | 0,994 | 1,052 | 1,111 | 1,170 | 1,246 | 1,316 | 1,381 | 1,446 | 1,516 | 1,589 | 1,662 | 1,737 | 1,813 | 1,890 | 1,968 | 2,048 | 2,127 | 2,206 | 2,285 | 2,365 | 2,631 | 2,934 | 3,273 | 3,647 | 3,996 | 4,421 | 4,840 | 5,295 | 6,379 |
| 1800 | 0,729 | 0,966 | 1,034 | 1,092 | 1,151 | 1,210 | 1,286 | 1,356 | 1,421 | 1,486 | 1,556 | 1,629 | 1,702 | 1,776 | 1,852 | 1,928 | 2,005 | 2,084 | 2,162 | 2,240 | 2,318 | 2,398 | 2,664 | 2,967 | 3,306 | 3,655 | 3,996 | 4,421 | 4,840 | 5,295 | 6,379 |
| 1900 | 0,769 | 1,006 | 1,074 | 1,132 | 1,191 | 1,250 | 1,326 | 1,396 | 1,461 | 1,526 | 1,596 | 1,669 | 1,742 | 1,815 | 1,890 | 1,965 | 2,042 | 2,120 | 2,197 | 2,274 | 2,351 | 2,430 | 2,696 | 2,999 | 3,338 | 3,687 | 3,996 | 4,421 | 4,840 | 5,295 | 6,379 |
| 2000 | 0,809 | 1,046 | 1,114 | 1,172 | 1,231 | 1,290 | 1,366 | 1,436 | 1,501 | 1,566 | 1,636 | 1,709 | 1,782 | 1,855 | 1,928 | 2,002 | 2,076 | 2,150 | 2,223 | 2,296 | 2,369 | 2,442 | 2,708 | 3,011 | 3,350 | 3,699 | 3,996 | 4,421 | 4,840 | 5,295 | 6,379 |
| 2100 | 0,849 | 1,086 | 1,154 | 1,212 | 1,271 | 1,330 | 1,406 | 1,476 | 1,541 | 1,606 | 1,676 | 1,749 | 1,822 | 1,895 | 1,968 | 2,041 | 2,114 | 2,187 | 2,259 | 2,331 | 2,403 | 2,476 | 2,742 | 3,045 | 3,384 | 3,733 | 3,996 | 4,421 | 4,840 | 5,295 | 6,379 |
| 2200 | 0,889 | 1,126 | 1,194 | 1,252 | 1,311 | 1,370 | 1,446 | 1,516 | 1,581 | 1,646 | 1,716 | 1,789 | 1,862 | 1,935 | 2,008 | 2,080 | 2,152 | 2,224 | 2,296 | 2,368 | 2,440 | 2,513 | 2,779 | 3,082 | 3,421 | 3,770 | 3,996 | 4,421 | 4,840 | 5,295 | 6,379 |
| 2300 | 0,929 | 1,166 | 1,234 | 1,292 | 1,351 | 1,410 | 1,486 | 1,556 | 1,621 | 1,686 | 1,756 | 1,829 | 1,902 | 1,975 | 2,047 | 2,119 | 2,191 | 2,263 | 2,335 | 2,407 | 2,479 | 2,552 | 2,818 | 3,121 | 3,460 | 3,770 | 3,996 | 4,421 | 4,840 | 5,295 | 6,379 |
| 2400 | 0,969 | 1,206 | 1,274 | 1,332 | 1,391 | 1,450 | 1,526 | 1,596 | 1,661 | 1,726 | 1,796 | 1,869 | 1,942 | 2,014 | 2,086 | 2,158 | 2,229 | 2,301 | 2,373 | 2,445 | 2,517 | 2,590 | 2,856 | 3,159 | 3,498 | 3,770 | 3,996 | 4,421 | 4,840 | 5,295 | 6,379 |
| 2500 | 1,009 | 1,246 | 1,314 | 1,372 | 1,431 | 1,490 | 1,566 | 1,636 | 1,701 | 1,766 | 1,836 | 1,909 | 1,982 | 2,054 | 2,126 | 2,198 | 2,269 | 2,341 | 2,413 | 2,485 | 2,557 | 2,630 | 2,896 | 3,199 | 3,538 | 3,770 | 3,996 | 4,421 | 4,840 | 5,295 | 6,379 |
| 2600 | 1,049 | 1,286 | 1,354 | 1,412 | 1,471 | 1,530 | 1,606 | 1,676 | 1,741 | 1,806 | 1,876 | 1,949 | 2,022 | 2,094 | 2,166 | 2,238 | 2,309 | 2,381 | 2,453 | 2,525 | 2,597 | 2,670 | 2,936 | 3,239 | 3,578 | 3,770 | 3,996 | 4,421 | 4,840 | 5,295 | 6,379 |
| 2700 | 1,089 | 1,326 | 1,394 | 1,452 | 1,511 | 1,570 | 1,646 | 1,716 | 1,781 | 1,846 | 1,916 | 1,989 | 2,062 | 2,134 | 2,206 | 2,278 | 2,349 | 2,421 | 2,493 | 2,565 | 2,637 | 2,710 | 2,976 | 3,279 | 3,618 | 3,770 | 3,996 | 4,421 | 4,840 | 5,295 | 6,379 |
| 2800 | 1,129 | 1,366 | 1,434 | 1,492 | 1,551 | 1,610 | 1,686 | 1,756 | 1,821 | 1,886 | 1,956 | 2,029 | 2,102 | 2,174 | 2,246 | 2,318 | 2,389 | 2,461 | 2,533 | 2,605 | 2,677 | 2,750 | 3,016 | 3,319 | 3,658 | 3,770 | 3,996 | 4,421 | 4,840 | 5,295 | 6,379 |
| 2900 | 1,169 | 1,406 | 1,474 | 1,532 | 1,591 | 1,650 | 1,726 | 1,796 | 1,861 | 1,926 | 1,996 | 2,069 | 2,142 | 2,214 | 2,286 | 2,358 | 2,429 | 2,501 | 2,573 | 2,645 | 2,717 | 2,790 | 3,056 | 3,359 | 3,698 | 3,770 | 3,996 | 4,421 | 4,840 | 5,295 | 6,379 |
| 3000 | 1,209 | 1,446 | 1,514 | 1,572 | 1,631 | 1,690 | 1,766 | 1,836 | 1,901 | 1,966 | 2,036 | 2,109 | 2,182 | 2,254 | 2,326 | 2,398 | 2,469 | 2,541 | 2,613 | 2,685 | 2,757 | 2,830 | 3,096 | 3,399 | 3,738 | 3,770 | 3,996 | 4,421 | 4,840 | 5,295 | 6,379 |
| 3100 | 1,249 | 1,486 | 1,554 | 1,612 | 1,671 | 1,730 | 1,806 | 1,876 | 1,941 | 2,006 | 2,076 | 2,149 | 2,222 | 2,294 | 2,366 | 2,438 | 2,509 | 2,581 | 2,653 | 2,725 | 2,797 | 2,870 | 3,136 | 3,439 | 3,778 | 3,770 | 3,996 | 4,421 | 4,840 | 5,295 | 6,379 |
| 3200 | 1,289 | 1,526 | 1,594 | 1,652 | 1,711 | 1,770 | 1,846 | 1,916 | 2,001 | 2,071 | 2,141 | 2,214 | 2,286 | 2,358 | 2,430 | 2,502 | 2,573 | 2,645 | 2,717 | 2,789 | 2,861 | 2,934 | 3,200 | 3,503 | 3,842 | 3,770 | 3,996 | 4,421 | 4,840 | 5,295 | 6,379 |
| 3300 | 1,329 | 1,566 | 1,634 | 1,692 | 1,751 | 1,810 | 1,886 | 1,956 | 2,041 | 2,111 | 2,181 | 2,254 | 2,326 | 2,398 | 2,470 | 2,542 | 2,613 | 2,685 | 2,757 | 2,829 | 2,901 | 2,974 | 3,240 | 3,543 | 3,882 | 3,770 | 3,996 | 4,421 | 4,840 | 5,295 | 6,379 |
| 3400 | 1,369 | 1,606 | 1,674 | 1,732 | 1,791 | 1,850 | 1,926 | 2,001 | 2,086 | 2,156 | 2,226 | 2,299 | 2,372 | 2,444 | 2,516 | 2,588 | 2,659 | 2,731 | 2,803 | 2,875 | 2,947 | 3,020 | 3,286 | 3,589 | 3,882 | 3,770 | 3,996 | 4,421 | 4,840 | 5,295 | 6,379 |
| 3500 | 1,409 | 1,646 | 1,714 | 1,772 | 1,831 | 1,890 | 1,966 | 2,041 | 2,126 | 2,196 | 2,266 | 2,339 | 2,412 | 2,484 | 2,556 | 2,628 | 2,699 | 2,771 | 2,843 | 2,915 | 2,987 | 3,060 | 3,326 | 3,629 | 3,882 | 3,770 | 3,996 | 4,421 | 4,840 | 5,295 | 6,379 |
| 3600 | 1,449 | 1,686 | 1,754 | 1,812 | 1,871 | 1,930 | 2,006 | 2,081 | 2,166 | 2,236 | 2,306 | 2,379 | 2,452 | 2,524 | 2,596 | 2,668 | 2,739 | 2,811 | 2,883 | 2,955 | 3,027 | 3,100 | 3,366 | 3,669 | 3,882 | 3,770 | 3,996 | 4,421 | 4,840 | 5,295 | 6,379 |
| 3700 | 1,489 | 1,726 | 1,794 | 1,852 | 1,911 | 1,970 | 2,046 | 2,121 | 2,206 | 2,276 | 2,346 | 2,419 | 2,492 | 2,564 | 2,636 | 2,708 | 2,779 | 2,851 | 2,923 | 2,995 |       |       |       |       |       |       |       |       |       |       |       |

**Table 41 SECTION PL**  
SPEED RATIO CORRECTION FACTOR

| SPEED RATIO | 1.00 to 1.02 | 1.03 to 1.06 | 1.07 to 1.08 | 1.09 to 1.16 | 1.17 to 1.26 | 1.27 to 1.40 | 1.41 to 1.74 | above 1.75 |
|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|
| 100         | 0.000        | 0.000        | 0.000        | 0.000        | 0.010        | 0.010        | 0.010        | 0.010      |
| 200         | 0.000        | 0.000        | 0.010        | 0.010        | 0.010        | 0.010        | 0.020        | 0.020      |
| 300         | 0.000        | 0.000        | 0.010        | 0.010        | 0.020        | 0.020        | 0.020        | 0.030      |
| 400         | 0.000        | 0.010        | 0.010        | 0.020        | 0.020        | 0.030        | 0.030        | 0.040      |
| 500         | 0.000        | 0.010        | 0.010        | 0.020        | 0.030        | 0.030        | 0.040        | 0.050      |
| 560         | 0.000        | 0.010        | 0.020        | 0.020        | 0.030        | 0.040        | 0.050        | 0.050      |
| 600         | 0.000        | 0.010        | 0.020        | 0.020        | 0.030        | 0.040        | 0.050        | 0.060      |
| 700         | 0.000        | 0.010        | 0.020        | 0.030        | 0.040        | 0.050        | 0.060        | 0.070      |
| 720         | 0.000        | 0.010        | 0.020        | 0.030        | 0.040        | 0.050        | 0.060        | 0.070      |
| 800         | 0.000        | 0.010        | 0.020        | 0.030        | 0.040        | 0.050        | 0.060        | 0.080      |
| 900         | 0.000        | 0.010        | 0.020        | 0.040        | 0.050        | 0.060        | 0.070        | 0.090      |
| 960         | 0.000        | 0.010        | 0.030        | 0.040        | 0.050        | 0.060        | 0.080        | 0.090      |
| 1000        | 0.000        | 0.010        | 0.030        | 0.040        | 0.050        | 0.070        | 0.080        | 0.090      |
| 1200        | 0.000        | 0.020        | 0.030        | 0.050        | 0.060        | 0.080        | 0.100        | 0.110      |
| 1400        | 0.000        | 0.020        | 0.040        | 0.060        | 0.080        | 0.090        | 0.110        | 0.130      |
| 1440        | 0.000        | 0.020        | 0.040        | 0.060        | 0.080        | 0.100        | 0.120        | 0.140      |
| 1600        | 0.000        | 0.020        | 0.040        | 0.060        | 0.090        | 0.110        | 0.130        | 0.150      |
| 1800        | 0.000        | 0.020        | 0.050        | 0.070        | 0.100        | 0.120        | 0.150        | 0.170      |
| 2000        | 0.000        | 0.030        | 0.050        | 0.080        | 0.110        | 0.140        | 0.160        | 0.190      |
| 2200        | 0.000        | 0.030        | 0.060        | 0.090        | 0.120        | 0.150        | 0.180        | 0.210      |
| 2400        | 0.000        | 0.030        | 0.060        | 0.100        | 0.130        | 0.160        | 0.190        | 0.230      |
| 2600        | 0.000        | 0.040        | 0.070        | 0.110        | 0.140        | 0.180        | 0.210        | 0.250      |
| 2800        | 0.000        | 0.040        | 0.080        | 0.110        | 0.150        | 0.190        | 0.230        | 0.260      |
| 2880        | 0.000        | 0.040        | 0.080        | 0.120        | 0.160        | 0.190        | 0.230        | 0.270      |
| 3000        | 0.000        | 0.040        | 0.080        | 0.120        | 0.160        | 0.200        | 0.240        | 0.280      |
| 3200        | 0.000        | 0.040        | 0.090        | 0.130        | 0.170        | 0.220        | 0.260        | 0.300      |
| 3400        | 0.000        | 0.050        | 0.090        | 0.140        | 0.180        | 0.230        | 0.280        | 0.320      |
| 3600        | 0.000        | 0.050        | 0.100        | 0.150        | 0.190        | 0.240        | 0.290        | 0.340      |
| 3800        | 0.000        | 0.050        | 0.100        | 0.150        | 0.210        | 0.260        | 0.310        | 0.360      |
| 4000        | 0.000        | 0.050        | 0.110        | 0.160        | 0.220        | 0.270        | 0.320        | 0.380      |
| 4200        | 0.000        | 0.060        | 0.110        | 0.170        | 0.230        | 0.280        | 0.340        | 0.400      |
| 4400        | 0.000        | 0.060        | 0.120        | 0.180        | 0.240        | 0.300        | 0.360        | 0.420      |
| 4500        | 0.000        | 0.060        | 0.120        | 0.180        | 0.240        | 0.300        | 0.360        | 0.430      |
| 4600        | 0.000        | 0.060        | 0.120        | 0.190        | 0.250        | 0.310        | 0.370        | 0.430      |
| 4800        | 0.000        | 0.060        | 0.130        | 0.190        | 0.260        | 0.320        | 0.390        | 0.450      |
| 5000        | 0.000        | 0.070        | 0.140        | 0.200        | 0.270        | 0.340        | 0.410        | 0.470      |
| 5200        | 0.000        | 0.070        | 0.140        | 0.210        | 0.280        | 0.350        | 0.420        | 0.490      |
| 5400        | 0.000        | 0.070        | 0.150        | 0.220        | 0.290        | 0.360        | 0.440        | 0.510      |
| 5500        | 0.000        | 0.070        | 0.150        | 0.220        | 0.300        | 0.370        | 0.450        | 0.520      |
| 5600        | 0.000        | 0.080        | 0.150        | 0.230        | 0.300        | 0.380        | 0.450        | 0.530      |
| 5800        | 0.000        | 0.080        | 0.160        | 0.230        | 0.310        | 0.390        | 0.470        | 0.550      |
| 6000        | 0.000        | 0.080        | 0.160        | 0.240        | 0.320        | 0.410        | 0.490        | 0.570      |
| 6200        | 0.000        | 0.080        | 0.170        | 0.250        | 0.330        | 0.420        | 0.500        | 0.590      |
| 6400        | 0.000        | 0.090        | 0.170        | 0.260        | 0.350        | 0.430        | 0.520        | 0.600      |
| 6600        | 0.000        | 0.090        | 0.180        | 0.270        | 0.360        | 0.450        | 0.530        | 0.620      |
| 6800        | 0.000        | 0.090        | 0.180        | 0.280        | 0.370        | 0.460        | 0.550        | 0.640      |
| 7000        | 0.000        | 0.090        | 0.190        | 0.280        | 0.380        | 0.470        | 0.570        | 0.660      |
| 7200        | 0.000        | 0.100        | 0.190        | 0.290        | 0.390        | 0.490        | 0.580        | 0.680      |
| 7400        | 0.000        | 0.100        | 0.200        | 0.300        | 0.400        | 0.500        | 0.600        | 0.700      |
| 7600        | 0.000        | 0.100        | 0.210        | 0.310        | 0.410        | 0.510        | 0.620        | 0.720      |
| 7800        | 0.000        | 0.110        | 0.210        | 0.320        | 0.420        | 0.530        | 0.630        | 0.740      |
| 8000        | 0.000        | 0.110        | 0.220        | 0.320        | 0.430        | 0.540        | 0.650        | 0.760      |
| 8200        | 0.000        | 0.110        | 0.220        | 0.330        | 0.440        | 0.550        | 0.660        | 0.770      |
| 8400        | 0.000        | 0.110        | 0.230        | 0.340        | 0.450        | 0.570        | 0.680        | 0.790      |
| 8600        | 0.000        | 0.120        | 0.230        | 0.350        | 0.460        | 0.580        | 0.700        | 0.810      |
| 8800        | 0.000        | 0.120        | 0.240        | 0.360        | 0.480        | 0.590        | 0.710        | 0.830      |
| 9000        | 0.000        | 0.120        | 0.240        | 0.360        | 0.490        | 0.610        | 0.730        | 0.850      |
| 9200        | 0.000        | 0.120        | 0.250        | 0.370        | 0.500        | 0.620        | 0.750        | 0.870      |
| 9400        | 0.000        | 0.130        | 0.250        | 0.380        | 0.510        | 0.630        | 0.760        | 0.890      |
| 9600        | 0.000        | 0.130        | 0.260        | 0.390        | 0.520        | 0.650        | 0.780        | 0.910      |
| 9800        | 0.000        | 0.130        | 0.260        | 0.400        | 0.530        | 0.660        | 0.790        | 0.930      |
| 10000       | 0.000        | 0.140        | 0.270        | 0.410        | 0.540        | 0.680        | 0.810        | 0.950      |

**Table 42**  
Length Correction Factor

| EFFECTIVE LENGTH | CORRECTION FACTOR |
|------------------|-------------------|
| Up to 1300       | 0.90              |
| 1300 - 1750      | 0.95              |
| 1750 - 2500      | 1.00              |
| 2500 - 3750      | 1.05              |
| 3750 - 4500      | 1.10              |
| 4500 - 5250      | 1.15              |
| above 5250       | 1.20              |

**Table 43**  
Arc of contact Correction Factor

| ARC OF CONTACT ON SMALL PULLEY | CORRECTION FACTOR |
|--------------------------------|-------------------|
| 100                            | 0.72              |
| 110                            | 0.76              |
| 120                            | 0.80              |
| 130                            | 0.84              |
| 140                            | 0.88              |
| 150                            | 0.91              |
| 160                            | 0.94              |
| 170                            | 0.97              |
| 180                            | 1.00              |
| 190                            | 1.02              |
| 200                            | 1.05              |
| 210                            | 1.07              |
| 220                            | 1.09              |
| 230                            | 1.11              |

**Table 44**      **Section PM**  
Basic power rating per rib (kw) for small pulley effective diameter (mm)

|          | de   | 180    | 190    | 200    | 212    | 224    | 250    | 280    | 315    | 355    | 400    | 450    | 500    | 560    | 630    | 700    |
|----------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>s</b> | 100  | 0.631  | 0.687  | 0.741  | 0.807  | 0.871  | 1.012  | 1.174  | 1.354  | 1.568  | 1.810  | 2.071  | 2.330  | 2.641  | 3.000  | 3.353  |
| <b>p</b> | 200  | 1.187  | 1.293  | 1.397  | 1.524  | 1.648  | 1.920  | 2.228  | 2.574  | 2.981  | 3.445  | 3.945  | 4.441  | 5.032  | 5.711  | 6.381  |
| <b>e</b> | 300  | 1.712  | 1.867  | 2.021  | 2.204  | 2.384  | 2.781  | 3.232  | 3.740  | 4.332  | 5.004  | 5.730  | 6.443  | 7.291  | 8.267  | 9.225  |
| <b>e</b> | 400  | 2.217  | 2.417  | 2.620  | 2.860  | 3.099  | 3.614  | 4.200  | 4.861  | 5.631  | 6.500  | 7.435  | 8.352  | 9.440  | 10.677 | 11.878 |
| <b>d</b> | 500  | 2.705  | 2.953  | 3.198  | 3.495  | 3.784  | 4.418  | 5.136  | 5.944  | 6.880  | 7.940  | 9.064  | 10.172 | 11.466 | 12.930 | 14.340 |
|          | 560  | 2.990  | 3.265  | 3.536  | 3.865  | 4.190  | 4.890  | 5.685  | 6.574  | 7.610  | 8.774  | 10.010 | 11.212 | 12.621 | 14.195 | 15.702 |
| <b>o</b> | 600  | 3.177  | 3.471  | 3.760  | 4.110  | 4.455  | 5.200  | 6.044  | 6.991  | 8.086  | 9.312  | 10.620 | 11.890 | 13.363 | 15.006 | 16.565 |
| <b>f</b> | 700  | 3.637  | 3.973  | 4.308  | 4.708  | 5.104  | 5.955  | 6.924  | 8.001  | 9.242  | 10.630 | 12.091 | 13.501 | 15.114 | 16.885 | 18.530 |
|          | 750  | 3.727  | 4.072  | 4.414  | 4.826  | 5.231  | 6.104  | 7.096  | 8.200  | 9.466  | 10.885 | 12.375 | 13.808 | 15.444 | 17.236 | 18.884 |
| <b>t</b> | 800  | 4.084  | 4.464  | 4.840  | 5.290  | 5.735  | 6.690  | 7.772  | 8.971  | 10.349 | 11.878 | 13.472 | 14.992 | 16.705 | 18.549 | 20.202 |
| <b>h</b> | 900  | 4.519  | 4.937  | 5.354  | 5.855  | 6.344  | 7.400  | 8.590  | 9.905  | 11.400 | 13.052 | 14.753 | 16.352 | 18.126 | 19.969 | 21.547 |
| <b>e</b> | 960  | 4.774  | 5.216  | 5.660  | 6.185  | 6.705  | 7.815  | 9.068  | 10.441 | 12.005 | 13.720 | 15.473 | 17.105 | 18.882 | 20.693 | 22.182 |
|          | 1000 | 4.940  | 5.400  | 5.857  | 6.402  | 6.941  | 8.084  | 9.377  | 10.795 | 12.396 | 14.150 | 15.932 | 17.572 | 19.350 | 21.120 | 22.531 |
| <b>s</b> | 1200 | 5.748  | 6.284  | 6.811  | 7.443  | 8.061  | 9.381  | 10.847 | 12.440 | 14.208 | 16.090 | 17.933 | 19.548 | 21.154 | 22.519 |        |
| <b>m</b> | 1400 | 6.504  | 7.108  | 7.704  | 8.411  | 9.101  | 10.561 | 12.171 | 13.885 | 15.744 | 17.645 | 19.405 | 20.810 |        |        |        |
| <b>a</b> | 1440 | 6.648  | 7.264  | 7.874  | 8.595  | 9.302  | 10.782 | 12.414 | 14.148 | 16.015 | 17.905 | 19.632 | 20.966 |        |        |        |
| <b>i</b> | 1600 | 7.207  | 7.871  | 8.527  | 9.299  | 10.052 | 11.625 | 13.330 | 15.109 | 16.971 | 18.771 | 20.276 |        |        |        |        |
| <b>i</b> | 1800 | 7.850  | 8.571  | 9.274  | 10.100 | 10.900 | 12.554 | 14.310 | 16.087 | 17.855 | 19.411 |        |        |        |        |        |
|          | 2000 | 8.435  | 9.198  | 9.940  | 10.808 | 11.641 | 13.338 | 15.094 | 16.792 | 18.356 |        |        |        |        |        |        |
| <b>p</b> | 2200 | 8.954  | 9.750  | 10.521 | 11.415 | 12.264 | 13.966 | 15.660 | 17.201 |        |        |        |        |        |        |        |
| <b>u</b> | 2400 | 9.401  | 10.221 | 11.011 | 11.912 | 12.762 | 14.421 | 15.995 | 17.283 |        |        |        |        |        |        |        |
| <b>i</b> | 2600 | 9.776  | 10.609 | 11.401 | 12.292 | 13.128 | 14.696 | 16.075 |        |        |        |        |        |        |        |        |
| <b>i</b> | 2800 | 10.071 | 10.903 | 11.687 | 12.555 | 13.345 | 14.772 |        |        |        |        |        |        |        |        |        |
| <b>e</b> | 2880 | 10.165 | 10.990 | 11.769 | 12.632 | 13.391 | 14.742 |        |        |        |        |        |        |        |        |        |
| <b>y</b> | 3000 | 10.281 | 11.101 | 11.855 | 12.682 | 13.412 | 14.641 |        |        |        |        |        |        |        |        |        |
|          | 3200 | 10.402 | 11.194 | 11.911 | 12.671 | 13.314 |        |        |        |        |        |        |        |        |        |        |
| <b>r</b> | 3400 | 10.433 | 11.180 | 11.840 | 12.511 | 13.044 |        |        |        |        |        |        |        |        |        |        |
| <b>p</b> | 3600 | 10.363 | 11.050 | 11.635 | 12.192 |        |        |        |        |        |        |        |        |        |        |        |
| <b>m</b> | 3800 | 10.188 | 10.798 | 11.290 |        |        |        |        |        |        |        |        |        |        |        |        |
|          | 4000 | 9.905  | 10.492 |        |        |        |        |        |        |        |        |        |        |        |        |        |

**Table 45 SECTION PM**  
SPEED RATIO CORRECTION FACTOR

| SPEED RATIO                    |      | 1.00 to 1.01 | 1.02 to 1.04 | 1.05 to 1.06 | 1.07 to 1.14 | 1.15 to 1.24 | 1.25 to 1.48 | 1.49 to 2.00 | above 2.01 |
|--------------------------------|------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|
| SPEED OF SMALLER PULLEY IN RPM | 100  | 0.00         | 0.01         | 0.01         | 0.02         | 0.03         | 0.05         | 0.06         | 0.07       |
|                                | 200  | 0.00         | 0.01         | 0.02         | 0.04         | 0.07         | 0.09         | 0.11         | 0.14       |
|                                | 300  | 0.01         | 0.02         | 0.03         | 0.06         | 0.10         | 0.14         | 0.17         | 0.20       |
|                                | 400  | 0.01         | 0.02         | 0.04         | 0.08         | 0.14         | 0.19         | 0.23         | 0.27       |
|                                | 500  | 0.01         | 0.03         | 0.05         | 0.10         | 0.17         | 0.24         | 0.29         | 0.34       |
|                                | 560  | 0.01         | 0.03         | 0.06         | 0.11         | 0.19         | 0.26         | 0.32         | 0.38       |
|                                | 600  | 0.01         | 0.03         | 0.06         | 0.12         | 0.20         | 0.28         | 0.34         | 0.41       |
|                                | 700  | 0.01         | 0.04         | 0.08         | 0.14         | 0.24         | 0.33         | 0.40         | 0.47       |
|                                | 720  | 0.01         | 0.04         | 0.08         | 0.15         | 0.24         | 0.34         | 0.41         | 0.49       |
|                                | 800  | 0.02         | 0.04         | 0.09         | 0.16         | 0.27         | 0.38         | 0.46         | 0.54       |
|                                | 900  | 0.02         | 0.05         | 0.10         | 0.18         | 0.30         | 0.43         | 0.52         | 0.61       |
|                                | 960  | 0.02         | 0.05         | 0.10         | 0.19         | 0.32         | 0.45         | 0.55         | 0.65       |
|                                | 1000 | 0.02         | 0.05         | 0.11         | 0.20         | 0.34         | 0.47         | 0.57         | 0.68       |
|                                | 1200 | 0.02         | 0.06         | 0.13         | 0.24         | 0.41         | 0.57         | 0.69         | 0.81       |
|                                | 1400 | 0.03         | 0.08         | 0.15         | 0.28         | 0.47         | 0.66         | 0.80         | 0.95       |
|                                | 1440 | 0.03         | 0.08         | 0.16         | 0.29         | 0.49         | 0.68         | 0.83         | 0.97       |
|                                | 1600 | 0.03         | 0.09         | 0.17         | 0.32         | 0.54         | 0.76         | 0.92         | 1.08       |
|                                | 1800 | 0.04         | 0.10         | 0.19         | 0.36         | 0.61         | 0.85         | 1.03         | 1.22       |
|                                | 2000 | 0.04         | 0.11         | 0.22         | 0.41         | 0.68         | 0.95         | 1.15         | 1.35       |
|                                | 2200 | 0.04         | 0.12         | 0.24         | 0.45         | 0.74         | 1.04         | 1.26         | 1.49       |
|                                | 2400 | 0.05         | 0.13         | 0.26         | 0.49         | 0.81         | 1.13         | 1.38         | 1.62       |
|                                | 2600 | 0.05         | 0.14         | 0.28         | 0.53         | 0.88         | 1.23         | 1.49         | 1.76       |
|                                | 2800 | 0.06         | 0.15         | 0.30         | 0.57         | 0.95         | 1.32         | 1.61         | 1.89       |
|                                | 2880 | 0.06         | 0.16         | 0.31         | 0.58         | 0.97         | 1.36         | 1.65         | 1.94       |
|                                | 3000 | 0.06         | 0.16         | 0.32         | 0.61         | 1.01         | 1.42         | 1.72         | 2.03       |
|                                | 3200 | 0.06         | 0.17         | 0.35         | 0.65         | 1.08         | 1.51         | 1.84         | 2.16       |
|                                | 3400 | 0.07         | 0.18         | 0.37         | 0.69         | 1.15         | 1.61         | 1.95         | 2.30       |
|                                | 3600 | 0.07         | 0.19         | 0.39         | 0.73         | 1.22         | 1.70         | 2.07         | 2.43       |
|                                | 3800 | 0.08         | 0.21         | 0.41         | 0.77         | 1.28         | 1.80         | 2.18         | 2.57       |
|                                | 4000 | 0.08         | 0.22         | 0.43         | 0.81         | 1.35         | 1.89         | 2.30         | 2.70       |

**Table 46**  
Length Correction Factor

| EFFECTIVE LENGTH | CORRECTION FACTOR |
|------------------|-------------------|
| upto 2750        | 0.95              |
| 2750 - 3750      | 1.00              |
| 3750 - 5000      | 1.05              |
| 5000 - 7000      | 1.10              |
| 7000 - 9000      | 1.15              |
| above 9000       | 1.20              |

**Table 47**  
Arc of contact  
Correction Factor

| ARC OF CONTACT ON SMALL PULLEY | CORRECTION FACTOR |
|--------------------------------|-------------------|
| 100                            | 0.72              |
| 110                            | 0.76              |
| 120                            | 0.80              |
| 130                            | 0.84              |
| 140                            | 0.88              |
| 150                            | 0.91              |
| 160                            | 0.94              |
| 170                            | 0.97              |
| 180                            | 1.00              |
| 190                            | 1.02              |
| 200                            | 1.05              |
| 210                            | 1.07              |
| 220                            | 1.09              |
| 230                            | 1.11              |

## INSTALLATION & MAINTENANCE

- 1) MAKE SURE THAT THE POWER IS OFF AND MACHINE STOPS COMPLETELY BEFORE SETTING THE BELT OR DURING MAINTENANCE
- 2) DO NOT USE EXCESSIVE FORCE TO SET THE BELT. REDUCE CENTRE DISTANCE BY USING THE MOTOR SLIDE FOR SMOOTH SETTING, WHEN USING THE TENSION PULLEY THE BELT SHOULD BE LOOSENEED BEFOREHAND.
- 3) MAKE SURE THAT OIL DOES NOT STICK TO THE BELT WHILE SETTING THE BELT.
- 4) WHEN THE CENTRE DISTANCE IS LONG ,OR WHEN USING J OR PK TYPE WITH SMALL PITCHES MAKE SURE THAT YOU DO NOT MIS SET THE BELT BY A RIDGE.
- 5) TENSION THE DRIVE PROPERLY.
- 6) WITH MULTI BELT SYSTEM MAKE SURE THAT THE PULLEY GROOVE DIMENSIONS ARE PERFECT.
- 7) CHECK IF THE PULLEY GROOVE IS WORN OR DAMAGED IN OPERATION IF THE PULLEY TIP GETS SMALLER (SHARPENED) REPLACE THE PULLEY, SINCE IT CAN CAUSE SHORTENED BELT LIFE.

### Installation Procedure

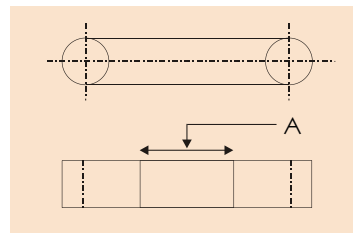
The following installation procedure should be strictly adhered to achieve the satisfactory performance from the ribbed belt drive.

- 1) Switch off the main supply before beginning with the exercise of installation.
- 2) Bring the pulleys closer to each other so that the belt can be removed easily.
- 3) Inspect the pulley grooves for any scores , sharp edges, dirt & rust. Clean them as required.
- 4) Ensure the alignment of pulleys. Make sure that the shafts are also properly aligned.
- 5) Mount the ribbed belt with no tension. Make sure that the ribs have been properly seated in the grooves.
- 6) Tension the ribbed belts as per the procedure given below.
- 7) Give some running time to the drive so that the belts are properly seated in the grooves.
- 8) Guard the drive properly.

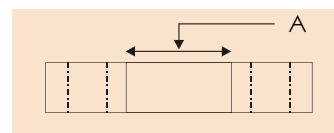
### Tensioning Procedure

It is imperative that to achieve the best from your ribbed belt drive, a proper tension be maintained in the drive. Under or over tensioning can cause the ribbed belt to fail prematurely. The following steps should be worked out to ensure the proper tension in the drive.

- 1) Fit the belt on the pulleys with no tension.
- 2) Draw two perpendicular lines across the belt at about 80% of the belt span between the pulleys as shown in the figure. Say for example the lines are placed 1000 mm apart. ( A ).



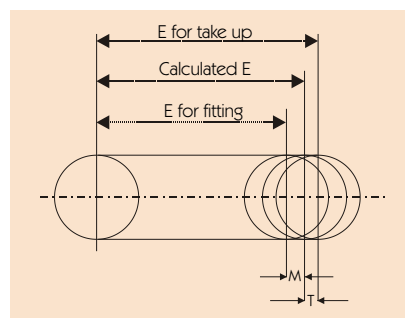
- 3) Increase the distance between two lines by 0.5 to 0.75% i.e. by 5 to 7.5 mm for an initial spacing of 1000 mm, so that the (A ) now becomes 1007.5 mm.



- 4) Run the drive under load for about 10 minutes.
- 5) Check the tension of the belt ( spacing between two lines ) & readjust if necessary.

### INSTALLATION AND TAKE UP ALLOWANCE

| L<br>(mm)    | PJ  |     | PK  |     | PL  |     | PM  |     |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|
|              | M   | T   | M   | T   | M   | T   | M   | T   |
| < 750        | -10 | +10 | -11 | +13 |     |     |     |     |
| 750 to 1200  | -10 | +15 | -12 | +16 | -15 | +20 |     |     |
| 1200 to 2000 | -15 | +20 | -16 | +22 | -20 | +20 |     |     |
| 2000 to 3500 | -20 | +30 | -23 | +32 | -30 | +35 | -40 | +50 |
| 3500 to 5000 |     |     |     |     | -40 | +50 | -50 | +70 |



## HOW TO USE THE IDLER PULLEY

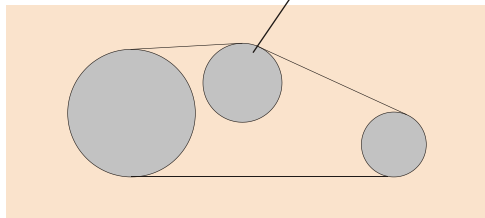
Be careful when you use the idler pulley since it might cause misalignment or shorten the belt service life through flex fatigue. The idler pulley is used when the pulley is fixed, when you want to reduce vibration, or to increase the contact angle of the small pulley. When you use an idler pulley, please follow the instructions given below. Please contact us if you use an outside idler, in particular, since it considerably reduces the belt service life.

### INSTRUCTION TO USE THE IDLER PULLEY

- ◆ Use the idler pulley on the slack side of the belt.
- ◆ Use the idler pulley at inside of the belt, rather than outside.
- ◆ Do not place the idler pulley close to other pulleys.
- ◆ The idler pulley should be flat, without any flanges.
- ◆ Do not use the belt for clutching device using idler.
- ◆ Correct the power transmission capacity if the contact angle might be changed.

#### 1. When using the inside idler pulley

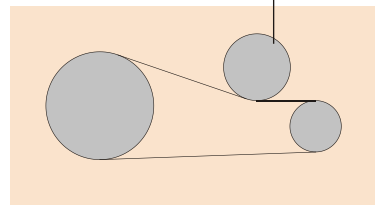
The idler pulley diameter should be larger than or equal to the smaller pulley diameter.



- ◆ Use an idler pulley with grooves.
- ◆ Position of the idler pulley should be near to the large pulley in order to maintain the contact angle of smaller pulley.

#### 2. When using the outside idler pulley.

The idler pulley diameter should be 1.5 times or more than the Smaller pulley diameter.



- ◆ Use the flat idler pulley without any crown.
- ◆ Position of the idler pulley should be near to the small pulley.
- ◆ Minimum idler pulley diameter is shown in the table below.

#### IDLER PULLEY MINIMUM DIAMETER

| Belt Type               | J  | PK | L   | M   |
|-------------------------|----|----|-----|-----|
| Minimum Pulley Diameter | 50 | 90 | 150 | 300 |

## TROUBLE SHOOTING

| PROBLEMS   | CAUSES  | REMEDIES   |
|--|---|--|
| <b>1. RIBBED BELT BREAKING AFTER A SHORT PERIOD OF RUNNING</b> | <p>Forcing the belt over pulley during installation.</p> <p>Overloaded drive</p> <p>Ingress of foreign body</p> <p>Drive stalled</p>  | <p>Use proper installation techniques</p> <p>Recheck the drive design</p> <p>Fit an effective guard</p> <p>Check for lubrication</p>   |
| <b>2. CUTS &amp; SPLITS IN THE RIBS</b>                        | <p>Pulley diameter too small</p> <p>Ambient temperature too high</p> <p>Abnormal belt slip</p> <p>Contamination by chemicals</p>  | <p>Redesign using the min. recommended diameters</p> <p>Ensure good ventilation</p> <p>Check drive tension</p> <p>Protect the drive</p>  |
| <b>3 SEVERE BELT VIBRATION</b>                                 | <p>Overloaded drive</p> <p>Centre distance more than recommended</p> <p>High shock loading</p> <p>Too low belt tension.</p> <p>Unbalanced pulleys</p>   | <p>Redesigning drive may be necessary.</p> <p>Use an inside idler on the slack side.</p> <p>Use an inside idler on the slack side.</p> <p>Re tension the drive</p> <p>Balance the pulleys</p>  |
| <b>4 CANNOT BE RETENSIONED</b>                                 | <p>Insufficient allowance for retensioning</p> <p>Excessive stretch caused by overloaded drive</p> <p>Incorrect belt length</p>   | <p>Modify the drive</p> <p>Redesign the drive</p> <p>Use belt of proper length</p>   |
| <b>5 EXCESSIVE WEAR OF RIBS</b>                                | <p>Starting torque too high</p> <p>Incorrect pulleys</p> <p>Excessive wear of grooves</p> <p>Poor drive alignment</p> <p>Smaller than recommended min. pulley diameter</p> <p>Belt catching on protruding parts</p> <p>Wrong section of belt for pulleys</p> <p>Too low belt tension.</p> | <p>Redesign the drive</p> <p>Remachine the pulleys</p> <p>Remachine pulleys</p> <p>Realign the pulleys</p> <p>Redesign using correct pulley diameters</p> <p>Remove protrusions</p> <p>Correct the belt section</p> <p>Retension the drive</p> |
| <b>6 EXCESSIVE NOISE</b>                                       | <p>Contamination by oil, grease or chemicals</p>  | <p>Protect the drive</p>   |

## CONVERSION CONSTANT

### LENGTH

|                 |   |             |
|-----------------|---|-------------|
| Inches x 25.4   | = | Millimetres |
| Inches x 0.0254 | = | Metres      |
| Feet x 0.3048   | = | Metres      |

### FORCE

|                             |   |            |
|-----------------------------|---|------------|
| kilogram Force (Kgf) x 9.81 | = | Newton (N) |
| Pound Force (lbf) x 4.45    | = | Newton (N) |

### TORQUE

|                                      |   |                    |
|--------------------------------------|---|--------------------|
| Kilogramforce metre (Kgf - m) x 9.81 | = | Newton Metre (N-m) |
| Pound feet (lbf - ft) x 1.36         | = | Newton Metre (N-m) |
| Pound Inches (lbf - in) x 0.113      | = | Newton Metre (N-m) |

### POWER

|                            |   |               |
|----------------------------|---|---------------|
| Horse Power (HP) x 0.746   | = | Kilowatt (Kw) |
| Cheval-vapeur (CV) x 0.735 | = | Kilowatt (Kw) |
| Pferdestärke (PS) x 0.735  | = | Kilowatt (Kw) |

### SPEED

|                                |   |                  |
|--------------------------------|---|------------------|
| Feet/Minute (ft/min) x 0.00508 | = | Meter/Sec. (m/s) |
|--------------------------------|---|------------------|

### MASS

|                       |   |               |
|-----------------------|---|---------------|
| Kilogram (kg) x 2.205 | = | Pound (lb)    |
| Pound (lb) x 0.454    | = | Kilogram (Kg) |

### USEFUL FORMULAE

|                                      |   |   |
|--------------------------------------|---|---|
| Belt Speed (V) : V (m/s)             | = | $5.236 \times d \times n \text{ (rev/min)} / 10^5$  |
| Power (P) : P (Kw)                   | = | $\frac{\text{Torque (N-M)} \times n \text{ (rev/min)}}{9550}$   |
|                                      | = | Belt effective tension (N) x V/105  |
| Torque (T) (N-M)                     | = | $\frac{9550 P}{n}$  |
| Belt effective tension (Te) : Te (N) | = | $\frac{2000 T}{d}$  |
| Static tension (Ts) : Ts (N)         | = | 32 x F x B<br>Where F is the force required to deflect a belt 15 mm per meter of span, 'B' is no. of belts. |
| Centrifugal Tension (Tc) : Tc (N)    | = | $2mV^2$   |
| Dynamic tension (TD) : TD(N)         | = | Ts - Tc   |

## ABBREVIATIONS

| Physical Quantity     | Symbol | Unit                   |
|-----------------------|--------|------------------------|
| Power                 | P      | Kilowatt (Kw)          |
| Torque                | T      | Newton-Metre (N-m)     |
| Force                 | F      | Newton (N)             |
| Rotational speed      | n      | Rev / min              |
| Pulley pitch diameter | d      | Millimetre (mm)        |
| Belt speed            | V      | Metre per second (m/s) |

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