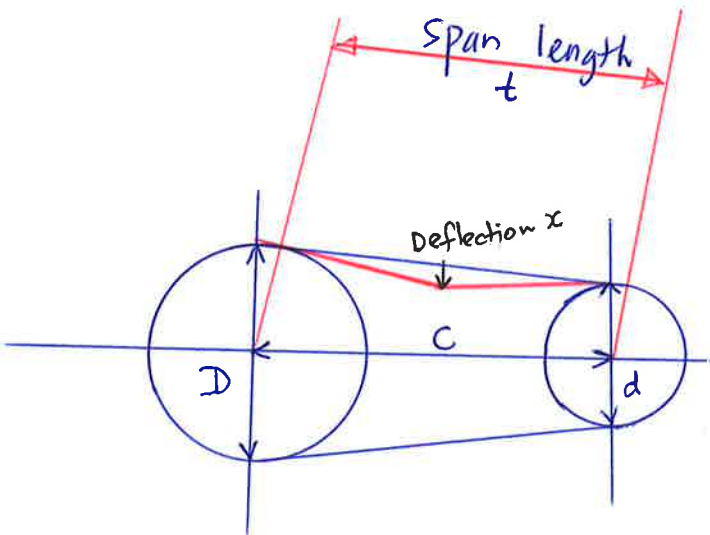


SPA Belt Spec.

| | | | |
|--------|--------------------------------|------|-----------------|
| Motor | | 11 | kW |
| | | 4 | P |
| | | 1455 | rpm |
| Fan | | 429 | rpm |
| | | | |
| Pulley | Bigger D | 400 | mm |
| | Smaller d | 118 | mm |
| Belt | Correction coefficient | 1.8 | Extra heavy use |
| | Idler | | N/A |
| | Belt length | 3650 | mm |
| | Number of Belts | 4 | Nos. |
| | Center distance C | 1411 | mm |
| | Perpendicular deflection force | 30 | N |
| | Belt Deflection x | 21.8 | mm |



$$t = \sqrt{C^2 - \frac{(D-d)^2}{4}}$$

$$= \sqrt{1411^2 - \frac{(400-118)^2}{4}}$$

$$= \underline{1397 \text{ mm}}$$

Belt Deflection = $\frac{1}{64} \times 1397 \text{ mm}$

$x = \underline{21.8 \text{ mm}}$

| Belt Section | Small pulley diameter (mm) | Setting force to deflect belt 10 mm per metre of span | | | |
|----------------------|----------------------------|---|-----------------|-----------------------|-----------------|
| | | Basic setting forces | | 1.25 x setting forces | |
| | | Newton (N) | kilograms (kgf) | Newton (N) | kilograms (kgf) |
| SPZ XPZ & QXPZ | 56 to 71 | 16 | 1.6 | 20 | 2.0 |
| | 75 to 90 | 18 | 1.8 | 22 | 2.2 |
| | 95 to 125 | 20 | 2.0 | 25 | 2.5 |
| | over 125 | 22 | 2.2 | 28 | 2.8 |
| SPA XPA & QXPA | 80 to 100 | 22 | 2.2 | 28 | 2.8 |
| | 106 to 140 | 30 | 3.0 | 38 | 3.9 |
| | 150 to 200 | 36 | 3.7 | 45 | 4.6 |
| SPB, XPB & QXPB | over 200 | 40 | 4.0 | 50 | 5.1 |
| | 112 to 160 | 40 | 4.0 | 50 | 5.1 |
| | 170 to 224 | 50 | 5.1 | 62 | 6.3 |
| | 236 to 355 | 62 | 6.3 | 77 | 7.9 |
| | over 355 | 65 | 6.6 | 81 | 8.3 |
| SPC, & QXPC | 224 to 250 | 70 | 7.1 | 87 | 8.9 |
| | 265 to 355 | 92 | 9.4 | 115 | 12.0 |
| | over 375 | 115 | 12.0 | 144 | 15.0 |
| 8V | 335 & above | 150 | 15.0 | 190 | 19.0 |
| Z (A & HA banded) | 56 to 100 | 5 to 7.5 | 0.5 to 0.8 | | |
| | 80 to 140 | 10 to 15 | 1.0 to 1.5 | | |
| | 125 to 200 | 20 to 30 | 2.0 to 3.1 | | |
| | C | 200 to 400 | 40 to 60 | 4.1 to 6.1 | |
| | D | 355 to 600 | 70 to 105 | 7.1 to 10.7 | |