

### FZ-SD & FEZ-SD - PULLEY GUIDELINES & FABRICATION OPTIONS

| Belt Type      | FZ-3-SD/FEZ-3-SD |       | FZ-4-SD/FEZ-4-SD |       |
|----------------|------------------|-------|------------------|-------|
| MPD. Base Belt | 80mm             | 3.15" | 120mm            | 4.72" |

#### Minimum Pulley Diameter for V-Flights

| Electrode  | 120mm | 4.72" | 150mm | 5.90" |
|------------|-------|-------|-------|-------|
| VLC/VLB 10 | 130mm | 5.12" | 170mm | 6.70" |
| VLC/VLB 13 | 140mm | 5.51" | 180mm | 7.08" |
| VLC/VLB 17 | 155mm | 6.10" | 195mm | 7.68" |

#### Minimum Pulley Diameter for Electrode Welded Flights

| Single Electrode 7 | 125mm | 4.92" | 150mm | 5.90" |
|--------------------|-------|-------|-------|-------|
| Single Electrode 9 | 140mm | 5.51" | 165mm | 6.50" |
| Double Electrode 7 | 165mm | 6.50" | 190mm | 7.48" |
| Double Electrode 9 | N.R.  |       | N.R.  |       |

#### Minimum Pulley Diameter for High Frequency Welded Flights

| App. Temperature | Temp ≥ 0° C / 32° F |       | Temp < 0° C / 32° F |       | Temp ≥ 0° C / 32° F |       | Temp < 0° C / 32° F |       |
|------------------|---------------------|-------|---------------------|-------|---------------------|-------|---------------------|-------|
| Flight 3 – 5 mm  | 101mm               | 3.97" | 151mm               | 5.94" | 128mm               | 5.04" | 180mm               | 7.09" |
| Flight 6 – 8 mm  | 128mm               | 5.04" | 180mm               | 7.09" | 143mm               | 5.63" | 200mm               | 7.87" |

#### Minimum Pulley Diameter for Based Sidewalls – (working temp.range -20°C to 35°C / 4°F to 95°F)

|        | Normal Flex |       | Back Flex |        | Normal Flex |       | Back Flex |        |
|--------|-------------|-------|-----------|--------|-------------|-------|-----------|--------|
|        | mm          | in    | mm        | in     | mm          | in    | mm        | in     |
| Sw 20  | 105         | 4.13" | 110       | 4.33"  | 120         | 4.72" | 120       | 4.72"  |
| Sw 30  | 105         | 4.13" | 125       | 4.92"  | 120         | 4.72" | 125       | 4.92"  |
| Sw 40  | 115         | 4.53" | 150       | 5.90"  | 130         | 5.12" | 150       | 5.90"  |
| Sw 50  | 125         | 4.92" | 175       | 6.89"  | 130         | 5.12" | 175       | 6.89"  |
| Sw 60  | 130         | 5.12" | 200       | 7.87"  | 135         | 5.31" | 200       | 7.87"  |
| Sw 80  | 150         | 5.90" | 250       | 9.84"  | 150         | 5.90" | 250       | 9.84"  |
| Sw 100 | 200         | 7.87" | 300       | 11.81" | 200         | 7.87" | 300       | 11.81" |

#### Minimum Pulley Diameter for Baseless Sidewalls – 2mm Thick

|               | Normal Flex |       | Back Flex |        | Normal Flex |       | Back Flex |        |
|---------------|-------------|-------|-----------|--------|-------------|-------|-----------|--------|
|               | mm          | in    | mm        | in     | mm          | in    | mm        | in     |
| B-SW 30 /1"   | 80mm        | 3.15" | 110mm     | 4.33"  | 120mm       | 4.72" | 150mm     | 5.90"  |
| B-SW 40 /1.5" | 90mm        | 3.54" | 120mm     | 4.72"  | 120mm       | 4.72" | 150mm     | 5.90"  |
| B-SW 50 /2"   | 100mm       | 3.94" | 150mm     | 5.90"  | 120mm       | 4.72" | 160mm     | 6.30"  |
| B-SW 60 /2.5" | 110mm       | 4.33" | 180mm     | 7.10"  | 120mm       | 4.72" | 190mm     | 7.48"  |
| B-SW 80 /3"   | 130mm       | 5.12" | 230mm     | 9.05"  | 130mm       | 5.12" | 240mm     | 9.45"  |
| B-SW 100 /4"  | 160mm       | 6.30" | 300mm     | 11.81" | 160mm       | 6.30" | 310mm     | 12.20" |
| B-SW 130 /5"  | 210mm       | 8.27" | 400mm     | 15.75" | 210mm       | 8.27" | 420mm     | 16.53" |
| B-SW 150 /6"  | 250mm       | 9.84" | 450mm     | 17.72" | 250mm       | 9.84" | 470mm     | 18.50" |

#### Minimum Pulley Diameter for Two Top Guides

| Guide Type    | Normal Flex |       | Back Flex |       | Normal Flex |       | Back Flex |       |
|---------------|-------------|-------|-----------|-------|-------------|-------|-----------|-------|
|               | mm          | in    | mm        | in    | mm          | in    | mm        | in    |
| VL/VLB/VLC 13 | 145mm       | 5.70" | 150mm     | 5.90" | 185mm       | 7.28" | 200mm     | 7.87" |
| VL/VLB/VLC 17 | 177.5mm     | 6.99" | 175mm     | 6.89" | 217.5mm     | 8.56" | 225mm     | 8.85" |
| CL/CLB/CLC 13 | 124mm       | 4.88" | 140mm     | 5.51" | 164mm       | 6.45" | 190mm     | 7.48" |
| CL/CLB/CLC 17 | 146mm       | 5.74" | 160mm     | 6.30" | 186mm       | 7.32" | 210mm     | 8.26" |
| VSB/VSC 13    | 125.5mm     | 4.94" | 135mm     | 5.31" | 165.5mm     | 6.52" | 185mm     | 7.28" |
| VSB/VSC 17    | 145mm       | 5.70" | 150mm     | 5.90" | 185mm       | 7.28" | 200mm     | 7.87" |
| CSB/CSC 13    | 110.8mm     | 4.36" | 128mm     | 5.04" | 150.8mm     | 5.93" | 178mm     | 7"    |
| CSB/CSC 17    | 124mm       | 4.88" | 140mm     | 5.51" | 164mm       | 6.45" | 190mm     | 7.48" |

NR: Not Recommended.

- For electrode welded cleats we recommend welding the cleats above the teeth location and not to exceed the tooth base width.
- Sidewalls must be positioned at a minimum distance of 100mm from the belt teeth.
- Flights can be welded on top of a tooth on condition that they do not exceed the width of the tooth or between teeth but and not in the area where pulley teeth make contact with the belt when driving it.

When choosing the pulley size, it must be equal or larger than the minimum pulley required.

