
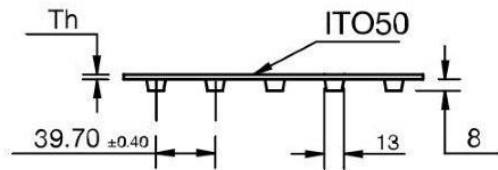
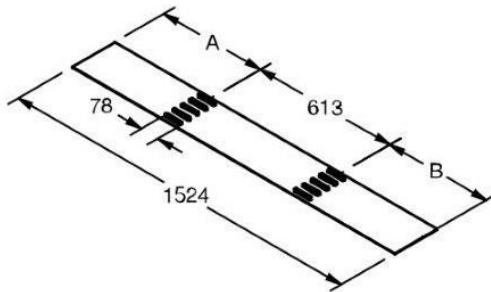


**FMB-SD-ITO50-MD (Metal Detectable)**  
**SuperDrive™, Top-Impression Top Oval -ITO50**

|                         |                  |   |
|-------------------------|------------------|---|
| Material:               | Volta MB-MD      |   |
| Color (Indicative only) | Blue 09          |  |
| Hardness:               | 53D              |   |
| Temp. Range (C°):       | -20°C to 60°C    |   |
| Temp. Range (F°):       | -5°F to 140°F    |   |
| Certification:          | FDA/ EU Approved |   |

|                                |      |
|--------------------------------|------|
| Coefficient of friction (Dry): |      |
| Steel:                         | 0.5  |
| Stainless Steel:               | 0.5  |
| UHMW:                          | 0.28 |



$B=A \pm 5\text{mm}$

|   |                          |
|---|--------------------------|
| <b>Product:</b>   | <b>FMB-3-SD-ITO50-MD</b> |
| <b>Belt Thickness:</b>                                  | 3mm                      |
| <b>Belt Weight (kg/ m<sup>2</sup>):</b>                 | 3.64kg/m <sup>2</sup>    |
| <b>Add for each row of teeth</b>                        | +0.1875 Kg/m             |
| <b>Belt Weight (lb/ ft<sup>2</sup>):</b>                | 0.75 lb/ft <sup>2</sup>  |
| <b>Add for each row of teeth</b>                        | +0.126 lb/ft             |
| <b>Belt Min Pulley Diameter (mm)</b><br>(Normal Flex)   | 100mm                    |
| <b>Belt Min Pulley Diameter (mm)</b><br>(Back Flex)     | 110mm                    |
| <b>Belt Min Pulley Diameter (Inch)</b><br>(Normal Flex) | 3.94"                    |
| <b>Belt Min Pulley Diameter (Inch)</b><br>(Back Flex)   | 4.33"                    |
| <b>Max Pull Force (kg/cm width)</b>                     | 6                        |
| <b>Max Pull Force (lb/inch width)</b>                   | 33.60                    |

- English dimensions have been converted from Metric measurements.
- All values are nominated and to the best of our experience are true and accurate.
- For endless welding use the Volta FBW welding system.

**Disclaimer:** Volta Belting Ltd. recommends testing all the products in your environment to ascertain suitability. The information is supplied in good faith without warranty.

### Pulley Guidelines & Fabrication Options

| Belt Type     | FMB-3 SD MD/ FMB-3 SD ITO50-MD |    |
|---------------|--------------------------------|----|
| MPD Base Belt | 100mm                          | 4" |

#### Minimum Pulley Diameter for V-Cleat

|           |       |       |
|-----------|-------|-------|
| Electrode | 135mm | 5.31" |
| VLB-MD 10 | 145mm | 5.70" |
| VLB-MD 13 | 155mm | 6.10" |
| VLB-MD 17 | 170mm | 6.70" |

#### Min. Pulley Diameter for Electrode Welded Flat Flights

|                    |       |       |
|--------------------|-------|-------|
| Single Electrode 7 | 140mm | 5.51" |
| Single Electrode 9 | 150mm | 5.90" |
| Double Electrode 7 | 180mm | 7.08" |
| Double Electrode 9 | NR    | NR    |

#### Min. Pulley Diam. for High Frequency Welded Flights

| App. Temperature | Temp ≥ 0° C / 32° F |       | Temp < 0° C / 32° F |       |
|------------------|---------------------|-------|---------------------|-------|
| Flight 3 – 5 mm  | 116mm               | 4.56" | 165mm               | 6.50" |
| Flight 6 – 8 mm  | 143mm               | 5.62" | 195mm               | 7.67" |

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

| Based Sidewall Type | Normal Flex |       | Back Flex |        |
|---------------------|-------------|-------|-----------|--------|
| SW-20               | 105mm       | 4.13" | 110mm     | 4.33"  |
| SW-30               | 105mm       | 4.13" | 125mm     | 4.92"  |
| SW-40               | 115mm       | 4.53" | 150mm     | 5.90"  |
| SW-50               | 125mm       | 4.92" | 175mm     | 6.89"  |
| SW-60               | 130mm       | 5.12" | 200mm     | 7.87"  |
| SW-80               | 150mm       | 5.90" | 250mm     | 9.84"  |
| SW-100              | 200mm       | 7.87" | 300mm     | 11.81" |

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

| Baseless Sidewall Type | Normal Flex |       | Back Flex |        |
|------------------------|-------------|-------|-----------|--------|
| B-SW 30                | 110mm       | 4.33" | 120mm     | 4.72"  |
| B-SW 40                | 110mm       | 4.33" | 120mm     | 4.72"  |
| B-SW 50                | 110mm       | 4.33" | 150mm     | 5.90"  |
| B-SW 60                | 110mm       | 4.33" | 180mm     | 7.10"  |
| B-SW 80                | 130mm       | 5.12" | 230mm     | 9.05"  |
| B-SW 100               | 160mm       | 6.30" | 300mm     | 11.81" |
| B-SW 130               | 210mm       | 8.27" | 400mm     | 15.75" |
| B-SW 150               | 250mm       | 9.84" | 450mm     | 17.72" |

#### Minimum Pulley Diameter for Top Guides

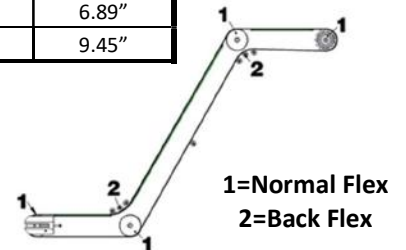
| Guide Type | Normal Flex |       | Back Flex |       |
|------------|-------------|-------|-----------|-------|
| VLB-MD 10  | 152mm       | 5.89" | 157mm     | 6.18" |
| VLB-MD 13  | 178mm       | 7"    | 175mm     | 6.89" |
| VLB-MD 17  | 220mm       | 8.66" | 240mm     | 9.45" |

**Electrode Welded Flights:** We recommend welding the flights above the teeth location and flight thickness should not exceed the tooth base width.

**Sidewalls & Guides:** must be positioned with a minimum gap of 100mm from the belt teeth.

**Flights:** should be welded between the teeth as indicated in the SuperDrive™ and Mini SuperDrive™ Technical Manual.

**Pulleys:** must be equal to, or larger than the minimum pulley specification.



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