
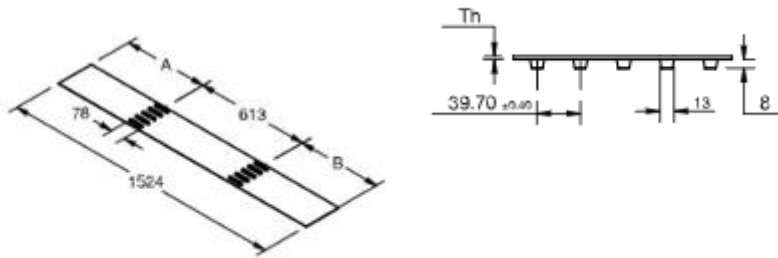


**FDR-SD V1; FEDR-SD-ITM2 V1; FEDR-SD-ITO50 V1**  
**(Hydrolysis & Chemical Resistant SuperDrive™ V1)**

Material:	<b>Volta DR-V1</b>	
Color (Indicative only)	<b>Blue 15</b>	
Hardness:	53D	
Temp. Range (C°):	-20°C to 70°C	
Temp. Range (F°):	-5°F to 158°F	
Certification:	FDA/ EU Approved	

Coefficient of friction (Dry) Smooth bottom		Embossed
Steel:	0.55	0.38
Stainless Steel:	0.55	0.38
UHMW:	0.28	0.22



B=A±5mm

Product:	<b>FDR-3-SD V1 ; FEDR-3-SD-ITM2 V1</b>	<b>FEDR-3-SD- ITO50 V1</b>	<b>FDR-4-SD V1</b>
<b>Belt Thickness:</b>	3mm	3mm	4mm
<b>Belt Weight (kg/ m<sup>2</sup>):</b> Add for each row of teeth	3.6 kg/m <sup>2</sup> +0.180 Kg/m	3.5 kg/m <sup>2</sup> +0.180 Kg/m	4.8 kg/m <sup>2</sup> +0.180 Kg/m
<b>Belt Weight (lb/ ft<sup>2</sup>):</b> Add for each row of teeth	0.74 lb/ft <sup>2</sup> +0.121 lb/ft	0.71 lb/ft <sup>2</sup> +0.121 lb/ft	0.98 lb/ft <sup>2</sup> +0.121 lb/ft
<b>Belt Min Pulley Diameter (mm)</b> (Normal Flex)	100mm	100mm	130mm
<b>Belt Min Pulley Diameter (mm)</b> (Back Flex)	100mm	100mm	150mm
<b>Belt Min Pulley Diameter (Inch)</b> (Normal Flex)	3.94"	3.94"	5.12"
<b>Belt Min Pulley Diameter (Inch)</b> (Back Flex)	3.94"	3.94"	5.90"
<b>Max Pull Force* (kg/cm width)</b>	6.5	5.5	8.6
<b>Max Pull Force* (lb/inch width)</b>	36.3	30.7	48.4

\*Pull force – According to “Temperature Correction Factor”.

Belt material	Temperature Correction Factor													
	30°C/ 86°F	40°C/ 104°F	45°C/ 113°F	50°C/ 122°F	55°C/ 131°F	60°C/ 140°F	65°C/ 149°F	70°C/ 158°F	75°C/ 167°F	80°C/ 176°F	85°C/ 185°F	90°C/ 194°F	95°C/ 203°F	100°C/ 212°F
<b>DR-V1- 53D Shore</b>	1	0.89	0.81	0.77	0.71	0.67	0.62	0.61	0.57	0.54	0.51	0.51	0.47	0.45

- English dimensions have been converted from Metric measurements.
- All values are nominated and to the best of our experience are true and accurate.

**FDR-SD V1 ; FEDR-SD-ITM2 V1 ; FEDR-SD-ITO50 V1**  
PULLEY GUIDELINES & FABRICATION OPTIONS

Belt Type	FDR-SD V1 ; FEDR-SD-ITM2 V1 ; FEDR SD-ITO50 V1				FDR -SD V1			
Belt Thickness	3mm				4mm			
MPD. Base Belt	100mm		3.94"		130mm		5.12"	
<b>Minimum Pulley Diameter for V – Flights *</b>								
Electrode	135mm		5.31"		165mm		6.5"	
VDR – 10 -V1	148mm		5.82"		178mm		7"	
VDR – 13 -V1	161mm		6.34"		191mm		7.52"	
VDR – 17 -V1	207mm		8.15"		237mm		9.33"	
<b>Minimum Pulley Diameter for High Frequency welded flights</b>								
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	106mm	4.17"	165mm	6.5"	136mm	5.35"	195mm	7.68"
Flight 6 – 8 mm	136mm	5.35"	195mm	7.68"	151mm	5.94"	205mm	8.1"
<b>Minimum Pulley Diameter for Baseless Sidewalls – 2 mm Thick *</b>								
	Normal Flex		Back Flex		Normal Flex		Back Flex	
B-SW 30	100mm	3.94"	110mm	4.33"	120mm	4.72"	150mm	5.9"
B-SW 40	100mm	3.94"	120mm	4.72"	120mm	4.72"	150mm	5.9"
B-SW 50	100mm	3.94"	150mm	5.90"	120mm	4.72"	160mm	6.3"
B-SW 60	110mm	4.33"	180mm	7.10"	120mm	4.72"	190mm	7.48"
B-SW 80	130mm	5.12"	230mm	9.05"	130mm	5.12"	240mm	9.45"
B-SW 100	160mm	6.30"	300mm	11.81"	160mm	6.3"	310mm	12.2"
B-SW 130	210mm	8.27"	400mm	15.75"	210mm	8.27"	420mm	16.53"
B-SW 150	250mm	9.84"	450mm	17.72"	250mm	9.84"	470mm	18.5"
<b>Minimum Pulley Diameter for Two Top Guides *</b>								
Guide Type	Normal Flex		Back Flex		Normal Flex		Back Flex	
VDR – 10 -V1	158mm	6.22"	158mm	6.22"	188mm	7.4"	188mm	7.4"
VDR – 13 -V1	171mm	6.73"	171mm	6.73"	201mm	7.91"	201mm	7.91"
VDR – 17 - V1	217mm	8.54"	217mm	8.54"	247mm	9.71"	247mm	9.71"

\* Wait two hours before you check the welding quality of all welding types that done with hot air.  
 Liester Set up : Welding Speed ~ 0.5 m/min ; Power: 7.5 - 8.5.

- Notes:**
- 1.) NR: Not Recommended.
  - 2.) All Inch sizes have been converted from Metric.
  - 3.) **Sidewalls & Guides** must be positioned at a minimum distance of 100mm from the belt teeth.
  - 4.) **HF Welded Flights** - we recommend welding the Flights above the teeth location and not to exceed the tooth base width or can be welded between the teeth as indicated in sketch.

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

