

FMB

Flat Belt, Bottom-Smooth, Top-Smooth

Material:	Volta MB
Color (Indicative only)	Blue
Hardness:	95A/46D
Temp. Range (C°):	-30°C to 70°C
Temp. Range (F°):	-20°F to 158°F
Certification:	FDA/ USDA/USDA Dairy/EU Approved

Coefficient of friction (Dry):	
Steel:	0.40
Aluminum:	0.40
Rubber:	0.50
UHMW:	0.30



Product:		FMB-2.5	FMB-3	FMB-4	FMB-5	FMB-6
Belt Thickness (mm)		2.5	3	4	5	6
Belt Weight (kg/ m ²):		3.1	3.8	5	6.3	7.4
Belt Weight (lb/ ft ²):		0.62	0.75	1	1.25	1.5
Belt Min Pulley Diameter (mm)-Normal Flex		35	40	60	80	90
Belt Min Pulley Diameter (mm)-Back Flex		35	40	60	80	90
Belt Min Pulley Diameter (Inch)-Normal Flex		1 3/8	1 5/8	2 3/8	3 1/8	3 5/8
Belt Min Pulley Diameter (Inch)-Back Flex		1 3/8	1 5/8	2 3/8	3 1/8	3 5/8
Max. Workload (Kg/cm)		10	12	16	20	24
Max. Workload (lb/inch)		56	67	90	112	134
Pull Force* (kg/cm width) at pretension of:	0.5%	0.8	0.9	1.2	1.5	1.8
	1%	1.5	1.8	2.4	3	3.6
	1.5%	2.3	2.7	3.6	4.5	5.4
	2%	3	3.6	4.8	6	7.2
	2.5%	3.8	4.5	6	7.5	9
	3%	4.5	5.4	7.2	9	10.8
Pull Force* (lb/inch width) at pretension of:	0.5%	4.2	5.1	6.8	8.4	10.2
	1%	8.4	10.1	13.5	16.9	20.25
	1.5%	12.7	15.2	20.2	25.3	30.3
	2%	16.9	20.2	27	33.7	40.5
	2.5%	21.1	25.3	33.7	42.2	50.6
	3%	25.3	30.4	40.5	50.6	60.8
Electrode Splicing	EVMB 7	✓	-	-	-	*
	EVMB 9	-	✓	✓	✓	*

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

Belt material	Temperature Correction Factor						
	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
MB – 95A/46D Shore	1	0.98	0.95	0.9	0.87	0.8	0.7

- Pull Force relates to Steel pulleys. Multiply given values by 0.9 for Cast Iron, 1.1 for Rubber and 0.8 for wet smooth drums.
- English dimensions have been converted from Metric measurements.
- All values are nominated and to the best of our experience are true and accurate.
- *Electrode welding not recommended for belt thicker than 5mm.FBW tool splicing is advisable.

MINIMUM PULLEY GUIDELINES FOR FABRICATED VOLTA FMB & FEMB BELTS

	FEMB-2		FMB-2.5 FEMB-2.5		FMB-3 FEMB-3		FMB-4 FEMB-4	
	inch	mm	inch	mm	inch	mm	inch	mm
Belt (a)	1 ³ / ₁₆	30	1 ³ / ₈	35	1 ³ / ₈	40	2 ³ / ₈	60
V - Guide (b)								
VM - 10	4	100	4 ¹ / ₄	108	4 ¹ / ₂	115	5	125
VM - 13	4 ¹ / ₂	115	4 ¹ / ₄	120	5	125	5 ¹ / ₂	140
VM - 17	NA	NA	5 ¹ / ₂	NA	6	150	7	175
VM - 22	NA	NA	NA	NA	NA	NA	8	200
VL /VLC/VLB - 6	2 ¹ / ₄	55	2 ¹ / ₂	62	2 ³ / ₄	70	3 ¹ / ₄	80
VL/VLC/VLB - 8	2 ³ / ₄	70	3	75	3 ¹ / ₂	80	3 ³ / ₄	95
VL/VLC/VLB -10	3	75	3 ¹ / ₄	80	3 ¹ / ₂	85	4	100
VL /VLC/VLB - 13	3 ¹ / ₄	80	3 ³ / ₈	85	3 ¹ / ₂	90	4 ¹ / ₂	115
VL/VLC/VLB - 17	NA	NA	4	110	4 ¹ / ₂	115	5 ¹ / ₂	140
VL /VLC/VLB - 22	NA	NA	NA	NA	NA	NA	6 ¹ / ₂	165
CM - 13	3 ¹ / ₂	90	3 ³ / ₄	95	4	100	5	125
CM - 17	NA	NA	4 ¹ / ₂	115	5	125	6	150
CM - 22	NA	NA	NA	NA	5 ¹ / ₂	140	7	175
CL/CLC/CLB - 10	2 ¹ / ₂	65	2 ³ / ₄	70	3	75	3 ¹ / ₂	90
CL/CLC/CLB - 13	2 ³ / ₄ ⁽³⁾	70 ⁽³⁾	3	75	3 ¹ / ₄	80	4	100
CL/CLC/CLB - 17	NA	NA	3 ¹ / ₂ ⁽³⁾	95 ⁽³⁾	4 ⁽³⁾	100 ⁽³⁾	5 ⁽³⁾	125 ⁽³⁾
CL/CLC/CLB - 22	NA	NA	NA	NA	4 ¹ / ₂	115	5 ³ / ₈	135
V - Cleat (c)								
Electrode	2 ¹ / ₄	55	2 ¹ / ₂	62	2 ³ / ₄	70	3 ³ / ₄	95
VL /VLC/VLB - 10	3 ¹ / ₄	80	3 ³ / ₈	85	3 ¹ / ₂	90	4 ¹ / ₂	115
VL/VLC/VLB - 13	3 ¹ / ₂	90	3 ³ / ₄	95	4	100	5	125
VL /VLC/VLB - 17	NA	NA	4 ¹ / ₂	NA	5	125	6	150
VL /VLC/VLB - 22	NA	NA	NA	NA	NA	NA	8	200
Flat Cleat (c)								
Single Electrode	4 ¹ / ₂	115	4 ³ / ₄	120	5	125	5 ¹ / ₂	140
Double 7 Electrode	5 ¹ / ₂	140	5 ³ / ₄	145	6	150	7	175
Double 9 Electrode	NR	NR	NR	NR	7 ¹ / ₂	190	8	200
T Cleat / HF (c)	3 ¹ / ₄	80	3 ³ / ₈	85	3 ¹ / ₂	90	4 ¹ / ₂	115
Side Walls (c)								
Sww 20 (Normal Flex)	3 ³ / ₄	95	4	100	4 ¹ / ₂	105	4 ³ / ₈	110
Sww 20 (BackFlex)	4 ³ / ₈	110	4 ³ / ₈	110	4 ³ / ₈	110	4 ³ / ₈	110
Sww 30(Normal Flex)	3 ³ / ₄	95	4	100	4 ¹ / ₂	105	4 ³ / ₈	110
Sww 30 (BackFlex)	5	125	5	125	5	125	5	125
Sww 40(Normal Flex)	4	100	4 ³ / ₈	110	4 ¹ / ₂	115	5 ¹ / ₈	130
Sww 40 (BackFlex)	6	150	6	150	6	150	6	150
Sww 50(Normal Flex)	NR	NR	NR	NR	5	125	5 ¹ / ₈	130
Sww 50 (BackFlex)	NR	NR	NR	NR	7	175	7	175
Sww 60(Normal Flex)	NR	NR	NR	NR	5 ¹ / ₈	130	5 ³ / ₈	135
Sww 60 (BackFlex)	NR	NR	NR	NR	8	200	8	200
Sww 80(Normal Flex)	NR	NR	NR	NR	6	150	6	150
Sww 80 (BackFlex)	NR	NR	NR	NR	10	250	10	250
Sww 100(Normal Flex)	NR	NR	NR	NR	8	200	8	200
Sww 100(Back Flex)	NR	NR	NR	NR	12	300	12	300

Notes: 1) For belt fabrication where the guides are located below the cleats or Side Walls, add the V - Guide value (b) and the cleat or sidewall value (c), and subtract belt value (a). In the case where the Guide is not located below the cleat or Side Wall, choose the higher of the values between the V-guide (b) and cleat or Side Wall (c).

2) Dimensions have been converted from metric measurements.

3) Recommended guide.

4) NA = Not Available.

NR =Not Recommended