


FZ

Flat Belt, Bottom-Smooth, Top-Smooth

Material:	Volta Z	
Color (Indicative only)	Green	
Hardness:	95A/46D	
Temp. Range (C°):	-30°C to 70°C	
Temp. Range (F°):	-20°F to 158°F	

Coefficient of friction (Dry):	
Steel:	0.36
Aluminum:	0.36
UHMW:	0.30



Product:		FZ-2.5	FZ-3	FZ-4	FZ-5
Belt Thickness (mm)		2.5	3	4	5
Belt Weight (kg/ m ²):		3.1	3.8	5	6.3
Belt Weight (lb/ ft ²):		0.62	0.75	1	1.25
Belt Min Pulley Diameter (mm)-Normal Flex		35	40	60	80
Belt Min Pulley Diameter (mm)-Back Flex		35	40	60	80
Belt Min Pulley Diameter (Inch)-Normal Flex		1 ³ / ₈	1 ⁵ / ₈	2 ³ / ₈	3 ¹ / ₈
Belt Min Pulley Diameter (Inch)-Back Flex		1 ³ / ₈	1 ⁵ / ₈	2 ³ / ₈	3 ¹ / ₈
Max. Workload (Kg/cm)		10	12	16	20
Max. Workload (lb/inch)		56	67	90	112
Pull Force* (kg/cm width) at pretension of:	0.5%	0.8	0.9	1.2	1.5
	1%	1.5	1.8	2.4	3
	1.5%	2.3	2.7	3.6	4.5
	2%	3	3.6	4.8	6
	2.5%	3.8	4.5	6	7.5
Pull Force* (lb/inch width) at pretension of:	0.5%	4.2	5.1	6.8	8.4
	1%	8.4	10.1	13.5	16.9
	1.5%	12.7	15.2	20.2	25.3
	2%	16.9	20.2	27	33.7
	2.5%	21.1	25.3	33.7	42.2
Electrode Splicing & Leister Setting	EVZ 7	-	-		
	EVZ 9	-	7.5 to 8.5		

- *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
Z – 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.
- Leister setting related to Type S and may vary according to specific welding conditions.

MINIMUM PULLEY GUIDELINES FOR FABRICATED VOLTA FZ & FEZ BELTS

	FEZ - 2		FZ - 2.5 FEZ - 2.5		FZ - 3 FEZ - 3		FZ - 4 FEZ - 4		FZ - 5 FEZ - 5	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
BELT (a)	1 ³ / ₁₆	30	1 ³ / ₈	35	1 ⁵ / ₈	40	2 ³ / ₈	60	3 ¹ / ₈	80
V - Guide (b)										
VM - 10	4	100	4 ½	105	5	115	5 ½	125	6 ¾	150
VM - 13	5	115	5 ½	120	6	135	6 ½	145	7 ¾	165
VM - 17	NA	NA	6 ½	150	7	170	7 ½	180	8 ¾	200
VM - 22	NA	NA	NA	NA	8 ½	215	9 ¼	230	10	225
VL/VLC/VLB - 6	2 ¼	55	2 ¾	60	3 ¾	73	4	85	4 ¾	105
VL/VLC/VLB - 8	2 ¾	70	3 ¾	80	3 ½	90	4 ⁵ / ₁₆	110	5 ¼	130
VL/VLC/VLB -10	3	75	3 ½	90	4 ¼	105	4 ¾	120	5 ½	140
VL/VLC/VLB - 13	3 ½	90	4	100	4 ½	115	5 ¼	130	6	150
VL/VLC/VLB - 17	NA	NA	5	125	5 ½	140	6 ¼	155	7	175
VL/VLC/VLB - 22	NA	NA	NA	NA	6 ½	165	7 ¼	180	8	200
CM - 13	4	100	4 ½	115	5	125	5 ¼	140	6 ½	160
CM - 17	NA	NA	5 ½	140	6	150	6 ½	165	7 ¾	185
CM - 22	NA	NA	NA	NA	7	175	7 ½	190	8 ¾	210
CL/CLC/CLB - 10	2 ½	65	3 ¾	80	3 ¾	95	4 ⁵ / ₁₆	110	5 ¾	130
CL/CLC/CLB - 13	3 ¼ ⁽⁴⁾	80 ⁽⁴⁾	3 ½	90	4 ¼	105	4 ¾	120	5 ½	140
CL/CLC/CLB - 17	NA	NA	4 ¾ ⁽⁴⁾	110 ⁽⁴⁾	5 ⁽⁴⁾	125 ⁽⁴⁾	5 ½ ⁽⁴⁾	140 ⁽⁴⁾	6 ¾	160
CL/CLC/CLB - 22	NA	NA	5	125	5 ½	140	6 ¼	155	7 ⁽⁴⁾	175 ⁽⁴⁾
V - Cleat (c)										
Electrode	2 ½	65	3 ¾	80	3 ¾	95	4 ½	115	5 ¾	135
VL/VLC/VLB - 10	3 ½	90	4	100	5	125	5 ½	140	6 ¾	160
VL/VLC/VLB - 13	4	100	4 ½	115	5 ½	140	6 ¼	155	7	175
VL/VLC/VLB - 17	NA	NA	5 ½	140	6 ½	165	7 ¼	180	8	200
VL/VLC/VLB - 22	NA	NA	NA	NA	8	200	8 ½	215	9 ¾	235
Flat Cleat (c)										
Single Electrode	5	125	5 ½	140	6	150	6 ¾	160	7 ¼	180
Double 7 Electrode	6	150	6 ½	165	7	175	7 ½	190	8 ¾	210
Double 9 Electrode	NA	NA	NA	NA	8 ½	215	9 ¼	230	10	250
T Cleat / HF (c)	3 ½	90	4	100	5	125	5 ½	140	6 ¾	160
Based Side Walls (c)										
SW20	3 ¾	95	4	100	4 ¾	105	4 ¾	110	4 ¾	120
SW 30	3 ¾	95	4	100	4 ¾	105	4 ¾	110	4 ¾	120
SW 40	4	100	4 ¾	110	4 ¹ / ₂	115	5 ¾	130	5 ¾	135
SW 50	NR	NR	NR	NR	5	125	5 ¾	130	5 ¾	135
SW 60	NR	NR	NR	NR	5 ¾	130	5 ¾	135	5 ½	140
SW 80	NR	NR	NR	NR	6	150	6	150	6	150
SW 100	NR	NR	NR	NR	8	200	8	200	8	200

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) NA = Not Available
- 4) Recommended guide.