



DRIVEN BY POSSIBILITY™

GATES TPU

METAL DETECTABLE FOOD BELT

ENHANCE YOUR FOOD BELT SAFETY PROGRAM

Metal detectable belts include a metal detectable additive and are made with the same rugged wear resistant construction as our standard food grade belts. In the event the metal detectable belt accidentally chips, the belt chips can be sensed by metal detectors in your down-stream operations to prevent further contamination.

PosiClean™, CenterClean™ and FlatClean™ Food Grade belts are now available with a metal detectable additive in 5mm and 7mm profiles – including sidewalls and cleats.

These endless welded belts are primarily used in food conveying applications.

FEATURES + BENEFITS

- All of the features, benefits and geometry of our standard food belts
- USDA Certified and EU 10/2011 compliant
- 0.125" cubic sample has mild steel equivalent of a 1.8mm FE ball
- Endless belt options via weld or mechanical lacing
- Sealed edges and tension members provide high strength with low stretch
- No retensioning
- Tough polyurethane construction



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METAL DETECTABLE FOOD GRADE BELTS

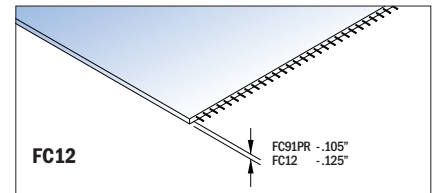
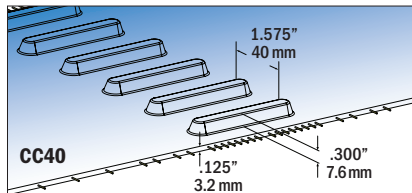
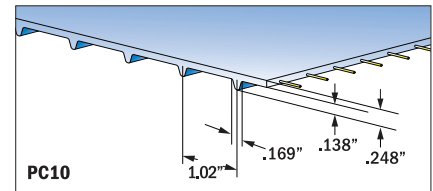
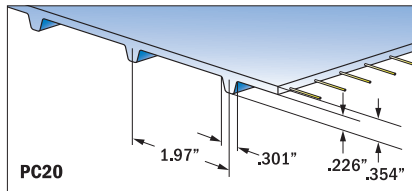
PRODUCT SPECIFICATIONS

MILD STEEL SPHERE EQUIVALENT

BELT PIECE SIZE SPHERE DIAMETER

0.125" X 0.125" X 0.125"	1.8mm FE
0.125" X 0.25" X 0.125"	2.1mm FE
0.25" X 0.25" X 0.125"	2.3mm FE
0.25" X 0.25" X 0.125"	3.1mm FE
0.25" X 0.75" X 0.125"	3.6mm FE
0.5" X 0.5" X 0.125"	4.5mm FE
0.5" X 0.75" X 0.125"	7.8mm FE
0.75" X 0.75" X 0.125"	>8.0mm FE

Sphere sizes determined with test setup using a wet or conductive product.



TECHNICAL DATA

BELT OPTIONS				PC 20	PC 10	CC 40	FC 12
Designator				KV-FMD	KV-FMD	KV-FMD	KV-FMD
Surface Finish		Top Running Side		Smooth, Inverted Pyramid N/A	Smooth, Inverted Pyramid N/A	Smooth, Inverted Pyramid N/A	Smooth, Inverted Pyramid Smooth
Cords/inch				2	2	2	2
Thickness				N/A	N/A	N/A	0.125" / (3.0 mm)
Pitch (nominal)				1.97" (50mm)	1.02" (26mm)	1.575" (40 mm)	N/A
Hardness, Shore A		Top Running Side		95 N/A	95 N/A	95 N/A	95 95
Specific Belt Weight (lbs/ft/inch)				0.095	0.068	0.084	0.070
Specific Belt Stiffness (lbs/inch)				7400	7400	7400	7400
Min. Pulley Dia. Service Temperature Above 25 ° F				5.02" (127.4mm)	3.25" (82.6mm)	5.9" (150 mm)	3.0" (76 mm)
Min. Pulley Dia. Service Temperature Below 25 ° F				7.52" (191.1mm)	4.55" (115.5mm)	6.9" (175 mm)	4.0" (100 mm)
Min. Back Bend Dia. Above 25 ° F				6" (152.4mm)	4.5" (115.5mm)	6" (152 mm)	3.0" (76 mm)
Min. Back Bend Dia. Below 25 ° F				10" (254.0mm)	6" (152.4mm)	10" (254 mm)	4.0" (100 mm)
Service Temperature Range				+15° to 160° F (-9° to 71° C)	+15° to 160° F (-9° to 71° C)	+15° to 160° F (-9° to 71° C)	+15° to 160° F (-9° to 71° C)
Ultimate Belt Strength (lbs/inch width)				265	294		265
Coefficient of Friction (Dynamic/Static)							
TPU vs. UHMW	Dry	Top		0.20/0.30	0.20/0.30	0.20/0.30	0.20/0.30
	Wet	Top		0.35/0.58	0.35/0.58	0.35/0.58	0.35/0.58
TPU vs. Steel	Dry	Top		0.38/0.41	0.38/0.41	0.38/0.41	0.38/0.41
	Wet	Top		0.40/0.57	0.40/0.57	0.40/0.57	0.40/0.57
TPU vs. UHMW	Dry	Running Side		N/A	N/A	N/A	0.11/0.21
	Wet	Running Side		N/A	N/A	N/A	0.14/0.23
TPU vs. Steel	Dry	Running Side		N/A	N/A	N/A	0.22/0.27
	Wet	Running Side		N/A	N/A	N/A	0.23/0.28
Coefficient of Thermal Expansion	in/in/° F mm/mm/° C			1.09 x 10-4 1.96 x 10-4	1.09 x 10-4 1.96 x 10-4	1.09 x 10-4 1.96 x 10-4	1.09 x 10-4 1.96 x 10-4
Color				PosiBlue	PosiBlue	PosiBlue	PosiBlue
Min. and Max. Width				5"/48" (127/1219mm)	4"/48" (102/1219mm)	6"/36" (152/914mm)	4"/60" (102/1524mm)
Max. Length				200' (61m)	200' (61m)	200' (61m)	300' (92m)

WELD STRENGTH

	PC 20	PC 10	FC 12	CC 40			
				6"-9"	>6"-12"	>12"-17"	>17"-36"
Platen Weld (Finger)	42	31	37	191	220	254	275
Platen Weld (Split Tooth)	34	31	N/A	N/A	N/A	N/A	N/A
Butt Weld	31	31	N/A	186	214	247	268
Flexco® UX1SS	31	31	31	186	214	247	268
Flexco® RS125	26	26	31	156	180	208	226

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