



# FLATCLEAN™ FOOD GRADE BELTING

**Gates FlatClean is a USDA approved, all-purpose urethane flat belt reinforced with Kevlar® tensile members.**



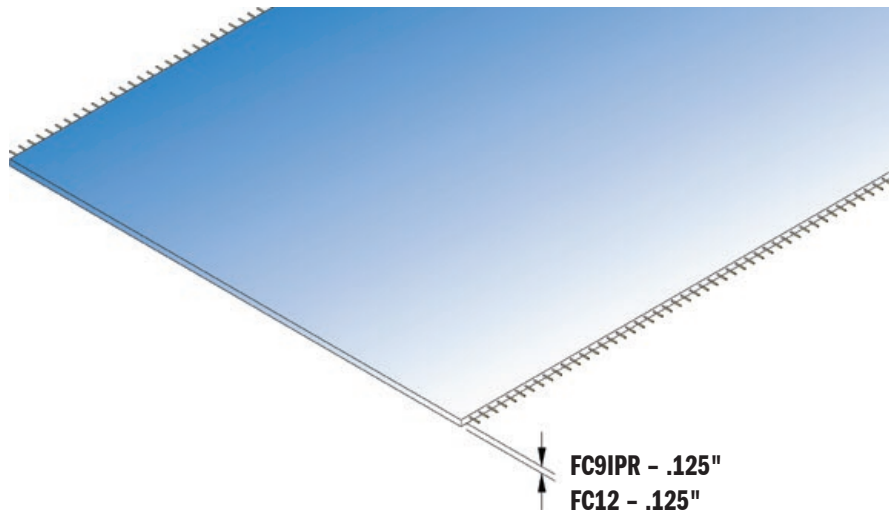
- Kevlar tensile members minimize belt stretch, reduce retensioning and extend belt life
- Made from a non-fraying, polyurethane jacket material with sealed edges that prevent ingress of microbes
- FC12 belt is for standard to high loads, particularly well-suited for clefted belts
- The FC9 series allows for a 1" minimum pulley diameter
  - Two color appearance assures correct textured surface positioning for small pulley applications

## FEATURES

- Clean-in-place process appropriate
- Urethane material compatible with wash down environments
- Kevlar® tension members provide high strength, low stretch
- Sealed edges and tension members prevent ingress of microbes
- USDA accepted for meat, poultry and dairy processing equipment
- Oil resistant

## BENEFITS

- Reduce cleaning water usage and waste water disposal by 45%
- Reduce cleaning labor by 50%
- Fabricators can easily slit roll stock without striking tensile member



## FLATCLEAN SPECIFICATIONS

Belt Options			FC12		FC9	
Designator			FC12	FC12IP		FC9IPR
Surface Finish	Top		Smooth	Inverted Pyramid		Smooth
	Running Side		Smooth	Smooth		Inverted Pyramid
Thickness			0.125" / (3.0 mm)	0.125" / (3.0 mm)		0.125" / (3.0 mm)
Hardness, Shore A	Top (Medium Blue)		95	95		90
	Running Side (PosiBlue)		95	95		95
Cords/inch			2	2		2.5
Tensile Force for 1% Elongation (k1 Relaxed) per Unit of Width			5.4 N/mm	5.4 N/mm		4.5 N/mm
Ultimate Belt Strength (lbs/inch width)			265	265		203
Specific Belt Weight (lbs/ft/in)			0.065	0.065		0.048
Specific Belt Stiffness (lbs/inch)			7400	7400		4410
Min. Pulley Dia. Service Temperature Above 25°F			2.0" (51 mm)	2.0" (51 mm)		1.0" (26 mm)
Min. Pulley Dia. Service Temperature Below 25°F			3.0" (76 mm)	3.0" (76 mm)		2.0" (51 mm)
Min. Back Bend Dia. Above 25°F			2.0" (51 mm)	2.0" (51 mm)		2.0" (51 mm)
Min. Back Bend Dia. Below 25°F			3.0" (76 mm)	3.0" (76 mm)		3.0" (76 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)
Coefficient of Friction (Dynamic/Static)						
TPU vs. UHMW	Dry	Top	0.20/0.30	0.20/0.30	Smooth	0.49/0.61
	Wet	Top	0.35/0.58	0.35/0.58	Smooth	0.50/0.65
TPU vs. Steel	Dry	Top	0.38/0.41	0.38/0.41	Smooth	0.89/1.21
	Wet	Top	0.40/0.57	0.40/0.57	Smooth	0.75/1.20
TPU vs. UHMW	Dry	Running Side	N/A	0.11/0.21	Inverted Pyramid	0.19/0.25
	Wet	Running Side	N/A	0.14/0.23	Inverted Pyramid	0.24/0.27
TPU vs. Steel	Dry	Running Side	N/A	0.22/0.27	Inverted Pyramid	0.40/0.35
	Wet	Running Side	N/A	0.23/0.28	Inverted Pyramid	0.42/0.36
Coefficient of Thermal Expansion		in/in/°F	$1.09 \times 10^{-4}$	$1.09 \times 10^{-4}$		$1.09 \times 10^{-4}$
		[mm/mm/°C]	$1.96 \times 10^{-4}$	$1.96 \times 10^{-4}$		$1.96 \times 10^{-4}$
Color		Top	PosiBlue, PosiWhite	PosiBlue, PosiWhite		Medium Blue
		Running Side				PosiBlue
Min. and Max. Width			4" / 48" (102 / 1219 mm)	4" / 48" (102 / 1219 mm)		4" / 48" (102 / 1219 mm)
Std. Length			300' (91 m)	300' (91 m)		300' (91 m)
FASTENING OPTIONS						
Max. Allowable Tension (lbs per inch width) <sup>(1)</sup>			FC12	FC12IP		FC9IPR
Platen Weld - 20 mm x 70 mm Finger			48	48		30
PosiLace™ (up to 42" wide)			NR"	NR"		N/A
Flexco® UX1SS Clipper® Wire Hooks			59	59		33
Flexco® APF100 Alligator® Plastic Rivet			N/A	N/A		27
Flexco® APF150 Alligator® Plastic Rivet			34	34		N/A
Flexco® RS62 Alligator® Ready Set™ Staple			N/A	N/A		31
Flexco® RS125 Alligator® Ready Set™ Staple			51	51		N/A

(1) Max allowable set as the lower of 25% yield strength or 2% stretch of weld or splice

### FLATCLEAN BELT SLIT WIDTH TOLERANCES

Up To and Including 15.75"	15.76" or more
+/- 0.0625"	+/- 0.125"

### GATES

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### FLATCLEAN SERIES PART NUMBER NOMENCLATURE

FC12IP 3000 / 2400

