siegling transilon
conveyor and processing belts

FULLSEAL
LOWER CLEANING COSTS AND INCREASED HYGIENE

Siegling – total belting solutions

forbo
MOVEMENT SYSTEMS

FULLSEAL
LOWER CLEANING COSTS AND INCREASED HYGIENE

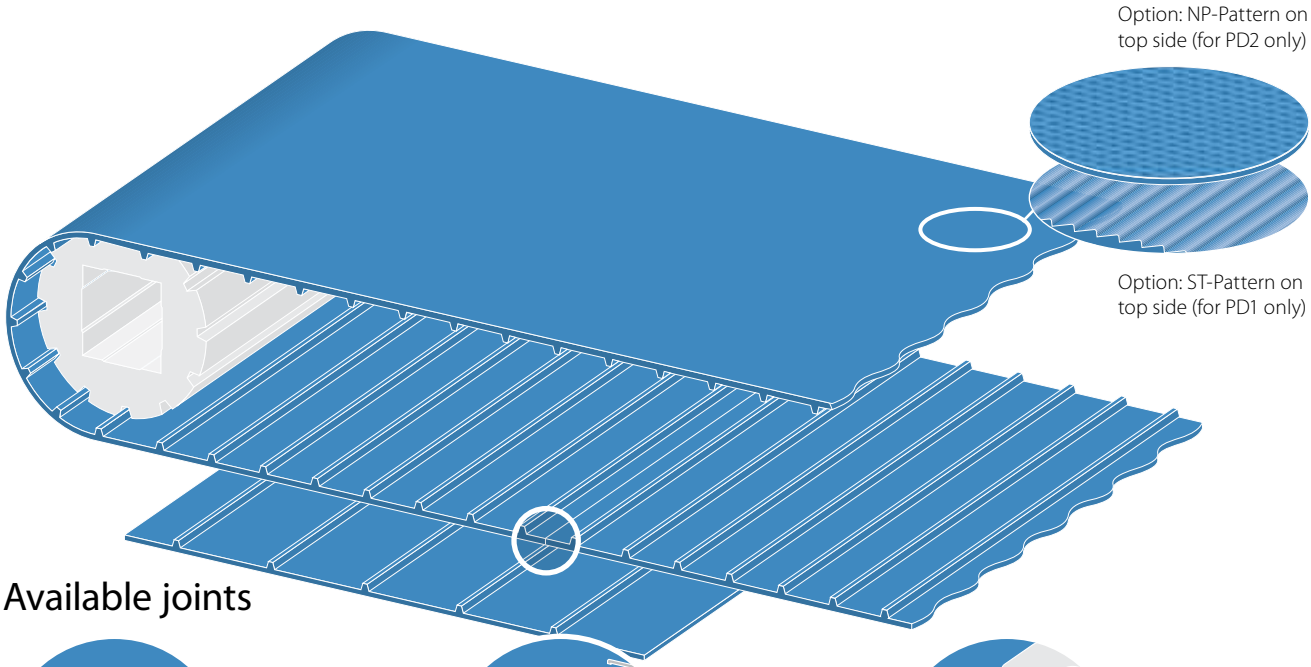
Fullseal is a product family made of homogeneous, thermoplastic polyurethane. All Fullseal belts are completely resistant to oils, fats, moisture and bacteria. They are extremely easy to clean and perfect for use in applications in which hygiene is a priority (e.g. dairy products, dough preparation, meat and poultry processing and other food processing applications).

In addition to the hygienic benefits, Fullseal belts with positive drive (PD) or center drive (CD) provide superior technical advantages. Due to the form-fit gear drive, the belts can be precisely positioned and used for slip-free operation.

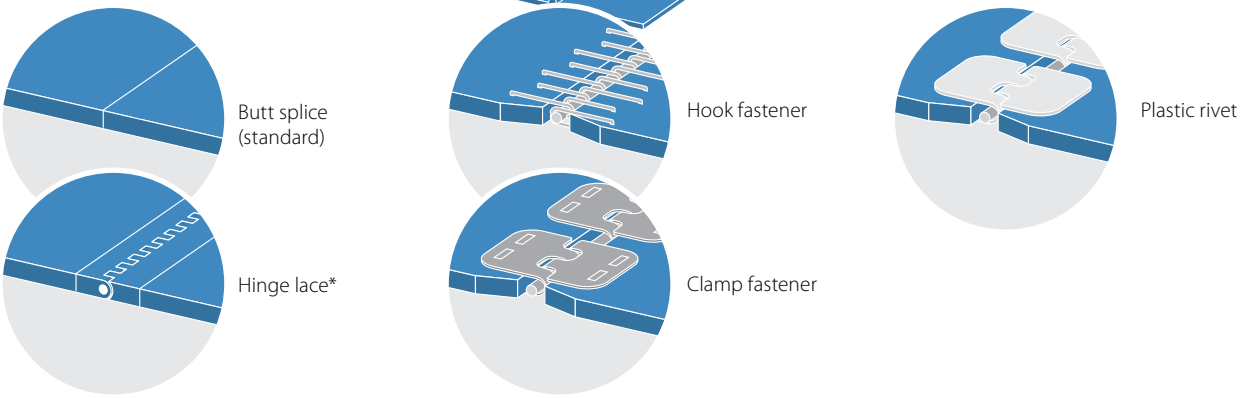
Optional profiles and sidewalls help adapt the belts to perform countless conveying tasks.

The properties	The advantages
homogeneous material with closed surface, no hinges	less water and cleaning required
centrally positioned drive lugs (center drive version)	selftracking belt, simple conveyor design, eliminates belt damage and product loss
quick and easy butt splice	minimal downtime when changing belts
troughable (center drive version)	enhanced range of applications
HACCP design	smooth surface, color option: blue, hydrolysis-resistant materials, FDA and EU-compliant
USDA authorization for dairy and meat industry	recognized high standard of hygiene
positive drive (center drive/positive drive)	precise positioning and slip-free operation

FULLSEAL POSITIVE DRIVE



Available joints



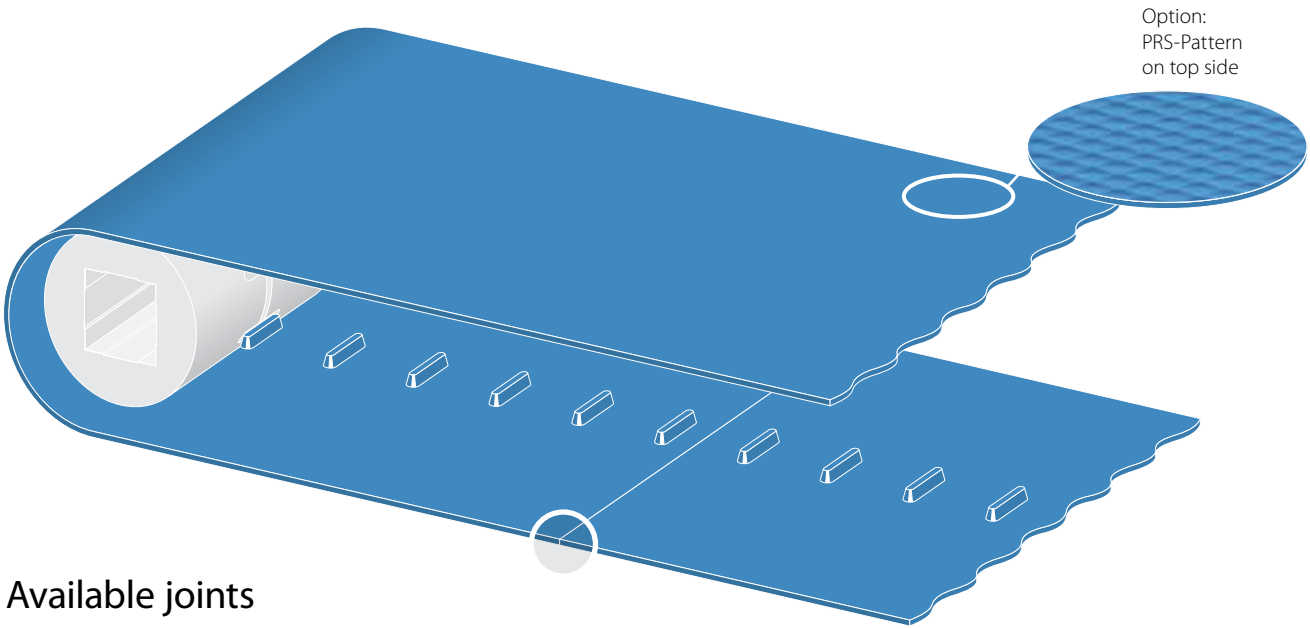
* We recommend a minimum pulley diameter of at least 150 mm (6 in)

Technical data

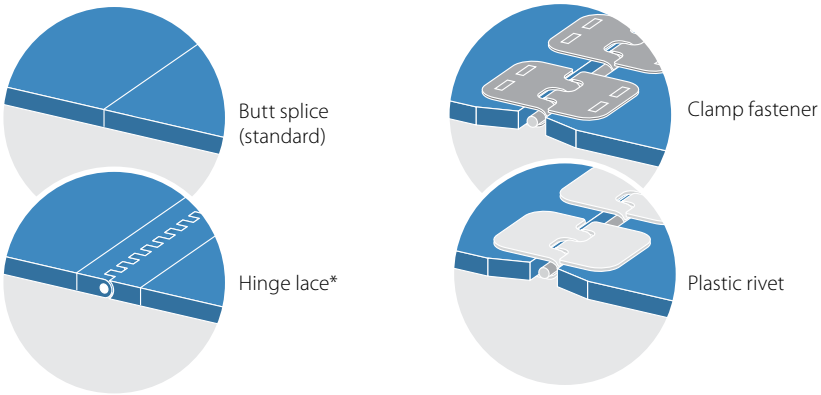
Belt types	Article number	Total thickness approx. [mm (in)]	Pitch [mm (in)]	Min pulley ø with counter bending [mm (in)]	Min pulley ø without counter bending [mm (in)]	Permissible operating temperature [°C]	Permissible operating temperature [°F]	Standard widths supplied [mm (in)]
PD1 U30 MT-NA-HACCP blue FDA	649912	3.05 (0.12)	25.908 (1.02)	83 (3.27)	51 (2)	-9/+71	+15/+160	1524 (60)
PD1 U48 ST-NA-HACCP blue FDA	649916	4.80 (0.19)	25.908 (1.02)	83 (3.27)	51 (2)	-9/+71	+15/+160	1524 (60)
PD2 U34 MT-NA-HACCP blue FDA	649913	3.43 (0.14)	50.038 (1.97)	98 (3.86)	80 (3.15)	-9/+71	+15/+160	1524 (60)
PD2 U34 MT-NA-HACCP beige FDA	649914	3.43 (0.14)	50.038 (1.97)	98 (3.86)	80 (3.15)	-9/+71	+15/+160	1524 (60)
PD2 U34 NP-NA-HACCP blue FDA	649915	3.40 (0.13)	50.038 (1.97)	98 (3.86)	80 (3.15)	-9/+71	+15/+160	1524 (60)

Blue (RAL 5015) Beige (RAL 1013)

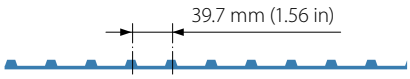
FULLSEAL CENTER DRIVE



Available joints



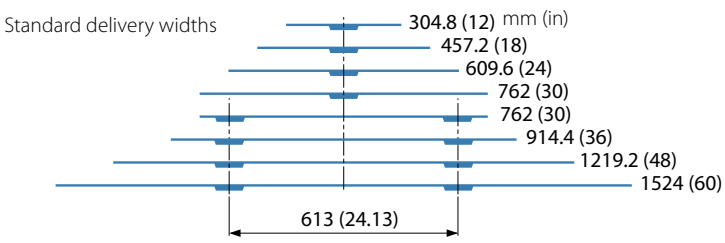
* We recommend a minimum pulley diameter of at least 150 mm (6 in)



Technical data

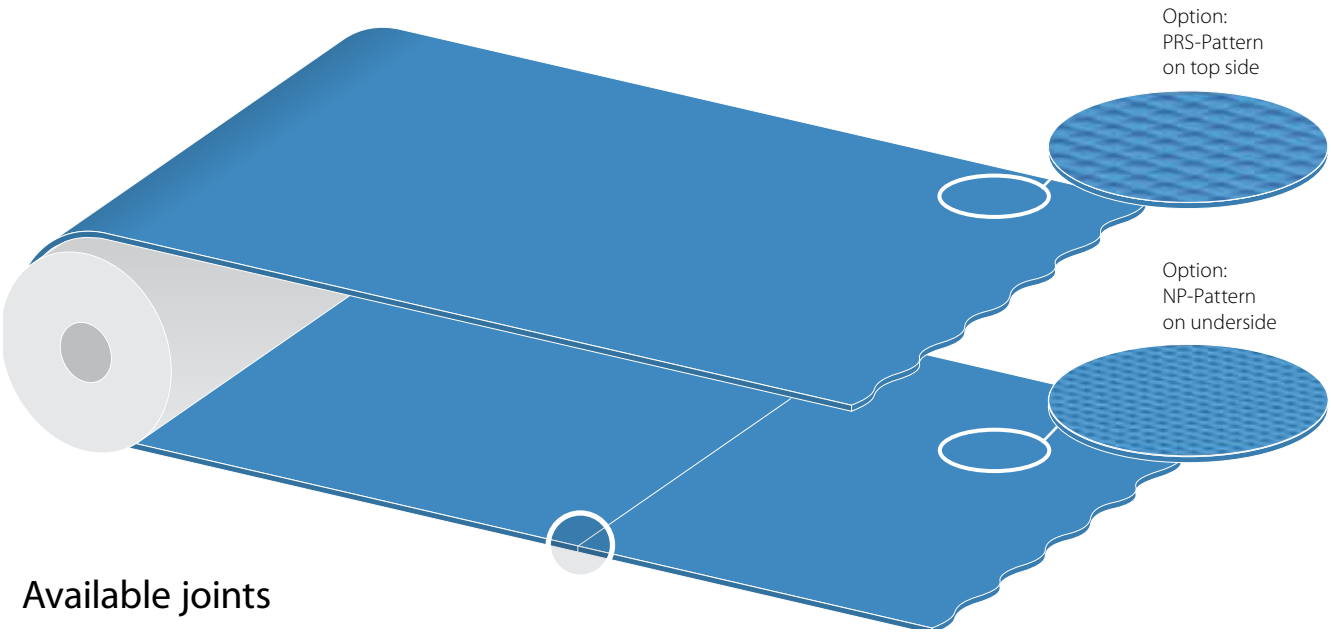
Belt types	Article number	Total thickness approx. [mm (in)]	Pitch [mm (in)]	Min pulley ø with counter bending [mm (in)]	Min pulley ø without counter bending [mm (in)]	Permissible operating temperature [°C]	Permissible operating temperature [°F]	Standard widths supplied [mm (in)]
CD40 U34 MT-NA-HACCP beige FDA	649918	3.4 (0.13)	39.7 (1.56)	98 (3.88)	80 (3.15)	-9/+71	+15/+160	see below*
CD40 U34 MT-NA-HACCP blue FDA	649919	3.4 (0.13)	39.7 (1.56)	98 (3.88)	80 (3.15)	-9/+71	+15/+160	see below*
CD40 U34 PRS-NA-HACCP blue FDA	649920	3.4 (0.13)	39.7 (1.56)	98 (3.88)	80 (3.15)	-9/+71	+15/+160	see below*

* Customized widths possible. If customized widths are ordered, we will charge for the next wider standard width as shown below.

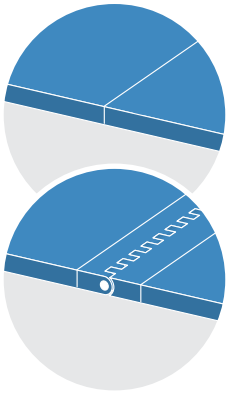


Blue (RAL 5015) Beige (RAL 1013)

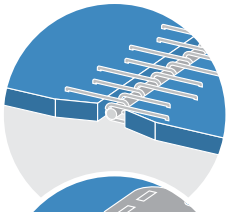
FULLSEAL FLAT

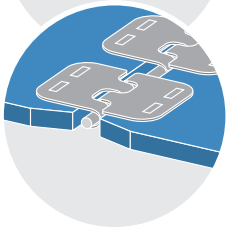


Available joints


Butt splice
(standard)

Hinge lace
(for 3 mm
thickness only)


Hook fastener


Clamp fastener

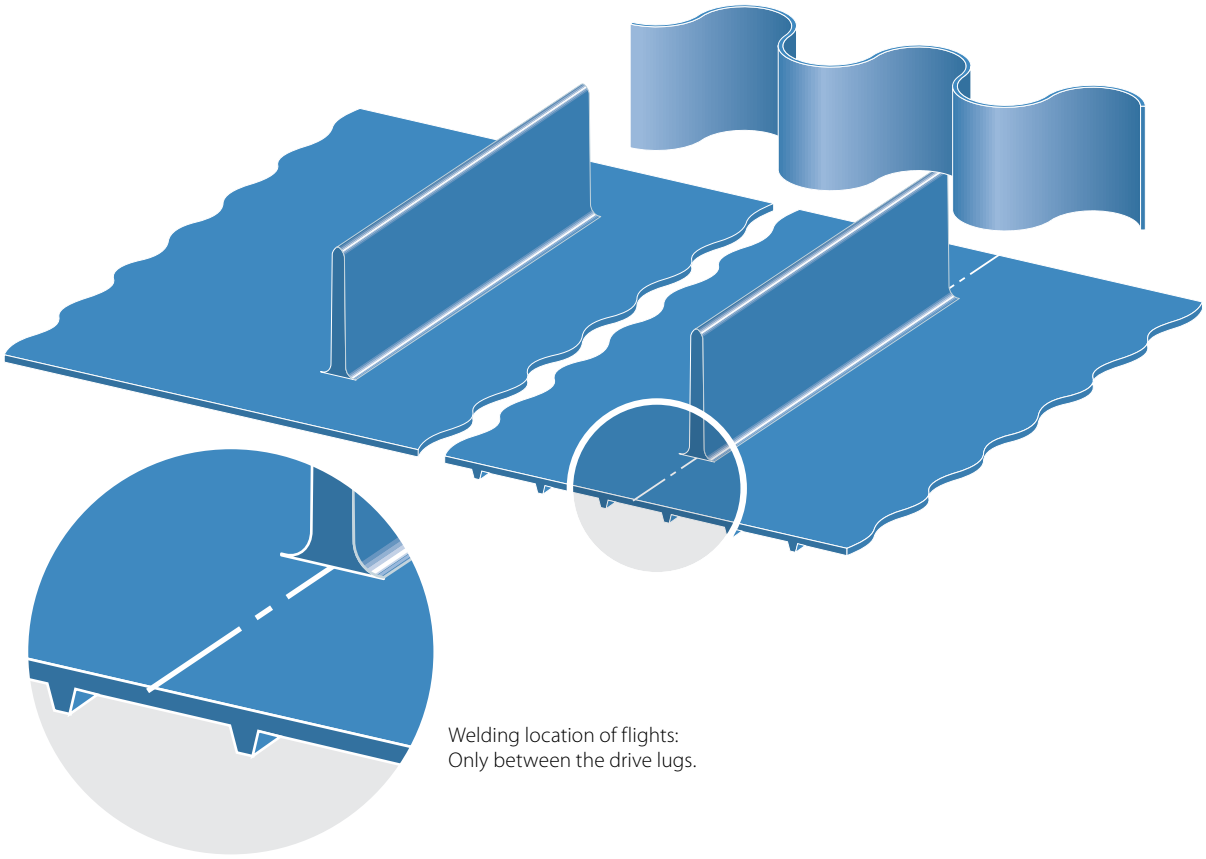
Plastic rivet

Technical data

Belt types	Article number	Total thickness approx. [mm (in)]	Effective pull at 1% elongation (kl% relaxed) [N/mm width]	Min pulley ø with counter bending [mm (in)]	Min pulley ø without counter bending [mm (in)]	Permissible operating temperature [°C]	Permissible operating temperature [°F]	Standard widths supplied [mm (in)]
FLT U20 GL/GL-NA-HACCP blue FDA	649901	2 (0.08)	1.0	30 (1.18)	30 (1.18)	-9/+71	+15/+160	1524 (60)
FLT U20 NP/GL-NA-HACCP blue FDA	649900	2 (0.08)	1.0	30 (1.18)	30 (1.18)	-9/+71	+15/+160	1524 (60)
FLT U30 GL/GL-NA-HACCP beige FDA	649905	3 (0.12)	1.5	40 (1.57)	40 (1.57)	-9/+71	+15/+160	1524 (60)
FLT U30 GL/GL-NA-HACCP blue FDA	649902	3 (0.12)	1.5	40 (1.57)	40 (1.57)	-9/+71	+15/+160	1524 (60)
FLT U30 NP/GL-NA-HACCP beige FDA	649906	3 (0.12)	1.5	40 (1.57)	45 (1.77)	-9/+71	+15/+160	1524 (60)
FLT U30 NP/GL-NA-HACCP blue FDA	649903	3 (0.12)	1.5	40 (1.57)	45 (1.77)	-9/+71	+15/+160	1524 (60)
FLT U30 PRS/NP-NA-HACCP blue FDA	649911	3.4 (0.135)	1.5	40 (1.58)	40 (1.57)	-9/+71	+15/+160	1524 (60)
FLT U30 NP/CT-NA-HACCP blue FDA	649910	3 (0.12)	1.5	40 (1.58)	40 (1.57)	-9/+71	+15/+160	1524 (60)
FLT U50 GL/GL-NA-HACCP blue FDA	649909	5 (0.20)	2.5	67 (2.64)	67 (2.64)	-9/+71	+15/+160	762 (30)

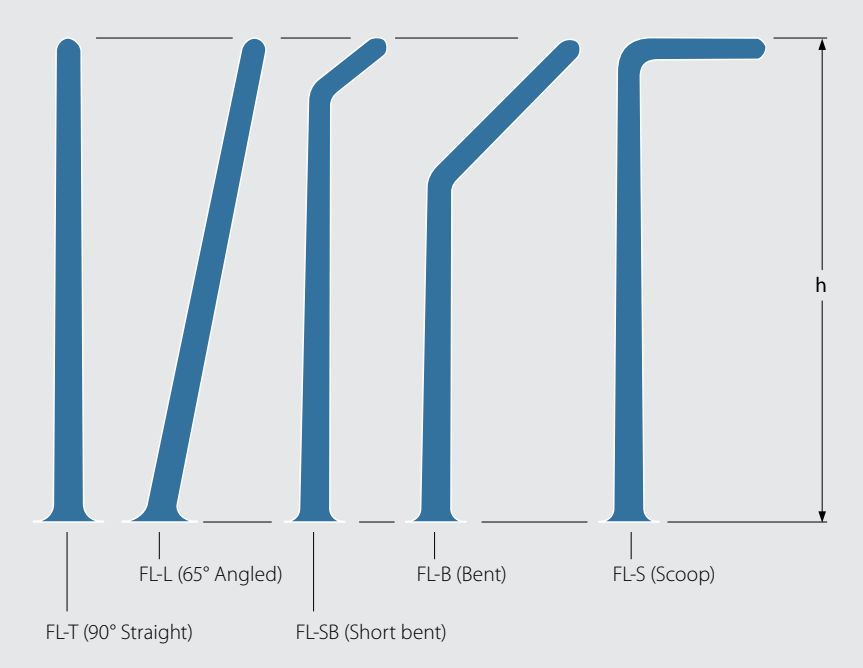
Blue (RAL 5015) Beige (RAL 1013)

PROFILES (OPTIONAL)



Welding location of flights:
Only between the drive lugs.

PU-flights (shapes)

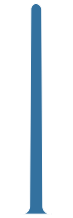


Technical data
see next page.

Blue (RAL 5015) Beige (RAL 1013)

PROFILES (OPTIONAL)

PU-flights (technical data)



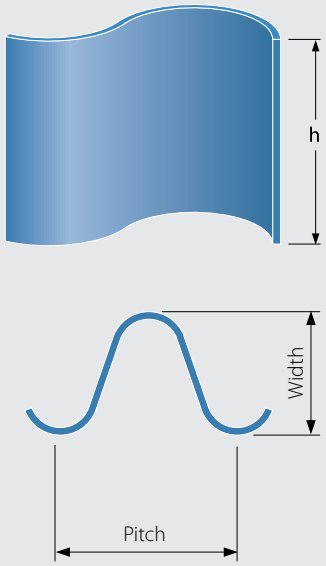
	Height h [mm (in)]	Extension [mm (in)]	Color	Material	Thickness [mm (in)]	Minimum Pulley Diameter [mm (in)]	
						Temp ≥ 0°C/32°F	Temp < 0°C/32°F
FL-T (90° straight)	25 (1)	NA	blue or beige	U95-MT/MT BL FDA or U95-NP/PRS BL FDA	3.4 or 4 (0.13 or 0.16)	101 (3.97)	151 (5.94)
	38 (1.5)						
	51 (2)						
	64 (2.5)						
	76 (3)				6 or 7 (0.24 or 0.28)	128 (5.04)	180 (7.09)
	102 (4)						
	127 (5)						
	152 (6)						
FL-L 65° (angled)	25 (1)	NA	blue or beige	U95-MT/MT BL FDA or U95-NP/PRS BL FDA	3.4 or 4 (0.13 or 0.16)	101 (3.97)	151 (5.94)
	38 (1.5)						
	51 (2)						
	64 (2.5)						
	76 (3)				6 or 7 (0.24 or 0.28)	128 (5.04)	180 (7.09)
	102 (4)						
	127 (5)						
	152 (6)						
FL-SB (short bent)	64 (2.5)	25 (1)	blue or beige	U95-MT/MT BL FDA or U95-NP/PRS BL FDA	3.4 or 4 (0.13 or 0.16)	101 (3.97)	151 (5.94)
	76 (3)						
	102 (4)						
	127 (5)				6 or 7 (0.24 or 0.28)	128 (5.04)	180 (7.09)
	152 (6)						
FL-B (bent)	102 (4)	51 (2)	blue or beige	U95-MT/MT BL FDA or U95-NP/PRS BL FDA	3.4 or 4 (0.13 or 0.16)	101 (3.97)	151 (5.94)
	127 (5)						
	152 (6)						
	102 (4)						
	127 (5)						
	152 (6)						
	102 (4)				6 or 7 (0.24 or 0.28)	128 (5.04)	180 (7.09)
	127 (5)						
	152 (6)						
	102 (4)						
	127 (5)						
	152 (6)						
FL-S (scoop)	51 (2)	51 (2)	blue or beige	U95-MT/MT BL FDA or U95-NP/PRS BL FDA	3.4 or 4 (0.13 or 0.16)	101 (3.97)	151 (5.94)
	64 (2.5)						
	51 (2)				6 or 7 (0.24 or 0.28)	128 (5.04)	180 (7.09)
	102 (4)						
	127 (5)						
	152 (6)						

U95-MT/MT BL FDA = smooth matt x matt available 4 mm or 6 mm thick.
U95-NP/PRS BL FDA = negative pyramid x positive release surface available 3.4 mm or 7 mm thick.

Detailed dimensions, tolerances, and other specifications available on request.
Contact customer service for additional information and recommendations.

PU-corrugated sidewalls

Belt type	Height h [mm (in)]	Thickness [mm (in)]	Pitch [mm (in)]	Width [mm (in)]	Color	Material	Min. pulley ø [mm (in)]	Min. pulley ø [mm (in)] counterbending
PD1	25 (1)	2 (0.08)	26 (1.02)	25 (0.98)	blue or beige	Matt/ Matt or Matt/ PRS	80 (3.15)	110 (4.33)
	38 (1.5)						90 (3.54)	120 (4.72)
	50 (2)						100 (3.94)	150 (5.90)
	64 (2.5)						110 (4.33)	180 (7.10)
	76 (3)						130 (5.12)	230 (9.05)
PD2	25 (1)	2 (0.08)	50 (1.98)	50 (1.98)	blue or beige	Matt/ Matt or Matt/ PRS	80 (3.15)	110 (4.33)
	38 (1.5)						90 (3.54)	120 (4.72)
	50 (2)						100 (3.94)	150 (5.90)
	64 (2.5)						110 (4.33)	180 (7.10)
	76 (3)						130 (5.12)	230 (9.05)
	102 (4)						160 (6.3)	300 (11.81)
	127 (5.5)						210 (8.27)	400 (15.75)
	152 (6)						250 (9.84)	450 (17.72)
CD	25 (1)	2 (0.08)	40 (1.57)	50 (1.98)	blue or beige	Matt/ Matt or Matt/ PRS	80 (3.15)	110 (4.33)
	38 (1.5)						90 (3.54)	120 (4.72)
	50 (2)						100 (3.94)	150 (5.90)
	64 (2.5)						110 (4.33)	180 (7.10)
	76 (3)						130 (5.12)	230 (9.05)
	102 (4)						160 (6.3)	300 (11.81)
	127 (5.5)						210 (8.27)	400 (15.75)
	152 (6)						250 (9.84)	450 (17.72)



Detailed dimensions, tolerances, and other specifications available on request. Contact customer service for additional information and recommendations.

Blue (RAL 5015) Beige (RAL 1013)

PU-top side guides

Minimum gap topside guide to flight or sidewall is 12 mm (0.47 in).

Two top side guides						
Guide	MPD [mm (in)]	MPD backbend	MPD [mm (in)]	MPD backbend	MPD [mm (in)]	MPD backbend
K6	101 (4)	147 (5.8)	101 (4)	147 (5.8)	101 (4)	147 (5.8)
K8	101 (4)	147 (5.8)	101 (4)	147 (5.8)	101 (4)	147 (5.8)
K10	101 (4)	147 (5.8)	101 (4)	147 (5.8)	101 (4)	147 (5.8)
K13	140 (5.5)	203 (8)	140 (5.5)	203 (8)	140 (5.5)	203 (8)
K17	203 (8)	295 (11.6)	203 (8)	295 (11.6)	203 (8)	295 (11.6)

Detailed dimensions, tolerances, and other specifications available on request. Contact customer service for additional information and recommendations.

SPROCKETS AND TAIL ROLLERS

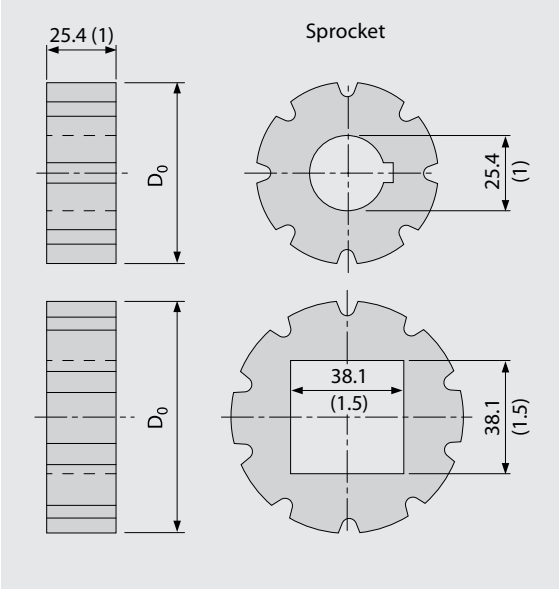
Fullseal positive drive Pitch 25.908 mm (1.02 in)

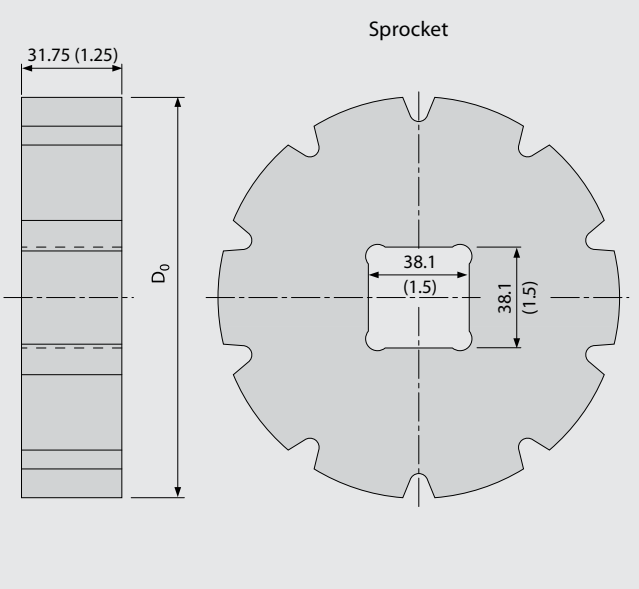
Outside dia. D_0 [mm (in)]	No. of teeth	Material	Bore [mm (in)]	Color
47.8 (1.88)	6	UHMW*	25.4 (1) RD	white
64.3 (2.53)	8	UHMW	25.4 (1) RD	white
80.8 (3.18)	10	UHMW	38.1 (1.5) SQ	white
97.2 (3.83)	12	UHMW	38.1 (1.5) SQ	white
163.3 (6.43)	20	UHMW	38.1 (1.5) SQ	white

***** UHMW-PE · Ultra-High-Molecular-Weight Polyethylene

Fullseal positive drive Pitch 50.038 mm (1.97 in)

Outside dia. D_0 [mm (in)]	No. of teeth	Material	Bore [mm (in)]	Color
93.7 (3.69)	6	UHMW*	38.1 (1.5) SQ	white
125.7 (4.95)	8	UHMW	38.1 (1.5) SQ	white
157.5 (6.20)	10	UHMW	38.1 (1.5) SQ	white
189.5 (7.46)	12	UHMW	38.1 (1.5) SQ	white
253.2 (9.97)	16	UHMW	38.1 (1.5) SQ	white





TYPE DESIGNATION

Type designation for Fullseal belts

FLT	U	30	NP/	GL	-NA-	HACCP	blue	FDA
PD1	U	30		MT	-NA-	HACCP	beige	FDA

Fullseal type
Belt material
Belt thickness in 1/10 mm
Surface finish underside
Surface finish top face
Belt property
Belt property
Color
Belt property

FLT = Flat top
CD = Center Drive · Pitch 39.7 mm (1.56 in)
PD1 = Positive drive · Pitch 25.908 mm (1.02 in)
PD2 = Positive drive · Pitch 50.038 mm (1.97 in)

U = Polyurethane
UHMW = Ultra-High-Molecular-Weight Polyethylene

CT = Crescent top
NP = Inverted pyramid
GL = Smooth
MT = Matte
PRS = Positive release structure
ST = Saw Tooth

NA = Non-antistatic

HACCP = Supports the HACCP concept
FDA = Food safe in compliance with EC/FDA (see data sheet)

Fullseal center drive Pitch 39.7 mm (1.56 in)

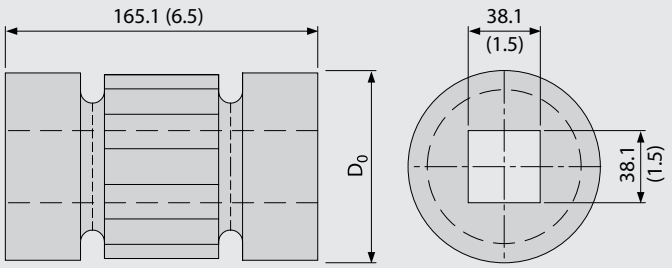
Outside dia. D_0 [mm (in)]	No. of teeth	Material	Color
101.6 (4)	8	UHMW*	white
111.76 (4.4)	9	UHMW	white
124.46 (4.9)	9	UHMW	white
137.16 (5.4)	11	UHMW	white
149.86 (5.9)	12	UHMW	white
162.56 (6.4)	13	UHMW	white
187.96 (7.4)	15	UHMW	white
200.66 (7.9)	16	UHMW	white
213.36 (8.4)	17	UHMW	white
238.76 (9.4)	19	UHMW	white
251.46 (9.9)	20	UHMW	white

***** UHMW-PE · Ultra-High-Molecular-Weight Polyethylene

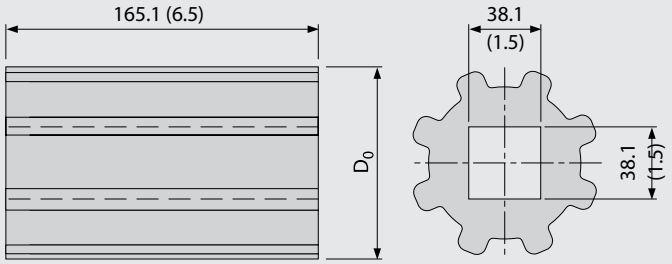
Additional sprockets bore sizes and sprockets available including flange sprockets, full width sprockets, and drum motors.

Contact customer service for additional information and recommendations.

Sprocket selftracking

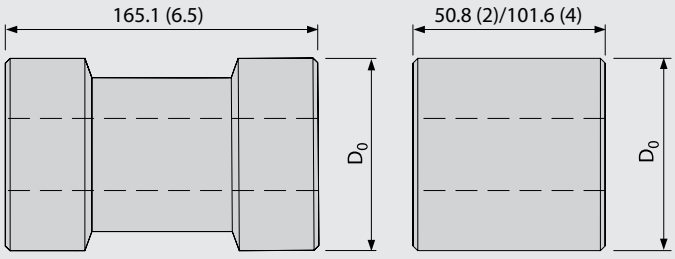


Sprocket open ended (PU material)



Tail roller

Support roller



Siegling – total belting solutions

Committed staff, quality oriented organization and production processes ensure the constantly high standards of our products and services.

Forbo Movement Systems complies with total quality management principles. Our quality management system has ISO 9001 certification at all production and fabrication sites. What's more, many sites have ISO 14001 environmental management certification.

Forbo Siegling service – anytime, anywhere

The Forbo Siegling Group employs around 2,400 people. Our products are manufactured in ten production facilities across the world. You can find companies and agencies with warehouses and workshops in over 80 countries. Forbo Siegling service points are located in more than 300 places worldwide.

Forbo Siegling, LLC.
12201 Vanstory Drive
US - Charlotte, North Carolina, 28078
Phone +1 704 948 08 00, Fax +1 704 948 09 95
www.forbo-siegling.com, siegling.us@forbo.com

Forbo
MOVEMENT SYSTEMS

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