Product range
Series 9
Pitch 50 mm (2 in)

siegling prolink
modular belts

Prolink Beltfinder

The easy way to find the right plastic modular belt for your conveyor.

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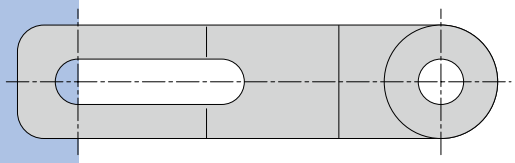
forbo
MOVEMENT SYSTEMS

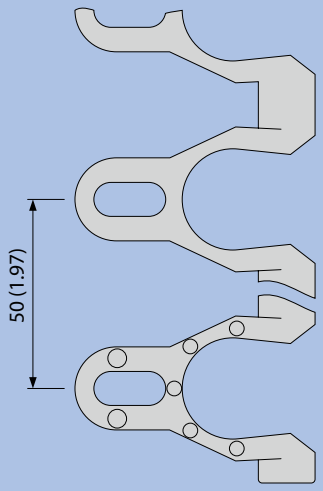
Siegling Prolink

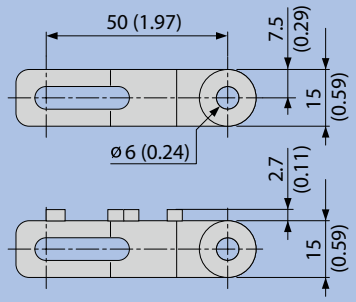
Series 9

Side flexing, pitch 50 mm (2 in)*

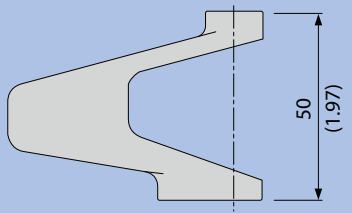


Scale 1:1

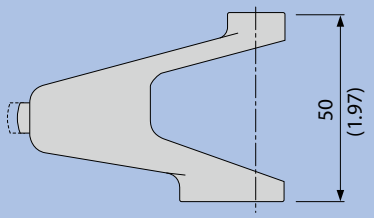




Left side module



Left F2 – F8 module



Key dimensions in mm and inches (in), scale 1:2.

* All imperial dimensions (inches) are rounded off.

** Due to the very large surface openings, personnel must be instructed not to place their fingers in or on this belt.

*** Side modules only available without NTP-pattern.

50 mm (2 in)* pitch radius and spiral belt for light and medium-duty food and non-food applications.

Design characteristics

- suitable for both straight and radius conveying
- 57 % open area for excellent air circulation and drainage**
- stainless steel hinge pins for high load capacity, lateral stiffness, less belt supports and minimum belt lifting in curves
- no potential belt edge catch points due to safe fixing of hinge pin

Special features

- nub top surface for increased grip and reduced contact area for good release
- guided version (G) eliminates the need of C-profile guides and allows utilisation of the entire belt width
- special edge modules with noses (F2 –F8) of varying size ensure smooth belt operation when the system turn radius is greater than the minimum belt turn radius

Belt types

S9-57 GRT

Open (57 %), lattice-shaped surface

S9-57 NTP

Open (57 %), lattice-shaped surface with 2.7 mm (0.11 in) high round studs 4 % contact area

S9-57 GRT G***

Open (57 %), lattice-shaped surface, side module with hold-down tabs

S9-57 GRT F2, F3, F4, F5, F6, F7, F8

Open (57 %), lattice-shaped surface, longer side modules

Pitch
50 mm (2 in)

Belt width min.
100 mm (3.9 in)

Width increments
In increments of 50 mm (2 in)

Hinge pins
Stainless steel (plastic pins can also be used for straight conveyors)

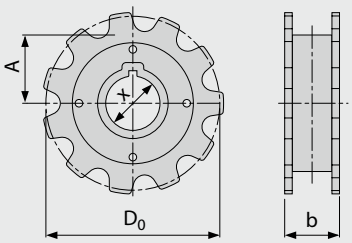
Declaration of compliances/Certificates
See fold-out page

Technical notes
Minimum curve radius = 1.8 x belt width. Minimum length of the straight in-feed/ out-feed section before and after the curve = 2 x belt width.

Please contact us should you require small curve radii.

	Materials	Colours	Open area [%]	Allowable belt pull [N/mm (lb/ft)] (Straight)	Allowable belt pull [N (lb)] (Curves)	Weight [kg/m² (lb/ft²)] (Stainles steel pins)
	PE	WT	57	12 (822)	–	9.5 (1.9)
	PP	WT, LG	57	22 (1507)	1600 (360)	9.3 (1.9)
	POM-CR	WT, LG, DB	57	30 (2055)	2800 (630)	11.5 (2.4)
	PA	BL	57	24 (1645)	2240 (504)	11.3 (2.3)
	PE		57	12 (822)	–	9.7 (2.0)
	PP	LG	57	22 (1507)	1600 (360)	9.4 (1.9)
	POM		57	30 (2055)	2800 (630)	11.7 (2.4)
	PE		57	12 (822)	–	9.5 (1.9)
	PP	LG	57	22 (1507)	1600 (360)	9.3 (1.9)
	POM-CR	WT	57	30 (2055)	2800 (630)	11.5 (2.4)
	PE		57	12 (822)	–	9.5 (1.9)
	PP		57	22 (1507)	1600 (360)	9.3 (1.9)
	POM		57	30 (2055)	2800 (630)	11.5 (2.4)

Sprockets



Sprocket size		Z10 DR	Z11 DR
b	[mm]	49	49
	[in]	(1.9)	(1.9)
D_0	[mm]	161	177
	[in]	(6.4)	(7.0)
A	[mm]	74	81
	[in]	(2.9)	(3.2)
x	**[mm] (sprocket bore metric)**		
	40		●/■
	60	■	
x	**[in] (sprocket bore imperial)**		
	1.5		■

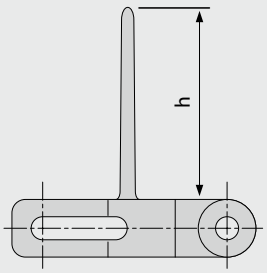
● Sprocket bore round
■ Sprocket bore square

b Sprocket width
D_0 Pitch circle diameter
A Distance centre of sprocket bore/ top edge support
DR Double row sprocket

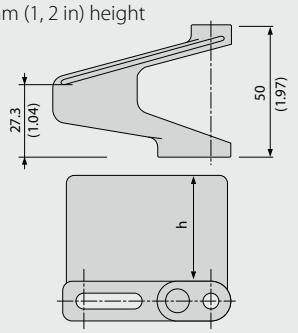
The abbreviations and type key are explained on the fold-out page at the back.

Profile and side guard designs/special modules

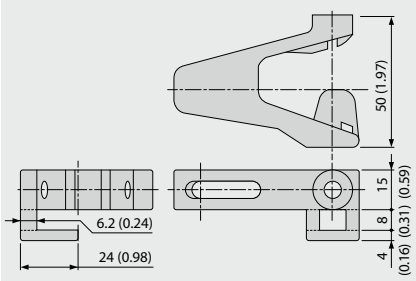
Profiles
25, 50 mm (1, 2 in) height



Side guards
25, 50 mm (1, 2 in) height



Guided version (G)



Type key*

										Series ①
										Open area/Sprocket size ②
										Surface pattern ③
										Type ④
										Style ⑤
										Material ⑥
										Colour ⑦
										Height/Diameter/Bore size and style ⑧
										Length/Width ⑨
										Cap material and colour ⑥ ⑦
S2	**-**	**Z20**		**SPR**		**POM**	**WT**	**RD1.5IN**		
S4.1	**-**	**0**	**FLT**			**PP**	**BL**			
S5	**-**	**45**	**GRT**	**SML**	**SG**	**POM**	**WT**	**H50**	**W38**	
S11	**-**	**45**	**GRT**	**CW**	**HD**	**PA**	**BL**			**(POM BL/WT)**

Legend

① Series
S1 … S13

② Open area/Sprocket size
Percentage open area
Format: xx
E.g. 20 = 20 %

For sprockets: number of teeth
Format: "Z"xx
E.g. Z12 = 12 teeth

③ Surface pattern

BSL	=	Base module for slider
CTP	=	Cone top
FLT	=	Flat top (smooth)
FRT(X)	=	Friction top (Design X)
FRT-OG	=	FRT without High Grip insert
GRT	=	Grid top
LRB	=	Lateral rib
MOD	=	Modified module shape
NCL	=	No cling
NPY	=	Inverted pyramid
NSK	=	Non skid
NTP	=	Nub top (round studs)
RAT	=	Radius top
RTP	=	Roller top
RRB	=	Raised rib
SRS	=	Slip-resistant surface

④ Type

A90	=	Angle 90° to conveying direction
CM	=	Centre module
SML	=	Side module, left
SMR	=	Side module, right
SMU	=	Side module, universal/both sides
UM	=	Universal module
PMC	=	Profile module centre
PMU	=	Profile module universal
PMU Ixx	=	Profile module universal with indent xx = indent in mm
CLP	=	Clip
IDL	=	Idler
RI	=	High Grip insert
SG	=	Module with sideguard
PIN	=	Coupling rod
FPL	=	Finger plate
SLI	=	Slider
SPR	=	Sprocket
RTR	=	Retaining ring
TPL	=	Turning panel, left
TPR	=	Turning panel, right
CW	=	Clockwise
CCW	=	Counterclockwise

⑤ Style

BT	=	Bearing tap
G	=	Guided
RG	=	Reversed guided
SG	=	Side guard
ST	=	Strong (S5)
DR	=	Double row sprocket
SP	=	Split sprocket
F1, F2, F3 …	=	Collapse factor modules
HD	=	Hold Down

⑥ Material

PA	=	Polyamide
PA-HT	=	Polyamide high temperature
PBT	=	Polybutylenterephthalate
PE	=	Polyethylene
PE-MD	=	PE metal detectable
POM	=	Polyoxymethylene (Polyacetal)
POM-CR	=	POM cut resistant
POM-HC	=	POM highly conductive
POM-MD	=	POM metal detectable
PP	=	Polypropylene
PXX-HC	=	Self-extinguishing highly conductive material
POM-PE	=	POM side modules + PE centre modules
POM-PP	=	POM side modules + PP centre modules
R1	=	TPE 80 Shore A, PP
R2	=	EPDM 80 Shore A, vulcanised
R3	=	TPE 70 Shore A, PP
R4	=	TPE 86 Shore A, PP
R5	=	TPE 52 Shore A, PP
R6	=	TPE 63 Shore A, POM
R7	=	TPE 50 Shore A, PP
R8	=	TPE 55 Shore A, PE
SER	=	Self-extinguishing TPE
SS	=	Stainless steel
HA	=	Supports the HACCP concept
HW	=	High Wear resistant material

⑦ Colour**

AT	=	Anthracite
BL	=	Blue
BG	=	Beige
BK	=	Black
DB	=	Dark blue
GN	=	Green
LB	=	Light blue
LG	=	Light grey
OR	=	Orange
RE	=	Red
TR	=	Transparent
UC	=	Uncoloured
WT	=	White
YL	=	Yellow

⑧ Height/Diameter/Bore size and style
Height in mm
Format: Hxxx

Pin diameter in mm
Format: Dxxx

Bore size: SQ (= square)
or RD (= round)
either in mm or inches
Format: SQxxMM or RDxxIN

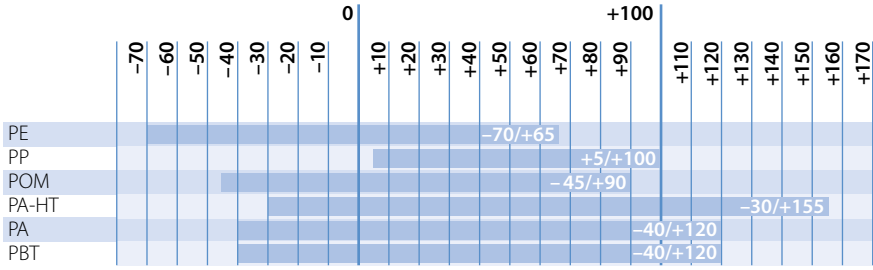
⑨ Length/Width
Pins Length in mm
Format: Lxxx

Module width in mm
Format: Wxxx

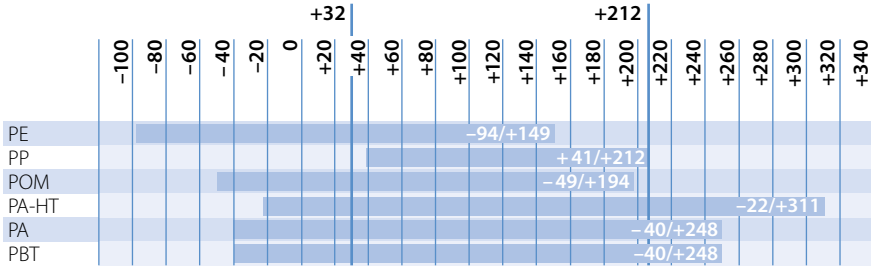
* Not every product requires all characteristics (within the designation). If there is an irrelevant characteristic, this category will be ignored and replaced by the following one.

** Please refer to the table of types for each series' standard colours. A number of other colours are available on request. Colours can vary from the original due to the print, production processes or material used.

Temperature ranges in °C



Temperature ranges in °F



HACCP types

Series 4.1, 6.1, 10 and 13 in particular support your HACCP concept with a number of hygiene-friendly characteristics. These features include:

Easy-to-clean design

– with wide channels underneath the module

Excellent resistance to hydrolysis

– resistant to hot water, cleaning agents and disinfectants

Good release properties

– beneficial when manufacturing adhesive foodstuffs (minimal product wastage)
– product residue is easy to remove
– easy-to-clean hinge design

Blue a strong colour contrast

– soiling is easier to identify
– suitable for usage in optical sorters
– reduces light reflection, making working conditions better

Declaration of compliances/ Certificates

FDA/EU

Siegling Prolink modular belts made of PE, PP, POM and PA comply with FDA 21 CFR as well as the (EU) 10/2011 and (EC) 1935/2004 regulations regarding the raw materials used and the migration thresholds.

Halal

All Siegling POM Prolink modular belts are certified as being compliant with the Halal regulations by IFRC Asia (member of the World Halal Council).

Friction top

Siegling Prolink modular belts made of PE with Friction top material R7 and of PP with Friction top material R8 comply with FDA 21 CFR as well as the (EU) 10/2011 and (EC) 1935/2004 regulations regarding the raw materials used and the migration thresholds with the exception of contact to oily and fatty foodstuff.

Materials

PE (Polyethylene)
– very good chemical resistance to acids and alkalis
– very good release properties due to low surface tension
– good friction and abrasion behaviour
– extremely tough
– low specific weight

PP (Polypropylene)
– standard material for normal conveying applications
– quite strong and stiff
– good dynamic capacity
– highly resistant to acids, alkalis, salts, alcohols
– low specific weight
– no risk of stress cracks forming

POM (Polyoxymethylene/Polyacetal)
– very dimensionally stable
– very strong and stiff
– high chemical resistance to organic solvents
– lower drag
– very durable material
– hard, incision-resistant surface

POM-CR (POM cut resistant)
– highly resistant to impact and incision
– easy to clean
– minimal ridge formation
– low risk of material delamination

POM-HC (POM highly conductive)
– highly conductive material
– surface resistivity < 10^6 Ω (according to specification)
– very strong and stiff
– very good friction and abrasion properties

POM-MD (POM metal detectable)
– material easily detected in metal detectors
– very strong and stiff
– very good tribological properties (friction and abrasion levels)

PA (Polyamide)
– good wear resistance in dry applications
– short-term temperature resistance up to 135 °C (275 °F)
– good fatigue resistance

PA-HT (Polyamide high temperature)
– material reinforced with fibre glass
– very high short-term temperature resistance up to 180 °C (356 °F)
– absorbs little water in humid environments
– very stiff
– durable

PXX-HC (self-extinguishing highly conductive material)
– flame retardant in line with DIN EN 13501-1 (C_{fl}-s1 and DIN 4102 (B1)
– surface resistivity < 10^6 Ω
– specially for use in the automotive industry

PBT (Polybutylenterephthalate)
– good wear resistance
– very good abrasive resistance
– good strength and stiffness
– not recommend for use in hot water >60 °C (140 °F)

Siegling – total belting solutions

Committed staff, quality-orientated organisation and production processes ensure the constantly high standards of our products and services. The Forbo Siegling Quality Management System is certified in accordance with ISO 9001.

In addition to product quality, environmental protection is an important corporate goal. Early on we also introduced an environmental management system, certified in accordance with ISO 14001.

Forbo Siegling service – anytime, anywhere

The Forbo Siegling Group employs more than 2,000 people. Our products are manufactured in nine 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.

MOVEMENT SYSTEMS

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