

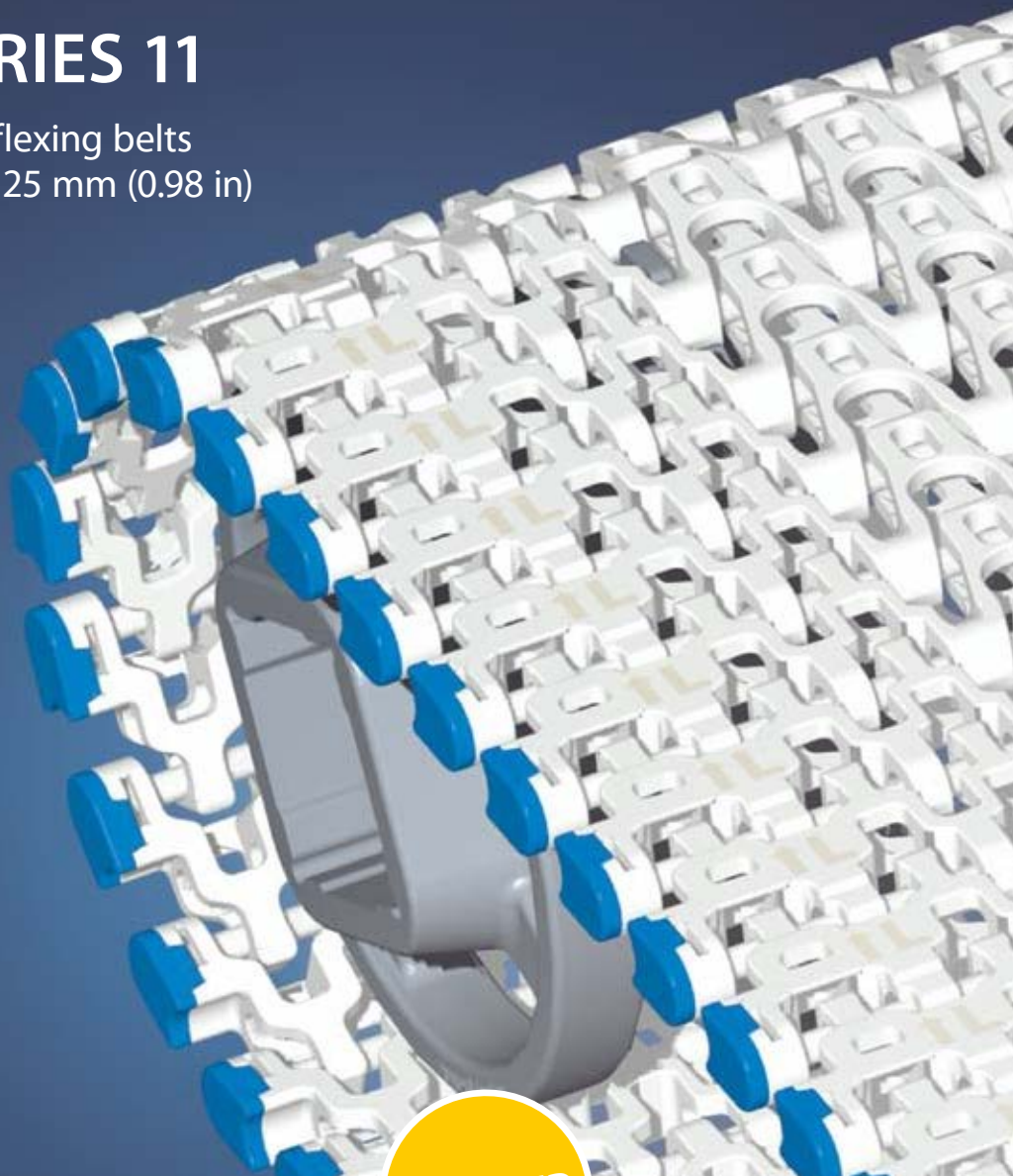
EXCERPT FROM PROLINK ENGINEERING MANUAL

12/17 (Ref-No. 888)

siegling prolink
modular belts

SERIES 11

Side flexing belts
Pitch 25 mm (0.98 in)



PATENTED

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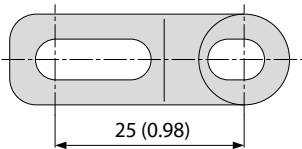
SERIES 11 | OVERVIEW

siegling prolink
modular belts

Side flexing belts | Pitch 25 mm (0.98 in)

Belts for light-duty food and non-food applications

Side view scale 1:1



Design characteristics

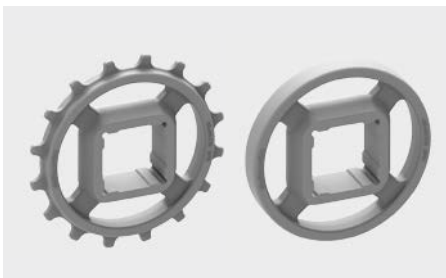
- 45 % open area provides excellent cooling and draining capabilities
- All plastic lightweight belts (plastic pins)
- Tight radius belt with minimum curve radius of 1.4 x belt width
- Outermost hinge is fixed to the pin to prevent deflection and elimination of potential belt edge catch points
- Suitable for both straight and radius conveying
- Ideal transmission of force due to sprockets offset inwards. Idlers support the belt on the outside

Basic data

Pitch	25 mm (0.98 in)
Belt width min.	175 mm (6.9 in)
Belt width max.	1000 mm (39.37 in)
Width increments	25 mm (0.98 in)
Hinge pins	5 mm (0.2 in) made of PBT. Alternative pin material on request

Sprockets/Idlers

in different sizes with round or square sprocket bore

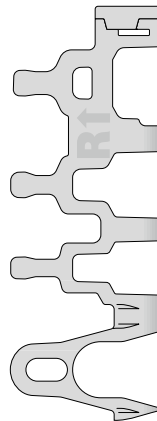


Profiles

in different heights and designs for inclines

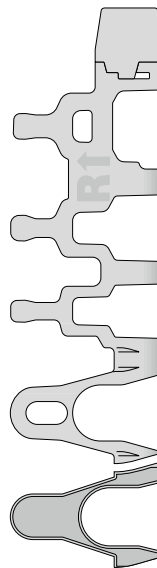


Available surface pattern and opening area



S11-45 GRT

Open (45 %), lattice-shaped surface with replaceable caps



S11-45 GRT HD

Open (45 %), lattice-shaped surface with replaceable Hold Down caps

S11-33 FRT2

Open (33 % for full FRT2 surface area), surface with friction top, flat

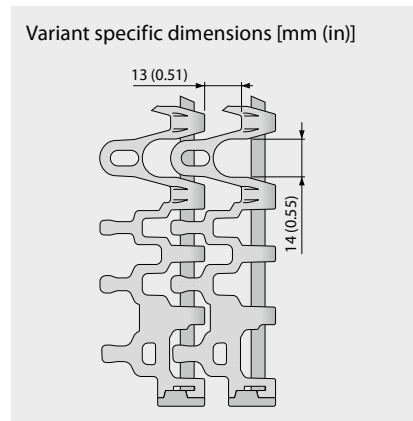
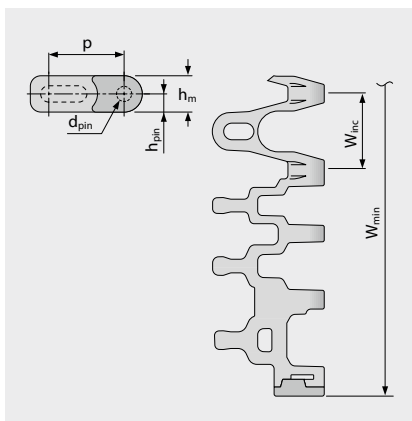
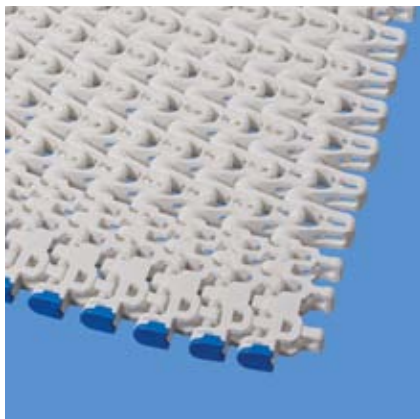
SERIES 11 | BELT TYPES

siebling prolink
modular belts

Side flexing belts | Pitch 25 mm (0.98 in)

S11-45 GRT | 45 % Opening | Grid top

Open area (45 %) for excellent air circulation and drainage | Lattice-shaped surface with robust, replaceable caps on the belt edges



Belt dimensions

	p	d _{pin}	h _m	h _{pin}	h _s	W _{min}	W _{inc}	W _{tol}	Minimum flex radii ¹⁾				
	Pitch	Pin Ø	Thickness [mm]	Pin position [mm]	Height [mm]	Width min. [mm]	Width Increment [mm]	Width tolerance [%]	r1	r2	r3	r4	r5
mm	25.0	5.0	12.0	6.0	0.0	175.0	25.0	±0.3	1.4 x W _B	25.0	50.0	75.0	25.0
inch	0.98	0.2	0.47	0.24	0.0	6.89	0.98	±0.3	–	0.98	1.97	2.95	0.98

W_B = Belt width

Available standard materials⁴⁾

Belt		Pin		Nominal belt pull, straight		Nominal belt pull, curve		Weight		Width deviation	Temperature		Certificates	
Material	Color	Material	Color	[N/mm]	[lb/ft]	[N]	[lb]	[kg/m ²]	[lb/ft ²]	[%]	[°C]	[°F]	FDA ²⁾	EU ³⁾
PP	WT	PBT	UC	9	617	600	135	4.7	0.96	0.2	5/100	41/212	●	●
PP	BL	PBT	BL	9	617	600	135	4.7	0.96	0.2	5/100	41/212	●	●
POM-CR	WT	PBT	UC	15	1028	1000	225	6.7	1.37	0.0	-45/90	-49/194	●	●
POM-CR	BL	PBT	BL	15	1028	1000	225	6.7	1.37	0.0	-45/90	-49/194	●	●
PA	BL	PBT	BL	15	1028	1000	225	5.7	1.17	0.6	-40/120	-40/248	●	●

■ BL (Blue), □ UC (Uncolored), □ WT (White)

All measurements and tolerances apply at 21 °C; for temperature deviations please see Prolink manual chapter 4.4 "Temperature influence".

All imperial dimensions (inches) are rounded off.

¹⁾ Flex radii: r1 = side flex, r2 = front flex on roller, r3 = back flex on load bearing roller, r4 = back flex on Hold Down shoe, r5 = back flex on roller

²⁾ Complies with FDA 21 CFR

³⁾ Complies with (EU) 10/2011 and (EC) 1935/2004 regulations regarding the raw materials used and the migration thresholds

⁴⁾ More materials and colors on request



MOVEMENT SYSTEMS

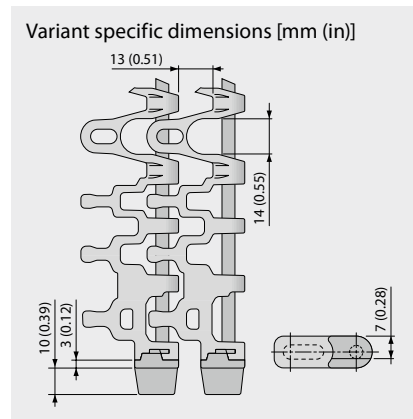
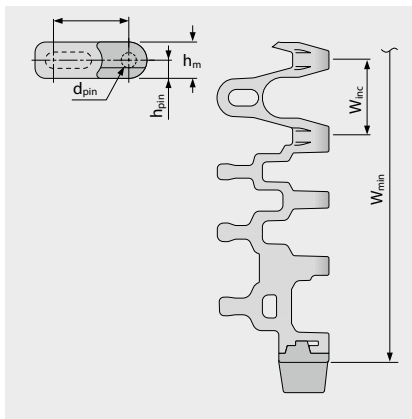
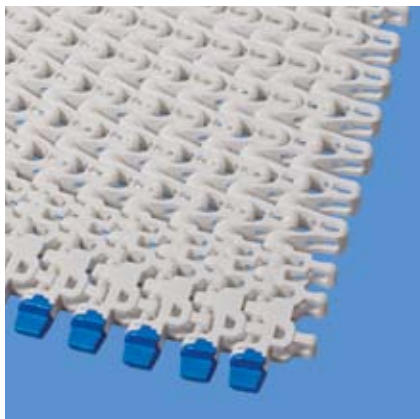
SERIES 11 | BELT TYPES

siebling prolink
modular belts

Side flexing belts | Pitch 25 mm (0.98 in)

S11-45 GRT HD | 45 % Opening | Grid top · Hold Down

Open area (45 %) for excellent air circulation and drainage | Lattice-shaped surface with replaceable Hold Down caps



Belt dimensions

	p	d _{pin}	h _m	h _{pin}	h _s	W _{min}	W _{inc}	W _{tol}	Minimum flex radii ¹⁾				
	Pitch	Pin Ø	Thickness [mm]	Pin position [mm]	Height [mm]	Width min. [mm]	Width Increment [mm]	Width tolerance [%]	r1	r2	r3	r4	r5
mm	25.0	5.0	12.0	6.0	0.0	175.0	25.0	±0.3	1.4 x W _B	25.0	50.0	75.0	25.0
inch	0.98	0.2	0.47	0.24	0.0	6.89	0.98	±0.3	–	0.98	1.97	2.95	0.98

W_B = Belt width

Available standard materials⁴⁾

Belt		Pin		Nominal belt pull, straight		Nominal belt pull, curve		Weight		Width deviation	Temperature		Certificates	
Material	Color	Material	Color	[N/mm]	[lb/ft]	[N]	[lb]	[kg/m²]	[lb/ft²]	[%]	[°C]	[°F]	FDA ²⁾	EU ³⁾
PP	WT	PBT	UC	9	617	600	135	4.7	0.96	0.2	5/100	41/212	●	●
PP	BL	PBT	BL	9	617	600	135	4.7	0.96	0.2	5/100	41/212	●	●
POM-CR	WT	PBT	UC	15	1028	1000	225	6.7	1.37	0.0	-45/90	-49/194	●	●
POM-CR	BL	PBT	BL	15	1028	1000	225	6.7	1.37	0.0	-45/90	-49/194	●	●
PA	BL	PBT	BL	15	1028	1000	225	5.7	1.17	0.6	-40/120	-40/248	●	●

■ BL (Blue), □ UC (Uncolored), □ WT (White)

All measurements and tolerances apply at 21 °C; for temperature deviations please see Prolink manual chapter 4.4 "Temperature influence".

All imperial dimensions (inches) are rounded off.

¹⁾ Flex radii: r1 = side flex, r2 = front flex on roller, r3 = back flex on load bearing roller, r4 = back flex on Hold Down shoe, r5 = back flex on roller

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⁴⁾ More materials and colors on request



MOVEMENT SYSTEMS

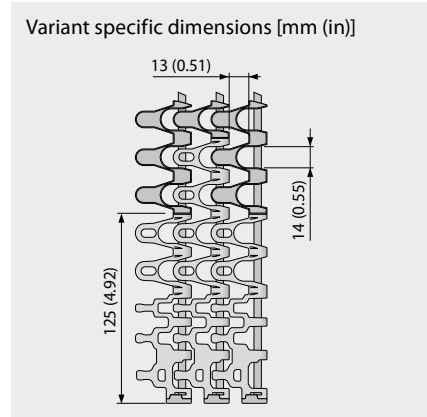
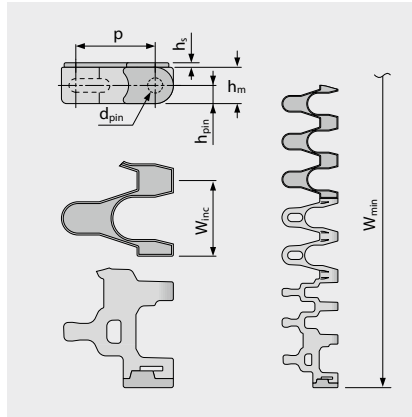
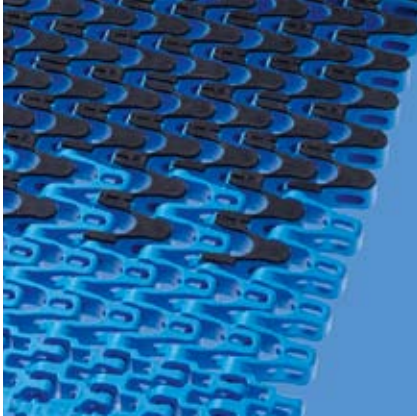
SERIES 11 | BELT TYPES

siebling prolink
modular belts

Side flexing belts | Pitch 25 mm (0.98 in)

S11-33 FRT2 | 33 % Opening | Friction top (Design 2)

Open area (33 %) for full FRT2 surface area) | Lattice-shaped surface with friction top, flat integrated friction pads in flat (FRT2) version for better grip. Minimum indent FRT2: 125 mm (5 in)/175 mm (7 in)



Belt dimensions

	p	d _{pin}	h _m	h _{pin}	h _s	W _{min}	W _{inc}	W _{tol}	Minimum flex radii ¹⁾				
	Pitch	Pin Ø	Thickness [mm]	Pin position [mm]	Height [mm]	Width min. [mm]	Width Increment [mm]	Width tolerance [%]	r1	r2	r3	r4	r5
mm	25.0	5.0	12.0	6.0	1.5	500.0	25.0	±0.3	1.4 x W _B	25.0	50.0	75.0	25.0
inch	0.98	0.2	0.47	0.24	0.06	19.69	0.98	±0.3	–	0.98	1.97	2.95	0.98

W_B = Belt width

Available standard materials⁴⁾

Belt		Pin		Rubber		Nominal belt pull, straight		Nominal belt pull, curve		Weight		Width deviation [%]	Temperature		Certificates	
Material	Color	Material	Color	Material	Color	[N/mm]	[lb/ft]	[N]	[lb]	[kg/m²]	[lb/ft²]		[°C]	[°F]	FDA ²⁾	EU ³⁾
PP	WT	PBT	UC	R7	BG	9	617	600	135	6.1	1.25	0.2	5/100	41/212	●	●
PP	BL	PBT	BL	R7	BG	9	617	600	135	6.1	1.25	0.2	5/100	41/212	●	●
PP	BL	PBT	BL	R7	BG	9	617	600	135	6.1	1.25	0.2	5/100	41/212	●	●

■ BL (Blue), ■ UC (Uncolored), ■ WT (White)

All measurements and tolerances apply at 21 °C; for temperature deviations please see Prolink manual chapter 4.4 "Temperature influence".

All imperial dimensions (inches) are rounded off.

¹⁾ Flex radii: r1 = side flex, r2 = front flex on roller, r3 = back flex on load bearing roller, r4 = back flex on Hold Down shoe, r5 = back flex on roller

²⁾ Complies with FDA 21 CFR

³⁾ Complies with (EU) 10/2011 and (EC) 1935/2004 regulations regarding the raw materials used and the migration thresholds

⁴⁾ More materials and colors on request



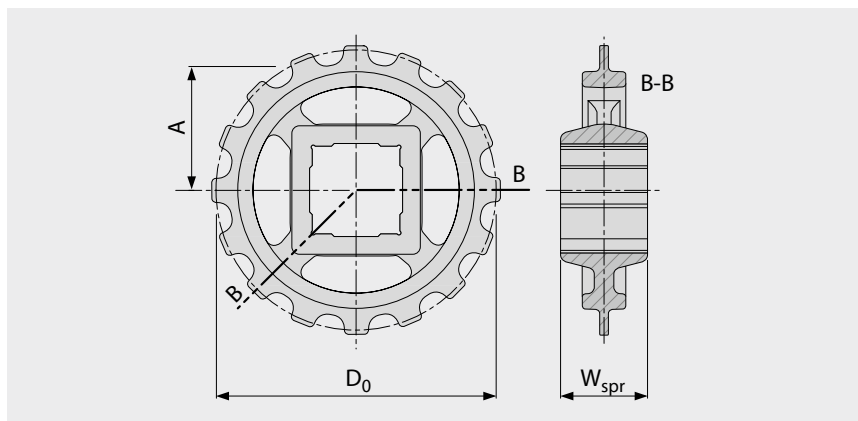
MOVEMENT SYSTEMS

SERIES 11 | SPROCKETS

siegling prolink
modular belts

Side flexing belts | Pitch 25 mm (0.98 in)

S11 SPR | Sprockets



Main dimensions

Sprocket size (Number of teeth)		Z6	Z9	Z11	Z12	Z16	Z18	Z20
W _{spr}	mm	24	24	24	24	24	24	24
	inch	0.94	0.94	0.94	0.94	0.94	0.94	0.94
D ₀	mm	50	73	89	97	128	144	160
	inch	1.97	2.88	3.49	3.80	5.05	5.67	6.29
A _{max}	mm	19	31	38	42	58	66	74
	inch	0.75	1.20	1.51	1.67	2.29	2.60	2.91
A _{min}	mm	16	29	37	41	57	65	73
	inch	0.65	1.13	1.45	1.61	2.24	2.56	2.87

Shaft bores (● = Round, ■ = Square)

25	mm		●/■	●	●/■	●	●	●
30	mm		●/■	●	●	●	●	●
40	mm			■	●/■	●/■	●/■	●/■
0.75	inch	●						
1	inch		●/■	●	●/■	●	●	●
1.25	inch		●/■	●	●	●	●	●
1.5	inch			■	●/■	●/■	●/■	●/■

Material: PA, Color: LG

■ LG (Light gray)

All measurements and tolerances apply at 21 °C; for temperature deviations please see Prolink manual chapter 4.4 "Temperature influence".
All imperial dimensions (inches) are rounded off.

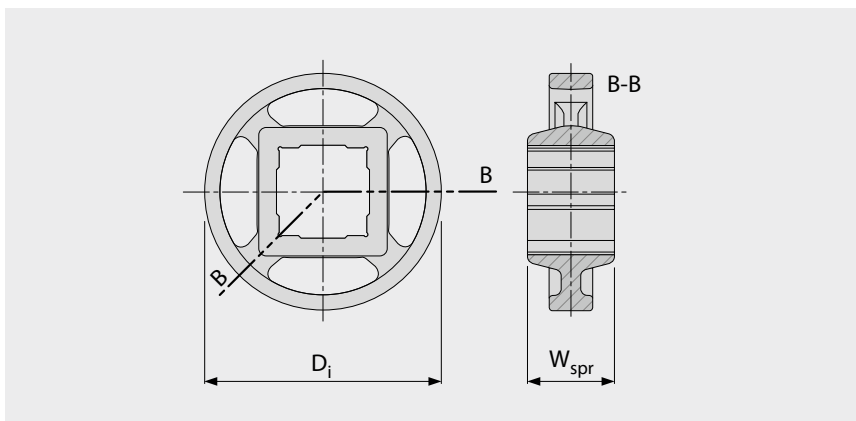
SERIES 11 | IDLER

siegling prolink
modular belts

Side flexing belts | Pitch 25 mm (0.98 in)

S11 IDL | Idler

For side support and return roller without tooth engagement



Main dimensions

Sprocket size (Number of teeth)		Z6	Z9	Z11	Z12	Z16	Z18	Z20
W _{spr}	mm	24	24	24	24	24	24	24
	inch	0.94	0.94	0.94	0.94	0.94	0.94	0.94
D _i	mm	32	56	72	80	112	128	144
	inch	1.25	2.21	2.84	3.16	4.42	5.05	5.67

Shaft bores (● = Round, ■ = Square)

25	mm		●/■	●	●/■	●	●	●
30	mm		●/■	●	●	●	●	●
40	mm			■	●/■	●/■	●/■	●/■
0.75	inch	●						
1	inch		●/■	●	●/■	●	●	●
1.25	inch		●/■	●	●	●	●	●
1.5	inch			■	●/■	●/■	●/■	●/■

Material: PA, Color: LG

■ LG (Light gray)

All measurements and tolerances apply at 21 °C; for temperature deviations please see Prolink manual chapter 4.4 "Temperature influence".
All imperial dimensions (inches) are rounded off.

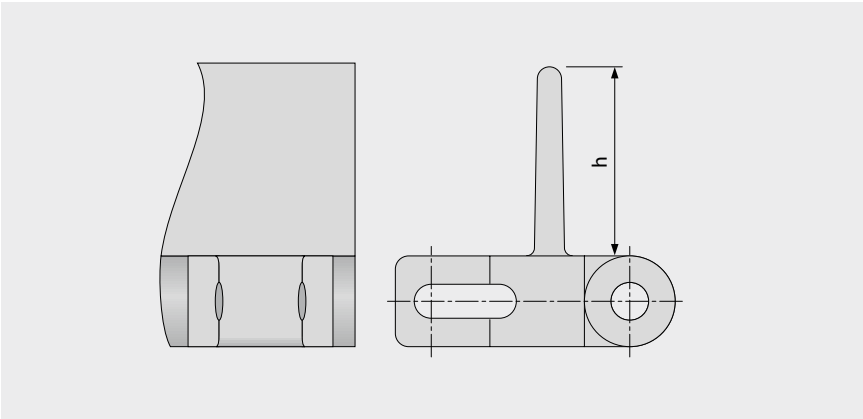
SERIES 11 | PROFILES

Side flexing belts | Pitch 25 mm (0.98 in)

siebling prolink
modular belts

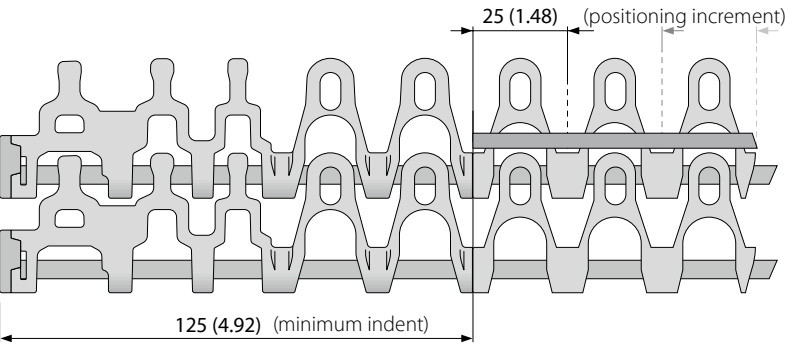
S11-45 PMC

For retention of bulk products



Basic data

Type	Material	Color	Height (h)	
			25 mm 1 inch	50 mm 2 inch
S11-45 GRT	PE	WT	●	●
		BL	●	●
	POM	DB	●	●
		UC	●	●
		WT	●	●
	PP	DB	●	●
		WT	●	●



■ BL (Blue), ■ DB (Dark blue), ■ UC (Uncolored), ■ WT (White)

All measurements and tolerances apply at 21 °C; for temperature deviations please see Prolink manual chapter 4.4 "Temperature influence".
All imperial dimensions (inches) are rounded off.

Note: Use of accessory in a belt may impact on the minimum design radii. Please see chapter 6.3 for further information.

LEGEND

① Series	
S1 ... S14	
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	Center module
SML	Side module, left
SMR	Side module, right
SMU	Side module, universal/both sides
UM	Universal module
PMC	Profile module center
PMU	Profile module universal
PMU lxx	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	Polybutylentere-phthalate
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 center modules
POM-PP	POM side modules + PP center modules
R1	TPE 80 Shore A, PP
R2	EPDM 80 Shore A, vulcanized
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
TPC1	Themoplastic Copolyester
HA	Supports the HACCP concept
HW	High Wear resistant material
⑦ Color*	
AT	Anthracite
BL	Blue
BG	Beige
BK	Black
DB	Dark blue
GN	Green
LB	Light blue
LG	Light gray
OR	Orange
RE	Red
TR	Transparent
TQ	Turquoise
UC	Uncolored
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	

* For each series' standard colors please refer to the table of materials for each belt (chapter 1.2). A number of other colors are available on request. Colors can vary from the original due to the print, production processes or material used.



MOVEMENT SYSTEMS