

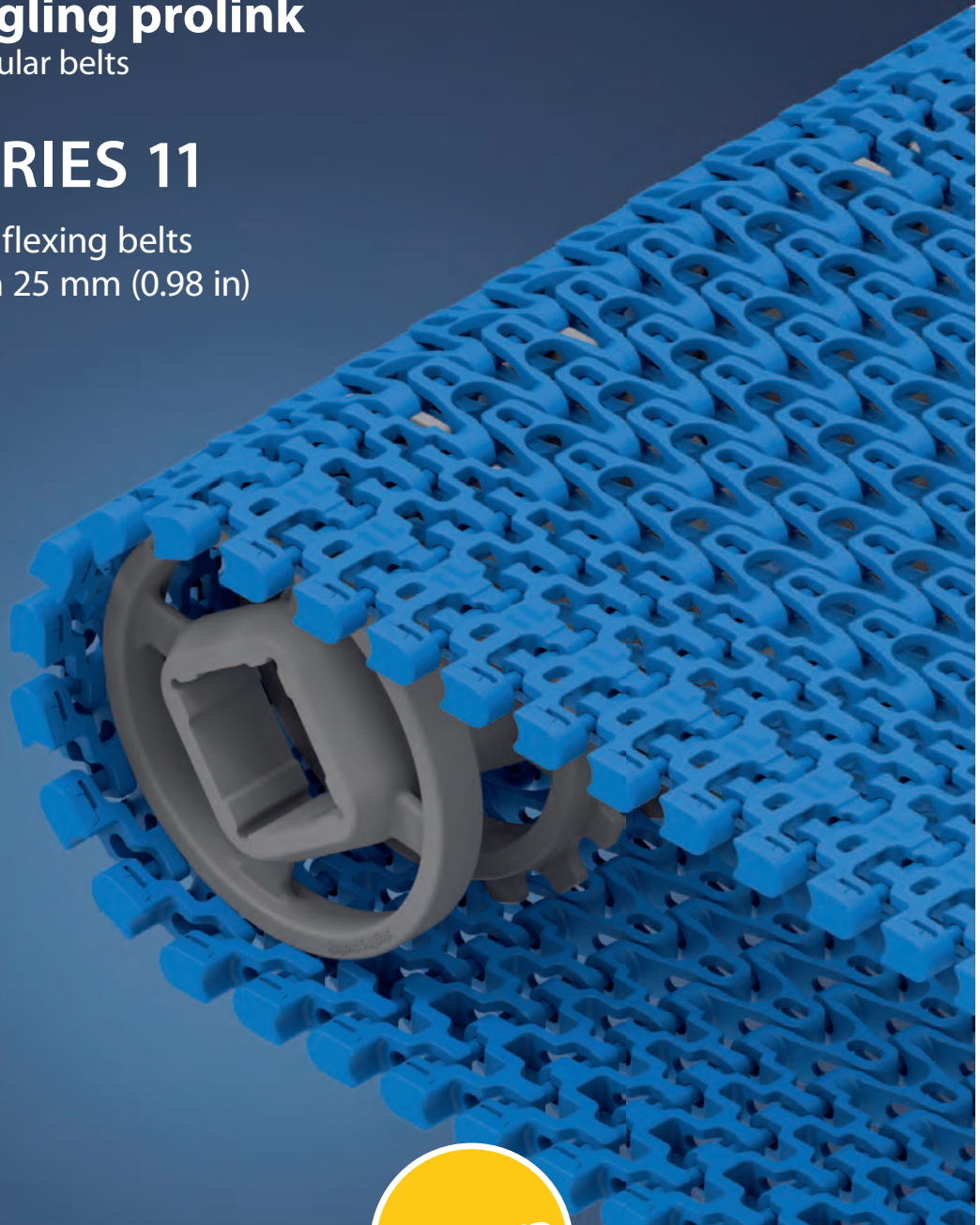
EXCERPT FROM PROLINK ENGINEERING MANUAL

01/19 (Ref-No. 888)

siegling prolink
modular belts

SERIES 11

Side flexing belts
Pitch 25 mm (0.98 in)



PATENTED

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Ref. no. 888-2_1.2_S11

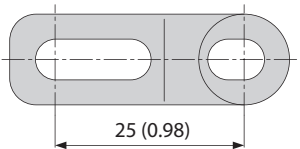
SERIES 11 | OVERVIEW

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

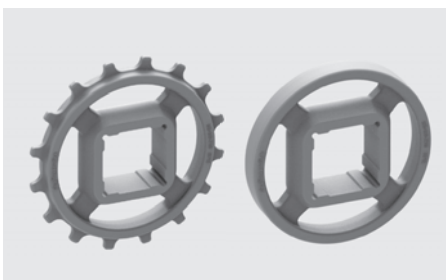
- 45% open area provides excellent cooling and draining capabilities
- All plastic lightweight belts (plastic pins)
- Tight radius belt with minimum curve radius of 1.4 x belt width
- Outermost hinge is fixed to the pin to prevent deflection and elimination of potential belt edge catch points
- Suitable 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

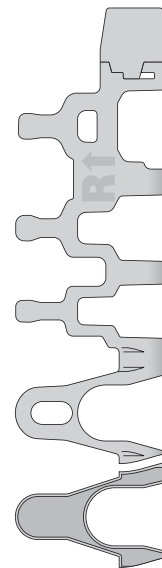


Available surface pattern and opening area



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

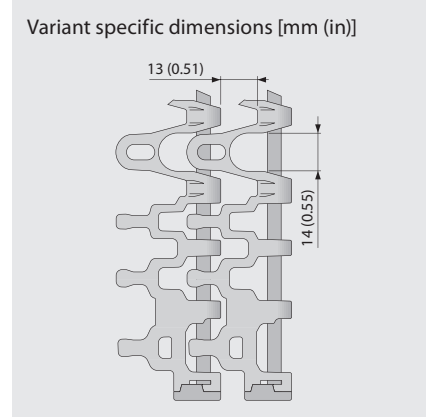
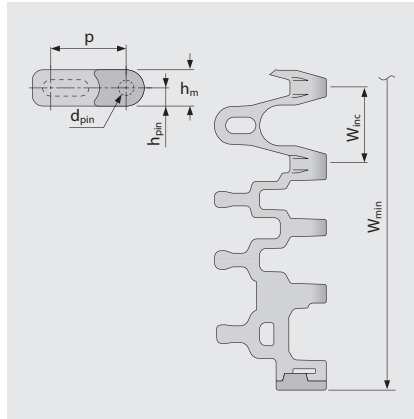
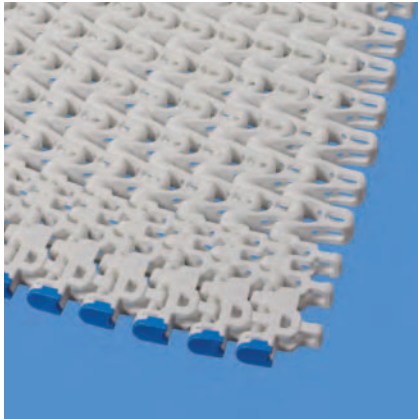
SERIES 11 | BELT TYPES

siegling prolink
modular belts

Side flexing belt | Pitch 25 mm (0.98 in)

S11-45 GRT | 45 % Opening | Grid top

Open area (45 %) for excellent air circulation and drainage | 42% contact area (Largest opening: 14 x 13 mm/0.55 x 0.51 in) | 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	1.4 x W _B	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	●	●

* Values valid for dry applications (RH <50%). Belts in PA material will absorb water in wet environments, causing them to expand and reduce the nominal belt pull capacity.

■ 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

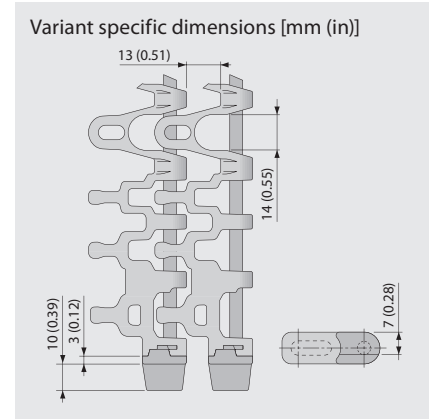
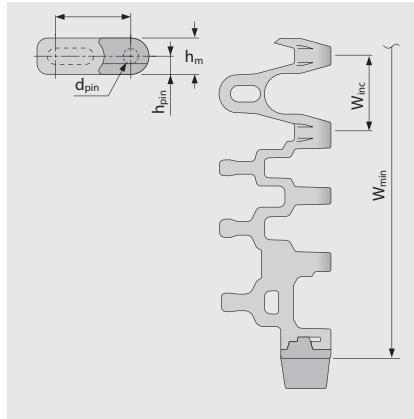
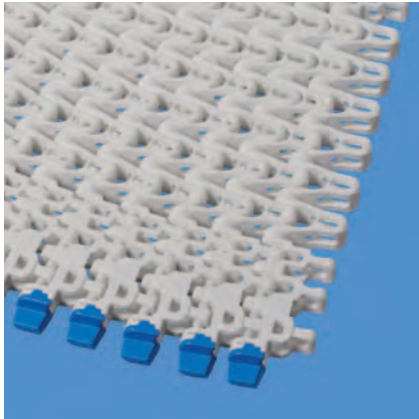
SERIES 11 | BELT TYPES

siegling prolink
modular belts

Side flexing belt | 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 | 42% contact area (Largest opening: 14 x 13 mm/0.55 x 0.51 in) | 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	1.4 x W _B	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	●	●

* Values valid for dry applications (RH <50%). Belts in PA material will absorb water in wet environments, causing them to expand and reduce the nominal belt pull capacity.

■ 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

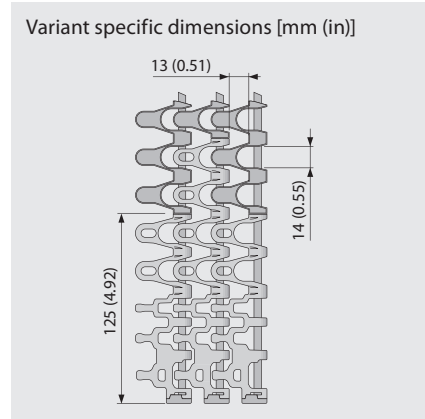
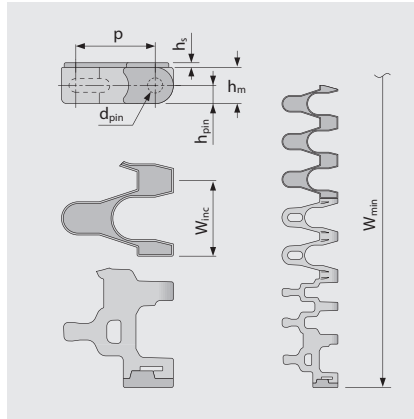
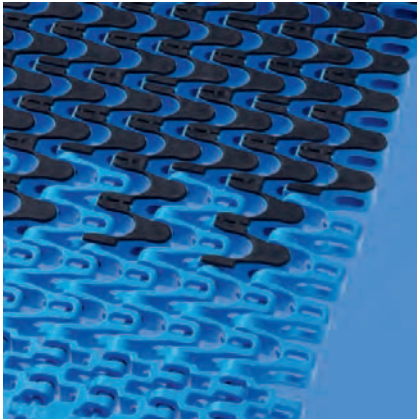
SERIES 11 | BELT TYPES

siegling prolink
modular belts

Side flexing belt | Pitch 25 mm (0.98 in)

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

Open area (33 %) for full FRT2 surface area | 47 % contact area (Largest opening: 14 x 13 mm/0.55 x 0.51 in) | Lattice-shaped surface with flat integrated friction pads (FRT2) 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	1.4 x W _B	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/m ²]	[lb/ft ²]		[°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

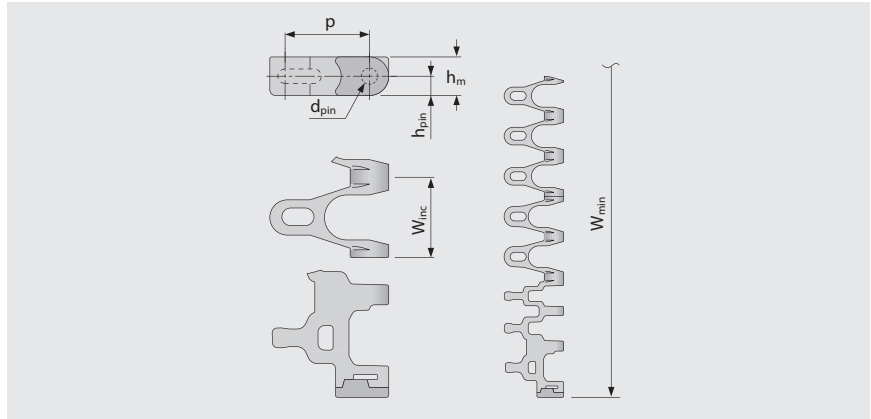
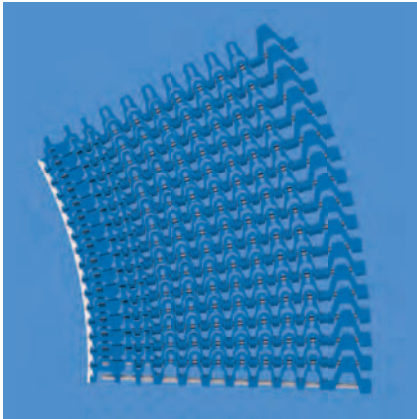
COMBO | BELT TYPES

sieging prolink
modular belts

Side flexing belt | Pitch 25 mm (0.98 in)

S11/S5 ST-45 GRT CCW | 45% Opening | Grid top | Counter clockwise or left hand curve

Combination of high belt pull capacity and small radii in one directional curve layouts | Excellent air circulation and drainage | 42% contact area (Largest opening: 14 x 13 mm/0.55 x 0.51 in) | Lattice shaped surface | SS pins for high stiffness



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	1.45 × 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	1.45 × W _B	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	SS		18	1233	1200	270	10.2	2.09	0.2	5/100	41/212	●	●
PP	BL	SS		18	1233	1200	270	10.2	2.09	0.2	5/100	41/212	●	●
POM-CR	WT	SS		25	1713	2100	472	13.2	2.70	0.0	-45/90	-49/194	●	●
POM-CR	BL	SS		25	1713	2100	472	13.2	2.70	0.0	-45/90	-49/194	●	●
PA*	BL	SS		20	1370	1680	378	13.0	2.66	0.6	-40/120	-40/248	●	●

* Values valid for dry applications (RH <50%). Belts in PA material will absorb water in wet environments, causing them to expand and reduce the nominal belt pull capacity.

■ BL (Blue), □ 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



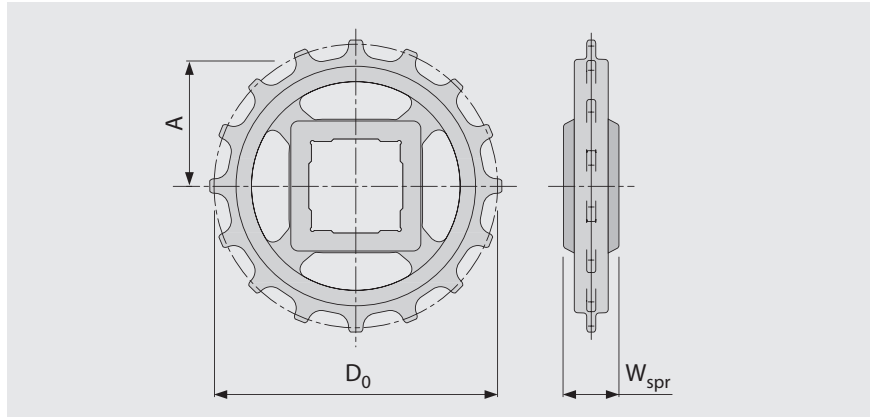
MOVEMENT SYSTEMS

SERIES 11 | SPROCKETS

siegling prolink
modular belts

Side flexing belt | 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	24.0	24.0	24.0	24.0	24.0	24.0	24.0
	inch	0.94	0.94	0.94	0.94	0.94	0.94	0.94
D ₀	mm	49.6	72.6	88.0	95.8	127.2	142.8	158.5
	inch	1.95	2.86	3.46	3.77	5.01	5.62	6.24
A _{max}	mm	18.8	30.3	38.0	41.9	57.6	65.4	73.3
	inch	0.74	1.19	1.50	1.65	2.27	2.57	2.89
A _{min}	mm	16.3	28.5	36.5	40.5	56.5	64.4	72.4
	inch	0.64	1.12	1.44	1.59	2.22	2.54	2.85

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.

For detailed sprocket and shaft dimensions see appendix 6.3.



MOVEMENT SYSTEMS

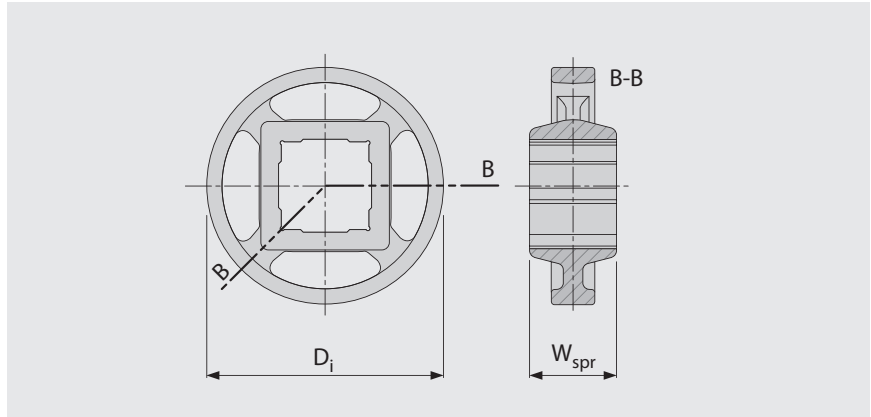
SERIES 11 | IDLER

siegling prolink
modular belts

Side flexing belt | 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	24.0	24.0	24.0	24.0	24.0	24.0	24.0
	inch	0.94	0.94	0.94	0.94	0.94	0.94	0.94
D _i	mm	31.7	56.1	72.2	80.3	112.3	128.2	144.1
	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.



MOVEMENT SYSTEMS

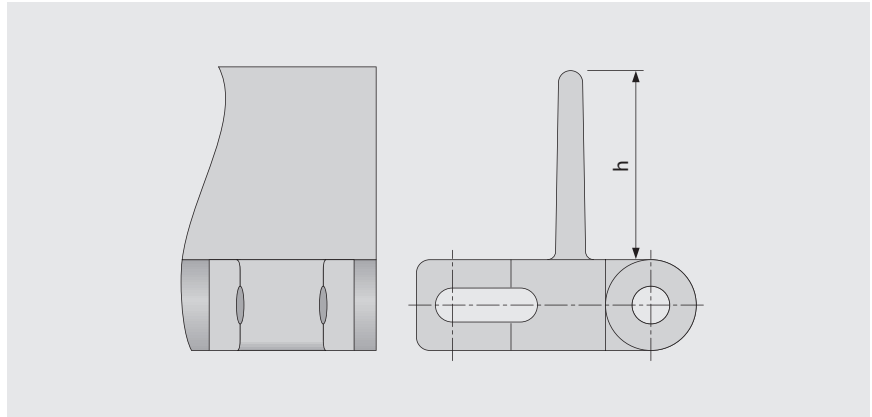
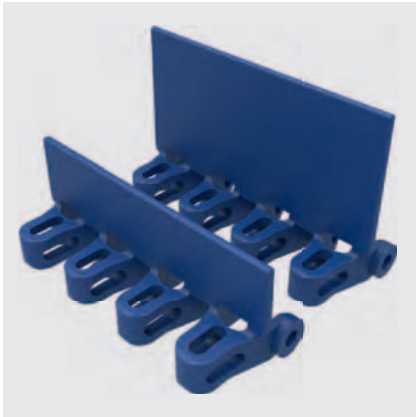
SERIES 11 | PROFILES

siegling prolink
modular belts

Side flexing belt | Pitch 25 mm (0.98 in)

S11-45 GRT PMC

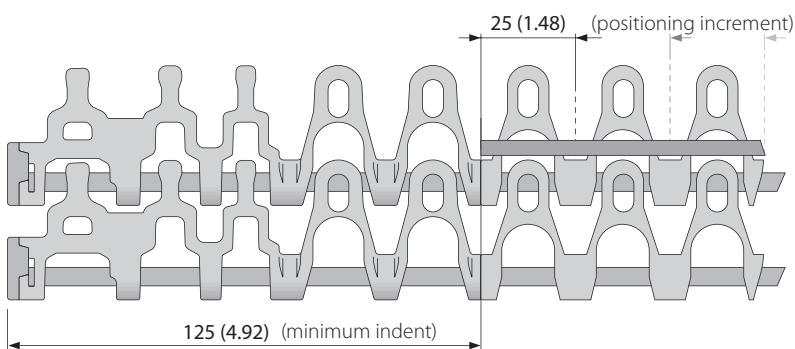
Open version (45%) base module for drainage



Basic data

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

Molded width: 100 mm (3.9 in)



■ 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.



MOVEMENT SYSTEMS

LEGEND

① Series		④ Type		⑥ Material		⑦ Color*	
S1 ... S15		A90	Angle 90° to conveying direction	PA	Polyamide	AT	Anthracite
② Open area/Sprocket size		BPU	Bucket profile	PA-HT	Polyamide high temperature	BL	Blue
Percentage open area		CM	Center module	PBT	Polybutylentere-phthalate	BG	Beige
Format: xx		SML	Side module, left	PE	Polyethylene	BK	Black
E.g. 20 = 20%		SMR	Side module, right	PE-MD	PE metal detectable	DB	Dark blue
For sprockets: number of teeth		SMU	Side module, universal/both sides	POM	Polyoxymethylene (Polyacetal)	GN	Green
Format: "Z"xx		UM	Universal module	POM-CR	POM cut resistant	LB	Light blue
E.g. Z12 = 12 teeth		PMC	Profile module center	POM-HC	POM highly conductive	LG	Light gray
③ Surface pattern		PMU	Profile module universal	POM-MD	POM metal detectable	OR	Orange
BSL	Base module for slider	PMU lxx	Profile module universal with indent xx = indent in mm	PP	Polypropylene	RE	Red
CTP	Cone top	CLP	Clip	PXX-HC	Self-extinguishing highly conductive material	TR	Transparent
FLT	Flat top (smooth)	IDL	Idler	POM-PE	POM side modules + PE center modules	TQ	Turquoise
FRT(X)	Friction top (Design X)	RI	High Grip insert	POM-PP	POM side modules + PP center modules	UC	Uncolored
FRT-OG	FRT without High Grip insert	SG	Module with sideguard	R1	TPE 80 Shore A, PP	WT	White
GRT	Grid top	PIN	Coupling rod	R2	EPDM 80 Shore A, vulcanized	YL	Yellow
LRB	Lateral rib	FPL	Finger plate	R3	TPE 70 Shore A, PP	⑧ Height/Diameter/ Bore size and style	
MOD	Modified module shape	SLI	Slider	R4	TPE 86 Shore A, PP	Height in mm	
NCL	No cling	SPR	Sprocket	R5	TPE 52 Shore A, PP	Format: Hxxx	
NPY	Negative pyramid	RTR	Retaining ring	R6	TPE 63 Shore A, POM	Pin diameter in mm	
NSK	Non skid	TPL	Turning panel, left	R7	TPE 50 Shore A, PP	Format: Dxxx	
NTP	Nub top (round studs)	TPR	Turning panel, right	R8	TPE 55 Shore A, PE	Bore size: SQ (= square) or RD (= round)	
RAT	Radius top	CW	Clockwise	SER	Self-extinguishing TPE	either in mm or inches	
RSA	Reduced surface area	CCW	Counterclockwise	SS	Stainless steel	Format: SQxxxMM or RDxxIN	
RTP	Roller top	⑤ Style		TPC1	Thermoplastic Copolyester	⑨ Length/Width	
RRB	Raised rib	BT	Bearing tap	-HA	Supports the HACCP concept	Pins Length in mm	
SRS	Slip-resistant surface	G	Guided	-HW	High Wear resistant material	Format: Lxxx	
		GT	Guiding tabs			Module width in mm	
		RG	Reversed guided			Format: Wxxx	
		SG	Side guard				
		ST	Strong (S5)				
		DR	Double row sprocket				
		SP	Split sprocket				
		F1, F2, F3 ...	Collapse factor modules				
		HD	Hold Down				

* 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.