

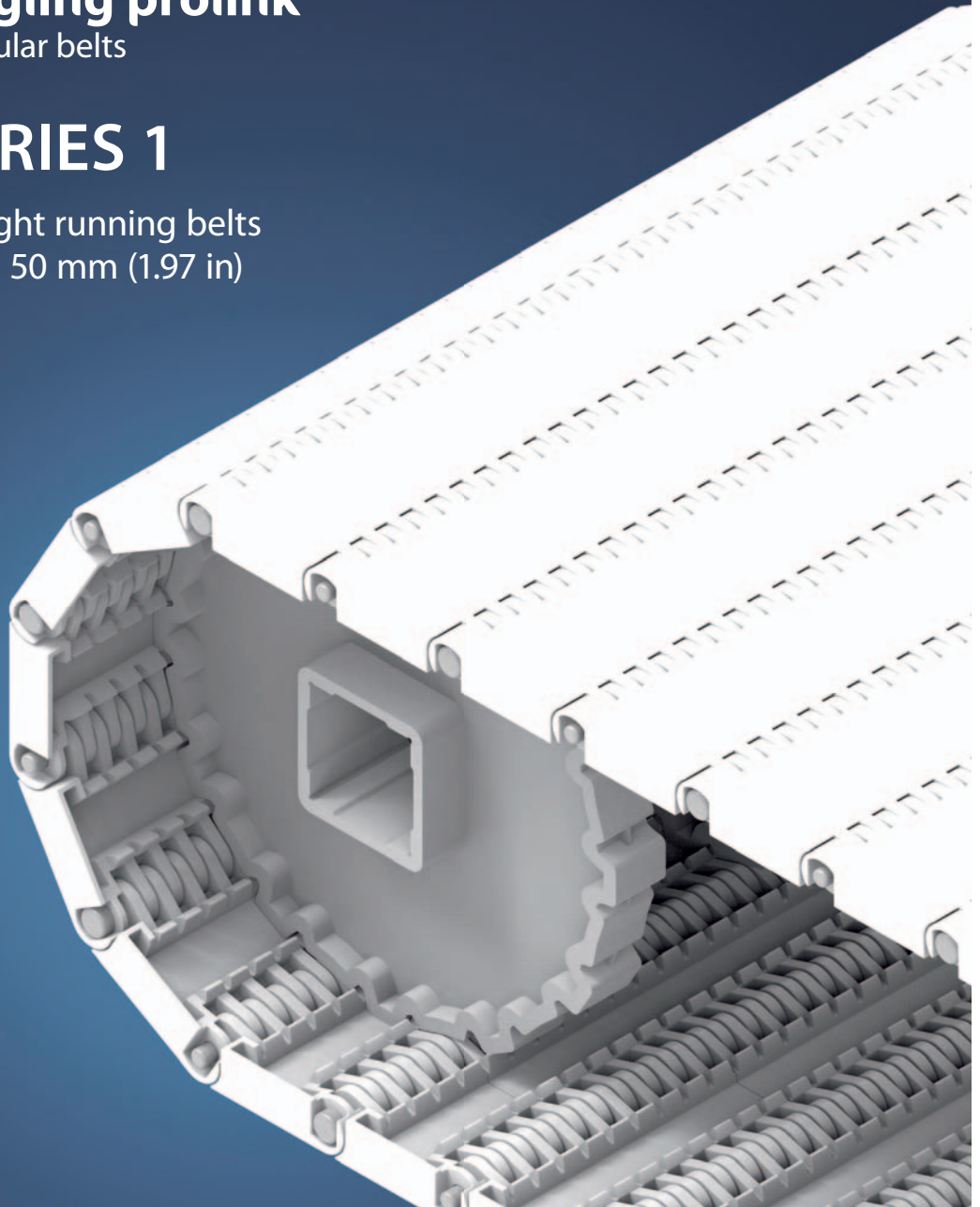
EXCERPT FROM PROLINK ENGINEERING MANUAL

05/23 (Ref-No. 888)

siegling prolink
modular belts

SERIES 1

Straight running belts
Pitch 50 mm (1.97 in)



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Ref. no. 888-2_1.2_S1

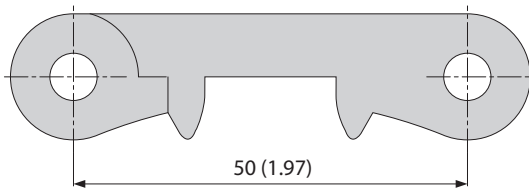
SERIES 1 | OVERVIEW

siegling prolink
modular belts

Straight running belts | Pitch 50 mm (1.97 in)

Belts for medium to heavy-duty industrial conveying applications

Side view scale 1:1



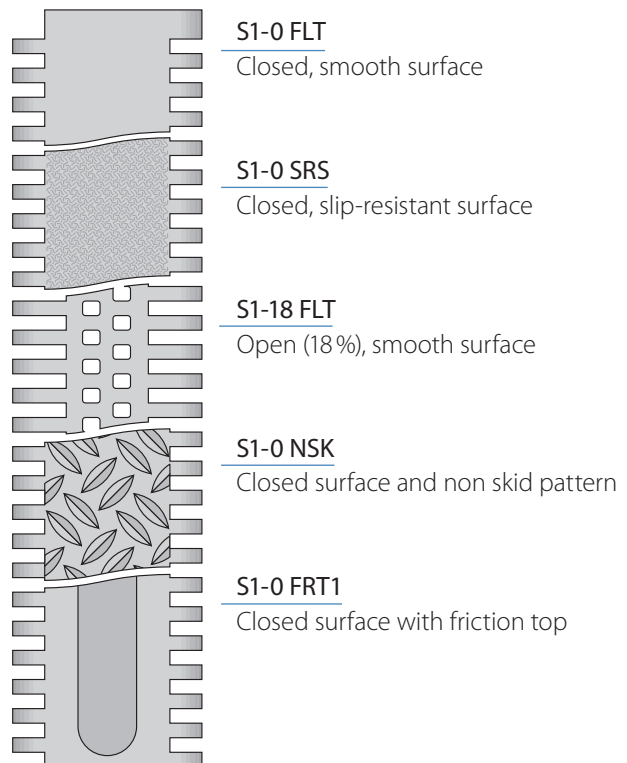
Design characteristics

- Narrow, closed hinge design provides high belt pull capacity
- Rigid module design makes belt suitable for long conveyors
- Closed solid edge design

Basic data

Pitch	50 mm (1.97 in)
Belt width min.	50 mm (1.97 in) 250 mm (9.8 in) for belts with FRT-pattern (side modules only available without FRT-pattern)
Width increments	10 mm (0.4 in)
Hinge pins	6 mm (0.24 in) made of plastic (PBT, PP, PE). One-piece up to a belt width of 1200 mm (47 in).

Available surface pattern and opening area



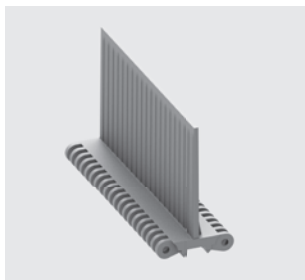
Sprockets

in different sizes with round or square sprocket bore



Profiles

in different heights and designs for inclines



Side guards

in different heights for retention of bulk products



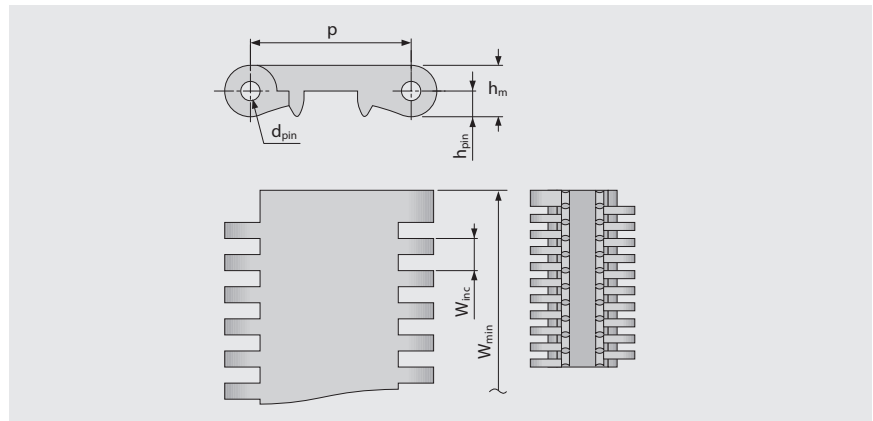
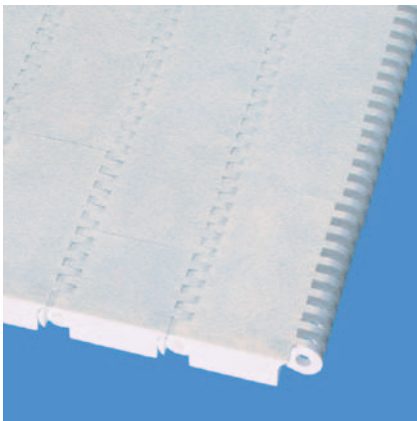
SERIES 1 | BELT TYPES

siegling prolink
modular belts

Straight running belt | Pitch 50 mm (1.97 in)

S1-0 FLT | 0% Opening | Flat top

Closed, smooth surface | Flat top surface



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	Pin position	Height	Width min.	Width Increment	Width tolerance [%]	r1 C _c x W _B	r2	r3	r4	r5
mm	50.0	6.0	16.0	8.0	0.0	50.0	10.0	±0.2	–	50.0	100.0	150.0	50.0
inch	1.97	0.24	0.63	0.31	0.0	1.97	0.39	±0.2	–	1.97	3.94	5.91	1.97

Available standard materials⁴⁾

Belt		Pin		Nominal belt pull, straight		Weight		Width deviation	Temperature		Certificates	
Material	Color	Material	Color	[N/mm]	[lb/ft]	[kg/m ²]	[lb/ft ²]	[%]	[°C]	[°F]	FDA ²⁾	EU ³⁾
PE	WT	PE	UC	18	1233	10.1	2.07	-0.35	-70/65	-94/149	●	●
POM	WT	PBT	UC	40	2741	14.4	2.95	-0.75	-45/90	-49/194	●	●
POM	AT	PBT	UC	40	2741	14.4	2.95	-0.75	-45/90	-49/194	–	–
PP	WT	PP	WT	30	2056	9.4	1.93	0.0	5/100	41/212	●	●
PP	AT	PP	WT	30	2056	9.4	1.93	0.0	5/100	41/212	–	–

■ AT (Anthracite), ■ BK (Black), □ 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

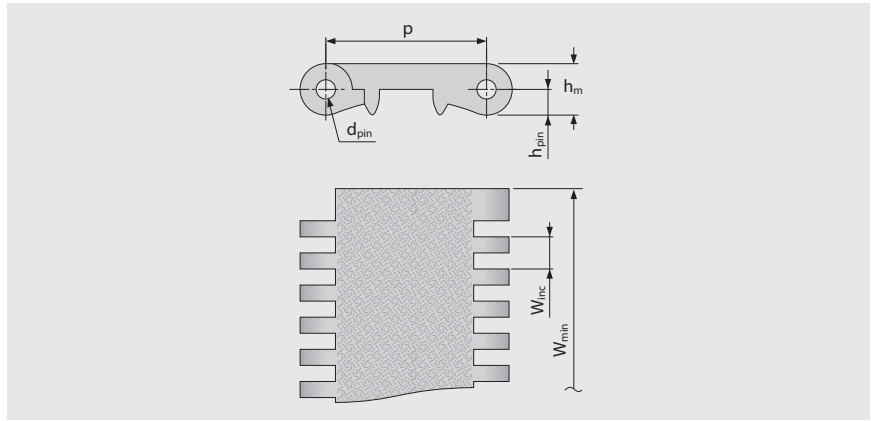
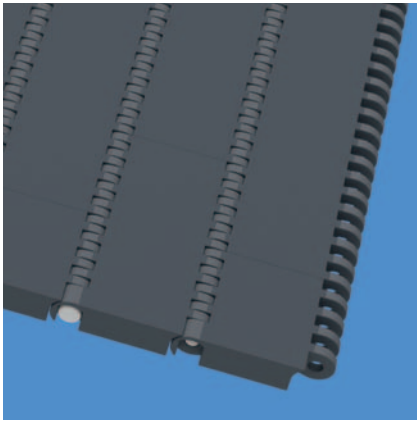
SERIES 1 | BELT TYPES

siegling prolink
modular belts

Straight running belt | Pitch 50 mm (1.97 in)

S1-0 SRS | 0% Opening | Slip-resistant surface

Closed surface | Slip-resistant surface, pleasant to walk and kneel on



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	Pin position	Height	Width min.	Width Increment	Width tolerance [%]	r1 C _c x W _B	r2	r3	r4	r5
mm	50.0	6.0	16.0	8.0	0.0	50.0	10.0	±0.2	–	50.0	100.0	150.0	50.0
inch	1.97	0.24	0.63	0.31	0.0	1.97	0.39	±0.2	–	1.97	3.94	5.91	1.97

Mold to order belts⁴⁾

Belt		Pin		Nominal belt pull, straight		Weight		Width deviation	Temperature		Certificates	
Material	Color	Material	Color	[N/mm]	[lb/ft]	[kg/m ²]	[lb/ft ²]	[%]	[°C]	[°F]	FDA ²⁾	EU ³⁾
POM	AT	PBT	UC	40	2741	14.4	2.95	-0.75	-45/90	-49/194	–	–
POM-HC	AT	PBT	UC	40	2741	14.8	3.03	-0.75	-45/90	-49/194	–	–
PXX-HC	BK	PBT	UC	20	1370	10.3	2.11	0.0	5/100	41/212	–	–

■ AT (Anthracite), ■ BK (Black), □ UC (Uncolored)

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

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⁴⁾ More materials and colors on request



MOVEMENT SYSTEMS

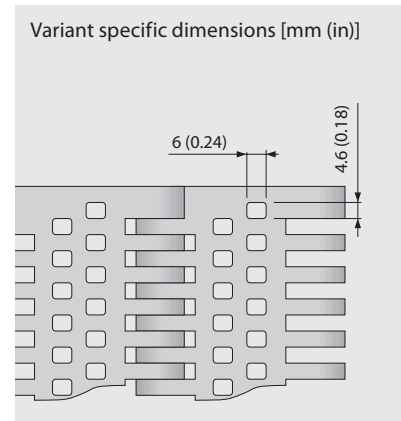
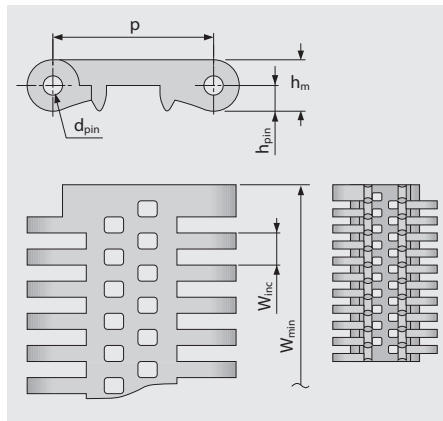
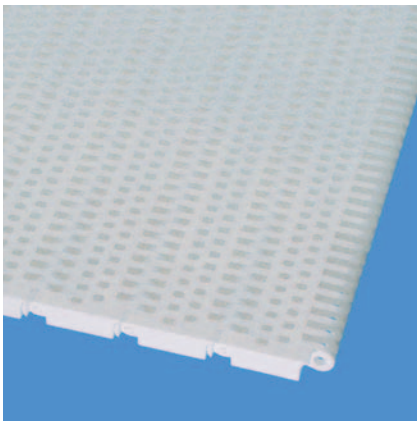
SERIES 1 | BELT TYPES

siegling prolink
modular belts

Straight running belt | Pitch 50 mm (1.97 in)

S1-18 FLT | 18% Opening | Flat top

Open version (18%) for excellent air circulation and drainage | Contact area 66% (Largest opening: 4.6 x 6 mm/0.18 x 0.24 in) | Flat top surface | Smooth surface



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	Pin position	Height	Width min.	Width Increment	Width tolerance [%]	r1 C _c x W _B	r2	r3	r4	r5
mm	50.0	6.0	16.0	8.0	0.0	50.0	10.0	±0.2	–	50.0	100.0	150.0	50.0
inch	1.97	0.24	0.63	0.31	0.0	1.97	0.39	±0.2	–	1.97	3.94	5.91	1.97

Available standard materials⁴⁾

Belt		Pin		Nominal belt pull, straight		Weight		Width deviation	Temperature		Certificates	
Material	Color	Material	Color	[N/mm]	[lb/ft]	[kg/m ²]	[lb/ft ²]	[%]	[°C]	[°F]	FDA ²⁾	EU ³⁾
PE	UC	PE	UC	18	1233	8.8	1.80	0.15	-70/65	-94/149	●	●
POM	WT	PBT	UC	40	2741	12.7	2.60	-0.7	-45/90	-49/194	●	●
PP	WT	PP	WT	30	2056	8.2	1.68	0.0	5/100	41/212	●	●

□ 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

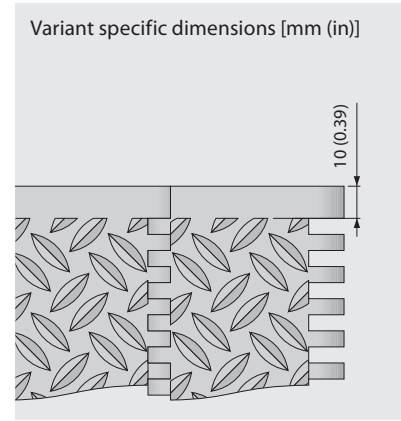
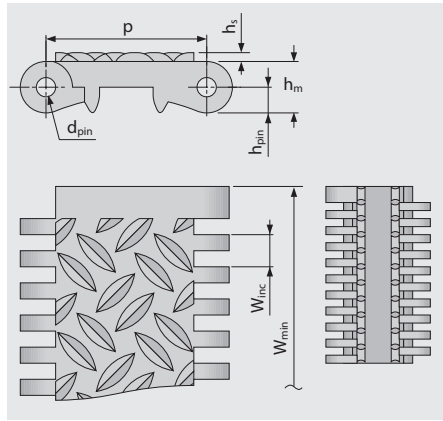
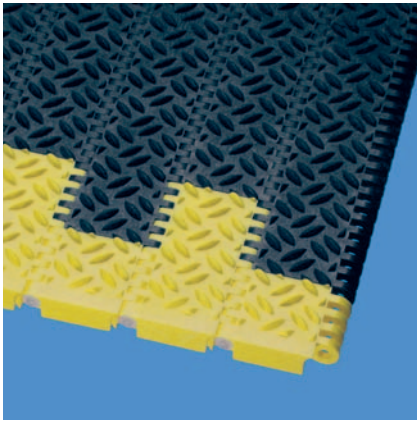
SERIES 1 | BELT TYPES

siegling prolink
modular belts

Straight running belt | Pitch 50 mm (1.97 in)

S1-0 NSK | 0% Opening | Non skid

Closed surface | Non skid surface for increased safety when walking on belt



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	Pin position	Height	Width min.	Width Increment	Width tolerance [%]	r1 C _c x W _B	r2	r3	r4	r5
mm	50.0	6.0	16.0	8.0	2.8	50.0	10.0	±0.2	–	50.0	100.0	150.0	50.0
inch	1.97	0.24	0.63	0.31	0.11	1.97	0.39	±0.2	–	1.97	3.94	5.91	1.97

Available standard materials⁴⁾

Belt		Pin		Nominal belt pull, straight		Weight		Width deviation [%]	Temperature		Certificates	
Material	Color	Material	Color	[N/mm]	[lb/ft]	[kg/m ²]	[lb/ft ²]		[°C]	[°F]	FDA ²⁾	EU ³⁾
POM	AT	PBT	UC	40	2741	16.0	3.28	-0.75	-45/90	-49/194	–	–
POM-HC	AT	PBT	UC	40	2741	16.0	3.28	-0.75	-45/90	-49/194	–	–
POM	YL	PBT	UC	40	2741	16.0	3.28	-0.75	-45/90	-49/194	●	●

■ AT (Anthracite), □ UC (Uncolored), ■ YL (Yellow)

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

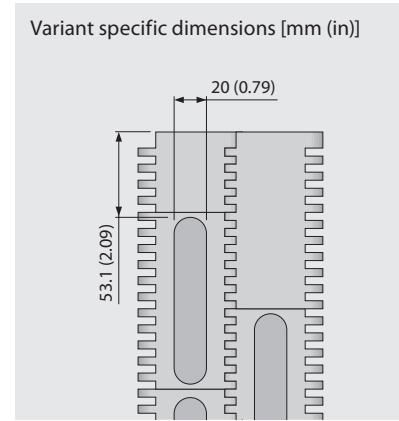
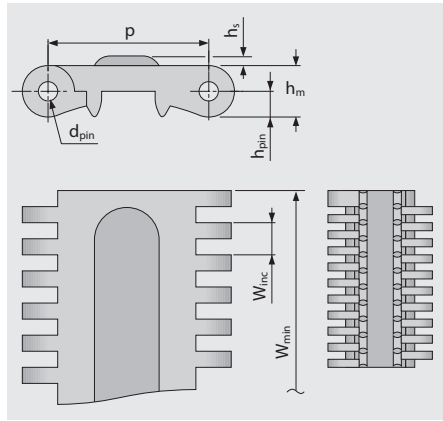
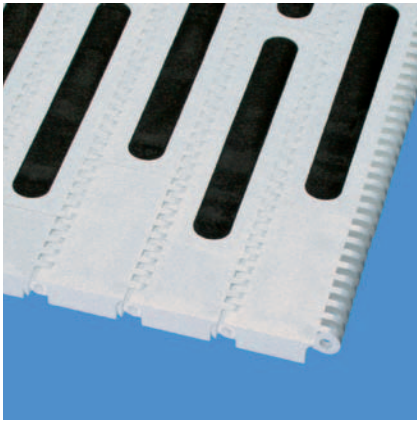
SERIES 1 | BELT TYPES

siegling prolink
modular belts

Straight running belt | Pitch 50 mm (1.97 in)

S1-0 FRT1 | 0% Opening | Friction top (Design 1)

Closed surface | Friction top with replaceable rubber pads for increased grip



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	Pin position	Height	Width min.	Width Increment	Width tolerance [%]	r1 C _c x W _B	r2	r3	r4	r5
mm	50.0	6.0	16.0	8.0	3.0	250.0	10.0	±0.2	–	50.0	100.0	150.0	50.0
inch	1.97	0.24	0.63	0.31	0.12	9.84	0.39	±0.2	–	1.97	3.94	5.91	1.97

Available standard materials⁴⁾

Belt		Pin		Rubber		Nominal belt pull, straight		Weight		Width deviation	Temperature		Certificates	
Material	Color	Material	Color	Material	Color	[N/mm]	[lb/ft]	[kg/m ²]	[lb/ft ²]	[%]	[°C]	[°F]	FDA ²⁾	EU ³⁾
POM	WT	PBT	UC	R2	BK	40	2741	15.0	3.07	-0.75	-45/90	-49/194	–	–

■ BK (Black), □ 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



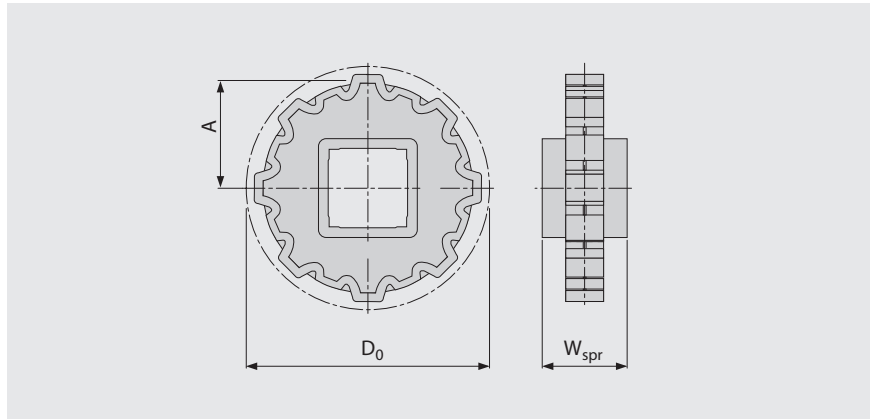
MOVEMENT SYSTEMS

SERIES 1 | SPROCKETS

siegling prolink
modular belts

Straight running belt | Pitch 50 mm (1.97 in)

S1 SPR | Sprockets



Main dimensions

Sprocket size (Number of teeth)		Z6	Z8	Z10	Z12	Z16
W _{spr}	mm	40.0	40.0	40.0	40.0	40.0
	inch	1.57	1.57	1.57	1.57	1.57
D ₀	mm	100.0	130.8	161.8	193.2	256.3
	inch	3.94	5.15	6.37	7.61	10.09
A _{max}	mm	42.0	57.4	72.9	88.6	120.1
	inch	1.65	2.26	2.87	3.49	4.73
A _{min}	mm	36.4	53.0	69.3	85.6	117.8
	inch	1.43	2.09	2.73	3.37	4.64

Shaft bores (● = Round, ■ = Square)

25	mm			●		
30	mm	●	●	●		
40	mm	■	■	■	■	■
60	mm		■	■	■	■
80	mm				■	■
1	inch	●	●	●		
1.5	inch	■	■	■	■	
2.5	inch				■	■

Material: POM, Color: UC

□ UC (Uncolored)

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

Number of sprockets (sprocket spacing distance) see chapter 3.2



MOVEMENT SYSTEMS

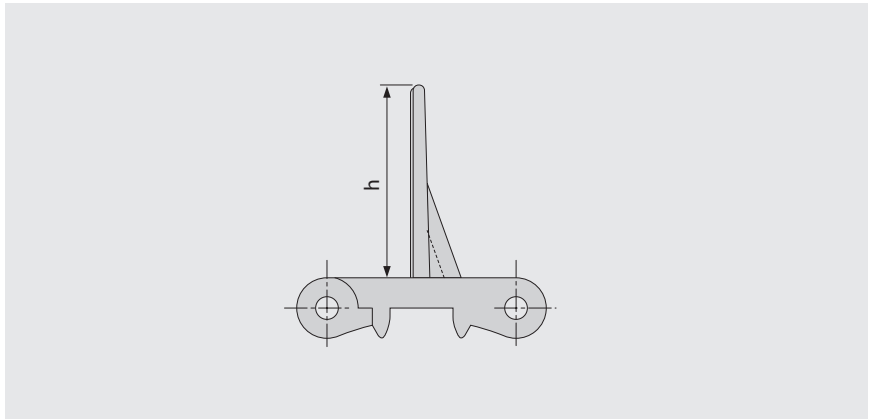
SERIES 1 | PROFILES

siegling prolink
modular belts

Straight running belt | Pitch 50 mm (1.97 in)

S1-0 FLT PMC

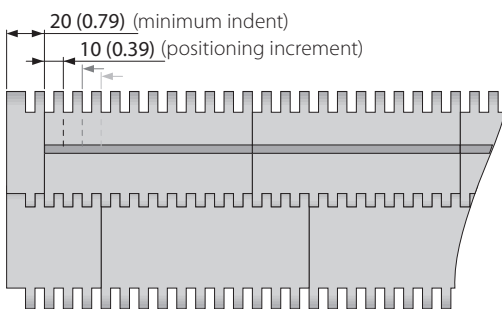
Flat top surface for dry products | No cling surface to improve release of wet and sticky products



Basic data

Material	Color	Height (h)	
		50 mm 2 inch	100 mm 4 inch
PE	WT	●	●
POM	AT	●	
POM	WT	●	●
PP	WT	●	●

Molded width: 200 mm (7.9 in)



Standard variation S1-0 FLT PMC

■ AT (Anthracite), □ 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

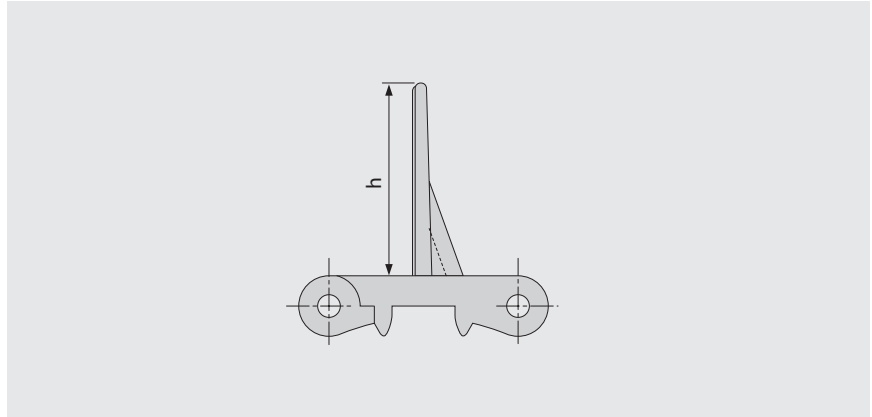
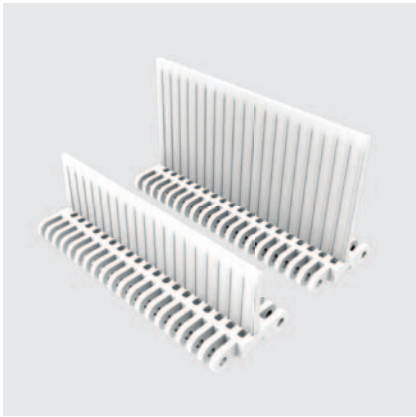
SERIES 1 | PROFILES

siegling prolink
modular belts

Straight running belt | Pitch 50 mm (1.97 in)

S1-18 FLT PMC

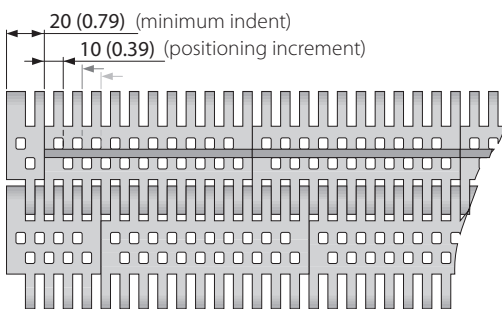
Open version (18%) base module for drainage | No cling surface to improve release of wet and sticky products



Basic data

Material	Color	Height (h)	
		50 mm 2 inch	100 mm 4 inch
PE	UC	●	●
POM	WT	●	●
PP	WT	●	●

Molded width: 200 mm (7.9 in)



Standard configuration S1-18 FLT PMC

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

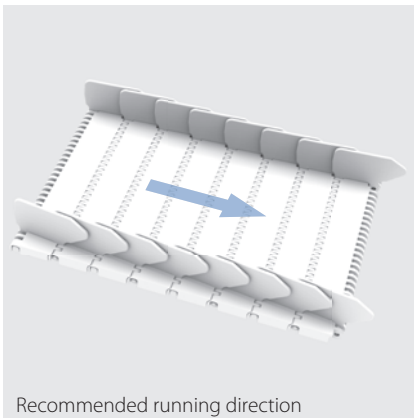
SERIES 1 | SIDE GUARDS

siegling prolink
modular belts

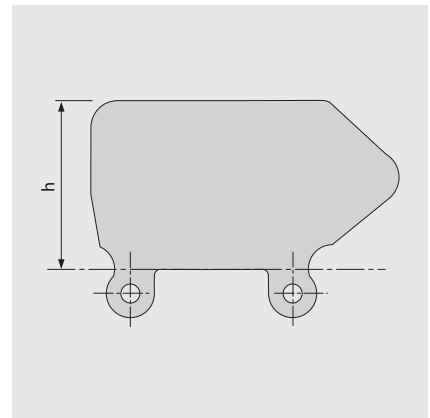
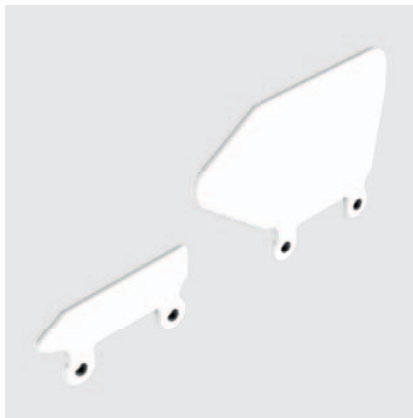
Straight running belt | Pitch 50 mm (1.97 in)

S1 SG | Side guards

For retention of bulk products

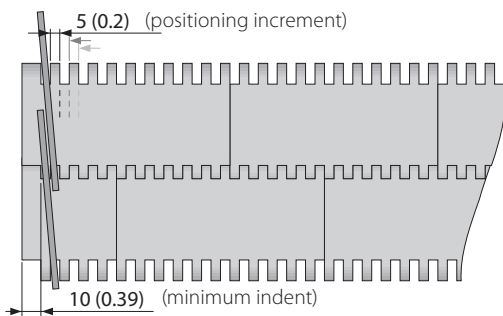


Recommended running direction



Basic data

Material	Color	Height (h)			
		25 mm 1 inch	50 mm 2 inch	75 mm 3 inch	100 mm 4 inch
PE	LB	●	●	●	●
PE	WT	●	●	●	●
PE-MD	BL		●	●	●
PP	LB	●	●	●	●
PP	WT	●	●	●	●



■ BL (Blue), ■ LB (Light 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.

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 ... S18		BPU	Bucket profile	PA	Polyamide	AT	Anthracite 
② Open area/Sprocket size		CAP	Pin lock & belt edge sealing	PA-HT	Polyamide high temperature	BG	Beige 
Percentage open area Format: xx E.g. 20 = 20%		CCW	Counter clockwise	PBT	Polybutylentere-phthalate	BK	Black 
For sprockets: number of teeth Format: "Z"xx E.g. Z12 = 12 teeth		CLP	Clip	PE	Polyethylene	BL	Blue 
③ Surface pattern		CM	Center module	PE-I	PE impact resistant	DB	Dark blue 
BSL	Base module for slider	CW	Clockwise	PE-MD	PE metal detectable	GN	Green 
CTP	Cone top	FPL	Finger plate	PLX	Wear & impact improved polymer	LB	Light blue 
CUT	Curved top	HDT	Hold Down Tab	POM	Polyoxymethylene (Polyacetal)	LG	Light gray 
FLT	Flat top (smooth)	IDL	Idler	POM-CR	POM cut resistant	OR	Orange 
FRT-OG	Friction top without High Grip insert	PIN	Coupling rod	POM-HC	POM highly conductive	RE	Red 
FRT(X)	Friction top (Design X)	PMC	Profile module center	POM-MD	POM metal detectable	TQ	Turquoise 
GRT	Grid top	PMU	Profile module universal	POM-PE	POM side modules + PE center modules	UC	Uncolored 
HDK	High Deck	PSP	ProSnap	POM-PP	POM side modules + PP center modules	WT	White 
LRB	Lateral rib	RI	High Grip insert	PP	Polypropylene	YL	Yellow 
MOD	Modified module shape	RTR	Retaining ring	PP-MD	PP metal detectable	⑧ Height/Diameter/ Bore size and style	
NCL	No cling	SG	Module with sideguard	PP-SW	PP steam and hot water resistant	Height in mm (in) Format: Hxxx	
NPY	Negative pyramid	SLI	Slider	PXX-HC	Self-extinguishing highly conductive material	Pin diameter in mm (in) Format: Dxxx	
NSK	Non skid	SML	Side module, left	R1	TPE 80 Shore A, PP	Bore size: SQ (= square) or RD (= round) either in mm or inches Format: SQxxMM or RDxxIN	
NSK2	Non skid, nonwoven variant	SMR	Side module, right	R2	EPDM 80 Shore A, vulcanized	⑨ Length/Width	
NTP	Nub top (round studs)	SMU	Side module, universal/both sides	R3	TPE 70 Shore A, POM	Pins Length in mm (in) Format: Lxxx	
PRR	Pin Retained Rollers	SPR	Sprocket	R4	TPE 86 Shore A, PP	Module width in mm (in) Format: Wxxx	
RAT	Radius top	TPL	Turning panel, left	R5	TPE 52 Shore A, PP		
RRB	Raised rib	TPR	Turning panel, right	R6	TPE 63 Shore A, POM		
RSA	Reduced surface area	UM	Universal module	R7	TPE 50 Shore A, PP		
RTP	Roller top	WSC	Wheel Stopper Center	R8	TPE 55 Shore A, PE		
SRS	Slip-resistant surface	WSS	Wheel Stopper Side	SER	Self-extinguishing TPE		
⑤ Style				SS	Stainless steel		
1.7	1.7 collapse factor			TPC1	Thermoplastic Copolyester		
2.2	2.2 collapse factor			-HA	Supports the HACCP concept		
2.2 G	2.2 collapse factor, guided			-HW	High Wear resistant material		
A90	Angle 90° to conveying direction						
BT	Bearing tab						
DR	Double row sprocket						
F1, F2, F3 ...	Collapse factor modules						
G	Guided						
GT	Guiding tabs						
HD	Hold Down						
Ixx	xx = indent in mm						
RG	Reversed guided						
SG	Side guard						
SP	Split sprocket						
ST	Strong						

* 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.