EXCERPT FROM PROLINK ENGINEERING MANUAL

05/20 (Ref-No. 888)



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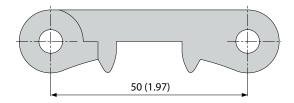
SERIES 1 | **OVERVIEW**

siegling prolink

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

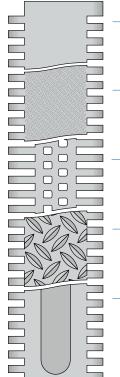
FRT-pattern)

Width increments 10 mm (0.4 in)

Hinge pins Made of plastic, (PE, PP, PBT), as a

special type made of stainless steel

Available surface pattern and opening area



S1-0 FLT

Closed, smooth surface

S1-0 SRS

Closed, slip-resistant surface

S1-18 FLT

Open (18%), smooth surface

S1-0 NSK

Closed surface and non skid pattern

S1-0 FRT1

Closed surface with friction top

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



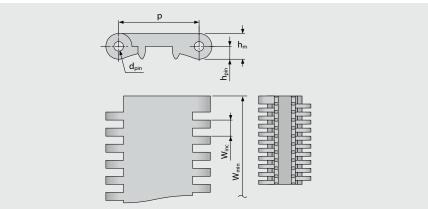
siegling prolink

Straight running belt | Pitch 50 mm (1.97 in)

S1-0 FLT | 0% Opening | Flat top

Closed, smooth surface | Flat top surface





Belt dimensions

	р	d_{pin}	h _m	h _{pin}	hs	W_{min}	W _{inc}	W_{tol}		Minim	num 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	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)

Be	elt	Pi	n	Nominal strai		Wei	ght	Width deviation	Tempe	erature	Certifi	cates
Material	Color	Material	Color	[N/mm]	[lb/ft]	[kg/m²]	[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	-	-
Mold to order belts												
PA-HT	BK	PA-HT	BK	40	2741	14.0	2.87	0.0	-30/155	-22/311	-	-

AT (Anthracite), BK (Black), UC (Uncolored), WT (W	/hite)
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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

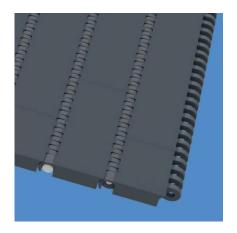
⁴⁾ More materials and colors on request

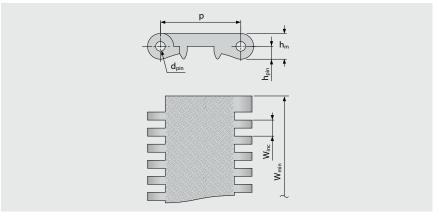
siegling prolink

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

	р	d_{pin}	h _m	h _{pin}	hs	W_{min}	W _{inc}	W_{tol}		Minim	num 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	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)

Вє	elt	Pi	n	Nominal strai		Wei	ght	Width deviation	Tempe	erature	Certifi	cates
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)



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

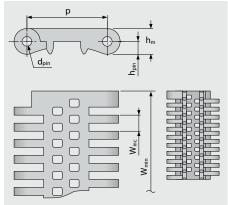
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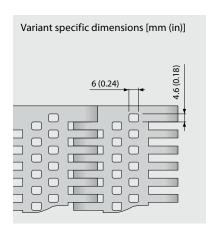
Straight running belt | Pitch 50 mm (1.97 in)

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

	р	d_{pin}	h _m	h _{pin}	hs	W_{min}	W _{inc}	W_{tol}		Minim	num 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	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 Color		Pi	n	Nominal strai		Wei	ght	Width deviation	Tempe	erature	Certifi	cates
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	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

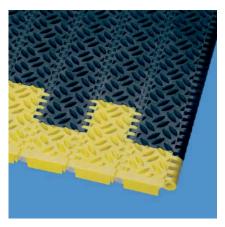
⁴⁾ More materials and colors on request

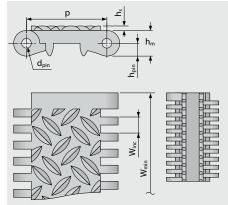
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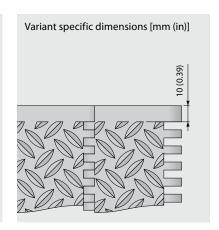
Straight running belt | Pitch 50 mm (1.97 in)

S1-0 NSK | 0% Opening | Non skid

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







Belt dimensions

	р	d_{pin}	h _m	h_{pin}	hs	W_{min}	W _{inc}	W_{tol}		Minim	num 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	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)

Ве	lt	Pi	n	Nominal strai		Wei	ght	Width deviation	Tempe	erature	Certifi	icates
Material	Color	Material	Color	[N/mm]	[lb/ft]	[kg/m²]	[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)



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

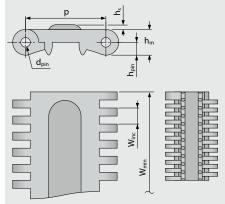
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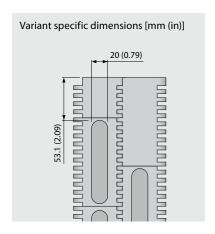
Straight running belt | Pitch 50 mm (1.97 in)

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

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







Belt dimensions

	р	d_{pin}	h _m	h _{pin}	hs	W_{min}	W _{inc}	W_{tol}		Minim	num 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	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)

Ве	elt	Pi	in	Rub	ber		Nominal belt pull, straight		ight	Width deviation	Tempe	erature	Certif	icates
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)



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

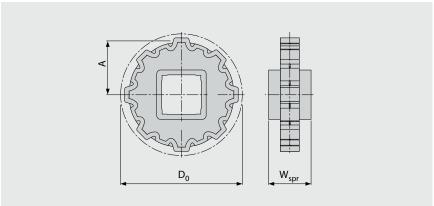
³⁾ Complies with (EU) 10/2011 and (EC) 1935/2004 regulations regarding the raw materials used and the migration thresholds

⁴⁾ More materials and colors on request

Straight running belt | Pitch 50 mm (1.97 in)

S1 SPR | Sprockets





Main dimensions

•	et size of teeth)	Z6	Z8	Z10	Z12	Z16
\ \/	mm	40.0	40.0	40.0	40.0	40.0
W_{spr}	inch	1.57	1.57	1.57	1.57	1.57
	mm	100.0	130.8	161.8	193.2	256.3
D_0	inch	3.94	5.15	6.37	7.61	10.09
^	mm	42.0	57.4	72.9	88.6	120.1
A _{max}	inch	1.65	2.26	2.87	3.49	4.73
^	mm	36.4	53.0	69.3	85.6	117.8
A _{min}	inch	1.43	2.09	2.73	3.37	4.64

Shaft bores (\bullet = Round, \blacksquare = 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 $^{\circ}$ 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.



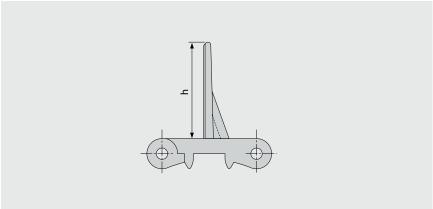
SERIES 1 | PROFILES

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

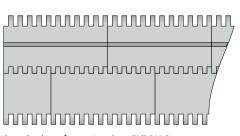




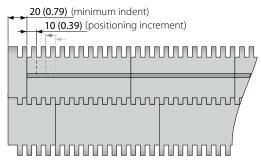
Basic data

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

Molded width: 200 mm (7.9 in)



Standard configuration S1-0 FLT PMC



Indent configuration 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.



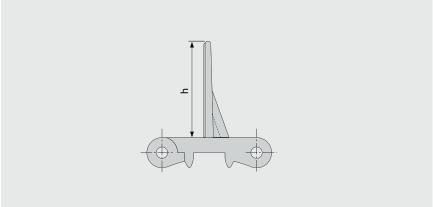
SERIES 1 | PROFILES

Straight running belt | Pitch 50 mm (1.97 in)

S1-18 FLT PMC

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

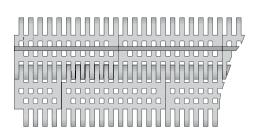




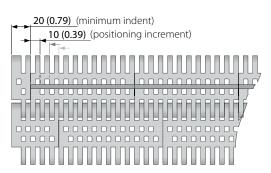
Basic data

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

Molded width: 200 mm (7.9 in)



Standard configuration S1-18 FLT PMC



Indent 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.



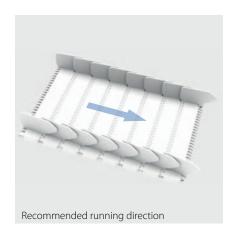
SERIES 1 | **SIDE GUARDS**

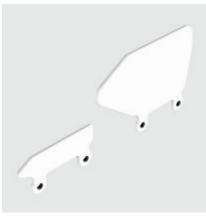
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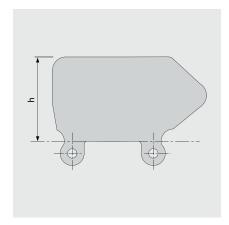
Straight running belt | Pitch 50 mm (1.97 in)

S1 SG | Side guards

For retention of bulk products

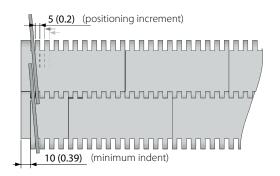






Basic data

		Height (h)			
Material	Color	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	•	•	•	•





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

@ 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 Surfac	③ Surface pattern		
BSL	Base module for slider		
СТР	Cone top		
CUT	Curved top		
FLT	Flat top (smooth)		
FRT-OG	Friction top without High Grip insert		
FRT(X)	Friction top (Design X)		
GRT	Grid top		
LRB	Lateral rib		
MOD	Modified module shape		
NCL	No cling		
NPY	Negative pyramid		
NSK	Non skid		
NTP	Nub top (round studs)		
RAT	Radius top		
RRB Raised rib			
RSA	Reduced surface area		
RTP	Roller top		
SRS	Slip-resistant surface		

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

⑤ Style		
BT	Bearing tab	
DR	Double row sprocket	
F1, F2, F3	Collapse factor modules	
G	Guided	
GT	Guiding tabs	
HD	Hold Down	
RG	Reversed guided	
SG	Side guard	
SP	Split sprocket	
ST	Strong	

6 Material			
PA	Polyamide		
PA-HT	Polyamide high temperature		
PBT	Polybutylentere- phthalate		
PE	Polyethylene		
PE-MD	PE metal detectable		
РОМ	Polyoxymethylene (Polyacetal)		
POM-CR	POM cut resistant		
РОМ-НС	POM highly conductive		
POM-MD	POM metal detectable		
POM-PE	POM side modules + PE center modules		
POM-PP	POM side modules + PP center modules		
PP	Polypropylene		
РХХ-НС	Self-extinguishing highly conductive material		
R1	TPE 80 Shore A, PP		
R2	EPDM 80 Shore A, vulcanized		
R3	TPE 70 Shore A, POM		
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		
-НА	Supports the HACCP concept		
-HW	High Wear resistant material		

⑦ Color*				
AT	Anthracite			
BG	Beige			
BK	Black			
BL	Blue			
DB	Dark blue			
GN	Green			
LB	Light blue			
LG	Light gray			
OR	Orange			
RE	Red			
TQ	Turquoise			
TR Transparent				
UC	Uncolored			
WT	White			
YL	Yellow			

8 Height/Diameter/ Bore size and style
Height in mm (in) Format: Hxxx Pin diameter in mm (in) Format: Dxxx
Bore size: SQ (= square) or RD (= round) either in mm or inches Format: SQxxMM or RDxxIN

Length/Width Pins Length in mm (in) Format: Lxxx Module width in mm (in) 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.