

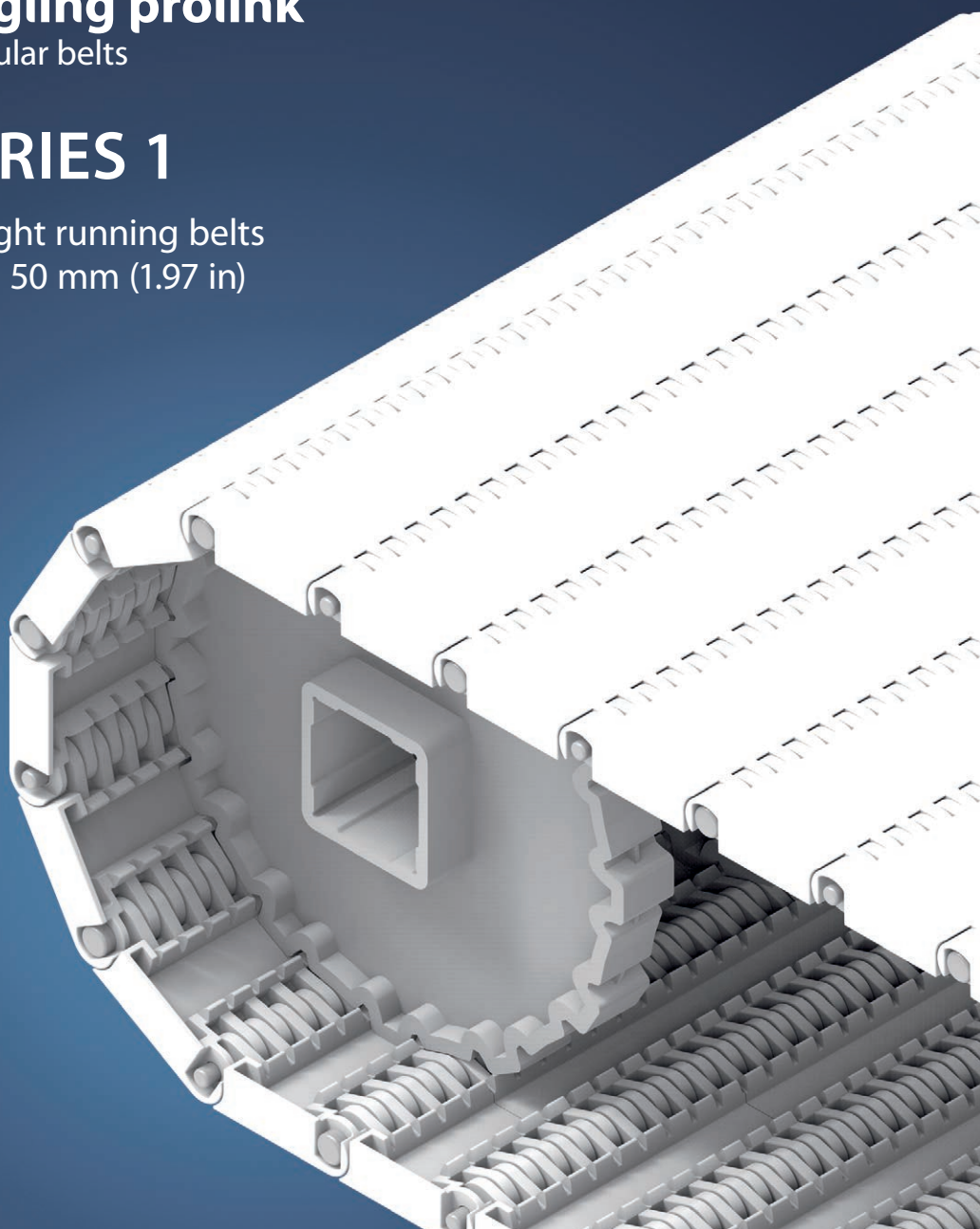
# EXCERPT FROM PROLINK ENGINEERING MANUAL

01/24 (Ref-No. 888)

**siegling prolink**  
modular belts

## SERIES 1

Straight running belts  
Pitch 50 mm (1.97 in)



**Forbo Siegling GmbH**  
Lilienthalstraße 6/8, D-30179 Hannover  
Phone +49 511 6704 0  
[www.forbo-siegling.com](http://www.forbo-siegling.com), [siegling@forbo.com](mailto:siegling@forbo.com)

Ref. no. 888-2\_1.2\_S1

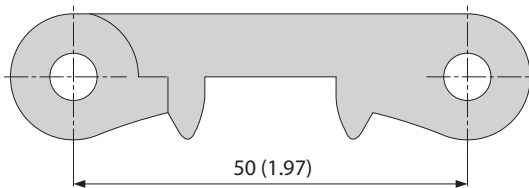
# SERIES 1 | OVERVIEW

**siebling 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



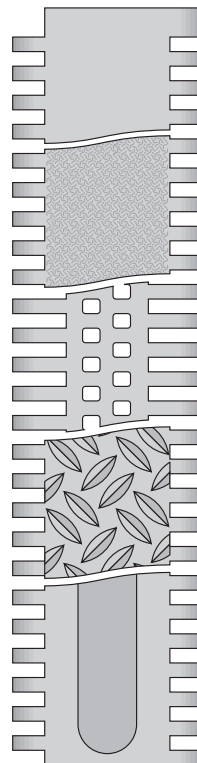
## Design characteristics

- 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



### 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

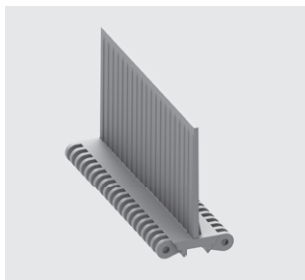
## Sprockets

in different sizes with round or square bore



## Profiles

in different heights and designs for inclines



## Side guards

in different heights for retention of bulk products



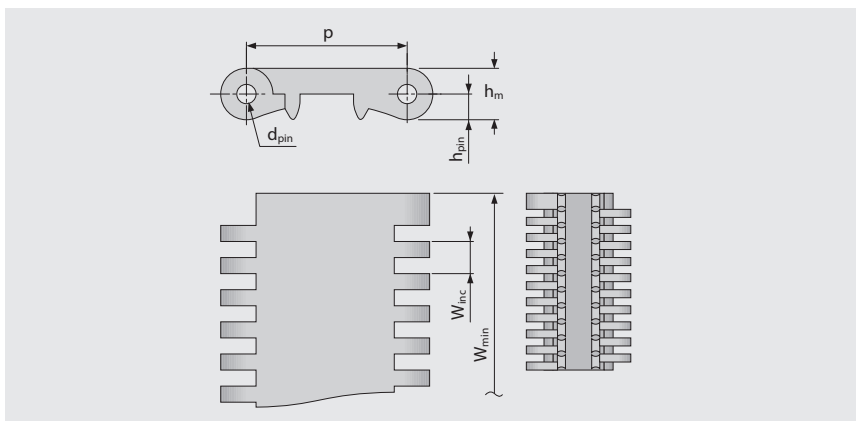
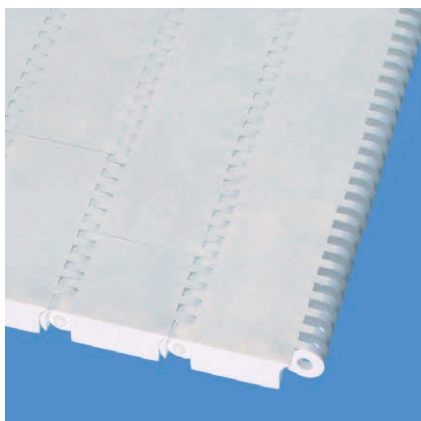
# SERIES 1 | BELT TYPES

**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 <sub>pin</sub>	h <sub>m</sub>	h <sub>pin</sub>	h <sub>s</sub>	W <sub>min</sub>	W <sub>inc</sub>	W <sub>tol</sub>	Minimum flex radii <sup>1)</sup>				
	Pitch	Pin Ø	Thickness	Pin position	Height	Width min.	Width Increment	Width tolerance [%]	r1 C <sub>c</sub> x W <sub>B</sub>	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 materials<sup>3)</sup>

Belt		Pin		Nominal belt pull, straight		Weight		Width deviation	Temperature		Certificates <sup>2)</sup>	
Material	Color	Material	Color	[N/mm]	[lb/ft]	[kg/m²]	[lb/ft²]	[%]	[°C]	[°F]	FDA	EU
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.

<sup>1)</sup> 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

<sup>2)</sup> Complies with FDA 21 CFR | Complies with (EU) 10/2011 and (EC) 1935/2004 regulations regarding the raw materials used and the migration thresholds | Complies with Japanese MHLW Notification 370

● = available | – = not available | empty cells = not tested

<sup>3)</sup> More materials and colors on request



MOVEMENT SYSTEMS

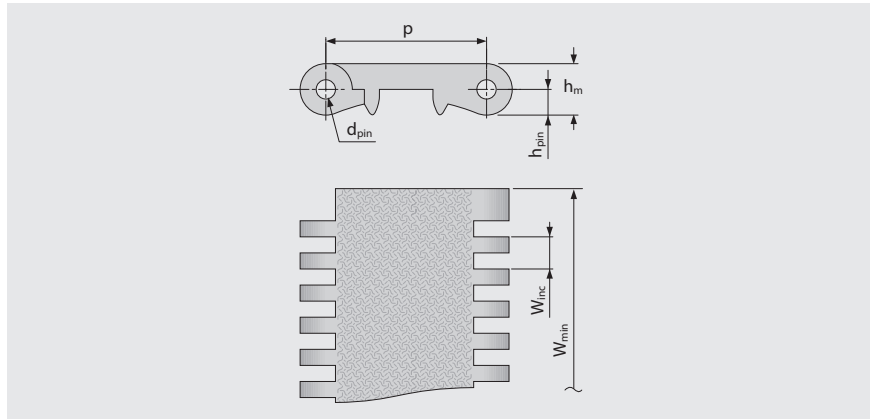
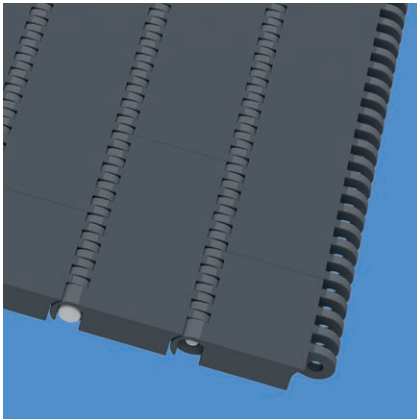
# SERIES 1 | BELT TYPES

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 <sub>pin</sub>	h <sub>m</sub>	h <sub>pin</sub>	h <sub>s</sub>	W <sub>min</sub>	W <sub>inc</sub>	W <sub>tol</sub>	Minimum flex radii <sup>1)</sup>				
	Pitch	Pin Ø	Thickness	Pin position	Height	Width min.	Width Increment	Width tolerance [%]	r1 C <sub>c</sub> x W <sub>B</sub>	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 belts<sup>3)</sup>

Belt		Pin		Nominal belt pull, straight		Weight		Width deviation	Temperature		Certificates <sup>2)</sup>	
Material	Color	Material	Color	[N/mm]	[lb/ft]	[kg/m²]	[lb/ft²]	[%]	[°C]	[°F]	FDA	EU
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.

<sup>1)</sup> 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

<sup>2)</sup> Complies with FDA 21 CFR | Complies with (EU) 10/2011 and (EC) 1935/2004 regulations regarding the raw materials used and the migration thresholds | Complies with Japanese MHLW Notification 370

● = available | – = not available | empty cells = not tested

<sup>3)</sup> More materials and colors on request



MOVEMENT SYSTEMS

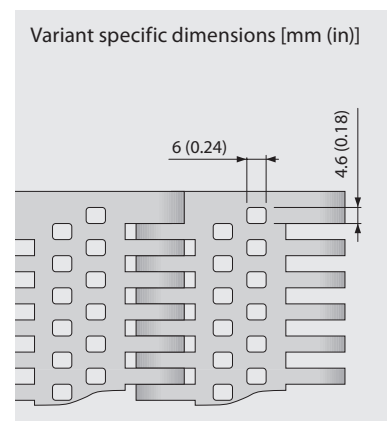
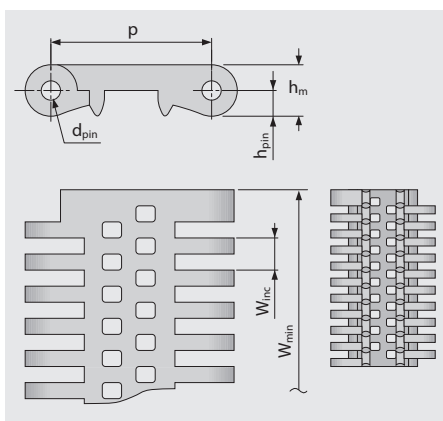
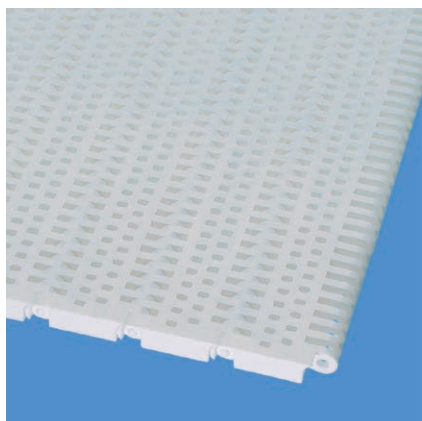
# SERIES 1 | BELT TYPES

**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 | 66% contact area (Largest opening: 4.6 x 6 mm/0.18 x 0.24 in) | Flat top surface | Smooth surface



### Belt dimensions

	p	d <sub>pin</sub>	h <sub>m</sub>	h <sub>pin</sub>	h <sub>s</sub>	W <sub>min</sub>	W <sub>inc</sub>	W <sub>tol</sub>	Minimum flex radii <sup>1)</sup>				
	Pitch	Pin Ø	Thickness	Pin position	Height	Width min.	Width Increment	Width tolerance [%]	r1 C <sub>c</sub> x W <sub>B</sub>	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 materials<sup>3)</sup>

Belt		Pin		Nominal belt pull, straight		Weight		Width deviation	Temperature		Certificates <sup>2)</sup>	
Material	Color	Material	Color	[N/mm]	[lb/ft]	[kg/m²]	[lb/ft²]	[%]	[°C]	[°F]	FDA	EU
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.

<sup>1)</sup> 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

<sup>2)</sup> Complies with FDA 21 CFR | Complies with (EU) 10/2011 and (EC) 1935/2004 regulations regarding the raw materials used and the migration thresholds | Complies with Japanese MHLW Notification 370

● = available | – = not available | empty cells = not tested

<sup>3)</sup> More materials and colors on request



MOVEMENT SYSTEMS

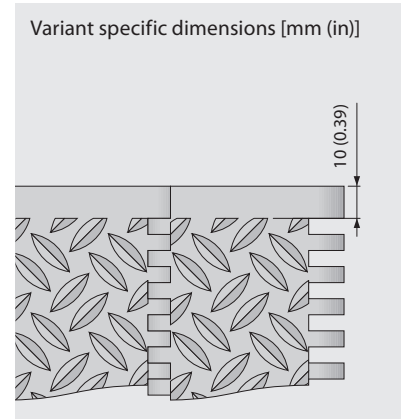
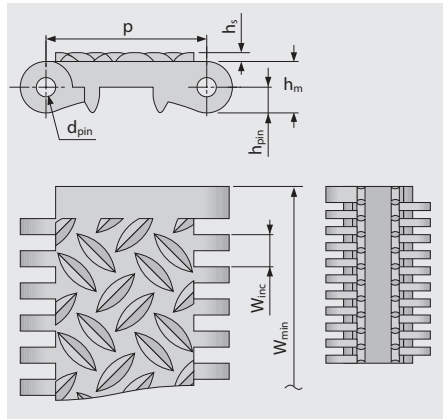
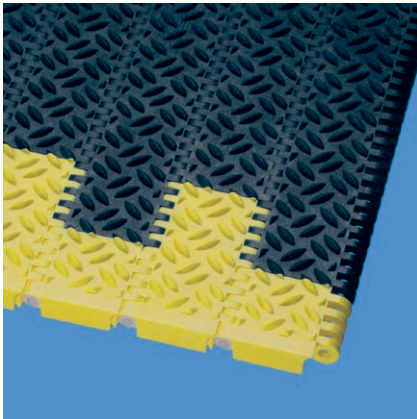
# SERIES 1 | BELT TYPES

Straight running belt | Pitch 50 mm (1.97 in)

**siegling prolink**  
modular belts

## S1-0 NSK | 0 % Opening | Non skid

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



### Belt dimensions

	p	d <sub>pin</sub>	h <sub>m</sub>	h <sub>pin</sub>	h <sub>s</sub>	W <sub>min</sub>	W <sub>inc</sub>	W <sub>tol</sub>	Minimum flex radii <sup>1)</sup>				
	Pitch	Pin Ø	Thickness	Pin position	Height	Width min.	Width Increment	Width tolerance [%]	r1 C <sub>c</sub> x W <sub>B</sub>	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 materials<sup>3)</sup>

Belt		Pin		Nominal belt pull, straight		Weight		Width deviation	Temperature		Certificates <sup>2)</sup>	
Material	Color	Material	Color	[N/mm]	[lb/ft]	[kg/m <sup>2</sup> ]	[lb/ft <sup>2</sup> ]	[%]	[°C]	[°F]	FDA	EU
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.

<sup>1)</sup> 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

<sup>2)</sup> Complies with FDA 21 CFR | Complies with (EU) 10/2011 and (EC) 1935/2004 regulations regarding the raw materials used and the migration thresholds | Complies with Japanese MHLW Notification 370

● = available | – = not available | empty cells = not tested

<sup>3)</sup> More materials and colors on request



MOVEMENT SYSTEMS

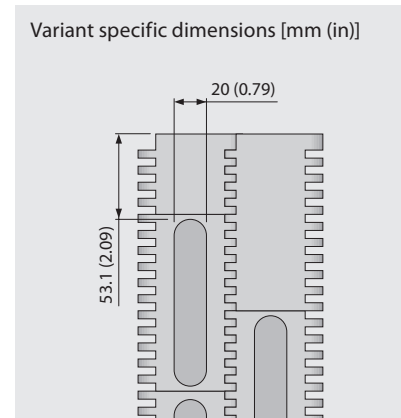
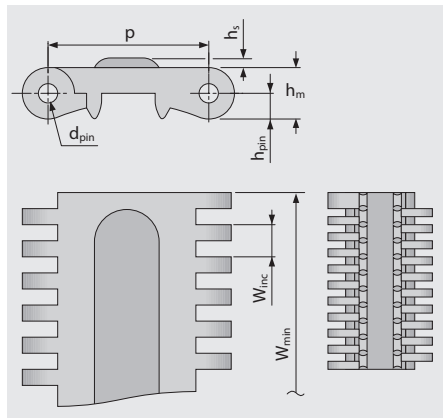
# SERIES 1 | BELT TYPES

**siebling 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 <sub>pin</sub>	h <sub>m</sub>	h <sub>pin</sub>	h <sub>s</sub>	W <sub>min</sub>	W <sub>inc</sub>	W <sub>tol</sub>	Minimum flex radii <sup>1)</sup>				
	Pitch	Pin Ø	Thickness	Pin position	Height	Width min.	Width Increment	Width tolerance [%]	r1 C <sub>c</sub> x W <sub>B</sub>	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 materials<sup>3)</sup>

Belt		Pin		Rubber		Nominal belt pull, straight		Weight		Width deviation	Temperature		Certificates <sup>2)</sup>	
Material	Color	Material	Color	Material	Color	[N/mm]	[lb/ft]	[kg/m²]	[lb/ft²]	[%]	[°C]	[°F]	FDA	EU
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.

<sup>1)</sup> 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

<sup>2)</sup> Complies with FDA 21 CFR | Complies with (EU) 10/2011 and (EC) 1935/2004 regulations regarding the raw materials used and the migration thresholds | Complies with Japanese MHLW Notification 370

● = available | – = not available | empty cells = not tested

<sup>3)</sup> More materials and colors on request



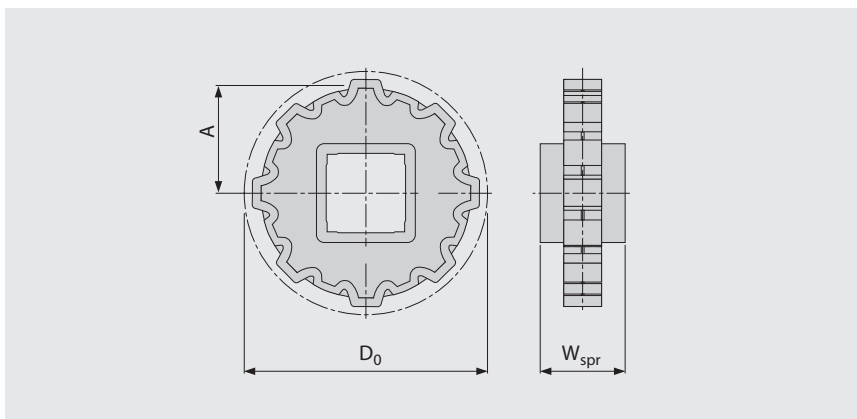
MOVEMENT SYSTEMS

# SERIES 1 | SPROCKETS

Straight running belt | Pitch 50 mm (1.97 in)

**siegling prolink**  
modular belts

## S1 SPR | Sprockets



### Main dimensions

Sprocket size (Number of teeth)		Z6	Z8	Z10	Z12	Z16
W <sub>spr</sub>	mm	40.0	40.0	40.0	40.0	40.0
	inch	1.57	1.57	1.57	1.57	1.57
D <sub>0</sub>	mm	100.0	130.8	161.8	193.2	256.3
	inch	3.94	5.15	6.37	7.61	10.09
A <sub>max</sub>	mm	42.0	57.4	72.9	88.6	120.1
	inch	1.65	2.26	2.87	3.49	4.73
A <sub>min</sub>	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

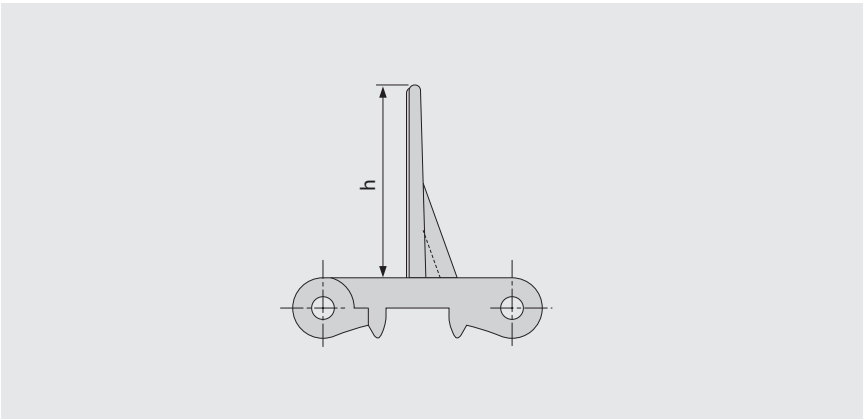
# SERIES 1 | PROFILES

Straight running belt | Pitch 50 mm (1.97 in)

siegling prolink  
modular belts

## S1-0 FLT PMC

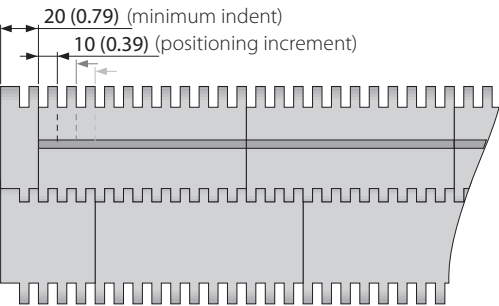
Flat top surface for dry products | No cling surface to improve release of wet and sticky products



### 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 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.

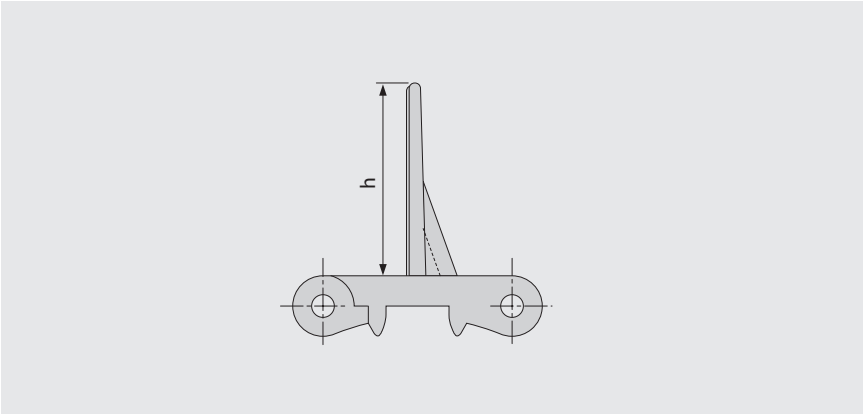
# SERIES 1 | PROFILES

Straight running belt | Pitch 50 mm (1.97 in)

siegling prolink  
modular belts

## S1-18 FLT PMC

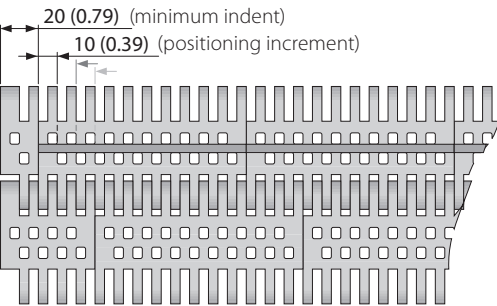
Open version (18 %) base module for drainage | No cling surface to improve release of wet and sticky products



### 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.

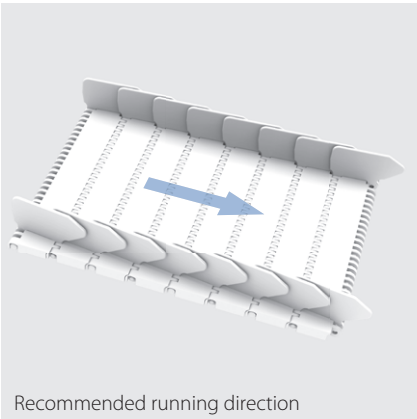
# SERIES 1 | SIDE GUARDS

Straight running belt | Pitch 50 mm (1.97 in)

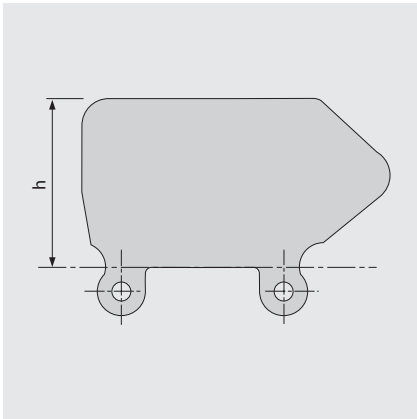
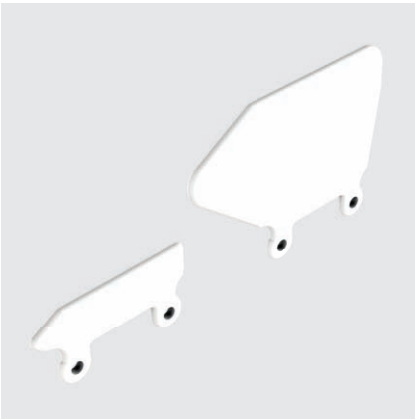
siegling prolink  
modular belts

## S1 SG | Side guards

For retention of bulk products

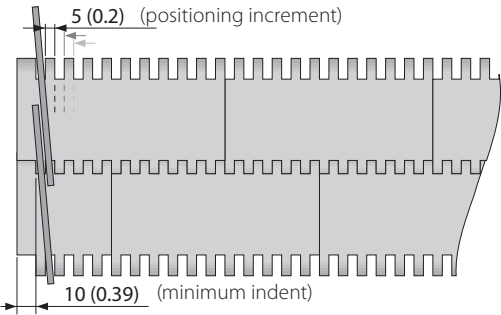


Recommended running direction



### 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.

# LEGEND

① Series
S1 ... S18

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
<b>BSL</b> Base module for slider
<b>CTP</b> Cone top
<b>CUT</b> Curved top
<b>FLT</b> Flat top (smooth)
<b>FRT-OG</b> Friction top without High Grip insert
<b>FRT(X)</b> Friction top (Design X)
<b>GRT</b> Grid top
<b>HDK</b> High Deck
<b>LRB</b> Lateral rib
<b>MOD</b> Modified module shape
<b>NCL</b> No cling
<b>NPY</b> Negative pyramid
<b>NSK</b> Non skid
<b>NSK2</b> Non skid, nonwoven variant
<b>NTP</b> Nub top (round studs)
<b>PRR</b> Pin Retained Rollers
<b>RAT</b> Radius top
<b>RRB</b> Raised rib
<b>RSA</b> Reduced surface area
<b>RTP</b> Roller top
<b>SRS</b> Slip-resistant surface

④ Type
<b>BPU</b> Bucket profile
<b>CAP</b> Pin lock & belt edge sealing
<b>CCW</b> Counter clockwise
<b>CLP</b> Clip
<b>CM</b> Center module
<b>CW</b> Clockwise
<b>FPL</b> Finger plate
<b>HDT</b> Hold Down Tab
<b>IDL</b> Idler
<b>PIN</b> Coupling rod
<b>PMC</b> Profile module center
<b>PMU</b> Profile module universal
<b>PSP</b> ProSnap
<b>RI</b> High Grip insert
<b>RTR</b> Retaining ring
<b>SG</b> Module with sideguard
<b>SLI</b> Slider
<b>SML</b> Side module, left
<b>SMR</b> Side module, right
<b>SMU</b> Side module, universal/both sides
<b>SPR</b> Sprocket
<b>TPL</b> Turning panel, left
<b>TPR</b> Turning panel, right
<b>UM</b> Universal module
<b>WSC</b> Wheel Stopper Center
<b>WSS</b> Wheel Stopper Side

⑤ Style
<b>1.7</b> 1.7 collapse factor
<b>2.2</b> 2.2 collapse factor
<b>2.2 G</b> 2.2 collapse factor, guided
<b>A90</b> Angle 90° to conveying direction
<b>BT</b> Bearing tab
<b>DR</b> Double row sprocket
<b>F1, F2, F3 ...</b> Collapse factor modules
<b>G</b> Guided
<b>GT</b> Guiding tabs
<b>HD</b> Hold Down
<b>Ixx</b> xx = indent in mm
<b>RG</b> Reversed guided
<b>SG</b> Side guard
<b>SP</b> Split sprocket
<b>ST</b> Strong

⑥ Material
<b>PA</b> Polyamide
<b>PA-HT</b> Polyamide high temperature
<b>PBT</b> Polybutylentere-phthalate
<b>PE</b> Polyethylene
<b>PE-I</b> PE impact resistant
<b>PE-MD</b> PE metal detectable
<b>PLX</b> Wear & impact improved polymer
<b>POM</b> Polyoxymethylene (Polyacetal)
<b>POM-CR</b> POM cut resistant
<b>POM-HC</b> POM highly conductive
<b>POM-MD</b> POM metal detectable
<b>POM-PE</b> POM side modules + PE center modules
<b>POM-PP</b> POM side modules + PP center modules
<b>PP</b> Polypropylene
<b>PP-MD</b> PP metal detectable
<b>PP-SW</b> PP steam and hot water resistant
<b>PXX-HC</b> Self-extinguishing highly conductive material
<b>R1</b> TPE 80 Shore A, PP
<b>R2</b> EPDM 80 Shore A, vulcanized
<b>R3</b> TPE 70 Shore A, POM
<b>R4</b> TPE 86 Shore A, PP
<b>R5</b> TPE 52 Shore A, PP
<b>R6</b> TPE 63 Shore A, POM
<b>R7</b> TPE 50 Shore A, PP
<b>R8</b> TPE 55 Shore A, PE
<b>SER</b> Self-extinguishing TPE
<b>SS</b> Stainless steel
<b>TPC1</b> Thermoplastic Copolyester
<b>-HA</b> Supports the HACCP concept
<b>-HW</b> High Wear resistant material

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

⑨ 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.