

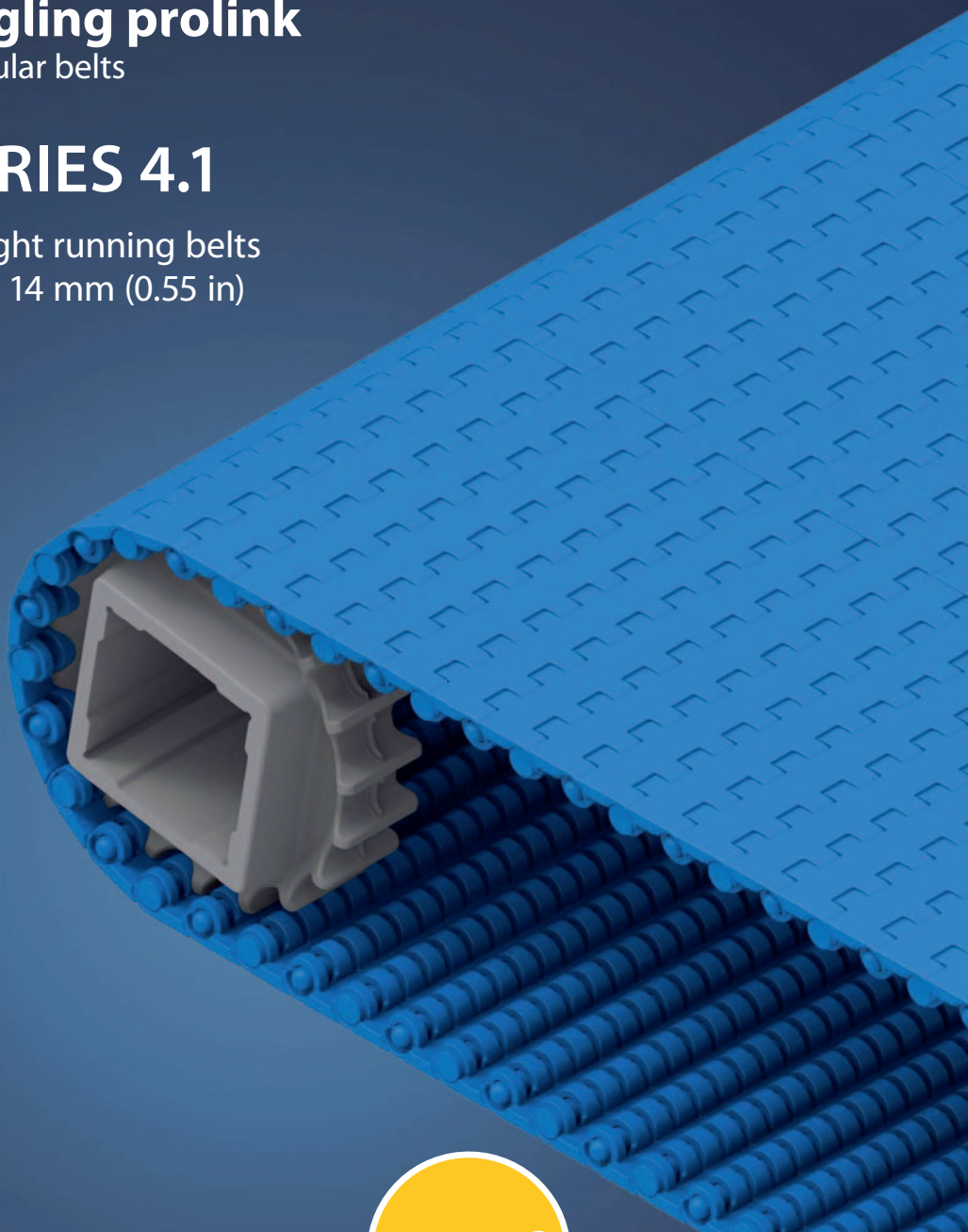
EXCERPT FROM PROLINK ENGINEERING MANUAL

05/20 (Ref-No. 888)

siegling prolink
modular belts

SERIES 4.1

Straight running belts
Pitch 14 mm (0.55 in)



PATENTED

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Ref. no. 888-2_1.2_S4.1

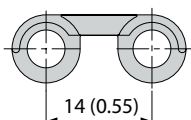
SERIES 4.1 | OVERVIEW

siebling prolink
modular belts

Straight running belts | Pitch 14 mm (0.55 in)

Belts for light to medium-duty food and non-food applications

Side view scale 1:1



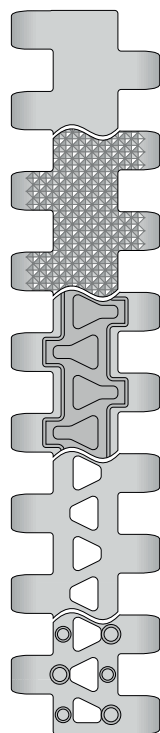
Design characteristics

- Small pitch belt for applications requiring small transfer gaps
- Hinges that open wide and flat channels on the underside ensure the belt is easy to clean
- Unique sprocket design with rounded tooth edges provides ideal load distribution
- Wide sprocket teeth ensure superior sprocket engagement and strength

Basic data

Pitch	14 mm (0.55 in)
Belt width min.	25 mm (0.98)
Width increments	12.5 mm (0.5 in)
Hinge pins	Made of plastic (PE, PP, PBT)

Available surface pattern and opening area



S4.1-0 FLT

Closed, smooth surface

S4.1-0 NPY

Closed surface with negative pyramid pattern

S4.1-0 FRT1

Closed surface with friction top

S4.1-21 FLT

Open (21 %), smooth surface

S4.1-21 NTP

Open (21 %) surface with round studs. Version available without round studs at the side (25 mm indent)



NSF-compliant from these certified Forbo plants:
Huntersville (USA), Malacky (Slovakia), NSW (Australia),
Tlalnepantla (Mexico), Saint-Petersburg (Russia),
Shizuoka (Japan), Maharashtra (India)

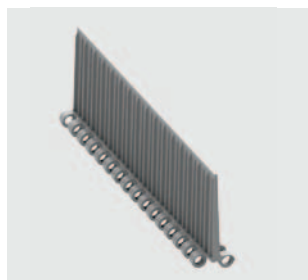
Sprockets

in different sizes with round or square sprocket bore



Profiles

in different heights and designs for inclines



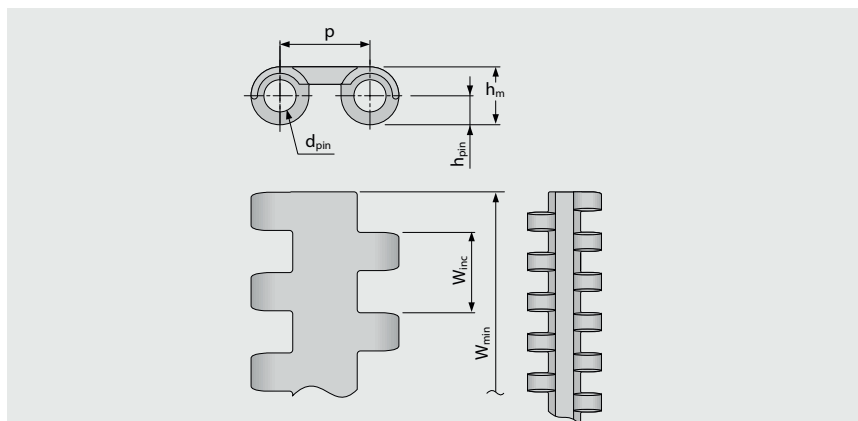
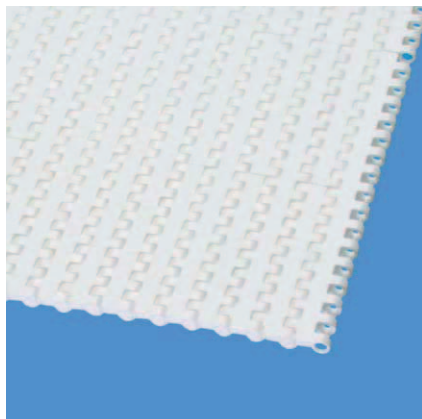
SERIES 4.1 | BELT TYPES

siegling prolink
modular belts

Straight running belt | Pitch 14 mm (0.55 in)

S4.1-0 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 [mm]	Pin position [mm]	Height [mm]	Width min. [mm]	Width Increment [mm]	Width tolerance [%]	r1	r2	r3	r4	r5
mm	14.0	5.0	9.0	4.5	0.0	25.0	12.5	±0.2	–	11.0	25.0	38.0	12.5
inch	0.55	0.2	0.35	0.18	0.0	0.98	0.49	±0.2	–	0.43	0.98	1.5	0.49

Available standard materials⁴⁾

Belt		Pin		Nominal belt pull, straight		Weight		Width deviation [%]	Temperature		Certificates	
Material	Color	Material	Color	[N/mm]	[lb/ft]	[kg/m²]	[lb/ft²]		[°C]	[°F]	FDA ²⁾	EU ³⁾
PE	WT	PE	UC	3	206	5.1	1.04	-0.1	-70/65	-94/149	●	●
PE	UC	PBT	UC	3	206	5.1	1.04	-0.1	-70/65	-94/149	●	●
PE	BL	PE	BL	3	206	5.1	1.04	-0.1	-70/65	-94/149	●	●
POM	BL	PBT	BL	10	685	7.1	1.45	0.0	-45/90	-49/194	●	●
POM	WT	PBT	UC	10	685	7.1	1.45	0.0	-45/90	-49/194	●	●
PP	BL	PP	BL	5	343	4.6	0.94	0.25	5/100	41/212	●	●
PP	WT	PP	WT	5	343	4.6	0.94	0.25	5/100	41/212	●	●
POM-MD	BL	POM-MD	BL	10	685	7.5	1.54	0.0	-45/90	-49/194	●	●

Mold to order belts

PXX-HC	BK	PBT	UC	5	343	5.1	1.04	0.25	5/100	41/212	–	–
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Mold to width available in: 38 mm (1.5 in), 50 mm (1.97 in), 100 mm (3.94 in), 125 mm (4.92 in)

■ BL (Blue), ■ 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

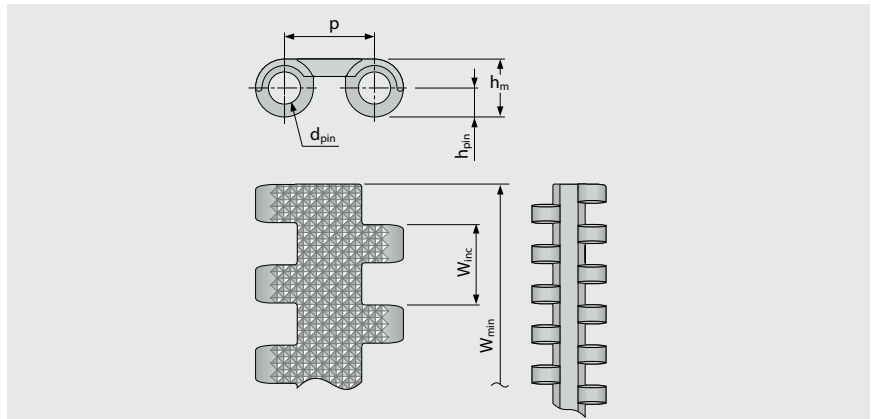
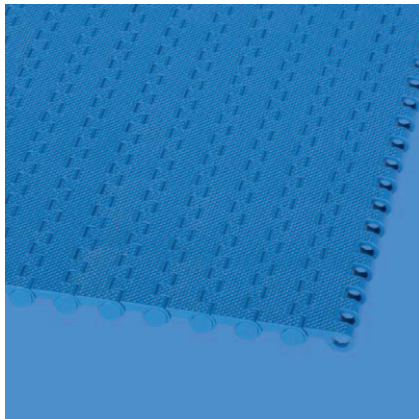
SERIES 4.1 | BELT TYPES

siebling prolink
modular belts

Straight running belt | Pitch 14 mm (0.55 in)

S4.1-0 NPY | 0 % Opening | Negative pyramid

Closed surface | Negative pyramid pattern for superb release characteristics when conveying wet or sticky products



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	14.0	5.0	9.0	4.5	0.0	25.0	12.5	±0.2	–	11.0	25.0	38.0	12.5
inch	0.55	0.2	0.35	0.18	0.0	0.98	0.49	±0.2	–	0.43	0.98	1.5	0.49

Available standard materials⁴⁾

Belt		Pin		Nominal belt pull, straight		Weight		Width deviation [%]	Temperature		Certificates	
Material	Color	Material	Color	[N/mm]	[lb/ft]	[kg/m²]	[lb/ft²]		[°C]	[°F]	FDA ²⁾	EU ³⁾
PE	BL	PE	BL	3	206	5.1	1.04	-0.1	-70/65	-94/149	●	●
POM	BL	PBT	BL	10	685	7.1	1.45	0.0	-45/90	-49/194	●	●
PP	BL	PP	BL	5	343	4.6	0.94	0.25	5/100	41/212	●	●

Mold to width available in: 200 mm (7.87 in)

■ BL (Blue)

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

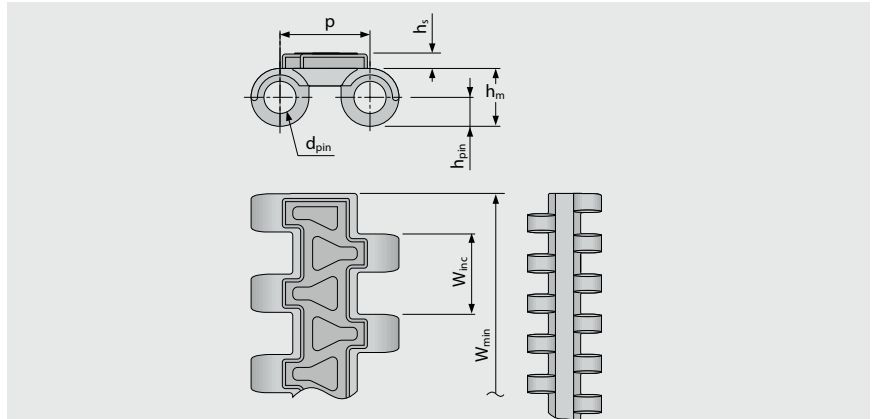
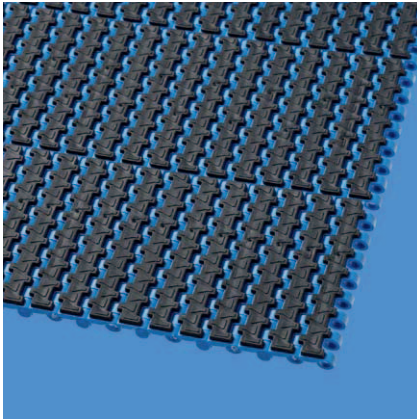
SERIES 4.1 | BELT TYPES

siegling prolink
modular belts

Straight running belt | Pitch 14 mm (0.55 in)

S4.1-0 FRT1 | 0% Opening | Friction top (Design 1)

Closed surface | Friction top with slightly elevated triangular shapes to reduce contact area/increase contact pressure to optimise grip and to channel dirt away from the friction 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 [mm]	Pin position [mm]	Height [mm]	Width min. [mm]	Width Increment [mm]	Width tolerance [%]	r1	r2	r3	r4	r5
mm	14.0	5.0	9.0	4.5	2.4	25.0	12.5	±0.2	–	11.0	25.0	38.0	16.5
inch	0.55	0.2	0.35	0.18	0.09	0.98	0.49	±0.2	–	0.43	0.98	1.5	0.65

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/m²]	[lb/ft²]	[%]	[°C]	[°F]	FDA ²⁾	EU ³⁾
PE	WT	PE	UC	R8	BG	3	206	6.8	1.39	-0.1	-70/65	-94/149	●	●
POM	BL	PBT	BL	R6	BK	10	685	9.4	1.93	0.0	-45/60	-49/140	–	–
PP	BL	PP	BL	R7	BK	5	343	6.9	1.41	0.25	5/100	41/212	●	●
PP	WT	PP	WT	R7	BG	5	343	6.9	1.41	0.25	5/100	41/212	●	●

Mold to order belts

PXX-HC	BK	PBT	UC	R7	BK	5	343	7.3	1.5	0.25	5/100	41/212	–	–
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Mold to width available in: 50 mm (1.97 in), 125 mm (4.92 in), 200 mm (7.87 in)

■ BG (Beige), ■ BL (Blue), ■ 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

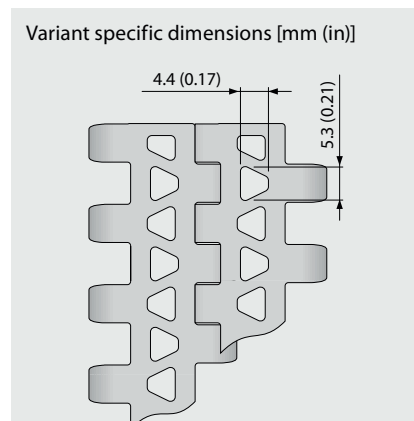
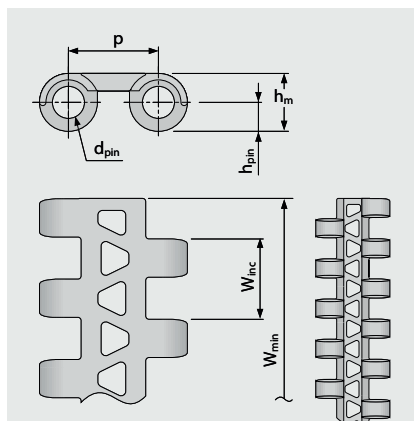
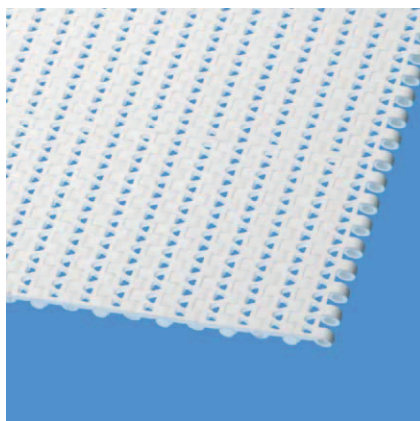
SERIES 4.1 | BELT TYPES

siebling prolink
modular belts

Straight running belt | Pitch 14 mm (0.55 in)

S4.1-21 FLT | 21 % Opening | Flat top

Large open area (21 %) for excellent air circulation and drainage | Contact area 70 % (Largest opening: 5.3 x 4.4 mm/0.21 x 0.17 in) | 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 [mm]	Pin position [mm]	Height [mm]	Width min. [mm]	Width Increment [mm]	Width tolerance [%]	r1	r2	r3	r4	r5
mm	14.0	5.0	9.0	4.5	0.0	25.0	12.5	±0.2	–	11.0	25.0	38.0	12.5
inch	0.55	0.2	0.35	0.18	0.0	0.98	0.49	±0.2	–	0.43	0.98	1.5	0.49

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	3	206	4.5	0.92	-0.1	-70/65	-94/149	●	●
PE	UC	PBT	UC	3	206	4.5	0.92	-0.1	-70/65	-94/149	●	●
PE	BL	PE	BL	3	206	4.5	0.92	-0.1	-70/65	-94/149	●	●
POM	BL	PBT	BL	10	685	6.5	1.33	0.0	-45/90	-49/194	●	●
POM	WT	PBT	UC	10	685	6.5	1.33	0.0	-45/90	-49/194	●	●
PP	BL	PP	BL	5	343	4.1	0.84	0.25	5/100	41/212	●	●
PP	WT	PP	WT	5	343	4.1	0.84	0.25	5/100	41/212	●	●

Mold to order belts												
PA-HT	BK	PA-HT	BK	10	685	6.4	1.31	1.4	-30/155	-22/311	–	–
POM-MD	BL	POM-MD	BL	10	685	6.9	1.41	0.0	-45/90	-49/194	●	●
PP-MD	BL	PP-MD	BL	10	685	4.8	0.98	0.2	5/100	41/212	●	●

Mold to width available in: 38 mm (1.5 in), 50 mm (1.97 in), 100 mm (3.94 in), 125 mm (4.92 in)

■ BK (Black), ■ 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

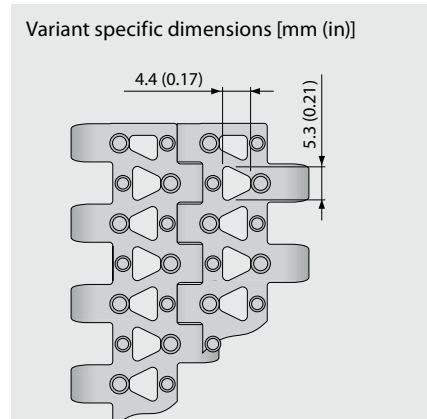
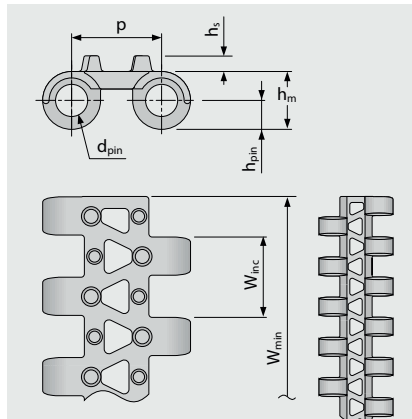
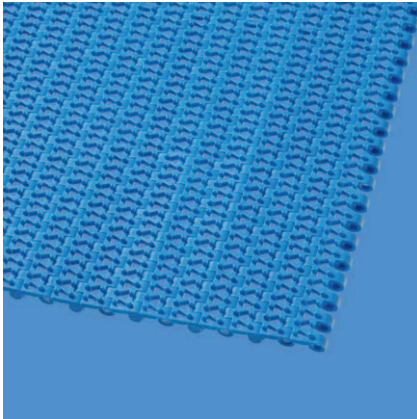
SERIES 4.1 | BELT TYPES

siebling prolink
modular belts

Straight running belt | Pitch 14 mm (0.55 in)

S4.1-21 NTP | 21 % Opening | Nub top (round studs)

Large open area (21 %) for excellent air circulation and drainage | Contact area 4% (Largest opening: 5.3 x 4.4 mm/0.21 x 0.17 in) | Nub top surface for good release of wet and sticky products | Version available without round studs at the side (25 mm indent)



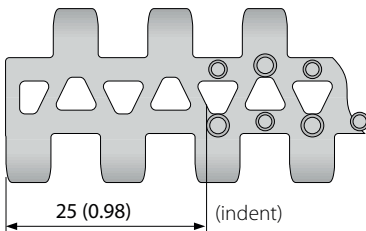
Belt dimensions

	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	14.0	5.0	9.0	4.5	2.5	25.0	12.5	±0.2	–	11.0	25.0	38.0	12.5
inch	0.55	0.2	0.35	0.18	0.1	0.98	0.49	±0.2	–	0.43	0.98	1.5	0.49

Available standard materials⁴⁾

Belt		Pin		Nominal belt pull, straight		Weight		Width deviation	Temperature		Certificates	
Material	Color	Material	Color	[N/mm]	[lb/ft]	[kg/m²]	[lb/ft²]	[%]	[°C]	[°F]	FDA ²⁾	EU ³⁾
PE	BL	PE	BL	3	206	4.6	0.94	-0.1	-70/65	-94/149	●	●
POM	BL	PBT	BL	10	685	6.6	1.35	0.0	-45/90	-49/194	●	●
PP	WT	PP	WT	5	343	4.2	0.86	0.25	5/100	41/212	●	●

Mold to width available in: 200 mm (7.87 in)



Also available with
molded indent
25 mm (0.98 in)

■ 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

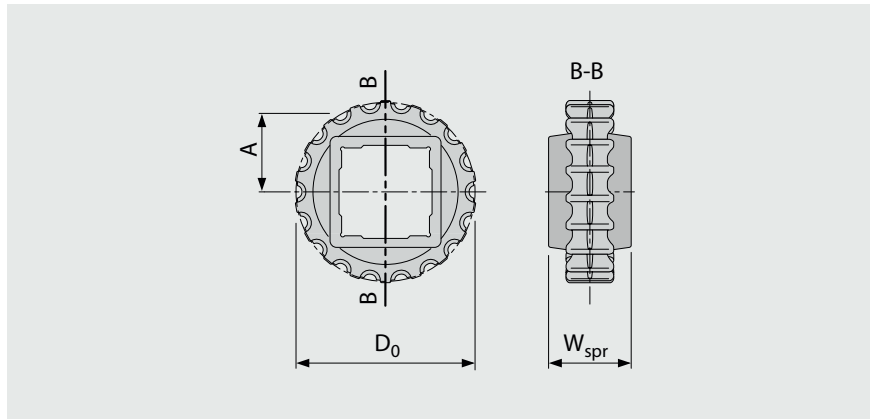
SERIES 4.1 | SPROCKETS

siegling prolink
modular belts

Straight running belt | Pitch 14 mm (0.55 in)

S4.1 SPR | Sprockets

Wide sprocket teeth ensure superior sprocket engagement and load transmission



Main dimensions

Sprocket size (Number of teeth)		Z10	Z12	Z14	Z18	Z19	Z26	Z35
W _{spr}	mm	24.0	24.0	24.0	38.0	38.0	38.0	38.0
	inch	0.94	0.94	0.94	1.50	1.50	1.50	1.50
D ₀	mm	47.1	56.1	65.3	83.4	88.0	119.8	160.4
	inch	1.85	2.21	2.57	3.28	3.46	4.72	6.31
A _{max}	mm	19.0	23.6	28.2	37.2	39.5	55.4	75.7
	inch	0.75	0.93	1.11	1.46	1.56	2.18	2.98
A _{min}	mm	18.1	22.8	27.5	36.6	39.0	55.0	75.4
	inch	0.71	0.90	1.08	1.44	1.53	2.17	2.97

Shaft bores (● = Round, ■ = Square)

20	mm	●/■						
25	mm		●/■	■	●/■	■		●
30	mm							●
40	mm				■	■	■	■
60	mm						■	■
0.75	inch	●	●				●	
1	inch		●/■	■	●/■	■		●
1.25	inch				●			●
1.5	inch				■	■	■	■
2.5	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

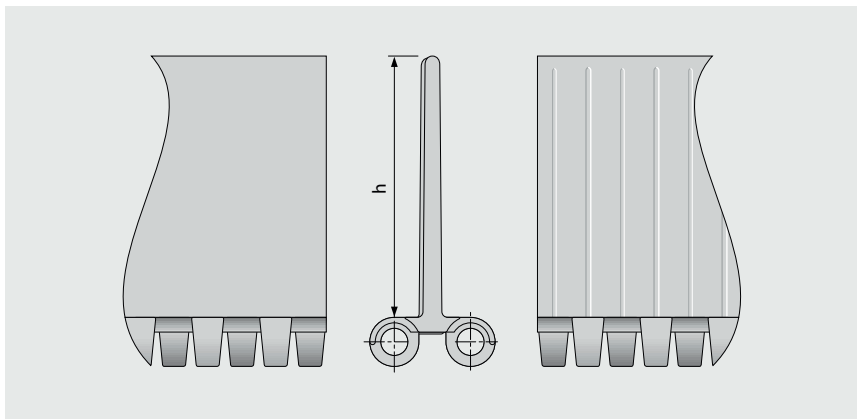
SERIES 4.1 | PROFILES

Straight running belt | Pitch 14 mm (0.55 in)

siebling prolink
modular belts

S4.1 FLT/NCL PMU

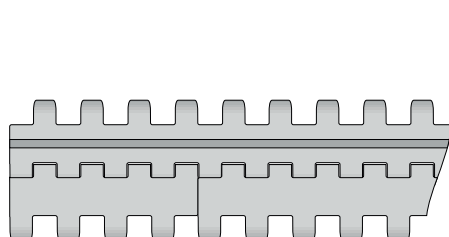
No cling surface to improve release of wet and sticky products and Flat top surface for dry products



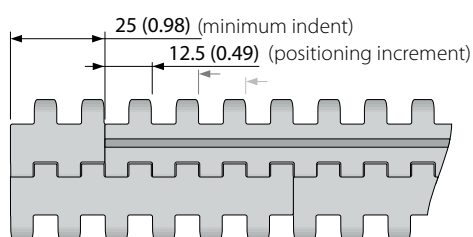
Basic data

Material	Color	Height (h)
		51 mm 2 inch
PE	BL	●
PE	WT	●
POM	BL	●
POM	WT	●
PP	BL	●
PP	WT	●

Molded width: 200 mm (7.9 in)



Standard configuration S4.1-0 FLT/NCL PMU



Indent configuration S4.1-0 FLT/NCL PMU

■ 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.

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		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-MD PE metal detectable		DB Dark blue	
BSL Base module for slider		CW Clockwise		POM Polyoxymethylene (Polyacetal)		GN Green	
CTP Cone top		FPL Finger plate		POM-CR POM cut resistant		LB Light blue	
CUT Curved top		IDL Idler		POM-HC POM highly conductive		LG Light gray	
FLT Flat top (smooth)		PIN Coupling rod		POM-MD POM metal detectable		OR Orange	
FRT-OG Friction top without High Grip insert		PMC Profile module center		POM-PE POM side modules + PE center modules		RE Red	
FRT(X) Friction top (Design X)		PMU Profile module universal		POM-PP POM side modules + PP center modules		TQ Turquoise	
GRT Grid top		PMU lxx Profile module universal with indent xx = indent in mm		PP Polypropylene		TR Transparent	
LRB Lateral rib		RI High Grip insert		PXX-HC Self-extinguishing highly conductive material		UC Uncolored	
MOD Modified module shape		RTR Retaining ring		R1 TPE 80 Shore A, PP		WT White	
NCL No cling		SG Module with sideguard		R2 EPDM 80 Shore A, vulcanized		YL Yellow	
NPY Negative pyramid		SLI Slider		R3 TPE 70 Shore A, POM		⑧ Height/Diameter/ Bore size and style	
NSK Non skid		SML Side module, left		R4 TPE 86 Shore A, PP		Height in mm (in) Format: Hxxx	
NTP Nub top (round studs)		SMR Side module, right		R5 TPE 52 Shore A, PP		Pin diameter in mm (in) Format: Dxxx	
RAT Radius top		SMU Side module, universal/both sides		R6 TPE 63 Shore A, POM		Bore size: SQ (= square) or RD (= round) either in mm or inches Format: SQxxMM or RDxxIN	
RRB Raised rib		SPR Sprocket		R7 TPE 50 Shore A, PP		⑨ Length/Width	
RSA Reduced surface area		TPL Turning panel, left		R8 TPE 55 Shore A, PE		Pins Length in mm (in) Format: Lxxx	
RTP Roller top		TPR Turning panel, right		SER Self-extinguishing TPE		Module width in mm (in) Format: Wxxx	
SRS Slip-resistant surface		UM Universal module		SS Stainless steel			
		⑤ Style		TPC1 Thermoplastic Copolyester			
		BT Bearing tab		-HA Supports the HACCP concept			
		DR Double row sprocket		-HW High Wear resistant material			
		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					

* 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