

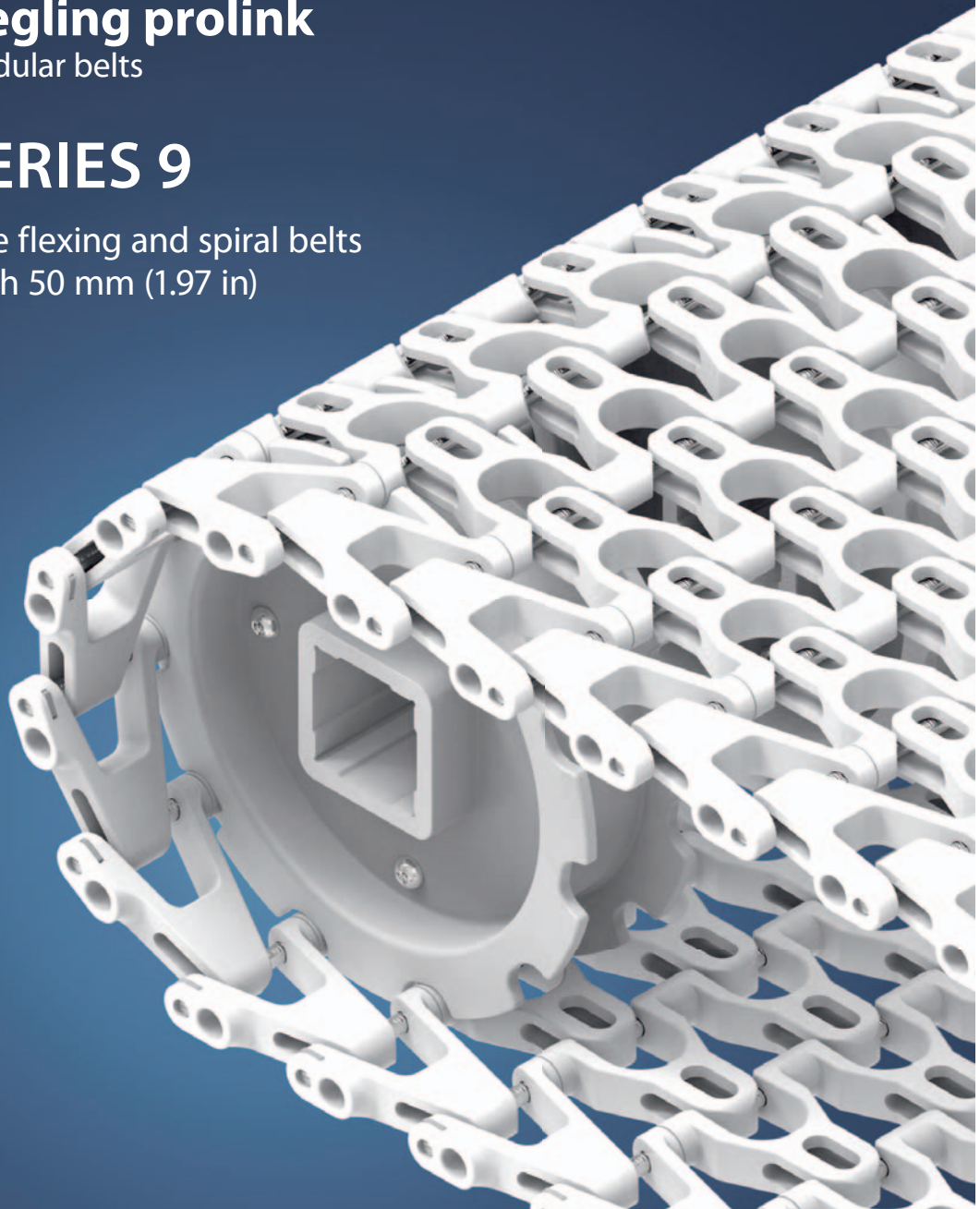
EXCERPT FROM PROLINK ENGINEERING MANUAL

02/22 (Ref-No. 888)

siegling prolink
modular belts

SERIES 9

Side flexing and spiral belts
Pitch 50 mm (1.97 in)



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Ref. no. 888-2_1.2_S9

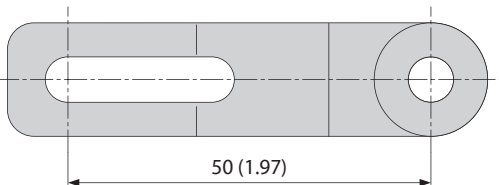
SERIES 9 | OVERVIEW

siegling prolink
modular belts

Side flexing and spiral belts | Pitch 50 mm (1.97 in)

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

Side view scale 1:1



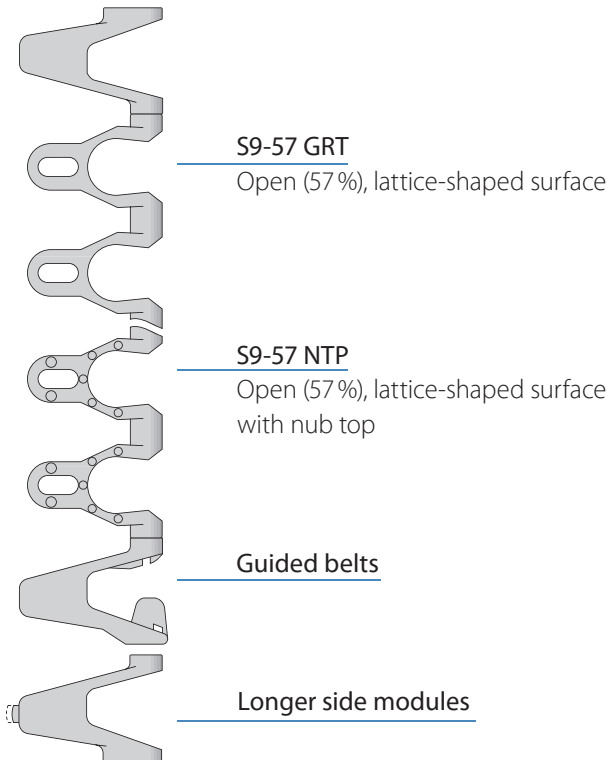
Design characteristics

- Suitable for both straight and radius conveying
- 57 % open area for excellent air circulation and drainage
- Stainless steel hinge pins for high load capacity, lateral stiffness, less belt supports and minimum belt lifting in curves
- No potential belt edge catch points due to safe fixing of hinge pin

Basic data

Pitch	50 mm (1.97 in)
Belt width min.	100 mm (3.9 in)
Width increments	50 mm (1.97 in)
Hinge pins	6 mm (0.24 in) made of stainless steel

Available surface pattern and opening area



Attention:

Due to the very large surface openings, personnel must be instructed not to place their fingers in or on this belt.

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



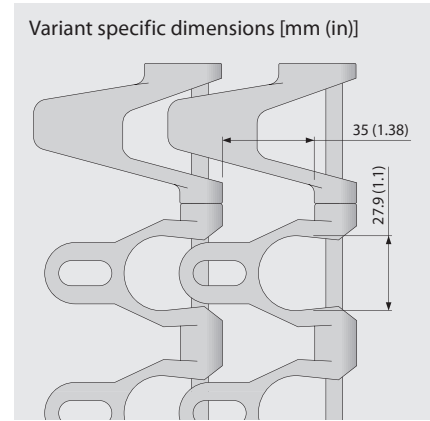
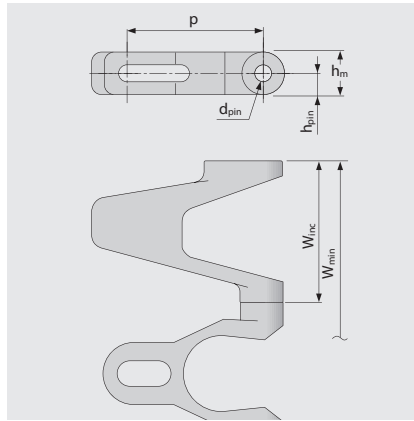
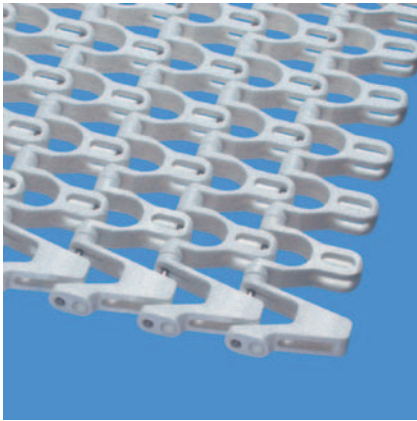
SERIES 9 | BELT TYPES

siegling prolink
modular belts

Side flexing and spiral belt | Pitch 50 mm (1.97 in) | $C_c = 1.8$

S9-57 GRT | 57% Opening | Grid top

Open area (57%) for excellent air circulation and drainage | Contact area 31% (Largest opening: 27.9 x 35 mm/1.1 x 1.38 in) | Lattice-shaped surface | Collapse factor (C_c) = 1.8



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 C _c x W _B	r2	r3	r4	r5
mm	50.0	6.0	15.0	7.5	0.0	150.0	50.0	±0.3	1.8 x W _B	50.0	100.0	150.0	50.0
inch	1.97	0.24	0.59	0.3	0.0	5.91	1.97	±0.3	1.8 x W _B	1.97	3.94	5.91	1.97

W_B = Belt width, further information regarding r1 see page III-20

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⁾
PE	WT	SS		12	822	NR	NR	9.5	1.95	0.0	-70/65	-94/149	●	●
PP	WT	SS		22	1507	1600	360	9.3	1.9	0.0	5/100	41/212	●	●
PP	LG	SS		22	1507	1600	360	9.3	1.9	0.0	5/100	41/212	●	●
POM-CR	UC	SS		30	2056	2800	629	11.5	2.36	0.0	-45/90	-49/194	●	●
POM-CR	LG	SS		30	2056	2800	629	11.5	2.36	0.0	-45/90	-49/194	●	●
POM-CR	DB	SS		30	2056	2800	629	11.5	2.36	0.0	-45/90	-49/194	●	●
PA*	BL	SS		24	1645	2240	504	11.3	2.31	0.0	-40/120	-40/248	●	●

NR = not recommended

* 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.

Attention! Due to the very large surface openings, personnel must be instructed not to place their fingers in or on this belt.

■ DB (Dark blue), ■ LG (Light gray), □ WT (White), □ 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

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

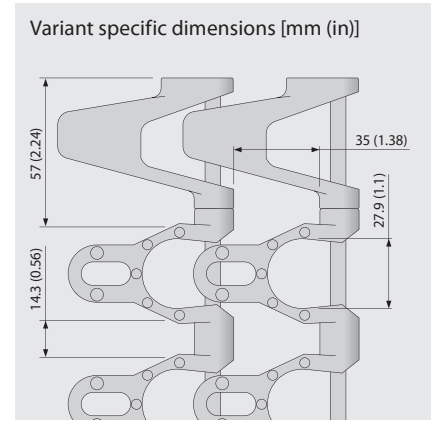
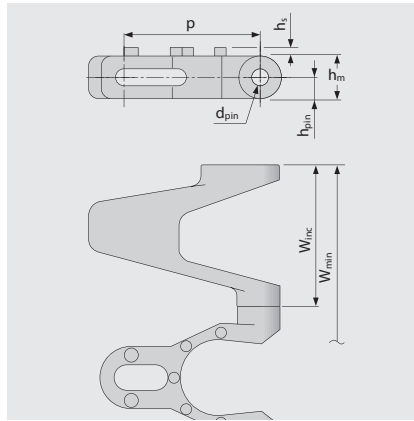
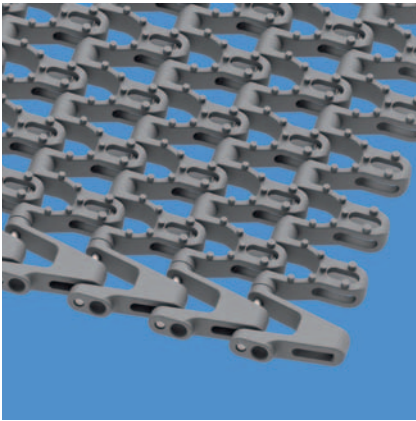
SERIES 9 | BELT TYPES

sieging prolink
modular belts

Side flexing and spiral belt | Pitch 50 mm (1.97 in) | $C_c = 1.8$

S9-57 NTP | 57% Opening | Nub top (round studs)

Open area (57%) for excellent air circulation and drainage | Lattice-shaped surface with 3.0 mm (0.12 in) high round studs
4% contact area | Nub top surface for increased grip and reduced contact area for good release | Collapse factor (C_c) = 1.8



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 C _c x W _B	r2	r3	r4	r5
mm	50.0	6.0	15.0	7.5	3.0	150.0	50.0	±0.3	1.8 x W _B	50.0	100.0	150.0	50.0
inch	1.97	0.24	0.59	0.3	0.12	5.91	1.97	±0.3	1.8 x W _B	1.97	3.94	5.91	1.97

W_B = Belt width, further information regarding r1 see page III-20

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	LG	SS		22	1507	1600	360	9.4	1.93	0.0	5/100	41/212	●	●

Mold to order belts														
PE		SS		12	822	NR	NR	9.7	1.99	0.0	-70/65	-94/149	-	-
POM-CR		SS		30	2056	2800	629	11.7	2.4	0.0	-45/90	-49/194	-	-

NR = not recommended

Attention! Due to the very large surface openings, personnel must be instructed not to place their fingers in or on this belt.

■ 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.

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

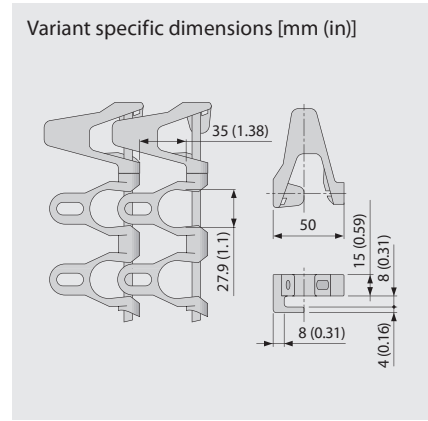
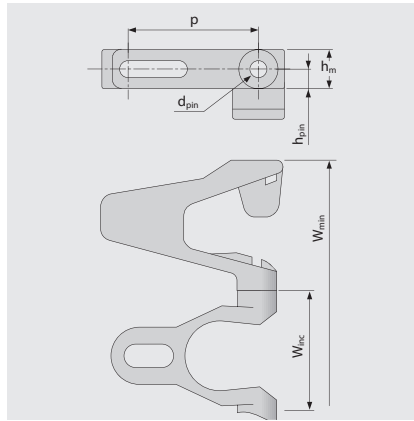
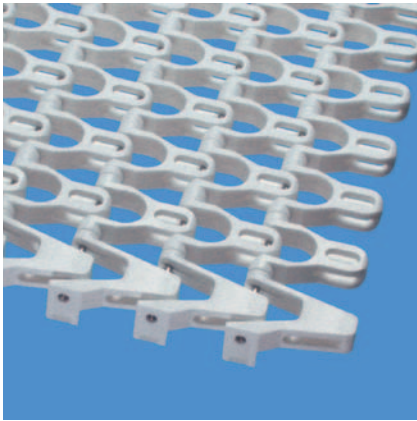
SERIES 9 | BELT TYPES

siebling prolink
modular belts

Side flexing and spiral belt | Pitch 50 mm (1.97 in) | $C_c = 1.8$

S9-57 GRT G | 57% Opening | Grid top · guided

Open area (57%) for excellent air circulation and drainage | Contact area 31% (Largest opening: 27.9 x 35 mm/1.1 x 1.38 in) | Lattice-shaped surface | Guided version (G) allows utilization of the entire belt width | Collapse factor (C_c) = 1.8



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 C _c x W _B	r2	r3	r4	r5
mm	50.0	6.0	15.0	7.5	0.0	150.0	50.0	±0.3	1.8 x W _B	50.0	100.0	150.0	50.0
inch	1.97	0.24	0.59	0.3	0.0	5.91	1.97	±0.3	1.8 x W _B	1.97	3.94	5.91	1.97

W_B = Belt width, further information regarding r1 see page III-20

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⁾
POM-CR	UC	SS		30	2056	2800	629	11.5	2.36	0.0	-45/90	-49/194	●	●
Mold to order belts														
PE		SS		12	822	NR	NR	9.5	1.95	0.0	-70/65	-94/149	-	-

NR = not recommended

Attention! Due to the very large surface openings, personnel must be instructed not to place their fingers in or on this belt.

■ LG (Light gray), □ 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

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

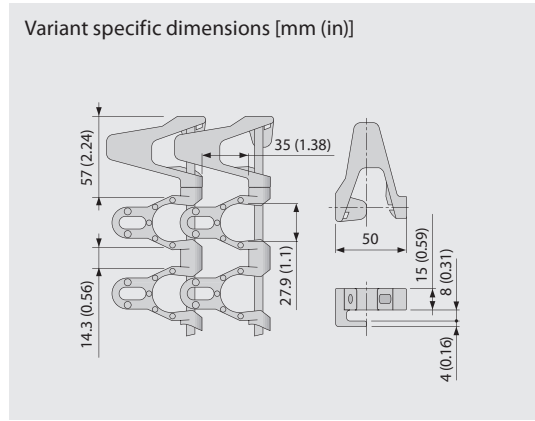
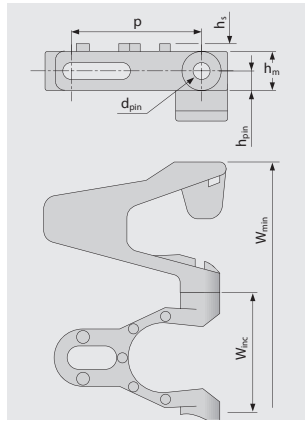
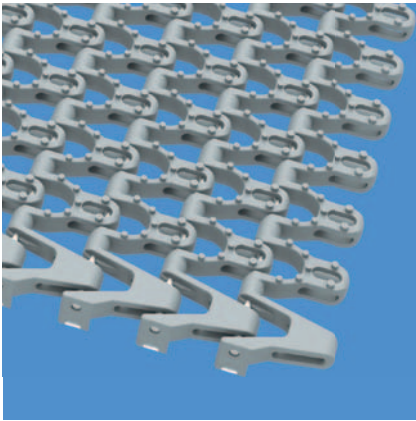
SERIES 9 | BELT TYPES

sieging prolink
modular belts

Side flexing and spiral belt | Pitch 50 mm (1.97 in) | $C_c = 1.8$

S9-57 NTP G | 57% Opening | Nub top (round studs) · guided

Open area (57%) for excellent air circulation and drainage | With round studs for increased grip (4% contact area) | Guided version (G) allows utilization of the entire belt width | Collapse factor (C_c) = 1.8



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 C _c x W _B	r2	r3	r4	r5
mm	50.0	6.0	15.0	7.5	3.0	150.0	50.0	±0.3	1.8 x W _B	50.0	100.0	150.0	50.0
inch	1.97	0.24	0.59	0.3	0.12	5.91	1.97	±0.3	1.8 x W _B	1.97	3.94	5.91	1.97

W_B = Belt width, further information regarding r1 see page III-20

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	LG	SS		22	1507	1600	360	9.4	1.93	0.0	5/100	41/212	●	●

Mold to order belts														
PE		SS		12	822	NR	NR	9.7	1.99	0.0	-70/65	-94/149	-	-
POM-CR		SS		30	2056	2800	629	11.7	2.40	0.0	-45/90	-49/194	-	-

NR = not recommended

Attention! Due to the very large surface openings, personnel must be instructed not to place their fingers in or on this belt.

■ 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.

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

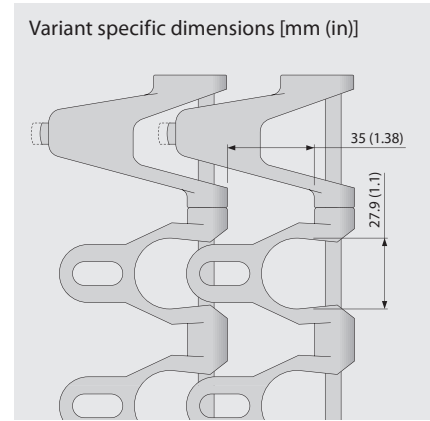
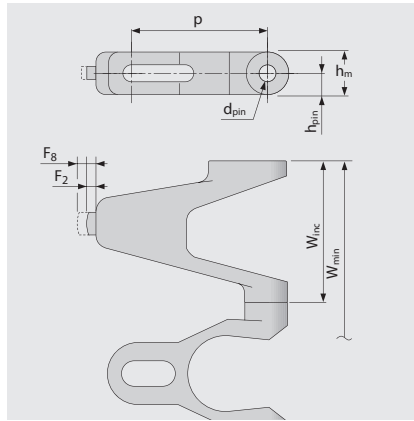
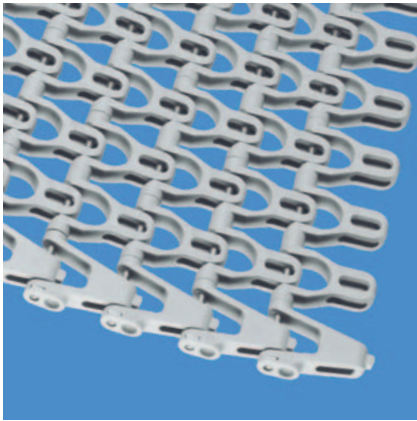
SERIES 9 | BELT TYPES

siebling prolink
modular belts

Side flexing and spiral belt | Pitch 50 mm (1.97 in)

S9-57 GRT F2, F3, F4, F5, F6, F7, F8 | 57% Opening

Open area (57%) for excellent air circulation and drainage | Special edge modules with noses (F2–F8) of varying size ensure smooth belt operation when the system turn radius is greater than the minimum belt turn radius | Collapse factor (C_c) = 2.12–5.50



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 C _c × W _B	r2	r3	r4	r5
mm	50.0	6.0	15.0	7.5	0.0	150.0	50.0	±0.3	C _c × W _B	50.0	100.0	150.0	50.0
inch	1.97	0.24	0.59	0.3	0.0	5.91	1.97	±0.3	C _c × W _B	1.97	3.94	5.91	1.97

W_B = Belt width. C_c see table below

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⁾
POM-CR	UC	SS		30	2056	2800	629	11.5	2.36	0.0	-45/90	-49/194	●	●

Mold to order belts														
PE		SS		12	822	NR	NR	9.5	1.95	0.0	-70/65	-94/149	–	–
PP		SS		22	1507	1600	360	9.3	1.9	0.0	5/100	41/212	–	–

Module variants

Module	F2	F3	F4	F5	F6	F7	F8
C _c	2.12	2.40	2.65	3.0	3.68	4.58	5.50

For further information see chapter 3.3 (paragraph spiral conveyors)

Attention! Due to the very large surface openings, personnel must be instructed not to place their fingers in or on this belt.

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

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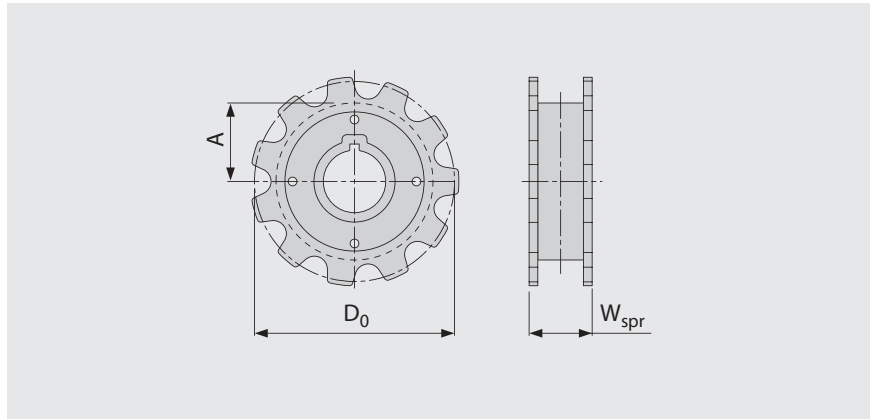
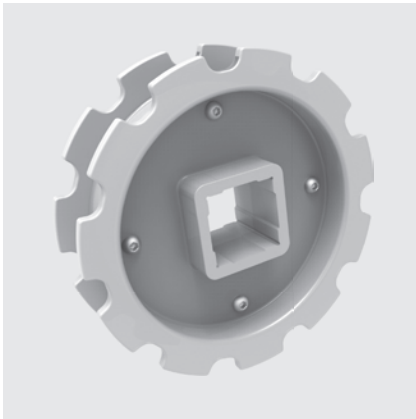
MOVEMENT SYSTEMS

SERIES 9 | SPROCKETS

siegling prolink
modular belts

Side flexing and spiral belt | Pitch 50 mm (1.97 in)

S9 SPR | Sprockets



Main dimensions

Sprocket size (Number of teeth)		Z11
W _{spr}	mm	49.0
	inch	1.93
D ₀	mm	178.8
	inch	7.04
A _{max}	mm	81.9
	inch	3.22
A _{min}	mm	77.4
	inch	3.05

Shaft bores (● = Round, ■ = Square)

40	mm	●/■
1.5	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

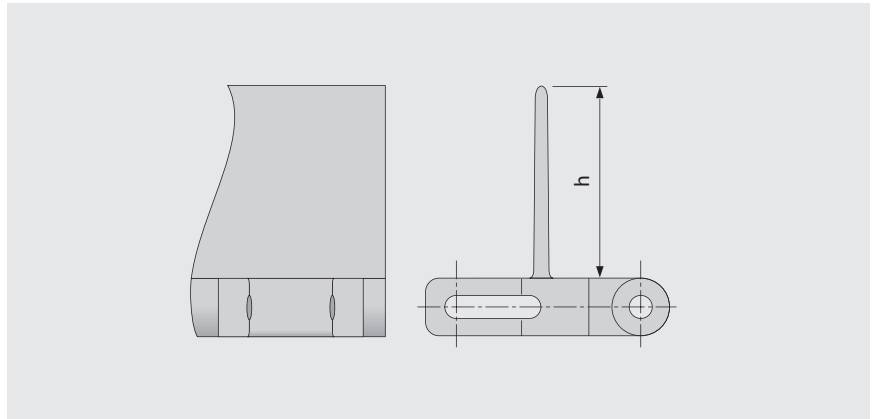
SERIES 9 | PROFILES

siegling prolink
modular belts

Side flexing and spiral belt | Pitch 50 mm (1.97 in)

S9-57 GRT PMC

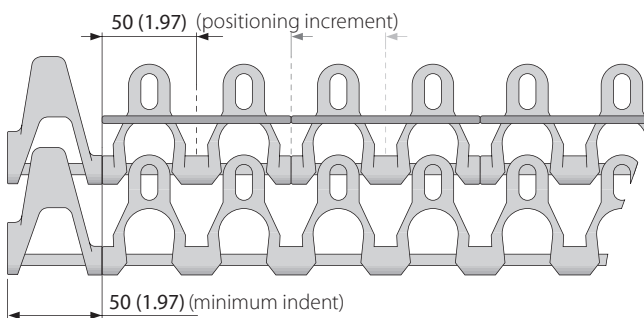
Open version (57%) base module for drainage



Basic data

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

Molded width: 100 mm (3.9 in)



Attention! Due to the very large surface openings, personnel must be instructed not to place their fingers in or on this belt.

□ 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

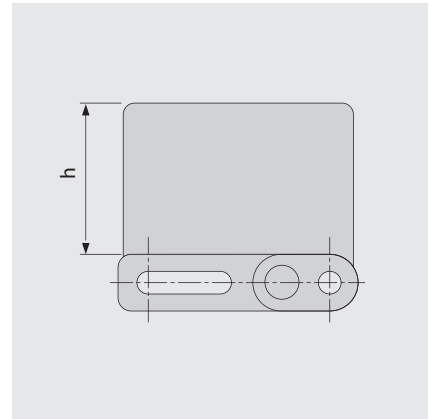
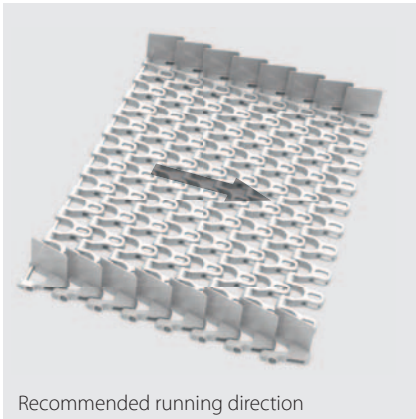
SERIES 9 | SIDE GUARDS

siegling prolink
modular belts

Side flexing and spiral belt | Pitch 50 mm (1.97 in) | $C_c = 1.8$

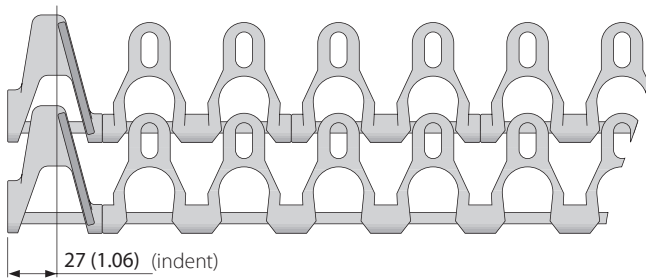
S9 SG | Side guards

For retention of bulk products | Collapse factor (C_c) = 1.8



Basic data

Material	Color	Height (h)	
		25 mm 1 inch	50 mm 2 inch
POM-CR	UC	●	●



Attention! Due to the very large surface openings, personnel must be instructed not to place their fingers in or on this belt.

□ 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.

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-MD	PE metal detectable	DB	Dark blue 
BSL	Base module for slider	CW	Clockwise	PLX	Wear & impact improved polymer	GN	Green 
CTP	Cone top	FPL	Finger plate	POM	Polyoxymethylene (Polyacetal)	LB	Light blue 
CUT	Curved top	HDT	Hold Down Tab	POM-CR	POM cut resistant	LG	Light gray 
FLT	Flat top (smooth)	IDL	Idler	POM-HC	POM highly conductive	OR	Orange 
FRT-OG	Friction top without High Grip insert	PIN	Coupling rod	POM-MD	POM metal detectable	RE	Red 
FRT(X)	Friction top (Design X)	PMC	Profile module center	POM-PE	POM side modules + PE center modules	TQ	Turquoise 
GRT	Grid top	PMU	Profile module universal	POM-PP	POM side modules + PP center modules	UC	Uncolored 
HDK	High Deck	PSP	ProSnap	PP	Polypropylene	WT	White 
LRB	Lateral rib	RI	High Grip insert	PXX-HC	Self-extinguishing highly conductive material	YL	Yellow 
MOD	Modified module shape	RTR	Retaining ring	R1	TPE 80 Shore A, PP		
NCL	No cling	SG	Module with sideguard	R2	EPDM 80 Shore A, vulcanized		
NPY	Negative pyramid	SLI	Slider	R3	TPE 70 Shore A, POM		
NSK	Non skid	SML	Side module, left	R4	TPE 86 Shore A, PP		
NSK2	Non skid, nonwoven variant	SMR	Side module, right	R5	TPE 52 Shore A, PP		
NTP	Nub top (round studs)	SMU	Side module, universal/both sides	R6	TPE 63 Shore A, POM		
PRR	Pin Retained Rollers	SPR	Sprocket	R7	TPE 50 Shore A, PP		
RAT	Radius top	TPL	Turning panel, left	R8	TPE 55 Shore A, PE		
RRB	Raised rib	TPR	Turning panel, right	SER	Self-extinguishing TPE		
RSA	Reduced surface area	UM	Universal module	SS	Stainless steel		
RTP	Roller top	WSC	Wheel Stopper Center	TPC1	Thermoplastic Copolyester		
SRS	Slip-resistant surface	WSS	Wheel Stopper Side	-HA	Supports the HACCP concept		
				-HW	High Wear resistant material		
		⑤ Style				⑧ Height/Diameter/ Bore size and style	
		1.7	1.7 collapse factor			Height in mm (in) Format: Hxxx	
		2.2	2.2 collapse factor			Pin diameter in mm (in) Format: Dxxx	
		2.2 G	2.2 collapse factor, guided			Bore size: SQ (= square) or RD (= round) either in mm or inches Format: SQxxMM or RDxxIN	
		A90	Angle 90° to conveying direction			⑨ Length/Width	
		BT	Bearing tab			Pins Length in mm (in) Format: Lxxx	
		DR	Double row sprocket			Module width in mm (in) Format: Wxxx	
		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.