# EXCERPT FROM PROLINK ENGINEERING MANUAL

01/24 (Ref-No. 888)



### Forbo Siegling GmbH

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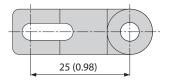
## SERIES 5 | **OVERVIEW**

## siegling prolink

Side flexing and spiral belts | Pitch 25 mm (0.98 in)

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

### Side view scale 1:1



### **Design characteristics**

- Suitable for both straight and radius conveying
- Up to 45% open area for excellent air circulation and drainage
- Stainless steel hinge pins for high load capacity, lateral stiffness, fewer belt supports and minimum belt lifting in curves
- No potential belt edge catch points due to safe fixing of hinge pins

### **Basic data**

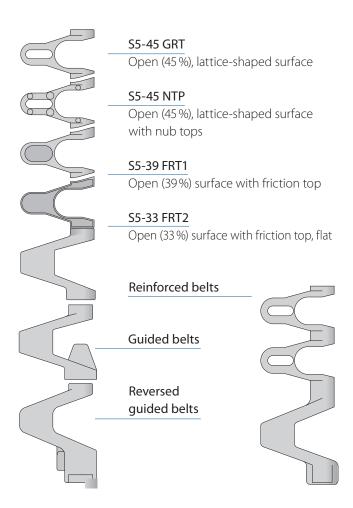
Pitch 25 mm (0.98)

Belt width min. 100 mm (3.9 in), 175 mm (6.9 in) for S5 ST

Width increments 25 mm (0.98)

Hinge pins 5 mm (0.2 in) made of stainless steel

## Available surface pattern and opening area



## **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



## **Ball-bearing modules**

to minimize friction forces at the belt edge

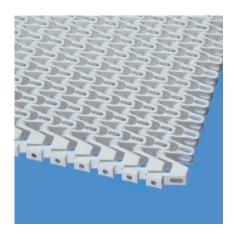


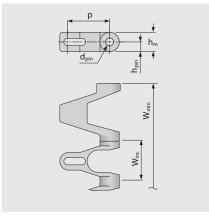
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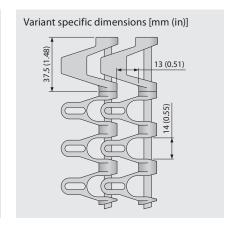
Side flexing and spiral belt | Pitch 25 mm (0.98 in) |  $C_c = 2.0$ 

## **S5-45 GRT** | 45 % Opening | Grid top

Open area (45 %) for excellent air circulation and drainage | 42 % contact area | Lattice shaped surface | Collapse factor ( $C_c$ ) = 2.0







## **Belt dimensions**

	р	$d_{pin}$	h <sub>m</sub>	h <sub>pin</sub>	h <sub>s</sub>	$W_{min}$	W <sub>inc</sub>	$W_{tol}$		Minim	num 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	25.0	5.0	12.0	6.0	0.0	100.0	25.0	±0.3	$2 \times W_B$	25.0	50.0	75.0	25.0
inch	0.98	0.2	0.47	0.24	0.0	3.94	0.98	±0.3	$2 \times W_B$	0.98	1.97	2.95	0.98

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

### Available standard materials 3)

В	Selt	Pi	n	Nominal stra		Nominal cu	belt pull, rve	Wei	ght	Width deviation	Tempe	erature	Certifi	cates <sup>2)</sup>
Material	Color	Material	Color	[N/mm]	[lb/ft]	[N]	[lb]	[kg/m <sup>2</sup> ]	[lb/ft <sup>2</sup> ]	[%]	[°C]	[°F]	FDA	EU
PE	WT/DB	SS		10	685	NR	NR	11.0	2.25	0.0	-70/65	-94/149	•	•
PP	WT/DB/BL	SS		18	1233	1000	225	10.0	2.05	0.0	5/100	41/212	•	•
POM-CR	WT/DB/BL	SS		25	1713	1800	405	13.0	2.66	0.0	-45/90	-49/194	•	•
Mold to d	order belts													
PA*	BL	SS		20	1370	1440	324	12.8	2.62	0.0	-40/120	-40/248	•	•

NR = not recommended

BL (Blue), DB (Dark blue), 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
- <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
- 3) More materials and colors on request



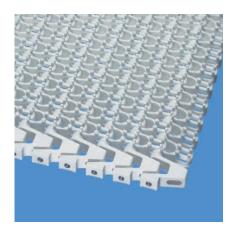
<sup>\*</sup> Values valid for dry applications (RH <50%). Belts in PA material will absorb water in wet environments, causing them to expand and reduce the nominal belt pull capacity.

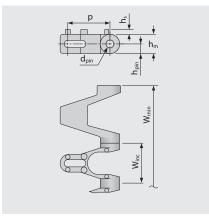
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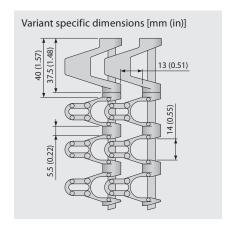
Side flexing and spiral belt | Pitch 25 mm (0.98 in) |  $C_c = 2.0$ 

## **S5-45 NTP** | 45 % Opening | Nub top (round studs)

Open area (45 %) for excellent air circulation and drainage | Lattice shaped surface with 3.0 mm (0.12 in) high round studs and 8 % contact area | Side modules without NTP-surface | Collapse factor ( $C_c$ ) = 2.0







#### **Belt dimensions**

	р	$d_{pin}$	h <sub>m</sub>	h <sub>pin</sub>	h <sub>s</sub>	$W_{min}$	W <sub>inc</sub>	$W_{tol}$		Minim	num 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	25.0	5.0	12.0	6.0	3.0	100.0	25.0	±0.3	$2 \times W_B$	25.0	50.0	75.0	25.0
inch	0.98	0.2	0.47	0.24	0.12	3.94	0.98	±0.3	$2 \times W_B$	0.98	1.97	2.95	0.98

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

### Available standard materials 3)

Ве	lt	Pi	n	Nominal strai	belt pull, ight	Nominal cu	belt pull, rve	Wei	ght	Width deviation	Tempe	erature	Certifi	cates <sup>2)</sup>
Material	Color	Material	Color	[N/mm]	[lb/ft]	[N]	[lb]	[kg/m <sup>2</sup> ]	[lb/ft <sup>2</sup> ]	[%]	[°C]	[°F]	FDA	EU
PP	WT	SS		18	1233	1000	225	10.1	2.07	0.0	5/100	41/212	•	•
POM-CR	WT	SS		25	1713	1800	405	13.1	2.68	0.0	-45/90	-49/194	•	•
Mold to o	rder belts	5												
PE	WT	SS		10	685	NR	NR	11.2	2.29	0.0	-70/65	-94/149	•	•

NR = not recommended

WT (White)



<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>&</sup>lt;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

<sup>● =</sup> available | - = not available | empty cells = not tested

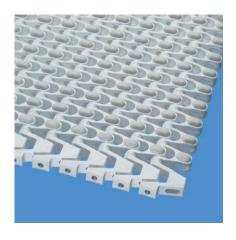
<sup>3)</sup> More materials and colors on request

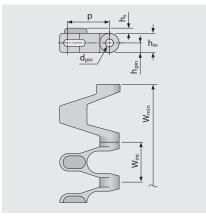
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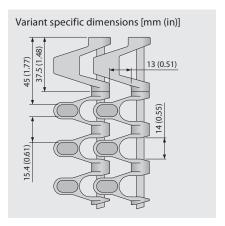
Side flexing and spiral belt | Pitch 25 mm (0.98 in) |  $C_c = 2.0$ 

## **S5-39 FRT1** | 39% Opening | Friction top (Design 1)

Excellent air circulation and drainage | Integrated friction pads (raised) increase surface friction and provide gentle grip | 8% contact area | Side modules without FRT-surface | Collapse factor ( $C_c$ ) = 2.0







#### **Belt dimensions**

	р	$d_{pin}$	h <sub>m</sub>	h <sub>pin</sub>	h <sub>s</sub>	$W_{min}$	$W_{inc}$	$W_{tol}$		Minim	num 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	25.0	5.0	12.0	6.0	3.2	100.0	25.0	±0.3	$2 \times W_B$	25.0	50.0	75.0	25.0
inch	0.98	0.2	0.47	0.24	0.13	3.94	0.98	±0.3	$2 \times W_B$	0.98	1.97	2.95	0.98

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

### Available standard materials 3)

	Ве	lt	Pi	n	Rub	ber	Nomin pull, st		Nomin pull, o	al belt curve	Wei	ght	Width deviation	Tempe	erature	Certifi	cates <sup>2)</sup>
٨	1aterial	Color	Material	Color	Material	Color	[N/mm]	[lb/ft]	[N]	[lb]	[kg/m <sup>2</sup> ]	[lb/ft <sup>2</sup> ]	[%]	[°C]	[°F]	FDA	EU
	PP	WT	SS		R4	BG	18	1233	1000	225	10.2	2.09	0.0	5/100	41/212	•	•
PC	OM-CR-PP	WT	SS		R4	BG	18	1233	1800	405	10.4	2.13	0.0	5/90	41/194	•	•



BG (Beige), WT (White)

<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>&</sup>lt;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

<sup>● =</sup> available | - = not available | empty cells = not tested

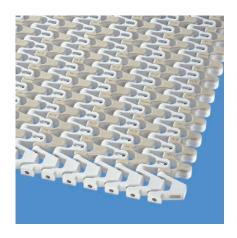
<sup>3)</sup> More materials and colors on request

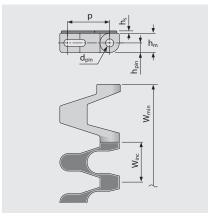
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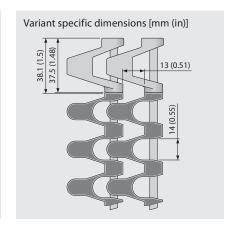
Side flexing and spiral belt | Pitch 25 mm (0.98 in) |  $C_c = 2.0$ 

## **S5-33 FRT2** | 33 % Opening | Friction top (Design 2)

Open area (33 % for full FRT2 surface area) for excellent air circulation and drainage | Integrated friction pads (flat) provide gentle grip | 47 % contact area | Side modules without FRT-surface | Collapse factor ( $C_c$ ) = 2.0







#### **Belt dimensions**

	р	$d_{pin}$	h <sub>m</sub>	h <sub>pin</sub>	h <sub>s</sub>	$W_{min}$	W <sub>inc</sub>	$W_{tol}$		Minim	num 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	25.0	5.0	12.0	6.0	1.5	100.0	25.0	±0.3	$2 \times W_B$	25.0	50.0	75.0	25.0
inch	0.98	0.2	0.47	0.24	0.06	3.94	0.98	±0.3	$2 \times W_B$	0.98	1.97	2.95	0.98

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

### Available standard materials 3)

Ве	elt	Pi	n	Rub	ber	Nomin pull, st		Nomin pull, o	al belt curve	Wei	ght	Width deviation	Tempe	erature	Certifi	cates <sup>2)</sup>
Material	Color	Material	Color	Material	Color	[N/mm]	[lb/ft]	[N]	[lb]	[kg/m <sup>2</sup> ]	[lb/ft <sup>2</sup> ]	[%]	[°C]	[°F]	FDA	EU
PP	WT	SS		R7	BG	18	1233	1000	225	11.4	2.33	0.0	5/100	41/212	•	•
PP	BL	SS		R7	BG	18	1233	1000	225	11.4	2.33	0.0	5/100	41/212	•	•
PP	BL	SS		R7	BK	18	1233	1000	225	11.4	2.33	0.0	5/100	41/212	•	•
POM-CR-PP	WT	SS		R7	BK	18	1233	1800	405	11.7	2.40	0.0	5/90	41/194	•	•
POM-CR-PP	BL	SS		R7	BG	18	1233	1800	405	11.7	2.40	0.0	5/90	41/194	•	•
POM-CR-PP	BL	SS		R7	BK	18	1233	1800	405	11.7	2.40	0.0	5/90	41/194	•	•

■ BG (Beige), ■ BK (Black), ■ BL (Blue), □ WT (White)



<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>&</sup>lt;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

 $<sup>\</sup>bullet$  = available | -= not available | empty cells = not tested

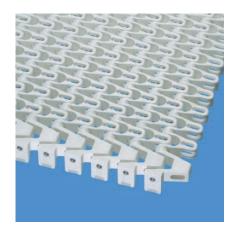
<sup>3)</sup> More materials and colors on request

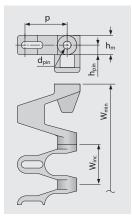
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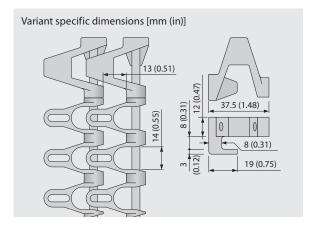
Side flexing and spiral belt | Pitch 25 mm (0.98 in) |  $C_c = 2.0$ 

## **S5-45 GRT G** | 45 % Opening | Grid top · guided

Excellent air circulation and drainage | 42% contact area | Lattice shaped surface and Hold Down Tabs | Allows utilization of the entire belt width | Collapse factor ( $C_c$ ) = 2.0







#### **Belt dimensions**

	р	$d_{pin}$	h <sub>m</sub>	h <sub>pin</sub>	h <sub>s</sub>	$W_{min}$	W <sub>inc</sub>	$W_{tol}$		Minim	num 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	25.0	5.0	12.0	6.0	0.0	100.0	25.0	±0.3	$2 \times W_B$	50.0	50.0	75.0	25.0
inch	0.98	0.2	0.47	0.24	0.0	3.94	0.98	±0.3	$2 \times W_B$	1.97	1.97	2.95	0.98

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

### Available standard materials 3)

Ве	elt	Pi	in	Nominal strai	•		belt pull, rve	Wei	ght	Width deviation	Tempe	erature	Certifi	icates <sup>2)</sup>
Material	Color	Material	Color	[N/mm]	[lb/ft]	[N]	[lb]	[kg/m <sup>2</sup> ]	[lb/ft <sup>2</sup> ]	[%]	[°C]	[°F]	FDA	EU
POM-CR	WT	SS		25	1713	1800	405	13.0	2.66	0.0	-45/90	-49/194	•	•
POM-CR	BL	SS		25	1713	1800	405	13.0	2.66	0.0	-45/90	-49/194	•	•
POM-CR	DB	SS		25	1713	1800	405	13.0	2.66	0.0	-45/90	-49/194	•	•
PP	WT	SS		18	1233	1000	225	10.0	2.05	0.0	5/100	41/212	•	•
Mold to o	rder belts	5												
PE	WT	SS		10	685	NR	NR	11.0	2.25	0.0	-70/65	-94/149	•	•
PA*	BL	SS		20	1370	1440	324	12.8	2.62	0.0	-40/120	-40/248	•	•

NR = not recommended

■ BL (Blue), ■ DB (Dark blue), □ WT (White)

- <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 Attention: Restrictions on sprocket size and corresponding shaft options please check sprocket data sheet
- <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
- $\bullet$  = available | -= not available | empty cells = not tested
- 3) More materials and colors on request



<sup>\*</sup> 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.

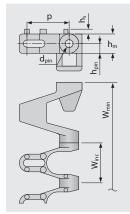
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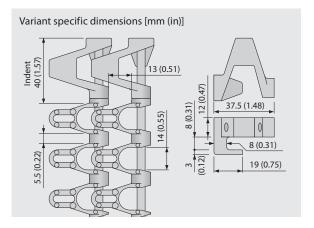
Side flexing and spiral belt | Pitch 25 mm (0.98 in) |  $C_c = 2.0$ 

## **S5-45 NTP G** | 45 % Opening | Nub top (round studs) · guided

Open area (45 %) for excellent air circulation and drainage | Lattice shaped surface with 3.0 mm (0.12 in) high round studs and 8 % contact area | Side modules without NTP-surface | Allows utilization of the entire belt width | Collapse factor ( $C_c$ ) = 2.0







#### **Belt dimensions**

	р	$d_{pin}$	h <sub>m</sub>	h <sub>pin</sub>	h <sub>s</sub>	$W_{min}$	W <sub>inc</sub>	$W_{tol}$		Minim	num 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	25.0	5.0	12.0	6.0	3.0	100.0	25.0	±0.3	$2 \times W_B$	50.0	50.0	75.0	25.0
inch	0.98	0.2	0.47	0.24	0.12	3.94	0.98	±0.3	2 x W <sub>B</sub>	1.97	1.97	2.95	0.98

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

### Available standard materials 3)

Ве	lt	Р	in	Nominal stra	belt pull, ight		belt pull, rve	Wei	ght	Width deviation	Tempe	erature	Certific	cates <sup>2)</sup>
Material	Color	Material	Color	[N/mm]	[lb/ft]	[N]	[lb]	[kg/m <sup>2</sup> ]	[lb/ft <sup>2</sup> ]	[%]	[°C]	[°F]	FDA	EU
POM-CR	WT	SS		25	1713	1800	405	13.2	2.70	0.0	-45/90	-49/194	•	•
PP	WT	SS		18	1233	1000	225	10.2	2.09	0.0	5/100	41/212	•	•



WT (White)

<sup>&</sup>lt;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 Attention: Restrictions on sprocket size and corresponding shaft options – please check sprocket data sheet

<sup>&</sup>lt;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

 $<sup>\</sup>bullet$  = available | -= not available | empty cells = not tested

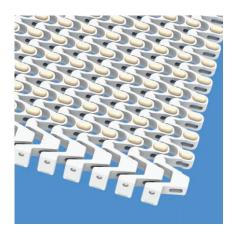
<sup>3)</sup> More materials and colors on request

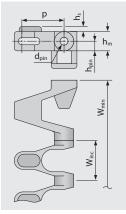
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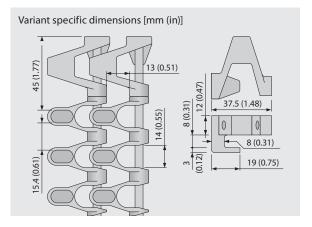
Side flexing and spiral belt | Pitch 25 mm (0.98 in) |  $C_c = 2.0$ 

## **S5-39 FRT1 G** | 39 % Opening | Friction top (Design 1) · guided

Excellent air circulation and drainage | Integrated friction pads (raised) increase surface friction and provide gentle grip | Allows utilization of the entire belt width | Side modules without FRT-surface | Collapse factor ( $C_c$ ) = 2.0







#### **Belt dimensions**

	р	$d_{pin}$	h <sub>m</sub>	h <sub>pin</sub>	h <sub>s</sub>	$W_{min}$	W <sub>inc</sub>	$W_{tol}$		Minim	num 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	25.0	5.0	12.0	6.0	3.2	100.0	25.0	±0.3	$2 \times W_B$	50.0	50.0	75.0	25.0
inch	0.98	0.2	0.47	0.24	0.13	3.94	0.98	±0.3	$2 \times W_B$	1.97	1.97	2.95	0.98

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

### Available standard materials 3)

	Ве	lt	Pi	n	Rub	ber	Nomin pull, st			nal belt curve	Wei	ght	Width deviation	Tempe	erature	Certifi	cates <sup>2)</sup>
1	Material	Color	Material	Color	Material	Color	[N/mm]	[lb/ft]	[N]	[lb]	[kg/m <sup>2</sup> ]	[lb/ft <sup>2</sup> ]	[%]	[°C]	[°F]	FDA	EU
	PP	WT	SS		R4	BG	18	1233	1000	225	10.2	2.09	0.0	5/100	41/212	•	•
P	OM-CR-PP	WT	SS		R4	BG	18	1233	1800	405	10.5	2.15	0.0	5/90	41/194	•	•



BG (Beige), WT (White)

<sup>&</sup>lt;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 Attention: Restrictions on sprocket size and corresponding shaft options – please check sprocket data sheet

<sup>&</sup>lt;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

 $<sup>\</sup>bullet$  = available | -= not available | empty cells = not tested

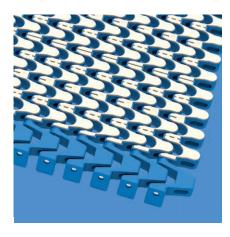
<sup>3)</sup> More materials and colors on request

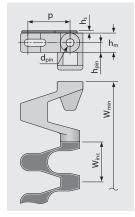
siegling prolink modular belts

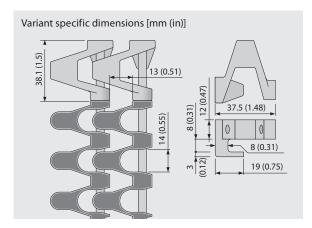
Side flexing and spiral belt | Pitch 25 mm (0.98 in) |  $C_c = 2.0$ 

## **S5-33 FRT2 G** | 33 % Opening | Friction top (Design 2) · guided

Open area (33 % for full FRT2 surface area) for excellent air circulation and drainage | 47 % contact area | Integrated friction pads (flat) provide gentle grip | Allows utilization of the entire belt width | Side modules without FRT-surface | Collapse factor ( $C_c$ ) = 2.0







#### **Belt dimensions**

	р	$d_{pin}$	h <sub>m</sub>	h <sub>pin</sub>	h <sub>s</sub>	$W_{min}$	W <sub>inc</sub>	$W_{tol}$		Minim	num 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	25.0	5.0	12.0	6.0	1.5	100.0	25.0	±0.3	$2 \times W_B$	50.0	50.0	75.0	25.0
inch	0.98	0.2	0.47	0.24	0.06	3.94	0.98	±0.3	2 x W <sub>B</sub>	1.97	1.97	2.95	0.98

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

### Available standard materials 3)

Ве	elt	Pi	n	Rub	ber	Nomin pull, st			nal belt curve	Wei	ght	Width deviation	Tempe	erature	Certifi	cates <sup>2)</sup>
Material	Color	Material	Color	Material	Color	[N/mm]	[lb/ft]	[N]	[lb]	[kg/m <sup>2</sup> ]	[lb/ft <sup>2</sup> ]	[%]	[°C]	[°F]	FDA	EU
PP	WT	SS		R7	BG	18	1233	1000	225	11.4	2.33	0.0	5/100	41/212	•	•
PP	BL	SS		R7	BG	18	1233	1000	225	11.4	2.33	0.0	5/100	41/212	•	•
PP	BL	SS		R7	BK	18	1233	1000	225	11.4	2.33	0.0	5/100	41/212	•	•
POM-CR-PP	WT	SS		R7	BG	18	1233	1800	405	11.7	2.40	0.0	5/90	41/194	•	•
POM-CR-PP	BL	SS		R7	BG	18	1233	1800	405	11.7	2.40	0.0	5/90	41/194	•	•
POM-CR-PP	BL	SS		R7	BK	18	1233	1800	405	11.7	2.40	0.0	5/90	41/194	•	•

■ BG (Beige), ■ BK (Black), ■ BL (Blue), □ WT (White)



<sup>&</sup>lt;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 Attention: Restrictions on sprocket size and corresponding shaft options – please check sprocket data sheet

<sup>&</sup>lt;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

 $<sup>\</sup>bullet$  = available | -= not available | empty cells = not tested

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

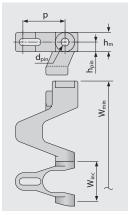
siegling prolink

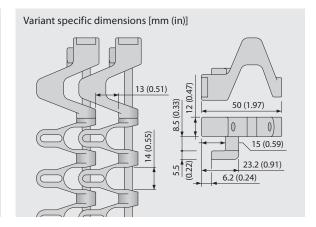
Side flexing and spiral belt | Pitch 25 mm (0.98 in) |  $C_c = 2.0$ 

## **S5-45 GRT RG** | 45 % Opening | Grid top · reverse guided

Excellent air circulation and drainage | Lattice shaped surface and reversed Hold Down Tabs | 42% contact area (Largest opening:  $14 \times 13 \text{ mm}/0.55 \times 0.51 \text{ in}$ ) | Smooth surface | Allows utilization of the entire belt width | Collapse factor ( $C_c$ ) = 2.0







#### **Belt dimensions**

	р	$d_{pin}$	h <sub>m</sub>	h <sub>pin</sub>	h <sub>s</sub>	$W_{min}$	W <sub>inc</sub>	$W_{tol}$		Minim	num 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	25.0	5.0	12.0	6.0	0.0	125.0	25.0	±0.3	$2 \times W_B$	50.0	50.0	75.0	25.0
inch	0.98	0.2	0.47	0.24	0.0	4.92	0.98	±0.3	$2 \times W_B$	1.97	1.97	2.95	0.98

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

### Available standard materials 3)

Ве	elt	Pi	in	Nominal stra	belt pull, ight	Nominal cui	belt pull, rve	Wei	ght	Width deviation	Tempe	erature	Certifi	cates <sup>2)</sup>
Material	Color	Material	Color	[N/mm]	[lb/ft]	[N]	[lb]	[kg/m <sup>2</sup> ]	[lb/ft <sup>2</sup> ]	[%]	[°C]	[°F]	FDA	EU
POM-CR	BL	SS		25	1713	2100	472	13.0	2.66	0.0	-45/90	-49/194	•	•
Mold to o	rder belts	5												
PE	WT	SS		10	685	NR	NR	11.0	2.25	0.0	-70/65	-94/149	•	•
PP	WT	SS		18	1233	1200	270	10.0	2.05	0.0	5/100	41/212	•	•

NR = not recommended

BL (Blue), WT (White)



<sup>&</sup>lt;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 Attention: Restrictions on sprocket size and corresponding shaft options – please check sprocket data sheet

<sup>&</sup>lt;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

 $<sup>\</sup>bullet$  = available | -= not available | empty cells = not tested

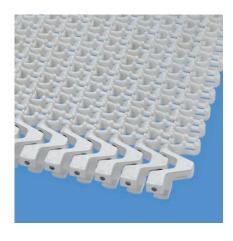
<sup>3)</sup> More materials and colors on request

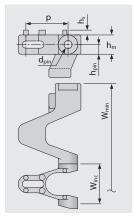
siegling prolink modular belts

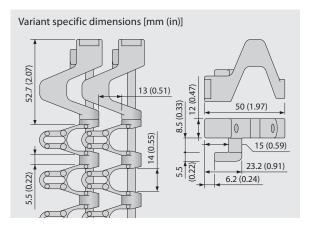
Side flexing and spiral belt | Pitch 25 mm (0.98 in) |  $C_c = 2.0$ 

## S5-45 NTP RG | 45 % Opening | Nub top (round studs) · reverse guided

Excellent air circulation and drainage | With round studs for increased grip (8% contact area) | Allows utilization of the entire belt width | Side modules only available without NTP-pattern | Collapse factor ( $C_c$ ) = 2.0







#### **Belt dimensions**

	р	$d_{pin}$	h <sub>m</sub>	h <sub>pin</sub>	h <sub>s</sub>	$W_{min}$	W <sub>inc</sub>	$W_{tol}$		Minim	num 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	25.0	5.0	12.0	6.0	3.0	125.0	25.0	±0.3	$2 \times W_B$	50.0	50.0	75.0	25.0
inch	0.98	0.2	0.47	0.24	0.12	4.92	0.98	±0.3	$2 \times W_B$	1.97	1.97	2.95	0.98

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

### Mold to order belts 3)

Ве	lt	Pi	in	Nominal stra	belt pull, ight		belt pull, rve	Wei	ight	Width deviation	Tempe	erature	Certifi	cates <sup>2)</sup>
Material	Color	Material	Color	[N/mm]	[lb/ft]	[N]	[lb]	[kg/m <sup>2</sup> ]	[lb/ft <sup>2</sup> ]	[%]	[°C]	[°F]	FDA	EU
POM-CR	WT	SS		25	1713	2100	472	13.2	2.7	0.0	-45/90	-49/194	•	•



WT (White)

<sup>&</sup>lt;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 Attention: Restrictions on sprocket size and corresponding shaft options – please check sprocket data sheet

<sup>&</sup>lt;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

 $<sup>\</sup>bullet$  = available | -= not available | empty cells = not tested

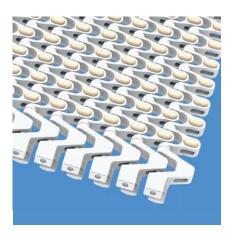
<sup>3)</sup> More materials and colors on request

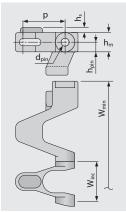
siegling prolink

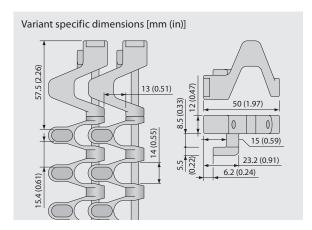
Side flexing and spiral belt | Pitch 25 mm (0.98 in) |  $C_c = 2.0$ 

## **S5-39 FRT1 RG** | 39% Opening | Friction top (Design 1) · reverse guided

Excellent air circulation and drainage | Integrated friction pads (raised) increase surface friction and provide gentle grip | Allows utilization of the entire belt width | Side modules without FRT-surface | Collapse factor ( $C_c$ ) = 2.0







#### **Belt dimensions**

	р	$d_{pin}$	h <sub>m</sub>	h <sub>pin</sub>	h <sub>s</sub>	$W_{min}$	W <sub>inc</sub>	$W_{tol}$		Minim	num 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	25.0	5.0	12.0	6.0	3.2	125.0	25.0	±0.3	$2 \times W_B$	50.0	50.0	75.0	25.0
inch	0.98	0.2	0.47	0.24	0.13	4.92	0.98	±0.3	$2 \times W_B$	1.97	1.97	2.95	0.98

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

### Available standard materials 3)

Ве	elt	Pi	n	Rub	ber	Nomin pull, st			nal belt curve	Wei	ight	Width deviation	Temp	erature	Certifi	cates <sup>2)</sup>
Material	Color	Material	Color	Material	Color	[N/mm]	[lb/ft]	[N]	[lb]	[kg/m <sup>2</sup> ]	[lb/ft <sup>2</sup> ]	[%]	[°C]	[°F]	FDA	EU
POM-CR-PP	WT	SS		R4	BG	18	1233	2100	472	10.2	2.09	0.0	-45/90	-49/194	•	•



BG (Beige), WT (White)

<sup>&</sup>lt;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 Attention: Restrictions on sprocket size and corresponding shaft options – please check sprocket data sheet

<sup>&</sup>lt;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

 $<sup>\</sup>bullet$  = available | -= not available | empty cells = not tested

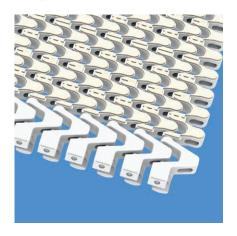
<sup>3)</sup> More materials and colors on request

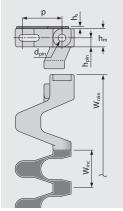
siegling prolink modular belts

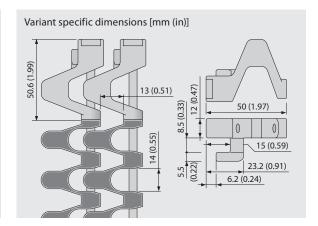
Side flexing and spiral belt | Pitch 25 mm (0.98 in) |  $C_c = 2.0$ 

## S5-33 FRT2 RG | 33 % Opening | Friction top (Design 2) · reverse guided

Open area (33 % for full FRT2 surface area) for excellent air circulation and drainage | 47 % contact area | Integrated friction pads (flat) provide gentle grip | Allows utilization of the entire belt width | Side modules without FRT-surface | Collapse factor ( $C_c$ ) = 2.0







#### **Belt dimensions**

	р	$d_{pin}$	h <sub>m</sub>	h <sub>pin</sub>	h <sub>s</sub>	$W_{min}$	$W_{inc}$	$W_{tol}$		Minim	num 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	25.0	5.0	12.0	6.0	1.5	125.0	25.0	±0.3	$2 \times W_B$	50.0	50.0	75.0	25.0
inch	0.98	0.2	0.47	0.24	0.06	4.92	0.98	±0.3	$2 \times W_B$	1.97	1.97	2.95	0.98

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

### Available standard materials 3)

	Belt	F	Pin	Rub	ber	Nomin pull, st	al belt raight		nal belt curve	Wei	ght	Width deviation	Temp	erature	Certifi	cates <sup>2)</sup>
Mater	ial Colo	Material	Color	Material	Color	[N/mm]	[lb/ft]	[N]	[lb]	[kg/m <sup>2</sup> ]	[lb/ft <sup>2</sup> ]	[%]	[°C]	[°F]	FDA	EU
POM-CR	-PP BL	SS		R7	BG	18	1233	2100	472	11.4	2.33	0.0	-45/90	-49/194	•	•
POM-CR	-PP WT	SS		R7	BG	18	1233	2100	472	11.4	2.33	0.0	-45/90	-49/194	•	•
POM-CR	-PP BL	SS		R7	BK	18	1233	2100	472	11.4	2.33	0.0	-45/90	-49/194	•	•



<sup>■</sup> BG (Beige), ■ BK (Black), ■ BL (Blue), □ WT (White)

<sup>&</sup>lt;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 Attention: Restrictions on sprocket size and corresponding shaft options – please check sprocket data sheet

<sup>&</sup>lt;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

 $<sup>\</sup>bullet$  = available | -= not available | empty cells = not tested

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

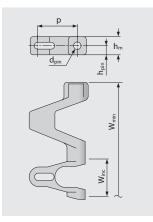
siegling prolink

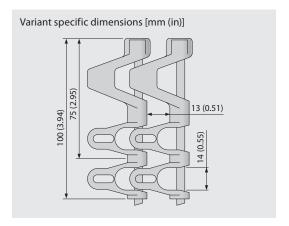
Side flexing and spiral belt | Pitch 25 mm (0.98 in) |  $C_c = 2.0$ 

## **S5-45 GRT ST** | 45 % Opening | Grid top · strong

Excellent air circulation and drainage | Lattice shaped surface | Version with reinforced brick-laid side modules (75 mm/2.9 in and 100 mm/3.9 in) increases belt pull capacity | Collapse factor ( $C_0$ ) = 2.0







#### **Belt dimensions**

	р	$d_{pin}$	h <sub>m</sub>	h <sub>pin</sub>	h <sub>s</sub>	$W_{min}$	W <sub>inc</sub>	$W_{tol}$		Minin	num 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	25.0	5.0	12.0	6.0	0.0	175.0	25.0	±0.3	$2 \times W_B$	25.0	50.0	75.0	25.0
inch	0.98	0.2	0.47	0.24	0.0	6.89	0.98	±0.3	$2 \times W_B$	0.98	1.97	2.95	0.98

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

### Available standard materials 3)

Ве	elt	Pi	in	Nominal strai	belt pull, ght		belt pull, rve	Wei	ght	Width deviation	Tempe	erature	Certifi	cates <sup>2)</sup>
Material	Color	Material	Color	[N/mm]	[lb/ft]	[N]	[lb]	[kg/m <sup>2</sup> ]	[lb/ft <sup>2</sup> ]	[%]	[°C]	[°F]	FDA	EU
PP	WT	SS		18	1233	1200	270	10.2	2.09	0.0	5/100	41/212	•	•
PP	DB	SS		18	1233	1200	270	10.2	2.09	0.0	5/100	41/212	•	•
PP	BL	SS		18	1233	1200	270	10.2	2.09	0.0	5/100	41/212	•	•
POM-CR	WT	SS		25	1713	2100	472	13.2	2.7	0.0	-45/90	-49/194	•	•
POM-CR	DB	SS		25	1713	2100	472	13.2	2.7	0.0	-45/90	-49/194	•	•
POM-CR	BL	SS		25	1713	2100	472	13.2	2.7	0.0	-45/90	-49/194	•	•
Mold to d	rder belts	5												
PE	WT	SS		10	685	NR	NR	11.1	2.27	0.0	-70/65	-94/149	•	•
DΔ*	RI	SS		20	1370	1680	378	13 0	266	0.0	-40/120	-40/248		

NR = not recommended

■ BL (Blue), ■ DB (Dark blue), □ 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
- <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
- 3) More materials and colors on request



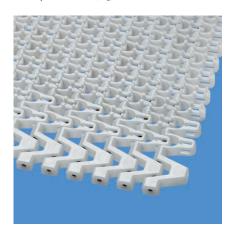
<sup>\*</sup> Values valid for dry applications (RH <50%). Belts in PA material will absorb water in wet environments, causing them to expand and reduce the nominal belt pull capacity.

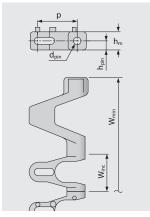
siegling prolink

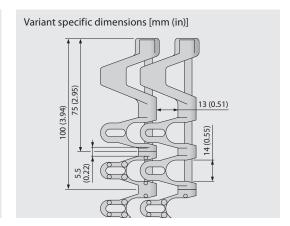
Side flexing and spiral belt | Pitch 25 mm (0.98 in) |  $C_c = 2.0$ 

## S5-45 NTP ST | 45 % Opening | Nub top (round studs) · strong

Excellent air circulation and drainage | With round studs for increased grip (8 % contact area) | Version with reinforced brick-laid side modules increases belt pull capacity | Side modules only available without NTP-pattern | Collapse factor ( $C_c$ ) = 2.0







#### **Belt dimensions**

	р	$d_{pin}$	h <sub>m</sub>	h <sub>pin</sub>	h <sub>s</sub>	$W_{min}$	W <sub>inc</sub>	$W_{tol}$		Minim	num 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	25.0	5.0	12.0	6.0	3.0	175.0	25.0	±0.3	$2 \times W_B$	25.0	50.0	75.0	25.0
inch	0.98	0.2	0.47	0.24	0.12	6.89	0.98	±0.3	$2 \times W_B$	0.98	1.97	2.95	0.98

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

### Available standard materials 3)

Ве	elt	Pi	in	Nominal stra	belt pull, ight		belt pull, rve	Wei	ght	Width deviation	Tempe	erature	Certific	cates <sup>2)</sup>
Material	Color	Material	Color	[N/mm]	[lb/ft]	[N]	[lb]	[kg/m <sup>2</sup> ]	[lb/ft <sup>2</sup> ]	[%]	[°C]	[°F]	FDA	EU
PP	WT	SS		18	1233	1200	270	10.2	2.09	0.0	5/100	41/212	•	•

WT (White)



<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>&</sup>lt;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

<sup>● =</sup> available | - = not available | empty cells = not tested

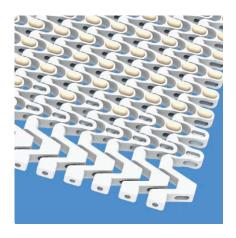
<sup>3)</sup> More materials and colors on request

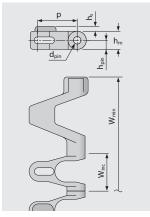
siegling prolink

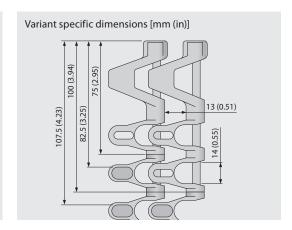
Side flexing and spiral belt | Pitch 25 mm (0.98 in) |  $C_c = 2.0$ 

## **S5-39 FRT1 ST** | 39 % Opening | Friction top (Design 1) · strong

Excellent air circulation and drainage | Integrated friction pads (raised) increase surface friction and provide gentle grip | Reinforced side modules increase belt pull capacity | Side modules without FRT-surface | Collapse factor ( $C_c$ ) = 2.0







#### **Belt dimensions**

	р	$d_{pin}$	h <sub>m</sub>	h <sub>pin</sub>	h <sub>s</sub>	$W_{min}$	W <sub>inc</sub>	$W_{tol}$		Minim	num 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	25.0	5.0	12.0	6.0	3.2	175.0	25.0	±0.3	$2 \times W_B$	25.0	50.0	75.0	25.0
inch	0.98	0.2	0.47	0.24	0.13	6.89	0.98	±0.3	$2 \times W_B$	0.98	1.97	2.95	0.98

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

### Available standard materials 3)

Ве	lt	Pi	n	Rub	ber	Nomin pull, st		Nomin pull, o	al belt curve	Wei	ght	Width deviation	Tempe	erature	Certifi	cates <sup>2)</sup>
Material	Color	Material	Color	Material	Color	[N/mm]	[lb/ft]	[N]	[lb]	[kg/m <sup>2</sup> ]	[lb/ft <sup>2</sup> ]	[%]	[°C]	[°F]	FDA	EU
PP	WT	SS		R4	BG	18	1233	1200	270	10.2	2.09	0.0	5/100	41/212	•	•
POM-CR-PP	WT	SS		R4	BG	18	1233	2100	472	10.5	2.15	0.0	5/90	41/194	•	•



BG (Beige), WT (White)

<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>&</sup>lt;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

 $<sup>\</sup>bullet$  = available | -= not available | empty cells = not tested

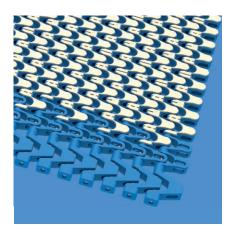
<sup>3)</sup> More materials and colors on request

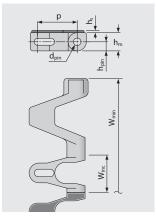
siegling prolink modular belts

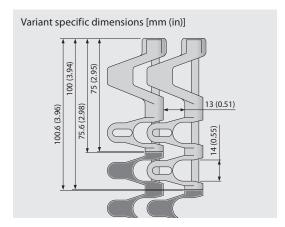
Side flexing and spiral belt | Pitch 25 mm (0.98 in) |  $C_c = 2.0$ 

## S5-33 FRT2 ST | 33 % Opening | Friction top (Design 2) · strong

Open area (33 % for full FRT2 surface area) for excellent air circulation and drainage | 47 % contact area | Lattice shaped surface | Version with reinforced brick-laid side modules increases belt pull capacity | Collapse factor ( $C_c$ ) = 2.0







#### **Belt dimensions**

	р	$d_{pin}$	h <sub>m</sub>	h <sub>pin</sub>	h <sub>s</sub>	$W_{min}$	W <sub>inc</sub>	$W_{tol}$		Minim	num 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	25.0	5.0	12.0	6.0	1.5	175.0	25.0	±0.3	$2 \times W_B$	25.0	50.0	75.0	25.0
inch	0.98	0.2	0.47	0.24	0.06	6.89	0.98	±0.3	$2 \times W_B$	0.98	1.97	2.95	0.98

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

### Available standard materials 3)

Ве	elt	Pi	n	Rub	ber	Nomin pull, st		Nomin pull, o	nal belt curve	Wei	ght	Width deviation	Tempe	erature	Certifi	cates <sup>2)</sup>
Material	Color	Material	Color	Material	Color	[N/mm]	[lb/ft]	[N]	[lb]	[kg/m <sup>2</sup> ]	[lb/ft <sup>2</sup> ]	[%]	[°C]	[°F]	FDA	EU
PP	BL	SS		R7	BG	18	1233	1200	270	11.4	2.33	0.0	5/100	41/212	•	•
PP	WT	SS		R7	BG	18	1233	1200	270	11.4	2.33	0.0	5/100	41/212	•	•
PP	BL	SS		R7	BK	18	1233	1200	270	11.4	2.33	0.0	5/100	41/212	•	•
POM-CR-PP	BL	SS		R7	BG	18	1233	2100	472	12.0	2.46	0.0	5/90	41/194	•	•
POM-CR-PP	WT	SS		R7	BG	18	1233	2100	472	12.0	2.46	0.0	5/90	41/194	•	•
POM-CR-PP	BL	SS		R7	BK	18	1233	2100	472	12.0	2.46	0.0	5/90	41/194	•	•

Comment: ST types combinable with standard center curve modules, NTP, FRT.

ST types not combinable with Guided (G), Side Guards (SG) or Bearing Tab (BT). Please contact us should you require small curve radii.

■ BG (Beige), ■ BK (Black), ■ BL (Blue), □ 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
- <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
- $\bullet$  = available | -= not available | empty cells = not tested
- 3) More materials and colors on request



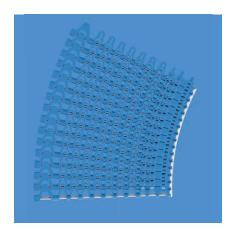
## S5 COMBO | BELT TYPES

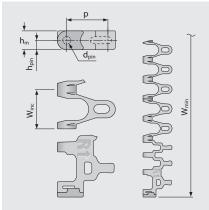
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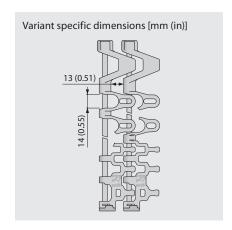
Side flexing belt | Pitch 25 mm (0.98 in) |  $C_c = 1.45$ 

## S5 ST/S11-45 GRT CW | 45 % Opening | Grid top | Clockwise or right hand curve

Combination of high belt pull capacity and small radii in one directional curve layouts | Excellent air circulation and drainage | 42% contact area | Lattice shaped surface | SS pins for high stiffness | Collapse factor ( $C_c$ ) = 1.45







#### **Belt dimensions**

	р	$d_{pin}$	h <sub>m</sub>	h <sub>pin</sub>	h <sub>s</sub>	$W_{min}$	W <sub>inc</sub>	$W_{tol}$		Minim	num 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	25.0	5.0	12.0	6.0	0.0	175.0	25.0	±0.3	1.45 x W <sub>B</sub>	25.0	50.0	75.0	25.0
inch	0.98	0.2	0.47	0.24	0.0	6.89	0.98	±0.3	1.45 x W <sub>B</sub>	0.98	1.97	2.95	0.98

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

### Available standard materials 3)

Ве	elt	Pi	in	Nominal stra	belt pull, ight	Nominal cui	belt pull, rve	Wei	ght	Width deviation	Tempe	erature	Certifi	cates <sup>2)</sup>
Material	Color	Material	Color	[N/mm]	[lb/ft]	[N]	[lb]	[kg/m <sup>2</sup> ]	[lb/ft <sup>2</sup> ]	[%]	[°C]	[°F]	FDA	EU
PP	WT	SS		18	1233	1200	270	10.2	2.09	0.2	5/100	41/212	•	•
PP	BL	SS		18	1233	1200	270	10.2	2.09	0.2	5/100	41/212	•	•
POM-CR	WT	SS		25	1713	2100	472	13.2	2.70	0.0	-45/90	-49/194	•	•
POM-CR	BL	SS		25	1713	2100	472	13.2	2.70	0.0	-45/90	-49/194	•	•
PA*	BL	SS		20	1370	1680	378	13.0	2.66	0.6	-40/120	-40/248	•	•

<sup>\*</sup> 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.

BL (Blue), WT (White)

- "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
- $\bullet$  = available | -= not available | empty cells = not tested
- 3) More materials and colors on request



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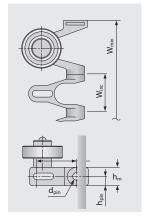
Side flexing and spiral belt | Pitch 25 mm (0.98 in) |  $C_c = 2.0$ 

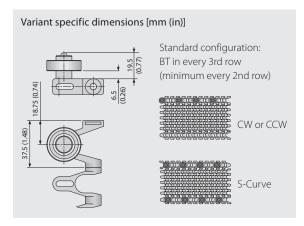
## **S5-45 GRT BT** | 45 % Opening | Bearing Tab Module\*

Ball-bearing support to minimize friction force at the belt edge (high speed, reduce dust, save energy) | Collapse factor ( $C_c$ ) = 2.0

\* The modules will be delivered without ball-bearings. Ball-bearing DIN 625-6000 2RS (or similar) could be used.







#### **Belt dimensions**

	р	$d_{pin}$	h <sub>m</sub>	h <sub>pin</sub>	h <sub>s</sub>	$W_{min}$	W <sub>inc</sub>	$W_{tol}$		Minin	num 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	25.0	5.0	12.0	6.0	0.0	100.0	25.0	±0.3	$2 \times W_B$	50.0	50.0	75.0	25.0
inch	0.98	0.2	0.47	0.24	0.0	3.94	0.98	±0.3	$2 \times W_B$	1.97	1.97	2.95	0.98

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

### Available standard materials 3)

Ве	lt	Pi	in	Nominal stra	belt pull, ight		belt pull, rve	Weig	ght**	Width deviation	Tempe	erature	Certifi	cates <sup>2)</sup>
Material	Color	Material	Color	[N/mm]	[lb/ft]	[N]	[lb]	[kg/m <sup>2</sup> ]	[lb/ft <sup>2</sup> ]	[%]	[°C]	[°F]	FDA	EU
POM-CR	DB	SS		25	1713	1800	405	13.0	2.66	0.0	-45/90	-49/194	•	•

<sup>\*\*</sup> Belt weight: Please calculate 18 g extra for each ball-bearing

#### **Additional information**

Compatible belt types: S5-45 GRT / NTP / (FRT1 / FRT2 in PP)

Friction coefficient in curve: 0.04

Standard belt configuration: BT in every 3rd row (min. every 2nd row). CCW and CW -> BT on the outside of the curve. S-curve -> BT on both sides.

Reduced spacing will improve smooth belt running behaviour

Smallest sprocket size: Depends on belt configuration (BT every 2nd row -> min. sprocket Z11 - only with RD hub)

### B (Dark blue)

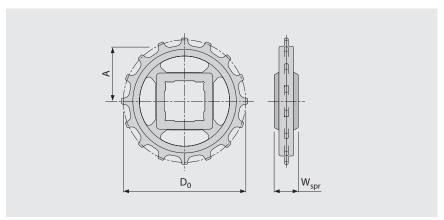
- 1) Flex radii: r1 = side flex, r2 = front flex on roller, r3 = back flex on load bearing roller, r4 = back flex on Hold Down shoe, r5 = back flex on roller
- <sup>2)</sup> Complies with FDA 21 CFR | Complies with (EU) 10/2011 and (EC) 1935/2004 regulations regarding the raw materials used and the migration thresholds | Complies with Japanese MHLW Notification 370
- = available | -= not available | empty cells = not tested
- 3) More materials and colors on request



Side flexing and spiral belt | Pitch 25 mm (0.98 in)

## **S5 SPR** | Sprockets





### **Main dimensions**

•	et size of teeth)	Z6	Z9	Z11	Z12	Z16	Z18	Z20
14/	mm	24.0	24.0	24.0	24.0	24.0	24.0	24.0
$W_{spr}$	inch	0.94	0.94	0.94	0.94	0.94	0.94	0.94
D <sub>0</sub>	mm	49.6	72.6	88.0	95.8	127.2	142.8	158.5
	inch	1.95	2.86	3.46	3.77	5.01	5.62	6.24
۸	mm	18.8	30.3	38.0	41.9	57.6	65.4	73.3
A <sub>max</sub>	inch	0.74	1.19	1.50	1.65	2.27	2.57	2.89
A <sub>min</sub>	mm	16.3	28.5	36.5	40.5	56.5	64.4	72.4
	inch	0.64	1.12	1.44	1.59	2.22	2.54	2.85

**Shaft bores** ( $\bullet$  = Round,  $\blacksquare$  = Square;  $\bigcirc/\square$  = not possible with S5 RG and G belts)

25	mm		●/□	•	●/■	•	•	•
30	mm		●/□	•	•	•	•	•
40	mm			۵	●/■	●/■	●/■	●/■
0.75	inch	0						
1	inch		●/□	•	●/■	•	•	•
1.25	inch		●/□	•	•	•	•	•
1.5	inch			٥	●/■	●/■	●/■	●/■

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

Number of sprockets (sprocket spacing distance) see chapter 3.2

Sprocket installation see chapter 5.2



## SERIES 5 | PROFILES

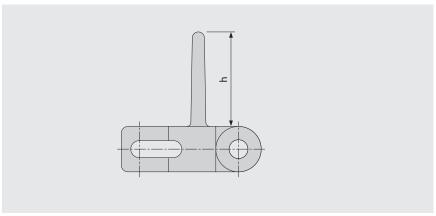
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Side flexing and spiral belt | Pitch 25 mm (0.98 in)

## S5-45 GRT PMC

Open version (45%) base module for drainage

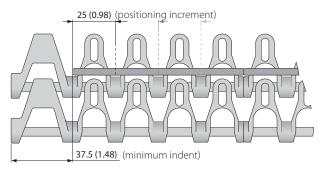




### **Basic data**

		Height (h)		
Material	Color	25 mm 1 inch	50 mm 2 inch	
PE	WT	•	•	
POM	BL	•	•	
POM	DB	•	•	
POM	UC	•	•	
POM	WT	•	•	
PP	DB	•	•	
PP	WT	•	•	

Molded width: 100 mm (3.9 in)



PMC also available for G, RG, ST types.

G = Indent 37.5 (1.48)RG = Indent 50 (1.97)

ST = Indent 75 (2.95)

BL (Blue), DB (Dark 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.

Note: Use of accessory in a belt may impact on the minimum design radii. Please see chapter 6.3 for further information.



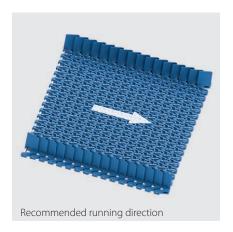
## SERIES 5 | **SIDE GUARDS**

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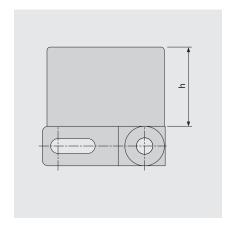
Side flexing and spiral belt | Pitch 25 mm (0.98 in)

## **S5 SG** | Side guards

For retention of bulk products

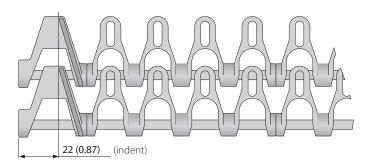






### **Basic data**

Material		Height (h)		
	l Color	25 mm	50 mm	
		1 inch	2 inch	
POM-CF	R BL		•	
POM-CF	R WT	•	•	



BL (Blue), WT (White)

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.

Note: Use of accessory in a belt may impact on the minimum design radii. Please see chapter 6.3 for further information.



## LEGEND

① <b>S</b>	eries	
<b>S</b> 1	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				
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			
HDK	High Deck			
LRB	Lateral rib			
MOD	Modified module shape			
NCL	No cling			
NPY	Negative pyramid			
NSK	Non skid			
NSK2	Non skid, nonwoven variant			
NTP	Nub top (round studs)			
PRR	Pin Retained Rollers			
RAT	Radius top			
RRB	Raised rib			
RSA	Reduced surface area			
RTP	Roller top			
SRS	Slip-resistant surface			

<b>4</b> Type	
BPU	Bucket profile
CAP	Pin lock & belt edge
C/11	sealing
CCW	Counter clockwise
CLP	Clip
CM	Center module
CW	Clockwise
FPL	Finger plate
HDT	Hold Down Tab
IDL	Idler
PIN	Coupling rod
PMC	Profile module center
PMU	Profile module universal
PSP	ProSnap
RI	High Grip insert
RTR	Retaining ring
SG	Module with sideguard
SLI	Slider
SML	Side module, left
SMR	Side module, right
SMU	Side module,
Sivio	universal/both sides
SPR	Sprocket
TPL	Turning panel, left
TPR	Turning panel, right
UM	Universal module
WSC	Wheel Stopper Center
WSS	Wheel Stopper Side

<b>5</b> Style	
1.7	1.7 collapse factor
2.2	2.2 collapse factor
2.2 G	2.2 collapse factor, guided
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
lxx	xx = indent in mm
RG	Reversed guided
SG	Side guard
SP	Split sprocket
ST	Strong

<b>© Material</b>				
PA	Polyamide			
PA-HT	Polyamide high temperature			
PBT	Polybutylentere- phthalate			
PE	Polyethylene			
PE-I	PE impact resistant			
PE-MD	PE metal detectable			
PLX	Wear & impact improved polymer			
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			
PP-MD	PP metal detectable			
PP-SW	PP steam and hot water resistant			
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			
ВК	Black			
BL	Blue			
DB	Dark blue			
GN	Green			
LB	Light blue			
LG	Light gray			
OR	Orange			
RE	Red			
TQ	Turquoise			
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

### 9 Length/Width

Pins Length in mm (in)
Format: Lxxx
Module width in mm (in)
Format: Wxxx

<sup>\*</sup> 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.