

# Product range

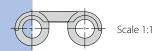
## Series 4.1

Pitch 14 mm (0.55 in)

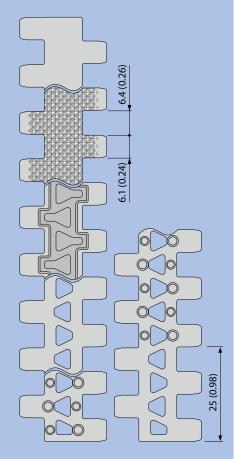


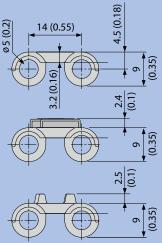


## Series 4.1



Straight running, pitch 14 mm (0.55 in)\*





14 mm (0.55 in)\* pitch straight running belt for light and medium-duty food and non-food applications.

## 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

## Special features

- inverted pyramid pattern provides superb release characteristics when conveying wet or sticky products
- 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
- large open area for excellent air circulation and drainage
- open nub top surface for good release of wet and sticky products

## Belt types

### S4.1-0 FLT

Closed, smooth surface

## S4.1-0 NPY

Closed surface with inverted 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)

## Pitch

14 mm (0.55 in)

## Belt width min.

25 mm (1 in)

### Width increments

In increments of 12.5 mm (0.5 in)

#### Hinge pins

5 mm (0.2 in) made of plastic (PE, PP, PBT)

## Declaration of compliances/Certificates

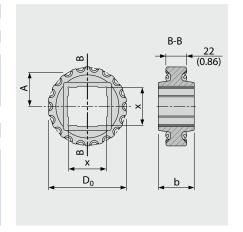
See fold-out page

Key dimensions in mm and inches (in), scale 1:2.

\* All imperial dimensions (inches) are rounded off.

#### Allowable belt pull [N/mm (lb/ft)] Weight [kg/m² (lb/ft²)] Open area [%] Materials Colours WT, UC, BL PΕ 3 (206) 5.1 (1.0) PE-MD 3 (206) WT, BL WT, BL 0 5 (343) 4.6 (0.9) POM 7.1 (1.5) 10 (685) 0 7.9 (1.6) POM-MD 0 BL 10 (685) BL 3 (206) 5.1 (1.0) 5 (343) 4.6 (0.9) BL 0 POM 10 (685) 7.1 (1.5) BL PE (R8) PP (R7) WT (BG) BL (BK) WT (BG) 3 (206) 6.1 (1.2) 0 5 (343) 5.9 (1.2) 0 POM (R6) 10 (685) 8.5 (1.7) BL (BK) 3 (206) 4.5 (0.9) 5 (343) 4.1 (0.8) WT, UC, BL WT, BL 21 21 PΕ PP POM 10 (685) 6.5 (1.3) WT, BL 21 PA-HT ВК 21 10 (685) 6.3 (1.3) PΕ BL 21 3 (206) 4.6 (0.9) WT 21 5 (343) 4.2 (0.9) POM 10 (685) 6.6 (1.3) BL

## **Sprockets**



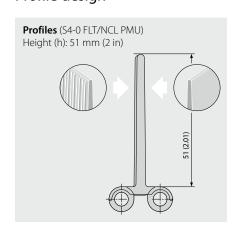
| Sp    | orocket<br>ze | Z10   | Z12   | Z14   | Z18   | Z19   | <b>Z26</b> | <b>Z</b> 35 |
|-------|---------------|-------|-------|-------|-------|-------|------------|-------------|
| b     | [mm]          | 25    | 25    | 38    | 38    | 38    | 38         | 38          |
|       | [in]          | (1.0) | (1.0) | (1.5) | (1.5) | (1.5) | (1.5)      | (1.5)       |
| $D_0$ | [mm]          | 47    | 56    | 65    | 83    | 88    | 120        | 161         |
|       | [in]          | (1.8) | (2.2) | (2.6) | (3.3) | (3.5) | (4.7)      | (6.3)       |
| Α     | [mm]          | 19    | 24    | 28    | 37    | 40    | 55         | 76          |
|       | [in]          | (0.7) | (0.9) | (1.1) | (1.5) | (1.6) | (2.2)      | (3.0)       |

| x | [mm] (sprocket bore metric) |       |        |      |       |    |  |   |
|---|-----------------------------|-------|--------|------|-------|----|--|---|
|   | 20                          | ●/■   |        |      |       |    |  |   |
|   | 25                          |       | ●/■    |      | ●/■   |    |  | • |
|   | 30                          |       |        |      |       |    |  | • |
|   | 40                          |       |        |      |       |    |  |   |
|   | 60                          |       |        |      |       |    |  |   |
|   |                             |       |        |      |       |    |  |   |
| X | [in] (sp                    | rocke | et bor | e im | peria | l) |  |   |
|   |                             |       |        |      |       |    |  |   |
|   | 3/4                         | •     |        |      |       |    |  |   |
|   | 3/4                         | •     | ●/■    |      | •     |    |  | • |
|   | 3/4<br>1<br>1.25            | •     | ●/■    |      | •     |    |  | • |
|   | 1                           | •     | ●/■    | -    | •     |    |  | _ |
|   | 1 1.25                      | •     | ●/■    |      | •     |    |  | • |
|   | 1<br>1.25<br>1.5            |       | ●/■    |      | •     |    |  | • |

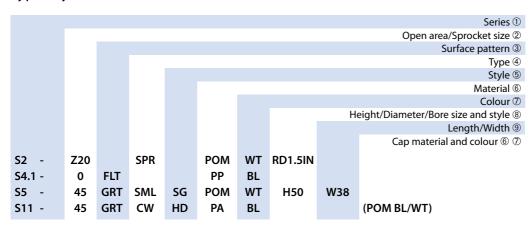
- Sprocket bore round
- Sprocket bore square
- **b** Sprocket width
- **D<sub>0</sub>** Pitch circle diameter
- A Distance centre of sprocket bore/ top edge support

The abbreviations and type key are explained on the fold-out page at the back.

## Profile design



## Type key\*



## Legend

| 1 | Series |  |
|---|--------|--|

S1 ... S13

#### 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**

SRS

= Base module for slider Cone top CTP FLT Flat top (smooth) FRT(X) =Friction top (Design X) FRT-OG = FRT without High Grip insert GRT Grid top LRB Lateral rib MOD Modified module shape = NCL No cling NPY Inverted pyramid NSK Non skid NTP Nub top (round studs) RAT Radius top RTP Roller top RRB Raised rib Slip-resistant surface

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

| 5 Style | • |                     |
|---------|---|---------------------|
| BT      | = | Bearing tap         |
| G       | = | Guided              |
| RG      | = | Reversed guided     |
| SG      | = | Side guard          |
| ST      | = | Strong (S5)         |
| DR      | = | Double row sprocket |
| SP      | = | Split sprocket      |
| F1, F2, | = | Collapse factor     |
| F3      |   | modules             |
| HD      | = | Hold Down           |

| 6 Materia | al |                          |
|-----------|----|--------------------------|
| PA        | =  | Polyamide                |
| PA-HT     | =  | Polyamide                |
|           |    | high temperature         |
| PBT       | =  | Polybutylenterephthalate |
| PE        | =  | Polyethylene             |
| PE-MD     | =  | PE metal detectable      |
| POM       | =  | Polyoxymethylene         |
|           |    | (Polyacetal)             |
| POM-CR    | =  | POM cut resistant        |
| POM-HC    | =  | POM highly conductive    |
| POM-MD    | =  | POM metal detectable     |
| PP        | =  | Polypropylene            |
| PXX-HC    | =  | Self-extinguishing       |
|           |    | highly conductive        |
|           |    | material                 |
| POM-PE    | =  | POM side modules +       |
|           |    | PE centre modules        |
| POM-PP    | =  | POM side modules +       |
|           |    | PP centre modules        |
| R1        | =  | TPE 80 Shore A, PP       |
| R2        | =  | EPDM 80 Shore A,         |
|           |    | vulcanised               |
| R3        | =  | TPE 70 Shore A, PP       |
| 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          |
| HA        | =  | Supports the             |
|           |    | HACCP concept            |
| HW        | =  | High Wear resistant      |
|           |    | material                 |

| ⑦ Colour** |   |             |  |  |  |  |
|------------|---|-------------|--|--|--|--|
| AT         | = | Anthracite  |  |  |  |  |
| BL         | = | Blue        |  |  |  |  |
| BG         | = | Beige       |  |  |  |  |
| BK         | = | Black       |  |  |  |  |
| DB         | = | Dark blue   |  |  |  |  |
| GN         | = | Green       |  |  |  |  |
| LB         | = | Light blue  |  |  |  |  |
| LG         | = | Light grey  |  |  |  |  |
| OR         | = | Orange      |  |  |  |  |
| RE         | = | Red         |  |  |  |  |
| TR         | = | Transparent |  |  |  |  |
| UC         | = | Uncoloured  |  |  |  |  |
| WT         | = | White       |  |  |  |  |
| YL         | = | Yellow      |  |  |  |  |
|            |   |             |  |  |  |  |

## ® Height/Diameter/ Bore size and style

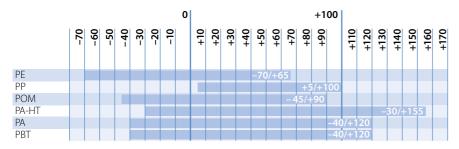
Height in mm Format: Hxxx Pin diameter in mm Format: Dxxx Bore size: SQ (= square) or RD (= round) either in mm or inches Format: SQxxMM or RDxxIN

## 9 Length/Width Pins Length in mm

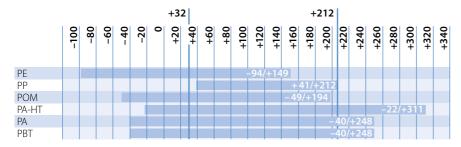
Format: Lxxx Module width in mm Format: Wxxx

- Not every product requires all characteristics (within the designation). If there is an irrelevant characteristic, this category will be ignored and replaced by the following one.
- \*\* Please refer to the table of types for each series' standard colours. A number of other colours are available on request. Colours can vary from the original due to the print, production processes or material used.

## Temperature ranges in °C



## Temperature ranges in °F



## **HACCP** types

Series 4.1, 6.1, 10 and 13 in particular support your HACCP concept with a number of hygiene-friendly characteristics. These features include:

### Easy-to-clean design

with wide channels underneath the module

## **Excellent resistance to hydrolysis**

 resistant to hot water, cleaning agents and disinfectants

## Good release properties

- beneficial when manufacturing adhesive foodstuffs (minimal product wastage)
- product residue is easy to remove
- easy-to-clean hinge design

## Blue a strong colour contrast

- soiling is easier to identify
- suitable for usage in optical sorters
- reduces light reflection, making working conditions better

## Declaration of compliances/ Certificates

#### FDA/EU

Siegling Prolink modular belts made of PE, PP, POM and PA comply with FDA 21 CFR as well as the (EU) 10/2011 and (EC) 1935/2004 regulations regarding the raw materials used and the migration thresholds.

#### Halal

All Siegling POM Prolink modular belts are certified as being compliant with the Halal regulations by IFRC Asia (member of the World Halal Council).

#### Friction top

Siegling Prolink modular belts made of PE with Friction top material R7 and of PP with Friction top material R8 comply with FDA 21 CFR as well as the (EU) 10/2011 and (EC) 1935/2004 regulations regarding the raw materials used and the migration thresholds with the exception of contact to oily and fatty foodstuff.

## Materials

#### PE (Polyethylene)

- very good chemical resistance to acids and alkalis
- very good release properties due to low surface tension
- good friction and abrasion behaviour
- extremely tough
- low specific weight

#### PP (Polypropylene)

- standard material for normal conveying applications
- quite strong and stiff
- good dynamic capacity
- highly resistant to acids, alkalis, salts, alcohols
- low specific weight
- no risk of stress cracks forming

### POM (Polyoxymethylene/Polyacetal)

- very dimensionally stable
- very strong and stiff
- high chemical resistance to organic solvents
- lower drag
- very durable material
- hard, incision-resistant surface

#### POM-CR (POM cut resistant)

- highly resistant to impact and incision
- easy to clean
- minimal ridge formation
- low risk of material delamination

## POM-HC (POM highly conductive)

- highly conductive material
- surface resistivity  $< 10^6 \, \Omega$  (according to specification)
- very strong and stiff
- very good friction and abrasion properties

#### POM-MD (POM metal detectable)

- material easily detected in metal detectors
- very strong and stiff
- very good tribological properties (friction and abrasion levels)

## PA (Polyamide)

- good wear resistance in dry applications
- short-term temperature resistance up to 135°C (275°F)
- good fatigue resistance

## PA-HT (Polyamide high temperature)

- material reinforced with fibre glass
- very high short-term temperature resistance up to 180  $^{\circ}\text{C}$  (356  $^{\circ}\text{F})$
- absorbs little water in humid environments
- very stiff
- durable

## PXX-HC (self-extinguishing highly conductive material)

- flame retardant in line with DIN EN 13501-1 (C<sub>fl</sub>-s1 and DIN 4102 (B1)
- surface resistivity < 10<sup>6</sup> Ω
- specially for use in the automotive industry

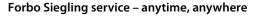
#### PBT (Polybutylenterephthalate)

- good wear resistance
- very good abrasive resistance
- good strength and stiffness
- not recommend for use in hot water >60 °C (140 °F)

Committed staff, quality-orientated organisation and production processes ensure the constantly high standards of our products and services. The Forbo Siegling Quality Management System is certified in accordance with ISO 9001.

In addition to product quality, environmental protection is an important corporate goal. Early on we also introduced an environmental management system, certified in accordance with ISO 14001.





The Forbo Siegling Group employs more than 2,000 people. Our products are manufactured in nine production facilities across the world. You can find companies and agencies with warehouses and workshops in over 80 countries. Forbo Siegling service points are located in more than 300 places worldwide.





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