

siegling
belting

AUTOMOTIVE INDUSTRY





FORBO SIEGLING – PRODUCTS AND SERVICES FOR **THE AUTOMOTIVE INDUSTRY**

If manufacturing and supplying products just in time are vital and downtimes are counted in minutes, Forbo Siegling is the perfect choice.

Advanced, reliable, good value belting products help you to maximize production capacities and minimize scheduled and unscheduled downtimes. A range of extra products makes handling easier and increases the efficiency of the application. 300 service points worldwide ensure rapid availability of spare parts and services – around the clock.

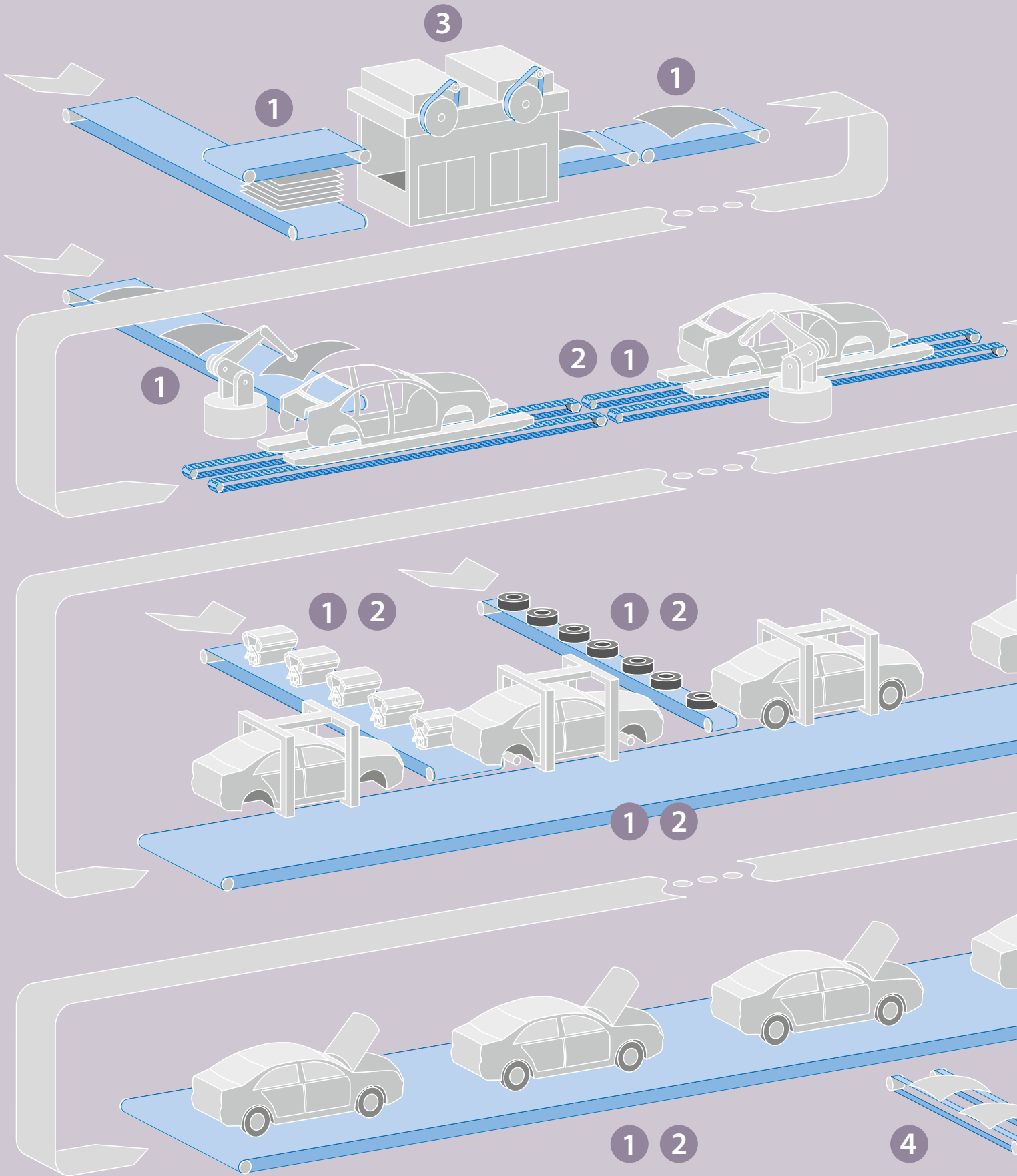
From support, to fitting, to after sales service, Forbo Siegling provides **a wide range of services**. Our qualified engineers, experienced in the industry, provide consistent support right up to when the products are used.

Our longstanding experience means we can provide specially tailored services for more effective and reliable production processes. With a customized service package, we can help you keep that competitive edge.

Just contact us.

Contents

- 4 The wide range of products for the automotive industry
- 6 Which product for which application?
- 7 Product range key data
- 8 Forbo Siegling worker belts
- 10 Worker belt range



THE WIDE RANGE OF PRODUCTS FOR THE AUTOMOTIVE INDUSTRY

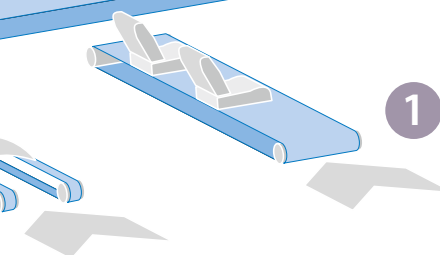
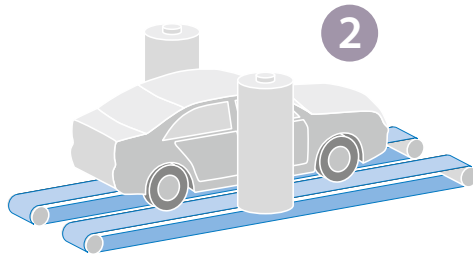
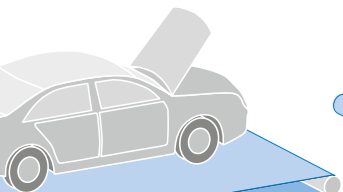
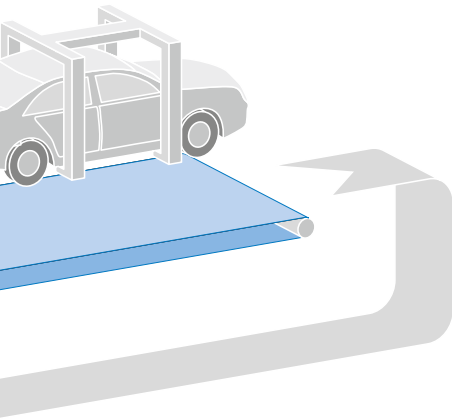
Before a vehicle leaves final assembly, it has already come into contact with Forbo Siegling belting products in many stages of the production process.

When manufacturing semi-finished products and components, conveyor belts ensure smooth material flow and streamlined fitting processes.

Flat belts guarantee efficient power transmission in the pressing shop and timing belts guarantee precise production timing.

Lightweight and easy to handle, Siegling Transilon conveyor belts and Siegling Prolink modular belts replace the conventional heavy rubber belts in worker belts of all types and skid conveying.

- 1** **siegling transilon**
conveyor and processing belts
- 2** **siegling prolink**
modular belts
- 3** **siegling extremultus**
flat belts
- 4** **siegling propostion**
timing belts



WHICH PRODUCT FOR WHICH APPLICATION?

siegling transilon conveyor and processing belts

1



- as worker belts
- for belt wrappers
- for conveying metal sheets
- in drag-band conveyors and magnetic elevators
- in metal stamping and vacuum lines
- as track belts
- for skid conveying
- in various other conveying and processing functions

siegling prolink modular belts

2



- as worker belts
- when fitting components
- for skid conveying
- in leak testing
- during final inspection
- when fitting tires
- for conveying metal sheets and punched parts

siegling extremultus flat belts

3



- as power transmission belts
- in vehicle body presses
- in forming machines
- in beveling machines
- in deep drawing machines

siegling propostion timing belts

4



- in drag-band conveyors
- in pressing lines
- in transfer lines
- in linear units

PRODUCT RANGE

KEY DATA

Supplied as	<ul style="list-style-type: none"> – open or endless – prepared for on-site fitting – with mechanical fasteners
Length	0.25 – 250 m
Width without longitudinal seam	10 – 4 000 mm
Width with longitudinal seam	to 9 000 mm
Thickness	1.4 – 7.0 mm
Number of layers	2/3, multi-ply fabric
K₁ relaxed	4 – 75 N/mm
Coating materials	PVC, urethane, nonwoven polyester material

Customized finishing.



For detailed information, see brochure **Siegling Transilon conveyor and processing belts** (Ref. no. 224)

Standard materials	<ul style="list-style-type: none"> – Polyethylene (PE) – Polypropylene (PP) – Polyacetal (POM)
Special materials	<ul style="list-style-type: none"> – HC polyacetal (POM HC) (conductive) – PXX-HC flame retardant in line with DIN EN 13501-1 and DIN EN ISO 21118:2006
Pitches	25.6/40/50 mm
Permeability categories	0/6/18
C₃ max	30 – 60 N/mm
Colors	white, green, gray, blue, yellow, black, anthracite
Patterns	smooth, anti-skid

Customized finishing.



For detailed information, see brochure **Siegling Prolink modular belts** (Ref. no. 800)

Supplied as	<ul style="list-style-type: none"> – open or endless – prepared for on-site fitting – with mechanical fasteners
Length	customized
Width	10 – 500 mm
Thickness	1.8 – 7.0 mm
Effective pull (1%)	6 – 80 N/mm
Tension member	Polyamide, polyester, aramid
Coatings	Leather, rubber, textile fabric etc.

Customized finishing.



For detailed information, see brochure **Siegling Extremultus compendium flat belts** (Ref. no. 333)

Supplied as	<ul style="list-style-type: none"> – open/roll material – prepared for on-site fitting – endless with Z-splice or meander splice – truly endless
Length (endless)	> 710 mm
Width	5 – 400 mm
Teeth types	T/AT/L/H/HTD and others
Pitches	5/10/20/8M/10M

Customized finishing.



For detailed information, see brochure **Siegling Proposition timing belts** (Ref. no. 245)

FORBO SIEGLING WORKER BELTS: ECONOMICAL OPERATION ALL ALONG THE LINE

Siegling Transilon conveyor belts and Siegling Prolink modular belts replace the conventional heavy rubber belts in worker belts of all types.

The combined benefits of these two product lines mean conveyors can be more compact, with much more economical operation as a result.

Compared with rubber belts with steel cord tension members, both of our alternatives have the following advantages:

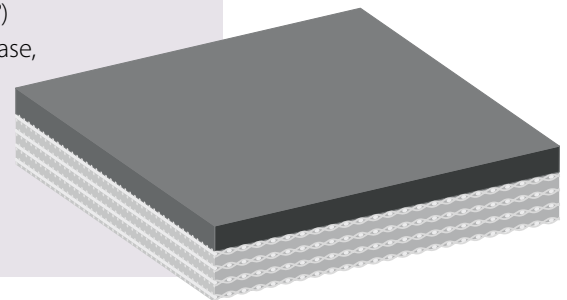
- wider belts without longitudinal seam
- lower purchasing costs
- small end drum diameters
- much easier handling when fitting and repairing
- the underside is extremely tough
- better chemical resistance
- quick and easy to fit and repair

They are also free of silicone and minimize electrostatic build-up.



Siegling Transilon worker belts (fabric based)

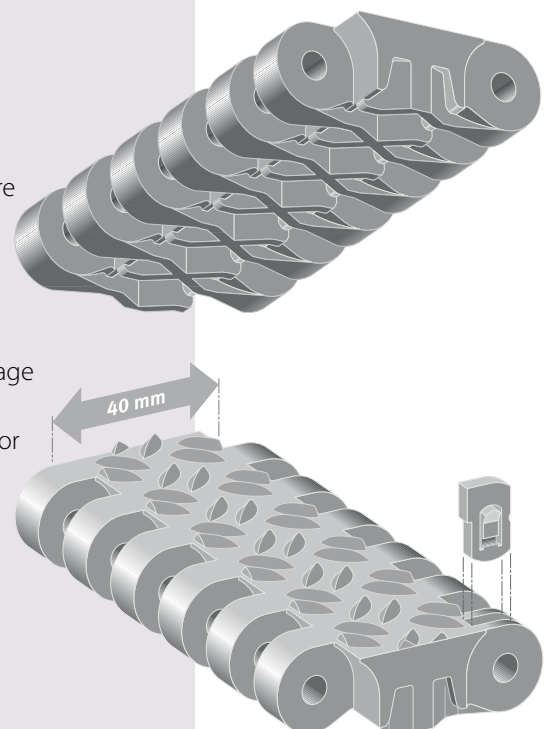
- **High level of lateral stiffness, lying absolutely flat**
with a structure up to four-layers deep and widths of up to 4000 mm without longitudinal seam.
- **Short take-up ranges and high level of longitudinal flexibility**
with a very strong aramid tension member (comparable with steel cord).
- **Can be used in all manufacturing processes**
with smooth or patterned surfaces and very hard (Shore A up to 92°) for ideal protection from damage; resistant to hydrolysis, oil and grease, free of silicone. Profiles can be welded on, e.g. as wheel stoppers.
- **Extremely low levels of drag and abrasion**
with a specially-impregnated underside.
- **Conveyors can be built compactly**
due to small end radii.



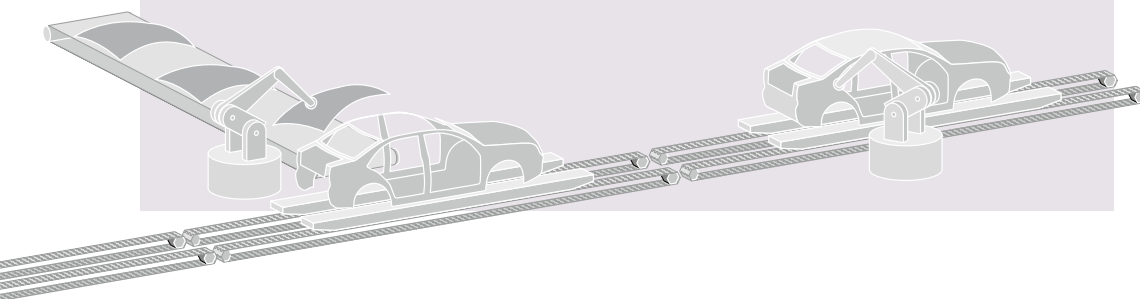
siegling transilon conveyor and processing belts

Siegling Prolink worker (plastic modular belts)

- **Smoother belt tracking**
due to closer modular pitch (more teeth at the end). As a result, chordal action or jolting is minimized.
- **Conveyor heights lower with simple shafts**
due to closer modular pitch and form-fit power transmission (small diameters at the ends are possible) and low sag.
- **Robust, abrasion and distortion resistant**
due to very strong plastics, ribbing over the whole height and therefore with a larger contact area. Used as a chain or skid conveyor because modules are strong and teeth engagement is ideal.
- **Can be used in all manufacturing processes**
due to a tough, incision-resistant surface, the surface pattern provides good grip (non-slip even in moist and oily conditions) and good drainage properties. Hydrolysis, oil and grease resistant, silicone free. Profiles available, e.g. as wheel stoppers. Optional hold-down clamps for reliable tracking and flat positioning of belts in swan neck conveyors.
- **Quick to fit and reliable splicing**
thanks to a new locking system with clips.
- **Minimal friction**
due to an ideal combination of materials with special runners.



siegling prolink modular belts





siegling transilon

conveyor and processing belts

Worker belt range

Article number	Total thickness approx. [mm]	Weight approx. [kg/m ²]	Effective pull at 1% elongation (K _{1%} relaxed) [N/mm width]*	Max. belt width without longitudinal seam [mm]	d _{min} approx. [mm]**	Permitted operating temperature [°C]	Surface hardness [Shore A]	HC-type available	Resistant to hydrolysis, oil and grease
----------------	------------------------------	-------------------------------------	---	--	---------------------------------	--------------------------------------	----------------------------	-------------------	---

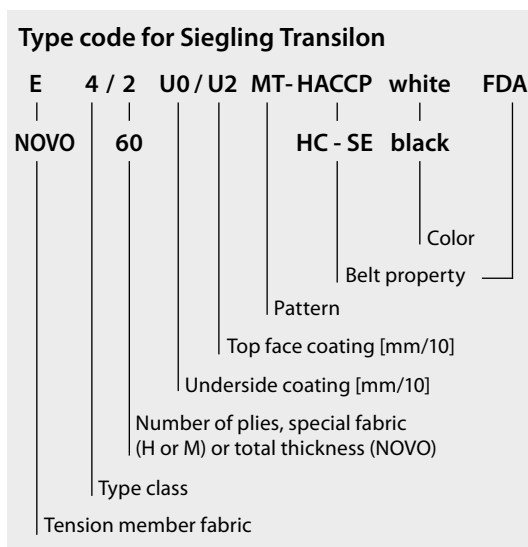
Siegling Transilon worker belts									
E 18/3 U0/V20 green	900088	4.8	5.7	16	3000	125	-10/+70	75	●
E 44/3 U0/V20 green	999995	5.8	7.0	27	3000	160	-10/+70	75	●
AE 140/3 U0/U4 MT-HC black	906609	3.7	4.2	75	4000	250	-30/+100	92	●

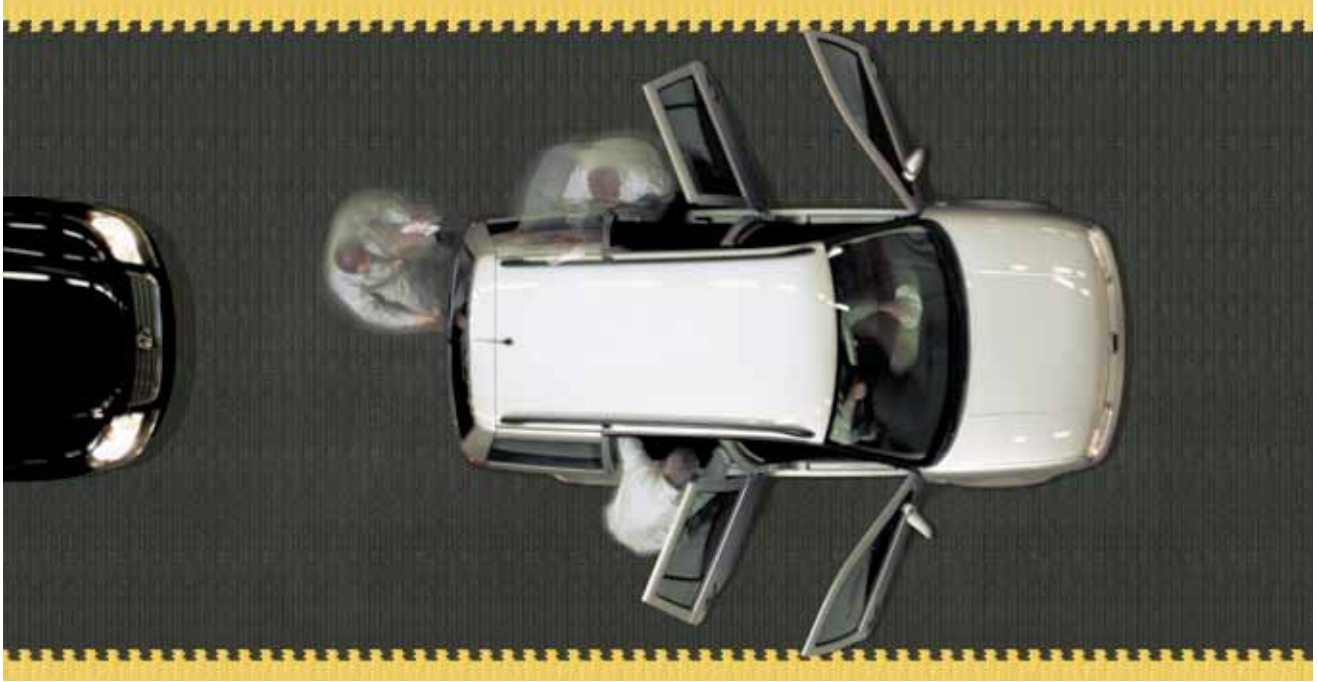
Legend

- AE** = Aramid/polyester blended fabric
- E** = Polyester
- U** = Polyurethane
- V** = Polyvinyl chloride
- MT** = Matte
- HC** = Highly-conductive

* Established in line with ISO 21181:2005

** The smallest permissible drum diameters were established at room temperature with z-splices and counter bending and do not apply to conveyor belts with mechanical fasteners. Lower temperatures, profiles and side walls can require larger drum diameters. On this point, see our brochure "Technical information 2" (ref. no. 318)





siegling prolink

modular belts

Worker belt range

Total thickness approx. [mm]	Weight approx. [kg/m ²] (includes hinge pin)	Allowable belt pull [N/mm]	d _{min} approx. [mm] on a small sprocket	Permitted operating temperature [°C]	HC-type available	Available in different colours	Permeable types available	Available with Friction top	Resistant to hydrolysis, oil and grease
------------------------------	--	----------------------------	---	--------------------------------------	-------------------	--------------------------------	---------------------------	-----------------------------	---

Siegling Prolink worker belts										
S1-0 FLT POM	16	14.4	40	162	-45/+90	●	●		●	●
S1-18 FLT POM	16	12.7	40	162	-45/+90	●	●	●		●
S1-0 NSK POM	16	16	40	162	-45/+90	●	●			●
S7-0 FLT POM	18	18.6	50 (60)*	130	-45/+90	●	●		●	●
S7-0 FLT PXX	18	9.3	30 (40)*	130	-5/+100	●			●	●
S7-6-FLT POM	18	17.6	50 (60)*	130	-45/+90	●		●		●
S7-0 NSK POM	18	19.5	50 (60)*	130	-45/+90	●	●			●
S8-0 FLT POM	10.5	10.6	40	91.6	-45/+90	●	●			●
S8-0 NSK POM	10.5	10.6	40	91.6	-45/+90	●	●			●
S8-0 FLT PXX	10.5	7.1	20	91.6	-5/+100	●				●

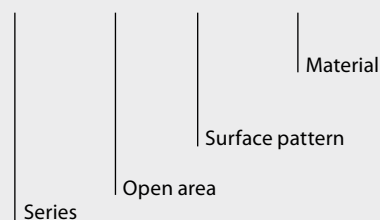
Legend

- POM** = Polyoxymethylene (Polyacetal)
- PXX** = Flame retardant in line with DIN EN 13501
- FLT** = Flat top
- NSK** = Non skid

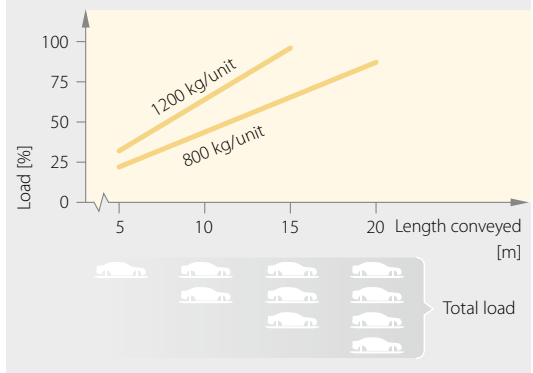
* Plastic pins (Stainless steel pins)

Type code for Siegling Prolink (simplified)

S1 - 18 FLT POM
S8 - 0 NSK POM



Calculation showing two-track drive with each module 80 mm wide



Siegling – total belting solutions

Committed staff, quality oriented organization 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.



Ref. no. 230-2
11/14 - UDH - Reproduction of text or parts thereof only with our approval. Subject to change.



Forbo Siegling service – anytime, anywhere

The Forbo Siegling Group employs more than 2,500 people. Our products are manufactured in ten 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.

Forbo Siegling GmbH

Lilienthalstrasse 6/8, D-30179 Hannover
Phone +49 511 6704 0
www.forbo-siegling.com, siegling@forbo.com



MOVEMENT SYSTEMS