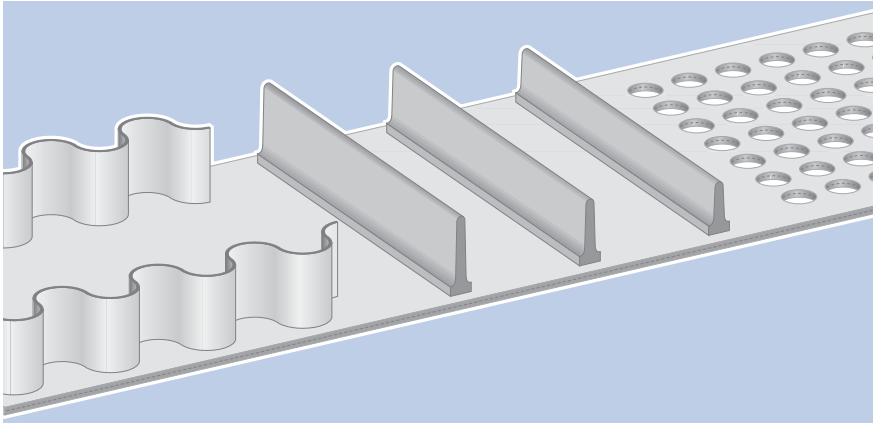


siegling transilon

conveyor and processing belts

Technical Information 2

Special features and properties



NA

Siegling Transilon conveyor and processing belts are high-quality products characterised by their durability, simple handling, freedom from maintenance and economical operation.

HC

Certain conveying and processing tasks require mechanical, physical or chemical belt properties which are made possible only by special production processes, combination of materials or finishing.

SE

- For example,
- profiles, sidewalls and surface patterns improve the grip properties,
 - special tension member designs allow usage as knife edge or curved belt,
 - NA, HC and SE belts fulfil special requirements in applications.

Important basic information about storage, finishing and fitting of your Siegling Transilon conveyor and processing belt can be found in our brochure ref. no. 317 "Technical Information 1".

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Profiles and sidewalls



Conveyor belts equipped with profiles are used for the inclined conveying of bulk goods and small items.

Profiles are available in various shapes and sizes, and in some cases can be supplied as roll material.

Sidewall profiles are used – often in conjunction with lateral profiles – to contain bulk goods on the sides of the belt.

Splice

For Siegling Transilon belts with profiles and sidewalls, the splice types listed in the “Technical Information 1” can be used, depending on the belt type.

In swan-neck conveyor belts, because of stiffness around the splice, a stepped Z-splice or overlap splice must be used.

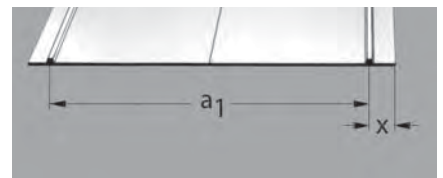
Positioning of profiles

Lateral profiles are usually positioned at a right angle to the belt edge. For other profile arrangements (e.g. V-shaped or curved) please note manufacturing possibilities and special dimensions on page 3.

With longitudinal profiles the distance from the belt edge to the middle of the profile (x) must be stated. Longitudinal profiles can be flush with the belt edge.

Exception: profiles on U0 surfaces require a gap from the belt edge of at least 2 mm.

When longitudinal profiles are attached in pairs the distance between the profile centres (a₁) must also be specified.



Combinations of materials				
Top face/ underside coating	Minimum coating thickness [mm]	Profile type/ material ⁽¹⁾	welded	hot-bonded
0; U0; E0; V1; U1; Y0	0	F, K profiles		●
VH	0.2	PVC F, K profiles all PU profiles	●	●
V	0.5	all PVC profiles/sidewalls all PU profiles	●	●
U2 ⁽²⁾	0.2	all PU profiles PVC F, K profiles	●	●
U4; U8	0.4; 0.8	all PU profiles/sidewalls PVC F, K profiles	●	●
U3; U20; UH; U2H; S; P; G; LF	–	no profiles/sidewalls possible		
E	0.3	all polyester profiles/sidewalls	●	
NOVO	2.5 mm total thickness	PVC F, K profiles		●
A	–	profiles on request		

The welding of profiles onto 1-ply belt types and onto the type E 5/2 is possible only to a limited extent.
Please inquire.

¹⁾ The letters “F” and “K” indicate profile shapes (see pages 4/5).

²⁾ The welding of PU profiles onto E 18/H U0/U2 MT white FDA is possible.

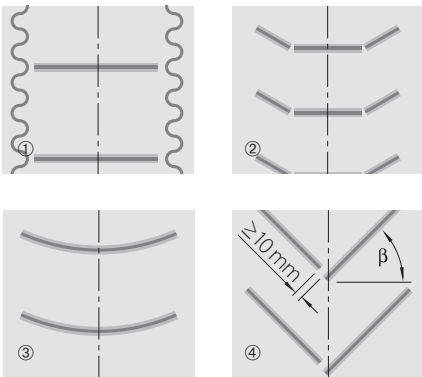
A	Polyolefin
C	Cotton
E	Polyester
G	Rubber/elastomer
F; Z	Felt, velour
P	Polyamide
S	Silicone
V	PVC
VH	Hard PVC
VS	Soft PVC
U	Urethane
UH	Hard urethane
NOVO	Polyester fibre bundle

0	Uncoated
A0	Impregnated with polyolefin
E0	Impregnated with polyester
LF	Low friction
S0	Impregnated with silicone
U0	Impregnated with urethane
U1	0.1 mm thick urethane coating
U2H	0.2 mm thick hard urethane coating
V1	0.1 mm thick PVC coating
Y0	Special impregnation on underside

Sizes available

No longitudinal profiles can be applied around a longitudinal seam, the distance a_1 must be at least 400 mm. If a longitudinal profile must be located in the centre of the belt, then the longitudinal seam must be offset by approx. 200 mm to either side of the centre.

If profiles on both sides or longitudinal and lateral profiles combined are needed, please inquire.



- ① Box-shaped welded profiles
- ② V-shaped welded profiles
- ③ Curved welded profiles
- ④ V-shaped welded profiles (sketch of dimensions)

Profile positions		
Profile details for v-shaped welded profiles (see fig.)		
Angle β	Belt length* min. [mm]	Belt width max. [mm]
45°	5500	1150
40°	5100	1300
35°	4800	1450
30°	4650	1600
25°	4300	1700
20°	3900	1800
15°	3300	1900
8.5°	2600	2000

* Shorter belt lengths available on request.

Belt sizes for lateral profiles	open belts	endless belts
	minimum belt length	any length
maximum belt length	any length	any length
minimum belt width ¹⁾	50 mm	50 mm
maximum belt width ¹⁾	approx. 3200 mm	approx. 3200 mm

Belt sizes for longitudinal profiles on top face	Belt width approx. [mm]	Minimum length endless belts ²⁾ approx. [mm]
up to 1200		700
up to 4700		1900
$>$ 4700		on request

Belt sizes for longitudinal profiles on underside	Belt width approx. [mm]	Minimum length approx. [mm]
up to 500		700
up to 700		1250
up to 1000		2000
up to 1750		2700
up to 2500		4000
up to 4450		5500
$>$ 4450		on request

Belts with profiles on top face and underside	Minimum widths
for lateral profiles	50 mm
for longitudinal profiles	a_1 + profile width

Tolerances of profile centre distances a_1	a_1 [mm]	Tolerance [mm]
	50 – 500	\pm 1.5
	up to 1000	\pm 2.0
	up to 3000	\pm 3.0
	up to 4000	\pm 4.0
	over 4000	\pm 5.0

Larger belt widths on request.

¹⁾ Depending on the profile shape and positioning, guidelines do not have to be kept to or may be exceeded – when using larger profiles or where profiles are positioned particularly narrowly, please consult us.

²⁾ Please note the manufacturing possibilities depending on the splicing angle – table minimum lengths in brochure ref. no. 317, page 4.

Types of profiles

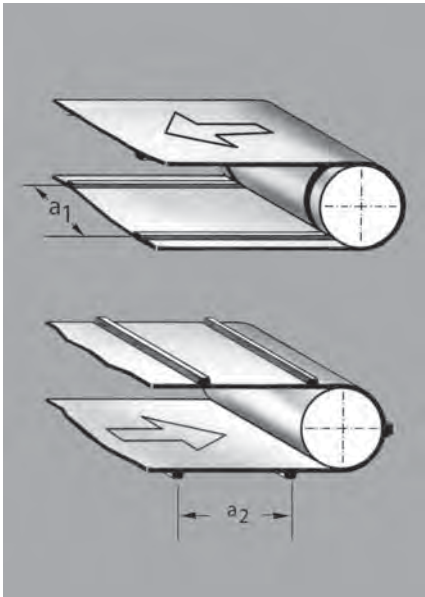
Material

Shapes

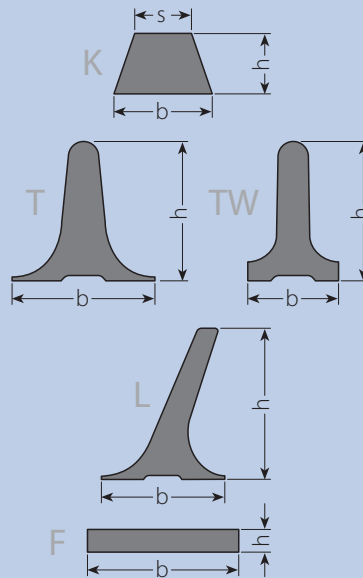
Shore-A-Hardness

Designation

Sizes
b x h x s [mm]



PVC Profiles



60

K 6	6 x 4 x 4
K 10	10 x 6 x 6
K 13	13 x 8 x 7.5
K 15	15 x 8 x 9.5
K 17	17 x 11 x 9.5
K 30	30 x 16 x 18
T 20	20 x 20
T 60	70 x 60
TW 40 ²⁾	30 x 40
TW 60 ²⁾	30 x 60
TW 80 ²⁾	40 x 80
L 40	33 x 40
L 60	33 x 60
L 80	46 x 80
F 20 x 3	20 x 3
F 30 x 8	30 x 8

Indented longitudinal profiles are available too. To extend service life we recommend using whole profiles that are not indented, as the indentation can cause splits at the bottom of the profile.

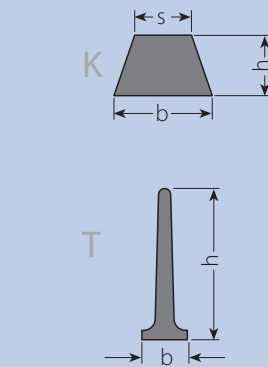
Further special profiles available on request.

Please note:

Profiles can mean that belt properties are changed. This applies particularly to types that

- are ATEX compliant
- have a highly conductive coating (HC)
- are flame-retardant (SE/FR)

Urethane Profiles

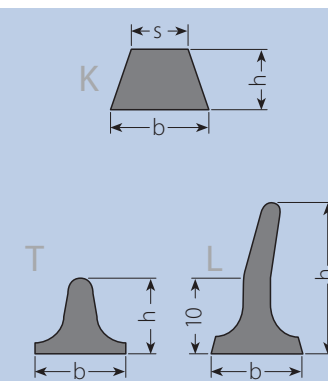


65

K 6	6 x 4 x 4
K 10	10 x 6 x 6
K 13	13 x 8 x 7.5
K 15	15 x 8 x 9.5
K 17	17 x 11 x 9.5
T 20	12 x 20
T 30	12 x 30
T 40	12 x 40
T 50	12 x 50
T 60	12 x 60
F 15 x 6	15 x 6
F 30 x 8	30 x 8

87

Polyester Profiles



92

K 10	10 x 6 x 6
K 13	13 x 8 x 7.5
K 17	17 x 11 x 9.5
T 10	12 x 10
LB 20	12 x 20
LB 30	12 x 30
LB 40	12 x 40
LB 50	12 x 50
LB 60	12 x 60

Recommended splice method

1-ply types	with splice film reinforced with gauze
2 + 3-ply types	Z-overlap or Overlap splice

¹⁾ The d_{min} specifications for the belt, the lateral profile and the sidewall must be taken into consideration when determining the drum diameters. The largest value is the most important factor and a smaller diameter may not be used. The specifications for d_{min} are standard values determined at normal ambient conditions (20 °C/50 % humidity).

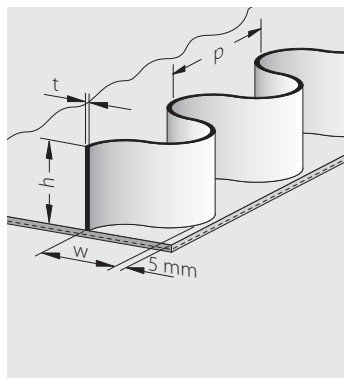
Lower temperatures require larger diameters.

²⁾ Can be used only in conjunction with sidewalls.

³⁾ Available, but not BFR/EU or FDA approved.

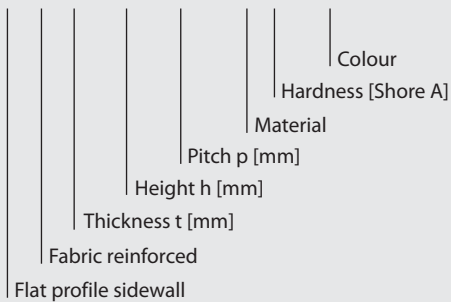
Sidewalls

	Article number	Thickness t [mm]	Height h [mm]	Width w [mm]	Spacing p [mm]	Shore A hardness	d _{min} approx. [mm]*	Permissible operating temperature [°C]	Fabric reinforced	
PVC	FWG 5X40/P67-V60 green	882020	5	40	52	67	60	100	-10/+70	●
	FWG 5X60/P67-V60 green	882021	5	60	52	67	60	150	-10/+70	●
	FWG 5X80/P67-V60 green	882022	5	80	52	67	60	200	-10/+70	●
	FWG 5X40/P67-V60 white FDA	882023	5	40	52	67	60	100	-10/+70	●
	FWG 5X60/P67-V60 white FDA	882024	5	60	52	67	60	150	-10/+70	●
	FWG 5X80/P67-V60 white FDA	882025	5	80	52	67	60	200	-10/+70	●
	FW 5X33/P67-V60 green	881150	5	33	52	67	60	80	-10/+70	
	FW 5X40/P67-V60-HACCP white FDA	880640	5	40	52	67	60	100	-10/+70	
	FW 5X60/P67-V60-HACCP white FDA	880641	5	60	52	67	60	150	-10/+70	
	FW 5X80/P67-V60-HACCP white FDA	880642	5	80	52	67	60	200	-10/+70	
	FW 5X40/P67-V60 green	880646	5	40	52	67	60	100	-10/+70	
	FW 5X60/P67-V60 green	880647	5	60	52	67	60	150	-10/+70	
	FW 5X68/P67-V60 green	882127	5	68	52	67	60	175	-10/+70	
	FW 5X80/P67-V60 green	880648	5	80	52	67	60	200	-10/+70	
Urethane	FW 2X30/P30-U87 green FDA	882035	2	30	36	30	87	50	-30/+80	
	FW 2X40/P30-U87 green FDA	882036	2	40	36	30	87	80	-30/+80	
	FW 2X30/P45-U87 green FDA	881246	2	30	36	45	87	80	-30/+80	
	FW 2X40/P45-U87 green FDA	881247	2	40	36	45	87	100	-30/+80	
	FW 2X60/P45-U87 green FDA	881248	2	60	36	45	87	150	-30/+80	
	FW 2X30/P30-U87-HACCP white FDA	882037	2	30	36	30	87	50	-30/+80	
	FW 2X40/P30-U87-HACCP white FDA	882038	2	40	36	30	87	80	-30/+80	
	FW 2X30/P45-U87-HACCP white FDA	881243	2	30	36	45	87	80	-30/+80	
	FW 2X40/P45-U87-HACCP white FDA	881244	2	40	36	45	87	100	-30/+80	
FW 2X60/P45-U87-HACCP white FDA	881245	2	60	36	45	87	150	-30/+80		
Polyester	FW 2X40/P45-E92 transparent FDA	881213	2	40	46	45	92	100	-10/+100	
	FW 2X60/P45-E92 transparent FDA	881214	2	60	46	45	92	150	-10/+100	
	FW 2X80/P67-E92 transparent FDA	881155	2	80	52	67	92	200	-10/+100	



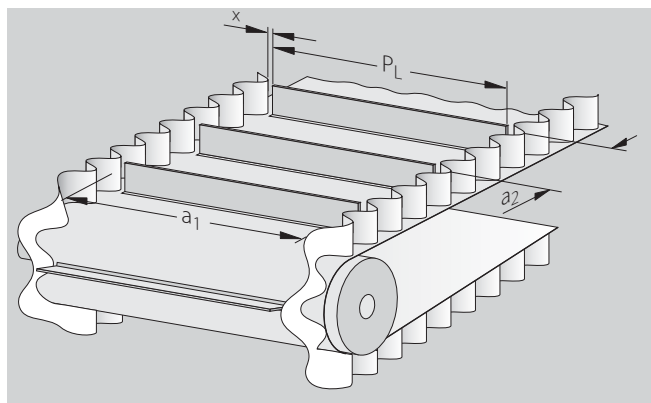
Type key

FWG 5 x 40 / P67 - V60 green



Key

* When establishing the drum diameter, the d_{min} of the belt, the lateral profile and the sidewall must be taken into account. The highest value is vital and must be adhered to. The d_{min} figures are guidelines. They were determined at normal ambient conditions (20°C/50% humidity.) Lower temperatures require smaller diameters.



Finished belt sizes available

Length: 2600 to 60000 mm
Width: 200 to 1300 mm

Recommended splicing method

Stepped overlap or stepped Z-splice

Inner distance between sidewalls

a₁ = 100 to 1200 mm (for a₁ < 150 mm deviations in edge parallelism are possible)

Maximum profile length PL max

P_{L max} = a₁ - 2x (with x = 2 ± 3)

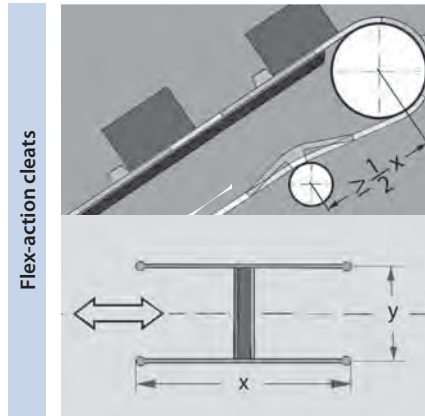
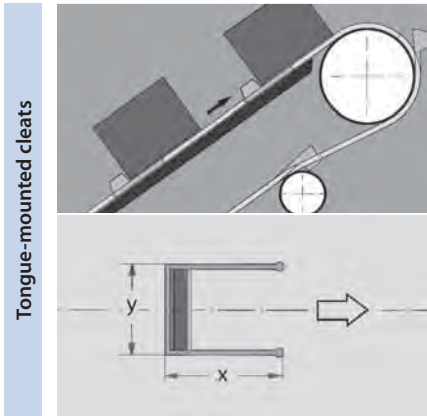
Sidewall amplitude tolerances

± 1.0 mm

Manual splice tolerances

amplitude ± 3.0 mm; spacing distance ± 1.5 mm

Tongue-mounted and flex-action cleats



With tongue-mounted and flex-action cleats it is possible to convey unit goods on inclines without problems – even at steeper incline angles.

A tongue is punched into the belt material in tongue-mounted cleats and a slit on flex-action cleats, on which a profile is applied laterally.

On the conveying side, the tongue or flexible section lies, like the belt itself, flat on the slider bed and makes form-fit conveying of unit goods on inclines possible. (Use of rollers with flex-action cleats is possible in some cases).

On the return side, the profile on the relatively narrow longitudinal strip flexes inwards when the belt runs over snub or support rollers. For that reason, belts with tongue-mounted and flex-action cleats can be retrofitted in existing conveyors without design modifications.

Profile	Tongue length (x) [mm]	Tongue width (y) [mm]
K 10	45 to 50	50 or 70
K 13	45 to 50	50 or 70
K 15	50 to 55	50 or 70
K 17	50 to 55	50 or 70

For other designs please inquire.

Profile	Length of flexible section (x) [mm]	Width of flexible section (y) [mm]
K 10	250	50 or 70
K 13	250	50 or 70
K 15	250 or 400	50 or 70
K 17	250 or 400	50 or 70

For other designs please inquire.

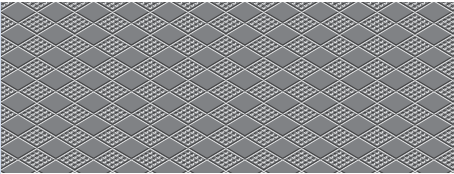
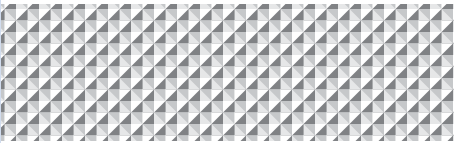
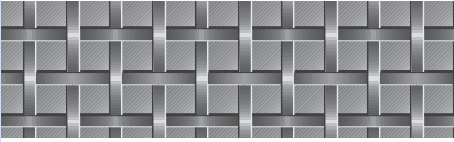





Tongue-mounted cleats carry unit goods only in an upward direction.

The slider bed should be located as close as possible to the snub rollers to prevent the profiles from sagging on the conveying side.

Flex-action cleats are suitable for inclined and declined conveying.

Belts with flex-action cleats are preferred for upwards conveying where the slider beds are too short, have gaps or are installed at a higher level than the snub rollers.

Properties					
good draining properties (wet areas)	easy to clean	wear resistant	low-noise in counter-bending	Inclined conveying	FDA design available

	●		○		●	
	○	○	●	○	●	
●	○		○	●		
●	●	●		●	●	
●	○	●		●		
		●		●		
●		●		●		
●	○	●		●	●	

RFF
Flat fine rhomboid pattern (Scale 1:1)

NP
Inverted pyramid pattern (Scale 1:1)

SG
Lattice pattern (Scale 1:1)

VN
Staggered stud pattern (Scale 1:4)

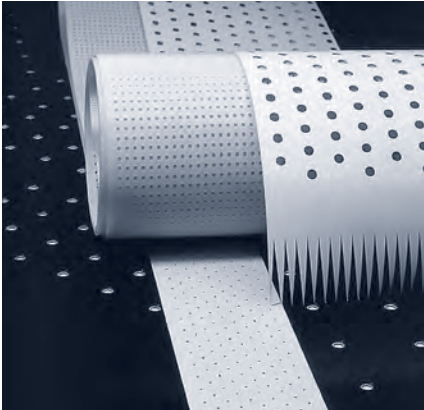
KN
Cross-stud pattern (Scale 1:1)

R80
Rhomboid pattern (Scale 1:4)

CH
Check-in pattern (Scale 1:4)

FG
Herringbone pattern (Scale 1:2)

Modifying belts



In Siegling Transilon material almost any perforation configuration can be achieved within narrow tolerances (± 1 mm) – please inquire about the perforation configuration you require. Special designs with metal eyelets are also available.

Perforated belts are not suitable for form-fit transmission of force. Ask your Forbo Siegling contact person for alternatives.

An overlap or stepped Z-splice should be used for perforated belts, since such splices can also be perforated in the splice section.

Maximum belt width b_0 [mm] = approx. 3000 (for several perforations)

Diameters of perforations d [mm]:

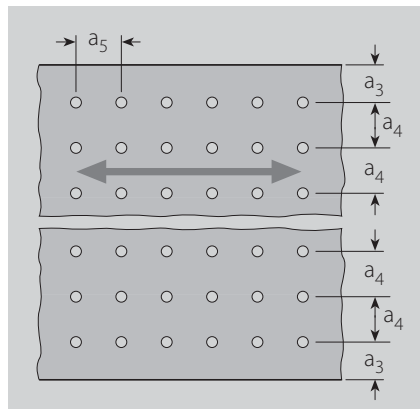
4	5	6	7	8	9	10	11	12
13	14	15	16	18	19	20	30	

Tolerance [mm] ± 1

Applying free forms

By precisely milling the surface of the belt and cutting virtually any types of perforations, Forbo Siegling offers a range of new options for many production processes. We can supply more detailed information on request.

Rows of perforations with identical diameters



Distance from edge [mm]

$$a_{3 \min} = d/2 + 25$$

Distance between perforations, longitudinal [mm]

$$a_{5 \min} = d + 35$$

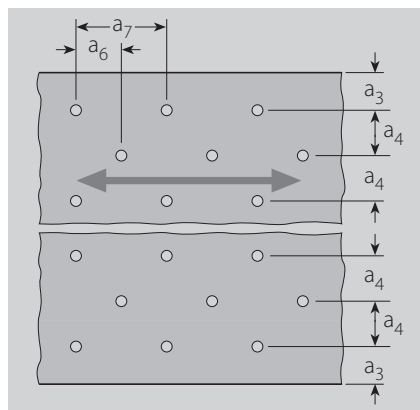
Distance between perforations, lateral [mm]

$$a_{4 \min} = d + 35$$

Modifying belts with lasers

Positioning and control markings, logos, graphics, technical information and much more can be lasered into the surface of the belt. No material is added, a different colour is merely applied to the surface of the belt. Because of its extreme durability, precise positioning and crisp printing results, this process opens up new ways of using belts.

Off-set rows of perforations with identical diameters



Distance from Edge [mm]

$$a_{3 \min} = d/2 + 25$$

Distance between perforations, longitudinal [mm]

$$a_{6 \min} = d + 25$$

$$a_{7 \min} = d + 25$$

Distance between perforations, lateral [mm]

$$a_{4 \min} = d + 35$$

You can find more information in our "Real added value due to innovative laser technology" brochure (ref. no. 123 – download at www.forbo-siegling.com/de).

Tolerances for elevator belts

Centre distance of perforation [mm]	Tolerance [mm]	Screw size	Perforation [mm]
40 – 50	± 1	M 6/M 7 M 8/M 9	+1
63 – 125	± 2	M 10/M 12 M 13/M 14	+2

Belt edge sealing



Belt edge sealing prevents oil, grease, water, foreign bodies and bacteria from penetrating the belt. At the same time, it increases the service life of the conveyor belt.

This additional protection can be applied to virtually every Siegling Transilon conveyor belt. You can find detailed information on the combinations possible in our data sheets.

All common types of splice can be used on Siegling Transilon belts with belt edge sealing.

Smartseal

A special press heats the edges of the belt material. The melted section at the sides is reshaped, closes the fabric reliably and can even be repaired.

In this process, the belt edge is always the same colour as the belt itself. The colours intermingle if the colour of the layers is different.



Hotseal

Reactive hot adhesive is applied to and shaped on the belt edge.

Hotseal can be an economical alternative for belts that are > 20 m long.



Proseal

A round cord is welded onto the edge of the belt.

This type of belt edge sealing is used on narrow belts and belts with special colours.

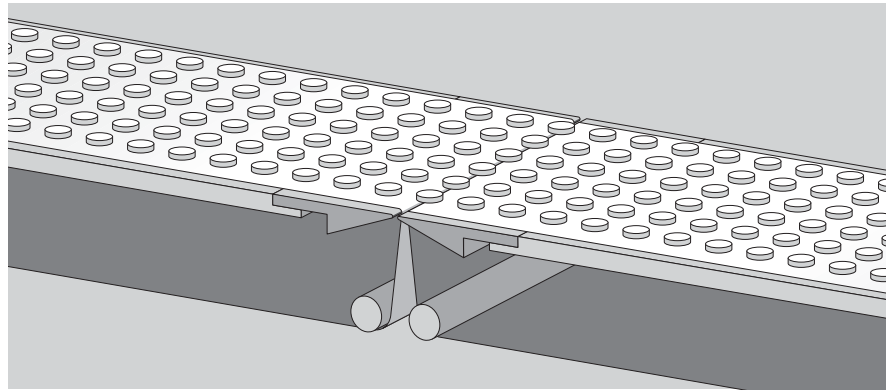
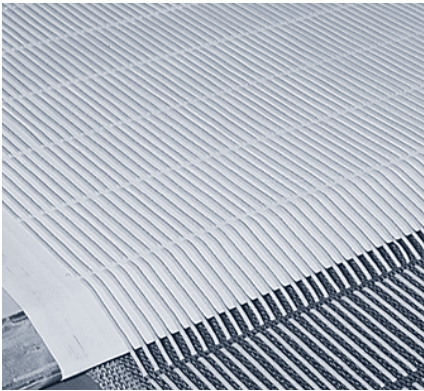


Combinations of materials

Process	Top face coating	Belt thickness from/to [mm]	Colour				Belt widths from/to [mm]
			transparent	white	green	blue	
Smartseal	A; E; U; V; 0	0.7 – 4.5	●*	●*	●*	●*	30/150*** – 4000
Hotseal	A; E; U; V; 0	0.7 – 8.0	●				50 – 3100
Proseal	0; U0	0.7 – 2.7		●	○	●	40 – 1000**
	A	2.5 – 3.7	●				40 – 1000**
	E	1.7 – 2.2	●				40 – 1000**
	U; UxS	0.7 – 2.7		●	○	●	40 – 1000**
	V; VxS	1.2 – 4.5		●	●	●	40 – 1000**

● available ○ on request * For technical reasons, same as colour of belt ** larger widths on request *** Depending on the material

Knife edge belts



Siegling Transilon knife edge belts are especially flexible longitudinally and rigid laterally. They are suitable for use on knife edges as of 3 mm radius.

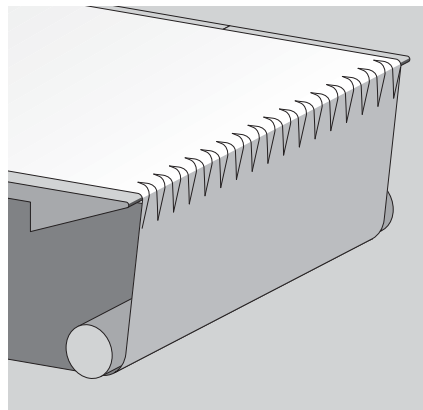
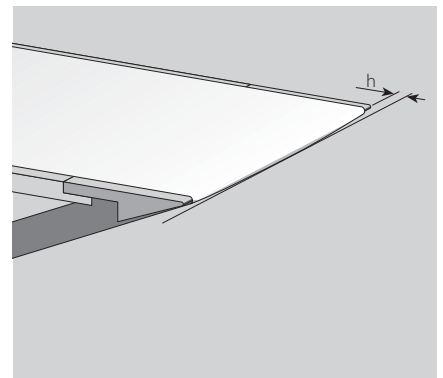
Even wide belts run flat, so even light-weight goods remain in position.

With their high coefficients of thermal conductivity, knife edge belts are exceptionally well suited for use as cooling tunnel belts. They are physiologically harmless, largely impermeable to oils and greases and meet BfR, EU and FDA stipulations for the conveying of unwrapped foodstuffs. They can also be supplied in blue and white HACCP design.

Since the power consumption of knife edge belts is higher, the arc of contact should be kept as small as possible.

Long conveyor belts running over knife edges (e.g. cooling tunnels) usually have edge-mounted tracking devices.

Shorter knife edge belts (e. g. at transfer points and tray belts) can be tracked well if a crown (h) is added to the knife edge or in reverse operation to both knife edges.



Z-splice

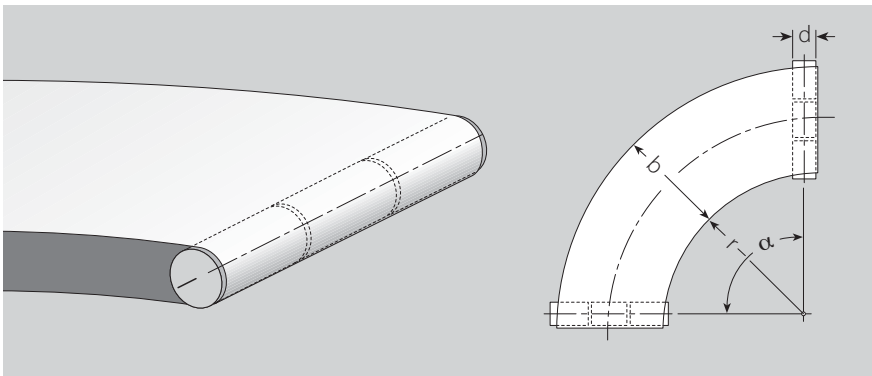
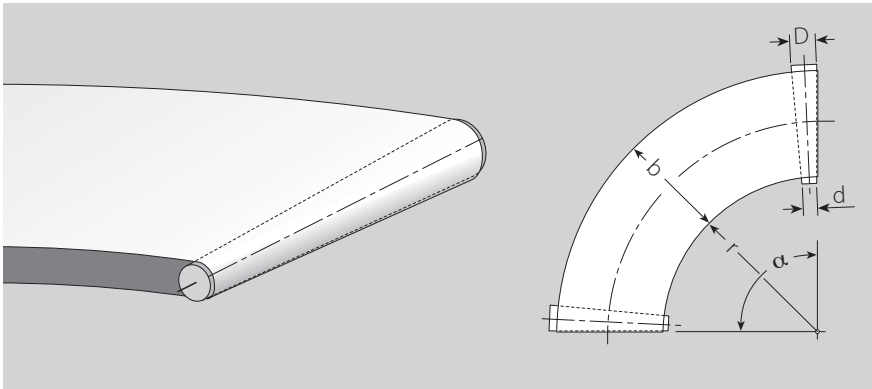
Due to its high flexibility and durability, we recommend the hot-pressed Z-splice for knife edge belts. The standard splice is 90°. A 60° or 80° splice is also possible for this type (particularly smooth operation).

By using special splice films almost identical friction coefficients are achieved on the underside of the splice. This makes belt travel smoother and running times longer.

Further information about finishing, types available, standard sizes and tolerances can be found in "Technical Information 1".

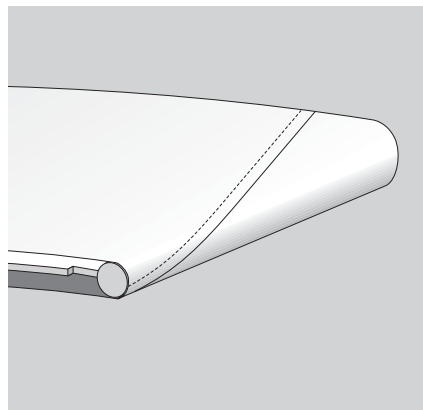
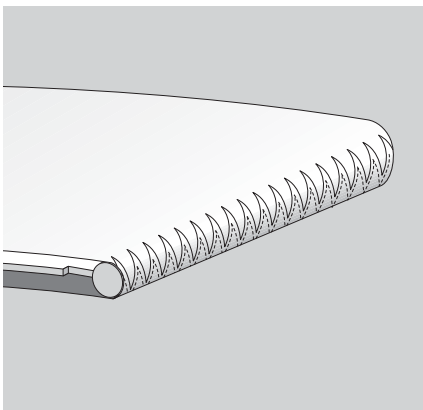
Further information on fitting knife edge machinery can be found in leaflet 305 "Recommendations for conveyor design".

Curved belts



Thanks to their fabric design, Siegling Transilon curved belts are exceptionally flexible, both laterally and longitudinally, ensuring an optimal distribution of forces within the belt.

Depending on the application, either conical or cylindrical drums are used, or in some cases even knife edges or rolling knife edges.



Curved belts can be fabricated from one or more segments. Fabrication from several segments improves the distribution of forces within the belt. Curved belts can be equipped with perforations or eyelets along the edges so they can be attached to tracking systems later on.

Z-splice

1-ply types are made endless with a Z-splice.

Stepped Z-splice

For 2-ply curved belts we recommend the stepped Z-splice. It has the same flexibility properties as the Z-splice, but can better absorb the lateral forces which arise in the curved belt.

Diagonal wedge or overlap splice

These two splice types can be used as an alternative if a stepped Z-splice cannot be fabricated. Both splice types enable the belt splice to roll over the drum evenly and can also absorb the lateral forces which arise.

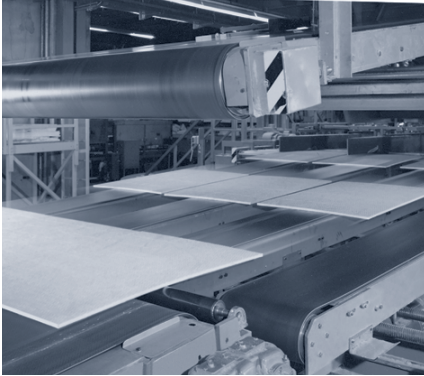
Standard curved belt dimensions [mm]

r_{\min}	=	250
b_{\max}	=	4500

Special dimensions on request

Special belt properties

Antistatic belts



Antistatic Siegling Transilon belts are equipped with an electrically conductive static inhibitor that is abrasion-protected and embedded in the belt. It effectively prevents static build-up from the running belt. Antistatic belts do not always guarantee discharge of previously statically-charged conveyed goods, e.g. in the nonwovens industry, when conveying plastic or electronic components. In these cases HC belts should be used, particularly when they have to be ESD safe.

In line with DIN-EN-ISO 284 thresholds, the electrical resistance measured on the inside (lengthways) R_{Di} , according to ISO 21178, is less than $3 \times 10^8 \Omega$.

Splice

The splice types listed in "Technical Information 1" can – depending on type – be used for antistatic Siegling Transilon belts.

NA (Non-antistatic)



Siegling Transilon NA belts are produced without an electrically conductive anti-static element. Tested according to ISO 21178 the electrical surface resistance R_{Di} is more than $3 \times 10^8 \Omega$.

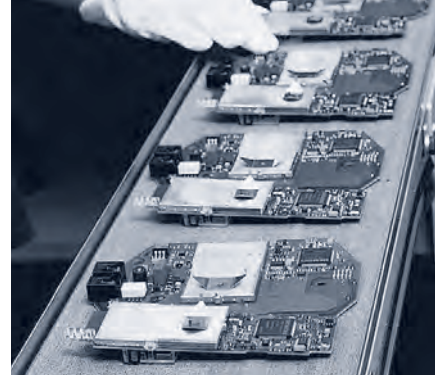
Combined with the coating materials appropriate in each case, NA belts guarantee smooth operation when using in electro-magnetic fields such as machine components with high frequency, X-ray and microwave applications.

NA belts in many different coatings with specific properties for particular products provide a high safety standard, in particular because of stringent quality controls, in the food and tobacco, chemical, pharmaceutical and particle board industries. In this way sensitive metal detectors for example can be used to an optimum with Siegling Transilon NA belts.

Splice

The splice types specified in "Technical Information 1" can be used for Siegling Transilon NA belts, depending on the belt type. It is not possible to use mechanical fasteners made of steel if metal detectors are in use or in microwave applications.

HC (Highly-conductive)



Siegling Transilon HC belts (Highly-conductive) are particularly antistatic due to a conductive top face and underside. Measured in line with ISO 21178, the electrical surface resistivity of the top face and underside is $R_{OA} < 3 \times 10^8 \Omega$. In the majority of belt types, the surface resistivity R_{OA} of the top face and underside is even less than $1 \times 10^7 \Omega$ and as a result falls significantly short of the threshold stated in DIN-EN ISO 284.

Numerous belt types also have an electrical volume resistance $R_D < 1 \times 10^9 \Omega$, verified in accordance with ISO 21178.

HC belts are particularly suitable for conveying electronic components and anywhere where, if the belts and the goods conveyed are charged, there is a detrimental effect on product quality e.g. in the nonwovens or chemical industries.

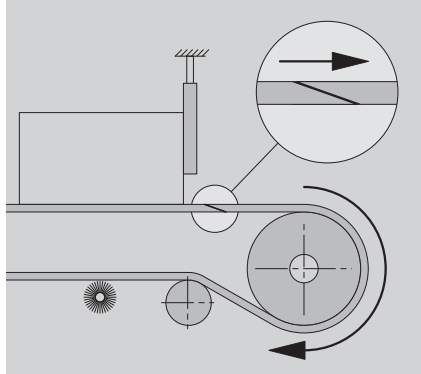
If the belts have to be ESD safe, only HC belts can be used. Should the belts be required for ESD applications, we recommend consulting application engineers at Forbo Siegling to discuss the technical details.

Splice

The splice types specified in "Technical Information 1" can be used for Siegling Transilon HC belts, depending on the belt type.



Accumulation belts



Accumulation belts are used when collecting conveyed goods behind a barrier or when sliding onto or off a belt. The particularly stiff design of the belts ensures level conveying in larger belt widths. So pushing unit goods on or off from the side is no problem at all.

Minimum friction coefficients between slider bed and underside and accumulation goods and top face must be maintained so that required power and wear and tear is kept low.

Siegling Transilon accumulation belts with duroplastic urethane coating (UH or U2H) are particularly abrasion resistant and have low friction coefficients. These properties guarantee long durability and reduce maintenance costs.

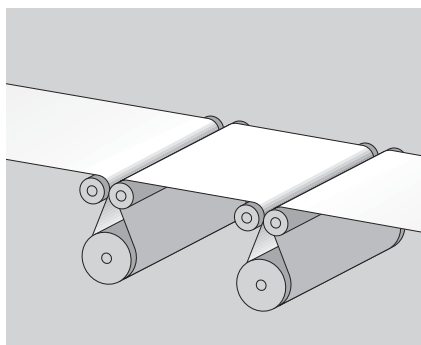
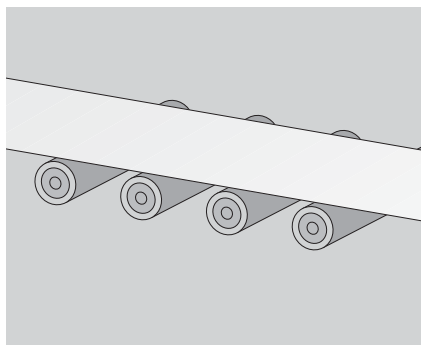
To eliminate belt mistracking that might be caused by loading or unloading of goods from the sides, we recommend:

- lagging all support rollers in the loading area so as to increase the drag between them and the belt which counterbalances the lateral forces
- designing the conveyor for increased belt wrap around the drums/rollers in the loading area (also advisable in the case of eject mechanisms).

Splice

The splice types specified in "Technical Information 1" can be used for Siegling Transilon accumulation belts, depending on the belt type, but Z or stepped Z-splice is preferred.

When using overlap and wedge splices please note: because of the unusual load on the top face in accumulation, the splice lap must decline from the top face (see fig. below).



SE/FR (flame retardant)



Tunnels connecting terminals or storeys are a potential fire risk.

Flame retardant Siegling Transilon belts (SE/FR) prevent the fire from spreading. In keeping with EN 20340/ISO 340 (SE) and MSHA Std 2G (30CFR18.65) measured according to ASTM D-378 (FR) these belt extinguish after being subjected to an open flame and do not re-ignite should they come into contact with a stream of air.

SE and FR belts ensure extra safety in baggage and freight handling in distribution centres and at airports.

Splice

The splice types specified in "Technical Information 1" can be used for Siegling Transilon SE belts.



Flame-retardant belts cease to burn within seconds as soon as they are no longer subjected to an open flame.

ATEX-compliant processing belts



Since 1 July, 2003 guideline 94/9EG for avoiding ignition risks in explosive atmospheres, known in the trade as "ATEX guideline 95", has come into force. When used in conveyors, processing belts are also at risk of ignition from static electricity or friction heat, if they are not used properly. Two partners are responsible for seeing this is done: the belt supplier and conveyor manufacturer.

As a belt supplier Forbo Siegling faces up to this responsibility and if required, will supply processing belts that may be used in an explosive atmosphere.

The suitability of processing belts is outlined in ATEX manufacturer and compliance declarations, issued in conjunction with an officially nominated body (TÜV – German Technical Supervisory Body).

Detailed operating instructions, with information on how to use the conveyor in compliance with ATEX, are part of the compliance declarations.

As our ATEX product range is continually added to, please ask your Siegling contact person about the types currently available.

Of course we provide advice to our customers, on a personal basis too, on current and future ATEX aspects.

The next up-date has already been announced: while the current ATEX guideline 95 deals with operation of new machinery, as of July 2006 ATEX guideline 137 will come into force. As part of the decree on safety in the workplace, it will regulate the operation of machinery that could cause explosive atmospheres. This also affects what is known as old machinery, that if required, will have to be modified to meet the new regulations.

So old machinery will also have to be fitted with processing belts based on the new ATEX regulations already.

Because our products are used in so many applications and because of the individual factors involved, our operating instructions, details and information on the suitability and use of the products are only general guidelines and do not absolve the ordering party from carrying out checks and tests themselves. When we provide technical support on the application, the ordering party bears the risk of the machinery functioning properly.