

**siegling**  
belting

# AIRPORTS





# BAGGAGE HANDLING AT INTERNATIONAL AIRPORTS

The majority of the world's airports use Forbo Movement Systems products to convey air freight and baggage.

When it comes to equipping international airports with conveyor and processing belts, there are good reasons why Forbo Movement Systems is the market leader. With our global service network and experience from numerous major projects, we act as a partner to OEMs and operating companies in terms of planning, construction and after-sales service.

Our product range is tailored to the requirements of today's airports and reflects the increasing demands placed by the ever-greater quantity of baggage and freight. The latest example: Energy-saving conveyor belts (Amp Miser™) that are up to 50% more energy efficient.

Our experience, high quality standards and the results of consistent research and development ensure our products are always one step ahead. Which is why baggage and air freight are moved with our conveyor and processing belts the world over.

Safely, reliably and efficiently.

**siegling transilon**  
conveyor and processing belts

**siegling transtex**  
conveyor belts

## The properties

## The advantages

extensive range of types	▶	product range perfectly suited for all conveying, transferring and processing functions
energy saving types	▶	lower costs, fewer CO <sub>2</sub> emissions
top product quality	▶	long belt life
dimensionally stable	▶	can be used even where temperatures and humidity fluctuate
light and thin	▶	belts are easy to fit, low energy consumption
low noise	▶	environmentally friendly thanks to low noise emissions

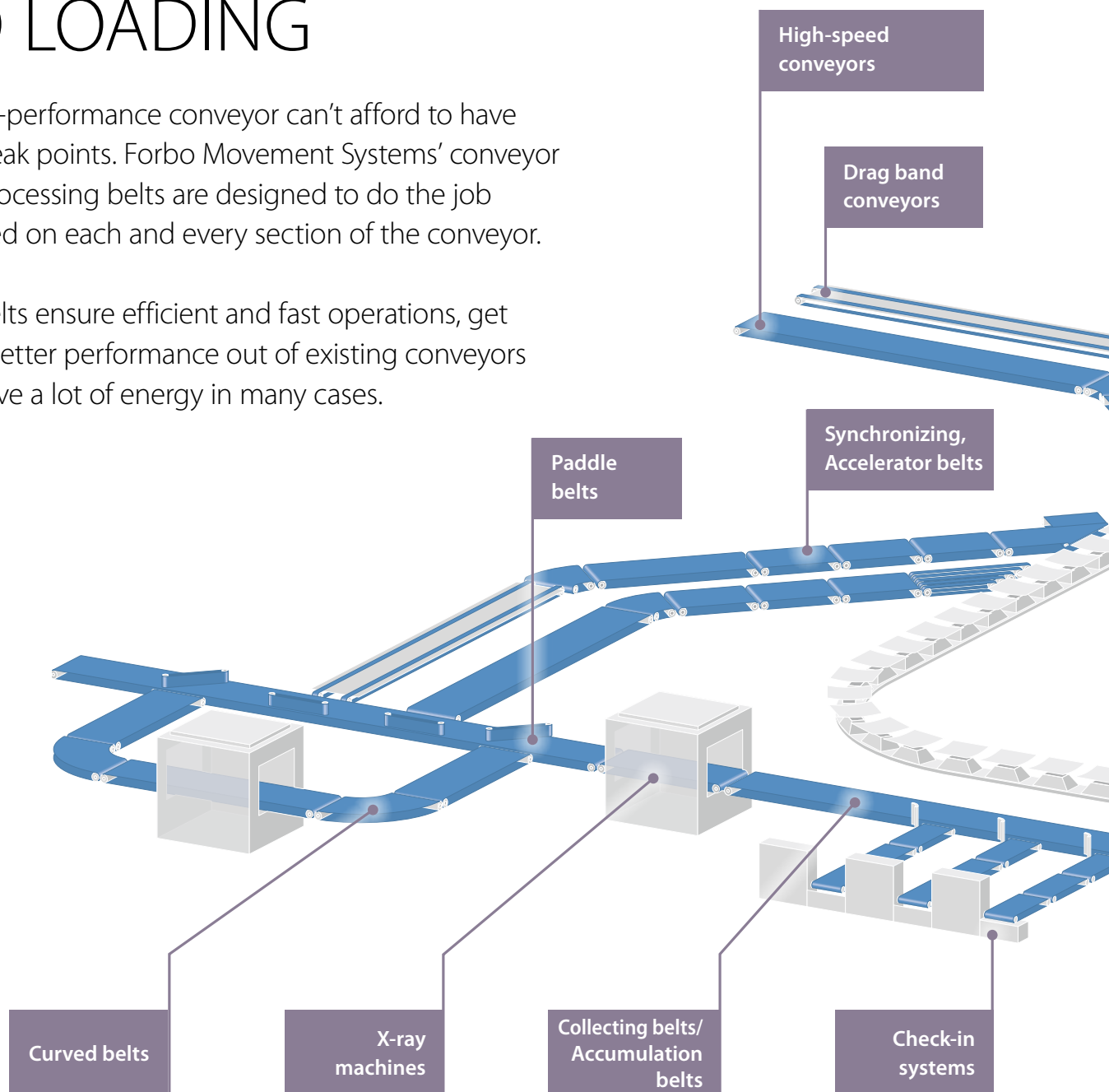
For further relevant Forbo Siegling products please see the following brochures:

No.	Title
214	Siegling Transtex Conveyor belts
238	Amp Miser™ · The new generation of energy saving conveyor belts
224	Siegling Transilon Conveyor and processing belts
317	Siegling Transilon Technical Information 1 Storage · Finishing · Fitting
318	Siegling Transilon Technical Information 2 Special features and properties
336	Our elastic belts
800	Siegling Prolink Modular belts

# FROM THE CHECK-IN TO LOADING

A high-performance conveyor can't afford to have any weak points. Forbo Movement Systems' conveyor and processing belts are designed to do the job required on each and every section of the conveyor.

Our belts ensure efficient and fast operations, get even better performance out of existing conveyors and save a lot of energy in many cases.



Reliable conveying due to a special fabric structure (distributing forces in the belt well).



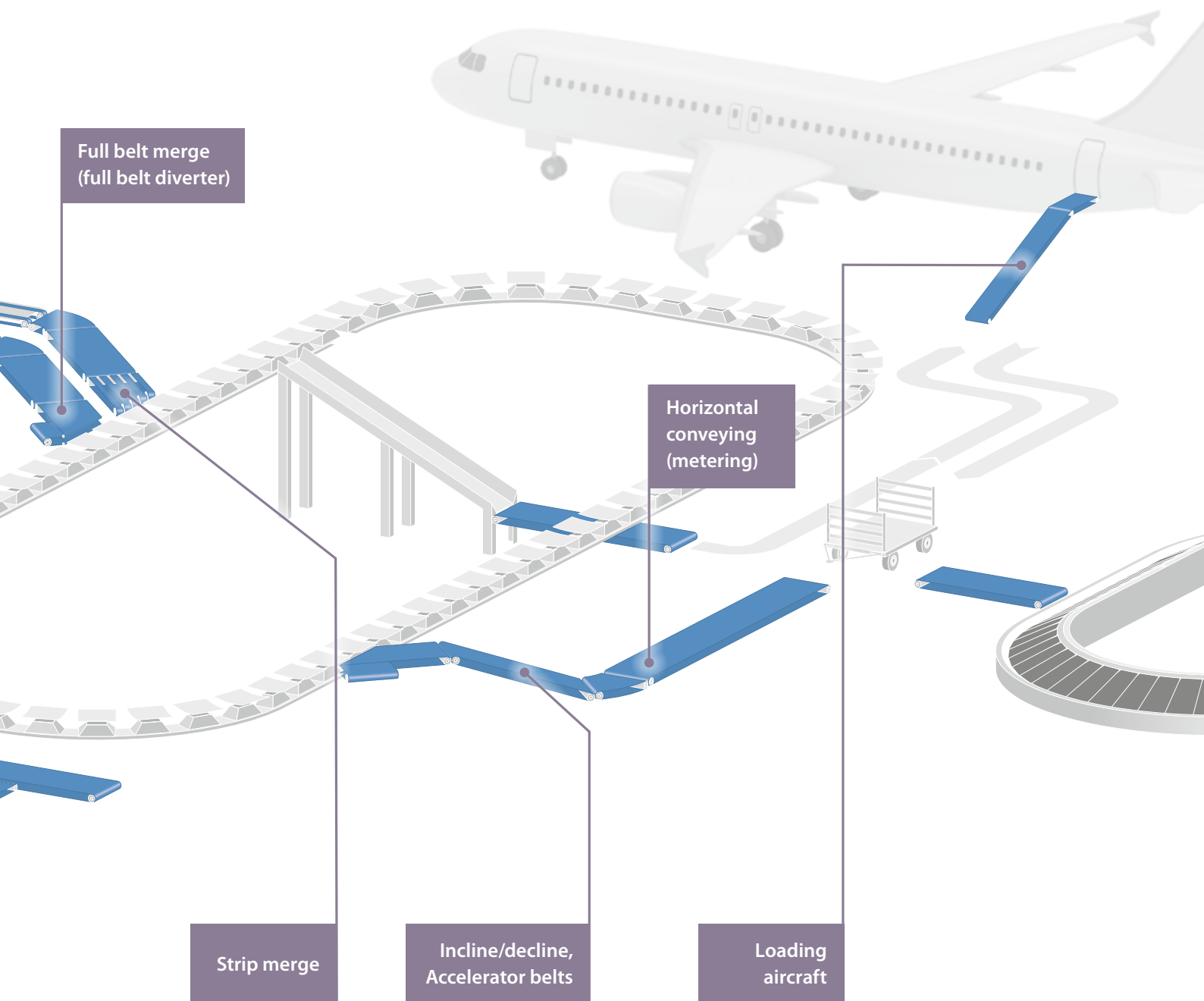
High-quality image definition due to the belts' exceptional flatness, uniform splices and first-class coatings.



The belts are so flat and smooth that transferring items onto the conveyor from the sides is no problem.



Special surface patterns ensure good grip. Even difficult trolley cases are conveyed reliably.



Perfect transfer of items conveyed due to small return radii; short take-up ranges thanks to the belts' tight length tolerances.



Secure inclined conveying due to conveyor belts with patterns or lateral profiles.



Especially hard-wearing belts operate reliably even if the humidity and temperature fluctuate.



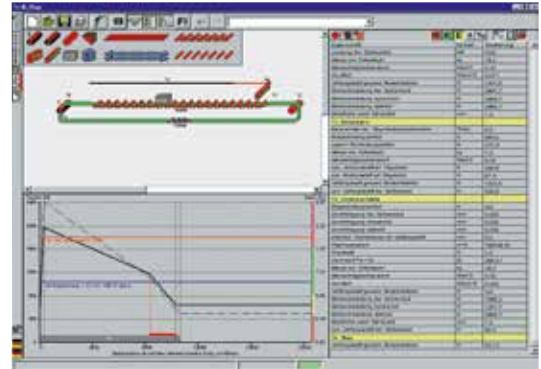
## Product Structure conveyor and processing belts

**Top face** | Various coating materials, thicknesses and patterns determine grip, chemical, physiological and mechanical properties of the belt.

**Tension member** | The use of various special fabrics largely determines the suitability for specific applications. Belt tracking properties, load/elongation properties, electrostatic properties, flatness, knife edge and curve suitability are directly dependant on the fabric construction.

**Underside** | The design of the underside determines the noise emission, wear, and suitability for sliding or rolling support of the belt.

## Pick the right belt with B\_Rex



To ensure conveyors operate efficiently, the physical parameters of the belts used should be a good match with the design of the conveyor. Our B\_Rex belt calculation program can:

- select the right belts for existing conveyors and
- create conveyor designs to allow previously specified belts to be used.

The program enables symbolic images of and changes to conveyors and drives and can therefore simulate how any conveyor interacts with any belt in our product range.

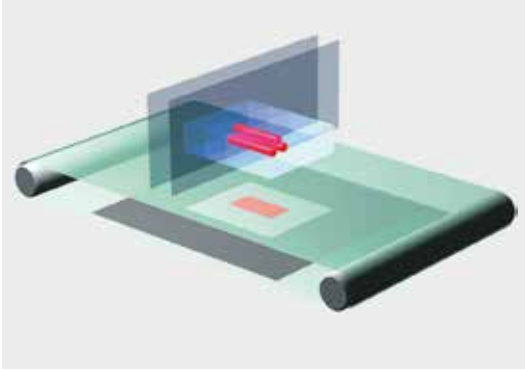
Any change to a design parameter immediately triggers a new calculation so that the conveyor simulated can be designed to be faster, more practical and more precise.

You can receive the calculation program with instructions in a PDF format and the information on the articles in our product range by registering free of charge under:

**[www.forbo.com/movement](http://www.forbo.com/movement) > E-Tools**

Our customers can use it for a limited period of time to guarantee that current versions with the latest product ranges are uploaded at regular intervals.

## Belts for Checked Baggage Screening (CBS) Systems



New CBS systems for the reliable, efficient and thorough inspection of baggage were developed to meet the safety regulations of international aviation organisations.

Specially-developed products from Forbo Siegling are decisive components when it comes to the operation of "Explosive Detection Systems":

- Precise belt tracking and good flatness make excellent image definition and high-quality image transmission possible.
- High uniformity of material and splice minimizes the influence of the belt on the X-ray image.
- Thanks to the homogeneous splice area, shadows or dark X-ray images resulting from the splice are practically eliminated.
- Our high quality coating materials ensure top quality x-rays.

Forbo Siegling is your competent partner when it comes to advanced CBS systems.

## Amp Miser™ – Energy saving conveyor belts



Due to a significantly reduced coefficient of friction, Amp Miser™ belts make an impact where energy losses in a conveyor are usually the greatest: in the friction between the bottom of the belt and slider bed. By adding patented Texglide to the underside fabric, a smooth layer is created that permanently acts like a dry lubricant and therefore minimizes energy consumption.

### Best choice on galvanized slider beds

The Amp Miser™ types are also perfect on otherwise tricky galvanized slider beds. The coefficient of friction is  $\mu < 0.17$ . And it's just  $\mu < 0.13$  on non-galvanized steel.

### Extremely economical consumption

Compared with standard types, in typical applications with long conveyors and heavy loads, up to 50% energy savings are possible, now.

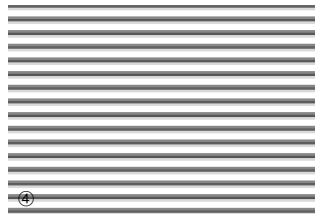
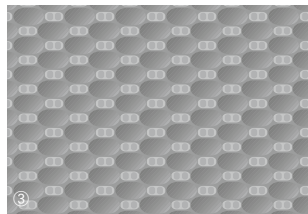
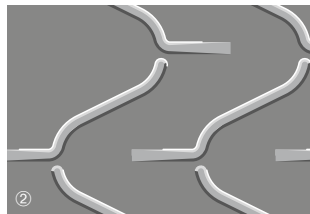
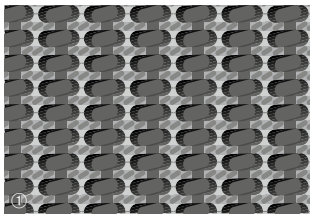
Independent German inspection body TÜV Rheinland examined the characteristics of Amp Miser™ on a range of belt types used as examples. The accuracy of the online calculator, absolute carbon dioxide savings and savings potential were confirmed and certified in the process.

### Save resources and shrink your carbon footprint now!

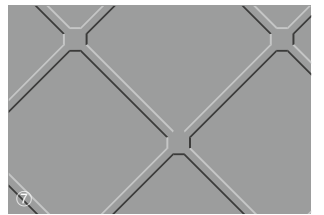
Forbo now also has belts called **Transilon ECOFIBER** with identical energy savings and a tension member fabric made from 100% recycled PET. This already saves valuable primary raw materials and harmful carbon emissions during production.

# Product range Airports

	Article number	Total thickness approx. [mm]	Weight approx. [kg/m <sup>2</sup> ]	Effective pull at 1% elongation (k <sub>9%</sub> relaxed) [N/mm width]*	d <sub>min</sub> counter-bend / d <sub>min</sub> bend / r <sub>min</sub> knife approx. [mm]**	Check-in systems	Collecting belts / Accumulation belts	X-ray machines	Paddle belts	High-speed conveyors	Curved belts	Horizontal conveying (metering)	Drag band conveyors	Inclined conveying, Synchronizing, Accelerator belts
<b>Siegling Transilon</b>														
E 8/2 U0/R15 LG-SE black	906706	3.20	3.00	7.50	60/-/-					•			•	•
E 8/2 U0/U10 LG-SE black	904539	2.10	2.00	5.00	40/-/-					•			•	•
E 8/2 U0/U10S LG-SE black	906650	2.20	2.40	7.75	40/30/-					•			•	•
E 8/2 U0/U2 MT-C-SE black	906391	1.20	1.40	5.00	14/8/-						•	•		
E 8/2 U0/U2 MT-SE black	906399	1.45	1.55	6.50	24/14/-							•		
E 8/2 U0/U2 STR black	907207	1.60	1.75	0.00	24/-/-			•						
E 8/2 U0/U2 STR-HC black	900154	1.60	1.80	6.00	24/24/-			•						
E 8/2 U0/V/U2H MT-SE black	906401	1.65	2.00	7.50	50/40/-		•					•		
E 8/2 U0/V10H M-SE black	906538	3.10	3.60	7.50	60/-/-		•					•		
E 8/2 U0/V15 LG-FR black	906434	3.10	3.40	7.50	40/-/-									•
E 8/2 U0/V15 LG-SE black	906313	3.10	3.40	7.50	60/30/-					•			•	•
E 8/2 U0/V20 AR-SE black	999532	4.90	4.20	6.00	60/-/-				•				•	•
E 8/2 U0/V5H MT-FR black	906433	2.20	2.60	8.00	60/60/60		•					•		
E 8/2 U0/V5H MT-SE black	999967	2.25	2.70	7.00	50/30/-		•					•		
E 8/2 U0/V65 R65-SE black	909160	8.00	5.70	6.50	120/60/-	•			•					
E 8/2 U0/V80 R80-SE black	996121	8.20	4.70	6.00	125/90/-	•			•					
E 8/2 U0/V/R15 LG-SE black	901004	3.10	3.50	5.75	60/30/-					•		•		
E 10/2 TX0/V15 LG-SE-AMP black	906810	2.70	2.90	9.00	40/30/-					•				•
E 10/2 TX0/V5H MT-SE-AMP black	906809	2.20	2.50	9.00	40/30/-		•			•		•		
E 12/2 0/U2 MT-C-SE black	906479	1.85	1.90	4.50	40/-/-						•			
E 12/2 0/U3 GSTR-C-SE black	906718	2.10	1.90	4.50	40/30/-						•			
E 12/2 0/V3 GSTR-C-SE anthracite	906784	2.10	2.35	3.25	30/-/-						•			
E 12/2 0/V6 MT-C-SE black	906882	2.10	2.50	3.00	40/30/-		•				•			
E 12/2 TX0/V1 M-FR-AMP black	907230	2.95	3.30	6.00	60/-/-		•			•		•		
E 12/2 TX0/V10 LG-M-FR-AMP black	907229	3.90	4.50	6.00	60/-/-					•				•
E 12/2 TX0/V2 MT-M-FR-AMP black	907224	3.00	3.60	6.00	60/-/-					•				•
E 12/2 U0/V/U0 SE black	999903	2.00	2.30	10.50	60/-/-		•					•		
E 12/2 U0/V10 STR-SE black	900323	3.10	3.80	10.00	60/40/-							•		
E 12/2 U0/V5 MT-LT black	909054	2.50	3.00	10.00	60/-/-							•		
E 12/2 U0/V5 STR-C-SE black	999856	2.50	3.00	3.00	60/-/-						•			
E 12/2 U0/V6 GSTR-C-SE black	906495	2.65	2.70	3.50	30/-/-						•			
E 12/2 U0/V7 SE black	909138	2.80	3.50	10.00	60/-/-							•		
E 12/2 U0/V7H MT-SE black	909169	2.80	3.50	10.00	90/-/-							•		
E 12/3 TX0/TX0 FR-AMP gray	907206	3.80	4.60	9.00	60/-/-		•			•		•		
E 20/3 0/V/0 SE gray	906734	3.00	3.50	17.00	125/-/-		•					•	•	•
EL 0/V10 LG-SE black	906796	2.25	2.40	0.20	24/-/-							•		•
EL 0/V10H MT-SE black	906848	2.20	2.40	0.30	30/-/-							•		•
NOVO 40 HC-SE black	906236	4.00	2.60	7.50	90/60/-		•					•		
NOVO 60 HC-SE black	906237	5.50	3.60	8.00	125/90/-		•					•		
RE 10/2 TX0/V5H MT-SE-AMP black	901015	2.20	2.60	8.50	40/36/-		•		•	•		•		•
RE 10/2 TX0/V15 LG-SE-AMP black	901016	2.70	2.90	8.50	40/36/-					•		•		•

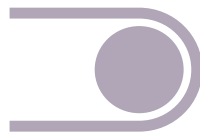


**Please note:** the values stated are nominal and can fluctuate in a belt whose width is a result of production processes. Our products are constantly adapted to market requirements. Consequently, changes in technical parameters can occasionally occur. **Therefore, please see the current product data sheets for specific information on designs and calculations.** These include details of further parameters.





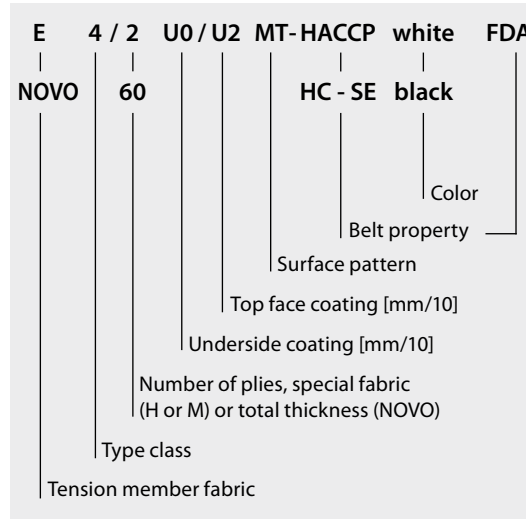
Strip merge	•				EU, AP
Full belt merge (full belt diverter)	•				AA
Loading aircraft		•			GL
Energy saving belts Amp Miser™					EU, AP
Available in					EU, AA
AP = Asia Pacific, AA = America,					GL
EU = Europe, GL = globally***					EU



**siegling transilon**  
conveyor and processing belts

•					EU, AP
•					AA
•					GL
		•			EU, AP
					EU, AA
					GL
•					GL
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					EU
				•	EU, AA
				•	EU, AA

## Type code



## Legend

\* Established in line with ISO 21181:2005

- \*\*
- Minimum drum diameter  $d_{min}$  with counter-bending (top face touches drum)
  - Minimum drum diameter  $d_{min}$  with bending (driving face touches drum)
  - Minimum radius  $r_{min}$  of a fixed knife edge (rX) or minimum diameter  $d_{min}$  of a rolling knife edge (dX) (driving face touches knife edge)

Missing values on request. 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)

\*\*\* Other regions on request

### Tension member fabrics

- E** = Polyester
- EL** = Polyester (elastic)
- NOVO** = Polyester felt
- RE** = Recycled polyester

### Design

- H** = HighTech-fabric

### Coatings

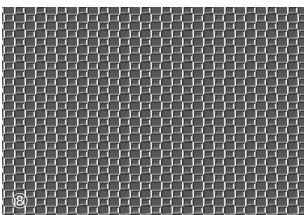
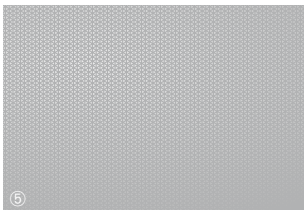
- 0** = Fabric uncoated
- R** = High Grip
- TX0** = Texglide™
- U** = Polyurethane
- U...H** = Polyurethane hard
- U0** = Polyurethane impregnation
- V** = Polyvinyl chloride
- V...H** = Polyvinyl chloride hard

### Surface patterns

- AR** = Rough-top ①
- CH** = Check-in ②
- GSTR** = Coarse texture ③
- LG** = Longitudinal groove ④
- MT** = Matt ⑤
- QS** = Quarz sand ⑥
- R** = Large diamond ⑦
- STR** = Normal texture ⑧

### Belt properties

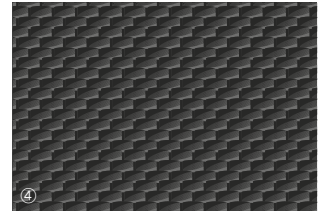
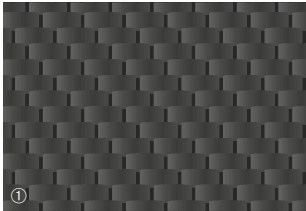
- AMP** = Amp Miser™
- C** = Laterally flexible, suitable for curved belts
- FR** = Flame-retardant, ASTM D-378
- HC** = Highly-conductive
- M** = Particularly stiff laterally
- S** = Very low noise
- SE** = Flame-retardant, EN340



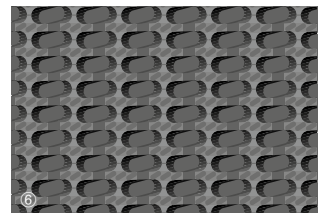
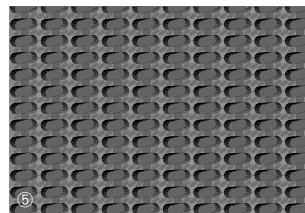
# Product range Airports

Article number	Total thickness approx. [mm]	Weight approx. [kg/m <sup>2</sup> ]	Effective pull at 1% elongation (k <sub>T%</sub> relaxed) [N/mm width]*	d <sub>min</sub> counter-bend / d <sub>min</sub> bend / r <sub>min</sub> knife approx. [mm]**	Check-in systems	Collecting belts / Accumulation belts	X-ray machines	Paddle belts	High-speed conveyors	Curved belts	Horizontal conveying (metering)	Drag band conveyors	Inclined conveying, Synchronizing, Accelerator belts
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Siegling Transtex													
PHR2-160 3/64LixBB-NA black FR	908204	3.63	4.39	11.00	127/-/-				●		●		●
PHR2-160 MRTxBB-NA FR black	908205	3.48	3.91	11.00	127/89/-								●
PHR2-160 RTxBB-NA FR black	908206	6.86	6.35	10.00	152/127/-								●
PHR2-90MF BBxBB-NA black FR	908200	2.87	3.37	4.00	63.5/-/-	●					●		
PHR2-90MF GRADE II RTxBB black	908214	7.01	6.44	4.50	126/89/-								●
PHR2-90MF LixBB-NA black FR	908201	3.58	4.30	8.00	126/89/-						●		●
PHR3-135MF BBxBB-NA black FR	908208	3.94	4.59	8.00	126/126/-	●					●		
PHR3-200TW BBxBB-NA black FR	908209	3.81	4.39	12.00	-/76.2/-	●					●		
PHR3-265TW BBxBB-NA black FR	908210	4.75	5.52	25.00	-/203/-	●					●		
PVC120 FxB-NA black FR	908011	2.79	2.44	7.50	38/-/-	●					●		
PVC120 RTxB-NA black FR	908004	6.35	4.88	8.50	63.5/51/-						●		●
PVC150 FxB-NA black FR	908015	3.30	3.42	7.00	51/-/-	●					●		
PVK100 CxFS-NA black FR	908101	3.30	3.91	11.00	63.5/38/-						●		
PVK100 FSxFS-NA black FR	908100	2.79	2.44	10.50	38/38/-	●					●		
PVK125 CxFS-NA black FR	908104	3.94	4.39	14.00	63.5/63.5/-						●		
PVK125 FSxFS-NA black FR	908103	3.68	3.42	10.00	38/38/-	●					●		
PVK125 MRTxFS-NA black FR	908105	4.83	4.88	14.00	51/38/-								●
PVK125 RTxFS-NA black FR	908106	7.62	6.35	11.00	63.5/-/-								●
PVK150 FSxFS-NA black FR	908125	4.57	4.44	10.00	63.5/51/-	●					●		
PVK200 FSxFS-NA black FR	908111	5.08	5.37	15.00	89/51/-	●					●		



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## Siegling – total belting solutions

Committed staff, quality oriented organization and production processes ensure the constantly high standards of our products and services.

Forbo Movement Systems complies with total quality management principles. Our quality management system has ISO 9001 certification at all production and fabrication sites. What's more, many sites have ISO 14001 environmental management certification.



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### Our service – anytime, anywhere

Forbo Movement Systems employs around 2,500 people in its group of companies. 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.

Service points are located in more than 300 places worldwide.

#### Forbo Siegling GmbH

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MOVEMENT SYSTEMS