siegling
belting

AIRPORTS

Siegling – total belting solutions

forbo
MOVEMENT SYSTEMS

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™ 2.0) 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_2 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

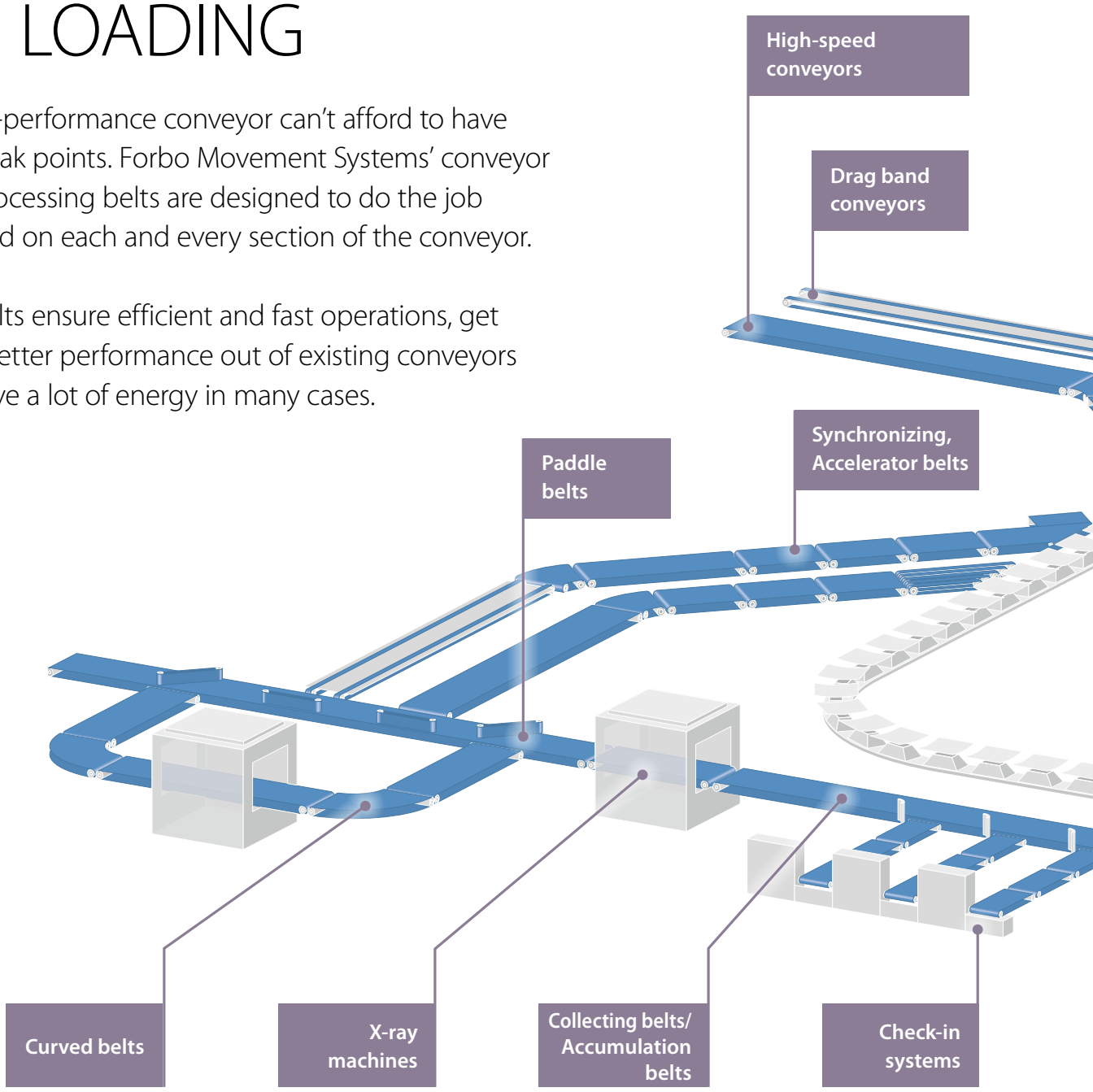
For further relevant Forbo Siegling products please see the following brochures:

No.	Title
214	Siegling Transtex Conveyor belts
238	Amp Miser™ 2.0 · 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.

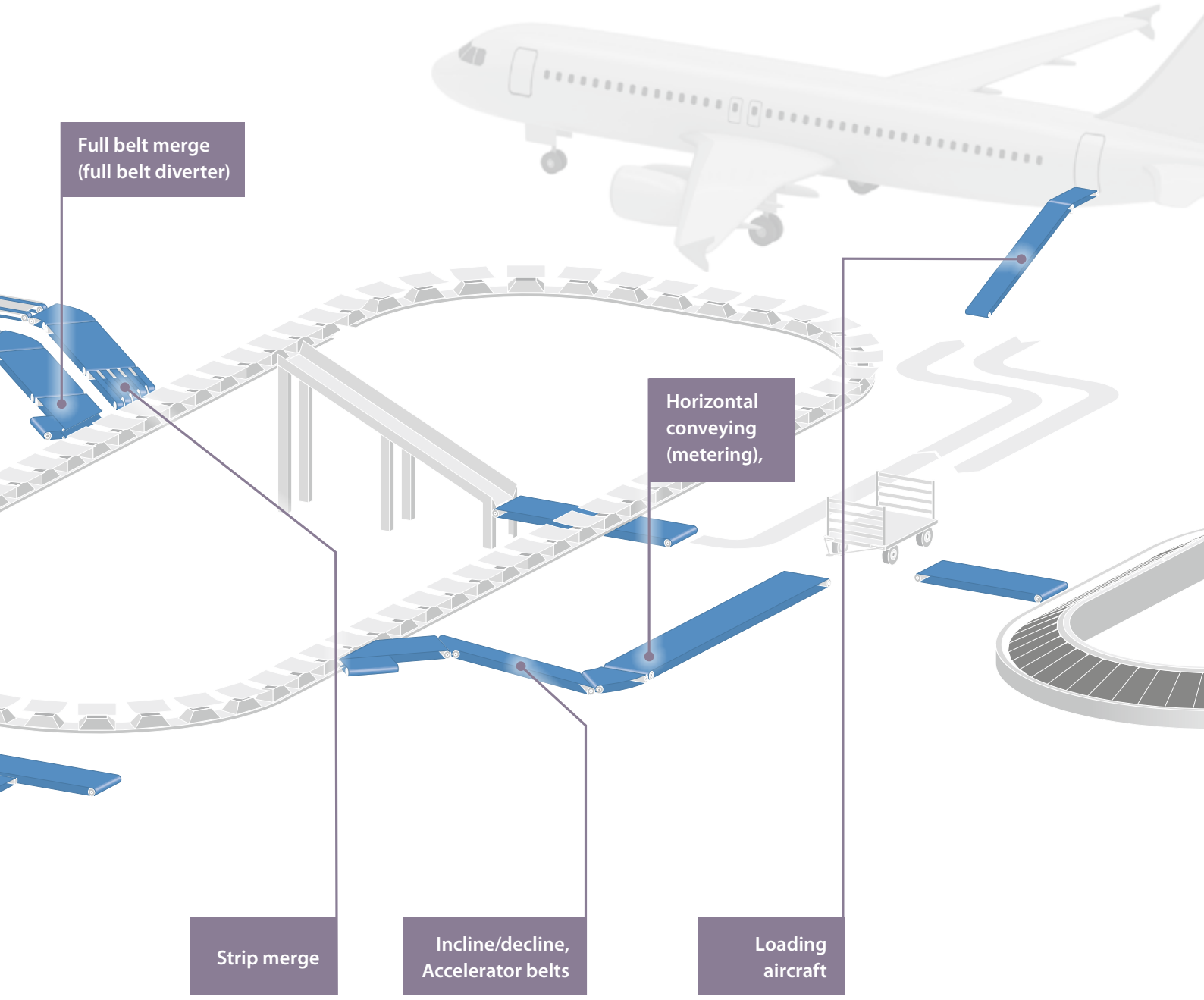


Reliable conveying due to a special fabric structure (distributing forces in the belt well).

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.

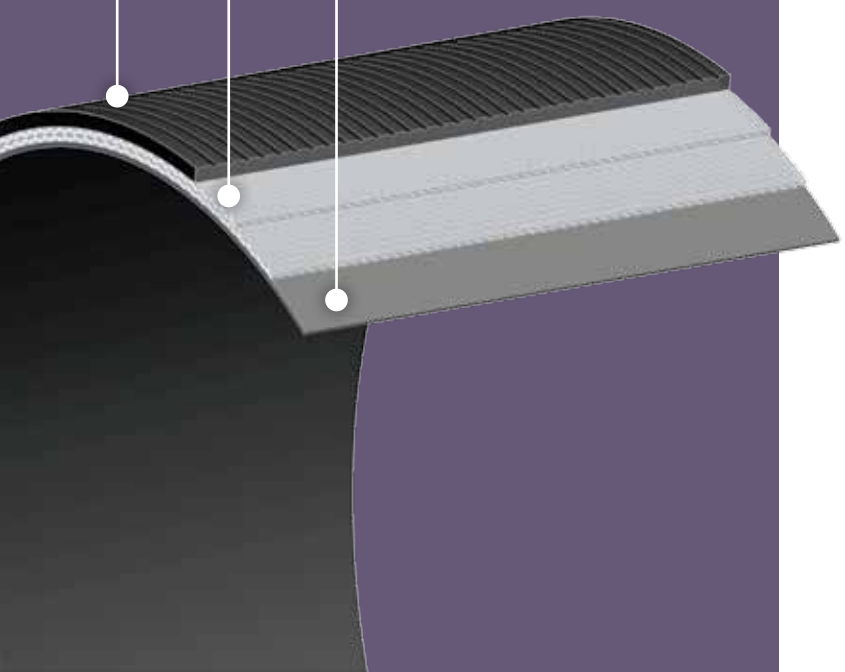
Especially hard-wearing belts operate reliably even if the humidity and temperature fluctuate.

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.

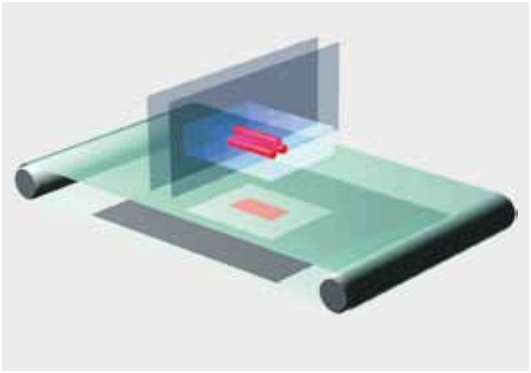
The program enables symbolic images of and changes to conveyors and drives and can therefore simulate how any conveyor interacts with any belt in our product range.

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 > 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™ 2.0 – Energy saving conveyor belts

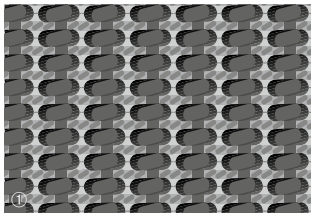
Due to a significantly reduced coefficient of friction, Amp Miser™ 2.0 belts make an impact where energy losses in a conveyor are usually the greatest: in the friction between the bottom of the belt and slider bed. By adding patented Texglide to the underside fabric, a smooth layer is created that permanently acts like a dry lubricant and therefore minimizes energy consumption.

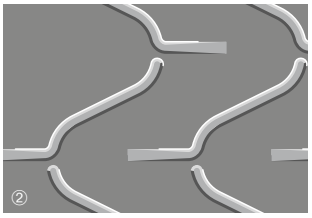
Best choice on galvanized slider beds
The second generation of Amp Miser™ types are also perfect on otherwise tricky galvanized slider beds. Compared with the previous belts, the coefficient of friction of this generation has been halved to $\mu < 0.17$. And it's just $\mu < 0.13$ on non-galvanized steel.

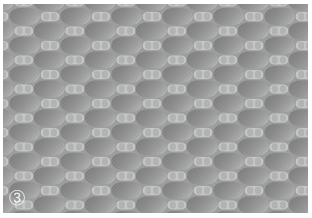
Extremely economical consumption
Compared with standard types, in typical applications with long conveyors and heavy loads, up to 50 % energy savings are possible, now.

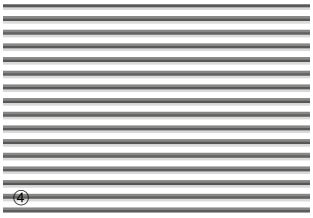
Product range Airports

	Article number	Total thickness approx. [mm]	Weight approx. [kg/m²]	Effective pull at 1% elongation ($k_{1\%}$ relaxed) [N/mm width]*	d_{min} 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
Siegling Transilon														
E 8/2 U0/R15 LG-SE black	906706	3.20	3.0	8.0	60					●			●	●
E 8/2 U0/U10 LG-SE black	904539	2.10	2.0	6.0	40					●			●	●
E 8/2 U0/U10S LG-SE black	906650	2.20	2.40	8.5	30					●			●	●
E 8/2 U0/U2 MT-C-SE black	906391	1.20	1.40	5.0	14/d10						●	●		
E 8/2 U0/U2 MT-SE black	906399	1.45	1.55	8.0	14							●		
E 8/2 U0/U2 STR black	907207	1.60	1.75	7.5	24			●						
E 8/2 U0/U2 STR-HC black	900154	1.60	1.80	6.0	25			●						
E 8/2 U0/V/U2H MT-SE black	906401	1.65	2.0	7.0	50		●					●		
E 8/2 U0/V10H M-SE black	906538	3.10	3.60	7.0	60		●					●		
E 8/2 U0/V15 LG-FR black	906434	3.10	3.40	7.5	40									●
E 8/2 U0/V15 LG-SE black	906313	3.10	3.40	8.0	60					●			●	●
E 8/2 U0/V20 AR-SE black	999532	4.90	4.20	8.0	60				●					●
E 8/2 U0/V5H MT-FR black	906433	2.20	2.60	8.0	60		●					●		
E 8/2 U0/V5H MT-SE black	999967	2.25	2.70	7.0	50		●					●		
E 8/2 U0/V65 R65-SE black	909160	8.0	5.70	6.5	120	●			●					
E 8/2 U0/V80 R80-SE black	996121	8.20	4.70	6.0	125	●			●					
E 8/H U0/U4 QS black	906541	1.50	1.60	8.5	24			●				●		
E 10/2 TX0/V15 LG-SE-AMP black	906810	2.70	2.90	9.0	40					●				●
E 10/2 TX0/V5H MT-SE-AMP black	906809	2.15	2.40	9.0	40		●			●		●		
E 12/2 0/U2 MT-C-SE black	906479	1.85	1.90	4.5	40						●			
E 12/2 0/U3 GSTR-C-SE black	906718	2.10	1.90	4.5	40						●			
E 12/2 0/V3 GSTR-C-SE anthracite	906784	2.10	2.35	2.5	30						●			
E 12/2 TX0/V1 M-FR-AMP black	907230	2.95	3.30	6.0	60		●			●		●		
E 12/2 TX0/V10 LG-M-FR-AMP black	907229	3.90	4.50	6.0	90					●				●
E 12/2 TX0/V2 M-FR-AMP black	907224	3.0	3.60	6.0	60					●		●		
E 12/2 U0/V/U0 SE black	999903	2.0	2.30	10.5	60		●					●		
E 12/2 U0/V10 STR-SE black	900323	3.10	3.80	10.0	60							●		
E 12/2 U0/V5 STR-C-SE black	999856	2.50	3.0	3.0	60						●			
E 12/2 U0/V6 GSTR-C-SE black	906495	2.65	2.70	3.5	30						●			
E 12/2 U0/V7 SE black	909138	3.0	3.50	10.0	60							●		
E 12/2 U0/V7H MT-SE black	909169	2.80	3.50	10.0	90		●					●		
E 12/3 TX0/TX0 FR-AMP gray	907206	3.80	4.60	7.0	60		●			●		●		
E 20/3 0/V/0 SE gray	906734	3.0	3.50	15.5	125		●					●	●	
EL 0/V10 LG-SE black	906796	2.25	2.40	0.25	24							●		●
EL 0/V10H MT-SE black	906848	2.20	2.40	0.25	30							●		
NOVO 40 HC-SE black	906236	4.0	2.60	7.5	90		●					●		
NOVO 60 HC-SE black	906237	5.50	3.60	8.0	125		●					●		

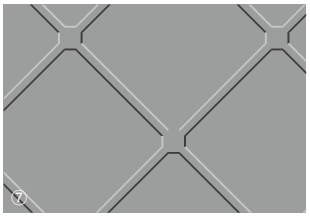








Please note: the values stated are nominal and can fluctuate in a belt whose width is a result of production processes. Our products are constantly adapted to market requirements. Consequently, changes in technical parameters can occasionally occur. **Therefore, please see the current product data sheets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



	Strip merge	Full belt merge (full belt diverter)	Loading aircraft	Energy saving belts Ampmiser™ 2.0	Available in AP = Asia Pacific, AA = America, EU = Europe, GL = globally***
	●				EU, AP
	●				AA
	●				GL
		●			EU, AP
					EU, AA
					GL
					GL
	●				EU
					GL
	●				AA
	●				EU, AP
					EU, AP
					AA
					EU, AP
					EU, AP
					GL
					GL
	●			●	EU, AP
				●	EU, AP
		●			AA
		●			EU, AP
					EU, AP
				●	AA
				●	AA
				●	AA
					GL
					EU, AP
					AA
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	●				AP
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				●	EU, AA
					EU, AP
	●				GL
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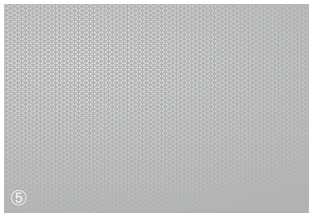
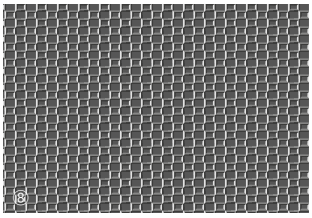
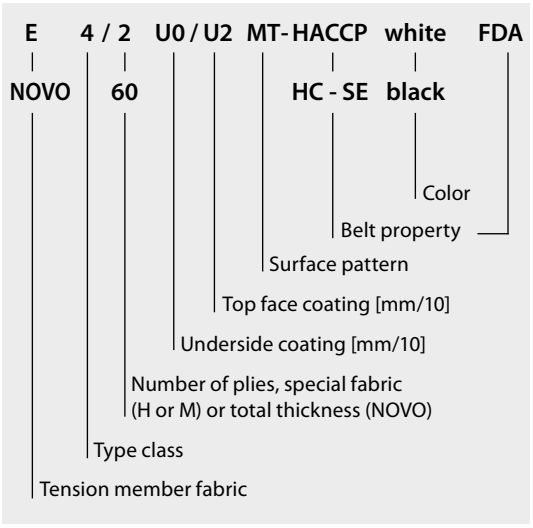
					EU
					EU





siegling transilon
conveyor and processing belts

Type code



Legend

* 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). rX is the radius of a fixed knife edge, dX is the diameter of a rolling knife edge

*** Other regions on request

Tension member fabrics

E = Polyester
EL = Polyester (elastic)
NOVO = Polyester felt

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

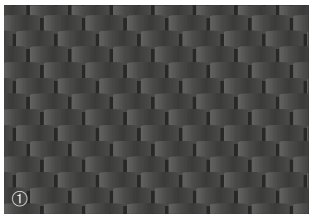
AR = Rough-top ①
CH = Check-in ②
GSTR = Coarse texture ③
LG = Longitudinal groove ④
MT = Matt ⑤
QS = Quarz sand ⑥
R = Large diamond ⑦
STR = Normal texture ⑧

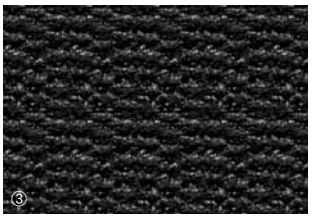
Belt properties

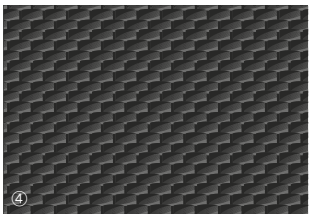
AMP = Amp Miser™
C = Laterally flexible, suitable for curved belts
FR = Flame-retardant, ASTM D-378
HC = Highly-conductive
M = Particularly stiff laterally
S = Very low noise
SE = Flame-retardant, EN340

Product range Airports

	Article number	Total thickness approx. [mm]	Weight approx. [kg/m²]	Effective pull at 1% elongation ($k_{1\%}$ relaxed) [N/mm width]*	d_{min} 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	
Siegling Transtex															
PHR2-160 3/64LIxBB-NA black FR	908204	3.63	4.39	11.0	125					●		●		●	
PHR2-160 MRTxBB-NA FR black	908205	3.48	3.91	11.0	125									●	
PHR2-160 RTxBB-NA FR black	908206	6.48	5.22	10.0	125									●	
PHR2-90MF BBxBB-NA black FR	908200	2.87	3.37	4.0	60		●					●			
PHR2-90MF GRADE II RTxBB black	908214	7.01	6.45	4.5	125									●	
PHR2-90MF LIxBB-NA black FR	908201	3.58	4.30	8.0	90							●		●	
PHR3-135MF BBxBB-NA black FR	908208	3.94	4.59	8.0	125		●					●			
PHR3-200TW BBxBB-NA black FR	908209	3.81	4.39	19.0	125 [1]/160		●					●			
PHR3-265TW BBxBB-NA black FR	908210	4.75	5.52	25.0	200		●					●			
PVC120 FxB-NA black FR	908011	2.79	2.44	7.5	30		●					●			
PVC120 RTxB-NA black FR	908004	3.94	4.39	14.0	60									●	
PVC150 FxB-NA black FR	908015	3.30	3.41	7.0	40		●					●			
PVK100 CxFS-NA black FR	908101	3.30	3.91	11	40							●			
PVK100 FSxFS-NA black FR	908100	2.79	2.44	10.5	30		●					●			
PVK125 CxFS-NA black FR	908104	3.94	4.39	14.0	60							●			
PVK125 FSxFS-NA black FR	908103	3.68	3.42	10.0	30		●					●			
PVK125 MRTxFS-NA black FR	908105	4.83	4.88	14.0	50									●	
PVK125 RTxFS-NA black FR	908106	7.62	6.35	11.0	40									●	
PVK150 FSxFS-NA black FR	908125	4.57	4.44	10.0	50		●					●			
PVK200 FSxFS-NA black FR	908111	5.08	5.37	15.0	90		●					●			







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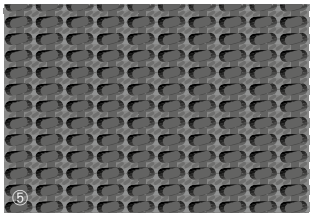

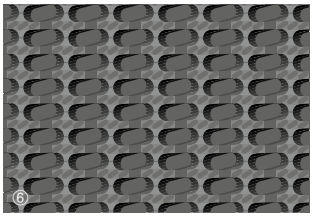

	Strip merge	Full belt merge (full belt diverter)	Loading aircraft	Energy saving belts Ampmiser™ 2.0	Available in AP = Asia Pacific, AA = America, EU = Europe, GL = globally***
					AA
					AA
					AA
					AA
			●		EU, AA
			●		AA
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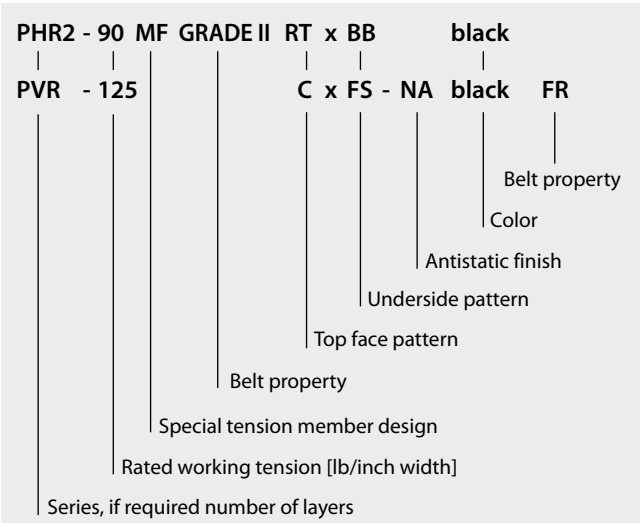
siegling transtex
conveyor belts

Type code



Legend

* Established in line with ISO 21181:2005

** The smallest permissible drum diameters were established at room temperature and do not apply to conveyor belts with mechanical fasteners. Lower temperatures require bigger drum diameters. Belts with profiles or sidewalls might require bigger drum diameters.

*** Other regions on request

[1)] Needled/standard wedge overlap splice

Series

PHR = Package Handling Rubber (Rubber coating and/or rubber in the intermediate layer)

PVC = Interwoven PVC (Special PVC-impregnated fabric)

PVK = Package Handling PVC (Special PVC-impregnated fabric, reinforced version)

Special tension member designs

MF = Polyester monofilament weft

TW = Driving face fabric with twill weave

Belt properties

FR = Flame retardant, ASTM D-378

Grade II = Less abrasion resistant styrene-butadiene-rubber

NA = Non-antistatic

Patterns/Coatings

B = Rough fabric, brushed, low friction

BB = Fabric with resorcin-formaldehyde-latex-impregnation ①

C = Smooth cover ②

F = Thin PVC coating

FS = Top face: coarse fabric with PVC impregnation, low friction
Driving face: coarse fabric, brushed, low friction ③

LI = Light impression ④

MRT = Rough-top, mini ⑤

RT = Rough-top ⑥

3/64 = Coating thickness in 3/64 inch

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.

Forbo Siegling service – anytime, anywhere

The Forbo Siegling Group employs around 2,400 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.

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Forbo
MOVEMENT SYSTEMS

Ref. no. 242-2
10/20 · UDH ·