

# siegling extremultus

flat belts



(EU) 10/2011,  
(EC) 1935/2004  
COMPLIANT

## GRIP STAR™

FLAT BELTS THAT HOLD ON TIGHT

Patterned polyurethane coating or fabric on the underside

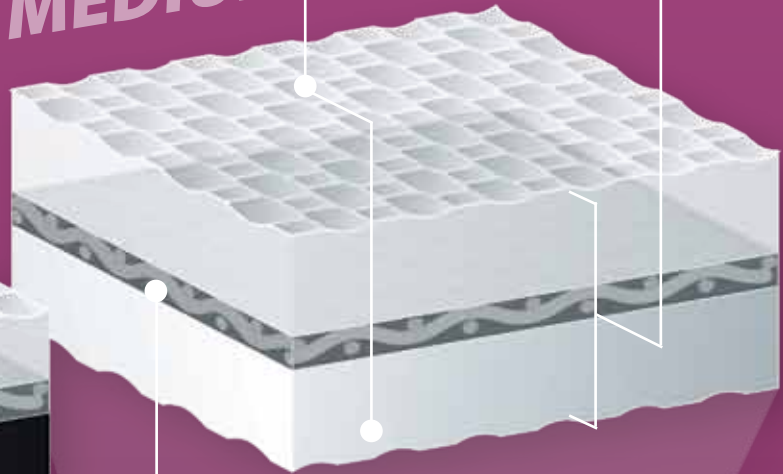
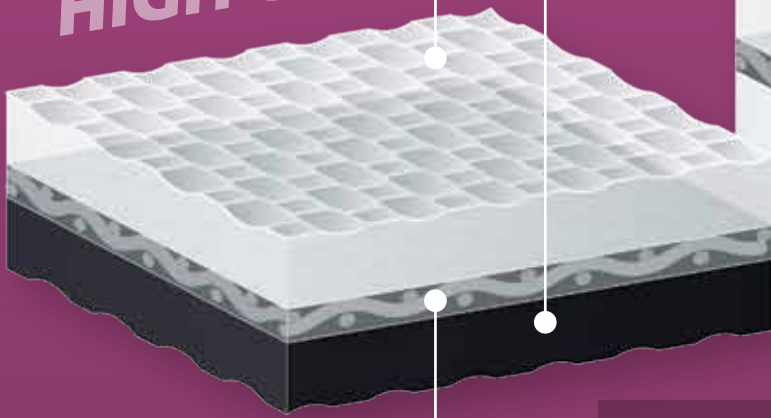
Innovative High Grip coating on one side with tried-and-tested patterns on the top face

Innovative Medium Grip coating on both sides with tried-and-tested patterns

Symmetrical layer structure up to 6 mm thick for long service lives

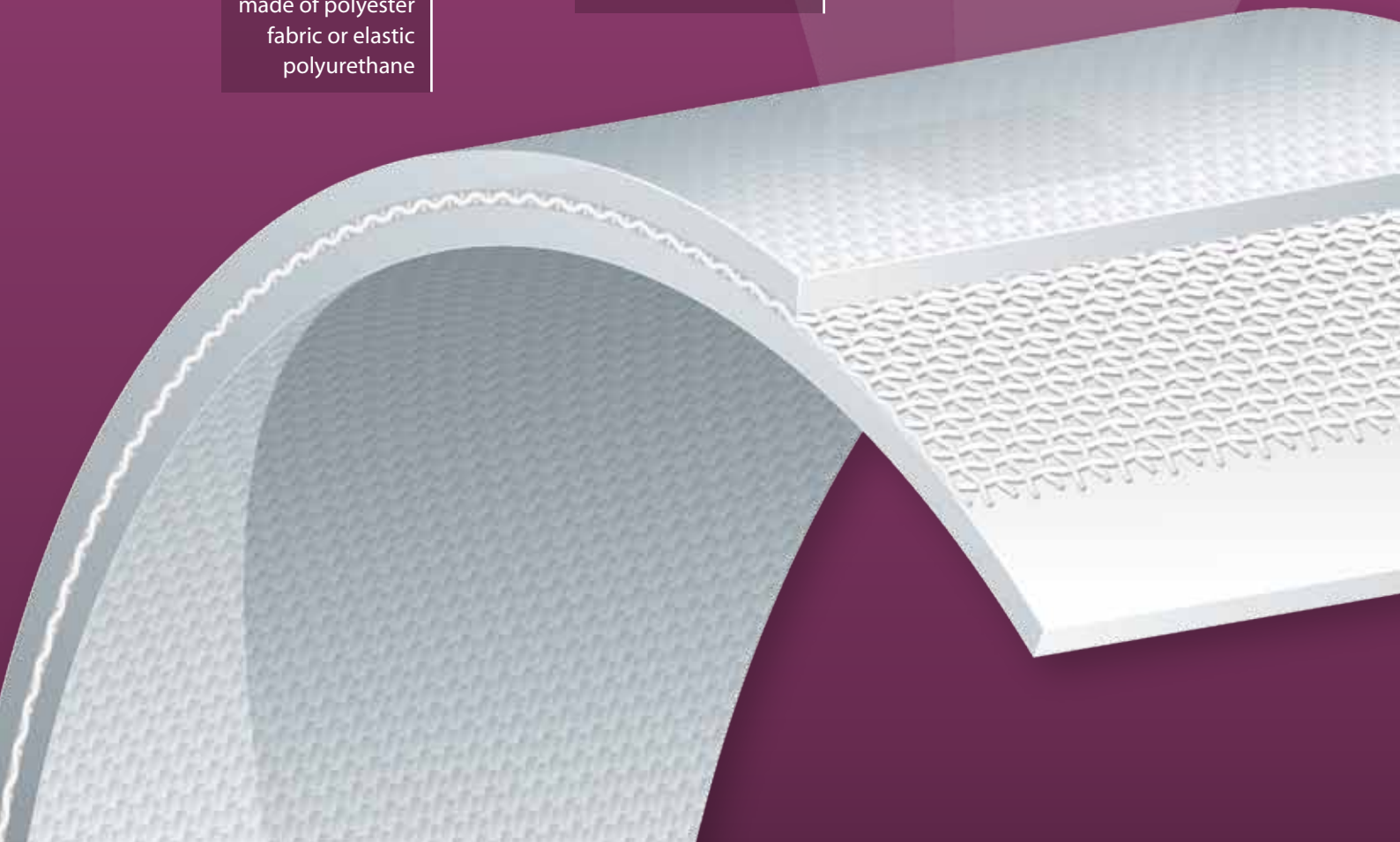
## HIGH GRIP

## MEDIUM GRIP



Tension member made of polyester fabric or elastic polyurethane

Tension member made of polyester fabric or highly oriented polyamide sheet



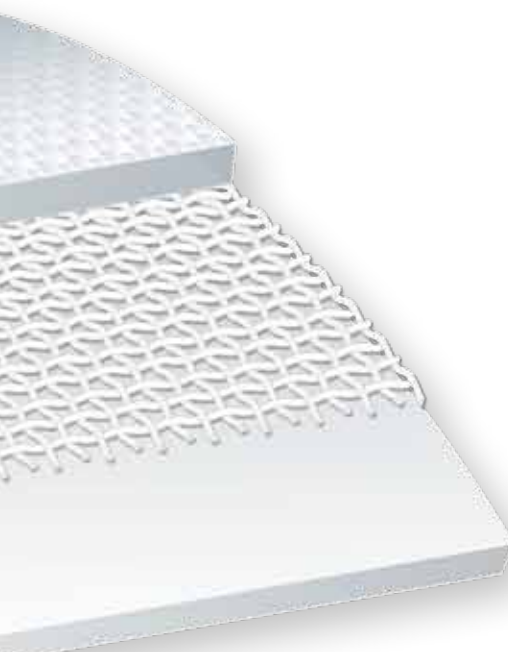
# GRIP STAR™ — FLAT BELTS THAT HOLD ON TIGHT

Grip Star™ flat belts are gentle with products, but still convey reliably. They take hold of and release products at precisely the right times. Grip Star™ flat belts can process paper, boxes, corrugated cardboard and tissue-based products dependably and efficiently.

Grip Star™ leaves no marks and has all the benefits of rubber. However, it doesn't include the typical disadvantages of rubber such as brittleness and cross-cracking. Due to its excellent characteristics and good value, Grip Star™ is the better alter-native to rubber. This is particularly the case when good grip, precise positioning, high levels of acceleration and high-performance braking are required.

## Customised grip

Grip Star™ is produced in High Grip or Medium Grip versions in different thickness and with specific surface patterns. As folder gluer belts, drag belts, live roller belts and machine tapes, the range's belts fulfil exacting demands and offer a wide range of uses. The majority of the Grip Star™ belts comply with the (EC) regulations 1935/2004, (EU) 10/2011, as well as the FDA's 21 CFR for conveying unpackaged food-stuff.



## The properties

age-resistant coating with virtually constant grip

available in Medium Grip or High Grip

coating in neutral gray

EU- and FDA-compliant

mechanically durable, highly abrasion resistant, edges on P types are especially strong

maintains tension

## The advantages

▶ application-driven grip over the entire service life

▶ a wide range of applications

▶ non-marking

▶ ideal for hygiene-critical areas

▶ long service life

▶ no retensioning necessary

# GRIP STAR™ – **BETTER THAN RUBBER**

The right grip  
for any job

Rubber

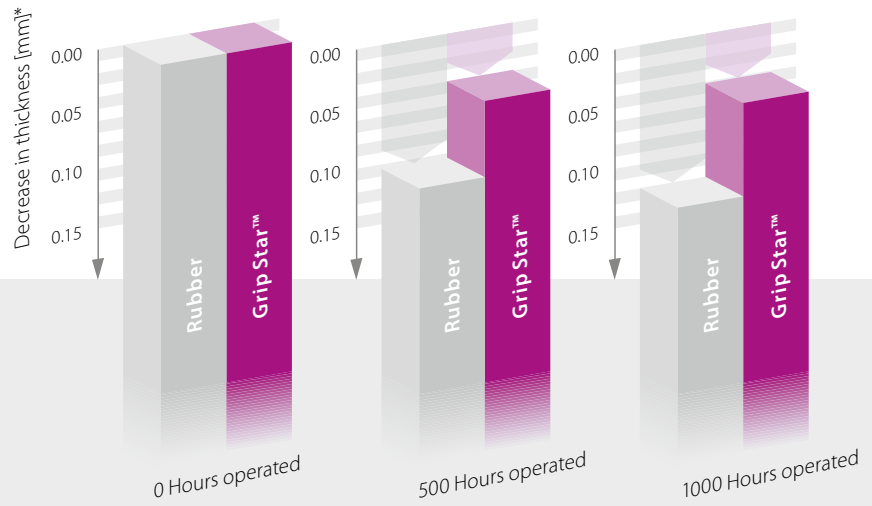
Medium Grip

High Grip

Friction ↑



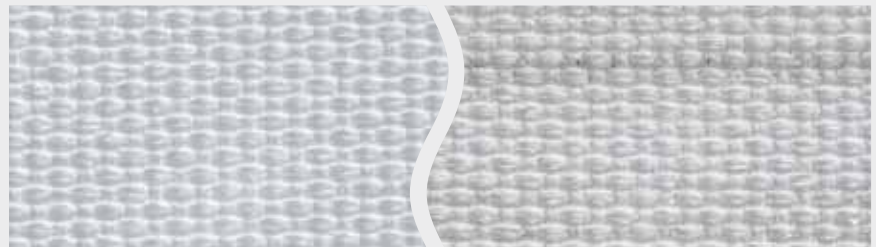
## Very robust



\* Established in standardised testing conditions.

The decrease in thickness of the Medium Grip coating is significantly lower than that of rubber.

## Long service lives, no cross tears



A new Grip Star™ belt

Grip Star™ after running 1000 hours\*\*

The pattern on the Medium Grip coating doesn't wear off and the surface characteristics virtually don't change. In contrast to rubber, the surface doesn't tear.



Rubber after running 1000 hours\*\*

\*\* Established under standardised testing conditions.

## Perfect splicing

Sophisticated Forbo tools and processes ensure Grip Star™ belts are given perfect splices:

- fast and reliable splicing
- short dwell times due to appropriate pressure applied
- almost invisible splices without any faults



# GRIP STAR™ – TYPICAL APPLICATIONS

## Printing industry

- in compensating stackers and bundlers
- in feeding and discharging
- in foil sealing

## Postal/letter sorting

- as reversing belts
- as carrier belts

## Offices

- in franking machines

## Paper processing

- in enveloping machines
- in tissue processing
- in packaging machinery
- in winding cardboard tubes

## Industrial production

- in the solar industry for wafer conveying

Almost all Grip Star™ Medium Grip products are EU- and FDA-compliant. They can be used during the manufacture of packaging and in the process of packaging foodstuffs.



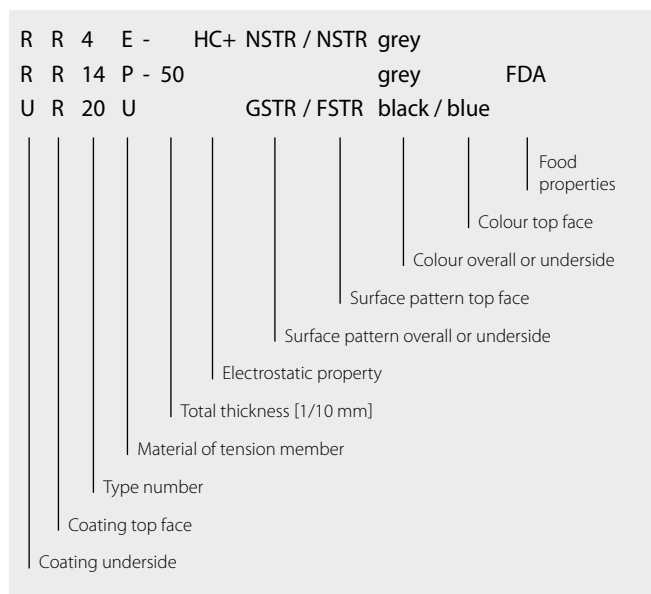
# The Grip Star™ range

Article number	Total thickness approx. [mm]	d <sub>min</sub> [mm]*	Specific shaft load ** [N/mm belt width]	Elongation at fitting [% of belt length]	Weight approx. [kg/m <sup>2</sup> ]	Permissible operating temperature [°C]	Special characteristics and applications					
							Food compliance	Folder gluer belts	Machine tapes	Elastic food tapes	Drag belts	Live roller belts

Medium Grip	<b>E line (with polyester tension member)</b>												
	RR 4E-HC+ FSTR/FSTR gray	822151	1.35	14 <sup>1)</sup>	4	0.3–2.0	1.40	-20/+70		●	●		
	RR 4E-HC+ NSTR/NSTR gray	822154	1.35	14 <sup>1)</sup>	4	0.3–2.0	1.40	-20/+70			●		
	RR 20E-20 gray FDA	822157	2.0	24	23	0.3–2.0	2.10	-20/+70	●	●			●
	RR 20E-30 gray FDA	822148	3.0	30	23	0.3–2.0	3.40	-20/+70	●	●			●
	RR 20E-40 gray FDA	822149	4.0	40	23	0.3–2.0	4.30	-20/+70	●	●			
	RR 20E-50 gray FDA	822152	5.0	50	23	0.5–2.0	5.55	-20/+70	●	●			
	RR 20E-60 gray FDA	822155	6.0	60	23	0.5–2.0	6.65	-20/+70	●	●			
High Grip	<b>P line (with polyamide tension member)</b>												
	RR 10P-30 gray FDA	855638	3.0	40	10	1.5–3.0	3.30	-20/+80	●	●			
	RR 10P-40 gray FDA	855639	4.0	40	10	1.5–3.0	4.30	-20/+80	●	●			
	RR 14P-50 gray FDA	855640	5.0	60	14	1.5–3.0	5.80	-20/+80	●	●			
	RR 14P-60 gray FDA	855641	6.0	60	14	1.5–3.0	6.80	-20/+80	●	●			
High Grip	<b>E line (with polyester tension member)</b>												
	TR 10E black/gray	822120	1.45	20	10	0.3–2.0	1.40	-20/+70		●	●		●
	<b>Elastic line (with urethane tension member)</b>												
	UR 20U GSTR/FSTR black/blue	855624	1.50	10	0.4	3.0–8.0	1.60	-20/+60			●		
UR 40U-HC+ GSTR/NSTR black/gray	855636	1.45	14	0.8	3.0–8.0	1.45	-20/+60		●	●		●	
UR 40U-12 FSTR/FSTR blue FDA	855647	1.20	10	0.25	3.0–8.0	1.30	-20/+60	●		●	●		

**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.**

## Type code



## Legend

The values stated were identified in standard ambient conditions (23°C, 50% rel. humidity)

\* Lower temperatures require larger drum diameters. For the Polyamid line, this also applies in the case of low humidity.

\*\* Relaxed specific shaft load at 1% elongation at fitting and 180° arc of contact in N/mm belt width.

<sup>1)</sup> 10 mm to 2.8 m/s max

- E** = Polyester
- P** = Polyamide P
- R** = High Grip or Medium Grip
- T** = Blended or Polyamide fabric
- U** = Polyurethane

- FDA** = FDA compliant
- HC+** = Conductive belt surfaces + conductive over the thickness

- FSTR** = Fine texture
- GSTR** = Coarse texture
- NSTR** = Normal texture

## 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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### 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.

#### Forbo Siegling GmbH

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MOVEMENT SYSTEMS