Product range





Siegling – total belting solutions



Siegling Transilon round belts

With their round shape and highly elastic properties, Siegling Transilon round belts bend well towards small drum diameters and almost any kind of curvature in their path.

They are used for conveying in the textiles, wood, ceramics, packaging and chemicals industries. They are also used as power transmission belts in precision mechanics, in constructing machinery and equipment and as live roller drives.

Resistances

Chemical resistances: see Transilon resistance details on the internet (www.forbo-siegling.com → products) or on request.

Supplied as:

- Roll material
- Cut to length
- Endless

Material	Colour	Surface	Hardness [Shore]	Recommended elongation at fitting [%]	Operating temperature permitted [°C]	Antistatic/ highly conductive	FDA/EC/BfR-compliant	Fricti Stee	ion coeffi approx.		2	3	4	7.8 7.8	nete	ers in	r sto	∝	6		12	15
U85	groop	rough	87 A	6 – 8	-20/+60			0.45	0.30	0.25												•
U80	green ultramarine blue	rough rough	84 A	0-0 6-8	-20/+60	_	– ves	0.45	0.30	0.25	•				-		•		•		-	•
E40	cream white	smooth	40 D	2 – 4	-30/+60	_	ves	0.50	0.30	0.25		•	•					•				
U80	ultramarine blue	smooth	84 A	6-8	-20/+60	-	yes	0.65	0.35	0.30		•	•		•	•		•		•	•	
U80	colourless, clear	smooth	84 A	6 - 8	-20/+60	-	ves	0.65	0.35	0.30		•	•	•	•	•		•		•	•	
U75	red	smooth	80 A	6 - 8	-20/+60	-	_	0.70	0.40	0.35		۲	۲		•	•		٠		•	•	۲
U90	black	smooth	90 A	6 – 8	-20/+60	yes	-	0.50	0.30	0.25			\bullet			\bullet		•				

Product range

U Polyurethane elastomer

E Polyester elastomer

Co-extruded: Surface and core are made of different materials Other materials, colours and properties

on request on request





Technical data

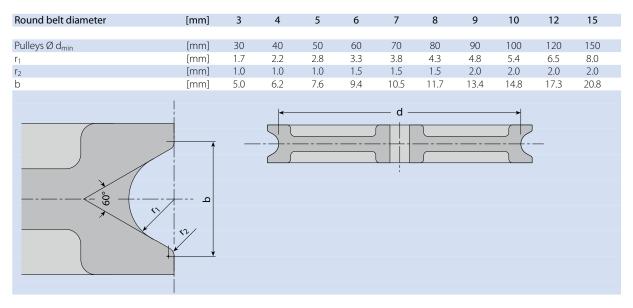
for round belts made of polyurethane elastomer, Shore A hardness 87

Figures depending on diameters

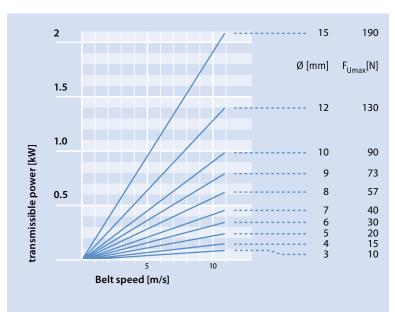
Round belt diameter	[mm]	3	4	5	6	7	8	9	10	12	15
Diameter tolerance	[mm]	0/+0.2	0/+0.2	±0.2	±0.2	±0.3	±0.3	±0.3	±0.3	±0.4	±0.4
Weight	approx. [g/m]	8	15	23	34	46	60	76	95	135	210
Shaft load factor G_W at 20–30° C											
and 180° arc of contact	approx. [N/%]	3.7	6.5	10	14.7	20	26	33	41	59	92
		5.7	0.5	10	1.1.7	20	20	55		55	12

The tensile strength is approx. 40 N/mm² Shaft load [N]: $F_W = C_W \cdot \epsilon$ ϵ = elongation [%]

Recommended pulley dimensions



Power transmission



Power transmission at 180° arc of contact and 8% elongation at fitting.

The values shown on the chart are achieved when the recommended groove design is used and the pulley diameter is not smaller than the minimum allowed.

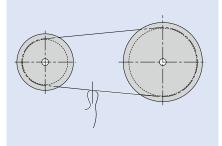


Splicing techniques

Measuring and cutting to length

The required belt length is determined by placing a string or something similar around the two pulleys in the groove and then measuring the string.

In the case of a non-adjustable centre distance, the pre-tension must be subtracted from the measured length (see product range table). For an adjustable centre distance, make reference marks on the belts and then tension according to the elongation required.



Endless splicing

Any dimensions can be quickly spliced endless using very simple tools.

Our handy round belt press pliers (RPZ) can be obtained separately or in the practical combi set with all accessories necessary for reliable and time-saving endless splicing (for use with diameters from 3 – 15 mm).

The RPZ can be supplied in two versions:

- with screw clamp: in this case the ends of the round belt are clamped with knurled screws
- with rapid tensioning lever: in this case the ends of the round belt are clamped by moving the tensioning lever. After welding, the belt is released by flipping open the rapid tensioning clamps. The diameter required of round belt is pre-adjusted (converting to another diameter takes approx. 60 secs.).



Pressure clamps for round belts with rapid tensioning lever (left) and screw clamp (right)

The more affordably-priced standard combi set includes a soldering iron with no temperature control.

The TC combi set includes a soldering iron with adjustable temperature control. The powerful soldering iron heats up in just approx. 90 seconds and maintains the temperature that is adjustable on the control knob.

Further details about endless splicing for Siegling Transilon round belts can be found in the instructions at www.bienefeld-gmbh.de/endlosverbindung.html



Combi set TC – here includes pressure clamp for round belts with rapid tensioning lever

Committed staff, quality-orientated organisation 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.





Forbo Siegling service – anytime, anywhere

The Forbo Siegling Group employs more than 2,000 people. Our products are manufactured in nine 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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