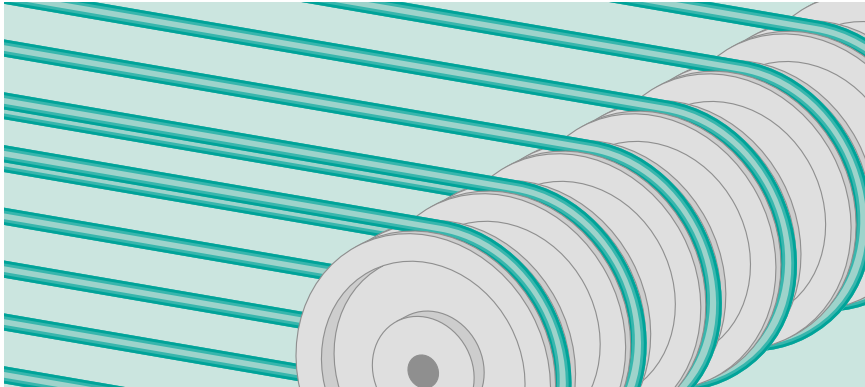


Product overview Round belts



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The profile, high flexibility and elasticity of Transilon round belts make small reversing drum diameters and any turn possible.

They are used for conveying purposes in the textiles, timber, ceramics, packaging and chemical industry.

They are efficient power transmission elements in fine mechanics, in machine and apparatus construction and as live roller conveyors.

Properties and designs

Structure and Material

PU green, rough approx. 87 Shore A
Special designs made from various materials available on request (amongst others: anti-static, white or cream white, with smooth surface)

Resistances

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

Types supplied

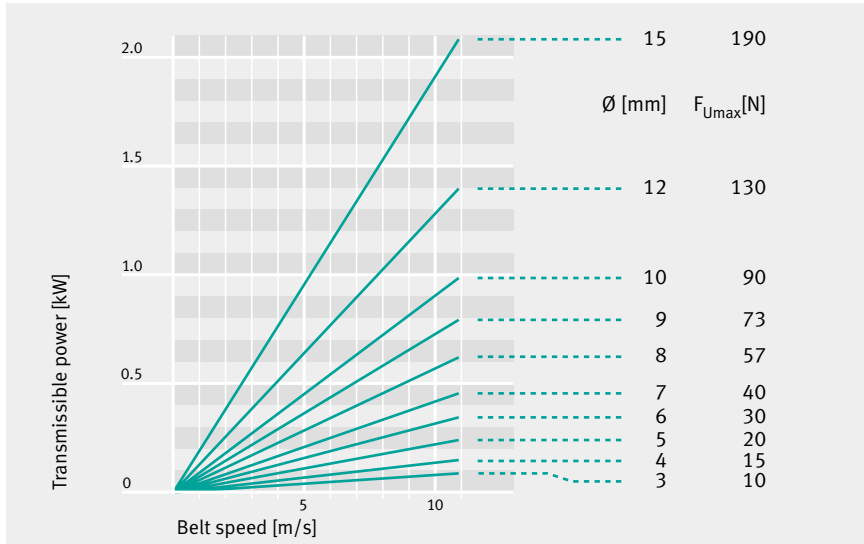
- roll material
- cut to length
- endless

Round belt diameter	[mm]	3	4	5	6	7	8	9	10	12	15
Diameter tolerance	± [mm]	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4
Weight	ca. [g/m]	8	15	23	34	46	60	76	95	135	210
Shaft load factor C_w at 20 – 30° C and 180° arc of contact	ca. [N/%]	3.7	6.5	10	14.7	20	26	33	41	59	92

Tensile strength	ca. [N/mm ²]	40
Shaft load	[N]	$F_w = C_w \cdot \varepsilon$
Recommended elongation at fitting	[%]	$\varepsilon = 6 - 8$
Permitted operational temperature	[°C]	–20 to +60



Power transmission



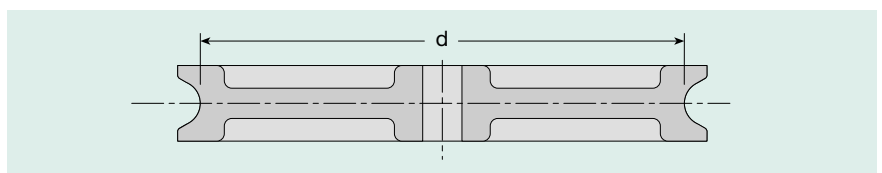
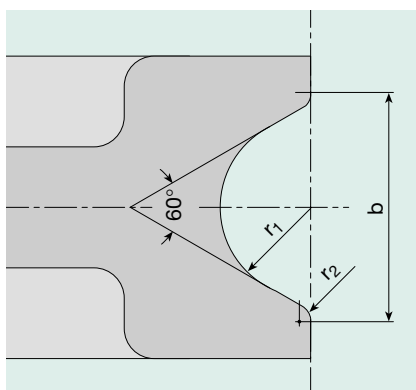
Applicational data and recommendations

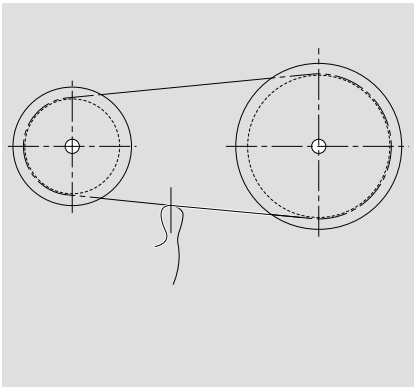
Power transmission at 180° arc of contact and 8 % elongation at fitting.

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.

Recommended pulley design

Round belt diameter	[mm]	3	4	5	6	7	8	9	10	12	15
Pulleys min „d“	[mm]	30	40	50	60	70	80	90	100	120	150
r_1	[mm]	1.7	2.2	2.8	3.3	3.8	4.3	4.8	5.4	6.5	8.0
r_2	[mm]	1.0	1.0	1.0	1.5	1.5	1.5	2.0	2.0	2.0	2.0
b	[mm]	5.0	6.2	7.6	9.4	10.5	11.7	13.4	14.8	17.3	20.8





Measuring and cutting to length

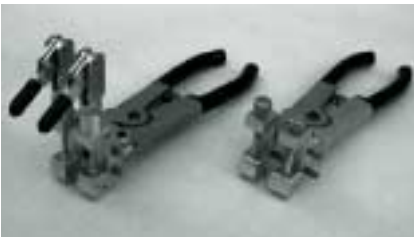
The required belt length is determined by placing a string or something similar around the two pulleys in the groove and then measuring the string.

In the case of a non-adjustable centre distance, the pre-tension of 6 - 8 % must be subtracted from the measured length.

For an adjustable centre distance, make reference marks on the belts and then tension according to the elongation required.



Combi set, includes pressure clamp for round belts with rapid tensioning lever



Pressure clamps for round belts:

left: with rapid tensioning lever
right: screw clamp

Endless splicing

Any dimension can be spliced endless within minutes using very simple devices.

Our handy round belt press pliers (RPZ) can be obtained separately or in the practical combi-set with all accessories necessary for safe 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 rapid tensioning systems release the endless belts with a small movement. The round belt diameter in question is pre-adjusted (converting to another diameter takes approx. 60 secs.).

Contents of the combi-set:

- Special clippers
- Press pliers with rapid adjustment lever or screw clamp
- Hold-down bar with screw clamp
- Soldering iron (110 V or 230 V)
- Flat welding bit
- Cutty

Further details on endless splicing for Transilon round belts can be found in the instructions - order no. 339.

Ref. No.
229
Issue 12.04/2 -UD
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