siegling extremultus
high-efficiency flat belts

Heavy-duty drives

Siegling – total belting solutions

Forbo
MOVEMENT SYSTEMS

Superb power transmission for heavy-duty applications

Siegling Extremultus belts excel at transmitting vast amounts of power proficiently. They are extremely efficient and often a welcome alternative to high-loss gear boxes.

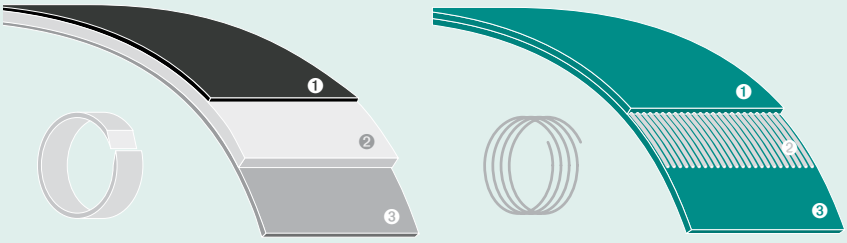
Siegling Extremultus belts transmit power of up to 1850 kW. They are durable, elastic, vibration- and shock-absorbent. And ideal for belt velocities of up to 100 m/s. Compared with other drive components like V-belts, they offer especially high efficiency of over 98 % and exceptional speed stability.

Typical applications are:

- turbines, generators, compressors;
- engine test rigs;
- flakers and chippers;
- gang saws for wood and stone;
- forming presses.

P line
- with a highly oriented polyamide sheet tension member

Endless line
- with a truly endless polyester cord or aramide cord tension member



❶ top face | ❷ traction layer | ❸ friction layer

The properties	The advantages
thin/flexible	high efficiency > 98 %, small reversing drum diameter
constant friction coefficient, high abrasion resistance	speed kept constant, long service life
high elastic modulus	short take-up ranges, low creep
laterally stiff	very strong edges
good damping characteristics	kind to bearings, smooth, vibration-free tracking

You can find product details in "Siegling Extremultus product range overview" (ref. no. 225) and "Siegling Extremultus – technical information" (ref. no. 316).

Extract from the product range

	Article number	Total thickness approx. [mm]	d_{min} [mm]*	Nominal effective pull approx. [N/mm belt width]**	Nominal working elongation [% of belt length]	Max. effective pull transmissible approx. [N/mm belt width]	Elongation at fitting [% of belt length]	Weight approx. [kg/m²]	Permitted operating temperature Td [°C] (constant temperature)***
P line									
LT 20P	800010	2.8	90	20	2.0	25	1.5 – 3.0	2.9	–20/+80
LT 28P	800011	3.7	125	28	2.0	35	1.5 – 3.0	3.7	–20/+80
LT 40P	800012	4.4	200	40	2.0	48	1.5 – 3.0	4.3	–20/+80
LT 54P	800013	5.5	300	54	2.0	67.5	1.5 – 3.0	5.5	–20/+80
LT 65P	998059	5.8	400	65	2.0	84.5	1.5 – 3.0	5.7	–20/+80
LT 80P	800014	7.2	400	80	2.0	110	1.5 – 3.0	7.1	–20/+80
GT 20P black	850047	2.5	60	20	2.0	25	1.5 – 3.0	2.65	–20/+80
GT 28P black	850048	3.0	120	28	2.0	35	1.5 – 3.0	3.3	–20/+80
GT 40P black	850049	3.65	200	40	2.0	48	1.5 – 3.0	4.0	–20/+80
GT 54P black	850050	4.4	300	54	2.0	67.5	1.5 – 3.0	4.9	–20/+80
GT 80P black	850051	6.0	400	80	2.0	110	1.5 – 3.0	6.4	–20/+80
Endless line									
LT 20E	810003	2.3	80	20	1.0	–	0.5 – 1.5	2.5	–20/+60
LT 28E	810004	2.9	130	28	1.0	–	0.5 – 1.5	3.2	–20/+60
LT 40E	810005	3.2	180	40	1.0	–	0.5 – 1.5	3.3	–20/+60
LT 54A	810081	2.7	200	54	1.0	–	0.3 – 1.0	2.7	–20/+60
LT 80A	810080	2.8	200	80	1.0	–	0.3 – 1.0	2.8	–20/+60
GT 20E black	810026	1.9	70	20	1.0	–	0.5 – 1.5	1.9	–20/+60
GT 28E black	810029	2.1	120	28	1.0	–	0.5 – 1.5	2.2	–20/+60
GT 40E black	810032	2.4	160	40	1.0	–	0.5 – 1.5	2.5	–20/+60
GT 54A black	810053	1.6	150	54	1.0	–	0.3 – 1.0	1.9	–20/+60
GT 80A black	810082	2.0	150	80	1.0	–	0.3 – 1.0	1.9	–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.

Key

* The lowest pulley diameter permitted was established in standard ambient conditions (23 °C, 50 % rel. humidity). Lower temperatures require smaller diameters. This also applies to the P line when humidity is particularly low.

** The nominal effective pull states the possible power transmission in N/mm belt width (standard ambient conditions 23 °C/50 % rel. humidity) that the belt type can produce at nominal elongation.

*** Temperature can be briefly exceeded to a max. of + 20 °C

A = Aramide
E = Polyester
G = Elastomer G
L = Chrome leather
P = Polyamide
T = Blended or polyamide fabric

For technical reasons, truly endless belts are made within the following dimensions:

Width	**[mm]**	min. 10	max.	480
Length	**[mm]**	min. 420	max.	13700

Type key for Siegling Extremultus

G T 20 P
L T 20 E
G T 54 A

- Tension member material
- Type no/Fu' value**
- Functional layer/friction layer/ top layer
- Friction coating

Flaker for tree trunks up to 1200 mm Ø
Power transmission 1850 kW
Belt type GT 80P

Kaplan tubular turbines
Turbine power 240 kW
Belt type LT 28P

Schuler CRM solid forming press
Pressing force 40000 kN
Belt type LT 54

Siegling – total belting solutions

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.

MOVEMENT SYSTEMS

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