

# Power Transmission Belts

## S-33/50



### Main industry segments

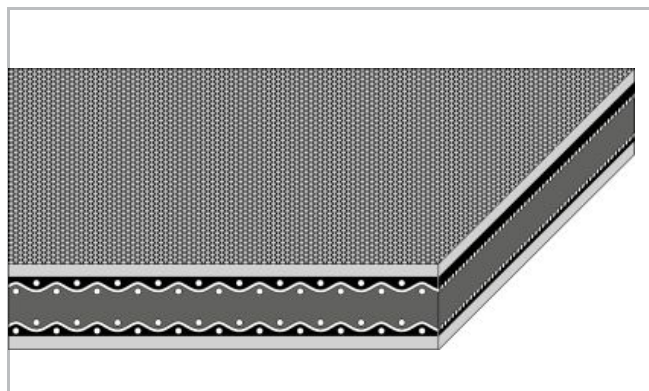
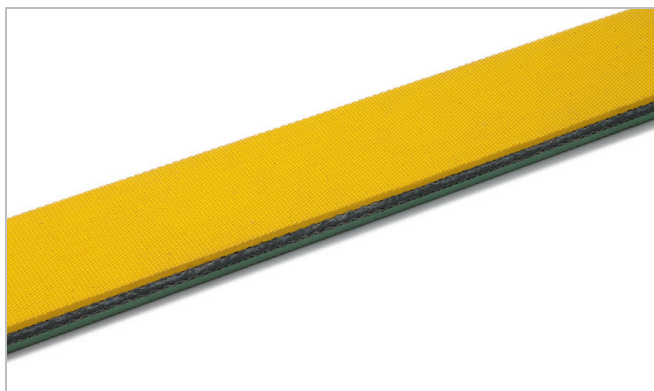
Yarn processing

### Applications

Power transmission belt, Tangential belt

### Special features

Abrasion resistant, Constant coefficient of friction, Forgiving in case of short term shock like overloads, Versatile



Product Construction / Design	
Pulley side material	Acrylonitrile-Butadiene-Rubber (NBR) as friction cover (pulley/cylinder side)
Pulley side surface	Rough structure
Pulley side color	Yellow
Traction layer (material)	Polyamide (PA)
Number of Fabrics	2
Opposite side material	Acrylonitrile-Butadiene-Rubber (NBR) as friction cover (whirl side)
Opposite side surface	Rough structure
Opposite side color	Light green

Product characteristics	
Drive determination	Double-sided power transmission
Antistatically equipped	Yes
Adhesive free joining method	No
Food suitability, FDA conformance	No
Food suitability, EU conformance	No

Technical data		
Thickness of belt	5.0 mm	0.20 inch
Mass of belt (belt weight)	5.4 kg/m <sup>2</sup>	1.106 lb/sqft
Tensile force for 1% elongation (k1% after running in) per unit of width (Habasit standard SOP3-013)	13 N/mm	74 lbf/in
Nominal peripheral force per unit of width	37 N/mm	211 lbf/in
Min. operating temperature admissible (continuous)	-20 °C	-4 °F
Max. operating temperature admissible (continuous)	100 °C	212 °F
Seamless manufacturing width	1200 mm	47 inch

All data are approximate values under standard climatic conditions: 23°C/73°F, 50% relative humidity (DIN 50005/ISO 554).

### Joining related properties

[Link to JDS:](#)

Joining method		Thermofix
Pulley diameter (minimum)	mm	125
	inch	4.92
Pulley diameter minimum with counter flection	mm	125
	inch	4.92

### Chemical resistance

Link to 'Chemical resistance information': <http://www.habasit.com/en/chemical-resistance.htm>

### Mode of use or conveyance

Power transmission

### Calculations

With power transmission belts a calculation at least of the belt width and initial elongation is highly recommended. For this serves the Habasit SeleCalc calculation program. The easiest way is to have belt drives calculated by Habasit representatives.

### Recommendation

Do not go below initial elongation (epsilon) ~ 0.3%

For details consult 'Storage and handling requirements for belts and machine tapes' or contact Habasit, Protect belts from sunlight/UV-radiation/dust and dirt. Store spare belts in a cool and dry place and if possible in their original packaging.

This product has not been tested according to ATEX standards (atmospheres with explosion risk - ATEX 95 regulation or EU directive 94/9) and therefore is subject to user's analysis in the respective environment

Group	Polyamide Power Transmission Belts
Sub-Group	S Polyamide Power Transmission Belts
Item number	H010100188

### Disclaimer

#### Product Application Disclaimer (valid for ALL Habasit products and mentioned on all PDS)

This disclaimer is made by and on behalf of Habasit and its affiliated companies, directors, employees, agents and contractors (hereinafter collectively "HABASIT") with respect to the products referred to herein (the "Products"). SAFETY WARNINGS SHOULD BE READ CAREFULLY AND ANY RECOMMENDED SAFETY PRECAUTIONS BE FOLLOWED STRICTLY! Please refer to the Safety Warnings herein, in the Habasit catalogue as well as installation and operating manuals. All indications / information as to the application, use and performance of the Products are recommendations provided with due diligence and care, but no representations or warranties of any kind are made as to their completeness, accuracy or suitability for a particular purpose. The data provided herein are based on laboratory application with small-scale test equipment, running at standard conditions, and do not necessarily match product performance in industrial use. New knowledge and experience may lead to re-assessments and modifications within a short period of time and without prior notice. EXCEPT AS EXPLICITLY WARRANTED BY HABASIT, WHICH WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, THE PRODUCTS ARE PROVIDED "AS IS". HABASIT DISCLAIMS ALL OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT, OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE, ALL OF WHICH ARE HEREBY EXCLUDED TO THE EXTENT ALLOWED BY APPLICABLE LAW. BECAUSE CONDITIONS OF USE IN INDUSTRIAL APPLICATION ARE OUTSIDE OF HABASIT'S CONTROL, HABASIT DOES NOT ASSUME ANY LIABILITY CONCERNING THE SUITABILITY AND PROCESS ABILITY OF THE PRODUCTS, INCLUDING INDICATIONS ON PROCESS RESULTS AND OUTPUT.