

Light Conveyor Belts HSL-5E



Main industry segments

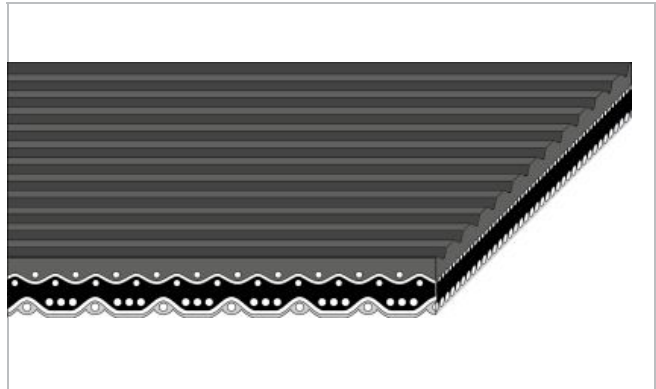
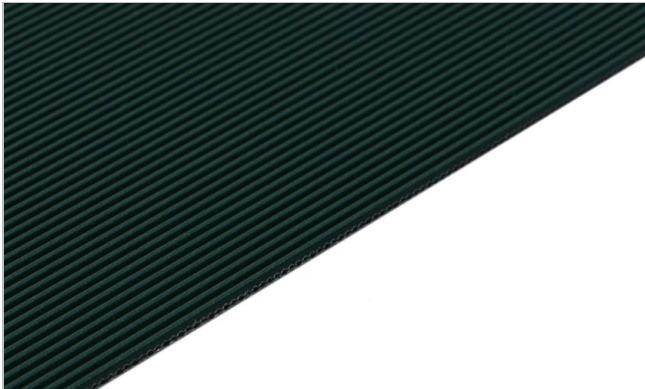
Distribution centers, General conveying

Applications

Decline belt, Incline belt, Metering/singulation belt

Special features

Abrasion resistant, Antistatic, Dimensionally stable, Flat laying, High coefficient of friction surface, Low temperature resistant, Small pulley diameter suitable



Product Construction / Design	
Conveying side material	Thermoplastic polyurethane (TPU)
Conveying side surface	Longitudinal groove structure
Conveying side property	Super-adhesive
Conveying side color	Dark green
Traction layer (material)	Polyester (PET)
Number of Fabrics	2
Pulley side material	Polyester (PET)
Pulley side surface	Impregnated fabric
Pulley side property	Non-adhesive
Pulley side color	Gray

Product characteristics	
Antistatically equipped	Yes
Adhesive free joining method	Yes
Flammability	Tested according to UL 94HB (USA) requirement; HB= Horizontal Burning
Food suitability, FDA conformance	No
Food suitability, USDA recommendations	No use intended
Food suitability, EU conformance	No
Other conformance/approval	Japanese Food Regulation (MHLW Notification No. 370)

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Technical data		
Thickness of belt	1.8 mm	0.07 inch
Mass of belt (belt weight)	1.9 kg/m ²	0.379 lb/sqft
Tensile force for 1% elongation (k1% static) per unit of width (Habasit standard SOP3-155)	6.5 N/mm	37 lbf/in
Tensile force for 1% elongation after relaxation (k1% relaxed) per unit of width (Habasit Standard SOP3-155 / EN ISO 21181)	4.6 N/mm	26 lbf/in
Min. operating temperature admissible (continuous)	-30 °C	-22 °F
Max. operating temperature admissible (continuous)	80 °C	176 °F
Coefficient of friction (pulley side / steel driving pulley)	0.15 -	
Coefficient of friction (pulley side / driving pulley with friction cover)	0.35 -	
Coefficient of friction (pulley side / pickled steel slider bed)	0.20 -	
Coefficient of friction (pulley side / phenolic resin slider bed)	0.15 -	
Coefficient of friction (pulley side / stainless steel slider bed)	0.15 -	
Seamless manufacturing width	2400 mm	94.49 inch

Joining related properties

Joining method	
Flexproof 20 x 80	Master joining method for standard applications

[Link to JDS:](#)

Joining method		Flexproof 20 x 80
Pulley diameter (minimum)	mm inch	20 0.79
Pulley diameter minimum with counter flection	mm inch	40 1.57
Admissible tensile force per unit of width	N/mm lbf/in	11 63
Admissible tensile force per unit of width at max. operating temperature	N/mm lbf/in	4.0 23
Slider bed suitable		Yes
Carrying rollers suitable		Yes
Troughed installation suitable		No
Powerturns / curved installations		No
Knife-edge (nosebar) suitable		No
Low noise applications		No
Metal detector suitable		No

All data are approximate values under standard climatic conditions: 23°C/73°F, 50% relative humidity (DIN 50005/ISO 554). Limited representative testing based on a standard configuration is carried out to estimate minimum pulley diameters. Please contact Habasit for specific guidance regarding non-standard applications, including, but not exclusively, when profiles or cleats are used, or if the belt working temperature is close to the limits listed in this document.

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Chemical resistance

Link to 'Chemical resistance information': <https://rims.habasit.com>

Mode of use or conveyance

Horizontal, Inclined

Calculations

For most applications calculation is not required. Should you still need a calculation: please ask Habasit.

Recommendation

Do not go below initial elongation (epsilon) ~ 0.3%, Install the slack belt and tension until running perfectly under the full belt load

Store spare belts in a cool and dry place and if possible in their original packaging. Protect spare belts from sunlight/UV-radiation/dust/dirt! Check Link for Storage requirements:

["https://tdm.habasit.com/pds/en-us/Storage%20of%20Habasit%20material.pdf"](https://tdm.habasit.com/pds/en-us/Storage%20of%20Habasit%20material.pdf)

This product has not been tested according to ATEX standards (atmospheres with explosion risk - ATEX 95 regulation or EU directive 2014/34/EU) and therefore is subject to user's analysis in the respective environment

Group	TPU Belts
Sub-Group	-
Item number	H010100784

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