

Food Belts

4T12 Frayless



Main industry segments

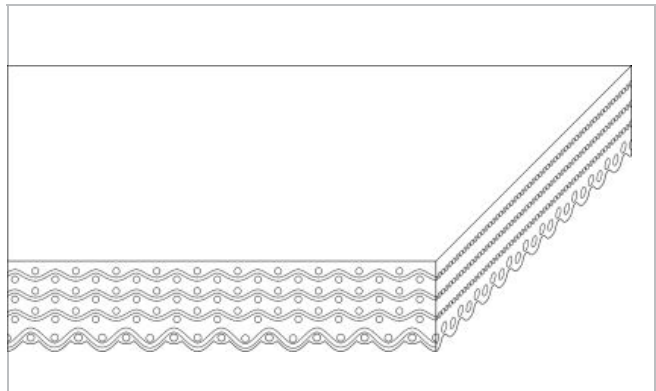
Coffee and tea, Fruit, Pet food

Applications

Food processing/conveying belt, Z-conveyor (goose/swan neck)

Special features

Abrasion resistant, Frayless edges, High transversal rigidity



Product Construction / Design	
Conveying side material	Thermoplastic polyurethane (TPU)
Conveying side surface	Glossy
Conveying side property	Non-adhesive
Conveying side color	White
Traction layer (material)	Polyester (PET)
Number of Fabrics	4
Pulley side material	Polyester (PET)
Pulley side surface	Impregnated fabric
Pulley side property	Non-adhesive
Pulley side color	White

Product characteristics	
Antistatically equipped	No
Adhesive free joining method	Yes
Flammability	No specific flammability prevention property
Food suitability, FDA conformance	Yes - Check Document of Compliance (DoC) in our Portal
Food suitability, USDA recommendations	No use intended
Food suitability, EU conformance	Yes - Check Document of Compliance (DoC) in our Portal
Other conformance/approval	Japanese Food Regulation (MHLW Notification No. 370)

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Technical data		
Thickness of belt	3.0 mm	0.12 inch
Mass of belt (belt weight)	3.2 kg/m ²	0.655 lb/sqft
Tensile force for 1% elongation (k1% static) per unit of width (Habasit standard SOP3-155)	16 N/mm	91 lbf/in
Tensile force for 1% elongation after relaxation (k1% relaxed) per unit of width (Habasit Standard SOP3-155 / EN ISO 21181)	12 N/mm	69 lbf/in
Min. operating temperature admissible (continuous)	-20 °C	-4 °F
Max. operating temperature admissible (continuous)	100 °C	212 °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)	0.20 -	
Coefficient of friction (pulley side / stainless steel slider bed)	0.20 -	
Seamless manufacturing width	2000 mm	78.74 inch
On request other seamless manufacturing width	1500 mm	59 inch

Joining related properties

Joining method	
Flexproof 10 x 80	Master joining method for standard applications

[Link to JDS:](#)

Joining method		Flexproof 10 x 80
Pulley diameter (minimum)	mm inch	125 4.92
Pulley diameter minimum with counter flection	mm inch	200 7.87
Admissible tensile force per unit of width	N/mm lbf/in	30 171
Admissible tensile force per unit of width at max. operating temperature	N/mm lbf/in	11 63
Slider bed suitable		Yes
Carrying rollers suitable		Yes
Troughed installation suitable		No
Powerturns / curved installations		No
Knife-edge (nosebar) suitable		No
Metal detector suitable		Yes

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

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%

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. 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	General Purpose Belts
Item number	H700000180

Disclaimer

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