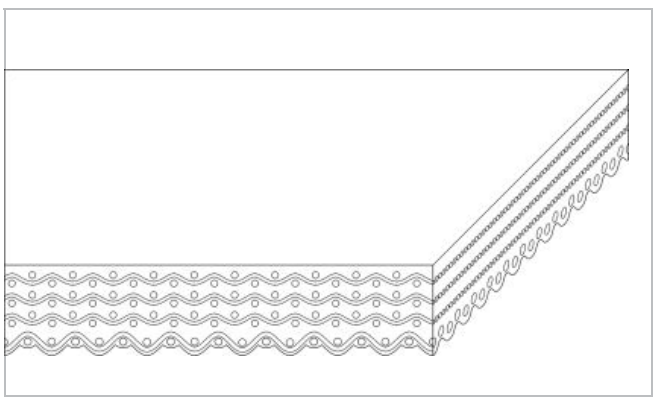
Food Belts
4T12 Frayless

Main industry segments
Coffee and tea, Fruit, Pet food

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

Special features
Abrasion resistant, High transversal rigidity, Frayless edges



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, EU conformance	Yes - Check Document of Compliance (DoC) in our Portal
Other conformance/approval	Japanese Food Regulation (MHLW Notification No. 370)

Food Belts
4T12 Frayless

Technical data				
Thickness of belt	3.0	mm	*0.118*	*inch*
Mass of belt (belt weight)	3.2	kg/m²	*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.

Food Belts
4T12 Frayless

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%

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"

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
	General Purpose Belts
Item number	H700000180

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.