

# Food Belts

## FNI-5E



### Main industry segments

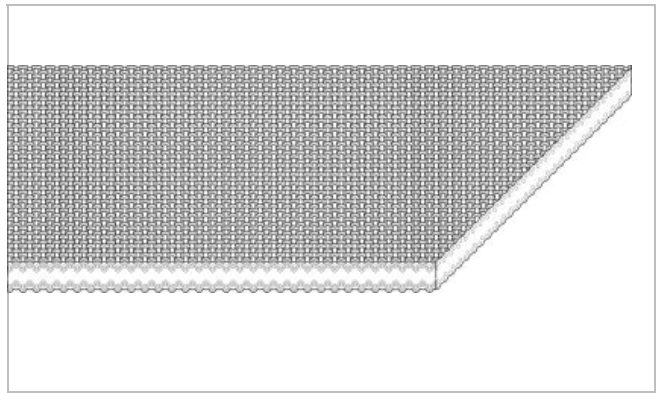
Baked snacks, Biscuit and Crackers, Bread, Chocolate, Convenience food, Pastry, Primary food packaging

### Applications

Accumulation belt, Diverting belt, Food processing/conveying belt, Packaging belt, Transfer belt

### Special features

Easy release, Longitudinal flexibility, Low friction running side, No stick-slip effect



Product Construction / Design	
Conveying side material	Polyester (PET)
Conveying side surface	Impregnated fabric
Conveying side property	Non-adhesive
Conveying side color	White
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	White

Product characteristics	
Antistatically equipped	Yes
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)
	Halal certified

Technical data		
Thickness of belt	0.90 mm	0.04 inch
Mass of belt (belt weight)	0.90 kg/m <sup>2</sup>	0.184 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)	4.4 N/mm	25 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)	0.25 -	
Coefficient of friction (pulley side / stainless steel slider bed)	0.15 -	
Thermal Resistance	0.108 m <sup>2</sup> *K/W	0.019 Fft <sup>2</sup> h/Btu
Thermal Conductivity	0.084 W/m*K	0.014 W/ft*F
Seamless manufacturing width	4000 mm	157.48 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
Knife-edge (nosebar) radius (minimum)	mm inch	4 0.157
Pulley diameter (minimum)	mm inch	15 0.59
Pulley diameter minimum with counter flection	mm inch	20 0.79
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	4.4 25
Slider bed suitable		Yes
Carrying rollers suitable		Yes
Troughed installation suitable		No
Powerturns / curved installations		No
Low noise applications		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.

## 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%, Install the slack belt and tension until running perfectly under the full belt load

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)

Not suitable for wet operations combined with increased temperatures, 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	Fabric Surface Belts
Sub-Group	Impregnated Belts
Item number	H010100424

## Disclaimer

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