

Food Belts

FNI-5E



Main industry segments

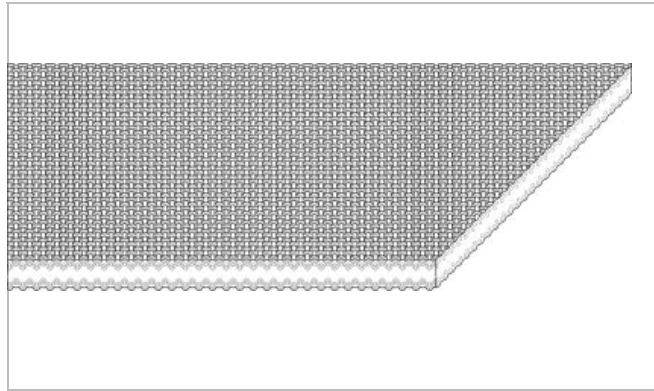
Baked snacks, Biscuit and Crackers, Bread, Chocolate, Convenience food, Pastry, Primary food packaging

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 ² | 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 ² *K/W | 0.019 Fft ² 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.

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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%, 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)

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 |

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