

HighGrip



Perlon® – The Filament Company

Perlon® – The Filament Company – is an innovative, global group of companies specialized in the manufacture of synthetic filaments. Perlon® generates annual sales of more than 150 million euros, employs about 850 people and has a production capacity of 23,000 tons. We operate from locations in Germany, Poland, in the USA and in China.

Through our technical expertise and strength in innovation we develop premium quality products for our customers. The comprehensive product portfolio is based on a variety of raw materials. In line with the intended application, these are modified and processed into high quality, application-specific filaments. The consistent high quality of our products sets worldwide benchmarks.

Get a grip on your process

HighGrip is a polyester based family of bi-component monofilaments with tailored tribological properties. While the core ensures dimensional stability and specific thermo-mechanical properties, the sheath provides customized dynamic frictional properties. The grip properties achieved are instrumental for process and conveyor belts for example. HighGrip is thus a sustainable and cost-efficient alternative to polyurethane or latex coating post-treatment. The outstanding core/sheath adhesion of bico HighGrip guarantees a long lasting and steady performance of the belts over time. The thickness of the sheath can be adjusted based on the requirements of the application.

A versatile portfolio of products with tailored frictional and thermomechanical (softening point, thermomechanical resistance) properties 7**MR/IR/NR is available.

The advantages of HighGrip at a glance

- Polyester-based monofilament (hydrophobic)
- Cost-efficient alternative to post-production coating
- Sustainable alternative to polyurethane or latex emulsions (no contamination nor waste disposal)
- Customizable thickness of the sheath
- Outstanding core/sheath adhesion
- Ensuring long lasting effect
- Good resistance to high pressure cleaning devices
- Round and profiled yarns available
- Core/sheath or side by side structure available
- Very good textile properties and therefore easy to process
- HighGrip can be woven or knitted

Textile properties

Type	710MR	710IR	710NR
Diameter (mm)	0.50	0.55	0.50
Linear density (dtex)	2,515 – 2,595	3,080 – 3,178	2,523 – 2,600
Strength (cN/Text)	27 – 33	22 – 28	22 – 28
Elongation to failure (%)	36 – 47	40 – 48	37 – 45
Free thermoshrink @180 °C (%)	7.3 – 9.3	7.0 – 9.0	7.3 – 9.3

Grip and thermo-mechanical properties

Type	Sheath softening Ts (°C)	Level of grip	Thermo-mechanical resistance @180°C
710/713 NR (HT)	196 – 208	++++	++++
710/713 IR HT	199 – 202/209 – 214	+++	++
710 MR	196 – 200/208 – 210	++	++
710/713 MR HT	204 – 206/214 – 217	++	+++++
710/713 MR HT S	211 – 216	++	+++++

HT: High temperature (softening point)

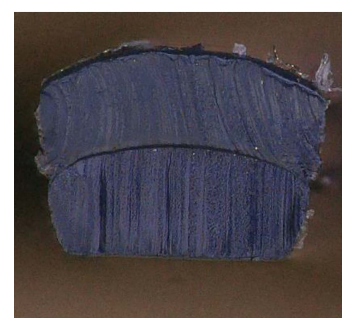
HTS: High temperature + heat stabilized



Core/sheath round



Core/sheath flat



Side-by-side flat

Brand related products: 7** IR, MR, NR, NJ, MJ

This product information has been compiled to the best of our knowledge and with the greatest of care. We cannot, however, assume any liability for the accuracy, integrity or timeliness of its content. The technical parameters and the behaviour of the monofilament can vary depending on diameter and production technique.