

BIW Isolierstoffe GmbH

Pregelstraße 2-5
D-58256 Ennepetal
Tel.: +49 (2333) 8308-0
Fax.: +49 (2333) 8308-10
info@biw.de
www.biw.de

Certified management system by:

- IATF16949
- ISO9001
- ISO13485
- ISO14001
- ISO50001
- IIP (Investors in People)



TECHNICAL DATASHEET

INDUSTRIES AND APPLICATIONS



PET - TEX FR

Typical uses

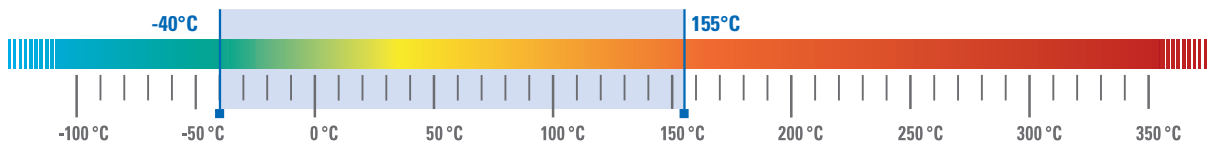
- Automotive industry
- E-mobility / hybrid
- Cable manufacture
- Line protection

Key properties

- Long-term heat resistance of -40°C bis +155°C
- Short-term heat resistance up to +180°C
- Flame resistant polyester fibre
- Self-extinguishing according to FMVSS 302
- Minimal moisture absorption
- Good resistance to water, salt spray, cleaning agents, as well as to fuels and lubricants during temporary exposure
- Low wear under mechanical and dynamic impacts
- High tensile strength
- Good abrasion resistance
- High radial elasticity
- Nominal diameter 3,0 mm to 40,0 mm



Application temperature



Product description

The PET - TEX FR consists of specially treated, flame-retardant PET fibres that are processed to form a tightly braided protective hose. The PET - TEX FR protective hose, which is ideally cut-to-length with hot-cutting technology in order to prevent a fraying of the interface, is outstandingly suited as cable and line protection with visually complete coverage. The good resistance to fuels and lubricants as well as cleaning agents of all types should be highlighted. The thermal load capacity is 155°C; brief temperature spikes up to 180°C are also tolerated without restricting the function. With the mechanical properties of flexibility, abrasion resistance and tear strength, the PET - TEX FR is designed as a mechanical protective hose for applications in the engine compartment or in the fuels area.

- IATF16949
- ISO9001
- ISO13485
- ISO14001
- ISO50001
- IIP (Investors in People)



**When it comes
to competence**

INDUSTRIES AND APPLICATIONS



PET - TEX FR

Application properties

Property	Standard	Test requirements	Result
Flame resistance	based on FMVSS302	Flame height 38 mm Flame exposure 15 s	Self-extinguishing, Classification B

Mechanical / physical properties

Property	Standard	Test requirements	Result
Abrasion resistance	LV 312-3	temperature 23°C frequency 8 Hz 7 N	Classification C

Compatibilities

Medium	Standard	Test requirements	Result
Biodiesel	based on LV312-3	Storage time 24h, at 150°C winding test	Requirements achieved
Break fluid	based on LV312-3	Storage time 24h, at 150°C winding test	Requirements achieved
Diesel	based on LV312-3	Storage time 24h, at 150°C winding test	Requirements achieved
Cold cleaning agent	based on LV312-3	Storage time 24h, at 150°C winding test	Requirements achieved
Fuel FAM-B	based on LV312-3	Storage time 24h, at 150°C winding test	Requirements achieved
Radiator antifreeze	based on LV312-3	Storage time 24h, at 150°C winding test	Requirements achieved
Multigrade engine oil	based on LV312-3	Storage time 24h, at 150°C winding test	Requirements achieved

Ecology, Environment & Safety

Ingredients compliant with VDA - requirements

IMDS listed

RoHS, GADSL compliant

Non-asbestos, contains no fiberglass, physiologically harmless, non-toxic

Non-hazardous to the environment, non-hazardous to water

Skin irritations from handling are excluded.

When using and disposing of the PET - TEX FR protective sleeve there are no environmentally relevant co-products expected

- IATF16949
- ISO9001
- ISO13485
- ISO14001
- ISO50001
- IIP (Investors in People)



When it comes to competence

INDUSTRIES AND APPLICATIONS



PET - TEX FR

BIW-Standard dimensions

PET - TEX FR (Code: pfr)

On demand individual dimensions available at any time

ID [mm]	Tol. ID [mm]	Wd [mm]	Tol. Wd [mm]	Ring [m]
3.0	∅ extreme expandible	0.50	±0.15	endless or cut to length
4.0	∅ extreme expandible	0.50	±0.15	endless or cut to length
5.0	∅ extreme expandible	0.50	±0.15	endless or cut to length
6.0	∅ extreme expandible	0.50	±0.15	endless or cut to length
7.0	∅ extreme expandible	0.50	±0.15	endless or cut to length
8.0	∅ extreme expandible	0.50	±0.15	endless or cut to length
9.0	∅ extreme expandible	0.50	±0.15	endless or cut to length
10.0	∅ extreme expandible	0.50	±0.15	endless or cut to length
12.0	∅ extreme expandible	0.50	±0.15	endless or cut to length
14.0	∅ extreme expandible	0.50	±0.15	endless or cut to length
16.0	∅ extreme expandible	0.50	±0.15	endless or cut to length
18.0	∅ extreme expandible	0.50	±0.15	endless or cut to length
20.0	∅ extreme expandible	0.50	±0.15	endless or cut to length
22.0	∅ extreme expandible	0.65	±0.15	endless or cut to length
24.0	∅ extreme expandible	0.65	±0.15	endless or cut to length
26.0	∅ extreme expandible	0.65	±0.15	endless or cut to length
28.0	∅ extreme expandible	0.65	±0.15	endless or cut to length
30.0	∅ extreme expandible	0.65	±0.15	endless or cut to length
32.0	∅ extreme expandible	0.65	±0.15	endless or cut to length
34.0	∅ extreme expandible	0.65	±0.15	endless or cut to length
36.0	∅ extreme expandible	0.65	±0.15	endless or cut to length
38.0	∅ extreme expandible	0.65	±0.15	endless or cut to length
40.0	∅ extreme expandible	1.00	±0.20	endless or cut to length