

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



ISOFLEX H

Typical uses

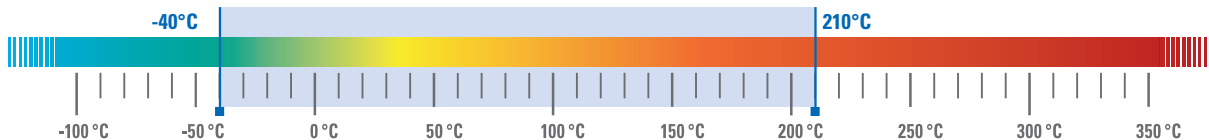
- Automotive industry
- E-mobility / hybrid
- Cable manufacture
- Line protection

Key properties

- Long-term heat resistance of -40°C to $+210^{\circ}\text{C}$
- Short-term heat resistance up to $+235^{\circ}\text{C}$
- Good resistance to water, water-glycol mixture, salt spray, as well as to fuels and lubricants during temporary exposure
- Good elongation and compressibility
- Very flexible
- Excellent value for money through efficient knitting process
- Physiologically harmless
- Colour: orange
- Nominal diameter 3,0 to 35,0 mm



Application temperature



Product description

The ISOFLEX H protective hose is a combination of a knitted glass fabric and a silicone coating specially developed for high mechanical loads in production and operation. The resulting tough knitting process in combination with the silicone coating provides a compelling level of quality. The special design and the efficient production process ensure a smooth inner and outer surface, good compression with special circularity and extraordinary ductility. These properties result in a simple and effective processing in cable construction. The resistance of ISOFLEX H against high temperatures and aggressive media is very good.

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INDUSTRIES AND APPLICATIONS



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Application properties

Property	Standard	Test requirements	Result
Flame resistance	FMVSS 302 LV 312-3	Flame height 38 mm Flame exposure 15 s	Fire classification B
Sound damping	LV 312-3		Classification C
Hot water jet test	LV 312-3	Spraying 2 min. Pressure 100bar	Requirements achieved
Heat stability	VW 75151	24h at 180°C	Requirements achieved
Low temperature flexibility	VW 75151	4 h at -40°C	Requirements achieved

Ageing

Property	Standard	Test requirements	Result
Short-term ageing 240h / 235°C	LV 312-3	Winding test	Requirements achieved
Long-term ageing 3000h / 210°C	LV 312-3	Winding test	Requirements achieved

Mechanical / physical properties

Property	Standard	Test requirements	Result
Abrasion resistance	LV 312-3	Test at room temperature	Classification A

Compatibilities

Medium	Standard	Test requirements	Result
Ad Blue	LV 312-3	Storage 240h, 480h, 720h and 1000h, 180°C, Winding test	Requirements achieved
Biodiesel	LV 312-3	Storage 240h, 480h, 720h and 1000h, 180°C, Winding test	Requirements achieved
Break fluid	LV 312-3	Storage 240h, 480h, 720h and 1000h, 180°C, Winding test	Requirements achieved
Diesel	LV 312-3	Storage 240h, 480h, 720h and 1000h, 180°C, Winding test	Requirements achieved
Intensive cleaner	LV 312-3	Storage 240h, 480h, 720h and 1000h, 180°C, Winding test	Requirements achieved
Cold cleaning agent	LV 312-3	Storage 240h, 480h, 720h and 1000h, 180°C, Winding test	Requirements achieved
Radiator antifreeze	LV 312-3	Storage 240h, 480h, 720h and 1000h, 180°C, Winding test	Requirements achieved

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Compatibilities

Medium	Standard	Test requirements	Result
Multigrade engine oil	LV 312-3	Storage 240h, 480h, 720h and 1000h, 180°C, Winding test	Requirements achieved
Water-Glycol-mixture	LV 312-3	Storage 240h, 480h, 720h and 1000h, 180°C, Winding test	Requirements achieved

Ecology, Environment & Safety

Ingredients compliant with VDA requirements

IMDS listed

RoHS, GADSL compliant

Non-asbestos, textile glass fibres non-carcinogenic, non hazardous to the environment, not hazardous to water

When using and disposing of the ISOFLEX H protective sleeve there are no environmentally relevant by-products expected.

BIW-Standard dimensions

ISOFLEX H (Code: GGO)

On demand individual dimensions available at any time

ID [mm]	Tol. ID [mm]	Wd [mm]	Tol. Wd [mm]	Ring [m]
3.0	±0.5	0.5	±0.2	200
4.0	±0.5	0.7	±0.2	200
5.0	±0.5	0.7	±0.2	200
6.0	±0.5	0.7	±0.2	200
7.0	±0.5	0.8	±0.2	100
8.0	±0.5	0.8	±0.2	100
9.0	±0.5	0.8	±0.2	100
10.0	±0.5	0.8	±0.2	100
11.0	±0.5	0.8	±0.2	100
12.0	±0.5	0.8	±0.2	100
13.0	±0.5	0.8	±0.2	100
14.0	±0.5	0.8	±0.2	100
15.0	±0.5	0.8	±0.3	100

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BIW-Standard dimensions

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On demand individual dimensions available at any time

ID [mm]	Tol. ID [mm]	Wd [mm]	Tol. Wd [mm]	Ring [m]
16.0	±0.7	0.8	±0.3	100
17.0	±0.7	0.8	±0.3	100
18.0	±0.7	0.8	±0.3	100
19.0	±0.7	0.8	±0.3	100
20.0	±0.7	0.8	±0.3	50
21.0	±0.7	1.0	±0.3	50
22.0	±0.7	1.0	±0.3	50
23.0	±0.7	1.0	±0.3	50
24.0	±0.7	1.0	±0.3	50
25.0	±0.7	1.0	±0.3	50
26.0	±0.8	1.2	±0.3	50
27.0	±0.8	1.2	±0.3	50
28.0	±0.8	1.2	±0.3	50
29.0	±0.8	1.2	±0.3	50
30.0	±0.8	1.2	±0.3	50
31.0	±0.8	1.2	±0.3	50
32.0	±0.8	1.2	±0.3	50
33.0	±0.8	1.2	±0.3	50
34.0	±0.8	1.2	±0.3	50
35.0	±0.8	1.6	±0.3	50