

## 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](http://www.biw.de)

## Certified management system by:

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



TECHNICAL DATASHEET

## INDUSTRIES AND APPLICATIONS



## ISOTEX H

### Typical uses

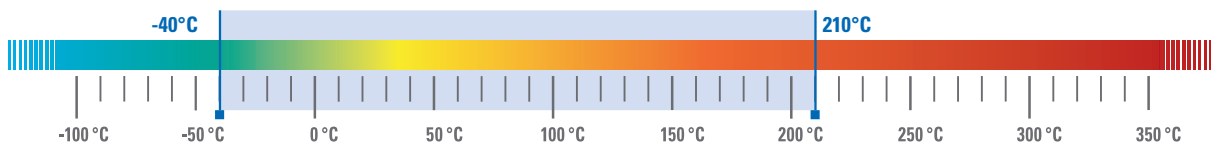
- Automotive industry
- E-mobility / hybrid
- Electrical insulation
- Cable manufacture
- Line protection

### Key properties

- Long-term heat resistance of  $-40^{\circ}\text{C}$  to  $+210^{\circ}\text{C}$
- Short-term heat resistance up to  $+235^{\circ}\text{C}$
- Self-extinguishing UL 1441
- Good flexibility and tensibility
- Good compressibility
- Good resistance to fuels and lubricants in the event of temporary exposure
- Very good resistance to water, water-Glycol-mixture and salt spray mist as well as cleaning agents of all types (soap, cold cleaner, steam)
- Physiologically harmless
- Equal surface because of silicone coating for an easy cable assembly
- Colour: orange
- Nominal diameter 0,5 mm to 35,0 mm



### Application temperature



### Product description

The ISOTEX H protective hose is a combination of a braided textile glass and a special silicone coating. This design ensures a smooth and even surface with special circularity and simple processing in cable production. It has very good resistance to high temperatures and aggressive media. If required, the ISOTEX H protective hose is also available by special order in a self-extinguishing version conforming to UL 1441 VW-1 or UL94-V0.

PUBLISHED 10/2021 (V3)

PAGE 1 OF 4

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

INDUSTRIES AND APPLICATIONS



**ISOTEX H**

**Application properties**

Property	Standard	Test requirements	Result
Flame resistance	LV 312-3 FMVSS 302	Flame height 38 mm Flame exposure 15s	Self-extinguishing
Sound damping	Based on LV 312-3		Classification C
Hot water jet test	Based on LV 312-3	Spraying 2 min. pressure 100bar	No cracks or damage
Shrinkage	LV 312-3	15 min. bei 225°C	No shrinkage

**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	based on LV 312-3	Storage time 240h, 480h, 720h, 1000h, 180°C, winding test	Requirements achieved
Biodiesel	based on LV 312-3	Storage time 240h, 480h, 720h, 1000h, 180°C, winding test	Requirements achieved
Break fluid	based on LV 312-3	Storage time 240h, 480h, 720h, 1000h, 180°C, winding test	Requirements achieved
Diesel	based on LV 312-3	Storage time 240h, 480h, 720h, 1000h, 180°C, winding test	Requirements achieved
Intensive cleaner	based on LV 312-3	Storage time 240h, 480h, 720h, 1000h, 180°C, winding test	Requirements achieved
Cold cleaning agent	based on LV 312-3	Storage time 240h, 480h, 720h, 1000h, 180°C, winding test	Requirements achieved
Radiator antifreeze	based on LV 312-3	Storage time 240h, 480h, 720h, 1000h, 180°C, winding test	Requirements achieved

(Continued on the next page)

## 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](http://www.biw.de)

## Certified management system by:

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



TECHNICAL DATASHEET

## INDUSTRIES AND APPLICATIONS



## ISOTEX H

## Compatibilities

Medium	Standard	Test requirements	Result
Multigrade engine oil	based on LV 312-3	Storage time 240h, 480h, 720h, 1000h, 180°C, winding test	Requirements achieved
Grease	based on LV 312-3	Storage time 240h, 480h, 720h, 1000h, 180°C, winding test	Requirements achieved
Water-Glycol-mixture	based on LV 312-3	Storage time 240h, 480h, 720h, 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, non-hazardous to water

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

## BIW-Standard dimensions

### ISOTEX H (Code: GSO)

On demand individual dimensions available at any time

ID [mm]	Tol. ID [mm]	Wd [mm]	Tol. Wd [mm]	Ring [m]
0.5	±0.2	0.6	±0.2	200
1.0	±0.2	0.6	±0.2	200
2.0	±0.2	0.6	±0.2	200
3.0	±0.2	0.6	±0.3	200
4.0	±0.3	0.6	±0.3	200
5.0	±0.3	0.6	±0.3	200
6.0	±0.3	0.6	±0.3	100
7.0	±0.3	0.6	±0.3	100
8.0	±0.3	0.6	±0.3	100
9.0	±0.3	0.7	±0.3	100
10.0	±0.4	0.7	±0.3	100

(Continued on the next page)

**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

**ISOTEX H****BIW-Standard dimensions****ISOTEX H (Code: GSO)**

On demand individual dimensions available at any time

ID [mm]	Tol. ID [mm]	Wd [mm]	Tol. Wd [mm]	Ring [m]
11.0	±0.4	0.7	±0.3	100
12.0	±0.4	0.7	±0.3	100
13.0	±0.4	0.7	±0.3	100
14.0	±0.4	0.7	±0.4	100
15.0	±0.5	0.8	±0.4	50
16.0	±0.5	0.8	±0.4	50
17.0	±0.5	0.8	±0.4	50
18.0	±0.5	0.8	±0.4	50
19.0	±0.5	0.9	±0.4	50
20.0	±0.7	0.9	±0.5	50
21.0	±0.7	0.9	±0.5	50
22.0	±0.7	0.9	±0.5	50
23.0	±0.7	0.9	±0.5	25
24.0	±0.7	0.9	±0.5	25
25.0	±0.8	1.2	±0.5	25
26.0	±0.8	1.2	±0.5	25
27.0	±0.8	1.2	±0.5	25
28.0	±0.8	1.2	±0.5	25
29.0	±0.8	1.2	±0.5	25
30.0	±1.0	1.5	±0.7	25
31.0	±1.0	1.5	±0.7	25
32.0	±1.0	1.5	±0.7	25
35.0	±1.0	1.5	±0.7	25