

## BIW Isolierstoffe GmbH

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## Certified management system by:

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



TECHNICAL DATASHEET

## INDUSTRIES AND APPLICATIONS



# THERMOFLEX

## Typical uses

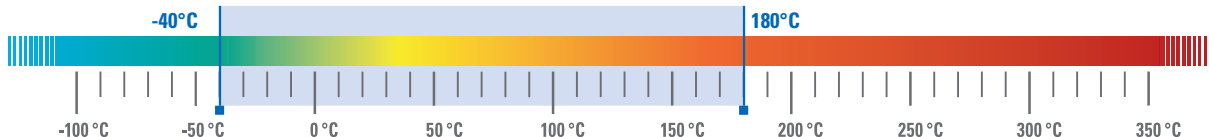
- Automotive industry
- E-mobility / hybrid
- Cable manufacture
- Line protection
- Machinery and plant engineering

## Key properties

- Long-term heat resistance of  $-40^{\circ}\text{C}$  to  $+200^{\circ}\text{C}$
- Short-term heat resistance up to  $+205^{\circ}\text{C}$
- Glossy and equal silicone coating, easy to assemble
- Good resistance to water, water-glycol mixture, salt spray, as well as to fuels and lubricants during temporary exposure
- High thermal insulation by thick-walled
- High buckling resistance, good cut resistance
- High abrasion resistance
- No adhesion during insertion of lines
- Physiologically harmless
- Huge colour range
- Nominal diameter 3,0 mm to 30,0 mm



## Application temperature



## Product description

The protective sleeve THERMOFLEX is a combination of a desized, thick-walled braided glass textile fibre and a silicone coating. The special design ensures an equal surface with a special roundness for an easy process of cable assembly. The protective hose THERMOFLEX achieves good thermal insulation due to its thick walls. The dielectric strength can be adjusted from 2.50 kV to 10 kV. THERMOFLEX is highly resistant to high temperatures and aggressive media. THERMOFLEX is also available in a huge range of colours and special setting in a self-extinguishing version UL 1441 VW-1.

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## THERMOFLEX

## Application properties

Property	Standard	Test requirements	Result
Flame resistance	based on LV 312-3 FMVSS 302	Flame height 38 mm Flame exposure 15 s	Self-extinguishing, class B

## Ageing

Property	Standard	Test requirements	Result
Short-term ageing 240h / 205°C	based on LV 312-3	Winding test	Requirements achieved
Long-term ageing 3000h / 180°C	based on LV 312-3	Winding test	Requirements achieved

## Mechanical / physical properties

Property	Standard	Test requirements	Result
Abrasion resistance	Based on LV 312-3	Test at room temperature	Classification B

## 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 THERMOFLEX protective sleeve there are no environmentally relevant by-products expected.

## BIW-Standard dimensions

### THERMOFLEX (Code: GSD)

On demand individual colours and dimensions available at any time

ID [mm]	Tol. ID [mm]	Wd [mm]	Tol. Wd [mm]	Ring [m]
3.0	±0.30	1.20	±0.30	100
4.0	±0.30	1.50	±0.30	100
5.0	±0.30	1.50	±0.30	100
6.0	±0.30	1.50	±0.30	100
7.0	±0.30	1.50	±0.30	100
8.0	±0.30	1.50	±0.30	100
9.0	±0.30	1.50	±0.30	100
10.0	±0.50	1.50	±0.30	100

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## THERMOFLEX

## BIW-Standard dimensions

### THERMOFLEX (Code: GSD)

On demand individual colours and dimensions available at any time

ID [mm]	Tol. ID [mm]	Wd [mm]	Tol. Wd [mm]	Ring [m]
11.0	±0.50	1.50	±0.30	50
12.0	±0.50	1.50	±0.30	50
13.0	±0.50	1.50	±0.30	50
14.0	±0.50	1.50	±0.30	50
15.0	±0.50	1.50	±0.30	50
16.0	±0.50	1.50	±0.30	50
17.0	±0.50	1.50	±0.30	50
18.0	±0.50	1.50	±0.30	50
19.0	±0.50	1.50	±0.30	50
20.0	±0.80	1.50	±0.50	25
21.0	±0.80	1.50	±0.50	25
22.0	±0.80	1.50	±0.50	25
23.0	±0.80	1.50	±0.50	25
24.0	±0.80	1.50	±0.50	25
25.0	±0.80	1.50	±0.50	25
26.0	±0.80	1.50	±0.50	25
27.0	±0.80	1.50	±0.50	25
28.0	±0.80	1.50	±0.50	25
29.0	±0.80	1.50	±0.50	25
30.0	±0.80	2.00	±0.50	25