BIW Isolierstoffe GmbH

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www.biw.de

Certified management system by:

- IATF16949
- ISO9001
- ISO13485
- ISO14001
- ISO50001



TECHNICAL DATASHEET

INDUSTRIES AND APPLICATIONS

















THERMOFLEX 650R

Typical uses

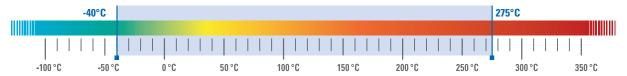
- Automotive industry
- Crash protection
- E-mobility / hybrid
- Cable manufacture
- Line protection

Key properties

- Long-term heat resistance of -40°C to +275°C
- Short-term heat resistance up to +300°C
- Radiant heat resistance up to +650°C
- Heat reflection by aluminum impregnation
- High mechanical protection, crash protection
- Good abrasion resistance
- Good cut resistance, buckling resistance and tensile strength
- Good resistance to water, water-glycol mixture, salt spray, as well as to fuels and lubricants during temporary exposure
- Radially extensible
- Thick-walled, thermally insulated
- Colour: silver
- Nominal diameter 5.0 mm to 30.0 mm



Application temperature



Product description

The protective sleeve THERMOFLEX 650R is a combination of textile glass and aluminium impregnation. It is necessary to use a special textile glass yarn, which ensures an exceptional thermal insulation, to achieve thermal requirements. The aluminium impregnation, based on a thermally stabilized silicone resin emulsion, supports high thermal resistance due to the additional heat-reflective effect. THERMOFLEX 650R protective sleeve is suitable for the use of heat exposed areas, where a protection against radiant heat is necessary, e.g.in the engine compartment or exhaust area. The special plaited construction Makes THERMOFLEX 650R radially expandable. As a result THERMOFLEX 650R adapts very well to the ground.



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Application properties

Property	Standard	Test requirements	Result
Flame resistance	FMVSS 302	Flame height 38 mm Flame exposure 15s	Self-extinguishing

Mechanical / physical properties

Property	Standard	Test requirements	Result
Abrasion resistance	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.

The textile glass sleeve requires compliance with the industrial hygiene. Workplace ventilation has to be turned away from the worker, sensitve individuals may get slight skin irritation.

When using and disposing the THERMOFLEX 650R protective sleeve there are no environmentally relevant by-products expected.

BIW-Standard dimensions

THERMOFLEX 650R (Code: GHS)

On demand individual dimensions available at any time

ID [mm]	Tol. ID [mm]	Wd [mm]	Tol. Wd [mm]	Ring [m]
5.0	±0.30	0.80	±0.20	100
6.0	±0.30	1.20	±0.30	100
7.0	±0.30	1.20	±0.30	100
8.0	±0.30	1.20	±0.30	100
9.0	±0.30	1.20	±0.30	100
10.0	±0.50	1.20	±0.30	100
11.0	±0.50	1.20	±0.30	50
12.0	±0.50	1.20	±0.30	50
13.0	±0.50	1.20	±0.30	50
14.0	±0.50	1.20	±0.30	50
15.0	±0.50	1.20	±0.30	50
16.0	±0.50	1.20	±0.30	50
17.0	±0.50	1.20	±0.30	50

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PAGE 2 OF 3

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INDUSTRIES AND APPLICATIONS

















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BIW-Standard dimensions

THERMOFLEX 650R (Code: GHS)

On demand individual dimensions available at any time

ID [mm]	Tol. ID [mm]	Wd [mm]	Tol. Wd [mm]	Ring [m]
18.0	±0.50	1.20	±0.30	50
19.0	±0.50	1.20	±0.30	50
20.0	±0.70	1.20	±0.30	25
21.0	±0.70	1.20	±0.30	25
22.0	±0.70	1.20	±0.30	25
23.0	±0.70	1.20	±0.30	25
24.0	±0.70	1.20	±0.30	25
25.0	±0.70	1.20	±0.30	25
26.0	±0.70	1.20	±0.30	25
27.0	±0.70	1.20	±0.30	25
28.0	±0.70	1.20	±0.30	25
29.0	±0.70	1.20	±0.30	25
30.0	±0.70	1.50	±0.30	25

PUBLISHED 11/2022 (V3) PAGE 3 OF 3