

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



ISOTEX 650R

Typical uses

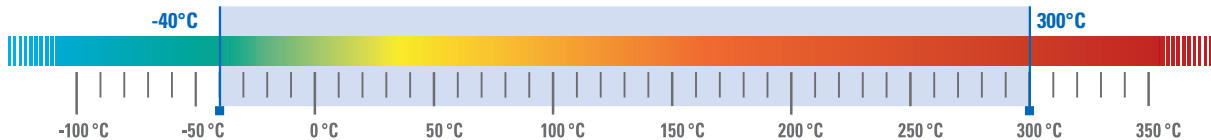
- Automotive industry
- E-mobility / hybrid
- Cable manufacture
- Line protection

Key properties

- Long-term heat resistance of -40°C to +275°C
- Short-term heat resistance up to +300°C
- Temperature resistance to radiant heat up to +650°C
- Heat reflection by aluminum impregnation
- Mechanical protection, good stiffness
- High cut resistance, buckling resistance and tensile strength
- Good resistance to water, water-glycol mixture and salt spray as well as to temporary to effect of fuels and lubricants
- Thermally insulated
- Colour: silver
- Nominal diameter 0,5 mm to 35.0 mm



Application temperature



Product description

The protective sleeve ISOTEX 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. ISOTEX 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 ISOTEX 650R flexible and radially expandable. As a result ISOTEX 650R adapts very well to the ground.

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When it comes to competence

INDUSTRIES AND APPLICATIONS



ISOTEX 650R

Application properties

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

Ageing

Property	Standard	Test requirements	Result
Short-term ageing 240h / 300°C	based on LV 312-3	Winding test	Requirements achieved
Long-term ageing 3000h / 275°C	based on 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 DIN EN 60684 LV 312-3	Storage time 24h at room temperature Chemical externally spread	Requirements achieved
Automatic transmission oil	Based on DIN EN 60684 LV 312-3	Storage time 24h at room temperature Chemical externally spread	Requirements achieved
Biodiesel	Based on DIN EN 60684 LV 312-3	Storage time 24h at room temperature Chemical externally spread	Requirements achieved
Break fluid	Based on DIN EN 60684 LV 312-3	Storage time 24h at room temperature Chemical externally spread	Requirements achieved
Multigrade engine oil	Based on DIN EN 60684 LV 312-3 customer specification	Storage time 24h at room temperature Chemical externally spread	Requirements achieved
Grease	Based on DIN EN 60684 LV 312-3	Storage time 24h at room temperature Chemical externally spread	Requirements achieved
Water-Glycol-mixture	Based on DIN EN 60684 LV 312-3	Storage time 24h at room temperature Chemical externally spread	Requirements achieved

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ISOTEX 650R

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, sensitive individuals may get slight skin irritation.

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

BIW-Standard dimensions

ISOTEX 650R (Code: GSJ)

On demand individual dimensions available at any time

ID [mm]	Tol. ID [mm]	Wd [mm]	Tol. Wd [mm]	Ring [m]
0.5	+0.30	0.30	±0.30	200
1.0	±0.30	0.60	±0.30	200
2.0	±0.30	0.60	±0.30	200
3.0	±0.30	0.60	±0.30	200
4.0	±0.30	0.60	±0.30	200
5.0	±0.30	0.60	±0.30	200
6.0	±0.30	0.60	±0.30	100
7.0	±0.30	0.60	±0.30	100
8.0	±0.30	0.60	±0.30	100
9.0	±0.30	0.80	±0.30	100
10.0	±0.50	0.80	±0.30	100
11.0	±0.50	0.80	±0.30	100
12.0	±0.50	0.80	±0.30	100
13.0	±0.50	0.80	±0.30	100
14.0	±0.50	0.80	±0.30	100
15.0	±0.50	0.80	±0.30	100
16.0	±0.50	0.80	±0.30	100
17.0	±0.50	0.80	±0.30	100
18.0	±0.50	0.80	±0.30	100

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**ISOTEX 650R****BIW-Standard dimensions****ISOTEX 650R (Code: GSJ)**

On demand individual dimensions available at any time

ID [mm]	Tol. ID [mm]	Wd [mm]	Tol. Wd [mm]	Ring [m]
19.0	±0.50	0.80	±0.30	100
20.0	±0.80	1.20	±0.40	50
21.0	±0.80	1.20	±0.40	50
22.0	±0.80	1.20	±0.40	50
23.0	±0.80	1.20	±0.40	50
24.0	±0.80	1.20	±0.40	50
25.0	±0.80	1.20	±0.40	50
26.0	±0.80	1.20	±0.40	50
27.0	±0.80	1.20	±0.40	50
28.0	±0.80	1.20	±0.40	50
29.0	±0.80	1.20	±0.40	50
30.0	±1.20	1.20	±0.40	25
31.0	±1.20	1.20	±0.40	25
32.0	±1.20	1.20	±0.40	25
33.0	±1.20	1.20	±0.40	25
34.0	±1.20	1.20	±0.40	25
35.0	±1.20	1.60	±0.40	25