

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



ULTRAFLEX L

Typical uses

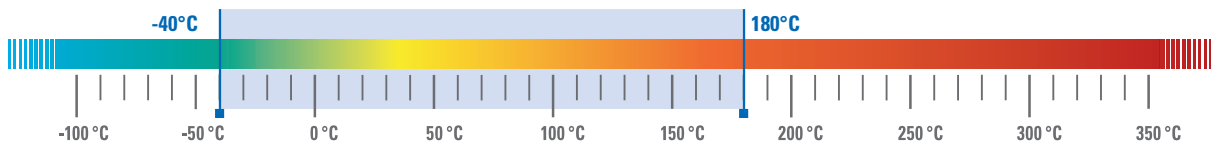
- Equipment items for pipes
- Automotive industry
- E-mobility / hybrid
- Electrical insulation
- Cable manufacture
- Line protection

Key properties

- Long-term heat resistance of -40°C to +180°C
- Short-term heat resistance up to +205°C
- Horizontal self-extinguishing
- Good resistance to water, water-glycol mixture, salt spray, as well as to fuels and lubricants during temporary exposure
- Extensible in diameter by up to 100% (special setting)
- Very good compressibility and flexibility
- Good cut resistance
- High abrasion resistance
- Physiologically harmless
- Wide colour range
- Nominal diameter 0.5 mm to 60.0 mm



Application temperature



Product description

The ULTRAFLEX L protective sleeve is a combination of an inner textile glass sleeve made out of a special plaited construction and a silicone coating. The coating material is liquid silicone (LSR), which resists short-term temperatures up to 205°C, depending on the silicone characteristics. The special plaited construction ensures a high flexibility and a high radial elasticity of up to 100% (special setting). The flexible combination of textile glass braid and silicone is mainly suitable for short harness in constricted space and for special requirements in the manufacture.

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When it comes to competence

INDUSTRIES AND APPLICATIONS



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Application properties

Property	Standard	Test requirements	Result
Electrical strength	DIN EN 60684	Testing at room temperature	> 2,50kV
Flame resistance	LV 312-3 FMVSS 302	Flame height 38 mm Flame exposure 15s	Fire classification B

Ageing

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

Mechanical / physical properties

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

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 ULTRAFLEX L protective sleeve there are no environmentally relevant by-products expected.

BIW-Standard dimensions

ULTRAFLEX L (Code: GCL)

On demand individual colours and dimensions available at any time

ID [mm]	Tol. ID [mm]	Wd [mm]	Tol. Wd [mm]	Ring [m]
4.0	±0.3	1.0	±0.3	200
6.0	±0.3	1.2	±0.3	200
8.0	±0.3	1.2	±0.3	200
10.0	±0.5	1.2	±0.3	100
12.0	±0.5	1.5	±0.4	100
14.0	±0.5	1.5	±0.4	50
16.0	±0.7	1.5	±0.4	50
18.0	±0.7	1.5	±0.4	50
20.0	±1.0	1.5	±0.4	50

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ID [mm]	Tol. ID [mm]	Wd [mm]	Tol. Wd [mm]	Ring [m]
22.0	±1.0	1.5	±0.5	25
24.0	±1.0	1.5	±0.5	25
26.0	±1.2	1.5	±0.5	25
28.0	±1.2	2.0	±0.5	25
30.0	±1.2	2.0	±0.7	25
35.0	±2.5	2.5	±0.7	25
40.0	±2.5	2.5	±0.7	5
45.0	±2.5	2.5	±0.7	5
50.0	±2.5	2.5	±0.7	5
60.0	±2.5	3.0	±0.8	5