

## 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 300R

## Typical uses

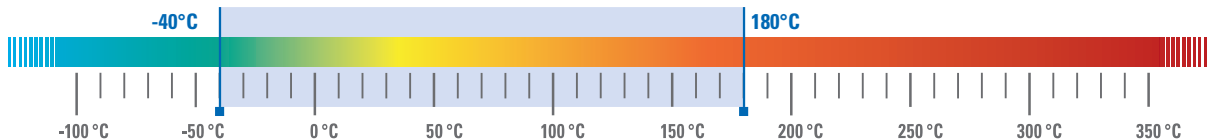
- Automotive industry
- E-mobility / hybrid
- Cable manufacture
- Line protection

## Key properties

- Long-term heat resistance of -40°C to +180°C
- Short-term heat resistance up to +205°C
- Temperature resistance to radiant heat up to +330°C
- Silicone Coating with good heat reflection
- Good resistance to water, water-glycol mixture, salt spray, as well as to fuels and lubricants during temporary exposure
- Good resistance to ozone
- Horizontal self-extinguishing
- Good abrasion resistance
- Very good elongation and compressibility
- High flexibility
- Extensible in diameter by up to 100%
- Colour: silver
- Nominal diameter 3.0 mm to 60.0 mm



## Application temperature



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INDUSTRIES AND APPLICATIONS



**ULTRAFLEX L 300R**

**Product description**

The ULTRAFLEX L 300R consists of a textile glass fibre in a special braided construction and a silicone(LSR)coating. The ULTRAFLEX L 300R is distinguished in particular by its high flexibility and large radial extension and is thus especially suitable for short cable sets when there are constricted installation conditions and special requirements in production. The resistance to high temperatures is very good thanks to the use of an aluminium-based special silicon with corresponding heat reflection properties. These properties result in a simple and effective processing. The structure is the same for all models but special customer requirements can be met with different coatings. Good resistance to fuel and lubricants in temporary effect round out the profile of the ULTRAFLEX L 300R protective hose.

**Application properties**

Property	Standard	Test requirements	Result
Electrical strength	DIN EN 60684-3-400-402	wall thickness dependent	>1,50 kV
Flame resistance	FMVSS 302 LV 312-3	Flame height 38 mm Flame exposure 15 s	Self-extinguishing, 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	Test at room temperature	Classification A

**Compatibilities**

Medium	Standard	Test requirements	Result
Ad Blue	Based on LV 312-3	Storage time 375h at 95°C Winding test	Requirements achieved
Automatic transmission oil	Based on LV 312-3	Storage time 240h at 180°C Winding test	Requirements achieved
Break fluid	Based on LV 312-3	Storage time 240h at 180°C Winding test	Requirements achieved
Diesel	Based on LV 312-3	Storage time 240h at 180°C Winding test	Requirements achieved
Radiator antifreeze	Based on LV 312-3	Storage time 240h at 180°C Winding test	Requirements achieved

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**When it comes  
to competence**

INDUSTRIES AND APPLICATIONS



**ULTRAFLEX L 300R**

**Compatibilities**

Medium	Standard	Test requirements	Result
Grease	Based on LV 312-3	Storage time 240h at 180°C Winding test	Requirements achieved
Water-Glycol-mixture	Based on LV 312-3	Storage time 240h at 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, not hazardous to the environment, not hazardous to water

When using and disposing the ULTRAFLEX L 300R protective sleeve there are no environmentally relevant by-products expected.

**BIW-Standard dimensions**

**ULTRAFLEX L 300R (Code: GCY)**

On demand individual 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
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	1.5	±0.5	25

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## ULTRAFLEX L 300R

### BIW-Standard dimensions

#### ULTRAFLEX L 300R (Code: GCY)

On demand individual dimensions available at any time

ID [mm]	Tol. ID [mm]	Wd [mm]	Tol. Wd [mm]	Ring [m]
30.0	±1.2	2.0	±0.7	25
35.0	±2.5	2.0	±0.7	25
40.0	±2.5	2.0	±0.7	5
45.0	±2.5	2.0	±0.7	5
50.0	±2.5	2.0	±0.7	5
60.0	±2.5	3.0	±0.8	5