

## 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 L DUO

## Typical uses

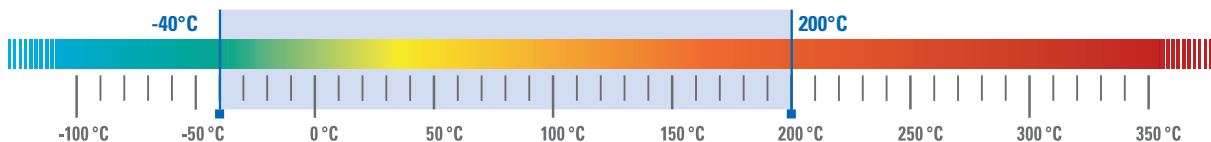
- Automotive industry
- E-mobility / hybrid
- Electrical insulation
- Electrical motors construction
- Cable manufacture
- Stator construction

## Key properties

- Long-term heat resistance of -40°C to +200°C
- Short-term heat resistance up to +225°C
- Double-walled, thermally insulated
- Extremely good elasticity
- Good compressibility
- Very Good cut resistance
- Very high dielectrical strength
- Good abrasion behavior under mechanical stress
- Good resistance to water, salt spray, cleaning agents, transformer oil, impregnating resins as well as to fuels and lubricants during temporary exposure
- Physiologically harmless
- Available in many colours
- Nominal diameter 8,0 mm to 15,0 mm



## Application temperature



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**ISOTEX L DUO**

**Product description**

ISOTEX L DUO is a double-walled insulating protective hose made of braided fibre glass fabric (E-glass) and special silicone coatings. The inner layer is made of a highly temperature-resistant fibre glass fabric (E-glass) and a special coating of LSR silicone. This combination of materials has excellent thermal and electrical properties. The outer layer is made of a fibre glass fabric sheath and is modified with a special silicone resin impregnation. The ISOTEX L DUO is distinguished by very high dielectric strength, especially good elasticity and extensibility, good crack resistance, insensitivity to mechanical stress and, with occasional contact, good resistance to transformer oil as well as various solvents (e.g. styrol, xylol, ethanol, etc.). The ISOTEX L DUO insulating protective hose is available in many colors and different diameters.

**Application properties**

Property	Standard	Test requirements	Result
Electrical strength	based on DIN EN 60684-2	Test at room temperature	> 4,0 kV
Flame resistance	based on FMVSS 302	Flame height 38 mm Flame exposure 15s	Self-extinguishing

**Ageing**

Property	Standard	Test requirements	Result
Short-term ageing 240h / 225°C	based on LV 312-3	no cracks no burst	Requirements achieved
Long-term ageing 3000h / 200°C	based on LV 312-3	no cracks no burst	Requirements achieved

**Mechanical / physical properties**

Property	Standard	Test requirements	Result
Abrasion resistance	based on LV 312-3	Test at room temperature broach diameter 5mm bearing strength 7N	Classification B

**Compatibilities**

Medium	Standard	Test requirements	Result
Impregnation resin	based on DIN EN 60684 SN56737	Voltatex 4200 no cracks no burst	Requirements achieved

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## ISOTEX L DUO

## Ecology, Environment & Safety

Ingredients compliant with VDA - requirements

IMDS listed

RoHS, GADSL compliant

Non-asbestos and physiologically harmless,  
non hazardous to the environment, not hazardous to water

Glass fibres non-carcinogenic

When using and disposing of the ISOTEX L DUO protective sleeve there are no environmentally relevant by-products expected.

## BIW-Standard dimensions

### ISOTEX L DUO (Code: GSL)

On demand individual colours and dimensions available at any time

ID [mm]	Tol. ID [mm]	Wd [mm]	Tol. Wd [mm]	Ring [m]
8.0	+1.0	1.0	+0.7	50
10.0	+1.0	1.0	+0.7	50
12.0	+1.0	1.0	+0.7	25
14.0	+1.0	1.0	+0.7	25
15.0	+1.0	1.7	+0.8	25