

- IATF16949
- ISO9001
- ISO13485
- ISO14001
- ISO50001

## INDUSTRIES AND APPLICATIONS



## ISOTEX RI DUO

### Typical uses

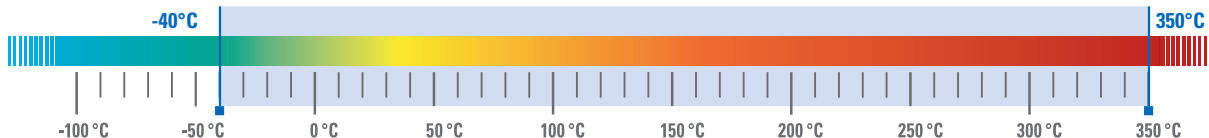
- Automotive industry
- E-mobility / hybrid
- Cable manufacture
- Line protection

### Key properties

- Long-term heat resistance of -40°C to +350°C
- Short-term heat resistance up to +450°C
- Very good protection against marten bite
- Good resistance to water, salt spray, cleaning agents, transformer oil, impregnating resins as well as to fuels and lubricants during temporary exposure
- Good abrasion resistance
- High buckling and bending strength, flexible, good cut resistance
- Thick-walled, thermally insulated
- Available in dyed version
- Nominal diameter 0,5 mm to 30 mm



### Application temperature



### Product description

ISOTEX RI DUO consists of high thermally resistant textile glass fibres (e-glass) with a silicone resin impregnation. The combination of these materials allows the use of the protective sleeve in the automotive sector under high thermal stress. Even on extrem situations the sleeve resists a thermal load up to 450°C. The protective function still works largely after a partial thermal overstress because of the excellent thermal properties of the textile glass sleeve. ISOTEX RI DUO is also characterized by good resistance against short-term contact with fuels and lubricants. Water and salt spray does not affect the function of the sleeve. ISOTEX RI DUO is suitable for longer cable sets because of its good buckling resistance and it can be dyed in a wide range of colours. The ISOTEX RI DUO is designed as protection sleeve, without a defined dielectric strength. Because of the thick walls ISOTEX RI DUO has thermally insulating effects.

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**ISOTEX RI DUO**

**Application properties**

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

**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                |
|----------------------------|---|---|-----------------------|
| Automatic transmission oil | Based on<br>DIN EN 60684<br>LV 312-3<br>customer specifications | Storage time 24h<br>at room temperature<br>Chemical externally spread | Requirements achieved |
| Biodiesel                  | Based on<br>DIN EN 60684<br>LV 312-3<br>customer specifications | Storage time 24h<br>at room temperature<br>Chemical externally spread | Requirements achieved |
| Break fluid                | Based on<br>DIN EN 60684<br>LV 312-3<br>customer specifications | Storage time 24h<br>at room temperature<br>Chemical externally spread | Requirements achieved |
| Multigrade engine oil      | Based on<br>DIN EN 60684<br>LV 312-3<br>customer specifications | Storage time 24h<br>at room temperature<br>Chemical externally spread | Requirements achieved |
| Grease                     | Based on<br>DIN EN 60684<br>LV 312-3<br>customer specifications | Storage time 24h<br>at room temperature<br>Chemical externally spread | Requirements achieved |
| Water-Glycol-mixture       | Based on<br>DIN EN 60684<br>LV 312-3<br>customer specifications | Storage time 24h<br>at room temperature<br>Chemical externally spread | Requirements achieved |

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## Certified management system by:

- IATF16949
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TECHNICAL DATASHEET

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## ISOTEX RI DUO

## 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 RI DUO protective sleeve there are no environmentally relevant by-products expected.

## BIW-Standard dimensions

### ISOTEX RI DUO (Code: GSE)

On demand individual colours and dimensions available at any time

| ID [mm] | Tol. ID [mm] | Wd [mm] | Tol. Wd [mm] | Ring [m] |
|---------|--------------|---------|--------------|----------|
| 5.0     | ±0.30        | 0.6     | ±0.30        | 100      |
| 6.0     | ±0.30        | 0.8     | ±0.30        | 100      |
| 7.0     | ±0.30        | 0.8     | ±0.30        | 100      |
| 8.0     | ±0.30        | 0.8     | ±0.30        | 100      |
| 9.0     | ±0.30        | 0.8     | ±0.30        | 100      |
| 10.0    | ±0.50        | 1.0     | ±0.40        | 100      |
| 11.0    | ±0.50        | 1.0     | ±0.40        | 50       |
| 12.0    | ±0.50        | 1.0     | ±0.40        | 50       |
| 13.0    | ±0.50        | 1.0     | ±0.40        | 50       |
| 14.0    | ±0.50        | 1.0     | ±0.40        | 50       |
| 15.0    | ±0.50        | 1.2     | ±0.40        | 50       |
| 16.0    | ±0.70        | 1.2     | ±0.40        | 50       |
| 17.0    | ±0.70        | 1.2     | ±0.40        | 50       |
| 18.0    | ±0.70        | 1.2     | ±0.40        | 50       |
| 19.0    | ±0.70        | 1.2     | ±0.40        | 50       |
| 20.0    | ±0.70        | 1.5     | ±0.40        | 25       |
| 21.0    | ±0.80        | 1.5     | ±0.40        | 25       |
| 22.0    | ±0.80        | 1.5     | ±0.40        | 25       |
| 23.0    | ±0.80        | 1.5     | ±0.40        | 25       |

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## ISOTEX RI DUO

## BIW-Standard dimensions

### ISOTEX RI DUO (Code: GSE)

On demand individual colours and dimensions available at any time

| ID [mm] | Tol. ID [mm] | Wd [mm] | Tol. Wd [mm] | Ring [m] |
|---------|--------------|---------|--------------|----------|
| 24.0    | ±0.80        | 1.5     | ±0.40        | 25       |
| 25.0    | ±0.80        | 3.20    | ±0.60        | 25       |