

- Single pole High Voltage Connectors
- Operating Voltage up to 100 kV<sub>DC</sub>
- Insulators made of POM or PTFE
- Nickel-plated Metal Parts

## ● APPLICATIONS

- High Voltage connection cable
- High Voltage cable plug
- High Voltage socket for instruments



The single pole high voltage pairs HSx1 and HBx1 are available for operating voltages for 10kV<sub>DC</sub>, 20kV<sub>DC</sub> and 30kV<sub>DC</sub>; the S1100/3 and B1100/3 for 100kV<sub>DC</sub>.

The strong nickel-plated housing and the screw interlock warrant a safe and reliable connection.

### Cable mounting connector

| Operating Voltage   | Current | Model          | Test Voltage        | Cable diameter |       | Length |
|---------------------|---------|----------------|---------------------|----------------|-------|--------|
|                     |         |                |                     | inner          | outer |        |
| 10kV <sub>DC</sub>  | 25A     | <b>HS11</b>    | 15kV <sub>DC</sub>  | 4.5mm          | 6.5mm | 75mm   |
| 20kV <sub>DC</sub>  | 25A     | <b>HS21</b>    | 30kV <sub>DC</sub>  | 4.5mm          | 6.5mm | 100mm  |
| 30kV <sub>DC</sub>  | 25A     | <b>HS31</b>    | 45kV <sub>DC</sub>  | 4.5mm          | 6.5mm | 111mm  |
| 100kV <sub>DC</sub> | 50A     | <b>S1100/3</b> | 150kV <sub>DC</sub> | 13mm           | 18mm  | 448mm  |

### Instrument mounting socket

| Operating Voltage   | Current | Model          | Test Voltage        | Length |
|---------------------|---------|----------------|---------------------|--------|
| 10kV <sub>DC</sub>  | 25A     | <b>HB11</b>    | 15kV <sub>DC</sub>  | 61mm   |
| 20kV <sub>DC</sub>  | 25A     | <b>HB21</b>    | 30kV <sub>DC</sub>  | 87.5mm |
| 30kV <sub>DC</sub>  | 25A     | <b>HB31</b>    | 45kV <sub>DC</sub>  | 98.5mm |
| 100kV <sub>DC</sub> | 50A     | <b>B1100/3</b> | 150kV <sub>DC</sub> | 380mm  |

### Recommended cable for HS.. :

High voltage cable, shielded, type 130660, approved for use up to 30kV<sub>DC</sub>.

### Recommended cable for S1100/3 :

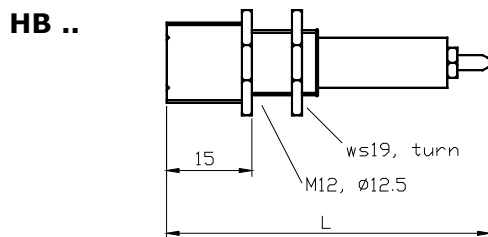
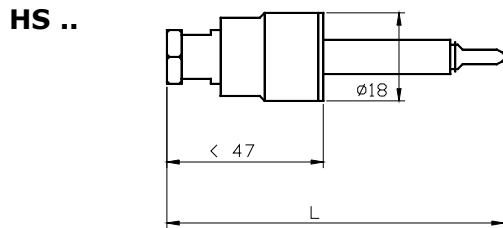
High voltage cable, shielded, type 2124 or type 2121.

## ● SPECIFICATIONS

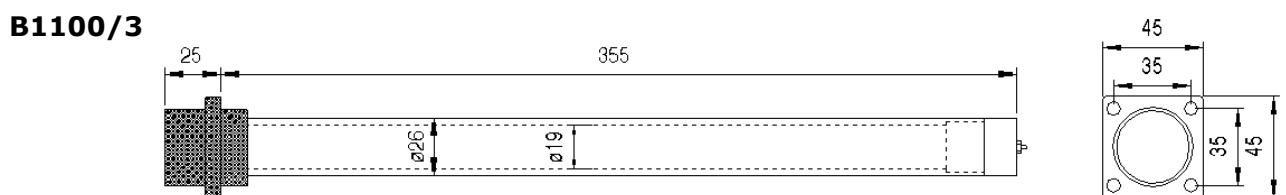
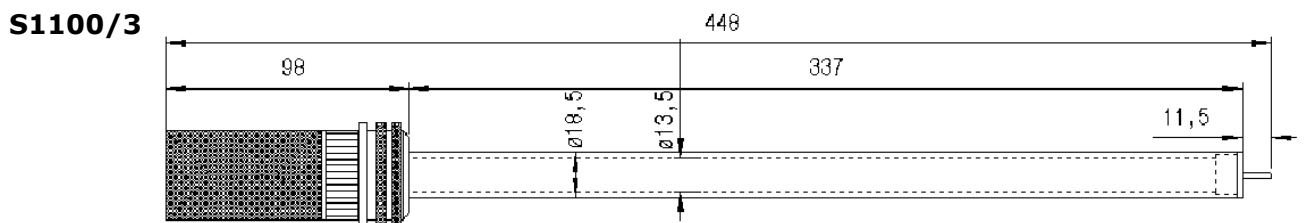
|                        |   |
|------------------------|---|
| Termination:           | solder / screw                                  |
| Shield connection:     | screw joint                                     |
| Contact surface:       | Ag  |
| Insulation material:   | POM (Delrin®), white or PTFE (Teflon®), white   |
| Temperature range:     | -20°C to +100°C (POM)<br>-50°C to +200°C (PTFE) |
| Insulation resistance: | 10 <sup>16</sup> Ω (contact / housing)          |
| Contact resistance:    | max. 300 μΩ                                     |
| Wire gauge:            | max. 3mm <sup>2</sup>                           |
| Mating cycles:         | 100000  |

Ratings listed in this table apply to clean connector pairs in standard atmospheric conditions. When connectors are used in an adverse environment (such as high temperature, humidity, pollution content, extreme mechanical exposure etc.) the connector should be derated. The fitness for use must be proved by extended operational tests.

• **DIMENSIONS (mm)**



L = Length (see table)



Additional high voltage connectors and cables are available on request.

**SECURITY ADVICE:**

Design, installation and inspection of machinery and devices carrying high voltage require accordingly trained and qualified personnel. Appropriate safety rules and directives must be complied with. Improper handling of high voltage can mean severe injuries or death and may cause serious collateral damage!