



## Resistance thermometers WTh 30



### Benefits

- Hygienic design as per EHEDG recommendations
- Compact design
- High accuracy
- Short response time
- Various process connections
- Transducer can be integrated

### Application

For temperature measurement in tanks and pipelines and applications requiring hygienic process connections, materials and processing. Specially suitable for food, pharmaceutical and biotechnology applications due to the compact design and the high accuracy.

### Description

WTh 30 consists of a sturdy stainless steel housing with diverse process connections and a Pt 100 measuring insert which is directly integrated in a thermowell. The change in resistance depending on the measured temperature is directly available as a signal or can be detected by a transducer and converted into a 4–20 mA output signal. The instrument is connected by means of a compact M12 plug connection.

### Technical specifications

#### Sensor

1 x Pt100  
4-wire  
Class A, IEC 751

#### Thermowell

∅ 6 mm  
Stainless steel 316 L

#### Process connection

G½B  
Clamp ISO 2852  
G½B conical metal seal  
Grooved union nut DIN 11851  
VARIVENT® type N  
Stainless steel 316 L

#### Installation length

30, 35, 50, 100, 150, 200 mm

#### Electrical connection

Connector M12  
Connector housing: Stainless steel

#### Housing

Material: Stainless steel  
Diameter: 18 mm

#### Degree of protection

IP 67 (EN 60529)

#### Surface roughness

R<sub>a</sub>: < 0.8 µm  
Welding seam: < 1.6 µm

#### Operating pressure

Max. 16 bar or max. 10 bar

#### Measuring range

-50/+200 °C

#### Response time t<sub>90</sub>

5.5 s as per EN 60751, test in flowing water (without transducer)

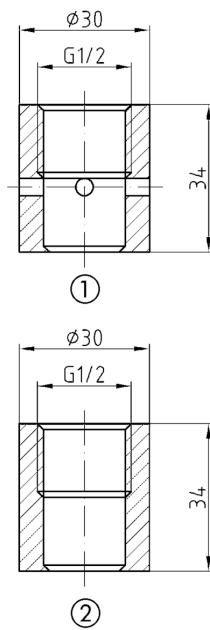


## Options

- Integrated transducer
- Other process connections
- Electropolishing
- Replaceable measuring insert
- Other installation lengths
- Weld-in sockets

## Detail views

### Weld-in socket

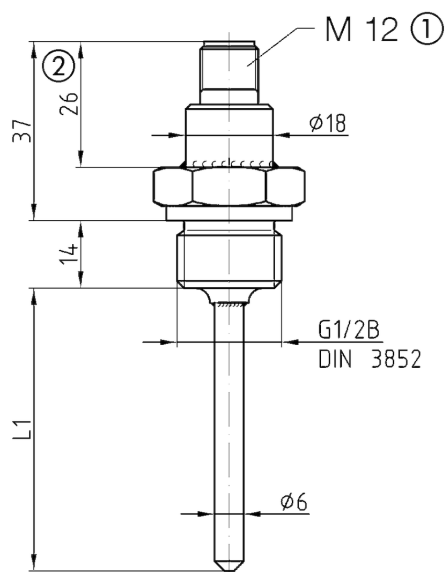


Dimensions (in mm)

1. Socket with inspection hole
2. Socket without inspection hole



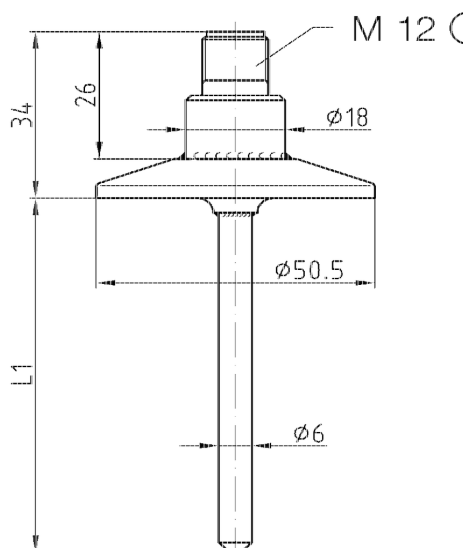
### Connection G $\frac{1}{2}$ B



Dimensions (in mm)

1. Connector 4-pin
2. Version with integrated transducer (24 mm longer)

### clamp connection

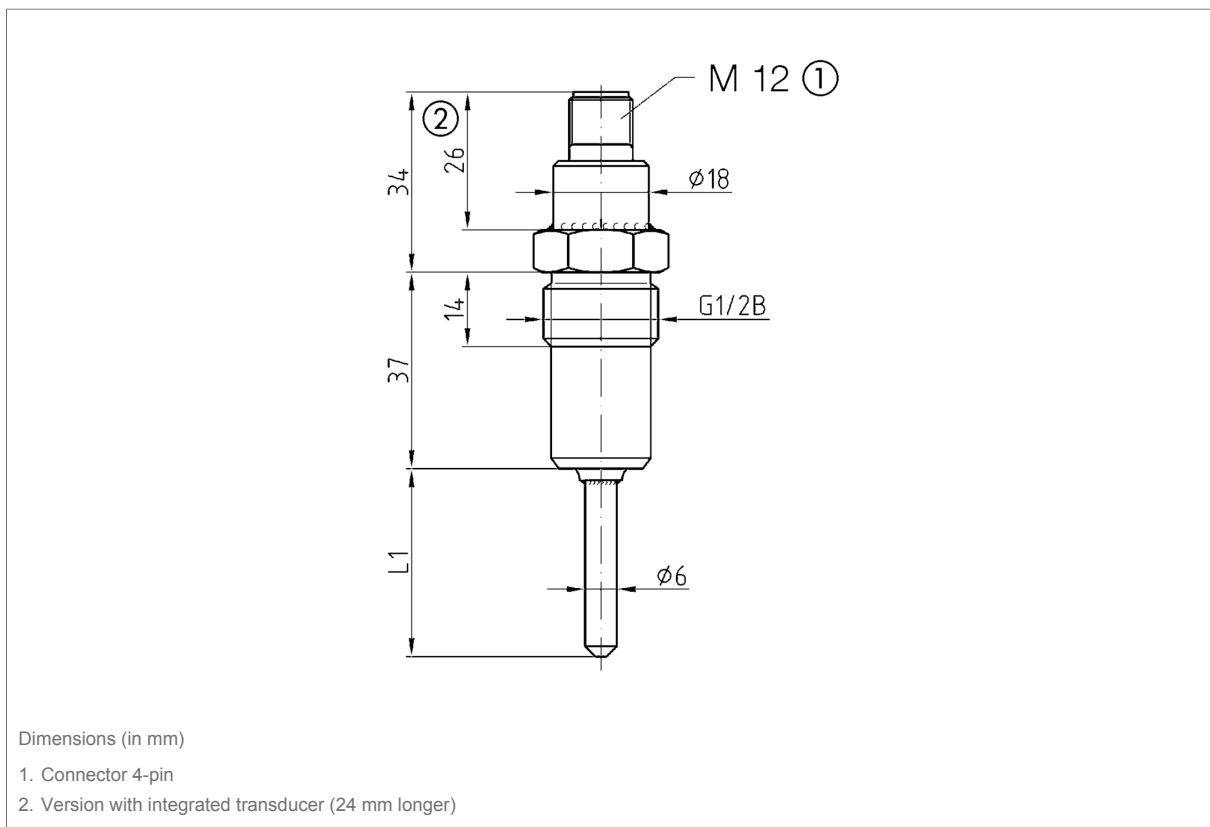


Dimensions (in mm)

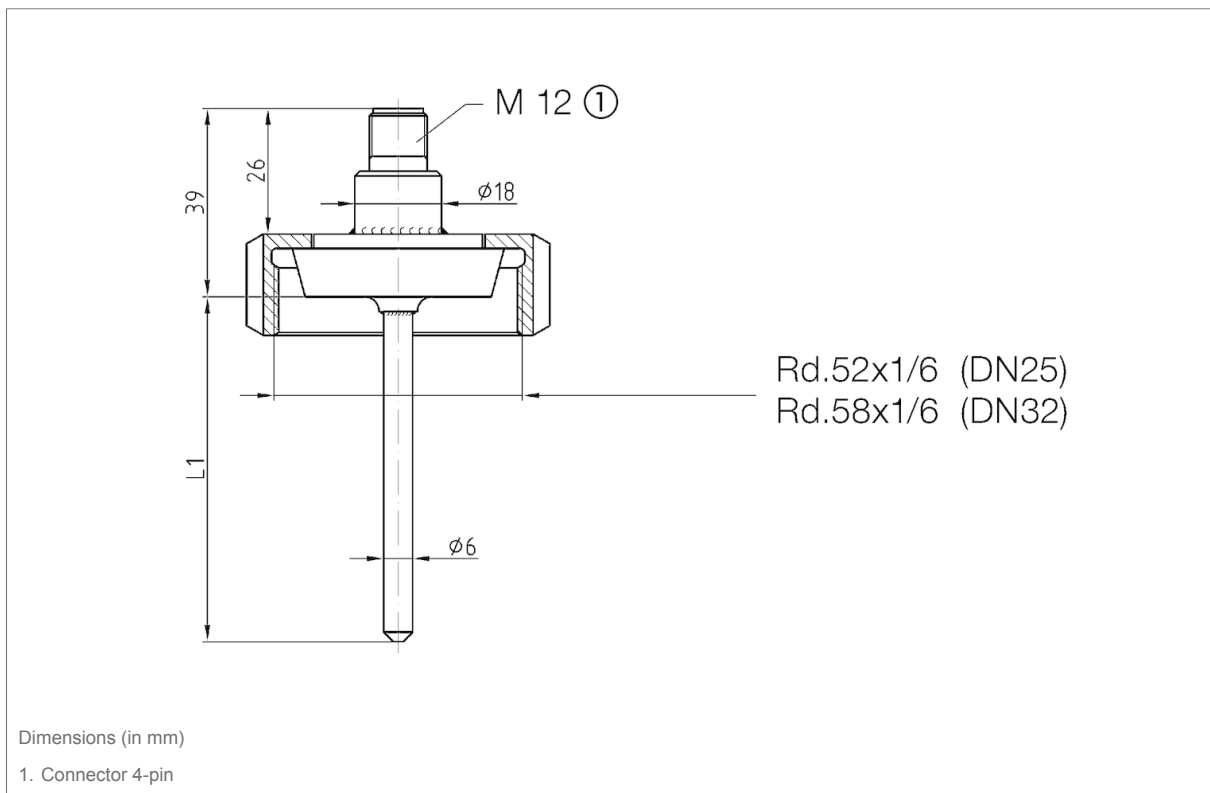
1. Connector 4-pin



connection G1/2B, tapered, metallic seal

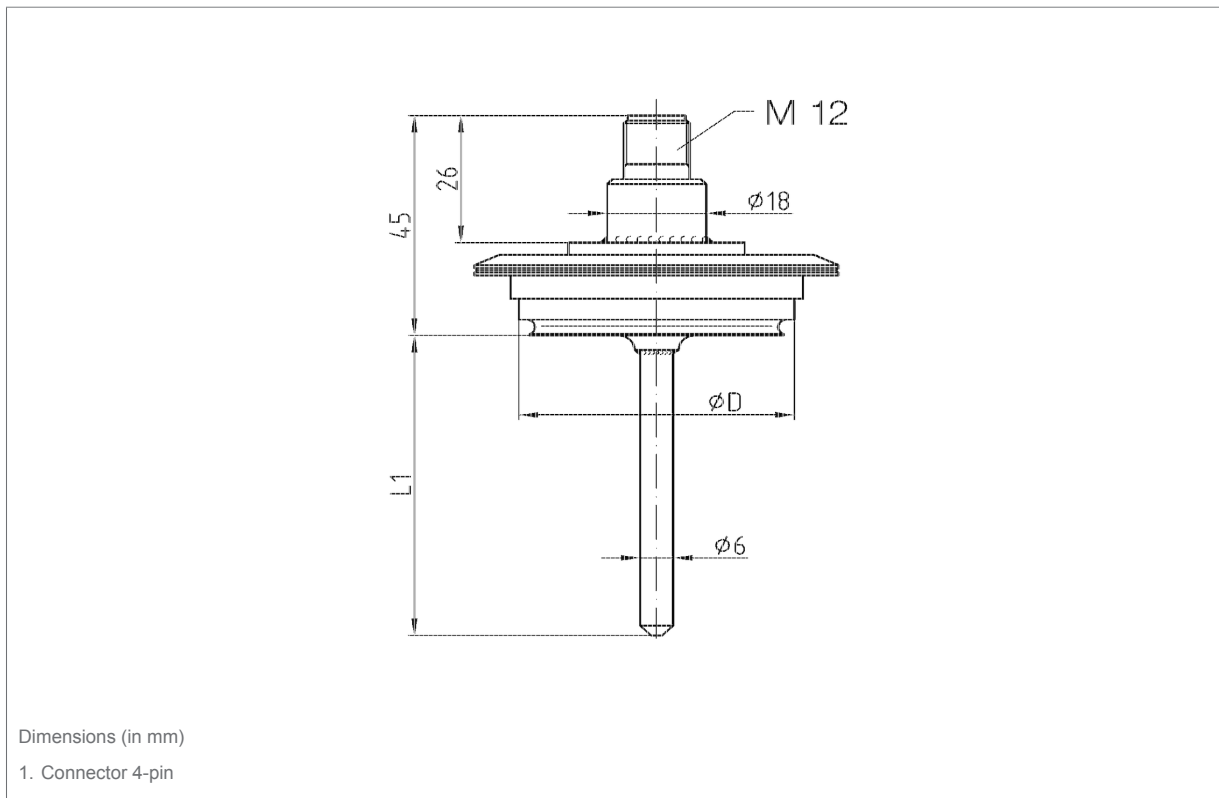


Tapered socket with grooved union nut DIN 11851



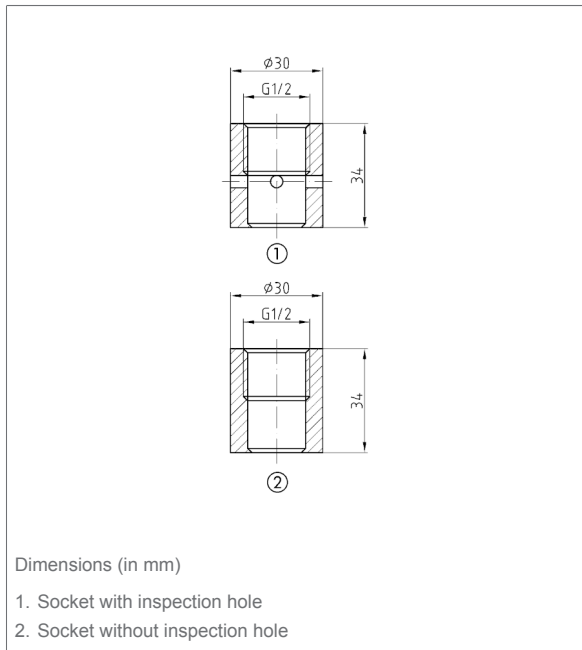


### VARIVENT® connection

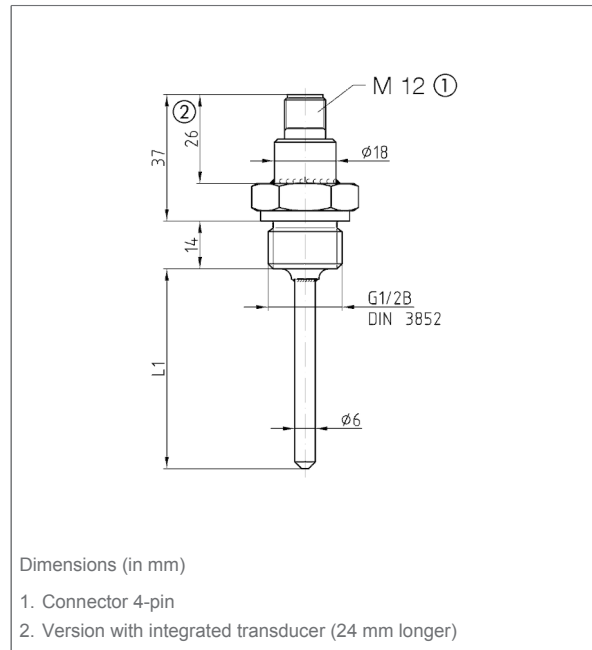


### Technical drawings

#### Weld-in socket

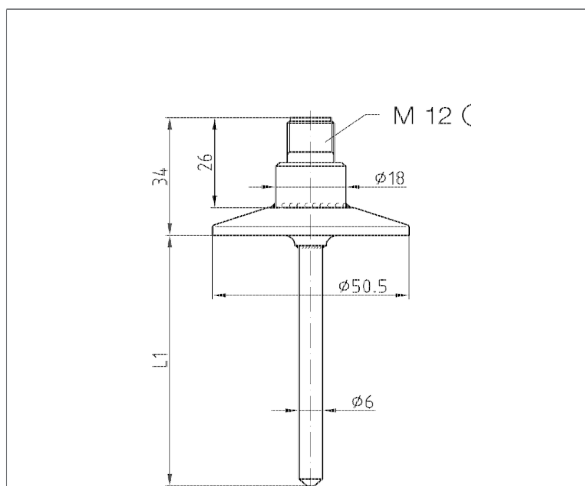


#### Connection G $\frac{1}{2}$ B





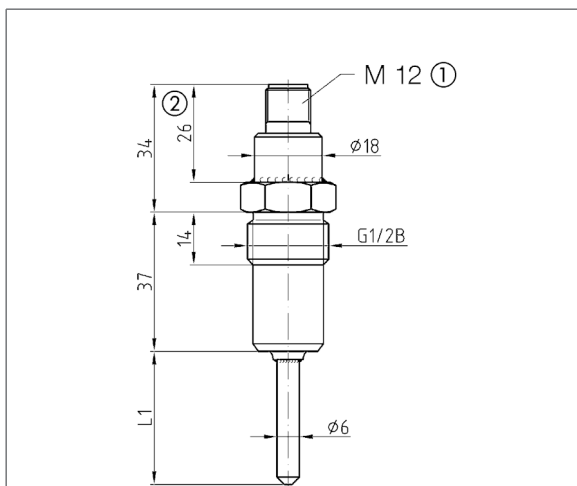
**clamp connection**



Dimensions (in mm)

1. Connector 4-pin

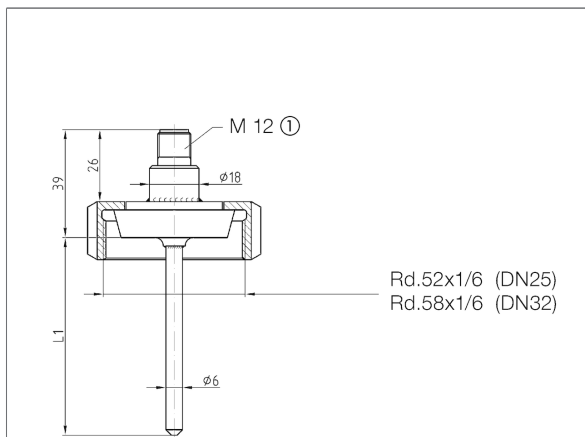
**connection G $\frac{1}{2}$ B, tapered, metallic seal**



Dimensions (in mm)

1. Connector 4-pin
2. Version with integrated transducer (24 mm longer)

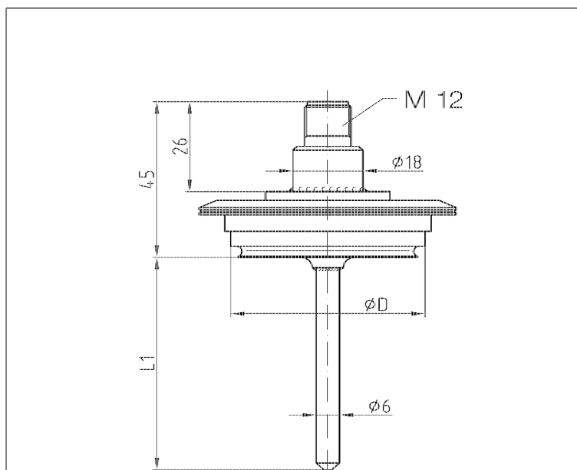
**Tapered socket with grooved union nut DIN 11851**



Dimensions (in mm)

1. Connector 4-pin

**VARIVENT® connection**







Dimensions (in mm)


1. Connector 4-pin



## Versions

|   | Installation length               | Part no. |       |
|---|-----------------------------------|----------|-------|
|    | Resistance thermometers WTh 30    | 30 mm    | 32302 |
|   | Resistance thermometers WTh 30    | 35 mm    | 32303 |
|   | Resistance thermometers WTh 30    | 50 mm    | 32304 |
|   | Resistance thermometers WTh 30    | 100 mm   | 32305 |
|   | Resistance thermometers WTh 30    | 150 mm   | 32306 |
|   | Resistance thermometers WTh 30    | 200 mm   | 32307 |
|    | Resistance thermometers WTh 30 CP | 30 mm    | 32326 |
|   | Resistance thermometers WTh 30 CP | 35 mm    | 32327 |
|   | Resistance thermometers WTh 30 CP | 50 mm    | 32328 |
|   | Resistance thermometers WTh 30 CP | 100 mm   | 32329 |
|   | Resistance thermometers WTh 30 CP | 150 mm   | 32330 |
|   | Resistance thermometers WTh 30 CP | 200 mm   | 32331 |
|  | Resistance thermometers WTh 30 DK | 30 mm    | 32310 |
|   | Resistance thermometers WTh 30 DK | 35 mm    | 32311 |
|   | Resistance thermometers WTh 30 DK | 50 mm    | 32312 |
|   | Resistance thermometers WTh 30 DK | 100 mm   | 32313 |
|   | Resistance thermometers WTh 30 DK | 150 mm   | 32314 |
|   | Resistance thermometers WTh 30 DK | 200 mm   | 32315 |
|  | Resistance thermometers WTh 30 MR | 30 mm    | 32318 |
|   | Resistance thermometers WTh 30 MR | 35 mm    | 32319 |
|   | Resistance thermometers WTh 30 MR | 50 mm    | 32320 |
|   | Resistance thermometers WTh 30 MR | 100 mm   | 32321 |
|   | Resistance thermometers WTh 30 MR | 150 mm   | 32322 |
|   | Resistance thermometers WTh 30 MR | 200 mm   | 32323 |

Blue part no. = in-stock items



|                                   | Installation length | Part no. |
|-----------------------------------|---------------------|----------|
| Resistance thermometers WTh 30 VT | 30 mm               | 32334    |
| Resistance thermometers WTh 30 VT | 35 mm               | 32335    |
| Resistance thermometers WTh 30 VT | 50 mm               | 32336    |
| Resistance thermometers WTh 30 VT | 100 mm              | 32337    |
| Resistance thermometers WTh 30 VT | 150 mm              | 32338    |
| Resistance thermometers WTh 30 VT | 200 mm              | 32339    |

Blue part no. = in-stock items