



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_a: < 0.8 µm
Welding seam: < 1.6 µm

Operating pressure

Max. 16 bar or max. 10 bar

Measuring range

-50/+200 °C

Response time t₉₀

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

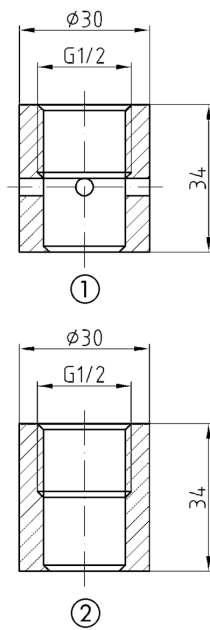


Options

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

Detail views

Weld-in socket

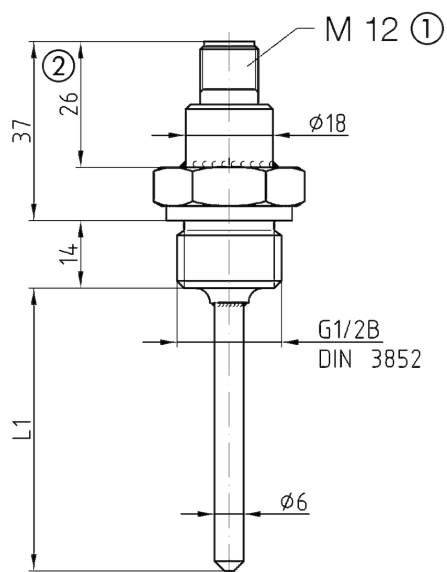


Dimensions (in mm)

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



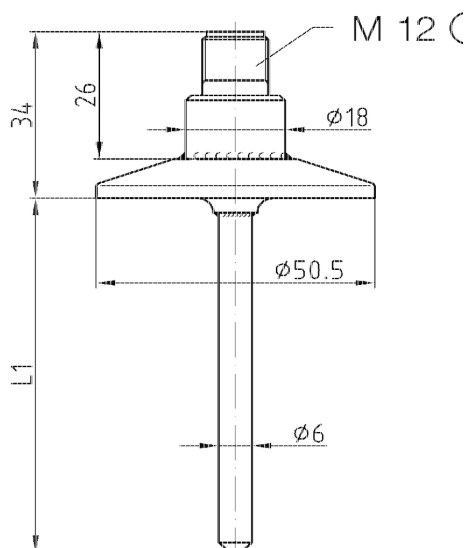
Connection G $\frac{1}{2}$ B



Dimensions (in mm)

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

clamp connection

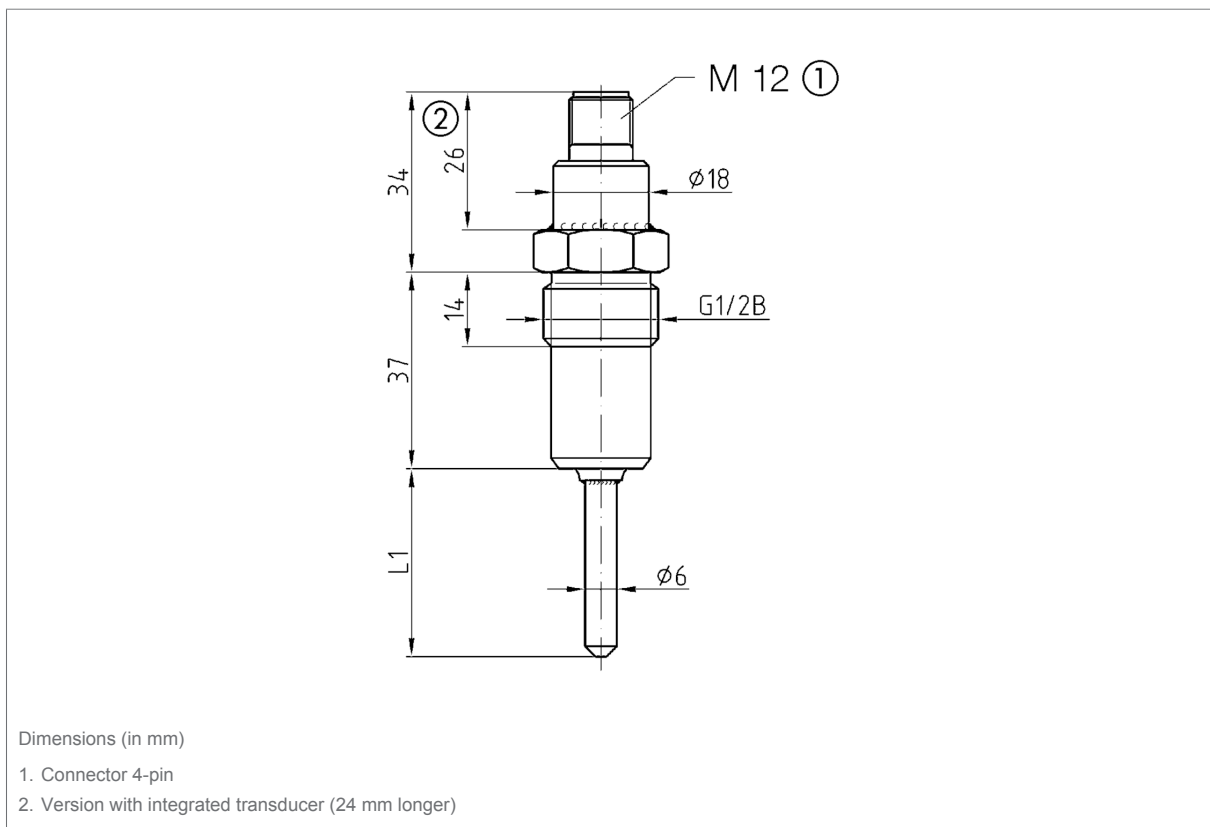


Dimensions (in mm)

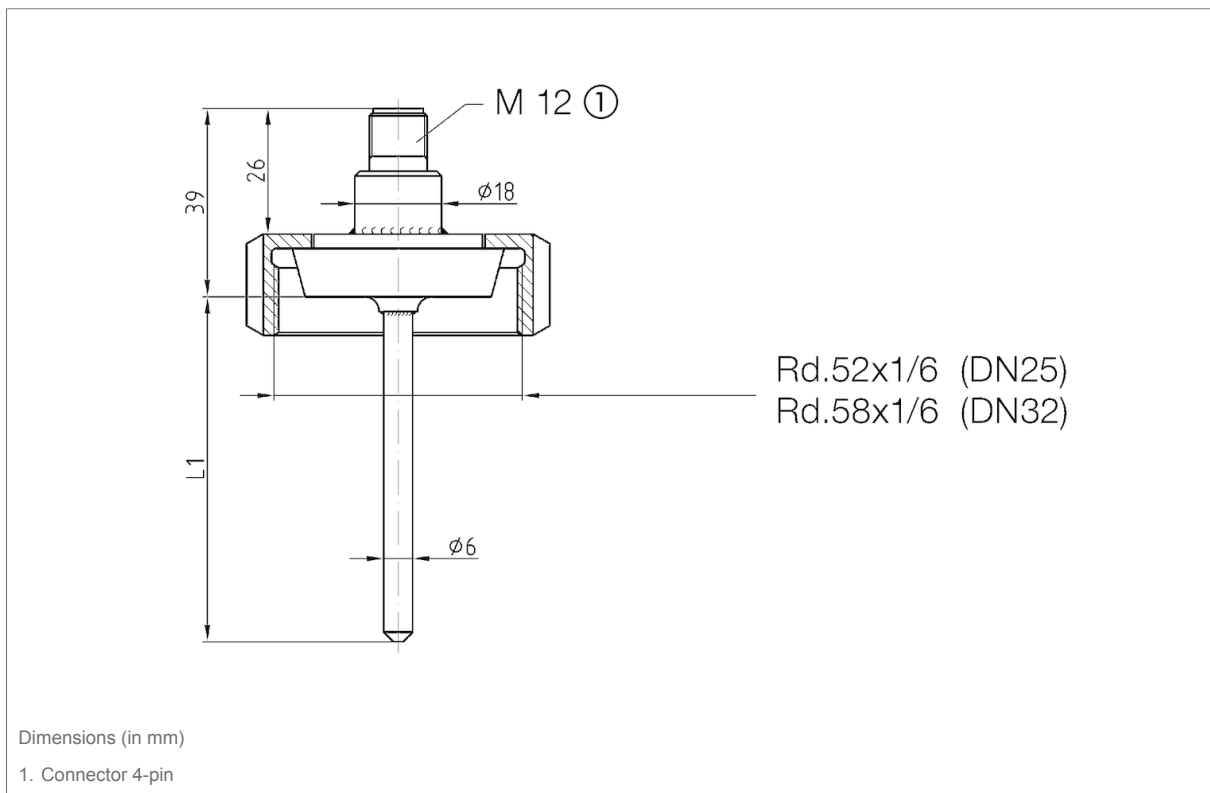
1. Connector 4-pin



connection G½B, tapered, metallic seal

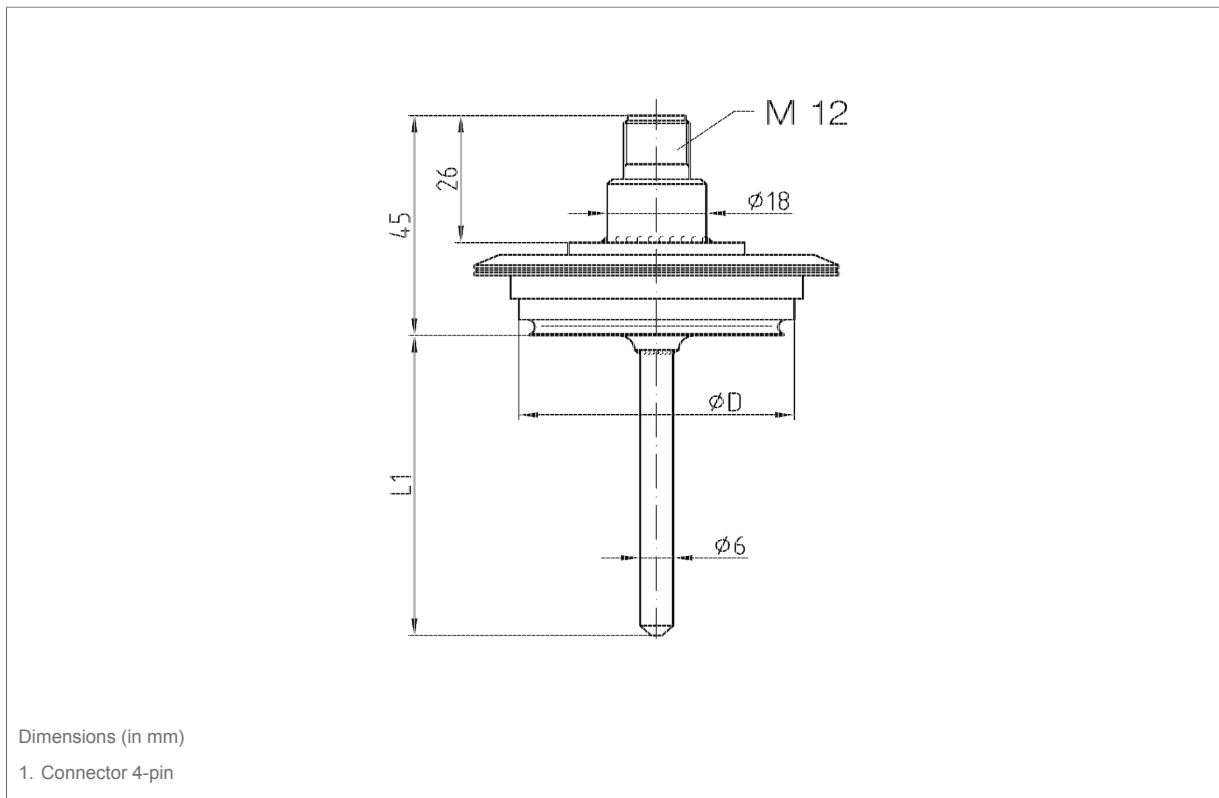


Tapered socket with grooved union nut DIN 11851



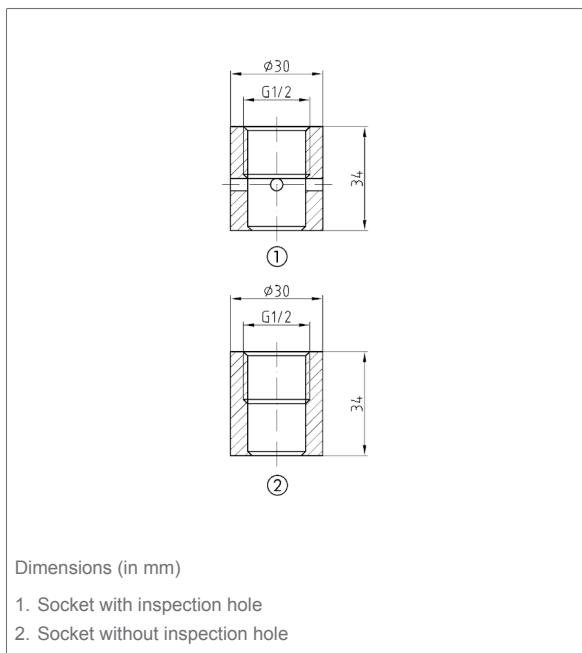


VARIVENT® connection

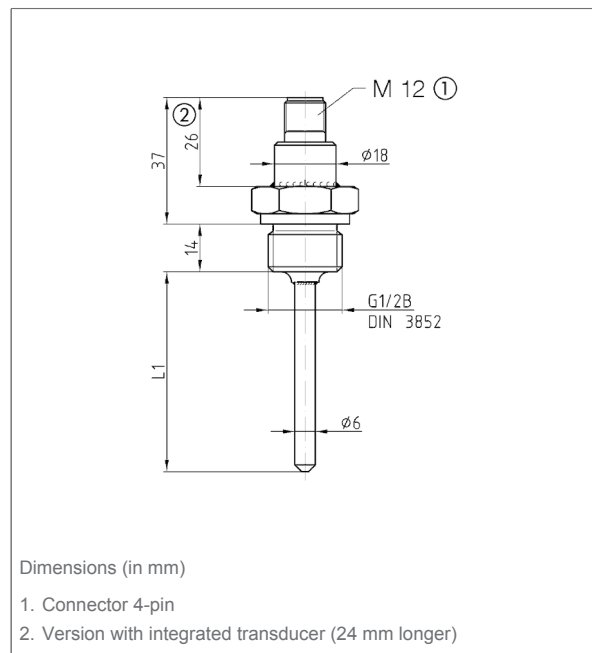


Technical drawings

Weld-in socket

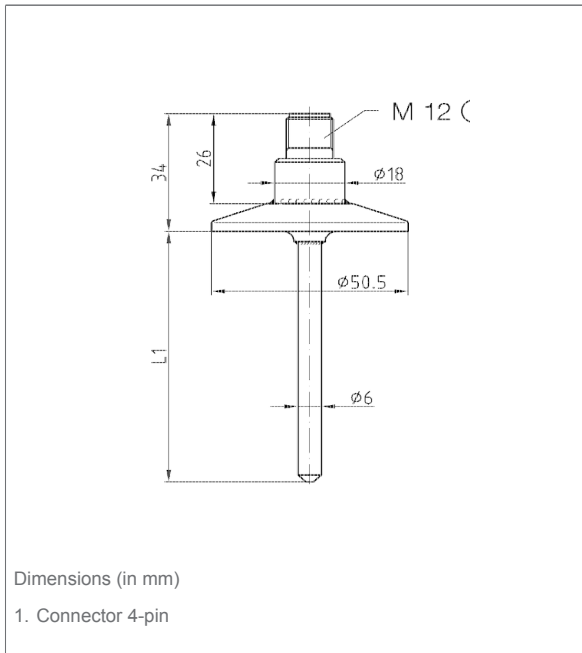


Connection G $\frac{1}{2}$ B

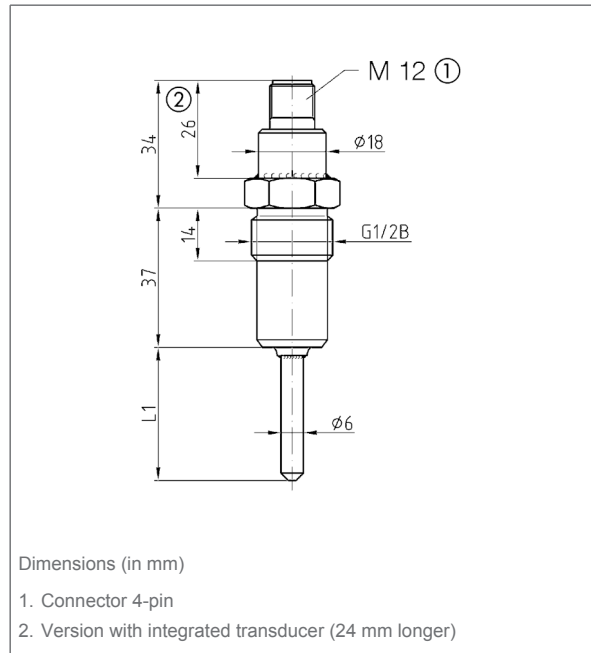




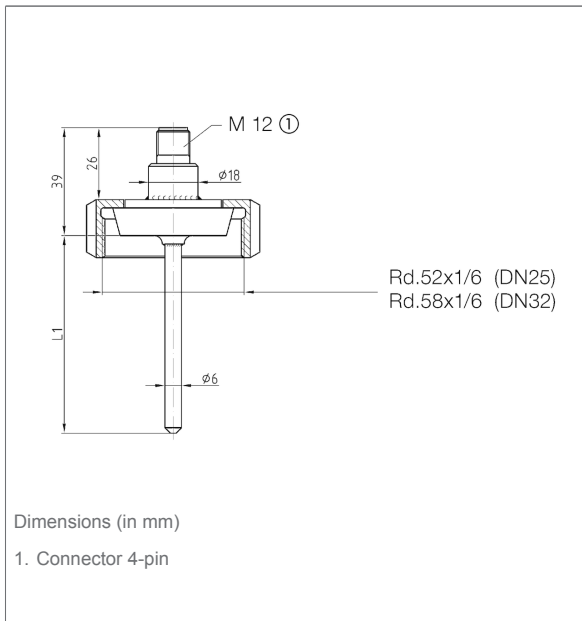
clamp connection



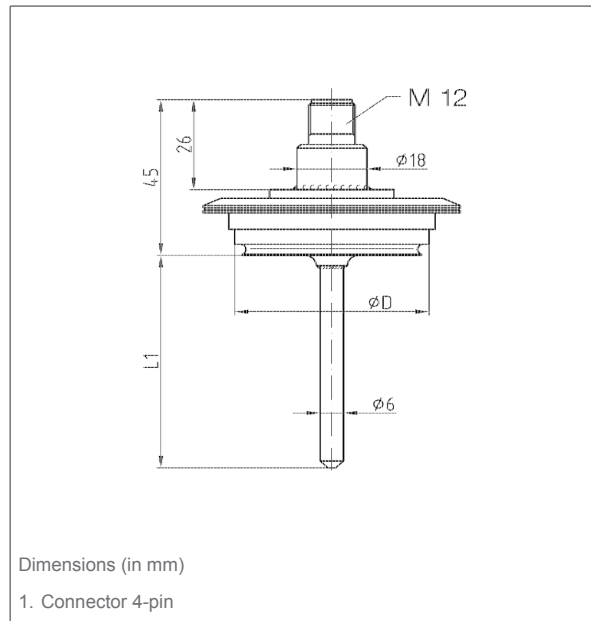
connection G $\frac{1}{2}$ B, tapered, metallic seal



Tapered socket with grooved union nut DIN 11851







VARIVENT® connection






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