

Resistance thermometer BR


Also available as thermocouple element

Identification EX II 2G Ex ia IIC T6-T2, GL-approval 13989-15HH



Cable gland (max. +105° C)
MSR M 20 x 1,5 mm
brass, nickel plated

Construction

- With neck pipe, pluggable or screwable
- Protective pipe 1.4571, 6 mm, protective hose as option
- Pt100 acc. to DIN EN 60751
- Can be fitted with 1 or 2 sensors
- 2- or 3-conductor connection possible
- Compression fitting 1/4" or 1/2" available
- Screw-in installation length 50 ... 500 mm
- Certified for zone 1 and 2 usage
- With -approval 13989-15HH

Description

Type BR resistance thermometers are certified for zones 1 and 2 in explosion endangered environments. They are used for temperature logging of gaseous and liquid media. Varying protective pipe lengths and pipe diameters provide versatile application variations. These units can be equipped with sensors in 2- or 3-conductor wiring and with max. number of 2 sensors.

Basically a free neck pipe length of min. 25 mm has to be considered for mounting.

Technical data	Type: BR Ex / GL
Measuring range	-20 ... +135 °C with silicone cable / -20 ... +100 °C with oilflex cable
Sensor element	1 or 2 pcs. Pt 100
Wiring mode	2- or 3-conductor wiring
Accuracy class	Class B
Core values	Acc. to EN 60 751
Measurement current	1 mA approx. (film resistance meas.)
Process connection	Thread connection G 1/4" or push-in type, others upon request
Accessories	Clamp connection G 1/4" A or G1/2" A, 1.4571
Protective pipe	ø 6 mm, NL = EL +40 mm, 1.4571
Option	Protective insulation with heat shrink tube (sensor tip only or full protective pipe length)
Connection head	Small stainless steel connection head ø 30 mm with brass cable gland, nickel-plated
Pressure resistance	60 bar with welded-on connection
Neck pipe	25 mm of min. free neck pipe length
Connection cable	Silicone, usage of oilflex cable reduces head connection temp. to. +70 °C
Insulation resistance	≥ 100 MΩ at 20 °C (500 V DC)
Proof voltage	> 500 VAC (50 Hz, 1 mm)
Protection class	IP 54 acc. to EN 60 529
Ex-class	EX II 2G Ex ia IIC T6-T2
EC type-examination certificate	IBExU 09 ATEX1143X Special directions in mounting instruction and EC type-examination certificate are to be obeyed

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Type designation codes

Type BR

- 1 Ex 202 (plug-in) Ex 222 (neck tube)
 Ex 212 (screw-in) Ex 223 (clamp ring connector)

- 2 Protective pipe diameter
 0,5 mm
 6 (others on request)

- 3 Length EL = ...
 50 100 200 250 400 500 mm

- 4 Protective pipe material
 3 = stainless steel 1.4571

- 5 Sensor quantity
 1 xw
 2 x

- 6 Sensor type
 Pt = Pt 100 **PtM** = Pt 1000 **Ni** = Ni 100 **NiM** = Ni 1000
 J = Fe-CuNi **K** = NiCr-Ni **N** = NiCrSi-NiSi
 L = Fe-CuNi

- 7 Connection
 2-conductor
 3-conductor

- 8 Class
Resistance thermometer Thermocouple
 0 = standard **2** = standard
 1 = 1/2 DIN IEC 751 **1** = ~1/2 DIN IEC 584
 2 = 1/3 DIN IEC 751

- 9 Process connection, welded
 G 1/4 G 1/2

 clamp connector, steel, relocatable
 or stainless steel
 flange, adjustable DIN EN 43 743
 aluminium flange for pipe diameter

- 10 Options
 F = flange C DN 25 40 DIN 2501
 C DN 40 40 DIN 2501
 UE = cap nut
 V = tapered **B** = flange ring **PE** = perforated
 M = measuring insert, mineral insulated, flexible tube
 K = kynar isolated
 P = PVC isolated

Example: BR 1 2 3 4 5 6 7 8 9 10
EX 202 · 6 x 100 · 3 · 1 Pt - 2 · 0 · G1/2

BR-EX 202, 6x100.3.1Pt-2.0.G1/2