



Bourdon tube pressure gauges for chemical applications RF100Ch IK1

Part no. 87701402

Bourdon tube pressure gauge with electrical contacts for chemical applications type D4

benefits

- measuring system fully welded to housing
- robust mechatronical pressure gauge
- Up to four switching contacts
- tightness-tested with helium
- GOSSTANDART-certified

Application

For corrosive gaseous and liquid media which are not highly viscous and do not crystallise; suitable for corrosive environments.

Technical Specifications

Type

D4

Nominal size

100

accuracy class (EN 837-1/6)

1.0

ranges (EN 837-1/5)

see ordering table

application area

≤ 600 bar: Full scale value
 > 600 bar: $\frac{3}{4}$ x full scale value
 ≤ 600 bar: 0.9 x full scale value
 > 600 bar: $\frac{2}{3}$ x full scale value
 ≤ 600 bar: 1.3 x full scale value
 > 600 bar: Full scale value

standard version

Connection

stainless steel 316 Ti/316 L, bottom
 G $\frac{1}{2}$ B, SW22 (EN 837-1/7.3)

contact types

inductive contact (IK)

minimum range

IK Single
 1 bar

Operating temperature range

Medium: max. 150 °C
 Ambient: -20/+60 °C

Temperature performance

Indication error when the temperature of the measuring system deviates from the normal temperature of 20 °C:
 at rising temperature approx. $\pm 0.4 \text{ } \%/10 \text{ K}$
 falling temperature approx. $\pm 0.4 \text{ } \%/10 \text{ K}$
 of full scale value

Degree of protection

IP 54 (EN 60529)

Electrical connection

Junction box

Measuring element

Bourdon tube, stainless steel 316 Ti/316 L
 ≤ 60 bar: "C" type tube
 > 60 bar: helical tube

movement

Stainless steel

Dial

Aluminium, white
Scaling: black

Inductive contact (IK)
Supply voltage

DC 5 – 25 V

Current input

≥ 2.1 mA

Switching accuracy

approx. 0.5 % of full scale value

Options

- Liquid filling (silicone oil)
- back flange
- 3-hole fixing, panel mounting bezel
- throttle screw
- Connector
- special scales
- other process connections

Pointer

Aluminium, black

Housing

Stainless steel 304, with blow-out

bayonet bezel

Stainless steel 304

window

Plastic (Makrolon), with contact adjustment lock

Operating temperature range

-20/+70 °C or corresponding to the respective measuring instruments

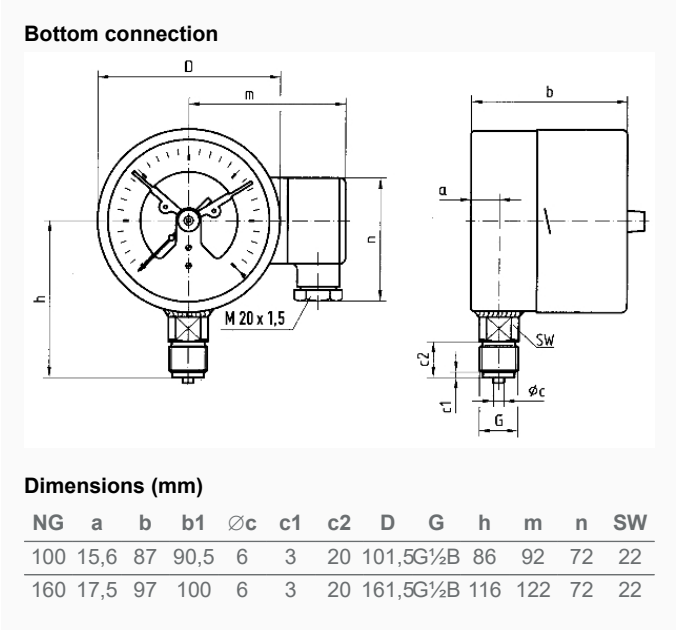
Adjustment range

5–95 % measuring range of gauge

Options

- contact systems with safety integrity level SIL 2

Technical Drawings



Versions

Range	Mounting type	Type	Part number
-1/+0 bar	direct	RF100Ch IK1 D402	87701402

- in-stock items
- Non-stock items