



Bourdon tube pressure gauges for chemical applications with electrical contact type D4



Benefits

- Measuring system fully welded to housing
- Robust mechatronical pressure gauge
- Up to three 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

Static load

≤ 600 bar: Full scale value
> 600 bar: ¼ x full scale value

Dynamic load

≤ 600 bar: 0.9 x full scale value
> 600 bar: ⅔ x full scale value

Short-term

≤ 600 bar: 1.3 x full scale value
> 600 bar: Full scale value

Inductive contact (IK)

Magnetic spring contact (MK)

Minimum range* (in bar) at nominal size

Contact

IK Single: 1 bar

IK dual: 1 bar

MK Single: 1.6 bar

MK dual: 1.6 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:
of full scale value

Degree of protection

IP54 (EN 60529)



Standard version

Connection

Stainless steel 316 Ti/316 L, bottom

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

Pointer

Aluminium, black

Housing

Stainless steel 304, with blow-out

Bayonet type bezel

Stainless steel 304

Window

Plastic (Makrolon)

Supply voltage

DC 5 – 25 V

Current input

≥ 2.1 mA

Operating temperature range

-20/+70 °C

Supply voltage

Max. AC/DC 250 V

Max. 1 A

Max. 0.6 A

Switch rating

Max. 50 VA, max. 30 W

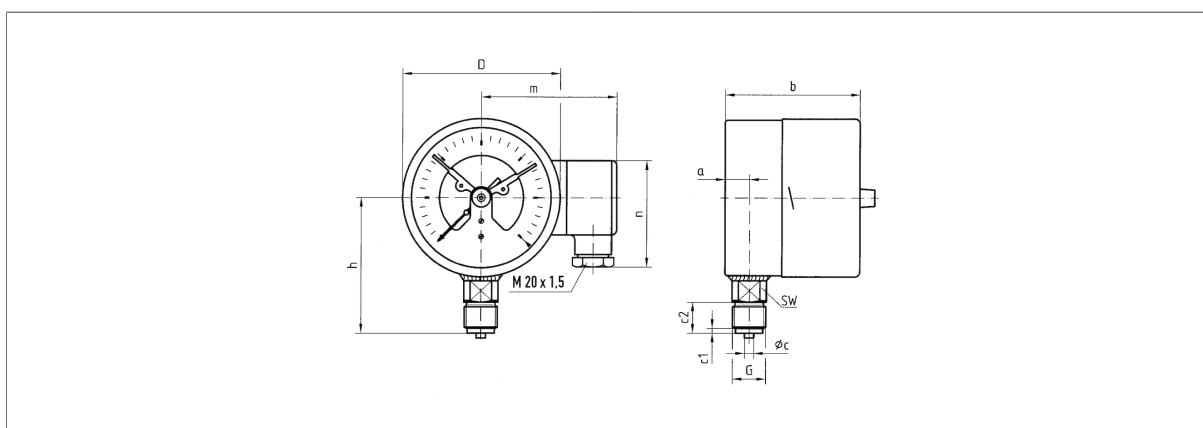
Operating temperature range

-20/+70 °C

Options

- Back flange
- 3-hole fixing, panel mounting bezel
- Damping screw
- Special scales
- Other process connections

Technical drawings



Dimensions (mm)

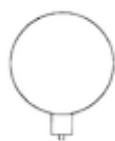
NG	a	b	b1	∅c	c1	c2	D	G	h	m	n	SW
100	15,6	87	90,5	6	3	20	101,5	G½B	86	92	72	22
160	17,5	97	100	6	3	20	161,5	G½B	116	122	72	22



Versions

RF100Ch IK1 D402

Housing \varnothing	Connection	Alignment	Housing	Accuracy class	Range	Type	Part no.
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	-1/0 bar	RF100Ch IK1 D402	87701402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	-1/+0.6 bar	RF100Ch IK1 D402	87702402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	-1/+1.5 bar	RF100Ch IK1 D402	87703402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	-1/+3 bar	RF100Ch IK1 D402	87704402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	-1/+5 bar	RF100Ch IK1 D402	87705402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	-1/+9 bar	RF100Ch IK1 D402	87706402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	-1/+15 bar	RF100Ch IK1 D402	87707402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/0.6 bar	RF100Ch IK1 D402	87709402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/1 bar	RF100Ch IK1 D402	87710402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/1.6 bar	RF100Ch IK1 D402	87711402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/2.5 bar	RF100Ch IK1 D402	87712402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/4 bar	RF100Ch IK1 D402	87713402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/6 bar	RF100Ch IK1 D402	87714402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/10 bar	RF100Ch IK1 D402	87715402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/16 bar	RF100Ch IK1 D402	87716402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/25 bar	RF100Ch IK1 D402	87717402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/40 bar	RF100Ch IK1 D402	87718402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/60 bar	RF100Ch IK1 D402	87719402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/100 bar	RF100Ch IK1 D402	87720402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/160 bar	RF100Ch IK1 D402	87721402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/250 bar	RF100Ch IK1 D402	87722402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/400 bar	RF100Ch IK1 D402	87723402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/600 bar	RF100Ch IK1 D402	87724402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/1,000 bar	RF100Ch IK1 D402	87725402

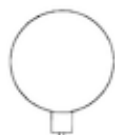


Blue part no. = in-stock items



RF100Ch IK2 D402

Housing \varnothing	Connection	Alignment	Housing	Accuracy class	Range	Type	Part no.
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	-1/0 bar	RF100Ch IK2 D402	87751402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	-1/+0.6 bar	RF100Ch IK2 D402	87752402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	-1/+1.5 bar	RF100Ch IK2 D402	87753402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	-1/+3 bar	RF100Ch IK2 D402	87754402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	-1/+5 bar	RF100Ch IK2 D402	87755402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	-1/+9 bar	RF100Ch IK2 D402	87756402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	-1/+15 bar	RF100Ch IK2 D402	87757402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/0.6 bar	RF100Ch IK2 D402	87759402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/1 bar	RF100Ch IK2 D402	87760402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/1.6 bar	RF100Ch IK2 D402	87761402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/2.5 bar	RF100Ch IK2 D402	87762402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/4 bar	RF100Ch IK2 D402	87763402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/6 bar	RF100Ch IK2 D402	87764402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/10 bar	RF100Ch IK2 D402	87765402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/16 bar	RF100Ch IK2 D402	87766402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/25 bar	RF100Ch IK2 D402	87767402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/40 bar	RF100Ch IK2 D402	87768402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/60 bar	RF100Ch IK2 D402	87769402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/100 bar	RF100Ch IK2 D402	87770402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/160 bar	RF100Ch IK2 D402	87771402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/250 bar	RF100Ch IK2 D402	87772402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/400 bar	RF100Ch IK2 D402	87773402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/600 bar	RF100Ch IK2 D402	87774402
100 mm	G $\frac{1}{2}$ B	Bottom	Stainless steel 304	1,0	0/1,000 bar	RF100Ch IK2 D402	87775402

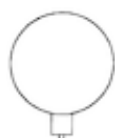


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RF100Ch MK1 D402

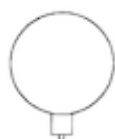
Housing Ø	Connection	Alignment	Housing	Accuracy class	Range	Type	Part no.
100 mm	G½B	Bottom	Stainless steel 304	1,0	-1/+0.6 bar	RF100Ch MK1 D402	87602402
100 mm	G½B	Bottom	Stainless steel 304	1,0	-1/+1.5 bar	RF100Ch MK1 D402	87603402
100 mm	G½B	Bottom	Stainless steel 304	1,0	-1/+3 bar	RF100Ch MK1 D402	87604402
100 mm	G½B	Bottom	Stainless steel 304	1,0	-1/+5 bar	RF100Ch MK1 D402	87605402
100 mm	G½B	Bottom	Stainless steel 304	1,0	-1/+9 bar	RF100Ch MK1 D402	87606402
100 mm	G½B	Bottom	Stainless steel 304	1,0	-1/+15 bar	RF100Ch MK1 D402	87607402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/1.6 bar	RF100Ch MK1 D402	87611402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/2.5 bar	RF100Ch MK1 D402	87612402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/4 bar	RF100Ch MK1 D402	87613402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/6 bar	RF100Ch MK1 D402	87614402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/10 bar	RF100Ch MK1 D402	87615402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/16 bar	RF100Ch MK1 D402	87616402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/25 bar	RF100Ch MK1 D402	87617402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/40 bar	RF100Ch MK1 D402	87618402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/60 bar	RF100Ch MK1 D402	87619402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/100 bar	RF100Ch MK1 D402	87620402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/160 bar	RF100Ch MK1 D402	87621402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/250 bar	RF100Ch MK1 D402	87622402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/400 bar	RF100Ch MK1 D402	87623402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/600 bar	RF100Ch MK1 D402	87624402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/1,000 bar	RF100Ch MK1 D402	87625402



Blue part no. = in-stock items

RF100Ch MK2 D402

Housing Ø	Connection	Alignment	Housing	Accuracy class	Range	Type	Part no.
100 mm	G½B	Bottom	Stainless steel 304	1,0	-1/+0.6 bar	RF100Ch MK2 D402	87652402
100 mm	G½B	Bottom	Stainless steel 304	1,0	-1/+1.5 bar	RF100Ch MK2 D402	87653402
100 mm	G½B	Bottom	Stainless steel 304	1,0	-1/+3 bar	RF100Ch MK2 D402	87654402
100 mm	G½B	Bottom	Stainless steel 304	1,0	-1/+5 bar	RF100Ch MK2 D402	87655402



Blue part no. = in-stock items



Housing Ø	Connection	Alignment	Housing	Accuracy class	Range	Type	Part no.
100 mm	G½B	Bottom	Stainless steel 304	1,0	-1/+9 bar	RF100Ch MK2 D402	87656402
100 mm	G½B	Bottom	Stainless steel 304	1,0	-1/+15 bar	RF100Ch MK2 D402	87657402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/1.6 bar	RF100Ch MK2 D402	87661402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/2.5 bar	RF100Ch MK2 D402	87662402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/4 bar	RF100Ch MK2 D402	87663402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/6 bar	RF100Ch MK2 D402	87664402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/10 bar	RF100Ch MK2 D402	87665402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/16 bar	RF100Ch MK2 D402	87666402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/25 bar	RF100Ch MK2 D402	87667402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/40 bar	RF100Ch MK2 D402	87668402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/60 bar	RF100Ch MK2 D402	87669402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/100 bar	RF100Ch MK2 D402	87670402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/160 bar	RF100Ch MK2 D402	87671402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/250 bar	RF100Ch MK2 D402	87672402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/400 bar	RF100Ch MK2 D402	87673402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/600 bar	RF100Ch MK2 D402	87674402
100 mm	G½B	Bottom	Stainless steel 304	1,0	0/1,000 bar	RF100Ch MK2 D402	87675402

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