

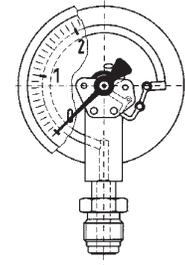
Bourdon tube pressure gauges for ultra-pure gas applications



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- Wetted parts specially cleaned, flushed and electropolished
- Tightness-tested with helium
- Rear blow-out
- Versatile connection technology
- GOSSTANDART-certified



Application Designed for highly demanding applications in terms of surface quality and purity of the wetted parts, particularly for measuring ultra-pure gases.

Technical specifications

Type

D 3

Nominal size

63

Accuracy class (EN 837-1/6)

1.6

Ranges (EN 837-1/5)

-1/0 to -1/+15 bar
0/0.6 to 0/400 bar

Calibration medium

Nitrogen or dried air

Application area

Static load: $\frac{3}{4}$ x full scale value
Dynamic load: $\frac{2}{3}$ x full scale value
Short-term: full scale value

Operating temperature range

Medium: $T_{max} = +150\text{ °C}$

Ambient: $T_{min} = -20\text{ °C}$

$T_{max} = +60\text{ °C}$

Temperature performance

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

Degree of protection

IP 32 (EN 60529)

Standard version

Connection

Bottom, either: $\frac{1}{4}$ –18 NPT
9/16–18 UNF, with pressure screw
9/16–18 UNF, with union nut

Measuring element

Bourdon tube
 ≤ 60 bar "C" type tube
 > 60 bar helical tube
tightness-tested with helium,
leak rate $\leq 10^{-9}$ mbar x l/s

Wetted parts

Connection stainless steel 316 Ti/316 L
Measuring element stainless steel 316 Ti/316 L
Cleaned, flushed with nitrogen,
electropolished, surface roughness
 $\leq Ra\ 0.6\ \mu m$

Movement

Stainless steel

Dial

Aluminium, white
Dial marking black
Label "Ultra-pure gas"

Pointer

Aluminium, black

Housing

Stainless steel 304 with rear blow-out

Push on bezel

Stainless steel 304, bare metal surface

Window

Plastic

Options

- Surface roughness $Ra\ 0.4\ \mu m$
- Housing polished
- Push on bezel polished
- Electrical contacts
- Special scales
- NG 50
- Other process connections

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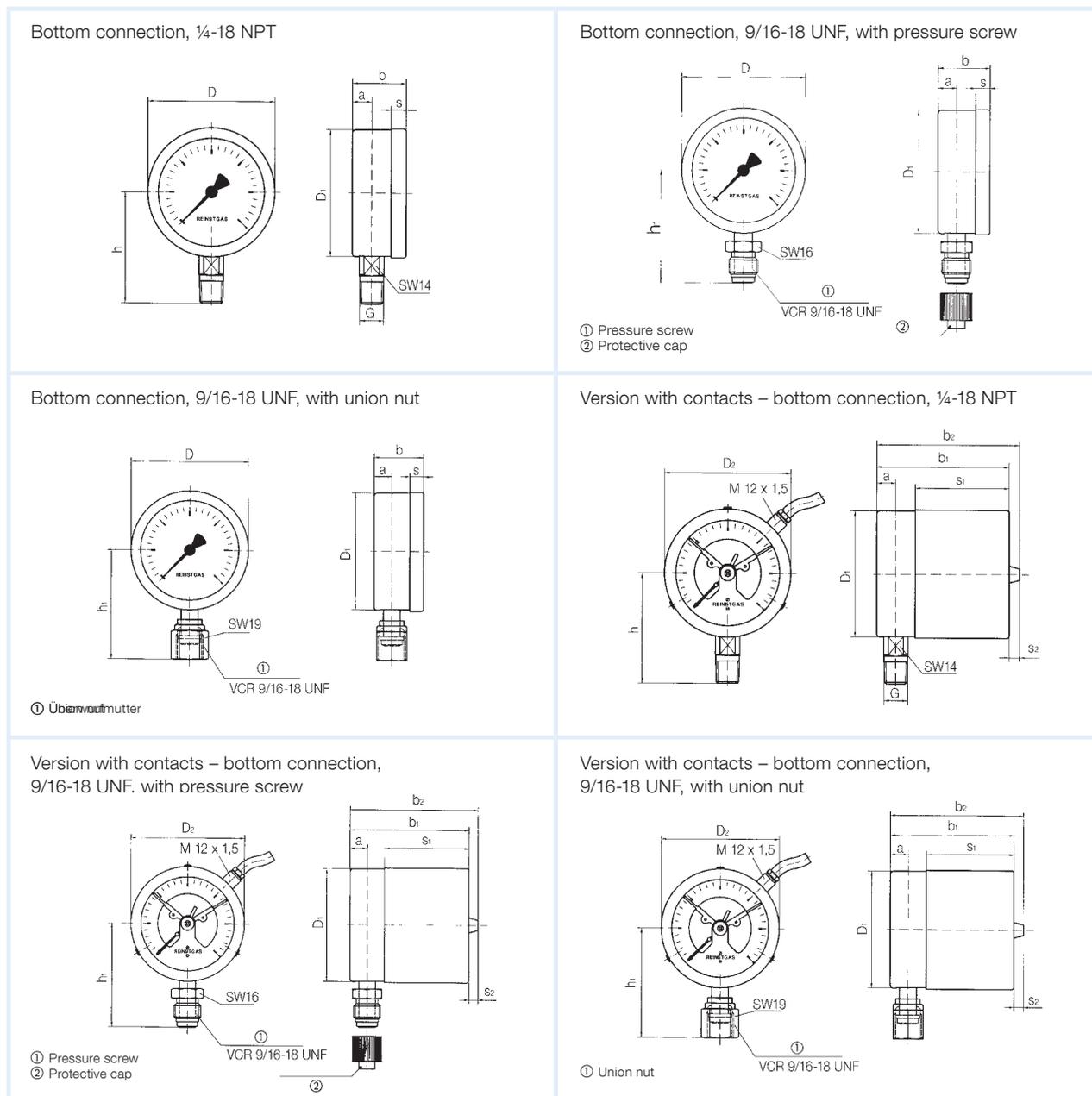
See page 100 for prices.

Bourdon tube pressure gauges for ultra-pure gas applications

Type D 3 – NG 63

Housing types and dimensions

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Dimensions (mm)

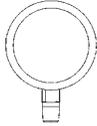
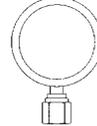
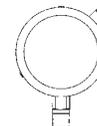
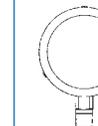
Nominal size (NG)	a	b	b ₁	b ₂	D	D ₁	D ₂	G	h	h ₁	S	S ₁	S ₂
63	9	28	66	74	63	62	64	1/4-18 NPT	54	57	8	48	8

Bourdon tube pressure gauges for ultra-pure gas applications

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DG: M, PG: 3

Version with electrical contacts

Type	RF63RG, D302	RF63RG, D302	RF63RG, D302	RF63RG, MK1, D302	RF63RG, MK2, D302	RF63RG, IK1, D302	RF63RG, IK2, D302
Version							
Housing Ø	63	63	63	63	63	63	63
Contact type				Single magnetic spring contact	Dual magnetic spring contact	Single inductive contact	Dual inductive contact
Housing	Stainless steel 304 with push on bezel, plastic window						
Measuring element	Bourdon tube, stainless steel 316 Ti/316 L						
Accuracy class	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Connection	¼-18 NPT	9/16-18 UNF with pressure screw	9/16-18 UNF with union nut	¼-18 NPT	¼-18 NPT	¼-18 NPT	¼-18 NPT
Range (bar)	Part no.	Part no.	Part no.				
Price €							
-1/0	87001302	87051302	87101302	---	---	---	---
-1/+0,6	87002302	87052302	87102302	87352302	87202302	87252302	87302302
-1/+1,5	87003302	87053302	87103302	87353302	87203302	87253302	87303302
-1/+3	87004302	87054302	87104302	87354302	87204302	87254302	87304302
-1/+5	87005302	87055302	87105302	87355302	87205302	87255302	87305302
-1/+9	87006302	87056302	87106302	87356302	87206302	87256302	87306302
-1/+15	87007302	87057302	87107302	87357302	87207302	87257302	87307302
Price €							
0/0,6	87009302	87059302	87109302	---	---	---	---
0/1	87010302	87060302	87110302	---	---	---	---
0/1,6	87011302	87061302	87111302	87361302	87211302	87261302	87311302
0/2,5	87012302	87062302	87112302	87362302	87212302	87262302	87312302
0/4	87013302	87063302	87113302	87363302	87213302	87263302	87313302
0/6	87014302	87064302	87114302	87364302	87214302	87264302	87314302
0/10	87015302	87065302	87115302	87365302	87215302	87265302	87315302
0/16	87016302	87066302	87116302	87366302	87216302	87266302	87316302
0/25	87017302	87067302	87117302	87367302	87217302	87267302	87317302
0/40	87018302	87068302	87118302	87368302	87218302	87268302	87318302
Price €							
0/60	87019302	87069302	87119302	87369302	87219302	87269302	87319302
0/100	87020302	87070302	87120302	87370302	87220302	87270302	87320302
0/160	87021302	87071302	87121302	87371302	87221302	87271302	87321302
0/250	87022302	87072302	87122302	87372302	87222302	87272302	87322302
0/400	87023302	87073302	87123302	87373302	87223302	87273302	87323302
				Extra charge 9/16-18 UNF pressure screw or union nut €			

Blue part no. = in-stock items