

Bourdon Tube Pressure Gauges

Crimped-on ring case stainless steel

RChg 80

RChgG 80

Standard Versions

Information on general and metrological features (e.g. load limits/temperature resistance) and standard pressure ranges/scale divisions can be found in model overview 1000.

Accuracy (DIN EN 837-1)

Class 1.6

Class 2.5 for pressure ranges 0 – 600 bar and 0 – 1000 bar
(0 – 10,000 and 0 – 15,000 psi)

Case

With polished crimped-on ring, stainless steel 304 (1.4301)

Degree of Protection (DIN EN 60 529/IEC 529)

IP54

IP65 for model RChgG with closed blow-out plug

Blow-out Device

Blow-out plug at the top of the case coverage

Case Ventilation

Via blow-out plug, ventilation required for internal pressure compensation for measuring spans ≤ 10 bar, and also recommended for other pressure ranges if the operating conditions permit

Case Filling

For model RChgG: glycerin

Nominal Case Size

80 mm (3")

Wetted Parts

Type – 3: connection: stainless steel 316L (1.4404)
Bourdon tube: stainless steel 316L (1.4404)
gas-shielded arc welding
 ≤ 60 bar (800 psi) c-form
 ≥ 100 bar (1,500 psi) helical form

Type – 1: O-ring sealing: FPM
connection: brass
Bourdon tube: bronze
 ≤ 40 bar (600 psi) c-form
 ≥ 60 bar (800 psi) soft-soldered
helical form
silver brazed

O-ring sealing: NBR

Case Configuration

Connection: screwed

Position of the connection:
- bottom connection
- centre back connection (rm)

Mounting device:
- without
- back flange for surface mounting (Rh)
- front flange for panel mounting (Fr)
- u-clamp for panel mounting (BFR)

Pressure Ranges (DIN EN 837-1)

0 – 0.6 bar to 0 – 1000 bar (0 – 10 psi to 0 – 15,000 psi) for type – 3
0 – 0.6 bar to 0 – 600 bar (0 – 10 psi to 0 – 10,000 psi) for type – 1

Process Connection

G $\frac{1}{2}$ B ($\frac{1}{2}$ " BSP)

Window

Laminated safety glass for type – 3
Instrument glass for type – 1



Movement

Stainless steel for type – 3
Brass / German silver for type – 1

Dial

Aluminum white, scale black

Pointer

Aluminum black

Safety Category According to DIN EN 837-1

S1 pressure gauges with blow-out device

Ordering Information, Standard Pressure Ranges, Options

See pages 3 and 4

Special Versions and Further Options

- Other process connections upon request
- Increased measurement accuracy
- Other pressure ranges and/or special scales, e.g. dual scale bar/psi, coloured fields or ranges, dial inscriptions, negative scale
- Version as refrigeration gauge with temperature scale
- Degree of protection IP65
- Other case fillings upon request
- Model RChg 80 – 3, bottom connection for ambient temperatures to -40 °C (-40 °F)
- Position of connection radial at 3 o'clock, 9 o'clock, 12 o'clock (others upon request) or other than vertical installation (90°), for unfilled models
- GOST version for Russia, Ukraine, Kazakhstan, Belarus

Accessories

See catalogue heading 11



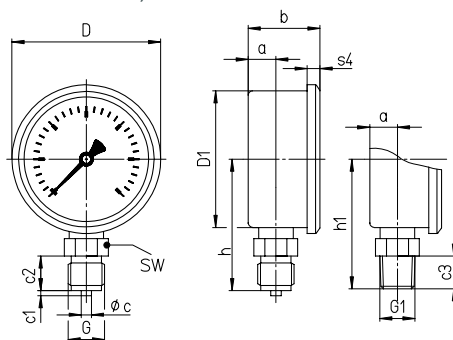
Case Configurations, Code Letters, Dimensional Data and Weights, Blow-out Device

Bottom Connection

Centre Back Connection

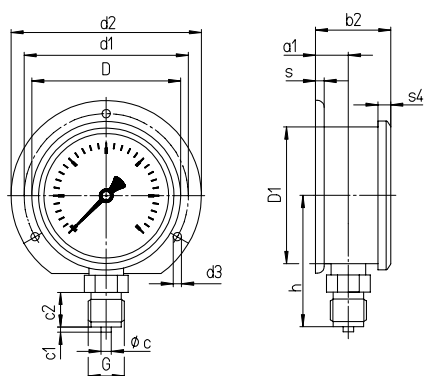
without mounting device

(without code letters)

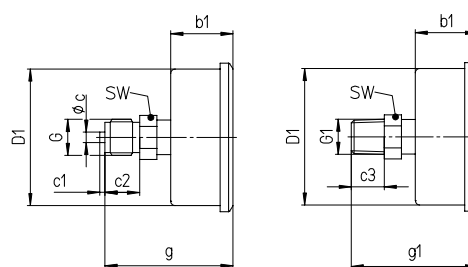


with back flange for surface mounting

code letters: **Rh**

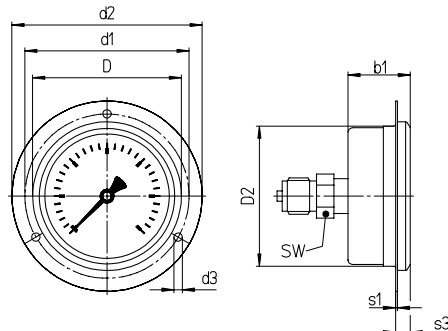


code letters: **rm**



with front flange for panel mounting

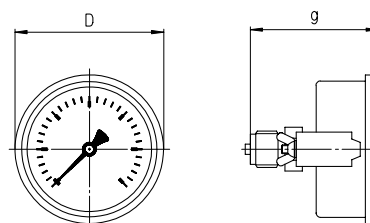
code letters: **rmFr**



recommended panel cut out $\varnothing 84 \pm 0.5 \text{ mm}$ ($3.31 \pm 0.02''$)

with u-clamp for panel mounting

code letters: **rmBFr**



recommended panel cut out $\varnothing 81 \pm 0.5 \text{ mm}$ ($3.19 \pm 0.02''$)

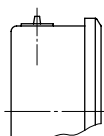
Dimensional Data (mm/inches) and Weight (kg/lb)

NCS	D	D1	D2	a	a1	b	b1	b2	c	c1	c2	c3	d1	d2	d3	G	G1
80 3"	86 3.39	79 3.11	81 3.19	16 0.63	19 0.75	41.5 1.63	36 1.42	44 1.73	6 0.24	3 0.12	20 0.79	19 0.75	95 3.74	110 4.33	4.8 0.19	G 1/2 B M 20x1.5	1/2" NPT

g	g1	h	h1	s	s1	s3	s4	SW	approx. weight ¹⁾	
									RChg	RhgG
74 2.91	73 2.87	76 2.99	75 2.95	5 0.2	1 0.04	9 0.35	8 0.31	22 0.87	0.34 0.75	0.50 1.1

Blow-out Device

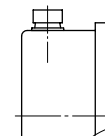
Blow-out plug no. 19



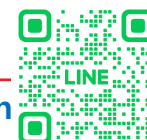
Optional

Model RChgG, case configurations bottom connection, rm:

Blow-out plug no. 24 (reclosable, IP65)



¹⁾ data for versions without mounting device



Basic Model:		Bourdon Tube Pressure Gauge with Crimped-on Ring Case		RChg	
Case filling:	without			without code letters	
	glycerin			G	
	fillable version			(G)	
Nominal case size:	case Ø 80 mm (3")			80	
Wetted material:	copper alloy			– 1	
	stainless steel			– 3	
Case configuration:	case/connection	screwed	without code letters		
	position of the connection	bottom connection	without code letters		
		centre back connection	rm		
	mounting device	without	without code letters		
		back flange for surface mounting	Rh		
		front flange for panel mounting	Fr		
u-clamp for panel mounting		BFr			
Pressure ranges:	–1200 / 0 mbar	30" hg vac. – 0 psi			
	–0.6 / 0 bar				
	–1 / 0 bar				
	–1 / +0.6 bar	30" hg vac. – 15 psi			
	–1 / +1.5 bar	30" hg vac. – 30 psi			
	–1 / +3 bar	30" hg vac. – 60 psi			
	–1 / +5 bar	30" hg vac. – 100 psi			
	–1 / +9 bar	30" hg vac. – 160 psi			
	–1 / +15 bar	30" hg vac. – 200 psi			
		30" hg vac. – 300 psi			
	0 – 0.6 bar	0 – 10 psi			
	0 – 1 bar	0 – 15 psi			
	0 – 1.6 bar				
	0 – 2.5 bar	0 – 30 psi			
	0 – 4 bar	0 – 60 psi			
	0 – 6 bar	0 – 100 psi	e.g. 0 – 6 bar		
	0 – 10 bar	0 – 160 psi			
	0 – 16 bar	0 – 200 psi			
		0 – 300 psi			
	0 – 25 bar	0 – 400 psi			
	0 – 40 bar	0 – 600 psi			
	0 – 60 bar	0 – 800 psi			
		0 – 1,000 psi			
	0 – 100 bar	0 – 1,500 psi			
	0 – 160 bar	0 – 2,000 psi			
		0 – 3,000 psi			
	0 – 250 bar	0 – 4,000 psi			
		0 – 5,000 psi			
	0 – 400 bar	0 – 6,000 psi			
	0 – 600 bar	0 – 10,000 psi			
	0 – 1000 bar for type – 3	0 – 15,000 psi			
	Process connection:	standard thread	G ½ B	G ½ B	
		options	½" NPT	½" NPT	
			M20x1.5	M20x1.5	
	Options:	see page 4			



Ordering Information, Further Options

[illegible]

Special Versions: Please describe your requirements in cleartext!

