

Bourdon Tube Pressure Gauges

Crimped-on Ring Case Stainless Steel

RChg 80
RChgG 80

Standard Versions

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

Accuracy (EN 837-1)

Class 1.0

Class 1.6 for pressure ranges 0-600 and 0-1,000 bar
(0-10,000 and 0-15,000 psi)

Case

Polished crimped-on ring, 1.4301 (304 stainless steel)

Case Protection Type (EN 60 529 / IEC 529)

IP 54,

IP 65 for model RChgG with closed blow-out plug

Blow-out Device

Blow-out plug at the top of the case coverage

Case Ventilation

By blow-out plug, ventilation required for internal pressure compensation for pressure ranges ≤ 10 bar and also recommended for other pressure ranges, as far as the operating conditions allow this.

Case Filling

for model RChgG: glycerine

Nominal Case Size

80 (mm) (3")

Wetted Parts

Type -3: Connection: 1.4571 (316 stainless steel)

Bourdon tube: 1.4571 (316 stainless steel),
argon arc welding,
 ≤ 60 bar (800 psi) c-form,
 ≥ 100 bar (1,500 psi) helical

O-ring-sealing: FPM (fluor caoutchouc)

Type -1: Connection: brass

Bourdon tube: bronze,
 ≤ 40 bar (600 psi) soft-soldered, c-form,
 ≥ 60 bar (800 psi) silver brazed, helical

O-ring-sealing: NBR

Case Configuration

Connection: screwed

Position of the connection: bottom connection,
optional centre back connection (**rm**)

Mounting device: without, optional back flange for
surface mounting (**Rh**) / front flange
for panel mounting (**Fr**) or u-clamp for
panel mounting (**BFr**), see page 2

Pressure Ranges (EN 837-1)

0-0.6 bar (0-10 psi) to 0-1,000 bar (0-15,000 psi) for type -3

0-0.6 bar (0-10 psi) to 0- 600 bar (0-10,000 psi) for type -1

Process Connection

G 1/2 B (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, black figures, white background

Pointer

Aluminum, black

Safety Category according to 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 among others

- Other process connections upon request
- Other pressure ranges and / or special scales, e.g. double scale bar/psi, coloured fields or areas, dial inscriptions, negative scale etc.
- Version as refrigeration gauge with temperature scale
- Increased case protection type, e. g. IP 65 without case filling, upon request
- Other case fillings upon request
- Model RChgG 80-3
bottom connection
for ambient temperatures down to -40 °C (-40 °F)
- Position of connection radial at 3 o'clock, 9 o'clock or 12 o'clock (others upon request), or other than vertical installation (90°) for dry version
- GOST-version for Russia, Ukraine, Kazakhstan

Accessory:

see catalogue-heading 11



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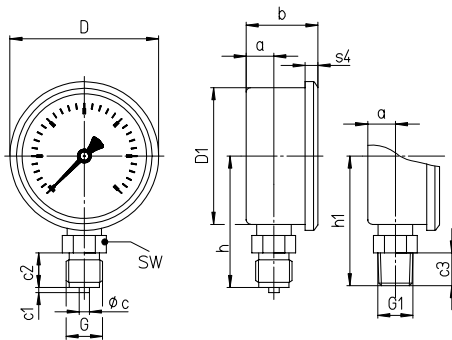
Case Configuration, Code Letters, Dimensional Data and Weights, Blow-out Device

Bottom connection

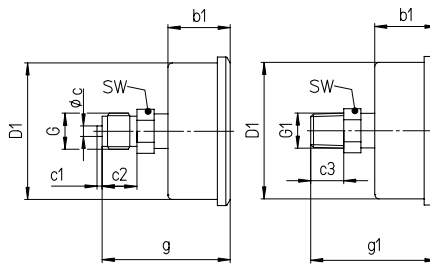
Centre back connection

No mounting device

(no additional code letters)

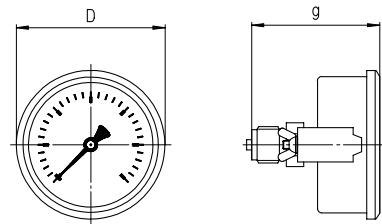


code letters: **rm**



U-clamp for panel mounting

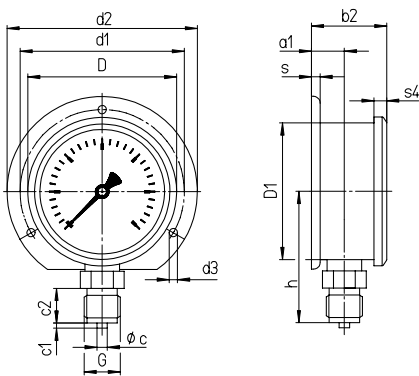
code letters: **rmBFr**



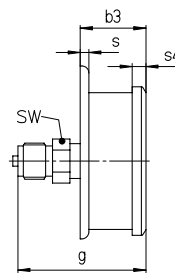
recommended panel cut out $\varnothing 81 \pm 0.5 \text{ mm (0.02")}$

Back flange for surface mounting

code letters: **Rh**



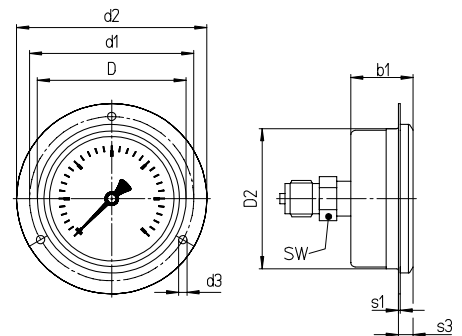
code letters: **rmRh**



(available upon request, but according to EN 837-1 not recommended)

Front flange for panel mounting

code letters: **rmFr**



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

Dimensional data (mm / inches) and weight (kg / lb)

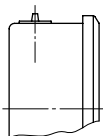
NCS	D	D1	D2	a	a1	b	b1	b2	b3	c	c1	c2	c3	d1	d2	d3	G	G1
80	86	79	81	16	19	41.5	36	44	38.5	6	3	20	19	95	110	4.8	G 1/2 B	1/2" NPT
3"	3.36	3.11	3.19	.63	.75	1.63	1.42	1.73	1.52	.24	.12	.79	.75	3.74	4.33	.19	M 20 x1,5 1/2" BSP	

NCS	g	g1	h	h1	s	s1	s3	s4	SW	approx. weight ¹⁾	
										RChg	RChgG
80	74	73	76	75	5	1	9	8	22	approx. 0.34	approx. 0.50
3"	2.91	2.87	2.99	2.95	.20	.04	.35	.31	.87	0.75	1.10

¹⁾ Information for versions without mounting device

Blow-out device

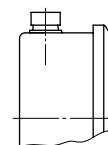
Blow-out plug 19



Optional:

Model RChgG, case configuration, bottom connection, rm:

Blow-out plug 24 (reclosable)



Ordering Information with Standard Pressure Ranges, Options

Basic Model:	Bourdon Tube Pressure Gauge, Crimped-on Ring		RChg
Case Filling	without glycerine fillable version		without code letters G (G)
Nominal Case Size:	case-Ø 80 (mm) (3")		80
Wetted Material:	copper alloy stainless steel		-1 -3
Case Configuration:	case / connection	screwed	without code letters
	position of the connection:	bottom connection centre back connection	without code letters rm
	mounting device:	without back flange for surface mounting front flange for panel mounting u-clamp for panel mounting	without code letters Rh Fr BFr
Pressure Ranges:	-1,200 – 0 mbar	30" Hg vac. – 0	
	-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	
	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 – 25 bar	0 – 300 psi	
	0 – 40 bar	0 – 600 psi	
	0 – 60 bar	0 – 800 psi	
	0 – 100 bar	0 – 1,500 psi	
	0 – 160 bar	0 – 2,000 psi	
	0 – 250 bar	0 – 3,000 psi	
	0 – 400 bar	0 – 5,000 psi	
	0 – 600 bar	0 – 10,000 psi	
	0 – 1,000 bar for type -3	0 – 15,000 psi	
Process Connection:	standard thread	G ½ B (½" BSP)	G ½ B
	options:	½" NPT	½" NPT
		M 20 x 1.5	M 20 x 1,5
Options:	see page 4		
Example:			RChg 80-3 rmFr, 0-6 bar, G ½ B

