

Bourdon Tube Pressure Gauges

Crimped-on ring case stainless steel

RChg 40 – 3v

RChgG 40 – 3v

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 range 0 – 600 bar (0 – 10,000 psi)

Case

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

Case Protection Type (DIN EN 60 529 / IEC 529)

IP54

IP65 for model RChgG with closed blow-out plug no. 19

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, as far as the operating conditions allow this

Case Filling

For model RChgG: glycerin

Nominal Case Size

40 mm (1 1/2")

Wetted Parts

Connection: stainless steel 316L (1.4404)

Bourdon tube: stainless steel 316L (1.4404)
shielded arc welding,
 ≤ 100 bar (1,500 psi) c-form,
 ≥ 160 bar (2,000 psi) helical form

Case Configuration

Connection: welded

Position of the

connection: bottom connection,
optional centre back connection (**rm**)

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

Pressure Ranges (DIN EN 837-1)

0 – 1 bar to 0 – 600 bar (0 – 15 psi to 0 – 10,000 psi)

Process Connection

1/8" NPT

Window

Instrument glass

Movement

Stainless steel

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 Among Others

- Special process connections upon request
- Other pressure ranges and/or special scales, e.g. dual scale bar/psi, coloured fields or ranges, dial inscriptions
- Case parts 316L (1.4404) upon request
- Other case fillings upon request
- Position of installation other than vertical (90°) only for model RChg
- GOST version for Russia, Ukraine, Kazakhstan and Belarus

Accessory

Chemical seals: see catalogue heading 7

Other: see catalogue heading 11



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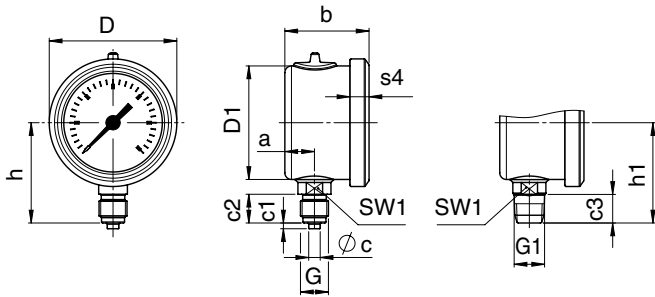
Case Configurations, Code Letters, Dimensional Data and Weights, Blow-out Device

Bottom Connection

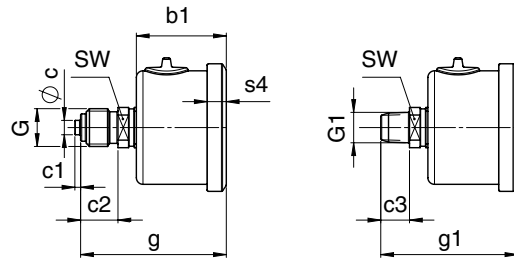
Centre Back Connection

without mounting device

(without code letters)

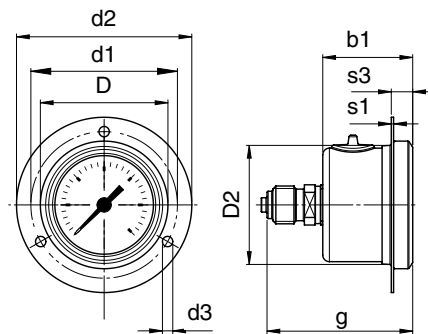


code letters: rm



with front flange for panel mounting

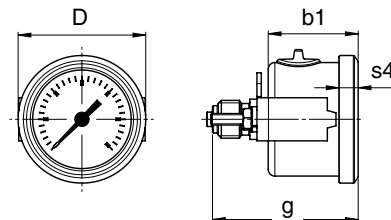
code letters: rmFr



recommended panel cut out $\varnothing 42.5 \pm 0.3$ mm (1.67 ± 0.01 ")

with u-clamp for panel mounting

code letters: rmBFr



recommended panel cut out $\varnothing 41 \pm 0.3$ mm (1.61 ± 0.01 ")

Dimensional Data (mm/inch) and Weights (kg/lb)

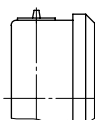
NCS	a	b	b1	c	c1	c2	c3	D	D1	D2	d1	d2	d3	G	G1	g
40 1 1/2"	10.3 0.41	29.5 1.16	31.5 1.24	4 0.16	2 0.08	10 0.39	10 0.39	44.5 1.75	39.5 1.56	41.5 1.63	51 2.01	61 2.4	3.6 0.14	G 1/8" B 1/8" BSP M10x1	1/8" NPT	48 1.89

g1	h±1	h1±1	s1	s3	s4	SW	SW1	approx. weight ¹⁾	
								RChg	RChgG
48 1.89	35 1.38	35 1.38	0.8 0.03	7.5 0.3	6.5 0.26	14 0.55	10 0.39	0.08 0.18	0.09 0.2

¹⁾ data for version without mounting device

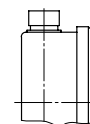
Blow-out Device

blow-out plug 19



Optional

blow-out plug 24
(reclosable, IP65)



Ordering Information with Standard Pressure Ranges, Options

Basic Model:		Bourdon Tube Pressure Gauge, Crimped-on Ring Case	RChg	
Case filling:	without		without code letters	
	glycerin		G	
	fillable version		(G)	
Nominal case size:	case Ø 40 mm (1 ½")		40	
Wetted material:	stainless steel		-3	
Case configuration:	case/connection	welded	v	
	position of the connection	bottom connection	without code letters	
		centre back connection	rm	
	mounting device	without	without code letters	
		front flange for panel mounting	Fr	
u-clamp for panel mounting		BFr		
Pressure ranges:	-1,200 – 0 mbar	30" hg vac. – 0 psi		
	-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 – 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 – 1,000 psi		
	0 – 100 bar	0 – 1,500 psi		
	0 – 160 bar	0 – 2,000 psi		
	0 – 250 bar	0 – 3,000 psi		
		0 – 4,000 psi		
	0 – 400 bar	0 – 5,000 psi		
	0 – 600 bar	0 – 10,000 psi		
	Process connection:	standard thread	1/8" NPT	1/8" NPT
options		G 1/8 B	G 1/8 B	
		M 10x1	M 10x1	
		only for centre back connection (rm)	1/4" NPT	1/4" NPT (connection rm)
			G 1/4 B	G 1/4 B (connection rm)
		M 12x1.5	M 12x1.5 (connection rm)	
Options:	see page 4			

Example:

RChg 40 – 3v rmFr, 0 – 6 bar, 1/8" NPT

Ordering Information Further Options

Basic Model:	Bourdon Tube Pressure Gauge, Crimped-on Ring Case		RChg
Model code:			see page 3
Options:	red mark	on the dial	(order at the moment still as cleartext)
	receiver gauge	linear	
	0.2 – 1 bar (3 – 15 psi),	square	
	scale 0 – 100%		
	IP65 with blow-out plug 24 (reclosable)		
	case polished		
	leak test of the measuring unit	with helium leak detection up to 10 ⁻⁹ mbar l/s	
	wetted parts free of grease and oil, up to 0 – 600 bar (0 – 10,000 psi)	adjustment ≤250 bar (3,000 psi) with dry air ≥400 bar (5,000 psi) with distilled water	
		dial marking symbol crossed out oil can	
	silicone-free version		
	restrictor screw in pressure inlet port	orifice Ø 0.6 mm (0.02")	
	material: like process connection stainless steel	orifice Ø 0.3 mm (0.01")	
	measuring point marking	stainless steel plate 12 x 55 mm (0.47 x 2.17"), wire mounting or sticker on case coverage	

Special Versions: Please describe your requirements in cleartext!