Bourdon Tube Pressure Gauges

Bayonet ring case stainless steel

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 psi and 0 - 15,000 psi)

With bayonet ring, stainless steel 304 (1.4301)

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

IP65 for model RChG 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 RChG: glycerin

Nominal Case Size

63 mm (21/2")

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: connection: brass

Bourdon tube: bronze

≤40 bar (600 psi) c-form

soft-soldered

≥60 bar (800 psi) helical form

silver brazed

Case Configuration

Connection: Position of the screwed

connection:

- bottom connection

- lower back connection (r)/

centre back connection (rm)

Mounting device: - without

- back flange for surface mounting (Rh)

- front flange for panel mounting (Fr)

Pressure Ranges (DIN EN 837-1)

0 - 0.6 bar to 0 - 1000 bar (0 - 10 psi to 0 - 15,000 psi) for type - 30 - 0.6 bar to 0 - 600 bar (0 - 10 psi to 0 - 10,000 psi) for type -1

Process Connection

G 1/4 B (1/4" BSP)

Window

Laminated safety glass for type - 3

Instrument glass for type - 1

Movement

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





Dial

Aluminum white, scale black

Pointer

optional:

Aluminum black

Safety Category According to DIN EN 837-1

S1 pressure gauges with blow-out device

S2 safety pressure gauge,

RCh 63 - 3 proved: RChG 63 - 3

type - 1

up to 1000 bar (15,000 psi) up to 600 bar (10,000 psi) with laminated safety glass

or polycarbonate

Ordering Information, Standard Pressure Ranges, Options

See pages 3 and 4

Special Versions and Further Options

- Special process connections, e.g. VCR-F, VCR-M, VCR-M short (see technical information sheet T01-000-016) or cannula connection with needle for vacuum/pressure test of cans (see technical information sheet T01-000-022), others upon request
- 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
- Case parts 316L (1.4404) upon request
- Increased degree of protection, e.g. IP65 without case filling, upon request
- Case/connection welded for lower back process connection or centre back process connection upon request
- Other case fillings upon request
- Model RChG 63 3, bottom connection (lower back connection or centre back connection upon request) for ambient temperatures to -40 °C (-40 °F) For ambient temperatures below -20 °C (-4 °F) we recommend: pressure gauges with crimped-on ring case models RChg or RChgG
- Versions for medium temperatures up to +300 °C (+572 °F) but without case filling upon request
- Position of connection radial at 3 o'clock, 9 o'clock, 12 o'clock (others upon request) or other than vertical installation (90°):
- for models without case filling and filled models with pressure equalizing membrane
- for filled models without pressure equalizing membrane upon request
- GOST version for Russia, Ukraine, Kazakhstan, Belarus
- Sour gas resistant version according to NACE

Accessories

Chemical seals: see catalogue heading 7 Other accessory: see catalogue heading 11

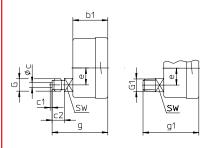
Case Configurations, Code Letters, Dimensional Data and Weights, Blow-out Device

(without code letters)

Lower Back Connection

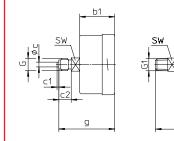
without mounting device

code letter: r

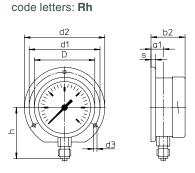


Centre Back Connection

code letters: rm



g1



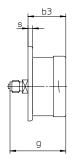
with back flange for surface mounting

code letters: rRh



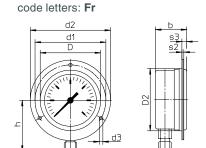
(available upon request, however not recommended according to DIN EN 837-1)

code letters: rmRh



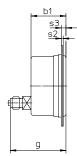
(available upon request, however not recommended according to DIN EN 837-1)

with front flange for panel mounting

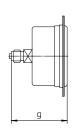


(available upon request, however not recommended according to DIN EN 837-1)

code letters: rFr



 $code\ letters: \textbf{rmFr}$



front flange with slotted holes, separate cover ring, recommended panel cut out: Ø 67 ±0.3 mm (2.64 ±0.012")

Din	Dimensional Data (mm/inch) and Weights (kg/lb)																						
NC	S a	a1	b	b1	b2	b3	С	c1	c2	с3	D	D1	D2	d1	d2	d3	е	G	G1	g	g1	h±1	h1±1
63 2 ½		13 0.51																G ¼ B M 12x1.5	1/4" NPT	59 2.32			

s	s2	s3	sw	approx.	weight ¹⁾ RChG		
5	2	5.5		0.18	0.25		
0.2	0.08	0.22		0.4	0.55		

Blow-out Device

Blow-out plug no. 19



Optional

Model RChG, case configurations bottom connection, r, rm:

Blow-out plug no. 24 (reclosable)



¹⁾ data for version without mounting device

Ordering Information

Basic Model:	Bourdon	Tub	e Pressu	ire G	auge with	Bayonet Rin	g C	ase	е			RCh
Case filling:	without											without code letters
	glycerin											G
	fillable ve	rsio	า									(G)
	case Ø 6											63
	copper al		11 (2 72)									-1
	stainless	-	ı									-3
				1000	hau maarama	ent stainless	0400	.l.l.		tad aafat		-
	Bourdon t	- I D	– 6									
	form, botte											
Case configuration:	case/con	inec	tion		screwed							without code letters
						welded (only						V
						bottom conn	ieci	IOH	1)			
	position of	of the	connec	tion		bottom conn						without code letters
						lower back of						r
						centre back	con	ne	ction			rm
	mounting	dev	ice			without						without code letters
						back flange for surface mounting					9	Rh
						front flange						Fr
Pressure ranges:	-1200	/	0	mba	r	30" hg va	ac.	_		0 psi		
	-0.6	/	0	bar						-		
	-1	/	0	bar								
	-1	/	+0.6			30" hg va	ac.	_		15 psi		
	-1	/	+1.5			30" hg va				30 psi		
	-1	/	+3	bar		30" hg va				60 psi		
	-1 -1	/	+5	bar		30" hg va				100 psi		
	-1 -1	/	+9	bar		30" hg va				160 psi		
	-1	/	+15			30" hg va						
	-1	/	+13	bar						200 psi		
	0		0.0	la a u		30" hg va				300 psi		
	0	_		bar			-	-		10 psi		
	0	-		bar			0	-		15 psi		
	0	_		bar								
	0	-		bar			0	_		30 psi		
	0	-	4	bar			0	_		60 psi		
	0	-	6	bar				-		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		
								_		000 psi		
	0	_	100	bar			0	_		500 psi		
	0	_	160	bar				_		000 psi		
			.00				0	_		000 psi		
	0	_	250	bar				_		000 psi		
	0		230	bai			0	_		000 psi		
	0	_	400	bar				_		000 psi		
	0	-	600	bar	forture	2 and C	0	-		000 psi		
	0	_	1000	nar	for types -	- 3 and - 6	0	_	15,	000 psi		
240000	otomal =l	th:	od		C1/ B	1	jac -		0	600		C1/ P
	standard	inre	au		G¼B	-1				600 bar		G¼B
John Collon.	options				1/4" NPT	- 3 and - 6	IIIć	ıĸ.	0 – 1	ooo bar		1/4" NPT
					M 12x1.5				0	400 !		M 12x1.5
					G%B	- 1 and - 6						G%B
					1/8" NPT	-3	ma	ιX.	0 –	600 bar		1/8" NPT
Options:	see page	4										

Ordering Information, Further Options

Basic Model:	Bourdon Tube Pressure Gauge with B	avonet Pina Case		RCh									
Model code:	-bouldon lube Flessure Gauge with b	ayonet hing case		see page 3									
Options:	adjustable pointer												
	red mark	on the dial											
	stationary red pointer	on the dial											
		adjustable with removable ring											
	stationary red pointer	integrated in polycarbonate window											
		adjustable externally	removable key	ә у									
			non-removable key										
	min./max. drag indicator	integrated in polycarbonate window											
	measuring spans 2.5 bar onwards	adjustable externally	removable key										
			non-removable key										
	receiver gauge 0.2 - 1 bar (3 - 15 psi),	linear											
	scale 0 – 100 %	square											
	special adjustment (reference points = 0												
	window	laminated safety glass for type – 1 (=	= S2 see below)										
		acrylic glass (PMMA) ¹⁾											
			S2 see below)										
	movement	stainless steel for type – 1 (for – 3 and											
	pressure equalizing membrane for model RChG with blow-out device Ø 1" (25 mm) at the back of the case for bottom connection and lower back connection												
	blow-out plug no. 24 (reclosable)												
	case ventilation no. 22 for outdoor insta	llation											
	case polished												
	bayonet ring polished												
	leak test of the measuring unit	with helium leak detection up to 10-9 m	nbar I/s										
		for types – 3 and – 6											
	wetted parts free of grease and oil	adjustment ≤250 bar (3,000 psi) with di											
	up to 0 – 600 bar (0 – 10,000 psi)	≥400 bar (5,000 psi) with distilled water											
		dial marking: symbol crossed out oil ca											
	oxygen version up to 0 – 600 bar (0 – 10,000 psi) ²⁾	free of grease and oil as above, addition in the inlet port, orifice Ø 0.3 mm (0.01)											
	up to 0 – 600 bar (0 – 10,000 psr)-/	dial inscription: oxygen											
		DIN EN 837-1 in connection with oxyg	en version requires										
		safety category S23) or S3	·										
	silicone-free version												
	version:	dial marking: symbol											
	DNV GL or Russian Sea Register	copy of the certificate upon request											
	RChG 63	, ,											
	safety category S2	for type -1 to $0 - 600$ bar $(0 - 10,000)$	si),										
		window laminated safety glass or poly	carbonate (PC)										
	restrictor screw in the pressure inlet	orifice Ø 0.8 mm (0.03")											
	port, material: like process connection	orifice Ø 0.6 mm (0.02") (not for Monel											
	brass, stainless steel or Monel	orifice Ø 0.3 mm (0.01") (not for Monel)											
	instrument tag	stainless steel plate 12 x 55 mm (0.47											
		sticker on the case coverage											

Special Versions: Please describe your requirements in cleartext!