

Bourdon Tube Pressure Gauges

Crimped-on ring case stainless steel

RChg 63
RChgG 63

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 – 1 000 bar
(0 – 10 000 psi 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

Model RChgG: glycerin

Nominal Case Size

63 mm (2½")

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: screwed

Position of the

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)
- u-clamp for panel mounting (BFr)

Pressure Ranges (DIN EN 837-1)

0 – 0.6 bar to 0 – 1 000 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 ¼ B (¼" BSP)

Window

Polycarbonate 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

S2 safety pressure gauge,

proved: RChg 63 – 3 up to 1 000 bar (15 000 psi)

RChgG 63 – 3 up to 600 bar (10 000 psi)

optional: type – 1 with laminated safety glass
or polycarbonate

Ordering Information, Standard Pressure Ranges, Options

See pages 3 and 4

Further Options

- Increased measurement accuracy
- Version as refrigeration gauge with temperature scale (see technical information sheet T01-000-015)
- Types – 3v for ambient temperatures down to -60 °C (-76 °F)
- Position of connection radial at 3 o'clock, 9 o'clock, 12 o'clock or other than vertical installation (90°)
 - for unfilled models
 - for filled models with pressure equalising membrane
- GOST version for Russia and Kazakhstan
- Sour gas resistant version according to NACE

Special Versions Upon Request

- Other process connections
- Other pressure ranges and/or special scales, e.g. dual scale bar/psi, coloured fields or ranges, dial inscriptions, negative scale
- Case parts 316L (1.4404)
- Increased degree of protection, e.g. IP65 without case filling
- Case/connection welded for lower back or centre back connection
- Other case fillings
- Other position of connection

Accessory

See catalogue heading 11

www.armano-messtechnik.com

ARMANO

ARMANO Messtechnik GmbH

Location Beierfeld

Am Gewerbepark 9 • 08344 Grünhain-Beierfeld
Tel.: +49 3774 58 – 0 • Fax: +49 3774 58 – 545
mail@armano-beierfeld.com

Location Wesel

Manometerstraße 5 • 46487 Wesel-Ginderich
Tel.: +49 2803 9130 – 0 • Fax: +49 2803 1035
mail@armano-wesel.com

1212

02/22

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

Bottom Connection	Lower Back Connection	Centre Back Connection
without mounting device		
without code letters 	code letter r 	code letters rm
with back flange for surface mounting		
code letters Rh 	code letters rRh 	code letters rmRh
with front flange for panel mounting		
code letters rFr 	code letters rmFr 	
recommended panel cut out $\varnothing 67 \pm 0.3$ mm (2.64 ± 0.012")	recommended panel cut out $\varnothing 67 \pm 0.3$ mm (2.64 ± 0.012")	
with u-clamp for panel mounting		
code letters rBFr 	code letters rmBFr 	
recommended panel cut out $\varnothing 64 \pm 0.3$ mm (2.52 ± 0.012")	recommended panel cut out $\varnothing 64 \pm 0.3$ mm (2.52 ± 0.012")	

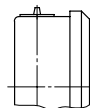
Dimensional Data (mm/inch) and Weight (kg/lb)

NCS	a	a1	b	b1	b2	b3	c	c1	c2	c3	D	D1	D2	d1	d2	d3	e	G	G1
63	10	13	34	38	37	41	5	2	13	13	67	62	64	75	85	3.6	18	G 1/4 B	1/4" NPT
2 1/2"	0.39	0.51	1.34	1.5	1.46	1.61	0.2	0.08	0.51	0.51	2.64	2.44	2.52	2.95	3.35	0.14	0.71		

g	g1	h ^{±1}	h1 ^{±1}	s	s1	s3	s4	SW	approx. weight ¹⁾	
									RChg	RChgG
61	61	54	54	5	1	10.5	9.5	14	0.18	0.25
2.4	2.4	2.13	2.13	0.2	0.04	0.41	0.37	0.55	0.4	0.55

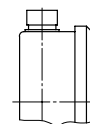
Blow-out Device

Blow-out plug no. 19



Optional

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



¹⁾ data for versions without mounting device

Ordering Information

Basic Model:		Bourdon Tube Pressure Gauge with Crimped-on Ring Case		RChg
Case filling:	without glycerin fillable version			without code letters G (G)
Nominal case size:	case Ø 63 mm (2½")			63
Wetted material:	copper alloy			- 1
	stainless steel			- 3
	Monel, 0 – 1 bar to 0 – 1 000 bar, movement stainless steel, polycarbonate, Bourdon tube Monel gas-shielded arc welding, ≤60 bar c-form, ≥100 bar helical form, bottom connection, optional r (no rm), safety version S2 up to 0 – 600 bar			- 6
Case configuration:	case/connection	screwed welded (type – 3 bottom connection only)		without code letters v
	position of the connection	bottom connection lower back connection centre back connection		without code letters r 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 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
	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 – 1 000 bar for types – 3 and – 6		0 –	15 000 psi
Process connection:	standard thread	G ¼B	- 1	max. 0 – 600 bar
	options	¼" NPT	- 3 and - 6	max. 0 – 1 000 bar
		M 12x1.5		
		G ½B	- 1 and - 6	max. 0 – 400 bar
		½" NPT	- 3	max. 0 – 600 bar
Options:	see page 4			
Example:				RChg 63 – 3 rmFr, 0 – 6 bar, G ¼B

