

Bourdon Tube Pressure Gauges



RSCh 63
RSChG 63

Bayonet ring case stainless steel

Safety category S3 according to DIN EN 837-1

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)

Case

With bayonet ring, stainless steel 304 (1.4301)

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

IP54

IP65 for model RSChG

Blow-out Device

Blow-out back; when pressure increases in the case, the entire case back separates, allowing full relief

Case Ventilation

Model RSChG without ventilation, but with internal pressure compensation via pressure equalizing membrane

Case Filling

For model RSChG: glycerin

Nominal Case Size

63 mm (2 1/2")

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: screwed

Position of the connection:
- bottom connection
- lower back connection (r)
(for model RSCh 63 – 3 and 63 – 6)

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 – 3
0 – 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

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

S3, safety pressure gauge with break-proof solid front and blow-out back

proved: pressure ranges up to 1000 bar (15,000 psi) (type – 3)
up to 600 bar (10,000 psi) (type – 1)
bottom connection: RSCh and RSChG
lower back connection: RSCh 63 – 3
marking S, see also sectional drawing overleaf

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), others 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
- Case parts 316L (1.4404) upon request
- Increased degree of protection, e.g. IP65 without case filling, upon request
- Other case fillings upon request
- Model RSChG 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 RChG
- Position of connection radial at 3 o'clock, 9 o'clock, 12 o'clock (others upon request) or other than vertical installation (90°):
- GOST version for Russia, Ukraine, Kazakhstan, Belarus
- Sour gas resistant version according to NACE

Accessories

Chemical seals: see catalogue heading 7
Electrical: see catalogue heading 9.1
see data sheet 1619.1 ff
Other accessory: see catalogue heading 11

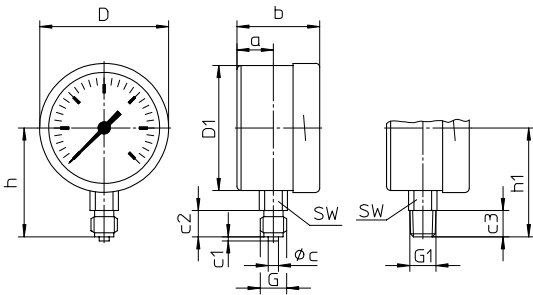
www.armano-messtechnik.com

Case Configurations, Code Letters, Dimensional Data and Weights, Schematic Drawing

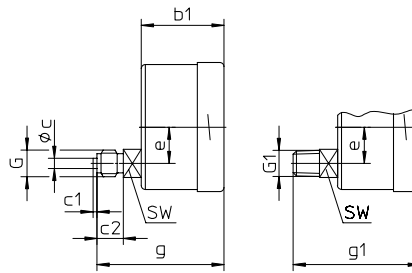
Bottom Connection Lower Back Connection (only type – 3 and – 6)

without mounting device

(without code letters)

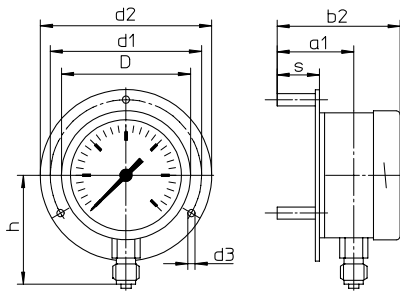


code letter: r



with back flange for surface mounting

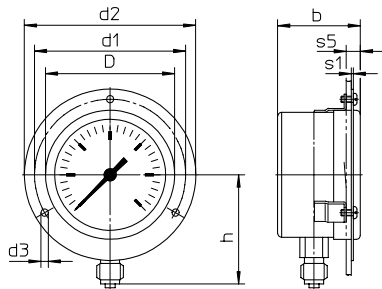
code letters: Rh



Version Rh including 3 separate mounting spacers.

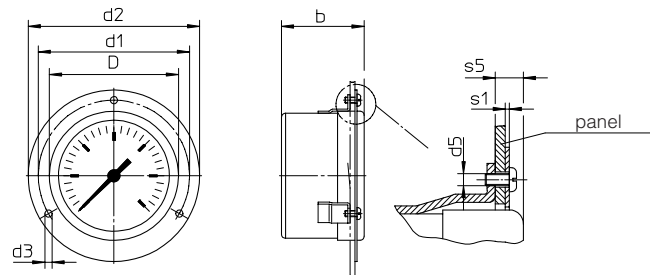
with front flange for panel mounting

code letters: Fr



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

code letters: rFr



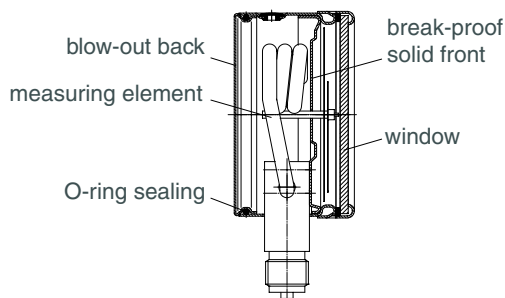
recommended panel cut out $\varnothing 67 \pm 0.5 \text{ mm}$ ($2.64 \pm 0.02''$)

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

NCS	a	a1	b	b1	b2	c	c1	c2	c3	D	D1	d1	d2	d3	d5	e	G	G1	g	g1	h ^{±1}	h1 ^{±1}
63	18	38	41	41	61	5	2	13	13	64	62	75	85	3.6	M3	18	G 1/4 B	1/4" NPT	63	63	54	54
2 1/2"	0.71	1.5	1.61	1.61	2.4	0.2	0.08	0.51	0.51	2.52	2.44	2.95	3.35	0.14		0.71	M12x1.5		2.48	2.48	2.13	2.13

s	s1	s5	SW	approx. weight ¹⁾	
				RSCh	RSChG
21	1	7	14	0.18	0.25
0.83	0.04	0.28	0.55	0.4	0.55

Schematic Drawing



¹⁾ data for versions without mounting device

Ordering Information

Basic Model:		Bourdon Tube Pressure Gauge with Bayonet Ring Case		RSCh	
Case filling:	without glycerin fillable version			without code letters G (G)	
Nominal case size:	case Ø 63 mm (2½")			63	
Wetted material:	copper alloy stainless steel Monel, 0 – 1 bar to 0 – 1000 bar, movement stainless steel, laminated safety glass, Bourdon tube Monel gas-shielded arc welding, ≤60 bar c-form, ≥100 bar helical form, bottom connection, optional r			- 1 - 3 - 6	
Case configuration:	case/connection position of the connection mounting device	screwed bottom connection lower back connection (only RSCh -3/-6)		without code letters without code letters r without code letters Rh Fr	
Pressure ranges:	-1200 / 0 mbar -0.6 / 0 bar -1 / 0 bar -1 / +0.6 bar -1 / +1.5 bar -1 / +3 bar -1 / +5 bar -1 / +9 bar -1 / +15 bar 0 - 0.6 bar 0 - 1 bar 0 - 1.6 bar 0 - 2.5 bar 0 - 4 bar 0 - 6 bar 0 - 10 bar 0 - 16 bar 0 - 25 bar 0 - 40 bar 0 - 60 bar 0 - 100 bar 0 - 160 bar 0 - 250 bar 0 - 400 bar 0 - 600 bar 0 - 1000 bar	30" hg vac. - 0 psi 30" hg vac. - 15 psi 30" hg vac. - 30 psi 30" hg vac. - 60 psi 30" hg vac. - 100 psi 30" hg vac. - 160 psi 30" hg vac. - 200 psi 30" hg vac. - 300 psi 0 - 10 psi 0 - 15 psi 0 - 30 psi 0 - 60 psi 0 - 100 psi 0 - 160 psi 0 - 200 psi 0 - 300 psi 0 - 400 psi 0 - 600 psi 0 - 800 psi 0 - 1,000 psi 0 - 1,500 psi 0 - 2,000 psi 0 - 3,000 psi 0 - 4,000 psi 0 - 5,000 psi 0 - 6,000 psi 0 - 10,000 psi 0 - 15,000 psi			e.g. 0 – 6 bar
Process connection:	standard thread options	G ¼B - 1 max. 0 – 600 bar ¼" NPT - 3 and - 6 max. 0 – 1000 bar M 12x1.5 G ½B - 1 and - 6 max. 0 – 400 bar ½" NPT - 3 max. 0 – 600 bar		G ¼B ¼" NPT M 12x1.5 G ½B ½" NPT	
Options:	see page 4				

Example:

RSCh 63 – 3 rFr, 0 – 6 bar, G ¼B

