

# Bourdon Tube Pressure Gauges

Bayonet Ring Case Stainless Steel,  
Safety Category S3 according to EN-837-1



**RSCh 63**  
**RSChG 63**

## 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 1.6

Class 2.5 for pressure ranges 0-600 and 0-1,000 bar  
(0-10,000 and 0-15,000 psi)

### Case

Bayonet ring, 1.4301 (304 stainless steel)

### Gehäuse-Schutzart (EN 60 529 / IEC 529)

IP 54,

IP 65 for model RSChG

### Blow-out Device

Blow-out back; should the bourdon tube rupture, the entire case back separates, allowing full relief.

### Case Ventilation

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

### Gehäusefüllung

for model RSChG: glycerine

### Nominal Case Size

63 (mm) (2½")

### 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

Type -1: Connection: brass

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

### Case Configuration

Connection: screwed

Position of the connection: bottom connection,  
Model RSCh 63-3 and 63-6,  
optional lower back connection (r)

Mounting device: without, optional back flange for  
surface mounting (Rh) / front flange  
for panel mounting (Fr), 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 ¼ B (¼" BSP)

### Window

Laminated safety glass

### 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

S3, safety pressure gauge with break-proof solid front,  
proved: pressure ranges up to 1,000 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 , see also sectional drawing overleaf.

## Ordering Information, Standard Pressure Ranges, Options:

see pages 3 and 4

## Special Versions and further options among others

- Special process connections, e. g. VCR-F, VCR-M, VCR-M short (see technical information sheet T01-000-006), others 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
- Case parts 1.4404 (316 L stainless steel)
- Increased case protection type, e. g. IP 65 without case filling, upon request
- Other case fillings upon request
- Model RSChG for ambient temperatures down to -40 °C (-40 °F) upon request. Our recommendation for ambient temperatures below -20 °C (-4 °F); models RChG resp. RChG
- Position of connection radial at 3 o'clock, 9 o'clock or 12 o'clock (others upon request) or other than vertical installation (90°)
- GOST-version for Russia, Ukraine, Kazakhstan
- Sour gas-resistant version according to NACE

## Accessory:

Chemical seals: see catalogue-heading 7

Electrical: limit switch contact assembly DS 1619.1 and catalogue-heading 9.1

Other accessory: see catalogue-heading 11



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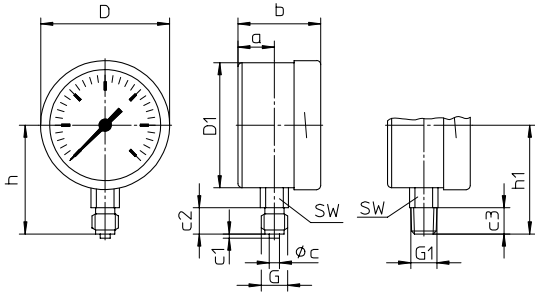
# Case Configurations, Code Letters, Dimensional Data and Weights, Blow-out Device

## Bottom connection

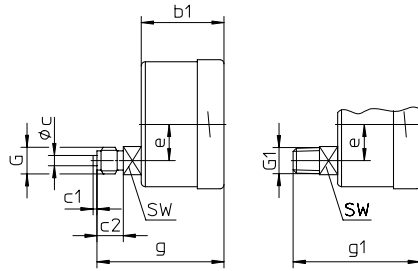
## Lower back connection (only -3 and -6)

### No mounting device

(no additional code letter)

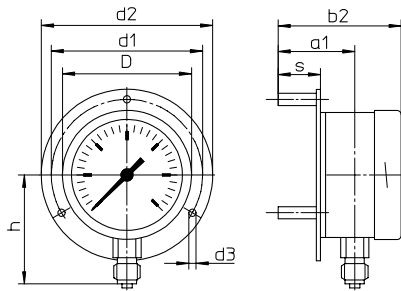


code letter: r



### Back flange for surface mounting

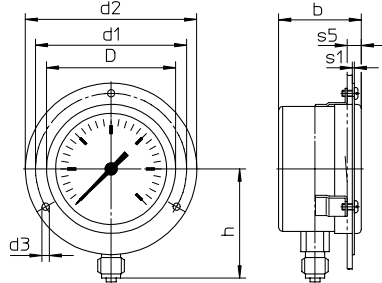
code letters: Rh



Version Rh including 3 separate mounting spacers.

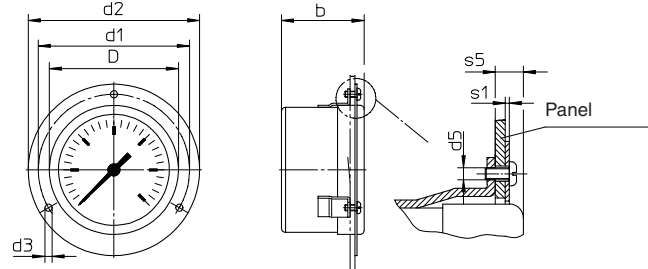
### Front flange for panel mounting

code letters: Fr



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

code letters: rFr



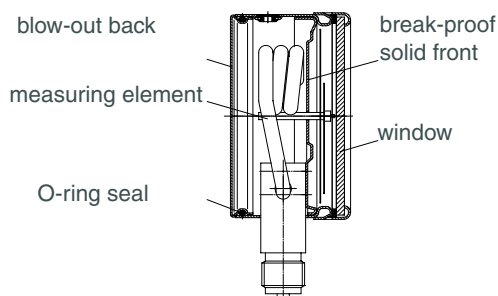
recommended panel cut out for  $\varnothing 67 \pm 0.5 (0.02")$

### Dimensional data (mm / inches) 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 <sup>±1</sup>	h1 <sup>±1</sup>
63 2 1/2"	18 .71	38 1.5	41 1.61	41 1.61	61 2.4	5 .2	2 .08	13 .51	13 .51	64 2.52	62 2.44	75 .95	85 3.35	3.6 .14	M3	18 .71	G 1/4 B 1/4" BSP M 12x1.5	1/4" NPT	63 2.48	63 2.48	54 2.13	54 2.13

s	s1	s5	SW	approx. weight <sup>1)</sup>	
				RSCh	RSChG
21 .83	1 .04	7 .28	14 .55	0.18 .39	0.25 .55

### Schematic drawing





## Further Options regarding Ordering Information

Basic Model: Bourdon Tube Pressure Gauge, Bayonet Ring Case		RSch	
Model Code:		see page 3	
Options:	adjustable pointer	(order at the moment still as cleartext)	
	red mark on the dial		
	stationary on the dial,		
	red pointer adjustable when removable ring		
	receiver gauge 0.2-1 bar, scale 0-100%		linear square
	special adjustment (reference points = odd values, e. g. 100 KN = 8.735 bar)		
	window polycarbonate (PC)		
	movement stainless steel for type -1 (for -3 and -6 standard)		
	case ventilation no. 22 for outdoor installation		
	case polished		
	bayonet ring polished		
	density examination with helium leak detection up to of the measuring unit 10 <sup>-9</sup> mbar l/s for types -3 and -6		
	wetted parts, free of grease and oil, up to 0-600bar (0-10,000 psi)		adjustment ≤ 250 bar (3,000 psi) with dry air, ≥ 400 bar (5,000 psi) with distilled water, dial marking: symbol cancelled oil can
	oxygen version up to 0-600 bar <sup>1)</sup> (0-10,000 psi)		free of grease and oil, additional restrictor screw in the inlet port, orifice Ø 0.3 mm (0.01"), dial inscription: oxygen
	silikonfreie Ausführung		
restrictor screw in pressure inlet port material: as process connection brass, stain- less steel or Monel	orifice Ø 0.8 mm (0.03") orifice Ø 0.6 mm (0.02") (not Monel) orifice Ø 0.3 mm (0.01") (not Monel)		
measuring point marking	stainless steel-plate 12 mm x 55 mm (0.47" x 2.17"), wire mounting or sticker on case coverage		

### Special Versions: Please describe your requirements clearly

<sup>1)</sup> for instruments without case filling

Technical changes, replacement of materials and errors excepted.