

Bourdon Tube Safety Pressure Gauges

Crimped-on ring case stainless steel

Safety category S3 according to DIN EN 837-1 up to 1600 bar



RSChg 160 – 3v

RSChgG 160 – 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 1.0

Case

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

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

IP66

Blow-out Device

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

Case Ventilation

Not required, internal pressure compensation via pressure equalising membrane

Case Filling

For model RSChgG: glycerin

Nominal Case Size

160 mm (6")

Wetted Parts

Connection:	stainless steel 316L (1.4404)
Bourdon tube:	stainless steel 316L (1.4404)
	gas-shielded arc welding
	≤ 40 bar (600 psi) c-form
	≥ 60 bar (800 psi) helical form
	≥ 1600 bar (20 000 psi) NiFe-alloy helical form

Case Configuration

Connection:	welded
Position of the connection:	bottom connection
Mounting device:	- without - back flange for surface mounting (Rh)

Pressure Ranges (DIN EN 837-1)

0 – 0.6 bar to 0 – 1600 bar (0 – 10 psi to 0 – 20 000 psi)¹⁾

Process Connection

G ½ B (½" BSP)

Window

Laminated safety glass

Movement

Stainless steel

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

Marking , see sectional drawing on page 2

Ordering Information, Standard Pressure Ranges, Options

See pages 3 and 4

Further Options

- Extended ambient temperature range down to –60 °C (–76 °F) with case filling silicone oil
- Position of connection radial at 3 o'clock, 9 o'clock, 12 o'clock or other than vertical installation (90°)
- GOST version for Russia and Kazakhstan
- Sour gas resistant version according to NACE

Special Versions Upon Request

- Other process connections upon request, e.g. high pressure connection with male thread (from 0 – 60 bar)
- Other pressure ranges and/or special scales, e.g. dual scale bar/psi, coloured fields or ranges, dial inscriptions, negative scale
- Other case fillings
- Other position of connection
- IP67 increased degree of protection

Accessories

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

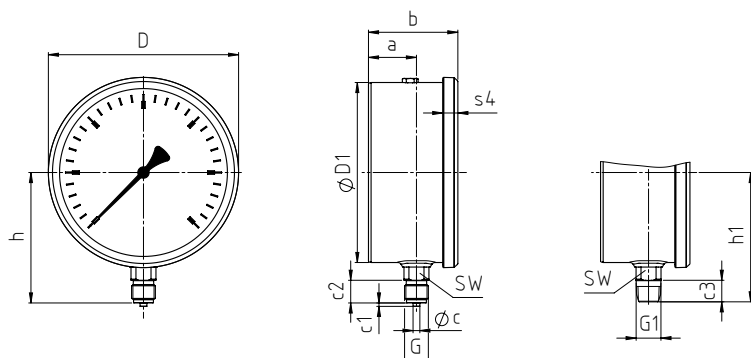
¹⁾ pressure ranges > 1600 bar according to DIN 16 001 see data sheet 1640

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

Bottom Connection

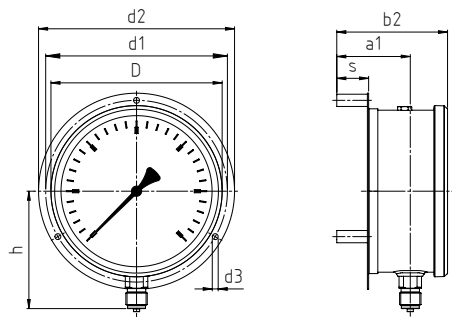
without mounting device

(without code letters)



with back flange for surface mounting

code letters: **Rh**

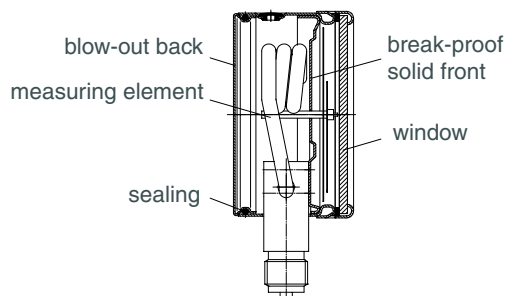


Version Rh including 3 separate mounting spacers.

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

NCS	a	a1	b	b2	c	c1	c2	c3	D	D1	d1	d2	d3	G	G1	h±1	h1±1	s	SW	approx. weight ¹⁾	
																				RSch	RSchG
160	43	73	79	108	6	3	20	19	167	159	178	196	5.8	G ½B	½" NPT	115	114	31.5	22	1.35	2.35
6"	1.69	2.87	3.11	4.25	0.24	0.12	0.79	0.75	6.57	6.26	7.01	7.72	0.23	M20x1.5		4.53	4.49	1.24	0.87	2.98	5.18

Schematic Drawing



¹⁾ data for versions without mounting device

Ordering Information

Basic Model:		Bourdon Tube Safety Pressure Gauge with Crimped-on Ring Case		RSChg
Case filling:	without			without code letters
	glycerin			G
	fillable version			(G)
Nominal case size:	case Ø 160 mm (6")		160	
Wetted material:	stainless steel		- 3	
Case configuration:	case/connection	welded		v
	position of the connection	bottom connection		without code letters
	mounting device	without back flange for surface mounting		without code letters Rh
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	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	
		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	0	- 15 000 psi		
0 - 1 600 bar	0	- 20 000 psi		
Process connection:	standard thread	G ½ B	max. 0 - 1 600 bar	G ½ B
	options	½" NPT		½" NPT
		M20x1.5		M20x1.5
	high pressure connection female thread (from 0 - 60 bar) for ¼" tube, with 60° cone	M 16x1.5 ⅜" - 18 UNF		HP connection M 16x1.5 HP connection ⅜" - 18 UNF
Options:	see page 4			
Example:				RSChgG 160 - 3v, 0 - 6 bar, G ½ B

