

Bourdon Tube Pressure Gauges

Bayonet Ring Case Stainless Steel,
American Case Type (wide ring)

RCha 63
RChaG 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

Wide bayonet ring, polished (American case type),
1.4301 (304 stainless steel)

Case Protection Type (EN 60 529 / IEC 529)

IP 54,
IP 65 for model RChaG (pressure ranges ≥ 2.5 bar and above),
for case configuration rFr and closed blow-out plug

Blow-out Device

Blow-out device at the top of the case;
Blow-out plug for case configuration rFr

Case Ventilation

By blow-out device resp. blow-out plug; for blow-out plug ventilation
for internal pressure compensation required for pressure ranges
 ≤ 10 bar and also recommended for other pressure ranges, as far
as the operating conditions allow this.

Case Filling

for model RChaG: 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,
optional lower back connection (r) /
centre back connection (rm)
Mounting device: without, optional back flange for
surface mounting (Rh) / front flange
for panel mounting (Fr) or u-clamp for
panel mounting (BFr), 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 for type -3
Instrument glass for type -1



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

S1 pressure gauges with blow-out device

Ordering Information, Standard Pressure Ranges, Options:

see pages 3 and 4

Special Versions and further Options among others

- Other process connections 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 RChaG for ambient temperatures down to -40 °C (-40 °F) upon request. Our recommendation for ambient temperatures below -20 °C (-4 °F); models RChg resp. 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 or 12 o'clock (others upon request), or other than vertical installation (90°) for dry version
- 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 and reed switch
DS 1219.4 and catalogue heading 9.1
Other accessory: see catalogue-heading 11



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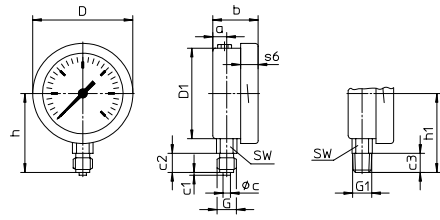
11/09

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

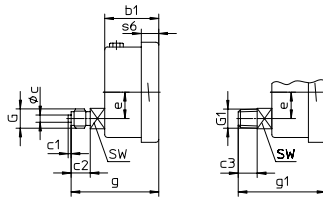
| Bottom connection | Lower back connection | Centre back connection |
|-------------------|-----------------------|------------------------|
|-------------------|-----------------------|------------------------|

| No mounting device | | |
|--------------------|--|--|
|--------------------|--|--|

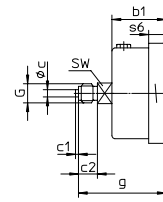
(no additional code letter)



code letter: r

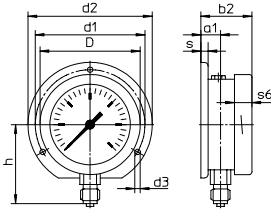


code letters: rm

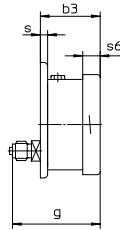


| Back flange for surface mounting | | |
|----------------------------------|--|--|
|----------------------------------|--|--|

code letters: Rh

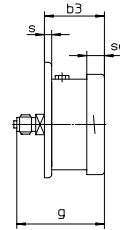


code letters: rRh



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

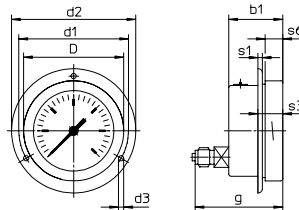
code letters: rmRh



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

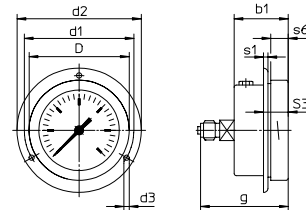
| Front flange for panel mounting | | |
|---------------------------------|--|--|
|---------------------------------|--|--|

code letters: rFr



recommended panel cut out $\varnothing 64 \pm 0.5$ mm (0.02")

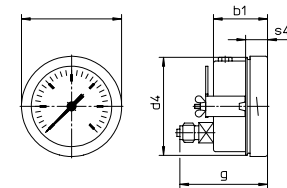
code letters: rmFr



recommended panel cut out $\varnothing 64 \pm 0.5$ mm (0.02")

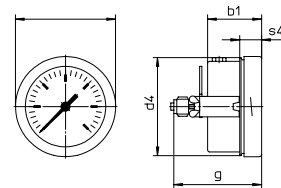
| U-clamp for panel mounting | | |
|----------------------------|--|--|
|----------------------------|--|--|

code letters: rBFr



recommended panel cut-out $\varnothing 64 \pm 0.5$ mm (0.02")

code letters: rmBFr



recommended panel cut out $\varnothing 64 \pm 0.5$ mm (0.02")

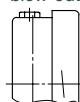
Dimensional data (mm / inches) and weights (kg / lb)

| NCS | a | a1 | b | b1 | b2 | b3 | c | c1 | c2 | c3 | D | D1 | d1 | d2 | d3 | d4 | e | G | G1 | g | g1 | h ±1 | h1 ±1 |
|-----------|------------|-------------|------------|------------|------------|------------|----------|----------|-----------|-----------|-------------|------------|------------|------------|------------|------------|-----------|-----------------------------|--------|------------|------------|------------|------------|
| 63 2½" | 9.5 .37 | 13.5 .53 | 31 1.22 | 37 1.46 | 35 1.38 | 41 1.61 | 5 .20 | 2 .08 | 13 .51 | 13 .51 | 68.5 2.7 | 62 2.44 | 75 2.95 | 85 3.35 | 3.6 .14 | 67 2.64 | 18 .71 | G ¼ B ¼" BSP M 12x1.5 | ¼" NPT | 60 2.36 | 60 2.36 | 54 2.13 | 54 2.13 |

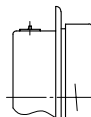
| s | s1 | s3 | s4 | s6 | SW | approx. weight ¹⁾ | |
|----------|----------|-----------|-----------|-----------|-----------|------------------------------|-------------|
| | | | | | | RChA | RChAG |
| 5 .20 | 3 .12 | 17 .67 | 15 .59 | 12 .47 | 14 .55 | 0.18 .4 | 0.25 .56 |

Blow-out device

Blow-out device
 Pressure range ≤ 1.6 bar (23.20 psi) blow-out device no.5
 ≥ 2.5 bar (30 psi) blow-out device no.3



Case configuration rFr
 Blow-out plug 19



¹⁾ Information for version without mounting device

