

Bourdon Tube Pressure Gauges

Bayonet Ring Case Stainless Steel, Solid Front and Blow-out Back
with Reed-Switch 201

Model

RSCh 63



This data sheet contains all important information about our pressure gauge model RSCh 63, provided **with reed contact assembly**. The reed switch 201 is a fast special limit-switch device that is able to switch even very low signals. It is a bistable switch which supplies a constant signal over the complete remaining range after reaching the contact.

Standard Configuration

Technical details and options of model RSCh 63 in standard version, information about applications and standard pressure ranges etc. can be found on **data sheet 1610** and **general information leaflet 1000**.

These data are also valid for the reed-switch version, as far as there are no deviating information below.

The reed-switch version is available without case filling only.

Window

Laminated safety glass, case configurations Fr, rFr: polycarbonate

Safety Features

S3 EN837-1, solid front and full blow-out safety back, see data sheet 1610

Minimum Pressure Ranges

2.5 bar or 30 psi (also compound ranges)

(since every pressure gauge needs a sufficient amount of torque to operate a limit-switch contact with minimized error)

Limit-switch Adjustment

- possible after removing the bayonet ring with window (by hand);
- versions Fr and rFr adjustment from outside (through the window), with removable key

Adjustment Range

any pressure value between minimum 2% and maximum 90% of full scale value

Make/Break Operations

- Switching is requested when the pointer is moving in clockwise direction (e.g. rising pressure or decreasing vacuum; standard-version):

R1 making or **R2 breaking**

- Switching is requested when the pointer is moving counterclockwise (e.g. decreasing pressure or rising vacuum):

R4 making or **R5 breaking**

After a switching contact took place, the pointer can still move forward on the scale without a change in the switching function.

To guarantee an accurate switching function, it is very important to order the required **switching direction properly**, because otherwise the switching hysteresis has to be considered.

Double Reed-Switch

- Any combination of above mentioned switching functions available
- Minimum distance between the 2 set points: 25% f. s.

Electrical Connection

1 m (39,4") connection cable, 2 wires; cable lead through at the bottom of the right side of the case, approx. at 5 o'clock, see drawings overleaf; for double reed-switches with second cable (as above) at the left side of the case, approximately at 7 o'clock



Electrical Data

Max. switching capacity 10 W (DC) or 10 VA (AC)

Max. switching voltage < 75 V DC < 50 V AC

Max. switching current .5 A DC or AC
with resistive load

Switching hysteresis max. 2.5 %

Service life 10⁵-10⁶ switchings

Temperature Limitation

For the reed-switch: -30°C (-22°F) up to + 75°C (167°F)

For the temperature limitations of the pressure gauges please compare data sheet 1610 and general information leaflet 1000.

Special Options

● Electrical connection

- Plug connection acc. to DIN EN 175301-803 for low voltage applications ≤ 48 V positioned at the left side of the case at 9 o'clock (dimensional drawings upon request);
- Other plug connectors, cable glands or others (positioned at the left side of the case at 9 o'clock) upon request
- other positions of the electrical connection upon request

● Reed-switch adjustment

- for case configurations bottom connection, r, Rh: adjustment device outside, with removable key, polycarbonate window (standard for version Fr and rFr)
- Adjustment device with non-removable key upon request

How to Order:

Please specify the pressure gauge model as described in data sheet 1610. The ordering code for the pressure gauge model is extended by the

- Code letter for the reed contact and the
- Code number for the make/break operation (see left), e.g.:

R1 making at clockwise pointer move
R2 breaking at clockwise pointer move
R4 making at counterclockwise pointer move
R5 breaking at counterclockwise pointer move

Special Configurations: upon request

Examples for Ordering Information:

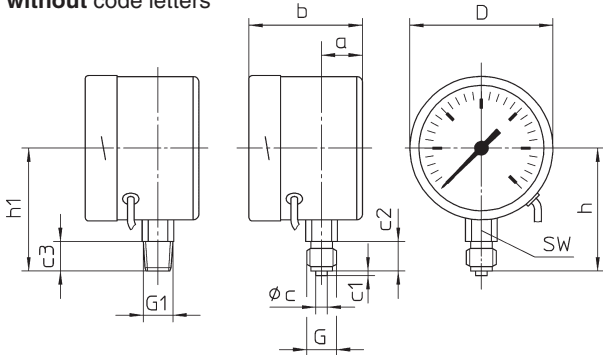
- RSCh 63-3, 0-4 bar, ¼" BSP, R1
- RSCh 63-1, rFr, 0-6 bar, ¼" NPT, R21

Case Configurations, Code Letters, Dimensional Drawings and Weights

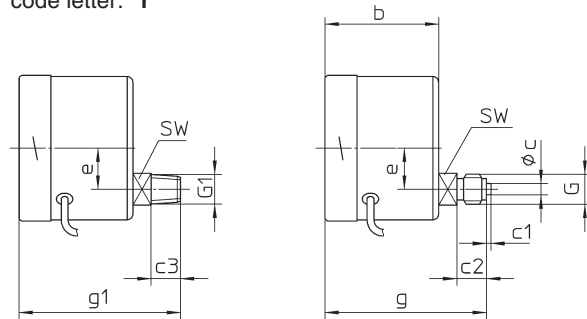
The front-to-back sizes b and $b1$ as well as dimensions g and $g1$ are different than the dimensions of the basic model, please compare table below and data sheet 1610.

The position of the cable entry is shown in the dimensional drawings below. Other positions for the cable entry only upon request (extra charges!).

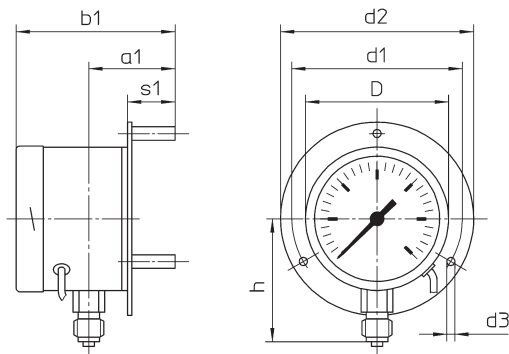
Bottom connection,
without code letters



Lower back connection,
code letter: **r**

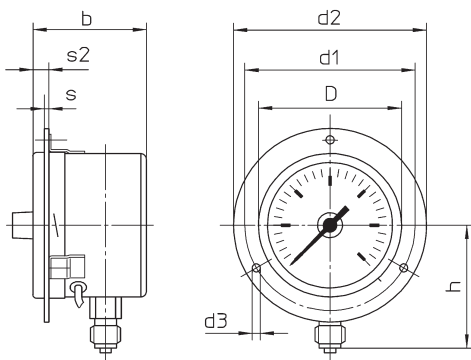


Bottom connection,
rear mounting flange,
code letters: **Rh**

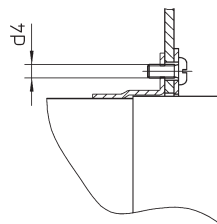
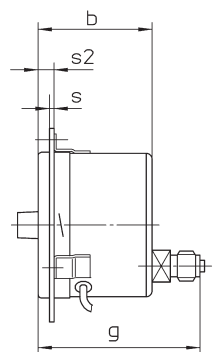


Case configuration "Rh" includes 3 separated mounting spacers.

Bottom connection,
front mounting flange,
code letters: **Fr**



Lower back connection,
front mounting flange,
code letters: **rFr**



Case configurations "Fr" and "rFr" will be supplied with a separated cover front mounting flange and mounting brackets welded to the case.

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

NCS	a	a1	b	b1	c	c1	c2	c3	D	d1	d2	d3	d4	e	G	G1	g ^{±1}	g1 ^{±1}	h ^{±1}	h1 ^{±1}	s	s1	s2	SW	Weight (approx.)
63	18	38	50	70	5	2	13	64	75	85	3.6			18	G ¼ B	¼" NPT	72		54	1	21	7	14	0.29	
2 ½	.71	1.5	1.97	2.76	.2	.08	.51	2.52	2.95	3.35	.14	M3		.71	¼" BSP	¼" NPT	2.83		2.13	.04	.83	.28	.55	.64	