

Bourdon Tube Pressure Gauges

Square Case with Front Frame, Wide Rim (RQB) or Narrow Rim (RQS)

Accuracy class 1

Nom. Sizes 96 (3.78")
144 (5.67")

Models

RQB
RQS

Application

For fluid and gaseous media which are not highly viscous and do not tend to crystallize. The medium must be compatible with the wetted parts; for various applications where a built-in square case is required, e.g. switchboards, electrical control panels, or control boxes

Nominal Case Sizes

96 (3.78 x 3.78"), 144 (5.67 x 5.67")

Accuracy Class

1.0 according to EN 837-1 (i.e. max. $\pm 1.0\%$ of full scale value)

Pressure Ranges (EN 837-1)

0-0.6 up to 0-1000 bar (0-10 up to 0-15,000 psi)
also all standard vacuum and compound ranges

Pressure Limitations (EN 837-1)

Steady pressure: full scale value
Cyclic pressure: 90% of full scale value
Temporary: 130% of full scale value

Temperature Limitations

Ambient temperature: -40 to +60 °C (-4...+140 °F)
Medium temperature: max. +60 °C (+140 °F) soft soldered
max. +100 °C (212 °F) silver brazed / argon arc welded

Temperature Caused Error

The error caused by temperatures differing from the reference temperature of +20 °C (+68 °F) is significant. In correspondence with EN 837-1 it may be up to 0.4% per each +10 °C (+18 °F).

Protection Type (EN 60529 / IEC 529)

IP 43

Further information about advantages, applications, specifications and pressure ranges of Bourdon tube pressure gauges of accuracy class 1.0 to 2.5 can be found on **general information leaflet 1000**.

Standard Configuration

Connection

G ½ B (½" BSP) lower back connection (standard)

Wetted Parts

Version -1: Socket = brass

Bourdon tube:

≤ 40 bar = bronze, C-form, soft-soldered
≥ 60 bar = bronze, helical, silver brazed
1000 bar = 316 stainl. steel (1.4571), helical, silver brazed

Version -3: Socket: = 316 stainless steel (1.4571)

Bourdon tube:

≤ 40 bar = 316 stainl. steel (1.4571), C-Form, argon arc welded
≥ 60 bar = 316 stainl. steel (1.4571), helical, argon arc welded

Movement

Brass / German silver

Dial

Aluminum alloy, black figures, white background

Pointer

Aluminum alloy black

Case

Square case with black front frame (carbon steel), model RQS with narrow rim, model RQB with wide rim, clamp clip for panel mounting

Lens

Single strength glass



Optional Special Configurations

- Process connection ½" NPT, others upon request
- Wetted parts Monel upon request
- Inlet port restrictor screw brass or stainless steel
- Special scales e.g. dual ranges, combination pressure and temperature ranges, fine division (with test gauge pointer)
- Receiver gauge 0.2-1 bar or 3-15 psi
- Movement stainless steel (wear and corrosion resistant)
- Higher pressure ranges upon request
- Nom. size 192 (7.56x7.56") upon request
- Other than vertical installation, e.g. inclined 45° backwards
- Electrical accessories, see data sheets 1590 and 9000 ff.

How to Order:

Please specify:

Model code: **RQB** = Front frame with wide rim
RQS = Front frame with narrow rim

Wetted parts: - 1 or - 3, compare left

Pressure range: according EN 837-1
e.g. **0-4 bar** or -1/+9 bar

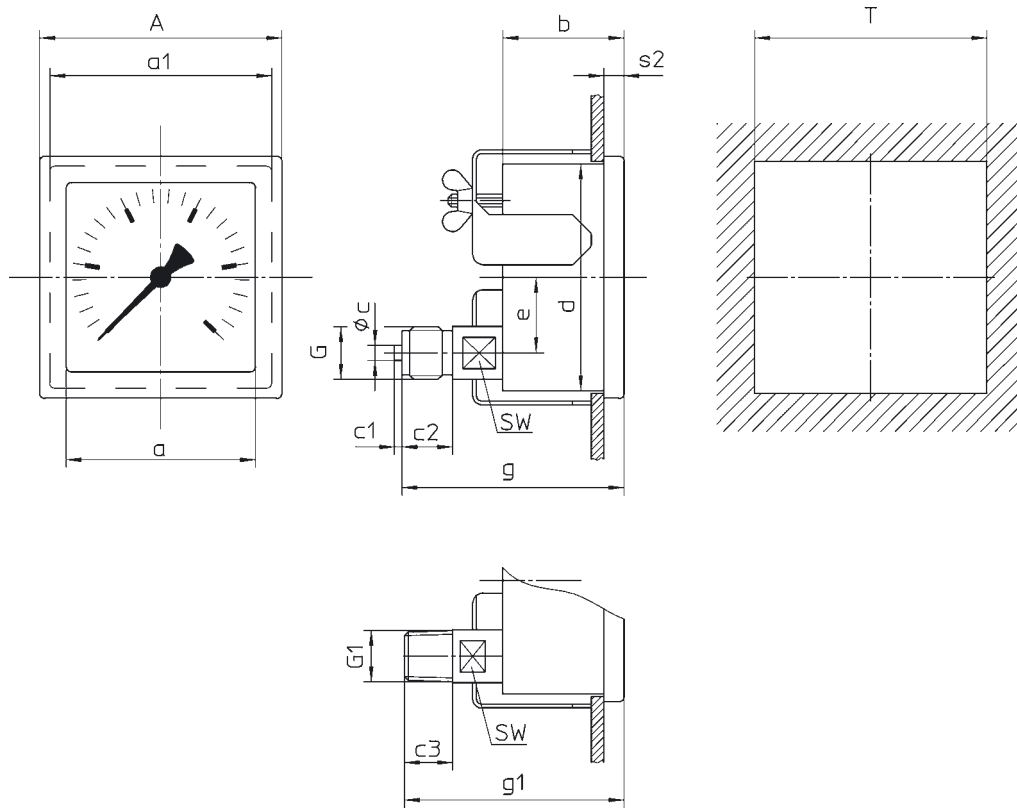
Process connection: **G ½ B (½" BSP)** (= standard)
or ½" NPT, others upon request

Special configurations: (see above)

Examples for Ordering Information:

- RQS 96-3, 0-6 bar, G ½ B
- RQB 144-1, -1/+9 bar, ½" NPT

Dimensions and Weight



Dimensions (mm / inches) and Weight (kg / lb)

Nom. Size A	a ¹⁾	a1 ²⁾	b	c	c1	c2	c3	d	e	G	G1	g	g1	s2	SW	T	Weight (approx.)
96 3.78	75 2.95	88 3.46	48 1.89	6 .24	3 .12	20 .08	19 .75	90 3.54	30 1.18	G ½ B ½" BSP	½" NPT	88 3.46	87 3.43	8 .31	17 .67	92 3.62	0.75 1.65
144 5.67	116 4.57	134 5.28						136 5.35	52 2.05							138 5.43	1.30 2.87
192 7.56	164 6.46	—						184 7.24	186 7.32							2.00 4.41	

¹⁾ model RQB

²⁾ model RQS