

Bourdon Tube Pressure Gauges

Case with Bezel

Accuracy Class 1.0

Nom. Sizes 100 (4")
160 (6")
250 (10")

Model **RÜ**

Application

For fluid and gaseous media (compatible to the wetted materials), which are not highly viscous and do not tend to polymerize.

Nominal Case Size

100, 160, 250 mm (4", 6", 10")

Accuracy Class (EN 837-1)

1.0 (i.e. \pm max. 1.0 % of full scale value)

Pressure Ranges

Version – 1: 0/0.6 to 0/1000 bar resp. 0/10 to 0/15,000 psi

Version – 2: 0/1600 bar resp. 0/20,000 to 0/25,000 psi

Version – 3: 0/0.6 to 0/1600 bar resp. 0/10 to 0/25,000 psi
also corresponding vacuum and compound pressure ranges

Pressure Limitations

Steady pressure: full scale value

Cyclic pressure: 90% of full scale value

Temporary: 130% of full scale value

Protection Type (EN 60 529 / IEC 529)

IP 43

Further information about advantages, applications, specifications, temperature limitations and pressure ranges of Bourdon tube pressure gauges can be found on general information leaflet 1000.

Standard Configuration

Process Connection

1/2" BSP¹⁾ bottom (standard) or lower back (ordering code letter: r)

Wetted Parts

Ordering code –1 : Socket²⁾ = brass

Bourdon tube:

≤ 40 bar = bronze, C-form,
(800 psi) soft soldered

≥ 60 bar = 316 st.st. (1.4571), helical³⁾,
(1,000 psi) silver brazed

≥ 600 bar = alloy steel, helical³⁾,
(8,000 psi) silver brazed

Ordering code –2 : (0/1600 bar, 0/20,000 to 0/25,000 psi)

Socket²⁾ : = 316 stainless steel (1.4571)

Bourdon tube = alloy steel, helical³⁾,
argon arc welded

Ordering code –3: Socket²⁾ = 316 stainless steel (1.4571)

Bourdon tube:

≤ 40 bar = 316 st. steel (1.4571), C-form,
(800 psi) argon arc welded

≥ 60 bar = 316 st.st. (1.4571), helical³⁾,
(1,000 psi) argon arc welded

1600 bar = NiFe-alloy, helical³⁾,
(≥ 20,000 psi) argon arc welded

Movement

Brass / German silver

Dial

Aluminum alloy, black figures, white background

Pointer

Aluminum black

Case and Ring

Case with bezel carbon steel black

Window

Single strength glass;

Versions –2 and –3, pressure range 1600 bar: laminated safety glass

Safety Features

Versions –2 and –3, pressure range 1600 bar: 1" blow-out in the back

¹⁾ = G 1/2 B ²⁾ = shank (EN 837-1); ³⁾ = coiled (EN 837-1)



Special Options

- Process connection M 20 x 1.5, 1/2" NPT, G 1/4 B, 1/4" NPT, high-pressure connections; others upon request
- Inlet port restrictor screw brass, stainless steel, or monel
- Pressure ranges 0/2500 bar, 0/30,000 psi, or 35,000 psi, version –2 or –3, pressure limitation at steady pressure: full scale value, at cyclic pressure: 65% of full span, HP-connection with M16x1.5 female and sealing cone, for 1/4" pipe; optional with 9/16–18 UNF female or 9/16–18 UNF (left) male; others upon request
- Receiver gauges 0.2/1 bar or 3/15 psi
- Special scales, such as dual ranges, special units, fine division (with knife edge pointer) etc.
- Micro-adjustable pointer, mechanism aluminum
- Stationary red pointer on the dial
- Maximum-indicating pointer (pressure ranges \geq 0/2.5 bar) or stationary red pointer with external adjustment, acrylic glass resp. polycarbonate lens
- Other than vertical installation; top or side connection
- Movement stainless steel, wear and corrosion resistant; others upon request
- Acrylic glass lens or laminated safety glass
- 1" blow-out in the back (standard for \geq 1600 bar)
- Splash proofed version (rubber seal ring between window/bezel)
- Bezel or front mtg. flange chromium plated brass
- Case steel sheet (nom. size 100/4") or gray cast iron (nom. size 160/6")
- Nom. size 160 (6") case gray cast iron, cover ring screwed head-on to the case, model RC / RCG 160 (former data sheet 1700)
- Electrical accessories, see data sheets 1190 and 9000 ff

How to Order:

Model code: **RÜ**
Nominal size: **100, 160, 250**
Wetted parts: **–1, –2 or –3** (see left)
Case configurations: **r, Rh, Fr, rFr, rBFr, Er, rEr**, see overleaf.
(standard = bottom connection = without additional code letters)
Pressure ranges: according to EN 837-1
e.g. 0 - 4 bar or 0/60 bar
(compare general info sheet 1000)
Process connection: **1/2" BSP** (= standard) or **1/2" NPT**
(others see above)
Special options: see above

Examples for Ordering Information:

- RÜ100–3 rFr, 0/6 bar, 1/2" BSP
- RÜ 160–1, –1/+9 bar, 1/2" NPT



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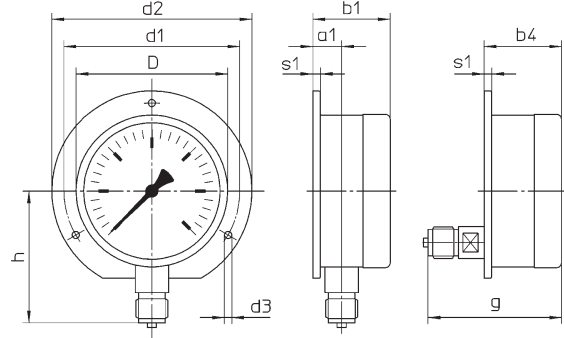
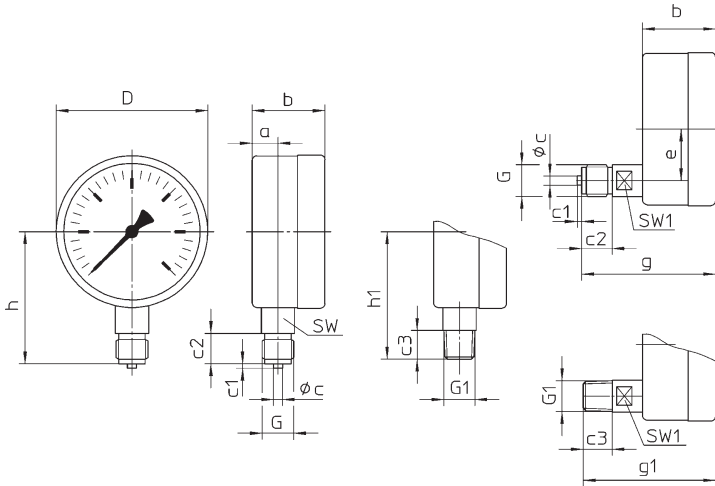
Case Configurations, Dimensions, Weight

Bottom connection
(without additional code letter)

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

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

Lower back connection,
rear mounting flange,
code letters: **rRh**

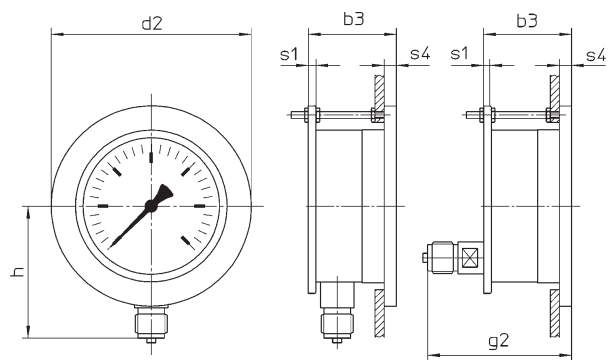
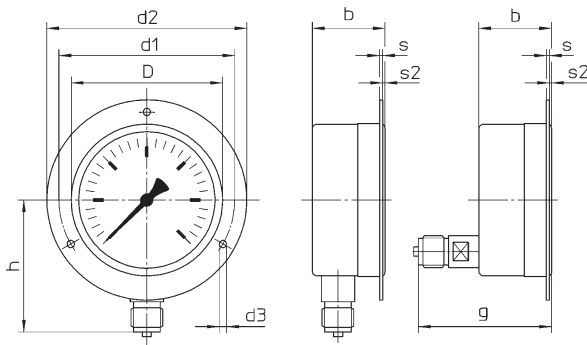


Bottom connection,
front mounting flange,
code letters: **Fr**

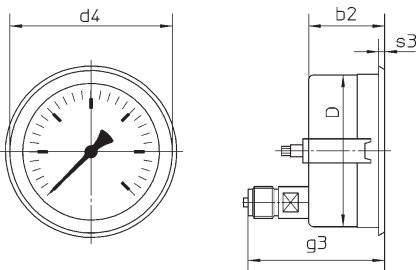
Lower back connection,
front mounting flange,
code letters: **rFr**

Bottom connection,
special mounting ring,
code letters: **Er**

Lower back connection,
special mounting ring,
code letters: **rEr**



Nom. size 100 (4"):
Lower back connection,
U-clamp for panel mounting,
code letters: **rBFr**



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

Nom. Size (D)	a	a1	b	b1	b2	b3	b4	b5	c	c1	c2	c3	d1	d2	d3	d4	e
100 4"	17 .67	19 .75	48 1.89	51 2.01	50 1.97	58	51 2.01	58					116 4.57	132 5.2	4.8 .19	107 4.21	34 1.34
160 6"	19 .75	21 .83	51 2.01	53 2.09	-	2.28	53 2.09	2.28	6 .24	3 .12	20 .79	19 .75	178 7.01	196 7.72	5.8	-	52 2.05
250 10"	17 .67	16 .63	2.01	50 1.97	-	56 2.20	55 2.17	61 2.40					270 10.63	285 11.22	.23		

Nom. Size (D)	G	G1	g	g1	g2	g3	h ±1	h1 ±1	SW	SW1	s	s1	s2	s3	s4	Weight	
100 4"	G ½ B ½" BSP	½" NPT	88	87	95	90	87	84					1.5	4		.450 kg	
160 6"			3.46	3.43	3.74	3.54	3.43	3.31				2	5	.06	.16	8	1.0 lb
250 10"			90	89	99	-	115	114	22	17	.08	.2	7	.28	-	.31	.750 kg
			3.54	3.5	3.90		165	164	.87	.67	3	6		10	2.500 kg		
							6.50	6.46			.12	.24		.39	5.50 lb		

The information in this leaflet is given in good faith, but we reserve the right to make changes without notice.