

Bourdon Tube Pressure Gauges

Polyamide Screw Ring Case

Standard (RK) or Liquid Filled (RKG)

NCS 100 (4")

Accuracy Class 1.0

Models

RK 100

RKG 100

Application

For fluid and gaseous media (compatible to the wetted materials) which are not highly viscous and do not tend to polymerize, especially where a rugged, rust resistant, sealed case is required (e.g. dirty damp or corrosive atmosphere).

Nominal Case Size (NCS)

100 mm (4")

Accuracy (EN 837-1)

Class 1.0

Pressure Ranges (EN 837-1)

Model-1*: 0-0.6 to 0-1000 bar resp. 0-10 to 0-15,000 psi

Model-2*: 0-1600 bar resp. 0-20,000 to 0-25,000 psi

Model-3*: 0-0.6 to 0-1600 bar resp. 0-10 to 0-25,000 psi

also all corresponding vacuum and compound ranges

(*compare below)

Pressure Limitations

Steady pressure: full scale value

Cyclic pressure: 90 % of full scale value

Overpressure: 130 % of full scale value

Protection Type (EN 60 529 / IEC 529)

IP 54 resp. IP 65 for model RKG 100 with closed blow-out plug

Further information about advantages, applications, specifications, temperature limitations and pressure ranges of Bourdon tube pressure gauges with accuracy class 1.0 to 2.5 (EN 837-1) can be found in our model overview 1000.

Standard Configuration

Connection

G ½ B (½" BSP), at option ½" NPT

bottom connection, at option lower back connection (r)

Wetted Parts

Ordering Code -1 :	Socket:	= brass
	Bourdon Tube:	
	≤ 40 bar	= bronze,
	(800 psi)	C-form, soft soldered
	≥ 60 bar	= stainl. steel 316 Ti (1.4571),
	(1,000 psi)	helical, silver brazed
Ordering Code -2 :	Socket:	= stainl. steel 316 Ti (1.4571)
	Bourdon Tube:	= alloy steel,
	0-1600 bar (≥20,000 psi)	helical, argon arc welded
Ordering Code -3:	Socket:	= stainl. steel 316 Ti (1.4571)
	Bourdon Tube:	
	≤ 40 bar	= stainl. steel 316 Ti (1.4571),
	(800 psi)	C-form, argon arc welded
	≥ 60 bar	= stainl. steel 316 Ti (1.4571),
	(1,000 psi)	helical, argon arc welded
	1 600 bar	= NiFe-alloy,
	(≥20,000 psi)	helical, argon arc welded

Movement

Version - 1 : brass/German silver, - 2 and - 3: stainless steel

Dial

Aluminum alloy, black figures, white background

Pointer

Aluminum alloy, black

Case and Ring

Glass fiber reinforced polyamide 6 B black, screw ring

Case Filling

Model RKG 100 only: Glycerine



Window

Version -1: single strength glass, -2, -3: laminated safety glass

Safety Features

RK: 1" Blow-out in the back, RKG: Blow-out plug Ø 13 mm (.51") at the top

Venting

RKG: Blow-out plug can be used for compensation of internal pressure. This is required for pressure ranges ≤ 6 bar / 100 psi, but recommended also for other pressure ranges, as far as the application conditions allow; IP 54 with opened blow-out plug.

Optional Special Configurations

- Pressure ranges **0-2500 bar**, 0-30,000 or 0-35,000 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 ¼" pipe; optional with 9/16-18 UNF female or 9/16-18 UNF (left) male; others upon request
- Wetted parts monel = ordering code: - 6: ranges 0-0.6 to 0-600 bar resp. 0-10 to 0-10,000 psi, movement stainless steel, Bourdon tube argon arc welded
- Connection M 20 x 1,5, ¼" BSP or NPT, others upon request
- Screw ring chrome plated ABS
- Inlet port restrictor screw brass, stainless steel or monel
- Special scales, dual ranges, special units or fine division (with knife-edge pointer) etc.
- Refrigerant gauges with temperature scale, compare technical information leaflet T01-000-015
- Receiver gauge 0.2-1 bar or 3-15 psi
- Micro-adjustable pointer with mechanism aluminum
- Stationary red pointer on the dial
- Maximum indicating pointer (pressure ranges ≥2.5 bar / ≥30 psi) or stationary red pointer with external adjustment, acrylic lens
- Other than vertical installation, or top or side connection
- Electrical accessories, see data sheet 1390 and catalogue heading 9, data sheets 9000 following

How to Order:

Model code/NCS:	RK 100 (IP 54, dry version)
	RKG 100 (IP 65, filled version)
Wetted parts:	Ordering code - 1, - 2, - 3 or - 6, compare left side resp. above
Case configuration:	Code letters: r, Rh or rT compare reverse side (standard=bottom connection, without code letter)
Pressure range:	(EN 837-1) e.g. 0-4 bar or 0-60 psi
Connection thread:	G ½ B (½ BSP) = standard, or ½" NPT
Special options:	(see above)

Examples for Ordering Information:

- RK 100-3, 0-6 bar, ½" BSP
- RKG 100-1, rT, -1/+9 bar, ½" NPT



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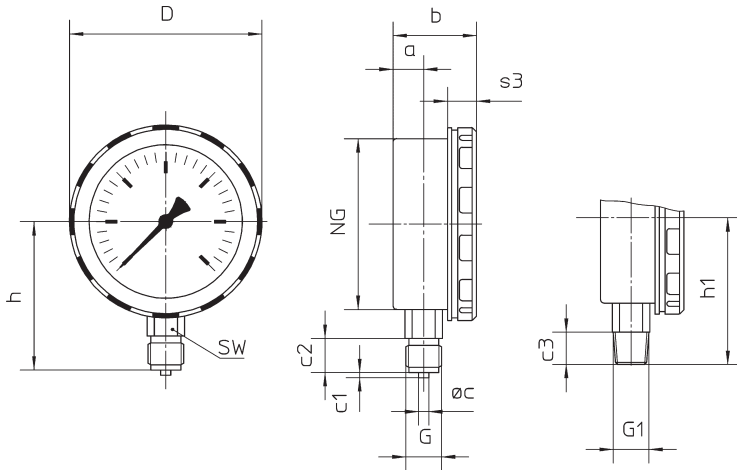
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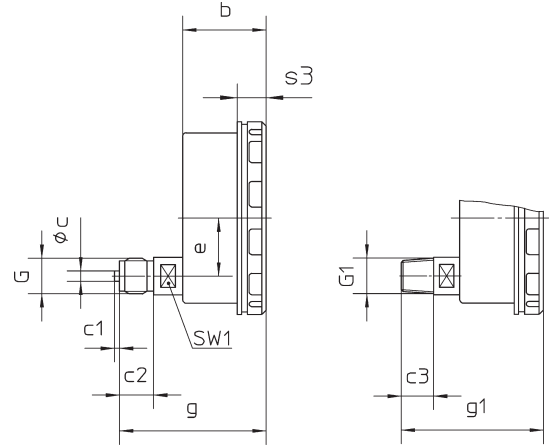
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Case Configurations, Dimensional Data and Weight

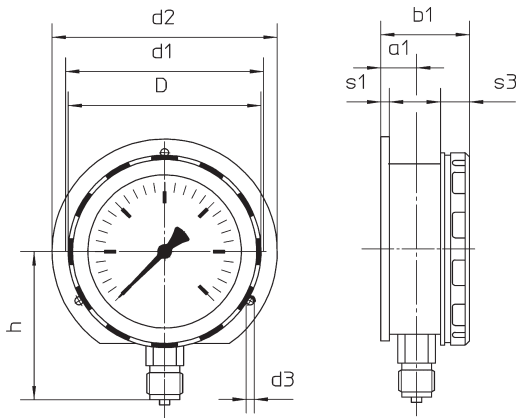
Bottom connection
(without code letter)



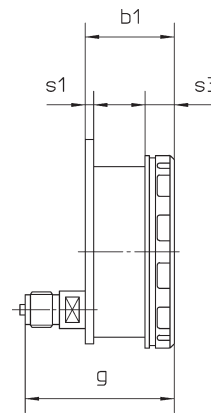
Lower back connection,
code letter: **r**



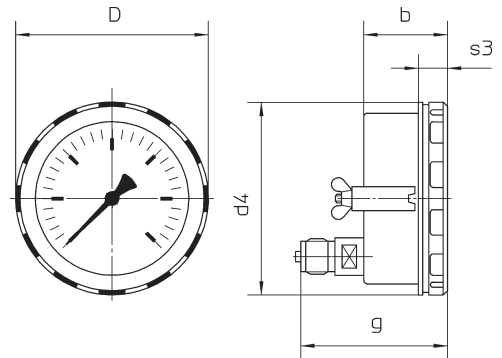
Bottom connection,
rear mounting flange,
code letters: **Rh**



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



Lower back connection,
U-clamp for panel mounting,
code letters: **rT**



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

Nominal Case Size	a	a1	b	b1	c	c1	c2	c3	D	d1	d2	d3	d4	e
100	18	22	49	52	6	3	20	19	113	116	132	4.8	110	34
4"	.71	.87	1.93	2.05	.24	.12	.79	.75	4.45	4.57	5.2	.19	4.33	1.34

G	G1	g	g1	h ^{±1}	h1 ^{±1}	NG	s1	s3	SW	SW1	Weight (approx.)	
											RK	RKG
G ½ B	½" NPT	87.5	86.5	87	84	100	5	16	22	17	.45	.75
½" BSP		3.45	3.41	3.43	3.31	3.94	.2	.63	.87	.67	1.0	1.70

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