

# Bourdon Tube Pressure Gauges

## Solid Front and Blow-out Back

### Polyamide Screw Ring Case

### Standard (RSK) or Liquid Filled (RSKG)

Models **RSK 100**  
**RSKG 100**

#### Application

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

#### Nominal Case Size (NCS)

100 mm (4")

#### Accuracy (EN 837-1)

Class 1.0 (i.e. max.  $\pm 1.0\%$  of full span)

#### Pressure Ranges (EN 837-1)

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

(\*see 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)

Model RSK = IP 54 / Model RSKG = IP 65

**Further information** about advantages, applications, specifications, temperature limitations and pressure ranges of Bourdon tube pressure gauges with accuracy classes 1.0 and 1.6 (acc. to EN) can be found in our **model overview 1000**.

## Standard Configuration

#### Connection

Bottom connection G 1/2 B (1/2" BSP) standard, at option 1/2" NPT

#### Wetted Parts

Ordering code –1: Socket: brass

Bourdon tube:  $\leq 40$  bar: bronze, C-form,  
 $\leq 800$  psi soft soldered

$\geq 60$  bar: 316 Ti (1.4571), helical,  
 $\geq 1,000$  psi silver brazed

Ordering code –2: Socket: stainless steel 316 Ti (1.4571)

Bourdon tube: alloy steel, helical, argon arc welded  
0-1600 bar ( $\geq 20,000$  psi)

Ordering code –3: Socket: stainless steel 316 Ti (1.4571)

Bourdon tube: argon arc welded,  
 $\leq 40$  bar: 316 Ti (1.4571), C-form  
 $\leq 800$  psi

$\geq 60$  bar: 316 Ti (1.4571), helical  
 $\geq 1,000$  psi

1600 bar: NiFe-alloy, helical,  
 $\geq 20,000$  psi

#### 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 RSKG only: Glycerine



#### Lens

Laminated safety glass, marked with "SAFETY GLASS"

#### Safety Features

Tested according to S3 EN837-1; solid front [304 stainless steel (1.4301)] between measuring system and dial, and a full blow-out safety back with retain straps. Should the Bourdon tube rupture, the entire case back separates, allowing full relief (see drawing overleaf). Instruments with pressure ranges 0-0.6 to 0-600 bar tested and marked in accordance with EN 837-1.

#### Venting

Model RSKG with pressure equalizing membrane

## Optional Special Configurations

- 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
- Wetted parts monel = ordering code: –6: ranges 0-0.6 up to 0-600 bar resp. 0-10 up to 0-10,000 psi, movement stainless steel, Bourdon tube argon arc welded
- Connection M 20 x 1.5, 1/4" BSP or NPT, others upon request
- Inlet port restrictor screw brass, stainless steel or monel
- For oxygene service free of grease and oil, inlet port restrictor screw
- Special scales, dual ranges, scales with high-precision graduations (with knife-edge pointer)
- Refrigerant gauges with temperature scale, compare technical information leaflet T01-000-015
- Receiver gauge 0.2-1 bar or 3-15 psi
- Adjustable pointer, mechanism aluminum
- Stationary red pointer on the dial
- Other than vertical installation, top or side connection
- Electrical accessories upon request

### How to Order:

Model code/NCS: **RSK 100** (IP 54, dry version)  
**RSKG 100** (IP 65, filled version)  
**RSK(G) 100** (IP 65, fillable version)

Wetted parts: Ordering code –1, –2 or –3, see left side

Case configuration: Standard bottom connection, or code letters **Rh**, compare reverse side

Pressure range: (EN 837-1) e.g. **0-4 bar**, or corresponding psi ranges

Connection thread: **G 1/2 B** (1/2" BSP = standard) or 1/2" NPT

Special configurations: (see above.)

#### Examples for Ordering Information:

- RSK 100-3, 0-6 bar, G 1/2 B (1/2" BSP)
- RSKG 100-1, 0-1000 psi, 1/2" NPT



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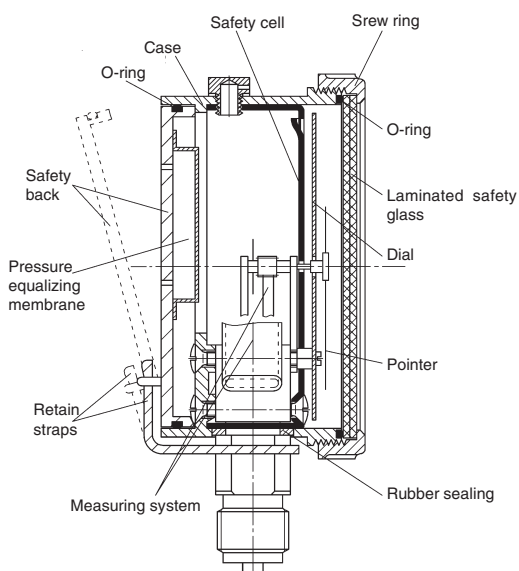
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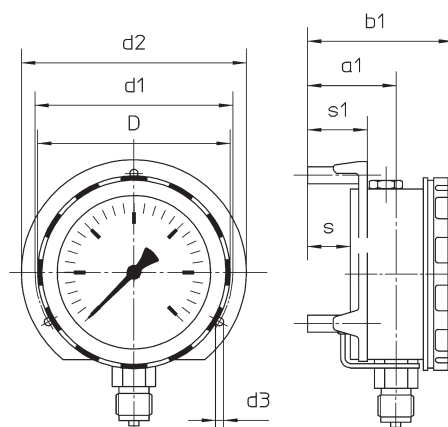
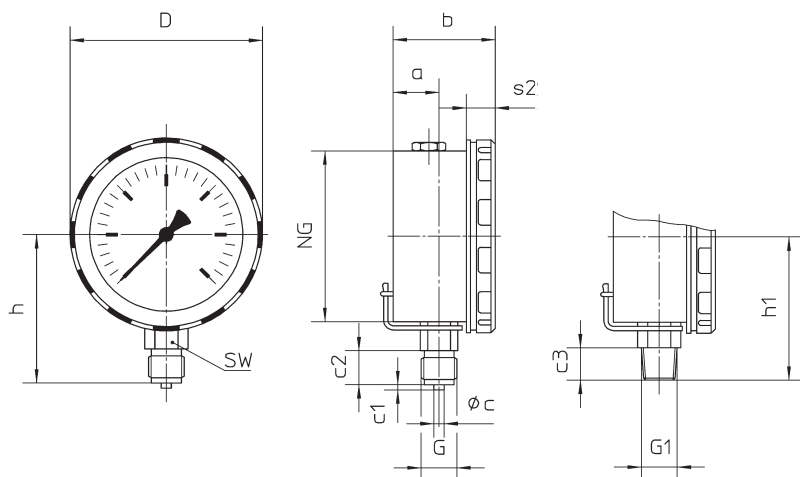
**1400**  
**11/05**

# Case Configurations, Dimensional Data and Weight



Bottom connection  
(without code letter)

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



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

NCS	a	a1	b	b1	c	c1	c2	c3	D	d1	d2	d3	G	G1
100 4"	27 1.06	52 2.05	60 2.36	85 3.35	6 .24	3 .12	20 .79	19 .75	113 4.45	116 4.57	132 5.20	4.8 .19	G ½ B ½" BSP	½" NPT

h±1	h1±1	s	s1	s2	SW	Weight (approx.)	
						RSK	RSKG
87 3.43	84 3.31	25 .98	35 1.38	17 .67	22 .87	0.55 1.2	0.90 2.0

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