

# Bourdon Tube Pressure Gauges

Process gauges according to US standard

**RPG 4 1/2"**  
**RPGG 4 1/2"**

## Application

For gaseous and liquid, aggressive media that are not highly viscous and do not tend to crystallise, especially for chemical and oil-processing industries.

## Standard Versions

Information on general and metrological features (e.g. load limits/temperature resistance) and standard pressure ranges/scale divisions can be found in model overview 1000.

### Accuracy

±0.5 % (Grade 2A according to ASME B40.1)

### Case

With screw ring, PBTP (thermoplastic) black, flame-retardant and impact resistant, fire classification UL 94 V-0, case with integrated back flange for surface mounting

### Degree of Protection (DIN EN 60529/IEC 529)

IP65

### Blow-out Device

Blow-out back; when pressure increases in the case, the entire case back separates, allowing full relief

### Case Ventilation

Without ventilation, but with internal pressure compensation via pressure equalizing membrane

### Case Filling

Model RPGG: glycerin

### Nominal Case Size

4 1/2"

### Wetted Parts

Connection: stainless steel 316L (1.4404)  
Bourdon tube: stainless steel 316L (1.4404)  
gas-shielded arc welding  
≤600 psi / 40 bar c-form  
≥800 psi / 60 bar helical form

### Case Configuration

Connection: screwed  
Position of the connection: bottom connection  
Mounting device: integrated back flange for surface mounting

### Pressure Ranges (ASME or DIN EN 837-1)

0 – 10 psi to 0 – 20 000 psi  
0 – 0.6 bar to 0 – 1 600 bar  
also corresponding vacuum and compound ranges

### Temperature Influence

In accordance with the ASME standards, the additional error per 28 °C/50 °F temperature deviation from the reference temperature +20 °C/+68 °F can be up to ±1 %.

### Process Connection

1/2" NPT

### Window

Laminated safety glass



### Movement

Stainless steel

### Dial

Aluminum white, scale black

### Pointer

Adjustable pointer, aluminum black, with aluminum mechanism

### Safety Category

Safety version (similar to DIN EN 837-1, S3) with break-proof solid front between measuring system and dial and with blow-out back. When pressure increases in the case, the entire case back separates, allowing full relief.

## Ordering Information, Standard Pressure Ranges, Options

See pages 3 and 4

## Further Options

- Connection thread 1/4" NPT or G 1/2 B
- Position of connection radial at 3 o'clock, 9 o'clock, 12 o'clock or other than vertical installation (90°)
- Assembly for panel mounting
- GOST version for Russia and Kazakhstan

## Special Versions Upon Request

- Other connection threads, e.g. high pressure connections
- Other pressure ranges and/or special scales, e.g. dual scale bar/psi, coloured fields or ranges, dial inscriptions
- Other case fillings
- Other position of connection

## Accessories

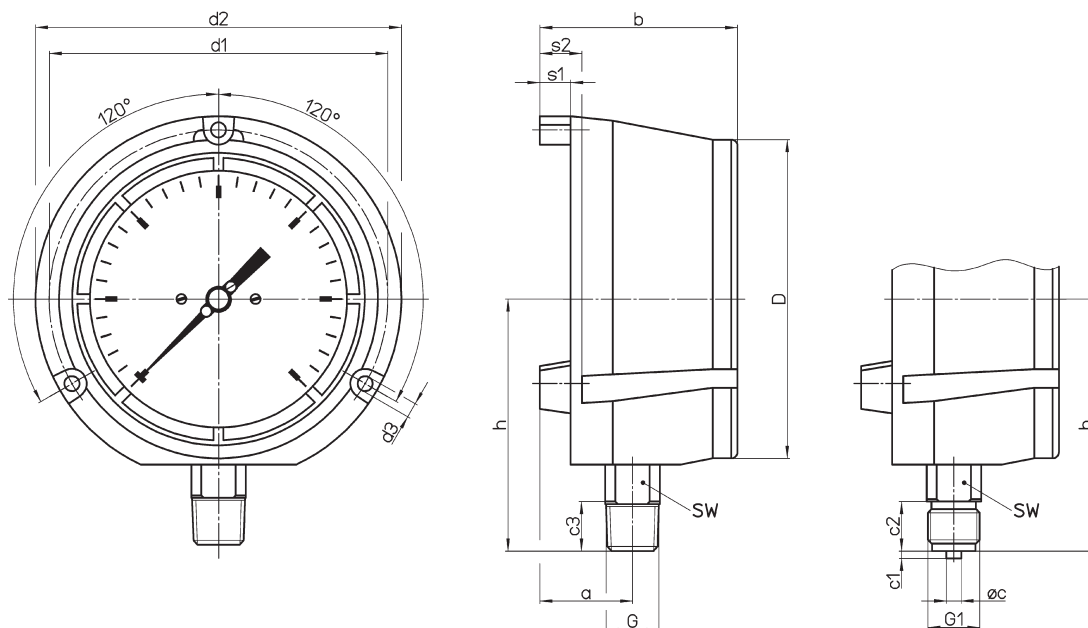
Electrical: see catalogue heading 9.1  
Other accessory: see catalogue heading 11

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# Case Configuration, Dimensional Data and Weights

## Bottom Connection

integrated back flange for surface mounting



**Dimensional Data (mm/inch) and Weights (kg/lb)**

NCS	a	b	c	c1	c2	c3	D	d1	d2	d3	G	G1	h	s1	s2	SW	approx. weight	
																	RPG	RPGG
4 1/2"	38 1.5	80 3.15	6 0.24	3 0.12	20 0.79	19 0.75	129 5.08	137 5.39	148 5.83	6.1 0.24	1/2" NPT	G 1/2 B 1/2" BSP	102 4.02	12,5 0.49	17 0.67	22 0.87	0.85 1.87	1.25 2.76

## Ordering Information

Basic Model:		Bourdon Tube Pressure Gauge, Process Gauge according to US Standard		RPG
Case filling:	without			without code letters
	glycerin			<b>G</b>
	fillable version			<b>(G)</b>
Nominal case size:	case Ø 4 1/2"		4 1/2"	
Wetted material:	stainless steel		- 3	
	Monel, 0 – 0.6 bar to 0 – 1 000 bar, movement stainless steel, laminated safety glass, Bourdon tube Monel gas-shielded arc welding, ≤40 bar c-form, ≥60 bar helical form, bottom connection		- 6	
Pressure ranges:	-1 200 / 0 mbar	30" Hg vac.	– 0 psi	
	-0.6 / 0 bar			
	-1 / 0 bar			
	-1 / +0.6 bar	30" Hg vac.	– 15 psi	
	-1 / +1.5 bar	30" Hg vac.	– 30 psi	
	-1 / +3 bar	30" Hg vac.	– 60 psi	
	-1 / +5 bar	30" Hg vac.	– 100 psi	
	-1 / +9 bar	30" Hg vac.	– 160 psi	
	-1 / +15 bar	30" Hg vac.	– 200 psi	
		30" Hg vac.	– 300 psi	
	0 – 0.6 bar	0	– 10 psi	
	0 – 1 bar	0	– 15 psi	
	0 – 1.6 bar			
	0 – 2.5 bar	0	– 30 psi	
	0 – 4 bar	0	– 60 psi	
	0 – 6 bar	0	– 100 psi	e.g. 0 – 6 bar
	0 – 10 bar	0	– 160 psi	
	0 – 16 bar	0	– 200 psi	
		0	– 300 psi	
	0 – 25 bar	0	– 400 psi	
	0 – 40 bar	0	– 600 psi	
	0 – 60 bar	0	– 800 psi	
		0	– 1 000 psi	
	0 – 100 bar	0	– 1 500 psi	
	0 – 160 bar	0	– 2 000 psi	
		0	– 3 000 psi	
	0 – 250 bar	0	– 4 000 psi	
		0	– 5 000 psi	
	0 – 400 bar	0	– 6 000 psi	
	0 – 600 bar	0	– 10 000 psi	
0 – 1 000 bar	0	– 15 000 psi		
0 – 1 600 bar	0	– 20 000 psi		
Process connection:	standard thread	1/2" NPT	1/2" NPT	
	options	1/4" NPT	1/4" NPT	
		G 1/2 B	G 1/2 B	
		high pressure connection female thread (0 – 60 bar onwards) for 1/4" tube, with 60° cone	1/16" – 18 UNF	HP connection 1/16" – 18 UNF
Options:	see page 4			
Example:	RPG 4 1/2", 0 – 6 bar, G 1/2 B			

