Bourdon Tube Pressure Gauges

Process Gauges acc. to US-Standard Fillable (RPG) or with Case Filling (RPGG)

Application

For fluid and gaseous, aggressive media which are not highly viscous and do not tend to polymerize; especially for chemical and oil-processing industries acc. to US-standards.

Size 41/2"

Accuracy

Grade 2A acc. to ASME B40.1 Standard (± .5% of full span)

Pressure Ranges (EN / ASME)

0 ... 10 up to 0 ... 15,000 psi resp. 0 ... 0.6 up to 0 ... 1000 bar, also all vacuum and compound ranges

Pressure Limitations

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

Temperature Limitations

Ambient temperature: -40 up to +60 °C (-40 up to +140 °F) with glycerine filling: -20 up to +60 °C (-4 up to +140 °F) with special oil filling: -40 up to +60 °C (-40 up to +140 °F) Medium temperature: max. +100 °C (+212 °F)

Temperature Caused Error

The accuracy error caused by media or ambient temperatures differing from +20 °C (+68 °F) is significant. It can be estimated with .4% per each 10 °C (18 °F).

Protection Type

IP 65 (EN 60529 / IEC 529)

Standard Configuration

Connection

1/2" NPT bottom connection 316 stainless steel (1.4571)

Bourdon Tube

- 316 stainless steel (1.4571), argon arc welded
- 600 psi resp. 40 bar and below = C-form
- 800 psi resp. 60 bar and above = helical

Movement

Stainless steel

Dial

Aluminum alloy, black figures, white background

Pointer

Aluminum alloy black, micrometer adjustable

Case and Ring

Thermoplastic PBTP black, with integral rear flange (fire retardant and impact resistant acc. to UL 94 VO);

Model RPG 41/2" fillable, model RPGG 41/2" with case filling glycerine

Safety Features

Solid front between measuring system and dial with full blow-out safety back. Should the Bourdon tube rupture, the entire case back separates, allowing full relief.

Blow-out Back

Same material as case and ring, hinged for safety (will not become a projectile)

Compensation Diaphragm

Elastomer (ready for filling, no fill kit required!)

Lens

Instruments To Industry Ltd

Laminated safety glass (4 mm / .16" thick)

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Models

RPG 4¹/₂"

RPGG 41/2"



Optional Special Configurations

- 1/4" NPT or 1/2" BSP connection (other connection threads upon request)
- Wetted parts monel = ordering code: -6
- Inlet port restrictor screw stainless steel or monel
- Other case filling, e.g. silicone oil, others upon request
- Special scales, combination pressure and temperature, other dual ranges
- Receiver gauge 0.2-1 bar or 3-15 psi
- Oxygene service, free of grease and oil
- Other than vertical installation
- Top or side connection
- Electrical accessories upon request

How to Order:

Please specify:

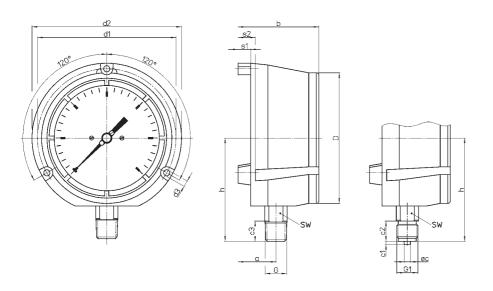
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Model code:	RPG 4½"=dry version (fillable)RPGG 4½"=filled version,filling fluid glycerine							
Wetted parts:	316 stainl. steel = ordering code: -3 (others see above)							
Pressure range:	according to EN 837-1 resp. ASME, e.g. 0/60 psi or 0 - 4 bar or 600 psi							
Connection thread:	¹ / ₂ " NPT (= standard) or others (see above)							
Special configurations:	(see above)							
Examples for Ordering Information:								

• RPG 41/2"-3, 0/6 bar, 1/2" BSP RPGG 4½"-6, 2,000 psi, ½" NPT

Case Configuration, Dimensional Data and Weight

Bottom connection,

rear mounting flange integrated to the case



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

Nominal	а	b	с	c1	c2	c3	D	d1	d2	d3	G	G1	h	s1	s2	SW	Weight	
Case Size																	RPG	RPGG
4 1⁄2"	37.5	80	6	3	20	19	129	137	148	6,1	1⁄2"	1⁄2"	102	12.5	17	22	0.85	1.25
4 72	1.48	3.15	.24	.12	.79	.75	5.08	5.39	5.83	.24	NPT	BSP	4.02	.49	.67	.87	1.88	2.76

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