

Capsule Gauge for Low Pressure

Process gauge – case according to US standard

KPPG 4 1/2"

– 3

Application

Measurement of positive or negative overpressure for spans from 25 mbar to 600 mbar for air or other gaseous media; case version as process gauge according to US standard, 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 6000.

Accuracy (DIN EN 837-3)
Class 1.6

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 60 529/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 equalising membrane

Nominal Case Size
4 1/2"

Wetted Parts
Connection stainless steel 316L (1.4404)
Diaphragm capsule stainless steel 316Ti (1.4571)
O-ring sealing FPM

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

Pressure Ranges (DIN EN 837-3)
0 – 25 mbar to 0 – 600 mbar
(0 – 10 inH₂O to 0 – 250 inH₂O)

Process Connection
1/2" NPT

Window
Polycarbonate (with punched hole for zero adjustment)

Movement
Stainless steel

Dial
Aluminum white, scale black

Pointer
Aluminum black



Zero Adjustment
On the front side

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

- Position of connection radial at 3 o'clock, 9 o'clock, 12 o'clock or other than vertical installation (90°)
- GOST version for Russia and Kazakhstan

Special Versions Upon Request

- Other process connections
- Other pressure ranges and/or special scales, e.g. dual scale mbar/kPa, coloured fields or ranges, dial inscriptions, negative scale
- Wetted parts free of grease and oil
- Oxygen version

Accessories

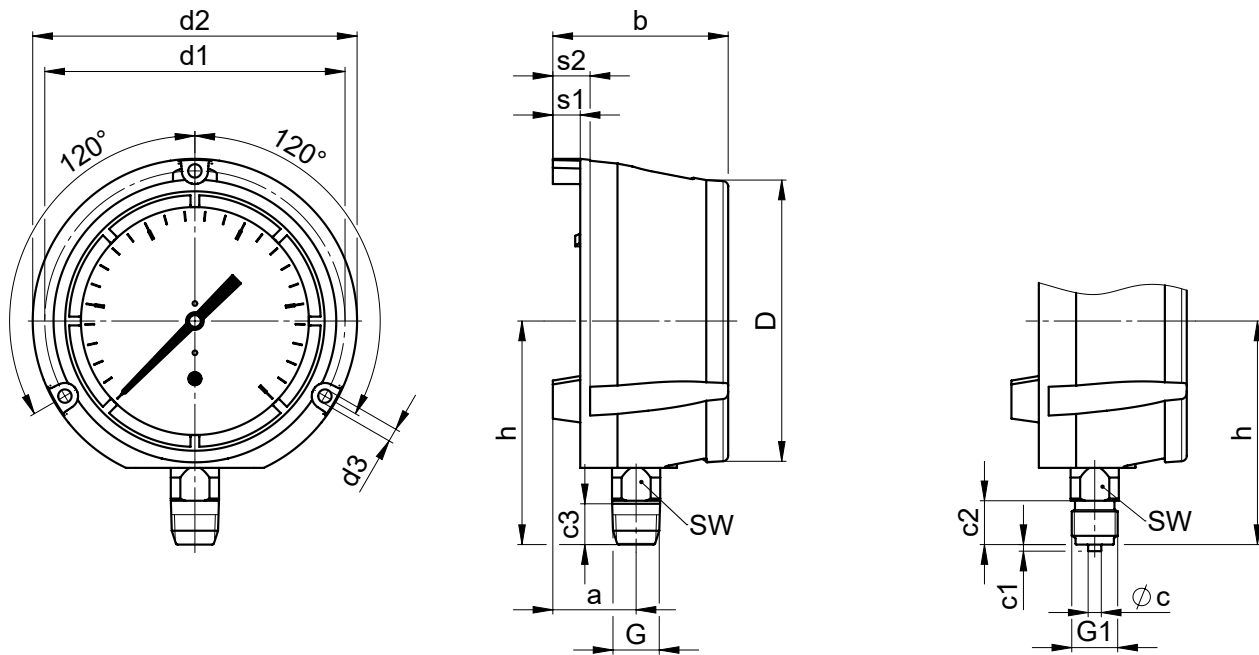
See catalogue heading 11

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Case Configuration, Dimensional Data and Weight

Bottom Connection

integrated back flange for surface mounting



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

NCS	a	b	c	c1	c2	c3	D	d1	d2	d3	G	G1	h	s1	s2	SW	approx. weight
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	0.8 1.76

Ordering Information

Basic Model		Capsule Gauge for Low Pressure, Process Gauge According to US Standard				KPPG	
Nominal case size	case Ø 4½"					4½"	
Wetted material	stainless steel					- 3	
Pressure ranges	mbar			inH ₂ O			
	vacuum	compound	pressure	vacuum	compound	pressure	
	-25 / 0	-10 / +15 -15 / +10	0 - 25	-10 / 0	-4 / +6 -6 / +4	0 - 10	
	-40 / 0	-15 / +25 -25 / +15	0 - 40	-16 / 0	-6 / +10 -10 / +6	0 - 16	
	-60 / 0	-20 / +40 -40 / +20	0 - 60	-25 / 0	-10 / +15 -15 / +10	0 - 25	
	-100 / 0	-40 / +60 -60 / +40	0 - 100	-40 / 0	-15 / +25 -25 / +15	0 - 40	
	-160 / 0	-60 / +100 -100 / +60	0 - 160	-60 / 0	-20 / +40 -40 / +20	0 - 60	
	-250 / 0	-100 / +150 -150 / +100	0 - 250	-100 / 0	-40 / +60 -60 / +40	0 - 100	
	-400 / 0	-150 / +250 -250 / +150	0 - 400	-160 / 0	-60 / +100 -100 / +60	0 - 160	
	-600 / 0	-200 / +400 -400 / +200	0 - 600	-250 / 0	-100 / +150 -150 / +100	0 - 250	
						e.g. 0 - 60 mbar	
	Process connection	standard thread	½" NPT				½" NPT
		options	G ½B				G ½B
¼" NPT				¼" NPT			
Options	see page 4						

Example KPPG 4½" - 3 , 0 - 60 mbar, G ½B

Ordering Information, Further Options

Basic Model	Capsule Gauge for Low Pressure, Process Gauge According to US Standard	KPPG
Model code		see page 3
Options	<div data-bbox="271 183 469 215">special adjustment</div> <div data-bbox="271 215 900 273"> window acrylic glass (PMMA) instrument glass </div> <div data-bbox="271 309 481 340">silicone-free version</div> <div data-bbox="271 340 916 421"> restrictor screw in the pressure inlet port, material: like process connection stainless steel orifice Ø 0.3 mm (0.01") </div> <div data-bbox="271 456 1085 631"> overrange protection (üs) and/or vacuum protection (us)¹⁾ 3-fold üs or us 10-fold üs from 0 – 25 mbar 10-fold us from –100 / 0 mbar combination 10-fold üs and 3-fold us only for compound ranges from measuring span 40 mbar </div> <div data-bbox="271 667 1279 725"> instrument tag stainless steel plate 12x55 mm (0.47x2.17"), wire mounting sticker on the case coverage </div>	

Special Versions: Please describe your requirements in cleartext!

¹⁾ max. –1000 mbar