

Diaphragm Pressure Gauges

vertical diaphragm,
bezel ring black

PsP 60

Standard Version

Information on advantages, application fields, temperature resistance, metrological features and pressure ranges of all available diaphragm pressure gauges with vertical diaphragm can be found in our model overview 4000.

Application

Among others, diaphragm pressure gauges with vertical diaphragm model PsP 60 have been developed especially for the application in chlorine metering systems. They are also suitable for viscous media.

Nominal Case Size (NCS)

60 (2.36")

Accuracy (DIN EN 837-3)

Class 1.6

Class 2.5 for diaphragm with protective foil

Pressure Ranges (DIN EN 837-3)

0 – 0.6 bar to 0 – 40 bar (0 – 9 psi to 0 – 600 psi)

also all corresponding standard vacuum and compound ranges, see table on the back of the page; restrictions apply to the various materials of the wetted parts, see below

Maximum Load Limits

Steady load: full scale value

Dynamic load: 90 % of full scale value

Overload: 1.3 x full scale value

Temperature Resistance

Storage temperature: - 40 °C to +70 °C (- 40 °F to +158 °F)

Ambient temperature: - 20 °C to +60 °C (- 4 °F to +140 °F)

Medium temperature: +60 °C max (+140 °F)

Reference Temperature

+20 °C (+68 °F)

Temperature Caused Error

If the operating temperatures of the measuring unit (resilient element and movement) deviate from the reference temperature, additional deviations of the indication could occur. In accordance with EN 837-3 these can be up to ± 0.8% of the span per 10 K.

Protection Type (EN 60 529 / IEC 529)

IP 43

Process Connection

G ¼ B (¼" BSP) bottom connection or centre back connection (rm)

Wetted Parts

Ordering code –1: bottom connection:
connection and lower flange of the diaphragm nickelplated steel with 5 mm (0.2") inlet port orifice, diaphragm steel¹⁾

centre back connection:
connection and lower flange of the diaphragm nickelplated steel, diaphragm steel¹⁾

Ordering code –2: connection and lower flange of the diaphragm steel, black enamelled, wetted parts bright, 5 mm (0.2") inlet port orifice, diaphragm steel¹⁾ with silver foil, applicable for use under vacuum, suitable for chlorine metering systems etc.²⁾, pressure ranges: -1 / 0 bar (30" vac.) or 0 – 16 bar (0 – 200 psi)

Movement

Brass / German silver

¹⁾ 0.6 bar and 1 bar made of Duratherm® (NiCrCo-alloy)

²⁾ version for chlorine metering systems: please also note the alternative version PsPK 63-2, data sheet 4310!



Dial

Aluminum, black figures, white background

Pointer

Aluminum black

Case

Bezel ring black, fibre-glass reinforced polyamide 6B, optionally front flange (Fr) single piece grey cast iron, black enamelled, screwed to the vertical mounted lower flange of the diaphragm

Window

Instrument glass

Special Versions Among Others

- Wetted parts with ordering code –3 upon request: lower flange of the diaphragm with connection stainless steel 1.4404 (316 L), diaphragm steel with protective foil made of stainless steel 1.4404 (316 L), pressure ranges ≥ 0 / 1.6 bar¹⁾
- Process connection ¼" NPT, others upon request
- Restrictor screw in the inlet port brass or stainless steel upon request
- Acrylic glass window
- Special scales, e.g. other measuring units, dual scales
- Overrange protection available up to 3-times full scale pressure, max. 50 bar (730 psi)
- Diaphragm with protective foil PTFE, stainless steel 1.4404 (316 L), fine silver (unless standard, compare left side)
- Splashproof version (sealed front and back side)
- Other than vertical installation
- Nominal case size 80 (3") upon request

Ordering Information

Model and NCS:	PsP 60
Ordering code of the wetted parts:	– 1, – 2 or – 3
Code letters of the case configuration:	without = bottom connection, rm or rmFr (see back of the page)
Pressure range:	according to EN 837-3 resp. table p. 2, e.g. 0 – 6 bar
Process connection:	G ¼ B (standard) others see above
Specifics:	(see above)

Examples for ordering information:

- PsP 60 – 1, rmFr, 6 bar, G ¼ B
- PsP 60 – 2, -1 / 0 bar, ¼" NPT (for Cl₂)



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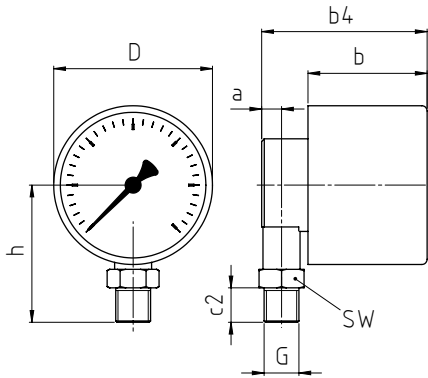
Case Configurations, Code Letters, Dimensional Data and Weight

Bottom Connection

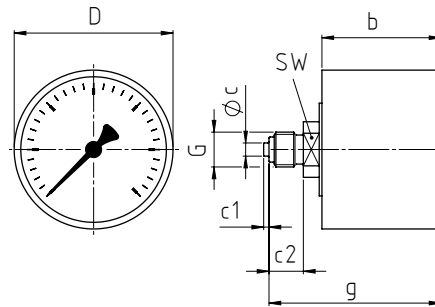
Centre Back Connection

without mounting device

(no additional code letters)

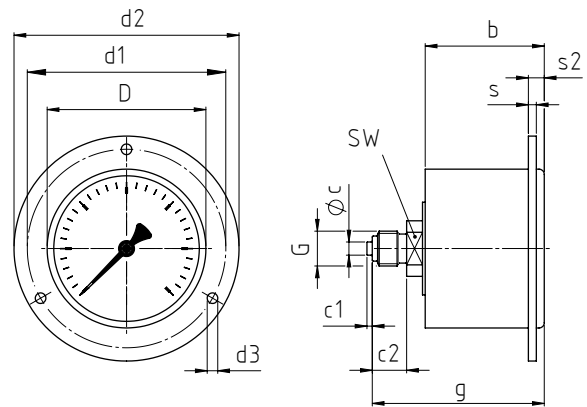


code letters: **rm**



front flange for panel mounting

code letters: **rmFr**



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

NCS	a	b	b4	c	c1	c2	D	d1 ²⁾	d2 ²⁾	d3	d4	g ¹⁾	G	h ^{±1)}	s	s2	SW	approx. weight ³⁾
60	7	41	59	5	2	13	60	75	85	4.2	64	62	G ¼ B	52	3	6	17	0.3
2.36	0.28	1.61	2.32	0.2	0.08	0.51	2.36	2.95	3.35	0.17	2.52	2.44	¼" BSP	2.05	0.12	0.24	0.67	0.66

Pressure Ranges / Scale Division

Pressure ranges according to DIN EN 837-3 (bar)	Smallest subdivision of the scale (bar)
Vacuum	0.02
-0.6 / 0 ⁴⁾	0.02
-1 / 0	0.02
Compound range	0.05
-1 / + 0.6	0.05
-1 / + 1.5	0.1
-1 / + 3	0.2
-1 / + 5	0.2
-1 / + 9	0.2
-1 / + 15	0.5
-1 / + 24	1.0
Pressure	0.02
0 - 0.6 ⁴⁾	0.02
0 - 1.0	0.02
0 - 1.6	0.05
0 - 2.5	0.1
0 - 4	0.2
0 - 6	0.2
0 - 10	0.2
0 - 16	0.5
0 - 25	1.0
0 - 40	2.0

¹⁾ for version -1 only valid for G ¼ B (¼" BSP); for other connection threads (¼" NPT, M 12x1.5) add approx. 10 mm (0.39") to dimension g!

²⁾ upon request also available with d1 = 70, d2 = 77

³⁾ information for version without mounting device

⁴⁾ not for version with protective foil!