

# Capsule Gauges for Low Pressure

Crimped-on ring case stainless steel

KPChg  
KPChgG

## 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 polished crimped-on ring, stainless steel 304 (1.4301)

### Degree of Protection (DIN EN 60 529/IEC 529)

IP54

IP65 for model KPChgG

### Case Ventilation

Model KPChgG 100 case ventilation closable  
ventilation required for internal  
pressure compensation  
Model KPChgG 160 via blow-out device

### Case Filling

Model KPChgG glycerin

### Nominal Case Size

100, 160 mm (4, 6")

### Wetted Parts

Type – 1	connection	brass
	diaphragm capsule	CuBe alloy
	O-ring sealing	NBR
Type – 3	connection	stainless steel 316L (1.4404)
	diaphragm capsule	stainless steel 316L (1.4404)
	O-ring sealing	FPM

### Case Configuration

Connection	screwed
Position of the connection	- bottom connection - centre back connection ( <b>rm</b> )
Mounting device	- without - back flange for surface mounting ( <b>Rh</b> ) - front flange for panel mounting ( <b>Fr</b> ) - u-clamp for panel mounting ( <b>BFr</b> )

### Pressure Ranges (DIN EN 837-3)

Model KPCh	0 – 2.5 mbar to 0 – 600 mbar (0 – 1 inH <sub>2</sub> O to 0 – 250 inH <sub>2</sub> O)
Model KPChG	0 – 100 mbar to 0 – 600 mbar (0 – 40 inH <sub>2</sub> O to 0 – 250 inH <sub>2</sub> O)

### Process Connection

G ½ B (½" BSP)

### Window

Instrument glass	pressure ranges ≤ 16 mbar (≤ 6.4 inH <sub>2</sub> O)
Acrylic glass	pressure ranges ≥ 25 mbar (≥ 10 inH <sub>2</sub> O)

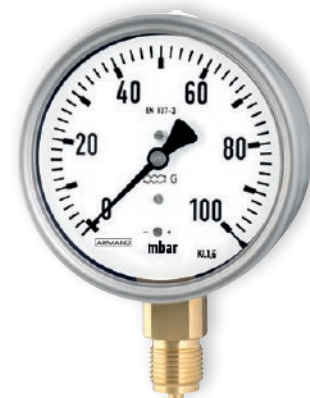
(with punched hole for zero adjustment)

### Movement

Brass/German silver	for type – 1
Stainless steel	for type – 3

### Dial

Aluminum white, scale black



### Pointer

Aluminum black

### Zero Adjustment

On the front side

## 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 position of connection other than vertical installation (90°) for models without case filling
- 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
- Case parts 316L (1.4404)
- Increased degree of protection, e.g. IP65 (without case filling)
- Wetted parts free of grease and oil for type – 3
- Oxygen version for type – 3 (without case filling)
- Version for higher medium temperatures
- Other position of connection
- Model KPChg: increased measurement accuracy (without case filling)

## Accessories

See catalogue heading 11

[www.armano-messtechnik.com](http://www.armano-messtechnik.com)

**ARMANO**

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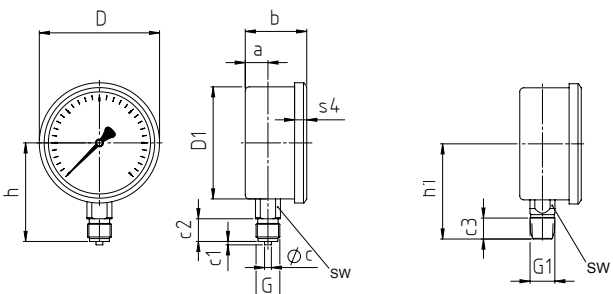
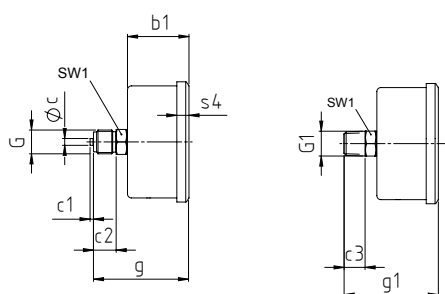
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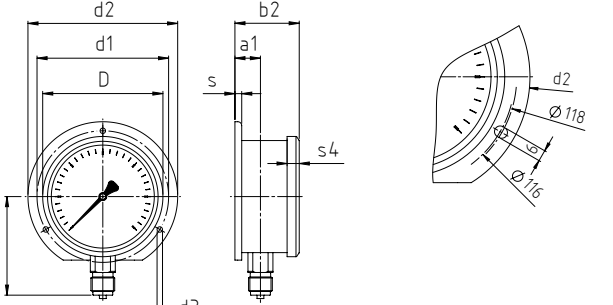
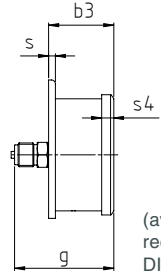
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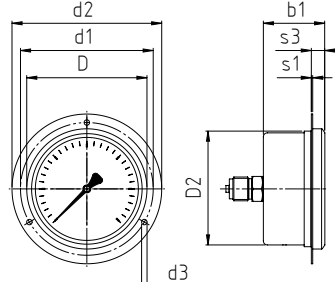
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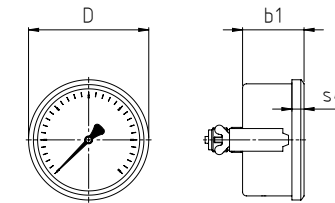
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# Case Configurations, Code Letters, Dimensional Data and Weight, Case Ventilation

Bottom Connection	Centre Back Connection
without mounting device	
without code letters 	code letters <b>rm</b> 

with back flange for surface mounting	
code letters <b>Rh</b> 	code letters <b>rmRh</b>  (available upon request, but not recommended according to DIN EN 837-3)

with front flange for panel mounting	
code letters <b>rmFr</b> 	recommended panel cut out NCS 100 (4") $\varnothing 104 \pm 0.5$ mm (4.09 ± 0.02") NCS 160 (6") $\varnothing 164 \pm 0.5$ mm (6.46 ± 0.02")

with u-clamp for panel mounting	
code letters <b>rmBFr</b> 	recommended panel cut out NCS 100 (4") $\varnothing 102 \pm 0.5$ mm (4.02 ± 0.02") NCS 160 (6") $\varnothing 162 \pm 0.5$ mm (6.38 ± 0.02")

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

NCS	a	a1	b	b1	b2	b3	c	c1	c2	c3	D	D1	D2	d1	d2	d3	G	G1	g	g1	h±1	h1±1
100 ≤16 mbar	15.5 0.61	19 0.75	55 2.17	55 2.17	58.5 2.3	59 2.32	6	3	20	19	106	99	103	116	132	4.8	G ½B M20x1.5	½" NPT	85 3.35	84 3.31	87 3.43	84 3.31
100 ≥25 mbar	15.5 0.61	23 0.91	55 2.17	55 2.17	58.5 2.3	59 2.32	6	3	20	19	106	99	103	116	132	4.8	G ½B M20x1.5	½" NPT	85 3.35	84 3.31	87 3.43	84 3.31
160 ≤16 mbar	15 0.59	18 0.71	55 2.17	55 2.17	58 2.28	58 2.28	6	3	20	19	167	159	163	178	196	5.8	G ½B M20x1.5	½" NPT	85 3.35	84 3.31	115 4.53	114 4.49
160 ≥25 mbar	15 0.59	18 0.71	51 2.01	51 2.01	54 2.13	54 2.13	6	3	20	19	167	159	163	178	196	5.8	G ½B M20x1.5	½" NPT	81 3.19	80 3.15	115 4.53	114 4.49

s	s1	s3	s4	SW	SW1	approx. weight <sup>1)</sup> KPChg KPChgG	
6 0.24	1 0.04	11.5 0.45	10.5 0.41	22 0.87	22 0.87	0.55 1.21	0.85 1.87
6 0.24	1 0.04	11.5 0.45	10.5 0.41	22 0.87	22 0.87	0.55 1.21	0.85 1.87
6 0.24	1.5 0.06	12.5 0.49	11.5 0.45	22 0.87	22 0.87	0.95 2.09	1.80 3.97
6 0.24	1.5 0.06	12.5 0.49	11.5 0.45	22 0.87	22 0.87	0.90 1.98	1.75 3.86

## Case Ventilation

Model KPChgG 100 case ventilation no. 26 (reclosable, IP65)		Model KPChgG 160 blow-out device	
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<sup>1)</sup> data for versions without mounting device

## Ordering Information

Basic Model		Capsule Gauge for Low Pressure with Crimped-on Ring Case				KPChg
Case filling	without					without code letters
	glycerin					<b>G</b>
Nominal case size	case Ø 100, 160 mm (4, 6")				<b>100, 160</b>	
Wetted material	copper alloy					- 1
	stainless steel					- 3
Case configuration	case/connection	screwed				without code letters
	position of the connection	bottom connection				without code letters
		centre back connection				<b>rm</b>
	mounting device	without				without code letters
back flange for surface mounting				<b>Rh</b>		
front flange for panel mounting				<b>Fr</b>		
		u-clamp for panel mounting				<b>BFr</b>
Pressure ranges	mbar			inH <sub>2</sub> O		
	vacuum	compound	pressure	vacuum	compound	pressure
	-2.5 / 0 <sup>1)</sup>	-1 / +1.5 <sup>1)</sup> -1.5 / +1 <sup>1)</sup>	0 - 2.5 <sup>1)</sup>	-1 / 0 <sup>1)</sup>	-0.4 / +0.6 <sup>1)</sup> -0.6 / +0.4 <sup>1)</sup>	0 - 1 <sup>1)</sup>
	-4 / 0	-1.5 / +2.5 -2.5 / +1.5	0 - 4	-1.6 / 0	-0.6 / +1 -1 / +0.6	0 - 1.6
	-6 / 0	-2 / +4 -4 / +2	0 - 6	-2.5 / 0	-1 / +1.5 -1.5 / +1	0 - 2.5
	-10 / 0	-4 / +6 -6 / +4	0 - 10	-4 / 0	-1.5 / +2.5 -2.5 / +1.5	0 - 4
	-16 / 0	-6 / +10 -10 / +6	0 - 16	-6 / 0	-2 / +4 -4 / +2	0 - 6
	-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
Process connection	standard thread	G ½ B				<b>G ½ B</b>
	options	½" NPT				<b>½" NPT</b>
		M20x1.5				<b>M20x1.5</b>
		G ¼ B				<b>G ¼ B</b>
		¼" NPT				<b>¼" NPT</b>
		M12x1.5				<b>M12x1.5</b>
Options	see page 4					
Example					<b>KPChg 100 - 1, 0 - 60 mbar, G ½ B</b>	

<sup>1)</sup> for NCS 100 (4\*): 180 angular degrees

