

Capsule Gauges for Low Pressure

Crimped-on ring case stainless steel

MERASERW5

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 60529 / IEC 60529)

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

Case Configuration

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

Pressure Ranges (DIN EN 837-3)

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

Process Connection

G ½ B (½" BSP)

Window

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

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)
- Certificates and approvals, e.g. GOST (see also website)

Accessories

See catalogue heading 11

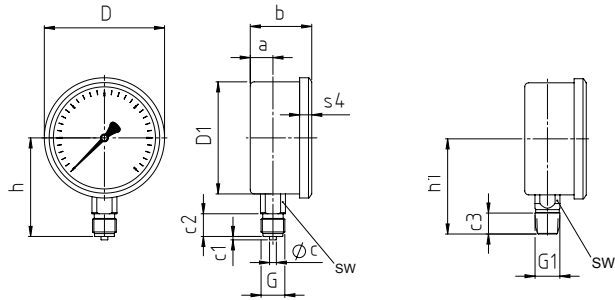
Case Configurations, Code Letters, Dimensional Data and Weight, Case Ventilation

Bottom Connection

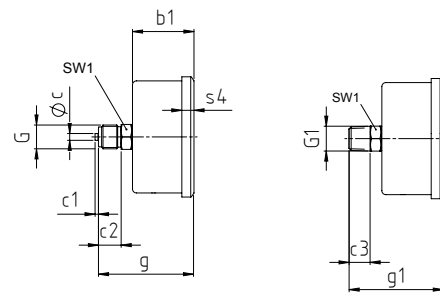
Centre Back Connection

without mounting device

without code letters

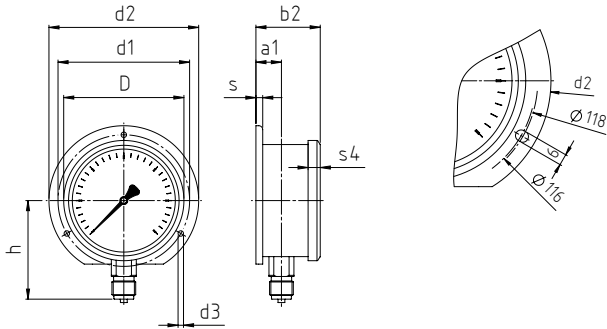


code letters rm

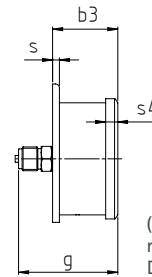


with back flange for surface mounting

code letters Rh



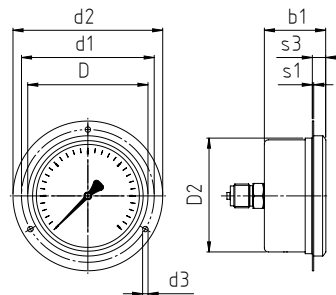
code letters rmRh



(available upon request, but not recommended according to DIN EN 837-3)

with front flange for panel mounting

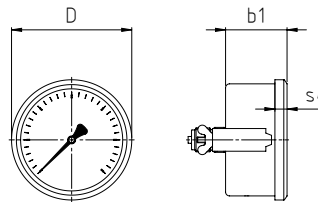
code letters rmFr



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 rmBFr



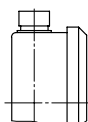
recommended panel cut out
NCS 100 (4") $\varnothing 102 \pm 0.5$ mm
(4.02 ± 0.02 ")
NCS 160 (6") $\varnothing 162 \pm 0.5$ mm
(6.38 ± 0.02 ")

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

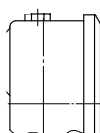
NCS	a	a1	b	b1	b2	b3	c	c1	c2	c3	D	D1	D2	d1	d2	d3	G	G1	g	g1	h ^{±1}	h1 ^{±1}
100 ≤ 16 mbar	15.5 0.61	19 0.75	55 2.17	55 2.17	58.5 2.3	59 2.32	6 0.24	3 0.12	20 0.79	19 0.75	106 4.17	99 3.9	103 4.06	116 4.57	132 5.2	4.8 0.19	G ½ B M20x1.5	½" NPT	85 3.35	84 3.31	87 3.43	84 3.31
100 ≥ 25 mbar	15.5 0.61	23 0.91	55 2.17	55 2.17	58.5 2.3	59 2.32	6 0.24	3 0.12	20 0.79	19 0.75	106 4.17	99 3.9	103 4.06	116 4.57	132 5.2	4.8 0.19	G ½ B 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 0.24	3 0.12	20 0.79	19 0.75	167 6.57	159 6.26	163 6.42	178 7.01	196 7.72	5.8 0.23	G ½ B 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 0.24	3 0.12	20 0.79	19 0.75	167 6.57	159 6.26	163 6.42	178 7.01	196 7.72	5.8 0.23	G ½ B M20x1.5	½" NPT	81 3.19	80 3.15	115 4.53	114 4.49

Case Ventilation

Model KPChgG 100
case ventilation no. 26
(reclosable, IP65)



Model KPChgG 160
blow-out device



s	s1	s3	s4	SW	SW1	approx. weight ¹⁾	
						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

¹⁾ 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								G
Nominal case size	case Ø 100, 160 mm (4, 6")							100, 160	
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						rm
	mounting device		without						without code letters
			back flange for surface mounting						Rh
			front flange for panel mounting						Fr
			u-clamp for panel mounting						BFr
Pressure ranges	mbar			inH ₂ O					
	vacuum	compound	pressure	vacuum	compound	pressure			
	-2.5 / 0 ¹⁾	-1 / +1.5 ¹⁾	0 - 2.5 ¹⁾	-1 / 0 ¹⁾	-0.4 / +0.6 ¹⁾	0 - 1 ¹⁾			
		-1.5 / +1 ¹⁾			-0.6 / +0.4 ¹⁾				
	-4 / 0	-1.5 / +2.5	0 - 4	-1.6 / 0	-0.6 / +1	0 - 1.6			
		-2.5 / +1.5			-1 / +0.6				
	-6 / 0	-2 / +4	0 - 6	-2.5 / 0	-1 / +1.5	0 - 2.5			
		-4 / +2			-1.5 / +1				
	-10 / 0	-4 / +6	0 - 10	-4 / 0	-1.5 / +2.5	0 - 4			
		-6 / +4			-2.5 / +1.5				
	-16 / 0	-6 / +10	0 - 16	-6 / 0	-2 / +4	0 - 6			
		-10 / +6			-4 / +2				
	-25 / 0	-10 / +15	0 - 25	-10 / 0	-4 / +6	0 - 10			
		-15 / +10			-6 / +4				
	-40 / 0	-15 / +25	0 - 40	-16 / 0	-6 / +10	0 - 16			
		-25 / +15			-10 / +6				
	-60 / 0	-20 / +40	0 - 60	-25 / 0	-10 / +15	0 - 25	e.g. 0 - 60 mbar		
		-40 / +20			-15 / +10				
	-100 / 0	-40 / +60	0 - 100	-40 / 0	-15 / +25	0 - 40			
		-60 / +40			-25 / +15				
	-160 / 0	-60 / +100	0 - 160	-60 / 0	-20 / +40	0 - 60			
		-100 / +60			-40 / +20				
	-250 / 0	-100 / +150	0 - 250	-100 / 0	-40 / +60	0 - 100			
		-150 / +100			-60 / +40				
	-400 / 0	-150 / +250	0 - 400	-160 / 0	-60 / +100	0 - 160			
		-250 / +150			-100 / +60				
	-600 / 0	-200 / +400	0 - 600	-250 / 0	-100 / +150	0 - 250			
	-400 / +200			-150 / +100					
Process connection	standard thread	G ½ B						G ½ B	
	options	½" NPT						½" NPT	
		M20x1.5						M 20x1.5	
		G ¼ B						G ¼ B	
		¼" NPT						¼" NPT	
		M 12x1.5						M 12x1.5	
Options	see page 4								
Example				KPChg 100 - 1, 0 - 60 mbar, G ½ B					

¹⁾ for NCS 100 (4"): 180 angular degrees

Ordering Information, Further Options

These options are to be ordered in written form. Please contact us to ensure compatibility when combining options.			
Red mark	on the dial		
Plastic clip	red or green, external at the crimped-on ring		
Special adjustment			
Window	acrylic glass (PMMA)		
	polycarbonate (PC)		
	instrument glass		
Blow-out device Ø 1" (25 mm)	in the back of the case		
Case ventilation no. 22	for outdoor installation		
Case polished			
Silicone-free version			
Restrictor screw in the pressure inlet port material: brass or stainless steel	orifice Ø 0.3 mm (0.01")		
Overrange protection (üs) and / or Vacuum protection (us) ¹⁾	for types – 1 (copper alloy)	3-fold üs ²⁾ or us	
		10-fold üs	from 0 – 25 mbar
		10-fold us	from –100 / 0 mbar
	combination 10-fold üs and 10-fold us only for compound ranges from measuring span 100 mbar		
	for types – 3 (stainless steel)	3-fold üs ²⁾ 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		
Instrument tag	stainless steel plate 12 x 55 mm (0.47 x 2.17"), wire mounting sticker on the case		

Special Versions: Please describe your requirements in cleartext!

¹⁾ max. –1000 mbar
²⁾ only for unfilled devices