

Capsule Gauges for Low Pressure

Crimped-on Ring Case Stainless Steel

KPChg
KPChgG

Standard Versions

Information on general and metrological features (load limits / temperature limitations) and standard pressure ranges / scale divisions can be found in model overview 6000.

Accuracy (EN 837-3)

Class 1.6

Case

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

Case Protection Type (EN 60 529 / IEC 529)

IP 54

Case Ventilation

Model KPChgG 100 Blow-out plug
Ventilation required for internal pressure compensation

Model KPChgG 160 Blow-out device

Case Filling

for model KPChgG: Glycerine

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: 1.4571 (316 stainless steel)
Diaphragm capsule: 1.4571 (316 stainless steel)
O-ring sealing: FPM

Case Configuration

Connection: screwed
Position of the connection: bottom connection,
optional: centre back connection (rm)
without, optional back flange for
surface mounting (Rh) / front flange
for panel mounting (Fr) or
u-clamp for panel mounting (BFr),
see page 2

Mounting device:

Pressure Ranges (EN 837-3)

KPChg 0- 2.5 mbar (0- 1.0 "WC) to 0-600 mbar (0-250 "WC)
KPChgG 0-100 mbar (0- 40 "WC) to 0-600 mbar (0-250 "WC)

Process Connection

G ½ B (½" BSP)

Window

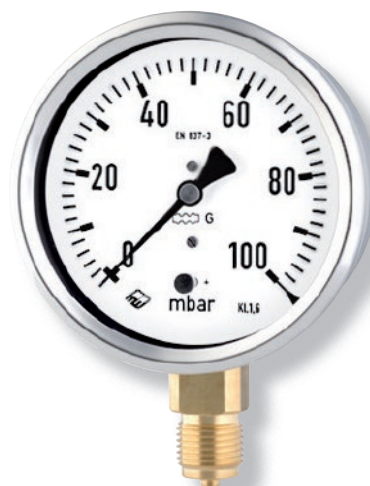
Pressure ranges ≤ 16 mbar (6 "WC): instrument glass
(punched for zero adjustment)
Pressure ranges ≥ 25 mbar (10 "WC): acrylic glass
(punched for zero adjustment)

Movement

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

Dial

Aluminium, black figures, white background



Pointer

Aluminium, black

Zero Adjustment

Frontsided

Ordering Information, Standard Pressure Ranges, Options

see pages 3 and 4

Special Versions and further Options among others

- Other process connections upon request
- Other pressure ranges and / or special scales, e.g. double scale mbar/kPa, coloured fields or areas, dial inscriptions, negative scale etc.
- Case parts 1.4404 (316 L stainless steel) upon request
- Increased case protection type, e.g. IP 65 upon request
- Wetted parts free of grease and oil for type –3 upon request
- Oxygen version for type –3 without case filling upon request
- Execution for higher medium temperatures upon request
- Position of the connection radial at 3 o'clock, 9 o'clock, 12 o'clock (others upon request) or position of connection other than vertical installation (90°) for types without case filling
- Increased precision upon request
- GOST-version for Russia, Ukraine, Kazakhstan

Accessory

see catalogue heading 11



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Case Configurations, Code Letters, Dimensional Data and Weights, Blow-out Device

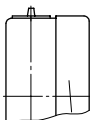
Bottom connection												Centre back connection											
no mounting device																							
(no additional code letter)												code letters: rm											
with back flange for surface mounting												with back flange for surface mounting											
code letters: Rh												code letters: rmRh											
												<p>(available upon request, but according to EN 837-3 not recommended)</p>											
with front flange for panel mounting												with front flange for panel mounting											
code letters: rmFr												code letters: rmFr											
												<p>recommended panel cut out NCS 100 (4"): Ø 104 ± 0.5 mm (0.02") NCS 160 (6"): Ø 164 ± 0.5 mm (0.02")</p>											
with u-clamp for panel mounting												with u-clamp for panel mounting											
code letters: rmBFr												code letters: rmBFr											
												<p>recommended panel cut out NCS 100 (4"): Ø 102 ± 0.5 mm (0.02") NCS 160 (6"): Ø 162 ± 0.5 mm (0.02")</p>											

Dimensional data (mm/ inches) and weights (kg/ lb)

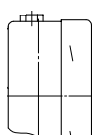
NCS	a	a1	b	b1	b2	b3	c	c1	c2	c3	D	D1	D2	d1	d2	d3	G	G1	g	g1	h±1	h1±1
100 (4") ≤ 16 mbar	15.5 .61	19 .75	55 2.17	55 2.17	58.5 2.3	59 2.32	6 .24	3 .12	20 .79	19 .75	106 4.17	99 3.9	103 4.06	116 4.57	132 5.2	4.8 .19	G ½ B (½ BSP) M 20 x 1.5	½" NPT	85 3.35	84 3.31	87 3.43	84 3.31
100 (4") ≥ 25 mbar	15.5 .61	23 .91	55 2.17	55 2.17	58.5 2.3	59 2.32	6 .24	3 .12	20 .79	19 .75	106 4.17	99 3.9	103 4.06	116 4.57	132 5.2	4.8 .19	G ½ B (½ BSP) M 20 x 1.5	½" NPT	85 3.35	84 3.31	87 3.43	84 3.31
160 (6") ≤ 16 mbar	15 .59	18 .71	55 2.17	55 2.17	58 2.28	58 2.28	6 .24	3 .12	20 .79	19 .75	167 6.57	159 6.26	163 6.42	178 7.01	196 7.72	5.8 .23	G ½ B (½ BSP) M 20 x 1.5	½" NPT	85 3.35	84 3.31	115 4.53	114 4.49
160 (6") ≥ 25 mbar	15 .59	18 .71	51 2.01	51 2.01	54 2.13	54 2.13	6 .24	3 .12	20 .79	19 .75	167 6.57	159 6.26	163 6.42	178 7.01	196 7.72	5.8 .23	G ½ B (½ BSP) M 20 x 1.5	½" NPT	81 3.18	80 3.15	115 4.53	114 4.49

Blow-out device		Blow-out device					
s	s1	s3	s4	SW	SW1	approx. weight ¹⁾ KPChg KPChgG	
6 .24	1 .04	11.5 .45	10.5 .41	22 .87	22 .87	0.55 1.21	0.85 1.87
6 .24	1 .04	11.5 .45	10.5 .41	22 .87	22 .87	0.55 1.21	0.85 1.87
6 .24	1.5 .06	12.5 .49	11.5 .45	22 .87	22 .87	0.95 2.09	1.80 3.97
6 .24	1.5 .06	12.5 .49	11.5 .45	22 .87	22 .87	0.90 1.98	1.75 3.86

Model KPChgG 100
Blow-out plug 19



Model KPChgG 160
Blow-out device



¹⁾ Information for version without mounting device

Ordering Information with Standard Pressure Ranges, Options

Basic Model:		Capsule Gauge for Low Pressure, Crimped-on Ring Case				KPChg	
Case Filling:	without					without code letters	
	glycerine					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 centre back			without code letters 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			inchWC			
	Vacuum	Compound Ranges	Pressure	Vacuum	Compound Ranges	Pressure	
	-2.5 - 0 ¹⁾	-1 - 1.5 ¹⁾ -1.5 - 1 ¹⁾	0 - 2.5 ¹⁾	-1.0 - 0	-0.4 - 0.6 -0.6 - 0.4	0 - 1.0	
	-4 - 0	-1.5 - 2.5 -2.5 - 1.5	0 - 4	-1.6 - 0	-0.6 - 1.0 -1.0 - 0.6	0 - 1.6	
	-6 - 0	-2 - 4 -4 - 2	0 - 6	-2.5 - 0	-1.0 - 1.5 -1.5 - 1.0	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	
							e.g. 0-60 mbar
	Process Connection:	standard thread	G ½ B (½" BSP)				G ½ B
		options:	½" NPT				½" NPT
			M20x1.5				M 20 x 1.5
			G ¼ B (¼" BSP)				G ¼ B
¼" NPT				¼" NPT			
M12x1.5				M 12 x 1.5			
Options:	see page 4						
Example:					KPChg 100-1, 0-60 mbar, G ½ B		

¹⁾ for NCS 100: 180 angular degrees

Further Options regarding Ordering Information

Basic Model: Capsule Gauge for Low Pressure, Crimped-on Ring Case		KPChg
Model Code:		see page 3
Options:	<p>red mark on the dial</p> <p>plastic clip red or green external at the crimped-on ring</p> <p>special adjustment</p> <p>window acrylic glass (PMMA) polycarbonate (PC) instrument glass</p> <p>blow-out device Ø 1" (25 mm) in the back of the case</p> <p>blow-out plug 24 (reclosable)</p> <p>case ventilation no. 22 for outdoor installation</p> <p>case polished</p> <p>silicone-free version</p> <p>restrictor screw in pressure inlet port orifice Ø 0.3 mm (0.01") material: as process connection, brass or stainless steel</p> <p>overrange protection (üs) and / or low pressure protection (us)¹⁾</p> <p>for types -1 (copper alloy) 3-times üs or us²⁾ 10-times üs 0 - 25 mbar and above 10-times us -100 - 0 mbar and above</p> <p>combination 10-times üs and 10-times us only for gauge-vacuum-ranges for spans 100 mbar (40 "WC) and above</p> <p>for types -3 (stainless steel) 3-times üs or us²⁾ 10-times üs 0 - 25 mbar and above 10-times us -100 - 0 mbar and above</p> <p>combination 10-times üs and 3-times us only for gauge-vacuum-ranges for spans 40 mbar (16 "WC) and above</p> <p>measuring point marking with stainless steel-plate 12 mm x 55 mm (0.47" x 2.17"), wire mounting or sticker on the case coverage</p>	<p>(order at the moment still as cleartext)</p>
<p>Special Versions: Please describe your requirements clearly</p>		

¹⁾ max. -1000 mbar
²⁾ only for dry versions