

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 Case ventilation closable
Ventilation required for internal pressure compensation

Model KPChgG 160 Blow-out device

Case Filling

for 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 316 SS
Diaphragm capsule: stainless steel 316 SS
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

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

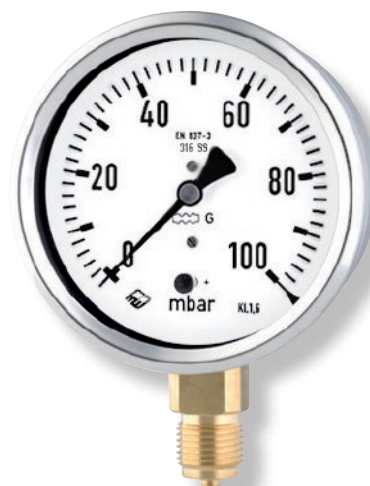
Pressure ranges ≤ 16 mbar (6 "WC): instrument glass
(punched for zero adjustment)
Pressure ranges ≥ 25 mbar (10 "WC): acrylic glass
(punched for zero adjustment)

Movement

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

Dial

Aluminum white, scaling black



Pointer

Aluminum, 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. dual scale mbar/kPa, coloured fields or ranges, 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
- Version 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											
with front flange for panel mounting												with front flange for panel mounting											
code letters: rmFr												code letters: rmFr											
with u-clamp for panel mounting												with u-clamp for panel mounting											
code letters: rmBFr												code letters: rmBFr											

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

Model KPChgG 100 Case ventilation no. 26 closable

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					no 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			no code letters	
	position of the connection	bottom centre back			no code letters rm	
mounting device	without				no 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	
		M 20x1.5			M 20x1.5	
		G ¼ B (¼" BSP)			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: 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 on 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>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-fold üs²⁾ or us 10-fold üs from 0 – 25 mbar 10-fold us from -100 – 0 mbar</p> <p>combination 10-fold üs and 10-fold us only for compound ranges for spans 100 mbar (40 "WC) and above</p> <p>for types -3 (stainless steel) 3-fold üs²⁾ or us 10-fold üs from 0 – 25 mbar 10-fold us from -100 – 0 mbar</p> <p>combination 10-fold üs and 3-fold us only for compound 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>	(order at present still in cleartext)

Special Versions: Please describe your requirements in cleartext

¹⁾ max. -1000 mbar

²⁾ only for dry versions