Capsule Gauge for Low Pressure

Bayonet Ring Case Stainless Steel

KPCh 63
KPChG 63

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 bayonet ring, 1.4301 (304 stainless steel)

Case Protection Type (EN 60 529 / IEC 529)
IP 44 for model KPCh with bottom connection
IP 54

Case Ventilation
Model ...G   Blow-out plug
Ventilation required for internal pressure compensation

Case Filling
for model KPCh**G**: Glycerine

Nominal Case Size
63 (mm) (2½")

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)**
Mounting device: without, optional back flange for surface mounting **(Rh)** / front flange for panel mounting **(Fr)**, see page 2

Pressure Ranges (EN 837-3)
KPChg   0- 25 mbar (0-10 "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 ¼ B (¼" BSP)

Window
KPCh   Instrument glass   for type –1
         Laminated safety glass   for type –3
         Specifics for case configuration Fr
         Polycarbonate (punched for zero adjustment)

KPChG   Polycarbonate (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

- 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

- Oxigen 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

- GOST-version for Russia, Ukraine, Kazakhstan

see catalogue heading 11

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

Bottom connection

no mounting device

(no additional code letter)

## Centre back connection

no mounting device
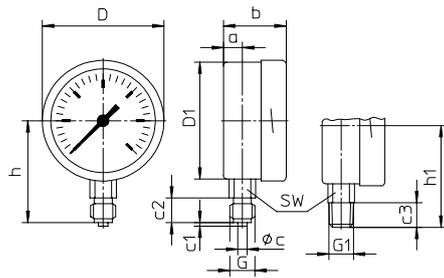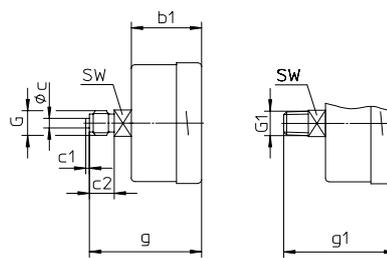
code letters: **rm**

with back flange for surface mounting

code letters: **Rh**
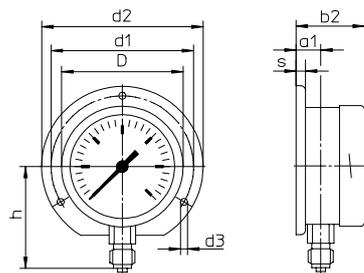
code letters: **rmRh**
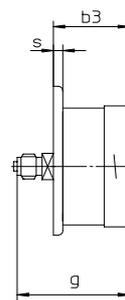
(available upon request, but according to
EN-837-3 not recommended)

with front flange for panel mounting

code letters: **Fr**
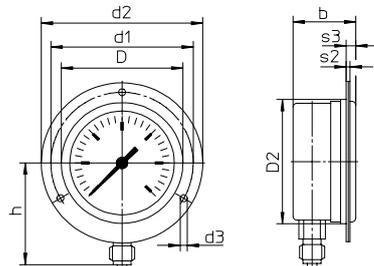
code letters: **rmFr**
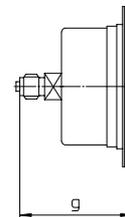
(available upon request, but according to
EN-837-3 not recommended)

Front flange for panel mounting with slotted holes, separate cover ring, recommended panel cut out: Ø 67 ± 0.3 mm (0.01")

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
63	Model KPCh	10 .4	13 .51	38 1.5	37 1.46	41 1.61	40 1.57	5 .2	2 .08	13 .51	13 .51	64 2.52	62 2.44	66 2.6	75 2.95	85 3.35	3.6 .14	G ¼ B (¼" BSP) M 12x1.5	¼" NPT
63	Model KPChG	10 .4	13 .51	47 1.85	37 1.46	50 1.97	40 1.57	5 .2	2 .08	13 .51	13 .51	64 2.52	62 2.44	66 2.6	75 2.95	85 3.35	3.6 .14	G ¼ B (¼" BSP) M 12x1.5	¼" NPT
63	10-times üs Model KPCh Model KPChG	10 .4	13 .51	47 1.85	47 1.85	50 1.97	50 1.97	5 .2	2 .08	13 .51	13 .51	64 2.52	62 2.44	66 2.6	75 2.95	85 3.35	3.6 .14	G ¼ B (¼" BSP) M 12x1.5	¼" NPT

NCS		g	g1	h±1	h1±1	s	s1	s3	SW	approx. weight[1]
63	Model KPCh	60 2.36	60 2.36	54 2.13	54 2.13	5 .2	2 .08	5.5 .22	14 .55	0.2 / 0.44
63	Model KPChG	60 2.36	60 2.36	54 2.13	54 2.13	5 .2	2 .08	5.5 .22	14 .55	0.26 / 0.57
63	10-times üs Model KPCh Model KPChG	70 2.76	70 2.76	54 2.13	54 2.13	5 .2	2 .08	5.5 .22	14 .55	0.21 / 0.46 0.26 / 0.57

[1] Information for version without mounting device

Blow-out device

Model KPChG
Blow-out plug 19
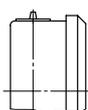
Ordering Information with Standard Pressure Ranges, Options

Basic Model:	Capsule Gauge for Low Pressure, Bayonet Ring Case		KPCh
Case Filling:	without		without code letters
	glycerine		**G**
Nominal Case Size:	case- Ø 63 (mm) (2½")		**63**
Wetted Material:	copper alloy		**−1**
	stainless steel		**−3**
Case Configuration:	case / connection	screwed	without code letters
	position of the connection	bottom	without code letters
		centre back	**rm**
	mounting device	without	without code letters
		back flange for surface mounting	**Rh**
		front flange for panel mounting	**Fr**

Pressure Ranges:

mbar			inchWC			
Vacuum	Compound Ranges	Pressure	Vacuum	Compound Ranges	Pressure	
−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	
	−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		e.g. **0-160 mbar**
−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 ¼ B (¼" BSP)	**G ¼ B**
	options:	¼" NPT	**¼" NPT**
		M12x1.5	**M 20 x 1.5**
		G ⅛ B (⅛" BSP)	**G ⅛ B**
		⅛" NPT	**⅛" NPT**
		M10x1	**M10x1**

Options:	see page 4		

Example:			**KPCh 63-1, 0-160 mbar, G ¼ B**

Further Options regarding Ordering Information

Basic Model:	Capsule Gauge for Low Pressure, Bayonet Ring Case			KPCh
Model Code:				see page 3
Options:	red mark	on the dial		
	stationary red pointer	on the dial, adjustable when removable ring		
	stationary red pointer	adjusting mechanism brass, nickelplated		
		screwed with window		
			adjustable externally	removable key	
				non-removable key	
		adjusting mechanism stainless steel		
		screwed with window		
			adjustable externally	removable key	
				non-removable key	
	maximum drag indicator measuring span 160 mbar and above	adjusting mechanism brass, nickelplated		
		screwed with window		
			adjustable externally	removable key	
				non-removable key	
	clockwise rotary pointer motion ; for vibration-free application	adjusting mechanism stainless steel		
		screwed with window		
			adjustable externally	removable key	
				non-removable key	
	special adjustment			
	blow-out plug 24 (reclosable)[1]			
	case ventilation no. 22 for outdoor installation [1]			
	case polished			
	bayonet ring polished			
	silicone-free version			
	restrictor screw in pressure inlet port material: as process connection, brass or stainless steel	orifice Ø 0.3 mm (0.01")		*(order at the moment still as cleartext)*
	overrange protection (üs) and / or **low pressure protection** (us)[2]			
		for types **–1** (copper alloy)	3-times üs or us[3]	
			10-times üs	0 - 25 mbar and above	
			10-times us	-100- 0 mbar and above	
			combination 10-times üs and 10-times us	
			only for gauge-vacuum-ranges for spans 100 mbar (40 "WC) and above	
		for types **–3** (stainless steel)	3-times üs or us[3]	
			10-times üs	0- 25 mbar and above	
			10-times us	-100- 0 mbar and above	
			combination 10-times üs and 3-times us	
			only for gauge-vacuum-ranges for spans 40 mbar (16 "WC) and above	
	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		