

# Capsule Gauge for Low Pressure

## Bayonet Ring Case Stainless Steel

**KPCh 63**  
**KPChG 63**

### 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 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 KPChG: 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

### 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
- GOST-version for Russia, Ukraine, Kazakhstan

### Accessory

see catalogue heading 11



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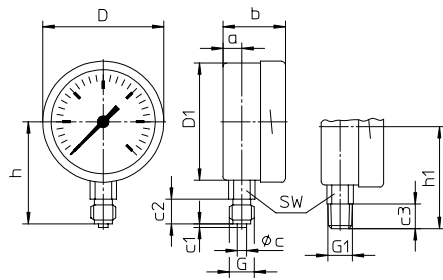
# Case Configurations, Code Letters, Dimensional Data and Weights, Blow-out Device

## Bottom connection

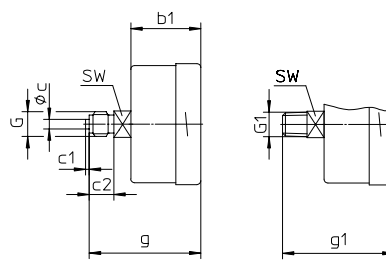
## Centre back connection

### no mounting device

(no additional code letter)

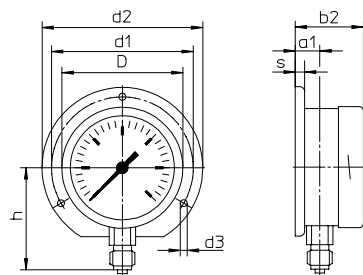


code letters: **rm**

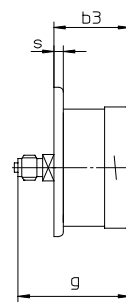


### with back flange for surface mounting

code letters: **Rh**



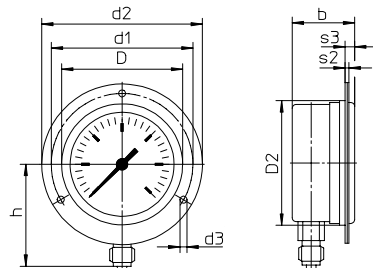
code letters: **rmRh**



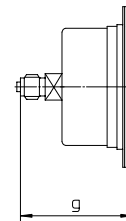
(available upon request, but according to EN-837-3 not recommended)

### 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:  $\varnothing 67 \pm 0.3$  mm (0.01")

## Dimensional Data (mm/inches) and weights (kg/lb)

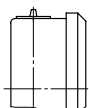
NCS	a	a1	b	b1	b2	b3	c	c1	c2	c3	D	D1	D2	d1	d2	d3	G	G1
63 Model KPCh	10 .4	13 .51	38 1.5	37 1.46	41 1.61	40 1.57	5 .2	2 .08	13 .51	13 .51	64 2.52	62 2.44	66 2.6	75 2.95	85 3.35	3.6 .14	G 1/4 B (1/4" BSP) M 12x1.5	1/4" NPT
63 Model KPChG	10 .4	13 .51	47 1.85	37 1.46	50 1.97	40 1.57	5 .2	2 .08	13 .51	13 .51	64 2.52	62 2.44	66 2.6	75 2.95	85 3.35	3.6 .14	G 1/4 B (1/4" BSP) M 12x1.5	1/4" NPT
10-times üs 63 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 1/4 B (1/4" BSP) M 12x1.5	1/4" NPT

NCS	g	g1	h <sup>±1</sup>	h1 <sup>±1</sup>	s	s1	s3	SW	approx. weight <sup>1)</sup>
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
10-times üs 63 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

<sup>1)</sup> 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					<b>G</b>	
Nominal Case Size:	case- Ø 63 (mm) (2½")				<b>63</b>		
Wetted Material:	copper alloy				<b>-1</b>		
	stainless steel				<b>-3</b>		
Case Configuration:	case / connection	screwed			without code letters		
	position of the connection	bottom centre back			without code letters <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>		
Pressure Ranges:	mbar			inchWC			
	Vacuum	Compound Ranges	Pressure	Vacuum	Compound Ranges	Pressure	
	-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. <b>0-160 mbar</b>
	Process Connection:	standard thread	G ¼ B (¼" BSP)			<b>G ¼ B</b>	
		options:	¼" NPT			<b>¼" NPT</b>	
M12x1.5			<b>M 20 x 1.5</b>				
G ⅜ B (⅜" BSP)			<b>G ⅜ B</b>				
⅜" NPT			<b>⅜" NPT</b>				
M10x1			<b>M10x1</b>				
Options:	see page 4						
<b>Example:</b>						<b>KPCh 63-1, 0-160 mbar, G ¼ B</b>	

## Further Options regarding Ordering Information

Basic Model: Capsule Gauge for Low Pressure, Bayonet Ring Case		KPCh																																						
Model Code:		see page 3																																						
Options:	<table border="1"> <tr> <td>red mark</td> <td>on the dial</td> </tr> <tr> <td>stationary red pointer</td> <td>on the dial, adjustable when removable ring</td> </tr> <tr> <td>stationary red pointer</td> <td>adjusting mechanism brass, nickelplated screwed with window adjustable externally removable key non-removable key</td> </tr> <tr> <td>stationary red pointer</td> <td>adjusting mechanism stainless steel screwed with window adjustable externally removable key non-removable key</td> </tr> <tr> <td>maximum drag indicator measuring span 160 mbar and above</td> <td>adjusting mechanism brass, nickelplated screwed with window adjustable externally removable key non-removable key</td> </tr> <tr> <td>clockwise rotary pointer motion ; for vibration-free application</td> <td>adjusting mechanism stainless steel screwed with window adjustable externally removable key non-removable key</td> </tr> <tr> <td>special adjustment</td> <td></td> </tr> <tr> <td>blow-out plug 24 (reclosable)<sup>1)</sup></td> <td></td> </tr> <tr> <td>case ventilation no. 22 for outdoor installation <sup>1)</sup></td> <td></td> </tr> <tr> <td>case polished</td> <td></td> </tr> <tr> <td>bayonet ring polished</td> <td></td> </tr> <tr> <td>silicone-free version</td> <td></td> </tr> <tr> <td>restrictor screw in pressure inlet port material: as process connection, brass or stainless steel</td> <td>orifice Ø 0.3 mm (0.01")</td> </tr> <tr> <td><b>overrange protection (üs) and / or low pressure protection (us)<sup>2)</sup></b></td> <td></td> </tr> <tr> <td>for types <b>-1</b> (copper alloy)</td> <td>3-times üs or us<sup>3)</sup> 10-times üs 0 - 25 mbar and above 10-times us -100- 0 mbar and above</td> </tr> <tr> <td>combination</td> <td>10-times üs and 10-times us only for gauge-vacuum-ranges for spans 100 mbar (40 "WC) and above</td> </tr> <tr> <td>for types <b>-3</b> (stainless steel)</td> <td>3-times üs or us<sup>3)</sup> 10-times üs 0- 25 mbar and above 10-times us -100- 0 mbar and above</td> </tr> <tr> <td>combination</td> <td>10-times üs and 3-times us only for gauge-vacuum-ranges for spans 40 mbar (16 "WC) and above</td> </tr> <tr> <td>measuring point marking</td> <td>with stainless steel-plate 12 mm x 55 mm (0.47" x 2.17"), wire mounting or sticker on the case coverage</td> </tr> </table>	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	stationary red pointer	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) <sup>1)</sup>		case ventilation no. 22 for outdoor installation <sup>1)</sup>		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")	<b>overrange protection (üs) and / or low pressure protection (us)<sup>2)</sup></b>		for types <b>-1</b> (copper alloy)	3-times üs or us <sup>3)</sup> 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 <b>-3</b> (stainless steel)	3-times üs or us <sup>3)</sup> 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	(order at the moment still as cleartext)
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### Special Versions: Please describe your requirements clearly

<sup>1)</sup> only for version -1 and span 100 mbar and above

<sup>2)</sup> max. - 1000 mbar

<sup>3)</sup> only for dry versions

Changes, replacement of materials and printing errors excepted