

Capsule Gauges

Case stainless steel (Ch) with case filling

Kl. 1.6 NCS
63
80
100
160

Models
KPChG
KPChG 80

Application

Measurement of positive or negative overpressure in pressure ranges 100 mbar (for NCS 63 160 mbar and above) up to 600 mbar for air or other gaseous media.

Nominal Case Size (NCS)

63, 80, 100, 160 mm (2½", 3", 4", 6")

Accuracy (EN 837-3)

Class 1.6 (indication accuracy better than ± 1.6 % of full scale value)

Pressure Ranges (according to EN 837-3)

NCS 63: 0-160 mbar to 0-600 mbar
NCS 80 and above: 0-100 mbar to 0-600 mbar
also vacuum- and compound ranges
(see table on reverse side)

Pressure Limitations

at steady load: full scale value
at dynamic load: 0.9 x full scale value

Temperature Limitations

Ambient temperature: - 20 bis +60 °C (-4 / +140 °F)
Medium temperature: max. +70 °C (+158 °F)

Temperature Caused Error

The accuracy error caused by media or ambient temperatures differing from +20 °C (+68 °F) is significant. It can be estimated with 0.6 % per each 10 °C (+18 °F).

Case Protection Type (EN 60529 / IEC 529)

IP 54

Standard Configuration

Connection

bottom connection, optional centre back connection (rm)

NCS 63:

¼" BSP (G ¼ B) brass (Version -1)

NCS 80, 100, 160:

½" BSP (G ½ B)

Version -1: brass

Version -3: stainless steel 1.4571 (316 stainless steel)

Diaphragm Capsule

Version -1: CuBe-alloy

Version -3: stainless steel 1.4571 (316 stainless steel)

(not available for NCS 63)

O-Ring-Sealing (wetted):

Version -1: NBR (nitrile rubber)

Version -3: FPM (fluorocarbon) (not available for NCS 63)

Movement

Version -1: brass / German silver

Version -3: stainless steel (not available for NCS 63)

Dial

Aluminum, black figures, white background

Pointer

Aluminum black

Zero Point Adjustment

Front-sided, adjustable externally through acrylic glass window

Case

Stainless steel 1.4301 (304 stainless steel),

NCS 63, 100, 160 with bayonet ring, NCS 80 with crimped-on ring

Case Filling

Glycerine (86%)



Window

Acrylic glass, with hole for zero point adjustment

Safety Features

Blow-out at the top of the case
(see information on the reverse side)

Special Options

- Other connection thread, e.g. M 12x1.5, ¼" NPT, NCS 80 and above also M 20x1.5 or ½" NPT; others upon request
- Restrictor screw Ms or stainless steel (orifice Ø 0.3 mm) in the inlet port
- Case ventilation no. 22 for outdoor installation
- Overrange-/low pressure protection (only NCS 80, 100, 160):
Version -1: 10- times overrange- or oder low pressure protected or combination 10-times overrange- and low pressure protected
Version -3: 10-times overrange protected or 10-times low pressure protected; combination 10-times overrange- and 3-times low pressure protected; higher low pressure protection in combination with 10-times overrange protection upon request

Ordering information (model construction):

Please quote the following information in your order:

Basic model and nominal case size : **KPChG 63, 100 or 160**
KPChG 80

Code for wetted parts: **- 1 or - 3** (see left; NCS 63 only -1)

Code for case configuration: standard case with bottom connection = without additional code letter

optional centre back connection = **rm**

Pressure range: see table on reverse side, e.g. **0-100 mbar**

Anschlussgewinde: **G ½ B** (andere siehe "Sonderausführungen")
G ¼ B bei NG 63

Special options: (see above)

Examples for ordering information:

- KPChG 100-3, rm, 0-250 mbar, G ½ B
- KPChG 80-1, -40/+60 mbar, ½" NPT



ARMATURENBAU GmbH
Manometerstraße 5 D-46487 Wesel - Ginderich
Phone: +49 (0) 28 03 / 91 30 - 0 Fax: +49 (0) 28 03 / 10 35
armaturenbau.com mail@armaturenbau.com



Subsidiary Company and Sales East Germany and Eastern Europe
MANOTHERM Beierfeld GmbH
Am Gewerbepark 9 D-08340 Beierfeld
Phone: +49 (0) 37 74 / 58 - 0 Fax: +49 (0) 37 74 / 58 - 545
manotherm.com mail@manotherm.com

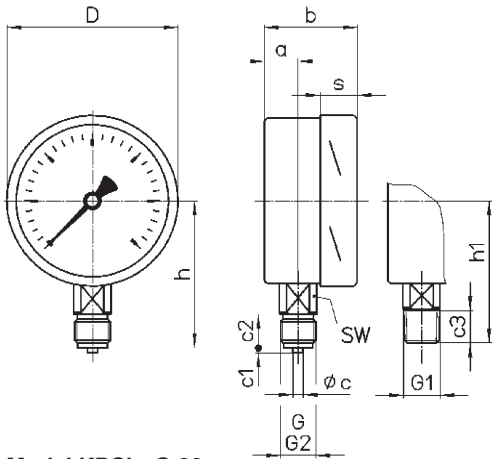
I-6202
01/10

Case Configurations, Code Letters, Dimensions and Weight, Pressure Ranges

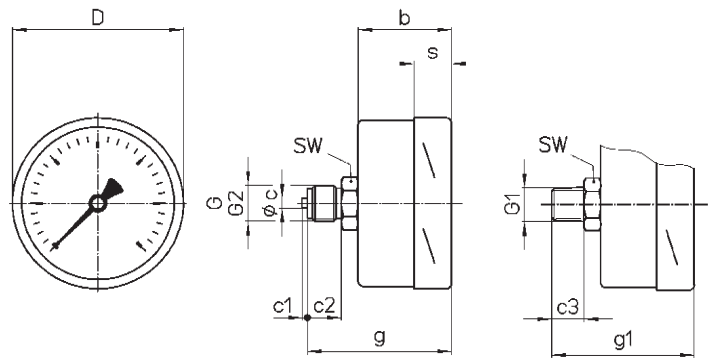
Bottom connection
without code letters

Centre back connection
code letters: **rm**

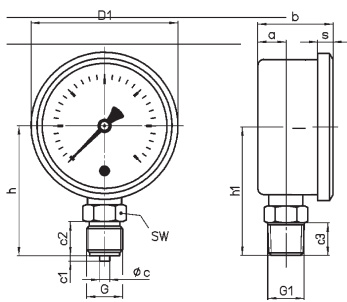
Models KPChG 100, 160



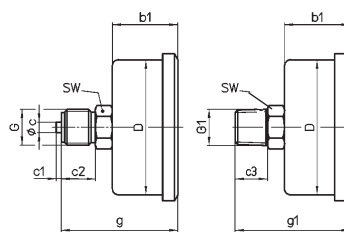
Models KPChG 100, 160



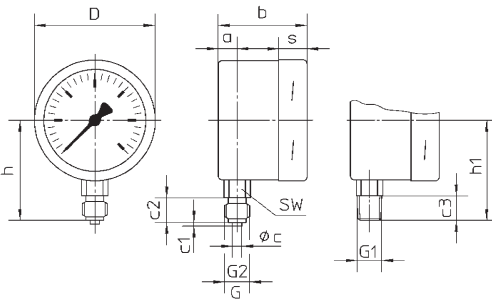
Model KPChG 80



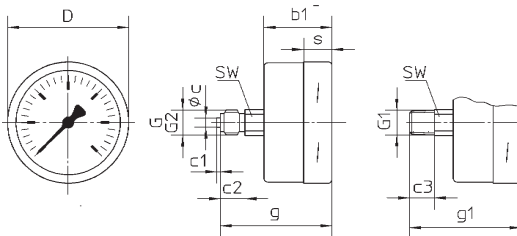
Model KPChG 80



Model KPChG 63



Model KPChG 63



Dimensional Data (mm / inches) and Weights (kg / lb)

NCS	a	b	b1	D	c	c1	c2	c3	G	G1	G2	g	g1	h ±1	h1 ±1	s	SW	Weight (approx.)
63	10	47	36	64	5	2	13	13	G ¼ B	¼" NPT	M 12x1.5	59	59	53	53	15	14	0.23
2 ½"	.4	1.85	1.42	2.52	.2	.08	.51	.51	¼" BSP			2.32	2.32	2.09	2.09	.59	.55	0.51
80	16	43	37	86								67	66	76	75	9		0.45
3"	.63	1.70	1.46	3.39								2.63	2.6	2.99	2.95	.35		0.99
100	20	55		101	6	3	20	19	G ½ B	½" NPT	M 20x1.5	85	84	87	84		22	0.90
4"	.79	2.17		3.98	.24	.12	.79	.75	½" BSP			3.35	3.31	3.43	3.31	.83	.87	1.98
160	15.5	51.5		161								82	81	115	114			1.90
6"	.61	2.03		6.43								3.23	3.18	4.53	4.49			4.19

Pressure Ranges (EN 837-3)

Vacuum	Compound	Pressure
in mbar		
- 100 / 0 ¹⁾	- 40 / + 60 ¹⁾ - 60 / + 40 ¹⁾	0 / 100 ¹⁾
- 160 / 0	- 60 / +100 - 100 / + 60	0 / 160
- 250 / 0	- 100 / +150 - 150 / +100	0 / 250
- 400 / 0	- 150 / +250 - 250 / +150	0 / 400
- 600 / 0	- 200 / +400 - 400 / +200	0 / 600

¹⁾ not for NCS 63

Mounting/operating advice regarding Blow-out

The filled version Ausführung is being delivered with a pressure relief vent Ø 13 mm at the top of the case coverage and blow-out plug. The tip of the blow-out plug has to be cut for internal pressure compensation (therefore IP 54). The instruments have to be labelled with a corresponding sticker.