

Diaphragm Pressure Gauges

Polyamide Screw Ring Case

Standard (PK) or Liquid Filled (PKOe)

with Limit-Switch Contact Assemblies

Nom. Case Size 100 (4")

Models
PK
PKOe

This data sheet contains ordering information, minimum pressure ranges, information about the electrical connections and dimensional drawings of diaphragm pressure gauges models PK and PKOe with limit-switch contact assemblies.

Data sheet 3300 contains all important features of model PK and PKG without electrical accessories. These technical details are valid also for gauges assembled with limit-switch contacts, as far as you don't find a deviating description below. The ordering code for the liquid-filled version with limit-switch contact assemblies is Oe instead of G. The filling liquid is a special oil.

For detailed information about use and operation of mechanical, inductive, electronic, and pneumatic limit-switch contact assemblies please note our **general information leaflet 9000**. For further information, especially about the available make/break operations, see the data sheets for the individual models of limit-switch contact assemblies:

Mechanical (standard- and magnetic contacts)	Data sheet 9100
Inductive	Data sheet 9200
Electronic	Data sheet 9201
Pneumatic	Data sheet 9300

Minimum Pressure Ranges

Every pressure gauge needs a sufficient amount of torque to operate the limit-switch contacts with minimized error. For this reason the following minimum pressure ranges are to consider¹⁾:

Limit-Switch Type ²⁾	Minimum Pressure Range:	
	Measuring Flange Ø	Measuring Flange Ø
	100 mm (4")	160 mm (6")
	bar (psi)	mbar ("WC)
1 x Standard	0.6 (10)	60 (25)
2 x Standard	0.6 (10)	100 (40)
3 x Standard	0.6 (10)	160 (60)
1 x Magnetic	0.6 (10)	100 (40)
2 x Magnetic	0.6 (10)	160 (60)
3 x Magnetic	2.5 (30)	250 (100)
1 x Inductive	0.6 (10)	60 (25)
2 x Inductive	0.6 (10)	60 (25)
3 x Inductive	0.6 (10)	60 (25)
1 x Electronic	0.6 (10)	60 (25)
2 x Electronic	0.6 (10)	60 (25)
3 x Electronic	0.6 (10)	60 (25)
1 x Pneumatic	0.6 (10)	60 (25)

For pressure gauges with 3 contacts it is not always possible to set all set pointers one above the other. Therefore you should always state for which contacts resp. set pointers the opportunity to set one above the other is required, or simply point out when ordering where your set points are.

Window

Polycarbonate

¹⁾ lower pressure ranges upon request

²⁾ Limit-switch contact assemblies are installed behind the dial (HZ version). Installation in front of the dial (TZ version) is possible upon request.



Electrical Connection

Pressure gauges **model PK** (unfilled version) with 1, 2, or 3 **standard or magnetic** limit-switch contacts are supplied with about 1 m (3 ft) connection cable passing through the back side of the case. Universal plug connectors are available at option (extra charges).

The universal plug connector is standard for pressure gauges **model PKOe** with mechanical limit-switch contacts.

Pressure gauges (PK, PKOe) with **inductive or electronic** limit-switch contact assembly are supplied with a terminal box.

The universal plug connector resp. the terminal box is mounted on the right side of the case ("right side" from viewer's perspective when looking on the dial).

Pressure gauges with **pneumatic** limit-switches are supplied with a PP or PE converter mounted on the back of the case.

The gauge cannot be supplied with a 1" blow-out when a universal plug connector resp. a terminal box or a PP/PE converter is mounted on the back of a case.

The precise locations of the electrical connections are shown in the dimensional drawings on the reverse side of this data sheet. Others than standard locations are available upon request at additional charges only.

The universal plug connector has 6 terminals and a ground terminal. The terminal box has 6 terminals only.

Ordering Information

The ordering information of the individual gauge model (compare data sheet 3300) is extended by the

CODE LETTER for the contact type :

S, M, I, E or P

and the CODE NUMBER for the make/break operation:

e.g. **1, 11, 12, 2, 22, 21**

(Please compare data sheets 9000 ff for the limit-switch contact assembly!)

Examples: PK 100-2, 0-6 bar, M 12

PKOe 100-3, -400 mbar, 1/2" NPT, I 11



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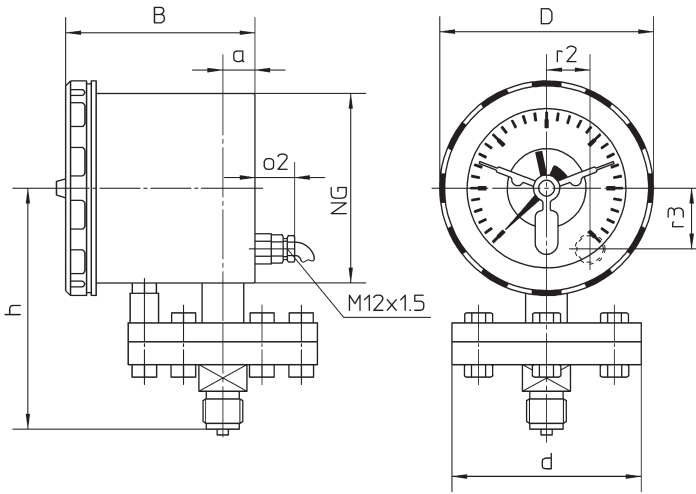
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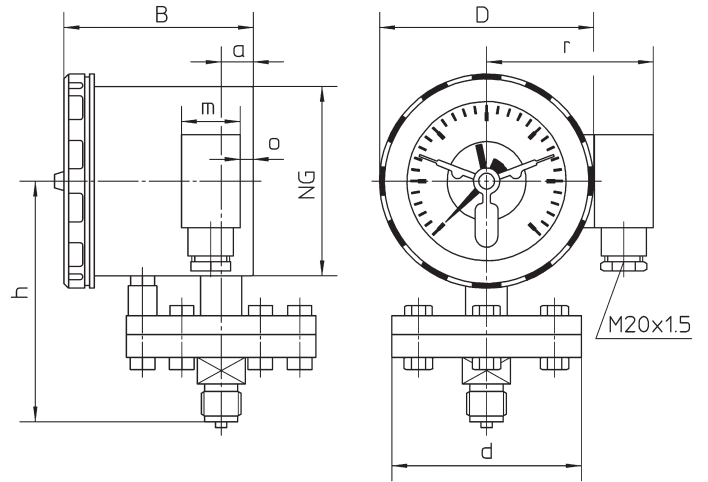
Case Configurations, Electrical Connections, Dimensional Data and Weights

The dimensions are the same as from the basic model, except the front-to-back sizes, see table below. For the other dimensions, please compare data sheet 3300.

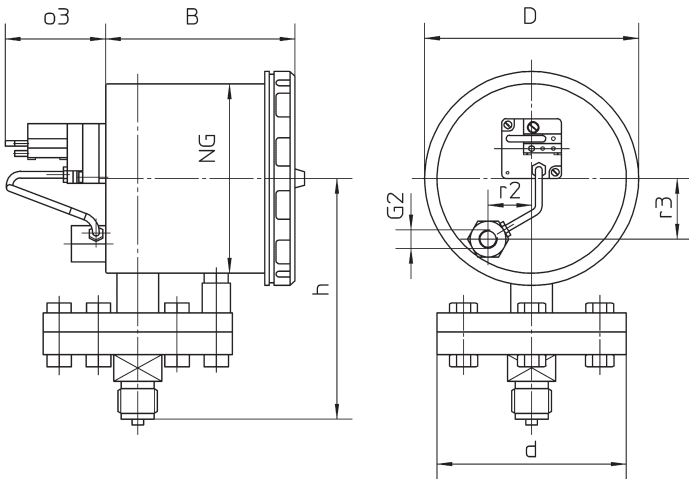
Connection cable passing through the back of the case



Universal plug connector or terminal box on the right side of the case



PP/PE converter (for pneumatic limit-switch) on the backside of the case (1"-Blow-out in the back is not possible)



Dimensions (mm / inches) and Weight (kg / lb)

Nom. Case Size	Measuring flange Ø d	a	B	D	G2	h ± 1	m	o	o2	o3	r	r2	r3	r5	Weight (approx.) ¹⁾	
															PK	PKOe
100 4"	100 4"	17	100	113	G 1/8	127	31	.27	21	53	88	23	32	17	1.850	2.300
	160 6"	.67	3.94	4.45	1/8" BPS	5	1.22	—	.83	2.1	3.46	.90	1.26	.67	4.10	5.10
															2.950	3.450
															6.50	7.60

¹⁾ The weights of instruments with different pressure ranges are varying a lot, therefore the here stated data can be a vague outlining only.

The information in this leaflet is given in good faith, but we reserve the right to make changes without notice.