



Features

- Small temperature error by means of reduced-volume measuring element
- Operating temperature up to 200 °C
- Process connection via diaphragm seal product group D5
- Case and pressure element assembly of stainless steel
- Instrument connection welded with diaphragm seal
- Accuracy class 1.0 per EN 837-1

Options

- Case with liquid filling and degree of protection IP 66
- Hygienic design
- Inspection certificate
 - material per DIN EN 10204
 - calibration certificate per DIN EN 10204

Application area

- Food industry
- Pharmaceutical industry
- Biotechnology

Application

The pressure gauge type series BH42.. has been especially constructed for the operation with diaphragm seals. A custom bourdon tube that is reduced in volume produces a very slight temperature error. Diaphragm seals with reduced membrane surface areas may also be used. A large selection of diaphragm seals – D5 product category – is available for a variety of applications.

Technical Data

Case

high quality case with bayonet ring DN 100, with blow-out device per EN 837-1.
Material: st. steel mat.-no. 1.4301 (304)

Degree of protection (EN60529)

IP 65 with and without case filling
IP 66 with case filling and blow-out device with internal pressure relief membrane

Pressure element assembly

bourdon tube and pressure connection material st. steel mat.-no. 1.4571 (316Ti)

Case filling

liquid filling glycerine/water
Other liquid fillings upon request.

Process connection

via diaphragm seals, see product group D5.

Movement

stainless steel segment

Scale

pure aluminium, white with black inscription.
Option: with red marking or with fixed reference pointer.
Special scale upon request

Pointer

pure aluminium, black, standard.
Option: with micro adjustment for zero-point correction

Window

non splintering laminated glass

Case seal

sealing ring: Perbunan
filling plug: Desmopan

Blow-out device

material: Desmopan

Nominal ranges

per EN 837-1
-1...3 bar up to 0...400 bar
other measuring units can be supplied

Overload protection

standard: 1.3times
other overload protections see order details

Accuracy

class 1.0 per EN 837-1

Temperature ranges

operating temperature range (ambient)
without liquid filling: -20...+60 °C
with liquid filling: -20...+50 °C
without liquid filling: max. +200 °C
min. -40 °C
with liquid filling: max. +140 °C
min. -20 °C

The maximum values stated could be restricted due to:

- size of diaphragm
 - measuring range
 - diaphragm liquid filling
- Other temperature ranges upon request.

Temperature influence

a detailed calculation of accuracy can be submitted upon request.

Weights

- DN 100, without liquid filling: approx. 0.7 kg + process connection (diaphragm seal)
- DN 100, with liquid filling: approx. 0.9 kg + process connection (diaphragm seal)

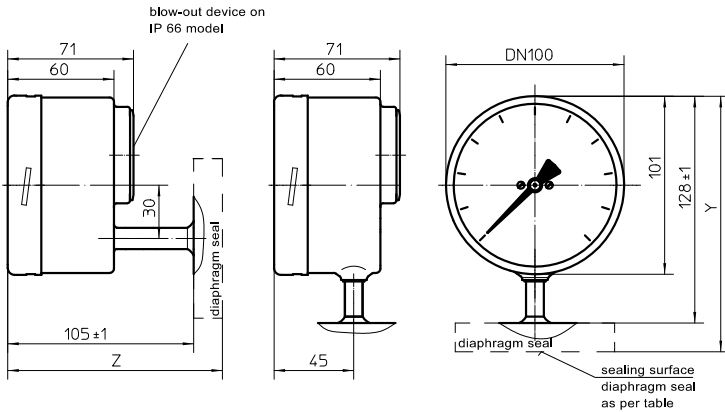
Additional devices

also available with limit value controller see data sheet D3-027

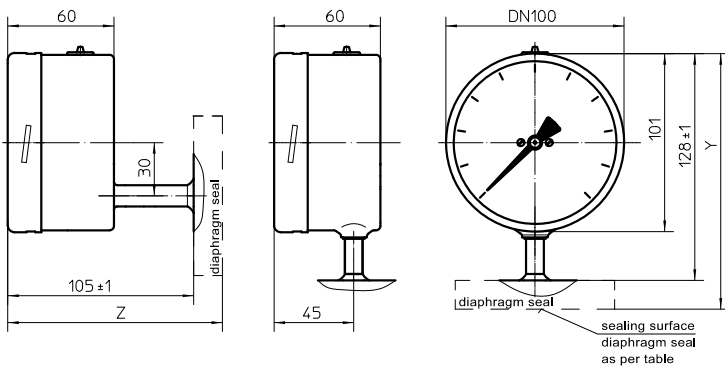
Information on other models see order details or upon request

Dimensions

degree of protection IP 66



degree of protection IP 65



Order Details - please give additional specifications for models not listed -

Bourdon tube pressure gauge for diaphragm seals

case design DN 100	IP 65	process connection	· bottom	BH4200
				· at back
	IP 65 with liquid filling		· bottom	BH4220
			· at back	BH4230
	IP 66 with liquid filling		· bottom	BH4240
			· at back	BH4250
nominal range	· 0...4 bar			A56
	· 0...6 bar			A57
	· 0...10 bar			A58
	· 0...16 bar			A59
	· 0...25 bar			A60
	· 0...40 bar			A61
	· 0...60 bar			A62
	· 0...100 bar			A63
	· 0...160 bar			A64
	· 0...250 bar			A65
	· 0...400 bar			A66
	· -1...3 bar			A89
	· -1...5 bar			A90
· -1...9 bar			A91	
· -1...15 bar			A92	

design features (to be indicated in case of need, only)

overload protected	· 2 times, nominal ranges ≤ 25 bar					H2
	· 2.5 times, nominal ranges ≤ 16 bar					H3
pointer	· micro adjustment pointer					I2
						R2
window	· non-splintering glass with maximum pointer					R3
	· non-splintering glass with adjustable reference pointer					R12
	· Macrolon with maximum pointer					R13
marking	· on scale (pls specify)					T2
	· fast reference pointer (pls specify)					T3

Order code (example):

BH4200 A56

process connections (diaphragm)

diaphragm seals as per product group D5 welded with measuring system connection

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