



Features

- Small temperature error by means of reduced-volume measuring element
- Operating temperature up to 140 °C
- Different process connections can be supplied
- Case and pressure element assembly of stainless steel
- Accuracy class 1.0/1.6 per EN 837-1

Options

- Case with liquid filling
- Autoclavable
- 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 DN 63/DN 100 ECO_{nomic} is suited for use in applications in the food/pharmaceutical/biotechnology.

Technical Data

Case

high quality case with bayonet ring per EN 837-1, st. steel mat.-no. 1.4301 (304)

- DN 63
- DN 100

Degree of protection (EN 60529)
IP 65

Pressure element assembly

bourdon tube and pressure connection
material: st. steel

- DN 63 screwed
- DN 100 pressure connection welded with process connection

Case filling (option)

liquid filling glycerine/water, approved for field service

Process connection

with internal diaphragm seal, see order details

Diaphragm material

stainless steel (316L)

System filling

synthetic oil, free of silicon for foodstuff industry, FDA listed, class USDA-H1

Movement

stainless steel segment

Scale

pure aluminium, white with black inscription.
Special scale upon request

Pointer

- DN 63 pure aluminium, black
- DN 100 pure aluminium, black, with micro adjustment for zero-point correction

Window

non splintering laminated glass

Case seal

sealing ring and filling plug: Elastomer

Autoclavable (option)

autoclavable without case filling, only.
Pls remove the filling plug of Elastomer before autoclaving.

Nominal ranges

per EN 837-1
0...4 bar up to 0...25 bar
-1...3 bar up to -1...15 bar
other measuring units can be supplied

Overload protection

standard: 1.3times

Accuracy

per EN 837-1
· DN 63: class 1.6
· DN 100: class 1.0

Temperature ranges

ambient temperature: -20...+60 °C
process temperature: 0...140 °C
autoclave temperature: 130 °C for 1 hour
(case without filling)
storage temperature: -20...+60 °C

Process temperature influence

depending on active membrane diameter
dM 22.6...24 mm ≤ 45 mbar/10K
dM 27...30 mm ≤ 25 mbar/10K
dM 34...36 mm ≤ 8 mbar/10K
dM 40...46 mm ≤ 5 mbar/10K
dM 51...58 mm ≤ 2 mbar/10K
A detailed calculation of accuracy can be submitted upon request.

Hygienic design

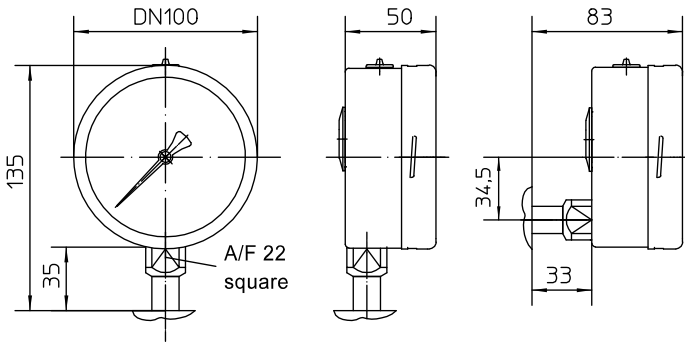
surface formation of wetted parts as per EHEDG guidelines
($R_a \leq 0,8 \mu\text{m}$)

Weights

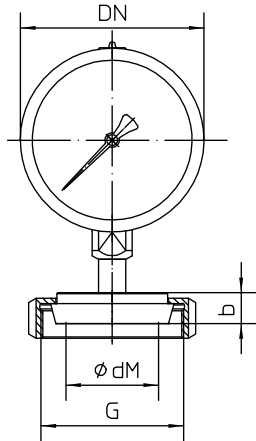
DN 63
without filling: approx. 0.5 kg
with filling: approx. 0.7 kg
DN 100
without filling: approx. 1.0 kg
with filling: approx. 1.3 kg

Information on other models see order details or upon request

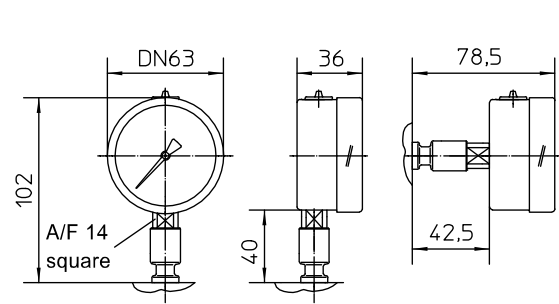
Dimensions



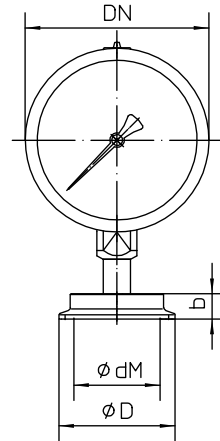
Sanitary pipe connection with union nut per DIN 11851



process connection				
DN	PN	dM	b	G
25	40	27	16	Rd. 52x1/6"
32	40	36	16	Rd. 58x1/6"
40	40	40	16	Rd. 65x1/6"
50	25	51	17	Rd. 78x1/6"

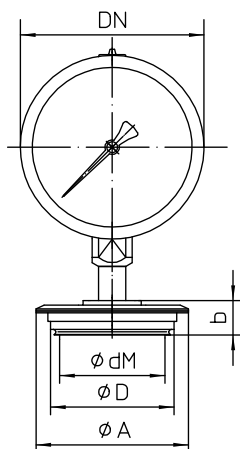


Clamp connection

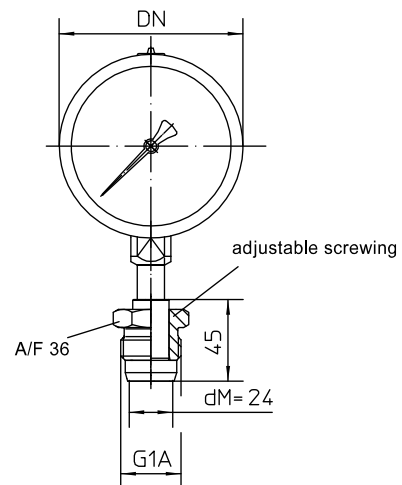


process connection							
ISO 2852	Tri -Clamp	DIN 32676					
DN	Zoll	DN	DN	PN	ØdM	ØD	b
-	-	3/4"	-	16	15	25	15
-	-	1"	-	16	22.6	50.5	15
25	1"	-	25	16	22.6	50.5	14
-	-	-	32	16	30	50.5	14
38	1 1/2"	1 1/2"	40	16	34	50.5	12
51	2"	2"	50	16	46	64	14

Varivent connection



Srew-in thread HYGIENIC G1A adjustable



process connection				
DN	dM	A	D	b
25 1"	40	66	50	19
40...125 1 1/2"...6"	58	84	68	19

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

Pressure gauge DN 100 ECO nomic for food/pharmaceutical/biotechnology											
case design IP 65	DN 63	process connection	· bottom		BH5100 ECO						
			· at back		BH5110 ECO						
			· bottom	with liquid filling	BH5120 ECO						
					BH5130 ECO						
	DN 100		· bottom		BH5200 ECO						
			· at back		BH5210 ECO						
			· bottom	with liquid filling	BH5220 ECO						
					BH5230 ECO						
surface roughness	· standard										
	· per hygienic design								HY		
nominal range	· 0...4 bar								A56		
	· 0...6 bar								A57		
	· 0...10 bar								A58		
	· 0...16 bar								A59		
	· 0...25 bar								A60		
	· -1...3 bar								A89		
	· -1...5 bar								A90		
	· -1...9 bar								A91		
· -1...15 bar								A92			
process connection ¹ material: stainless steel (316)	sanitary pipe connection with union nut per DIN 11851	· DN 25							K102		
		· DN 32							K103		
		· DN 40							K104		
		· DN 50							K105		
	Clamp per ISO 2852	· DN 1"							K124		
		· DN 1 1/2 "							K126		
		· DN 2"							K127		
	Tri-Clamp	· DN 3/4" ³							K134		
		· DN 1"							K136		
		· DN 1 1/2"							K137		
		· DN 2"							K138		
	Clamp per DIN 32676	· DN 25							K144		
		· DN 32							K146		
		· DN 40							K147		
		· DN 50							K148		
	Varivent	· D = 50 for Varivent DN 25 and 1"							K152		
		· D = 68 for Varivent DN 40...125 and 1 1/2...6"							K153		
	screw-in thread HYGIENIC		· G 1 A adjustable, no gasket						K80		
design features (to be indicated in case of need, only)											
marking	· on scale (pls specify)								T2		
	· fast reference pointer (pls specify) ⁴								T3		
autoclavable (130 °C for 1 hour) ²									W4073		
order code (example):					BH5200 ECO	A56	K102				

¹ further process connections (diaphragm seals) upon request² for cases without liquid filling, only³ limited temperature ranges with special calculation⁴ for case DN 100, only