



Features

- Flush-mounted separating diaphragm of stainless steel, welded by laser
- Volume optimized diaphragm base
- Connection of measuring instrument:
 - directly welded
 - directly screwed
 - with temperature decoupler
 - with capillary

Options

- Material certificate acc. to DIN EN 10204-3.1
- Hygienic design with advanced surface quality
- With reduced temperature effect and reinforced diaphragm (LTC-technology)
- Special materials upon request

Application area

- Food industry
- Pharmaceutical industry
- Biotechnology

Application

Suitable for mounting to bourdon tube pressure gauges and pressure transmitters. The diaphragm seal for VARIVENT in-line access unit is used mainly for dead-zone free measuring.

Technical Data

Process connection

VARIVENT in-line access unit

- D = 50 for Varivent case DN 25 and 1"
- D = 68 for Varivent case DN 40...DN 125 and 1 1/2"...6"

Diaphragm seal material

basic body:
st. steel mat. no. 1.4435 (316L)
Gasket is not included !

Nominal pressure

dependent of in-line access unit

DN 25 / 1"	PN 25 bar
DN 40-80	PN 25 bar
DN 1 1/2"-3"	PN 25 bar
DN 100 / 4"	PN 20 bar
DN 125 / 6"	PN 10 bar

Separating diaphragm

standard material: st. steel mat. no. 1.4435 (316L), further materials upon request

Diaphragm outline

standard Sinus-type, option: with reduced temperature effect and reinforced diaphragm (LTC-technology)

Measuring instrument connection

- directly welded/screwed
 - with temperature decoupler
 - with capillary
- see order code
material stainless steel

Process temperature

dependent on measuring system, diaphragm seal filling liquid and installation.

Diaphragm seal filling liquid

see data sheet D5-003.
Standard according to order code

Hygienic design

surface formation of wetted parts as per EHEDG guidelines
($R_a \leq 0.8 \mu\text{m}$)

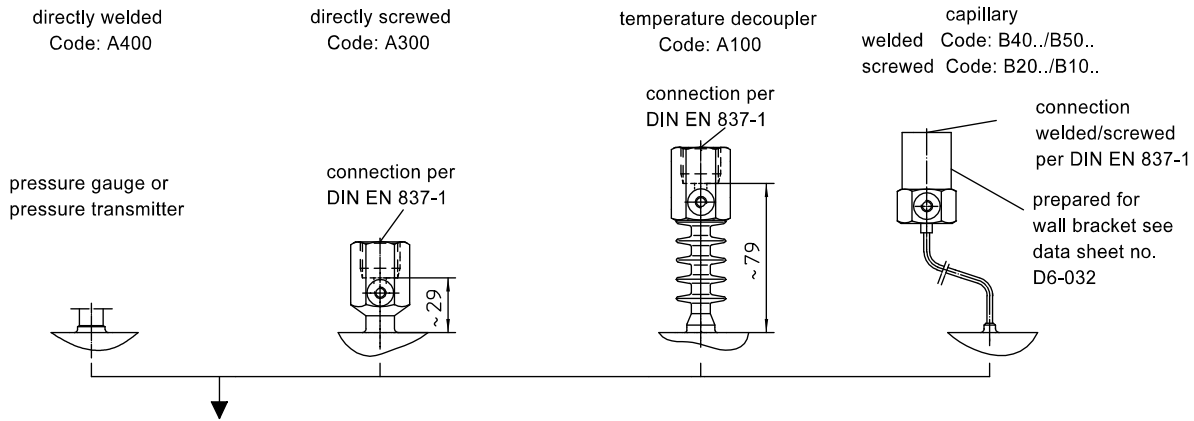
Installation instructions

see operating instructions BTA-062

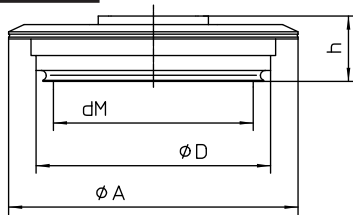
Weights

with measuring instrument connection
G 1/2
D = 50: approx. 0.6 kg
D = 68: approx. 0.8 kg

Measuring instrument connection



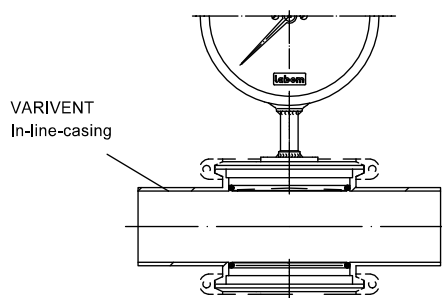
Dimensions



DN	dM	A	D	h
DN 25 1"	40	66	50	19
DN 40 - 125 1 1/2" - 6"	58	84	68	19

dimensions (mm)

Mounting example



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

Diaphragm seal for food/pharmaceutical/biotechnology for VARIVENT in-line access unit				capillary length	
design	VARIVENT in-line access unit		DL8080	length m	order code
surface	· standard			1	11
roughness	· hygienic version as per EHEDG guidelines		HY	1.6	12
process	· D= 50 for VARIVENT type F - case DN 25 and 1"		D40	2.5	13
connection ¹	· D= 68 for VARIVENT type N - case DN 40.. DN 125 and 1 1/2" 6"		D58	4	14
diaphragm material	· stainless steel mat.-no. 1.4435 (316L)		G7	5	21
	· stainless steel mat.-no. 1.4435 (316L), LTC membrane technology ⁴		G7L	6	15
	· variant		G9	7	23
connection of measuring instrument	· directly	· welded		8	16
		· screwed G 1/2	A400	10	17
	· with temperature decoupler A100	· screwed G 1/2	A300	others	9
	· with capillary	· welded	A100		
	· screwed G 1/2	B40 ..			
	· with capillary and stainless steel protective tube	· welded	B20 ..		
		· screwed G 1/2	B50 ..		
			B10 ..		
system filling ²	filling liquid		temperature range ³		
	· foodstuff oil FD1 (standard)		+10...+140 °C		L22
	· foodstuff oil FD1, pls specify temperature, max.		-40...+200 °C		L23
	· glycerine/water FGW		-20...+120 °C		L15

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

material certificate acc. to DIN EN 10204- 3.1, wetted parts	W1020
diaphragm seal electropolished	W4035

Order code (example): DL8080 D58 G7 A400 L22

¹ Other designs upon request.
² Please check data sheet D5-003 for further information.
 Please state temperature range to allow an accurate calculation of the system.
³ max. temperature of liquid filling for abs. pressure > 1 bar
⁴ for D = 68