



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
- 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 process connection per INGOLD is used mainly for dead-zone free measuring.

Technical Data

Process connection

per INGOLD

- DN 25, union nut G 1 1/4"
- DN 50, union nut G 2"
- other designs upon request

Diaphragm seal material

basic body:

st. steel mat. no. 1.4435 (316L)

measuring instrument connection:

st. steel

O-ring gasket is included, material:

EPDM,

working temperature: -40...+140 °C (standard)

Nominal pressure

60 bar

Separating diaphragm

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

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

for sterile applications: surfaces have to be wetted with demineralized water. Further installation instructions see operating instructions BTA-062.

Weights

with measuring instrument connection G 1/2 see table

Measuring instrument connection

directly welded
Code: A400

directly screwed
Code: A300

temperature decoupler
Code: A100

capillary
welded Code: B40../B50..
screwed Code: B20../B10..

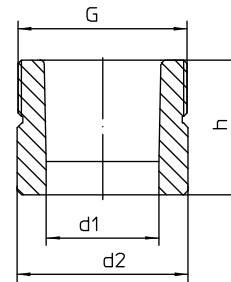
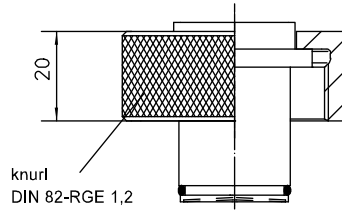
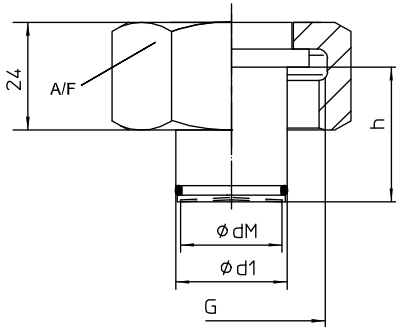
pressure gauge or
pressure transmitter

connection per
DIN EN 837-1

connection per
DIN EN 837-1

connection
welded/screwed
per DIN EN 837-1
prepared for
wall bracket see
data sheet no.
D6-032

Dimensions



nominal width	dM	d1	d2	h	G	A/F	weight appr.
DN 25	22,6	25	42	46	G 1 1/4"	46	0,6 kg
DN 50	42	50	68	60	G 2"	70	2 kg

dimensions (mm)

welded-in adapter

Order Details

- please give additional specifications for models not listed -

Diaphragm seal for food/pharmaceutical/biotechnology, process connection per INGOLD								
design	process connection per INGOLD						DL8090	
surface roughness	· standard						HY	
process connection ¹	nominal width		length					
	DN 25	hexagon union nut A/F 46, G 1 1/4"	h= 46 mm			D2546	capillary length length m order-code	
		union nut knurled Ø 50, G 1/4"	h= 46 mm			D2599		
	DN 50	hexagon union nut A/F 70, G 2"	h= 46 mm			D2646		
		union nut knurled Ø 70, G 2"	h= 60 mm			D2699		
		hexagon union nut A/F 70, G 2"	h= 60 mm			D5160		
union nut knurled Ø 70, G 2"		h= 60 mm			D5199			
basic body material	· stainless steel mat.no. 1.4435 (316L)						E7	
	· variant						E9	
diaphragm material	· stainless steel mat.no. 1.4435 (316L)						G7	
	· Hastelloy C276						G3	
	· variant						G9	
gasket	· EPDM in correspondence with FDA (standard)						H2	
	· variant						H9	
connection of measuring instrument	· directly	· welded				A400	← ← ← ← ← ← ← ← ← ←	
		· screwed G 1/2				A300		
	· with temperature decoupler A100	· screwed G 1/2				A100		
	· with capillary	· welded				B40 ..		
	· screwed G 1/2				B20 ..			
· with capillary and stainless steel protective tube	· screwed G 1/2				B50 ..			
	· welded				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):							DL8090 D5160 E7 G7 H2 A400 L22	
accessories								
weld-in socket	· DN 25, G 1 1/4", h= 46 mm, material stainless steel mat.no. 1.4404 (316L)				MZ2011	D2546		
	· DN 50, G 2", h= 60 mm, material stainless steel mat.no. 1.4404 (316L)				MZ2011	D5160		

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