



Features

- Flush-mounted separating diaphragm of stainless steel, welded by laser
- For pipes per DIN 11850, DIN EN 1127 and ASME-BPE 1997
- 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

Application area

- Food industry
- Pharmaceutical industry
- Biotechnology

Application

Suitable for mounting to bourdon tube pressure gauges and pressure transmitters. This diaphragm seal with aseptic flange connections is used mainly for dead-zone free measuring.

Technical Data

Process connection

aseptic flange connection per DIN 11864-2

- flange with groove
- coupling flange with gasket

- model A (O-ring)

Further connection designs upon request

Diaphragm seal material

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

Nominal pressure/nominal widths

see table

Separating diaphragm

standard material: st. steel mat. no. 1.4435 (316L).

Further materials 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

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..

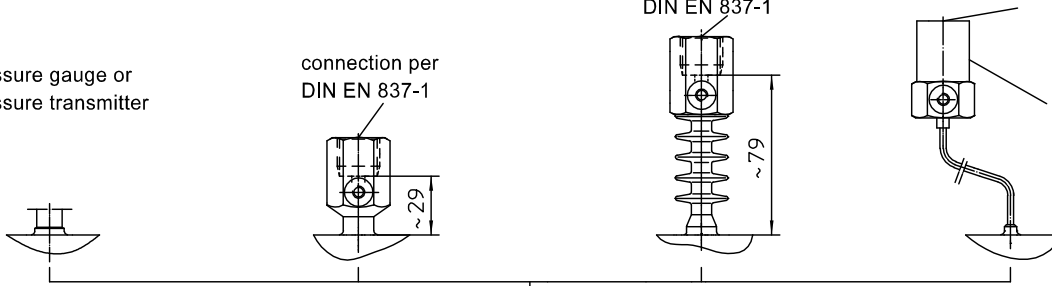
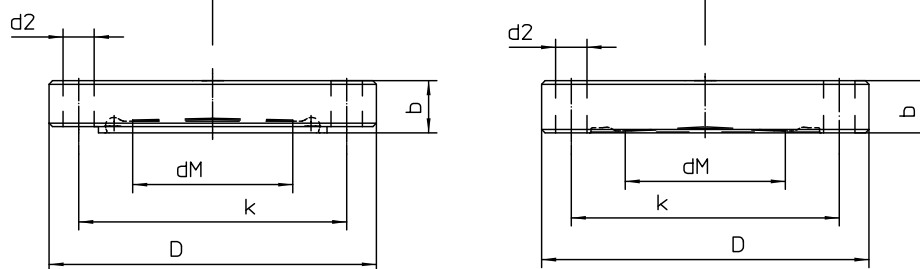
pressure gauge or
pressure transmitter

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**

aseptic flange with groove, model A

aseptic coupling flange, model A

flange connection per DIN 11864-2, model A

dimensions (mm) for pipes per DIN 11850									
pipe dimensions per DIN 11866 table 2 model A									
DN	PN	pipe					no. of		weight
	bar	inside Ø	D	dM	k	d2	borings	b	approx. kg
25	25	26	70	24	53	9	4	17	0.5
32	25	32	76	27	59	9	4	17	0.7
40	25	38	82	34	65	9	4	15	0.9
50	16	50	94	46	77	9	4	15	1.0
65	16	66	113	62	95	9	8	20	1.7

dimensions (mm) for pipes per DIN EN ISO 1127									
pipe dimensions per DIN 11866 table 2 model B									
nominal width	PN	pipe					no. of		weight
DN/OD	bar	inside Ø	D	dM	k	d2	borings	b	approx. kg
33.7	25	29.7	74	27	57	9	4	17	0.6
42.4	16	38.4	82	34	65	9	4	15	0.9
48.3	16	44.3	88	40	71	9	4	15	1.0
60.3	16	56.3	103	51	85	9	4	15	0.9

dimensions (mm) for pipes per ASME-BPE 1997									
pipe dimensions per DIN 11866 table 2 model C									
(suitable for pipe per BS 4852 Part 3 and O.D. Tube)									
DN/OD	PN	pipe					no. of		weight
inch	bar	inside Ø	D	dM	k	d2	borings	b	approx. kg
1"	25	22.1	66	21	49	9	4	17	0.4
1 1/2"	25	34.8	79	34	62	9	4	17	0.8
2"	16	47.5	92	46	75	9	4	15	1.0
2 1/2"	16	60.2	107	51	89	9	8	20	1.5

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

Diaphragm seal for food/pharmaceutical/biotechnology, aseptic flange connection				
design	for pipes per DIN 11850			DH1 ...
	pipe dimensions per DIN 11866 table 2 model A			
nominal width	process connection	PN	pipe inside-Ø di	
	· DN 25	25	26 mm	100
	· DN 32	25	32 mm	200
	· DN 40	25	38 mm	300
	· DN 50	16	50 mm	400
	· DN 65	16	66 mm	500
design	for pipes per DIN EN ISO 1127			DH2 ...
	pipe dimensions per DIN 11866 table 2 model B			
nominal width DN/OD	process connection	PN	pipe inside-Ø di	
	· DN 33.7 (Rohr 33.7 x 2.0)	25	29.7 mm	100
	· DN 42.4 (Rohr 42.4 x 2.0)	16	38.4 mm	200
	· DN 48.3 (Rohr 48.3 x 2.0)	16	44.3 mm	300
	· DN 60.3 (Rohr 60.3 x 2.0)	16	56.3 mm	400
design	for pipes per ASME-BPE 1997			DH3 ...
	pipe dimensions per DIN 11866 table 2 model C (suitable for pipes per BS 4825 Part 3 and O.D. Tube)			
nominal width DN/OD	process connection	PN	pipe inside-Ø di	
	· 1"	25	22.1 mm	100
	· 1 1/2"	25	34.8 mm	300
	· 2"	16	47.5 mm	400
	· 2 1/2"	16	60.2 mm	500
aseptic flange connection	flange connection per DIN 11864-2 ³			S1 ...
	· aseptic flange with groove, model A (O-ring)			.. 001
	· aseptic coupling flange, model A (O-ring)			.. 003
surface roughness	· standard			
	· hygienic version as per EHEDG guidelines			HY
connection of measuring instrument	· directly	· welded		A400 .
		· screwed G 1/2		A300 .
	· with temperature decoupler A100	· screwed G 1/2		A100 .
		· with capillary	· welded	
	· screwed G 1/2			B20 ..
	· with capillary and stainless steel protective tube	· welded		B50 ..
· screwed G 1/2			B10 ..	
material	· wetted parts stainless steel mat.-no. 1.4435 (316L)			7
system filling ¹	filling liquid	temperature range ²		
	· 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

capillary length	
length m	order- code
1	11
1.6	12
2.5	13
4	14
5	21
6	15
7	23
8	16
10	17
others	9

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

material certificate per DIN EN 10204-3.1, wetted parts	W1020
diaphragm seal electropolished	W4035

Order code (example): DH1100 S1001 HY A4007 L22

- ¹ Please check data sheet D5-003 for further information.
Please state temperature range to allow an accurate calculation of the system.
² max. temperature of liquid filling for abs. pressure > 1 bar
³ in conn. with hygienic version (HY): corresponding to EHEDG guidelines