



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 with clamp connection is used mainly for dead-zone free measuring.

Technical Data

Process connections

clamp connection per ISO 2852, DIN 32676 and Tri-Clamp.
Other types of connections such as aseptic connection per Südmo upon request

Diaphragm seal material

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

Separating diaphragm

standard material: stainless 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

with clamp connections operation outside the allowed nominal pressure rating is only possible with suitable clamps. In this case, note DIN 32676 for stipulations on heat resistance. For further information 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

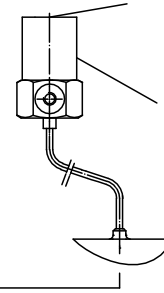
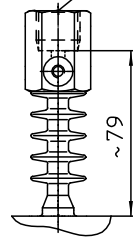
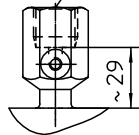
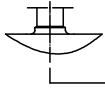
capillary
welded Code: B40../B50..
screwed Code: B20../B10..

pressure gauge or
pressure transmitter

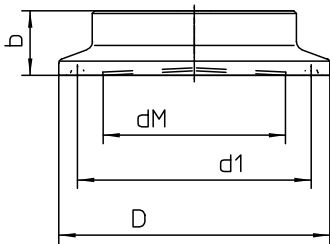
connection per
DIN EN 837-1

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



Clamp connection per DIN 32676 model A (metric) for pipes per DIN 11850

DN mm	PN bar	dM mm	b mm	D mm	weight approx. kg
25	25	22.6	14	50.5	0.3
32	25	27	12	50.5	0.3
40	25	34	12	50.5	0.3
50	16	46	14	64	0.4
65	10	65	14	91	0.5

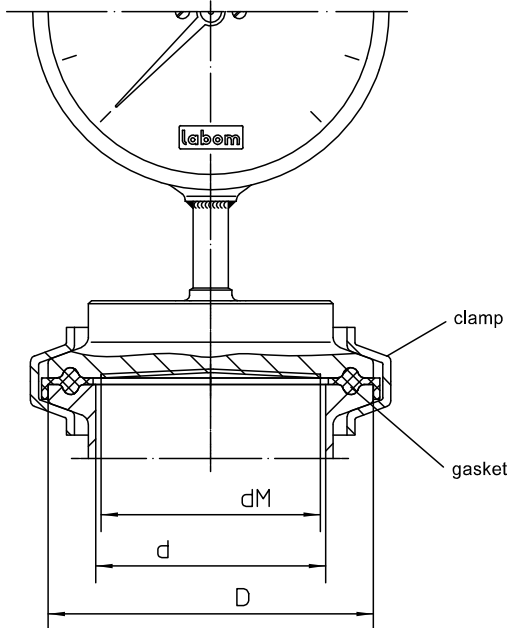
Clamp connection per DIN 32676 model C (Tri-Clamp) for pipes per ASME BPE

DN Inch	PN bar	dM mm	b mm	D mm	weight approx. kg
1"	25	22.6	14	50.5	0.3
1 1/2"	25	34	12	50.5	0.3
2"	16	46	14	64	0.4
2 1/2"	16	51	14	77.5	0.5
3"	10	65	14	91	0.8

Clamp connection per ISO 2852 for pipes per ISO 2037

DN mm	PN bar	dM mm	b mm	D mm	weight approx. kg
25	16	22.6	14	50.5	0.3
38	16	34	12	50.5	0.3
51	16	46	14	64	0.4
63.5	10	51	14	77.5	0.5
76.1	10	65	14	91	0.8

Mounting example



Order Details - please give additional specifications for models not listed -**Diaphragm seal for food/pharmaceutical/biotechnology, clamp-connection ¹**

	clamp socket-Ø	membran-Ø dM		
Clamp connection per ISO 2852 for pipes per ISO 2037	· DN 25 PN 16	50.5 mm	22.6 mm	DL3100
	· DN 38 PN 16	50.5 mm	34 mm	DL3200
	· DN 51 PN 16	64 mm	46 mm	DL3300
	· DN 63.5 PN 10	77.5 mm	51 mm	DL3400
	· DN 76.1 PN 10	91 mm	65 mm	DL3500
Clamp connection per DIN 32676, model C (Tri-Clamp) for pipes per ASME BPE	· DN 1" PN 25	50.5 mm	22.6 mm	DL3130
	· DN 1 1/2" PN 25	50.5 mm	34 mm	DL3230
	· DN 2" PN 16	64 mm	46 mm	DL3330
	· DN 2 1/2" PN 16	77.5 mm	51 mm	DL3430
	· DN 3" PN 10	91 mm	65 mm	DL3530
Clamp connection per DIN 32676, model A (metric) for pipes per 11850	· DN 25 PN 25	50.5 mm	22.6 mm	DL4100
	· DN 32 PN 25	50.5 mm	27 mm	DL4200
	· DN 40 PN 25	50.5 mm	34 mm	DL4300
	· DN 50 PN 16	64 mm	46 mm	DL4400
	· DN 65 PN 10	91 mm	65 mm	DL4500
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		B40 . .
		· 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)		
system filling ²	<u>filling liquid</u>	<u>temperature range³</u>		
	· 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):				DL3200 A4007 L22

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

¹ aseptic connection per Südmo upon request² 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