

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 BioControl connection is used mainly for dead-zone free measuring.

Technical Data

Process connection

NEUMOBioControl connection flange
 · Gr. 25
 · Gr. 50
 · Gr. 65
 · Gr. 80

Diaphragm seal material

basic body:
 st. steel mat. no. 1.4435 (316L)
 measuring instrument connection:
 st. steel mat.no. 1.4301 (304)
 gasket: EPDM, 70° Shore
 temperature range -45...150 °C,
 in concordance with FDA

Nominal pressure

PN 16 bar

Separating diaphragm

material st. steel, 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 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

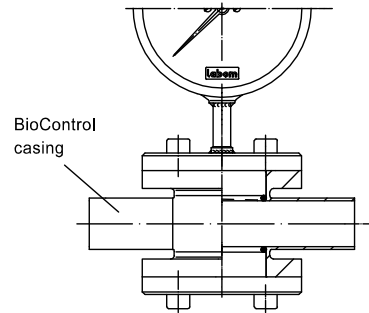
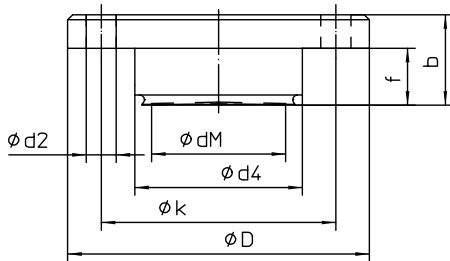
connection per
DIN EN 837-1

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

Mounting example



process connection	dM	d2	no. of borings	d4	D	f	b	k	weight appr.
Gr. 25	24	7	4	30.5	64	11	20	50	0.3 kg
Gr. 50	40	9	4	50	90	17	27	70	0.7 kg
Gr. 65	54	11	4	68	120	17	27	95	1.4 kg
Gr. 80	80	11	4	87.5	140	25	37	115	2.6 kg

dimensions (mm)

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

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

Diaphragm seal process for food/pharmaceutical/biotechnology connection per NEUMO Biocontrol

design	NEUMO BioControl connection flange		DL8110						
surface roughness	· standard								
	· hygienic version as per EHEDG guidelines								HY
process connection ¹	· Gr. 25								D10 .
	· Gr. 50								D11 .
	· Gr. 65								D12 .
	· Gr. 80								D13 .
gasket	· EPDM, temperature range -45...150°C, FDA listed								2
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
	· stainless steel mat.-no. 1.4435 (316L), LTC membrane technology ⁴								7L
	· variant								9
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):	DL8110	HY	D122	A4007	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 Gr. 65 and Gr. 80