



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)

Application area

- Food industry
- Pharmaceutical industry
- Biotechnology

Application

Suitable for mounting to bourdon tube pressure gauges and pressure transmitters. The diaphragm seal HYGIENIC Tubus is used mainly for dead-zone free measuring.

Technical Data

Process connection

HYGIENIC Tubus Ø 101 mm
diaphragm surface Ø 85 mm
PN 10

Diaphragm seal material

basic body: stainless steel mat.-no. 1.4404/1.4435 (316L)
measuring instrument connection: st. steel mat.-no. 1.4301 (304)
gasket: EPDM, FDA listed
Viton O-ring

Separating diaphragm

material st. steel mat.-no. 1.4404/1.4435 (316L)

Diaphragm outline

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.

Temperature influence

influence of process temperature to meas. system: $\leq 0.1 \text{ mbar/10K}$

Diaphragm seal filling liquid

see data sheet D5-003, order code standard

Hygienic design

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

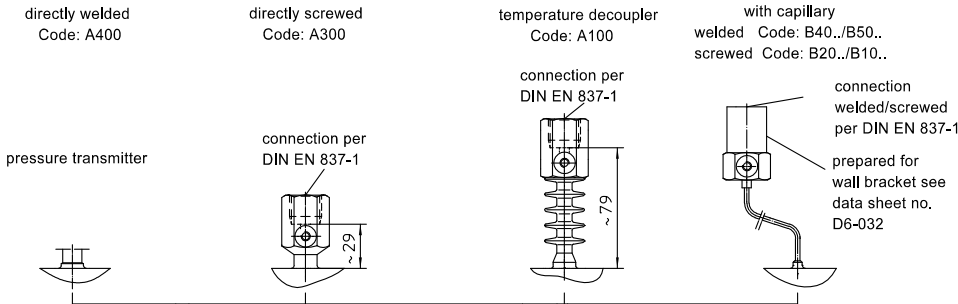
Installation instructions

see operating instructions BTA-062

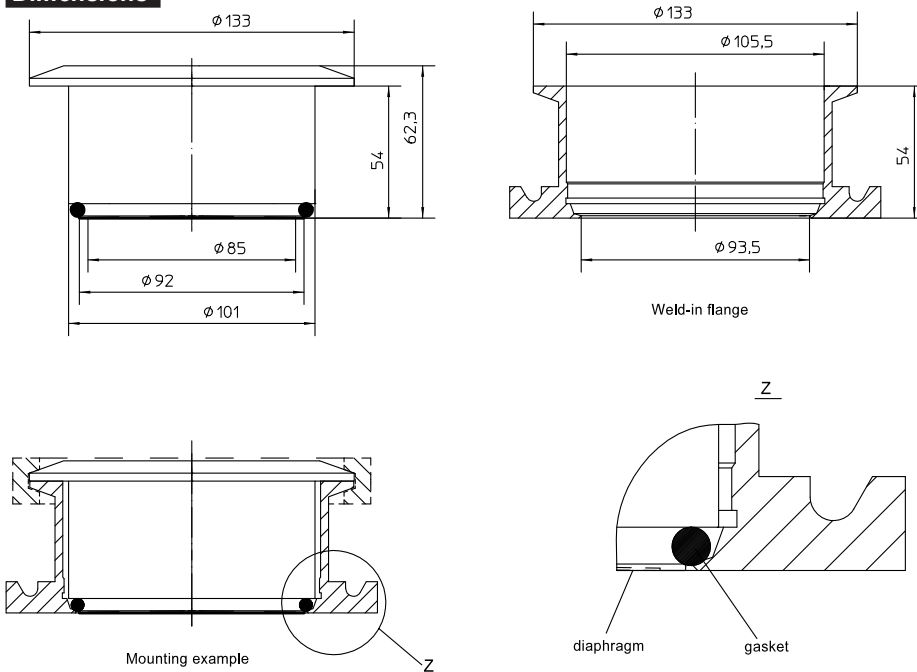
Weights

with measuring instrument connection G 1/2 approx. 4.5 kg

Measuring instrument connection



Dimensions



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

Diaphragm seal HYGIENIC Tubus with clamp connection		DL8140	
design	HYGIENIC Tubus Ø 101 mm		
surface roughness	hygienic version as per EHEDG guidelines	HY	
basic body material	· stainless steel mat.-no. 1.4404/1.4435 (316L)	E1	
diaphragm material	· stainless steel mat.-no. 1.4404/1.4435 (316L) LTC membrane technology	G1L	
gasket	· EPDM, FDA listed	H2	
	· Viton O-ring	H7	
connection of measuring instrument	· directly		
	· screwed G 1/2	A400	
	· welded	A300	
	· with temperature decoupler	· screwed G 1/2	A100
	· with capillary	· welded	B40 ..
system filling ¹	· filling liquid	temperature range ²	
	· foodstuff oil FD1 (standard)	+10...+140 °C	L22
	· foodstuff oil FD1	-40...+200 °C	L23
	· Neobee FNM20	-20...+200 °C	L32

capillary length	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 acc. to DIN EN 10204- 3.1, wetted parts	W1020
diaphragm seal electropolished	W4035
order code (example):	DL8140 HY E1 G1L H2 A300 L32

accessories

weld-in flange, stainless steel 1.4404/1.4435 (316L), hygienic version	MZ2030-HY-E1
mounting bracket	MZ8110

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