

Inline diaphragm seal for threaded pipe connection Type series DS1260



Application area

- Food industry
- Pharmaceutical industry
- Biotechnology

Features

- Circular diaphragm of stainless steel, slightly grooved, laser welded
- Pipe connections 10x1,5 up to 20x2
- Volume optimised diaphragm base
- System fillings for different applications
- Measuring device connection:
 - directly welded
 - directly screwed
 - with temperature decoupler
 - with capillary

Options

- Labom REconnect quick coupling device for easy and safe separation and connection of diaphragm seal systems. Available with a wide range of pressure gauges and pressure transmitters; Type series MK1000, see data sheet DB_D6-022
- Certificates
 - Material certificate per EN 10204-3.1
- Special materials upon request
- Oxygen free of oil and grease
- Negative pressure service

Application

Suitable for mounting to bourdon tube pressure gauges and pressure transmitters. The diaphragm seal for threaded pipe connections is used mainly for dead-zone free pressure measurement.

Technical data

Constructional design

Basic body:	Volume reduced diaphragm base Material: stainless steel mat.-no. 1.4404/1.4435 (316L)
Diaphragm:	Inline diaphragm
Material wetted parts:	Diaphragm: See order details Basic body: Stainless steel mat.-no. 1.4404/1.4435 (316L)

Process connection

Design:	DN 15, directly welded to pipe or connection to Swagelok- oder Ermeto screwing.
Nominal pressure, Nominal width:	See order details. Nominal pressure stages as per order details correspond with the threaded pipe connections per EN 10305-1. Maximum nominal pressure stage: PN 250. The nominal pressure stage of the pipe connection has to be observed.

Sealing are not included in the scope of delivery.

Measuring device connection

See order details.

Material stainless steel mat.-no. 1.4301 (304)

System filling

See order details; further upon request.

Further details about pressure transmission fluids see general technical information TA_038.

Negative pressure service

Labom pressure transmission fluids can be used in vacuum conditions at room temperature if the diaphragm seal is installed correctly. Special treatment during manufacturing is necessary, if the system will be exposed to higher temperatures later during operation.

Which treatment is required (standard or negative pressure service) depends on the critical process condition, when the system is exposed to min. pressure at max. temperature.

Upon request, we provide an optimised design of the system.

For further details on pressure transmission fluids and negative pressure, see general technical information TA_038.

Temperature error

In order to optimise the system we provide a detailed error calculation upon request.

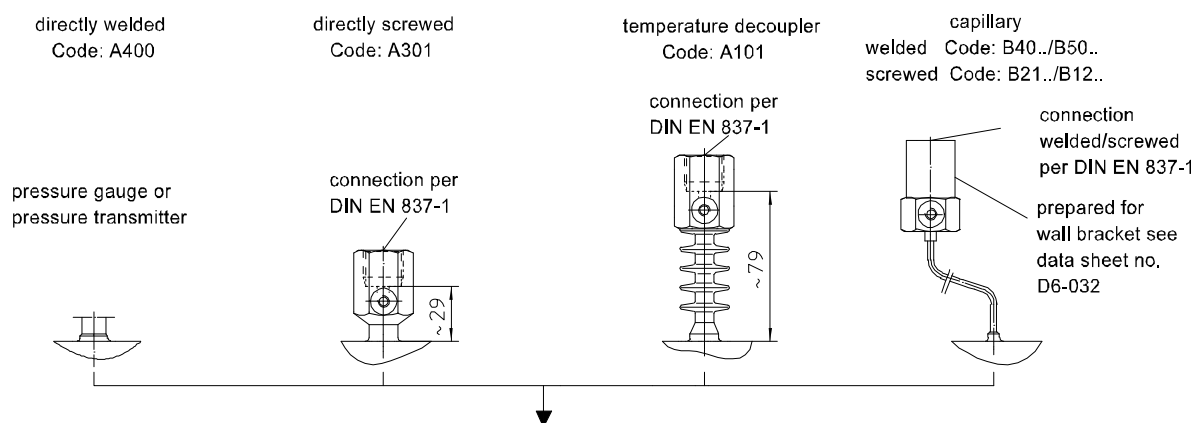
Weight

With measuring device connection G1/4 approx. 1.0 kg

Further information about diaphragm seals see general technical information TA_031.

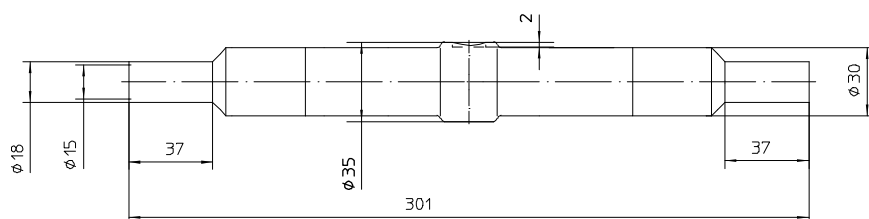
Flame arrester MF21xx for connection of measuring devices to zone 0 see data sheet D6-025.

Measuring device connection



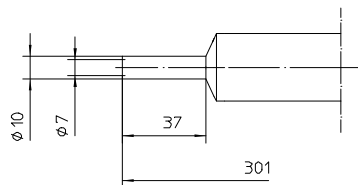
Dimensions

pipe connection 18x1,5 [S66]

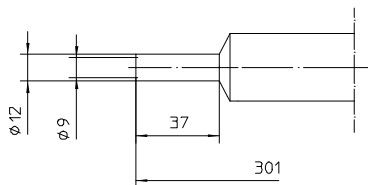


various sizes of pipe connections available

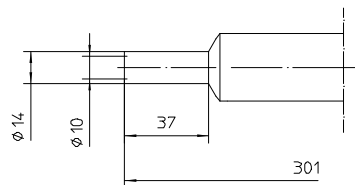
pipe connection 10x1,5
Code: S54



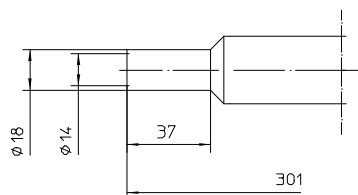
pipe connection 12x1,5
Code: S58



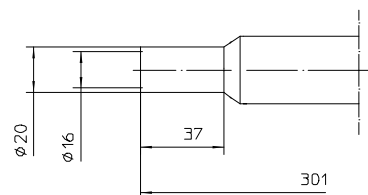
pipe connection 14x2
Code: S60



pipe connection 18x2
Code: S67



pipe connection 20x2
Code: S70



Order details

Inline diaphragm seal with threaded pipe connection			
DS1260	inline diaphragm seal DN 15 for threaded pipe connections ¹		
S54	connections both sides for pipes	10 x 1.5	PN 250
S58		12 x 1.5	PN 250
S60		14 x 2	PN 250
S66		18 x 1.5	PN 160
S67		18 x 2	PN 160
S70		20 x 2	PN 250
F1	insertion length L	total length 301 mm, pipe connections 37 mm	
F9		as in writing	
G1	material	wetted parts stainless steel mat.-no. 1.4435 (316L)	
G99		further materials as in writing	
A400	measuring device connection	directly	welded
A301			screwed G1/4
A101		with temperature decoupler	screwed G1/4
B40 . .		with capillary	welded
B21. .			screwed G1/4
B50 . .		with capillary and stainless steel protective tube	welded
B12 . .			screwed G1/4
11		capillary length	1 m
12			1.6 m
13			2.5 m
14			4 m
21			5 m
15			6 m
23			7 m
16			8 m
17			10 m
9			others
	system filling ²	<u>pressure transmission fluid</u>	<u>temperature range</u> ³
L22		synthetic oil, free of silicone FD1, standard	-10...140 °C
L23		synthetic oil, free of silicone FD1, pls. specify max. temperature	-40...230 °C
L34		vacuum oil FV4	-25...260 °C
L35		high temperature oil FH	-20...400 °C
L10		low temperature oil FM5	-90...160 °C
L30		halocarbon oil FC	-50...190 °C ⁴

Additional features (to be indicated in case of need, only)	
W1020	material certificate per EN 10204-3.1, wetted parts
W4001	oxygen free of oil and grease
X1	negative pressure service ⁵

Order code (example): DS1260 - S54 - F1 - G1 - A400 - L22 - ...

¹ Further connections upon request.

² For more detailed information about pressure transmission fluids see TA_038.
Please state temperature range to allow an accurate calculation of the system.

³ Max. media temperature for pressures > 0 bar rel.

⁴ For oxygen applications (in combination with order code W4001), a temperature range of -50...60 °C applies.

⁵ Temperature limits see Technical Information TA_038 (Pressure transmission fluids).