

## Diaphragm seal welded design Type series DD8030



### Application area

- Machinery construction
- Chemical and petrochemical industry
- General process technology

### Features

- Completely welded design
- Volume optimised diaphragm base
- Process connection G1/2 B or 1/2" NPT
- 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 D6-022
- Certificates
  - Material certificate acc. to EN 10204-3.1
- Special materials upon request

### Application

Suitable for mounting to bourdon tube pressure gauges and pressure transmitters. The diaphragm seal welded design is suited for measuring aggressive media and for high process temperatures.

Especially for use in hydrogen applications a calculation tool is available with which it can be determined on the basis of the available process data whether gold plating of the diaphragm is necessary.

## Technical data

### Constructional design

- Design:
- PN 60, max. pressure 60 bar, diaphragm Ø 62 mm
  - PN 400, max. pressure 400 bar, diaphragm Ø 62 mm

Basic body: Volume reduced diaphragm base  
Material:  
stainless steel mat.-no. 1.4404/1.4435 (316L)

Diaphragm: Flat diaphragm  
  
Material:  
stainless steel mat.-no. 1.4404/1.4435 (316L)  
Further materials upon request

### Process connection

Design: G1/2 B male or 1/2" NPT male, see order details.  
Stainless steel mat.-no. 1.4571 (316Ti)  
Further designs upon request.

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.

### Temperature error

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

### Weight

With measuring device connection G1/2:

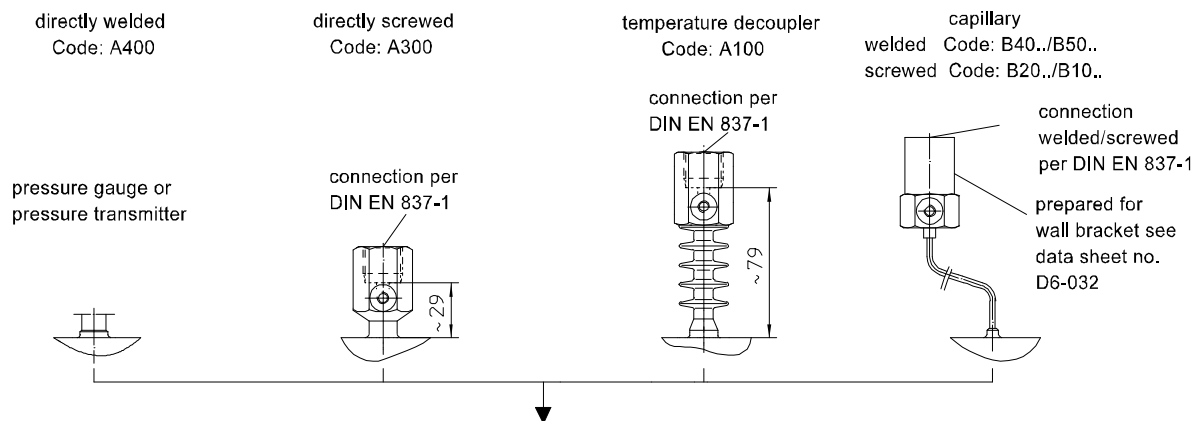
PN 60: 0.75 kg

PN 400: 4.5 kg

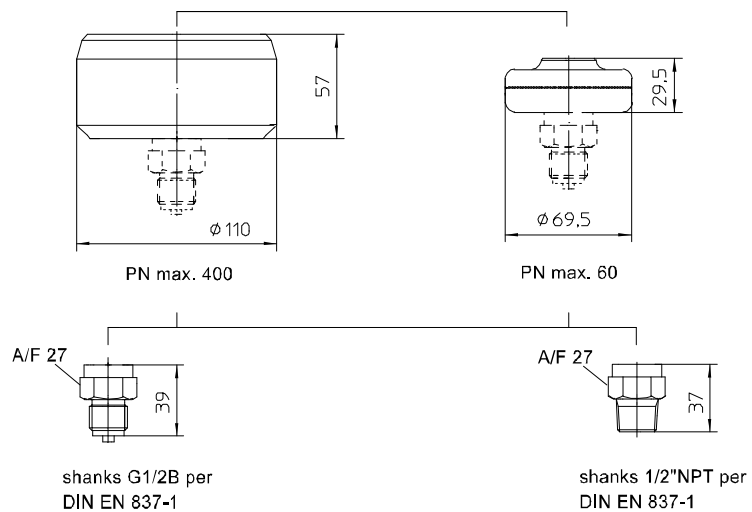
**Further information about diaphragm seals see general technical information TA\_031.**

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

## Measuring device connection



## Dimensions



## Order details

### Diaphragm seal, welded design

#### Type series DD8030

##### Order details diaphragm seal DD8030

<b>DD8030</b>	diaphragm seal, welded design		
<b>D1 . .</b>	nominal pressure	PN 60	
<b>D4 . .</b>		PN 400	
<b>10</b>	process connection	G1/2 B male	
<b>51</b>		1/2" NPT male	
<b>K1</b>	material	process connection	stainless steel mat.-no. 1.4571 (316Ti)
<b>E1</b>		basic body	stainless steel mat.-no. 1.4404/1.4435 (316L)
<b>G7</b>		diaphragm	stainless steel mat.-no. 1.4435 (316L)
<b>G3</b>			Hastelloy C 276
<b>A400</b>	measuring device connection	directly	welded
<b>A300</b>			screwed G1/2
<b>A100</b>		with temperature decoupler	screwed G1/2
<b>B40 . .</b>		with capillary	welded
<b>B20 . .</b>			screwed G1/2
<b>B50 . .</b>		with capillary and stainless steel protective tube	welded
<b>B10 . .</b>			screwed G1/2
<b>11</b>		capillary length	1 m
<b>12</b>			1.6 m
<b>13</b>			2.5 m
<b>14</b>			4 m
<b>21</b>			5 m
<b>15</b>			6 m
<b>23</b>			7 m
<b>16</b>			8 m
<b>17</b>			10 m
<b>9</b>			others
	system filling <sup>1</sup>	<u>pressure transmission fluid</u>	<u>temperature range</u> <sup>2</sup>
<b>L22</b>		synthetic oil, free of silicone FD1, standard	-10...140 °C
<b>L23</b>		synthetic oil, free of silicone FD1, pls. specify max. temperature	-40...230 °C
<b>L31</b>		high temperature oil FV3H	-10...400 °C

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

<b>W1020</b>	material certificate per EN 10204-3.1, wetted parts
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Order code (example): DD8030 - D110 - K1 - E1 - G7 - A400 - L22 - ...

<sup>1</sup> for more detailed information about pressure transmission fluids see TA\_038.  
Please state temperature range to allow an accurate calculation of the system.

<sup>2</sup> max. media temperature for pressures > 0 bar rel.