

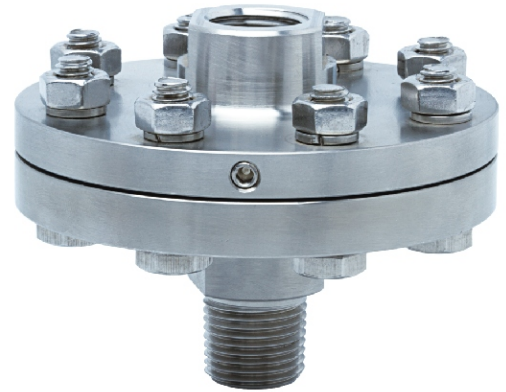
## FEATURES

- Forged chambers
- Rigid construction
- Laser welded diaphragm
- Optional exotic materials

## APPLICATION

- Separation systems
- Isolation applications
- Viscous & corrosive media
- High-pressure applications
- High vibration application

### Direct Coupled

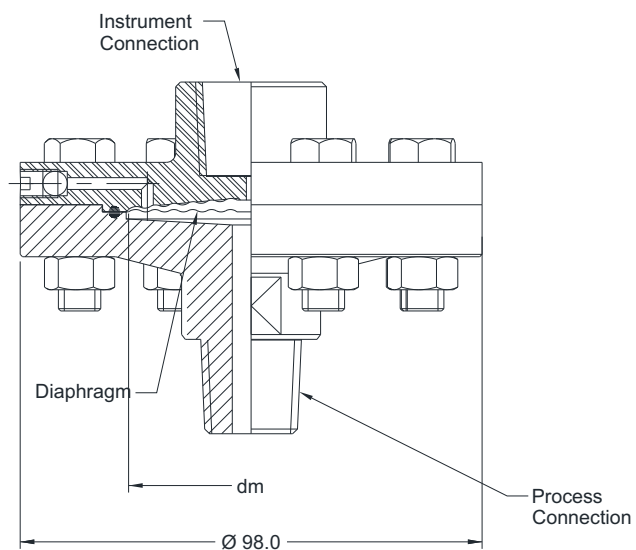


### STANDARD SPECIFICATIONS

Range type	: -1...0 bar & 0...70 bar / 100...160 bar / 210...400 bar
Top chamber material	: AISI 304 SS
Diaphragm	: AISI 316 SS, laser welded on upper part
Gaskets	: PTFE
Bottom chamber material	: AISI 316L SS
Instrument connection	: 1/2" NPT (F) / 1/2" BSP (F)
Sealing fluid	: Silicon DC 200 (-40...205°C)
Process connection	: 1/2"NPT (M) / 1/2" BSP (M)
Assembly	: Direct

### DIMENSIONAL DRAWING

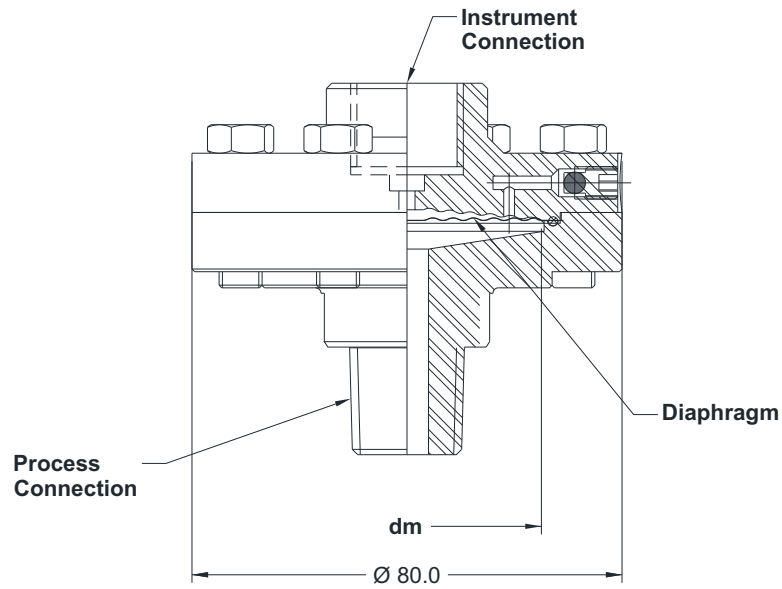
#### Type S01



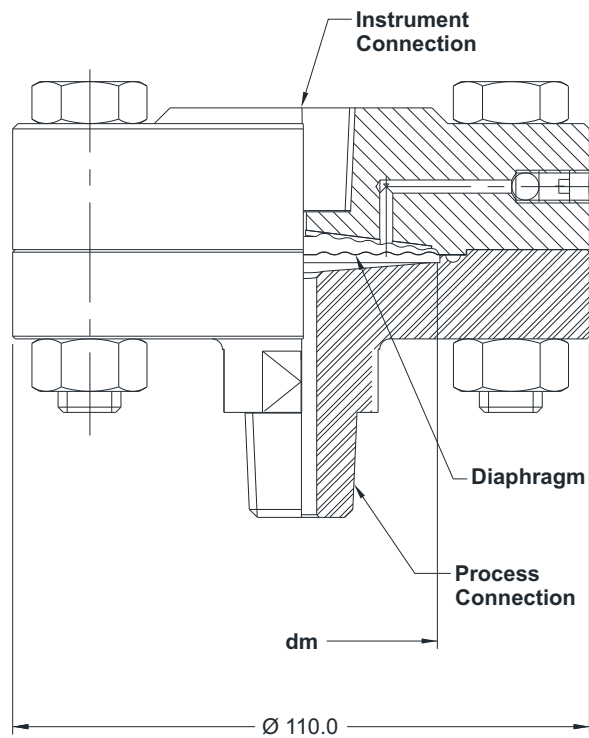
All dimensions are in mm.

## DIMENSIONAL DRAWING

Type S02



Type S03



## ORDERING CODES

## 1. RANGE TYPE

<b>S01</b>	-1...0 bar & 0...70 bar
<b>S02</b>	100...160 bar
<b>S03</b>	210...400 bar

S01

## 2. TOP CHAMBER MATERIAL

<b>LC</b>	AISI 304 SS	<b>LF</b>	AISI 316 SS
<b>LG</b>	AISI 316L SS		

LC

## 3. DIAPHRAGM MATERIAL

<b>DG</b>	AISI 316L SS	<b>DM</b>	Monel 400
<b>DO</b>	Hastelloy C-276	<b>DQ</b>	Inconel 600
<b>DV</b>	Titanium	<b>DW</b>	Tantalum
<b>D8</b>	Silver coated		

DG

## 4. GASKETS

<b>RP</b>	PTFE	<b>RM</b>	Metal
-----------	------	-----------	-------

RP

## 5. BOTTOM CHAMBER MATERIAL

<b>NC</b>	AISI 304 SS	<b>NF</b>	AISI 316 SS
<b>NG</b>	AISI 316L SS	<b>NM</b>	Monel 400
<b>NO</b>	Hastelloy C-276	<b>NV</b>	Titanium
<b>NW</b>	Tantalum	<b>N1</b>	PVC <sup>1</sup>
<b>N2</b>	PTFE <sup>1</sup>	<b>N3</b>	PVDF <sup>1</sup>
<b>N4</b>	Polypropylene <sup>1</sup>		

NF

## 6. INSTRUMENT CONNECTION

<b>03B</b>	3/8" BSP (F)	<b>04N</b>	1/2" NPT (F)
<b>02B</b>	1/4" BSP (F)	<b>04B</b>	1/2" BSP (F)
<b>02N</b>	1/4" NPT (F)		

04N

## 7. SEALING FLUID

<b>OA</b>	Silicon DC 200 [-40°C to 205°C]
<b>OF</b>	Food grade oil [-20°C to 140°C]
<b>OG</b>	Glycerine [10°C to 150°C]
<b>OI</b>	Syltherm 800 [-40°C to 315°C]
<b>OL</b>	Silicon DC 710 [7°C to 371°C]

OA

## 8. PROCESS CONNECTION

<b>12B</b>	1/4" BSP (M)	<b>13B</b>	3/8" BSP (M)
<b>14B</b>	1/2" BSP (M)	<b>15B</b>	3/4" BSP (M)
<b>12N</b>	1/4" NPT (M)	<b>14N</b>	1/2" NPT (M)
<b>15N</b>	3/4" NPT (M)	<b>14M</b>	M20 x 1.5 (M)
<b>17M</b>	M33 x 2.0 (M)	<b>02N</b>	1/4" NPT (F)
<b>04N</b>	1/2" NPT (F)	<b>05N</b>	3/4" NPT (F)
<b>02B</b>	1/4" BSP (F)	<b>04B</b>	1/2" BSP (F)
<b>05B</b>	3/4" BSP (F)		

14N

## 9. PROTECTION ON WETTED PARTS

<b>PA</b>	PTFE lining on bottom chamber <sup>4,5</sup>
<b>PB</b>	PTFE protection for diaphragm
<b>PC</b>	PTFE coating on diaphragm or wetted parts

XX

## 10. ASSEMBLY

<b>B8</b>	Direct
<b>B9</b>	Remote(capillary)

B8

## 11. CAPILLARY

<b>OU</b>	AISI 304 SS	<b>OV</b>	AISI 316 SS
-----------	-------------	-----------	-------------

XX

## 12. ARMOUR

<b>OX</b>	AISI 304 SS	<b>OY</b>	AISI 316 SS
<b>OZ</b>	PVC (Ambient max. 60°C)		

XX

## 13. REMOTE MOUNTING LENGTH

<b>XXXX</b>	1000 mm up to 6000 mm
-------------	-----------------------

XXXX

## 14. OTHER OPTIONS

<b>XZ</b>	Dry seal
<b>HL</b>	Helium leak test
<b>TM</b>	Material test certificate 2.2
<b>TC</b>	Material test certificate 3.1
<b>E8</b>	Weld constructed bottom chamber (Eco version)

XX

Ordering Example : D101-S01-LC-DG-RP-NF-04N-OA-14N-XX-B8

## NOTES:

1. Pressure rating up to 10 bar. Consult factory for details.
2. Other sealing liquids are available, contact factory for further details.
3. All metal diaphragms are laser welded to the top chamber.
4. While choosing option PA for diaphragm DG, option PB has to be selected mandatory.
5. PTFE lining to be chosen on parallel threads.

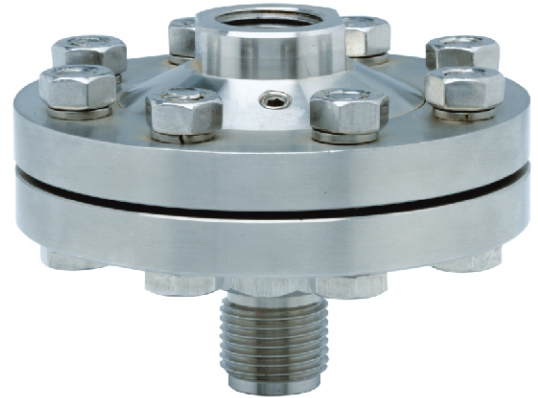
## FEATURES

- Rigid construction
- Laser welded diaphragm
- Optional exotic materials

## APPLICATION

- Separation systems
- Isolation applications
- Viscous & corrosive media
- High-pressure applications
- High vibration application

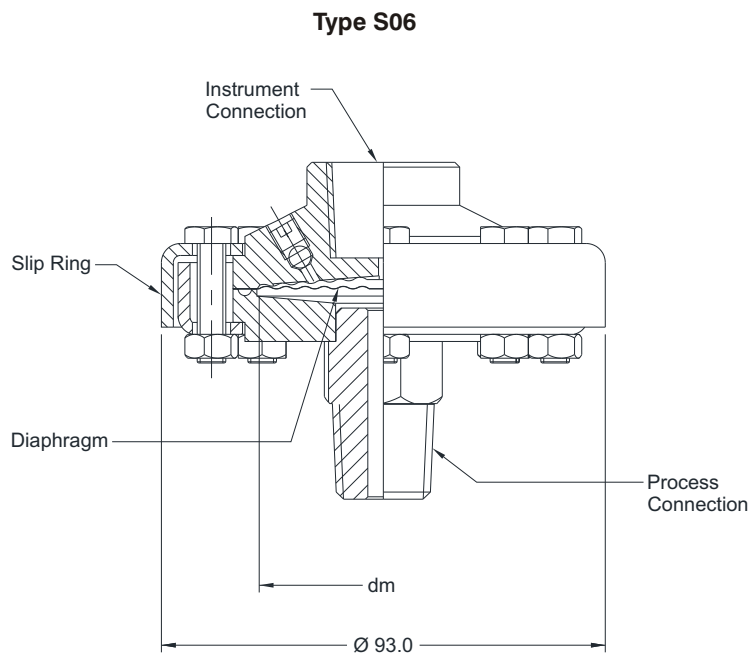
### Ring Coupled



### STANDARD SPECIFICATIONS

Range type	: -1...0 bar & 0...21 bar / -1...0 bar & 0...70 bar
	: -1...0 bar & 0...160 bar
Top chamber material	: AISI 304 SS
Diaphragm	: AISI 316L SS
Gaskets	: PTFE
Bottom chamber material	: AISI 316 SS
Instrument connection	: 1/2" NPT (F) / 1/2" BSP (F)
Sealing fluid	: Silicon DC 200 (-40...205°C)
Process connection	: 1/2" NPT (M) / 1/2" BSP (M)
Coupling flanges & hardware	: Pressed Steel - Cup design (plated) / AISI 304 SS
Assembly	: Direct

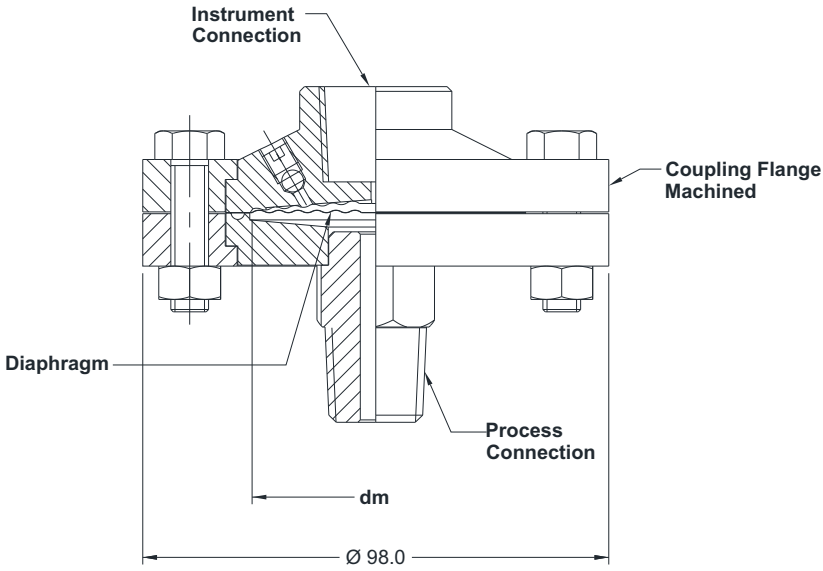
### DIMENSIONAL DRAWING



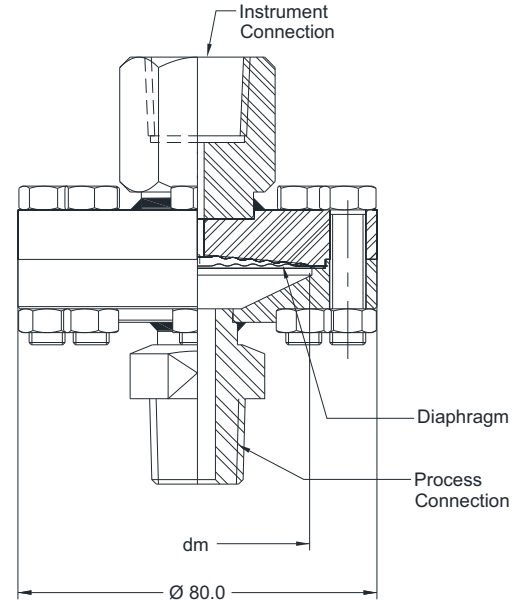
All dimensions are in mm.

DIMENSIONAL DRAWING

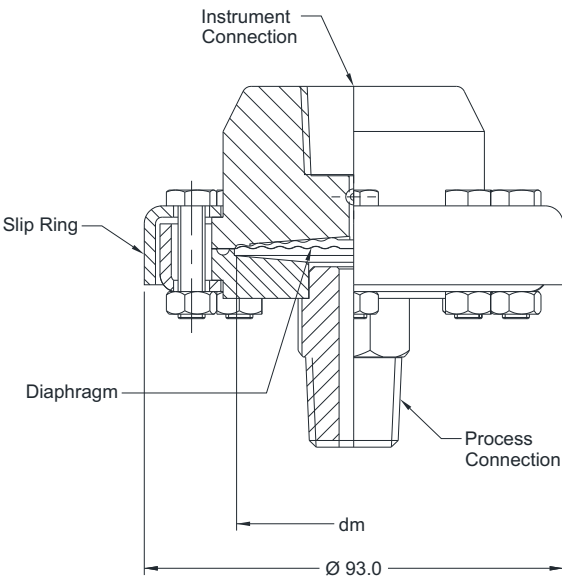
Type S07



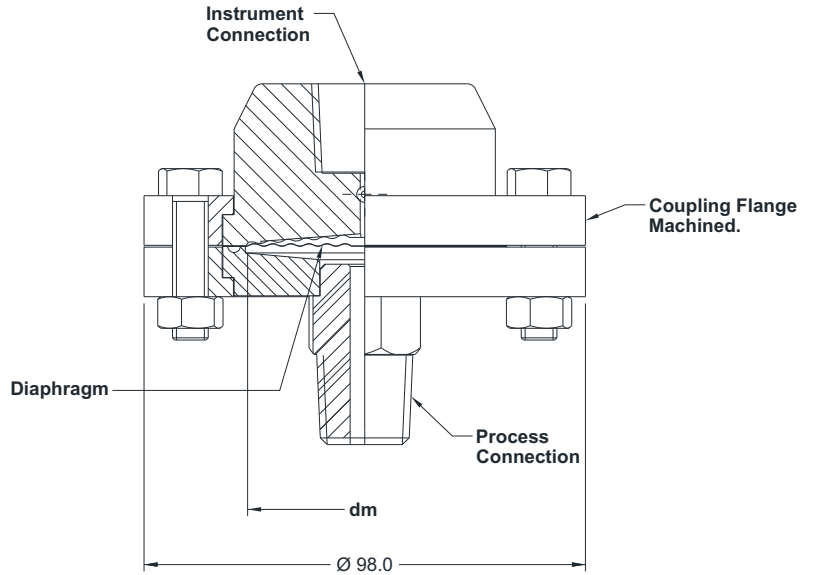
Type S08



Type S09



Type S10



ORDERING CODES					
<b>1. RANGE TYPE</b>					
<b>S06</b>	-1...0 bar & 0...21 bar		<b>S06</b>		
<b>S07</b>	-1...0 bar & 0...70 bar				
<b>S08</b>	-1...0 bar & 0...160 bar				
<b>S09</b>	-1...0 bar & 0...21 bar				
<b>S10</b>	-1...0 bar & 0...70 bar				
<b>2. TOP CHAMBER MATERIAL</b>					
<b>LC</b>	AISI 304 SS	<b>LF</b>	AISI 316 SS	<b>LC</b>	
<b>LG</b>	AISI 316L SS				
<b>3. DIAPHRAGM MATERIAL</b>					
<b>DG</b>	AISI 316L SS	<b>DM</b>	Monel 400	<b>DG</b>	
<b>DO</b>	Hastelloy C-276	<b>DQ</b>	Inconel 600		
<b>DV</b>	Titanium		<b>DW</b>		Tantalum
<b>D8</b>	Silver coated				
<b>4. GASKETS</b>					
<b>RP</b>	PTFE		<b>RM</b>	Metal	<b>RP</b>
<b>5. BOTTOM CHAMBER MATERIAL</b>					
<b>NC</b>	AISI 304 SS	<b>NF</b>	AISI 316 SS	<b>NF</b>	
<b>NG</b>	AISI 316L SS	<b>NM</b>	Monel 400		
<b>NO</b>	Hastelloy C-276	<b>NV</b>	Titanium		
<b>NW</b>	Tantalum		<b>N1</b>		PVC <sup>5</sup>
<b>N2</b>	PTFE <sup>5</sup>		<b>N3</b>		PVDF <sup>5</sup>
<b>N4</b>	PP <sup>5</sup>				
<b>6. INSTRUMENT CONNECTION</b>					
<b>03B</b>	3/8" BSP (F)		<b>04N</b>	1/2" NPT (F)	<b>04N</b>
<b>02B</b>	1/4" BSP (F)		<b>04B</b>	1/2" BSP (F)	
<b>02N</b>	1/4" NPT (F)				
<b>7. SEALING FLUID</b>					
<b>OA</b>	Silicon DC 200 [-40°C to 205°C]			<b>OA</b>	
<b>OF</b>	Food grade oil [-20°C to 140°C]				
<b>OG</b>	Glycerine [10°C to 150°C]				
<b>OI</b>	Syltherm 800 [-40°C to 315°C]				
<b>OL</b>	Silicon DC 710 [7°C to 371°C]				
<b>8. PROCESS CONNECTION</b>					
<b>12B</b>	1/4" BSP (M)	<b>13B</b>	3/8" BSP (M)	<b>14N</b>	
<b>14B</b>	1/2" BSP (M)	<b>12N</b>	1/4" NPT (M)		
<b>14N</b>	1/2" NPT (M)	<b>02N</b>	1/4" NPT (F)		
<b>04N</b>	1/2" NPT (F)	<b>02B</b>	1/4" BSP (F)		
<b>04B</b>	1/2" BSP (F)	<b>12M</b>	M20X1.5mm(M)		
<b>9. COUPLING FLANGES &amp; HARDWARES</b>					
<b>L0</b>	Pressed Steel - Cup design (plated)			<b>L0</b>	
<b>LD</b>	AISI 304SS - Machined				
<b>LH</b>	AISI 316 SS - Machined				
<b>10. PROTECTION ON WETTED PARTS</b>					
<b>PA</b>	PTFE lining on bottom chamber <sup>3,4</sup>			<b>XX</b>	
<b>PB</b>	PTFE protection for diaphragm				
<b>PC</b>	PTFE coating on diaphragm or wetted parts				
<b>11. ASSEMBLY</b>					
<b>B8</b>	Direct			<b>B8</b>	
<b>B9</b>	Remote(capillary)				
<b>12. CAPILLARY</b>					
<b>OU</b>	AISI 304 SS	<b>OV</b>	AISI 316 SS	<b>XX</b>	
<b>13. ARMOUR</b>					
<b>OX</b>	AISI 304 SS	<b>OY</b>	AISI 316 SS	<b>XX</b>	
<b>OZ</b>	PVC (Ambient max. 60°C)				
<b>14. REMOTE MOUNTING LENGTH</b>					
<b>XXXX</b>	1000 mm up to 6000 mm			<b>XXXX</b>	
<b>15. OTHER OPTIONS</b>					
<b>XZ</b>	Dry seal			<b>XX</b>	
<b>HL</b>	Helium leak test				
<b>TM</b>	Material test certificate 2.2				
<b>TC</b>	Material test certificate 3.1				

### Ordering Example : D102-S06-LC-DG-RP-NF-04N-OA-14N-L0-XX-B8

#### NOTES:

- Other sealing liquids are available, contact factory for further details.
- All metal diaphragms are laser welded to the Top Chamber.
- While choosing option PA for diaphragm DG, option PB has to be selected mandatory.
- PTFE lining to be chosen on parallel threads.
- Maximum pressure rating 10 bar.

## FEATURES

- Economical and light weight
- All welded construction
- Laser welded diaphragm

## APPLICATION

- Separation systems
- Isolation applications
- Viscous & corrosive media
- High-pressure applications
- High vibration application

### Heavy Duty Mini Seal

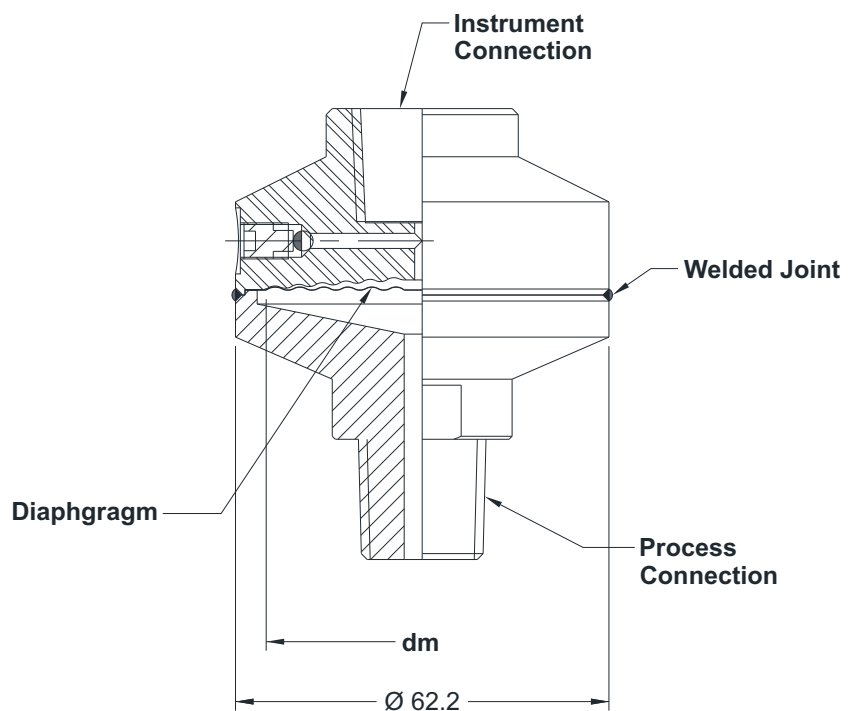


### STANDARD SPECIFICATIONS

Range type	: -1...0 bar & 0...2.5 bar / 4...70 bar / 100...250 bar / 280...600 bar
Chamber material	: AISI 316 SS
Diaphragm	: AISI 316L SS
Instrument connection	: 1/2" NPT (F) / 1/2" BSP (F)
Sealing fluid	: Silicon DC 200 (-40...205°C)
Process connection	: 1/2" NPT (M) / 1/2" BSP (M)
Assembly	: Direct

### DIMENSIONAL DRAWING

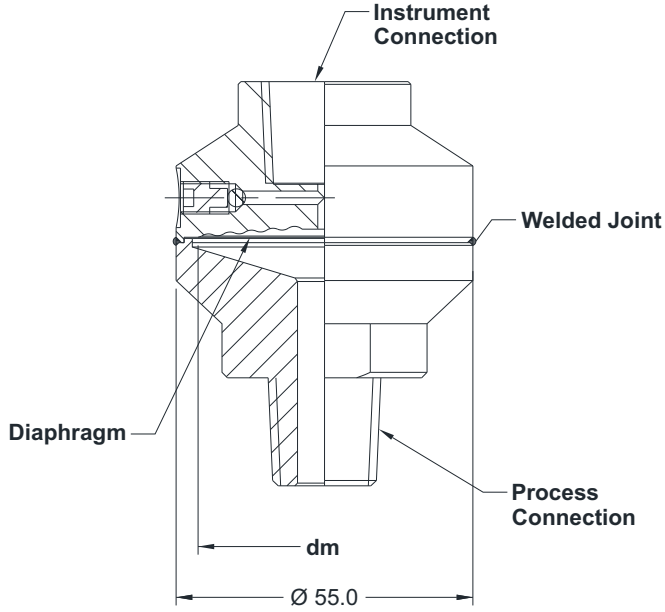
Type S11



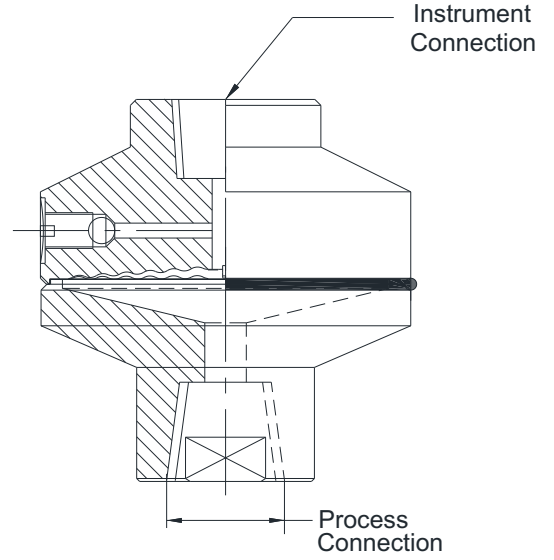
All dimensions are in mm.

DIMENSIONAL DRAWING

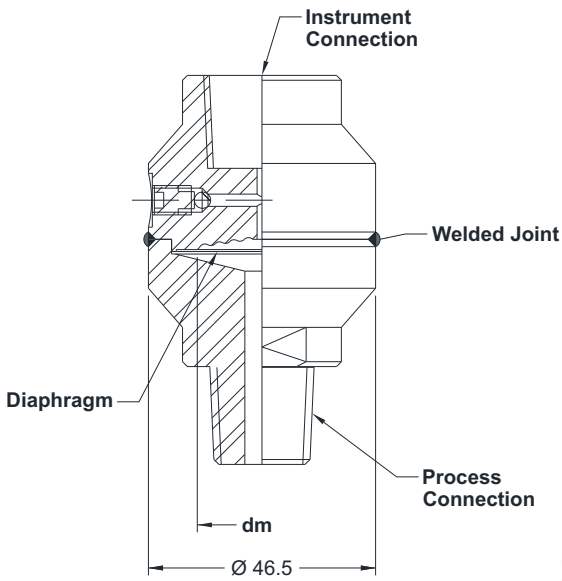
Type S12



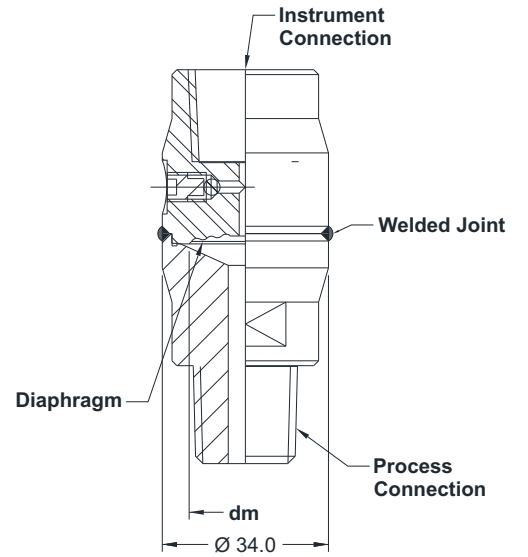
Example for female process connection



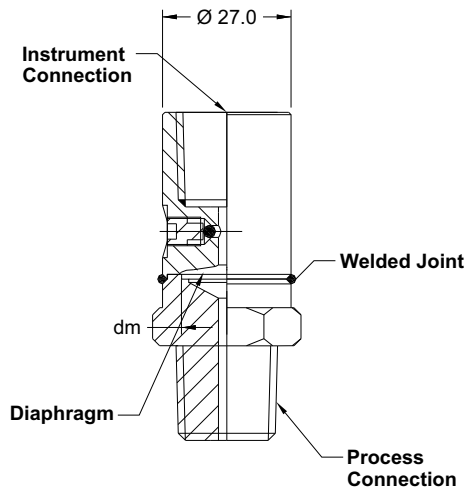
Type S13



Type S14



Type S15





## ORDERING CODES

## 1. RANGE TYPE

<b>S11</b>	-1...0 bar & 0...2.5 bar
<b>S12</b>	4...70 bar
<b>S13</b>	100...250 bar
<b>S14</b>	280...600 bar
<b>S15</b>	700...1000 bar

S11

## 2. CHAMBER MATERIAL

<b>LF</b>	AISI 316 SS	<b>LG</b>	AISI 316L SS
<b>NM</b>	Monel 400	<b>NO</b>	Hastelloy C-276

LC

## 3. DIAPHRAGM MATERIAL

<b>DG</b>	AISI 316L SS	<b>DO</b>	Hastelloy C-276
<b>DV</b>	Titanium	<b>D8</b>	Silver coated
<b>DM</b>	Monel 400	<b>DQ</b>	Inconel 600
<b>DW</b>	Tantalum		

DG

## 4. INSTRUMENT CONNECTION

<b>03B</b>	3/8" BSP (F)	<b>04N</b>	1/2" NPT (F)
<b>02B</b>	1/4" BSP (F)	<b>04B</b>	1/2" BSP (F)
<b>02N</b>	1/4" NPT (F)		

04N

## 5. SEALING FLUID

<b>OA</b>	Silicon DC 200 [-40°C to 205°C]
<b>OF</b>	Food grade oil [-20°C to 140°C]
<b>OG</b>	Glycerine [10°C to 150°C]
<b>OI</b>	Syltherm 800 [-40°C to 315°C]
<b>OL</b>	Silicon DC 710 [7°C to 371°C]

0A

## 6. PROCESS CONNECTION

<b>12B</b>	1/4" BSP (M)	<b>13B</b>	3/8" BSP (M)
<b>14B</b>	1/2" BSP (M)	<b>12N</b>	1/4" NPT (M)
<b>14N</b>	1/2" NPT (M)	<b>14M</b>	M20 x 1.5 (M)
<b>02N</b>	1/4" NPT (F)	<b>04N</b>	1/2" NPT (F)
<b>02B</b>	1/4" BSP (F)	<b>04B</b>	1/2" BSP (F)
<b>03B</b>	3/8" BSP (F)		

14N

## 7. ASSEMBLY

<b>B8</b>	Direct
<b>B9</b>	Remote (capillary)

B8

## 8. CAPILLARY

<b>OU</b>	AISI 304 SS	<b>OV</b>	AISI 316 SS
-----------	-------------	-----------	-------------

XX

## 9. ARMOUR

<b>OX</b>	AISI 304 SS	<b>OY</b>	AISI 316 SS
<b>OZ</b>	PVC (Ambient max. 60°C)		

XX

## 10. REMOTE MOUNTING LENGTH

<b>XXXX</b>	1000 mm up to 4000 mm
-------------	-----------------------

XXXX

## 11. OTHER OPTIONS

<b>XZ</b>	Dry seal
<b>HL</b>	Helium leak test
<b>TM</b>	Material test certificate 2.2
<b>TC</b>	Material test certificate 3.1
<b>E8</b>	Weld constructed bottom chamber (Eco version)

XX

Ordering Example : D103-S11-LC-DG-04N-OA-14N-B8

## NOTES:

- Other sealing liquids are available, contact factory for further details.
- Remote mounting applicable in range type S11, S12 & S13.
- All metal diaphragms are laser welded to the Top Chamber.

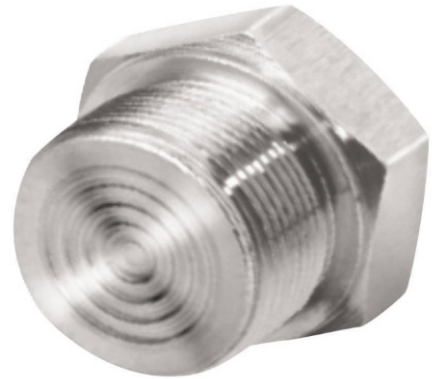
## FEATURES

- One piece construction
- Laser welded diaphragm
- Flushed diaphragm
- Ideal for Transmitters

## APPLICATION

- Separation systems
- Isolation applications
- Viscous & corrosive media
- High-pressure applications

### Flush



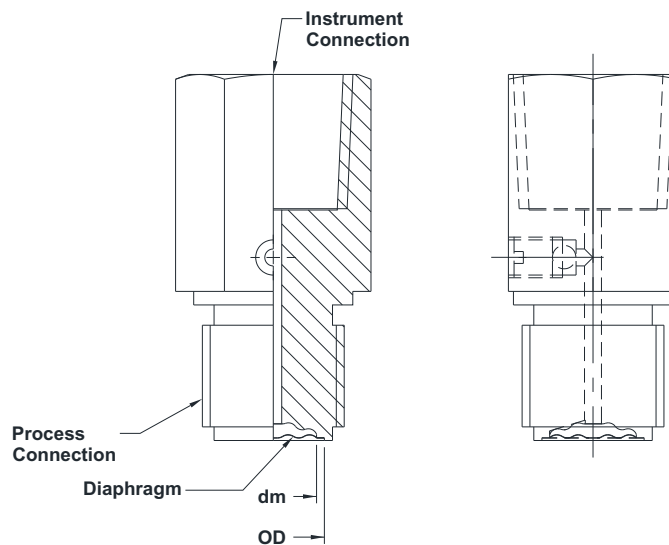
### STANDARD SPECIFICATIONS

Range type	: 4...600 bar*
Body material	: AISI 316 SS
Diaphragm	: AISI 316L SS
Instrument connection	: 1/2" NPT (F) / 1/2" BSP (F)
Sealing fluid	: Silicon DC 200 (-40...205°C)
Process connection	: 1/2" NPT (M) / 1/2" BSP (M)*
Assembly	: Direct

\*Refer range vs Process connection table

### DIMENSIONAL DRAWING

#### Type S16



All dimensions are in mm.

## ORDERING CODES

### 1. RANGE TYPE

**S16** 4...600 bar

**S16**

### 2. BODY MATERIAL

**LF** AISI 316 SS  
**LG** AISI 316L SS

**LF**

### 3. DIAPHRAGM MATERIAL

**DG** AISI 316L SS

**DG**

### 4. INSTRUMENT CONNECTION

**03B** 3/8" BSP (F)      **04B** 1/2" BSP (F)  
**02B** 1/4" BSP (F)      **04N** 1/2" NPT (F)  
**02N** 1/4" NPT (F)

**04N**

### 5. SEALING FLUID

**OA** Silicon DC 200 [-40°C to 205°C]  
**OF** Food grade oil [-20°C to 140°C]  
**OG** Glycerine [10°C to 150°C]  
**OI** Syltherm 800 [-40°C to 315°C]  
**OL** Silicon DC 710 [7°C to 371°C]

**OA**

### 6. PROCESS CONNECTION

**14N** 1/2" NPT (M)      **15N** 3/4" NPT (M)  
**16N** 1" NPT (M)      **17N** 1.5" NPT (M)  
**18N** 2" NPT (M)      **14B** 1/2" BSP (M)  
**15B** 3/4" BSP (M)      **16B** 1" BSP (M)  
**17B** 1.5" BSP (M)      **18B** 2" BSP (M)

**14N**

### 7. ASSEMBLY

**B8** Direct  
**B9** Remote (capillary)

**B8**

### 8. CAPILLARY

**OU** AISI 304SS  
**OV** AISI 316 SS

**XX**

### 9. ARMOUR

**OX** AISI 304SS  
**OY** AISI 316 SS  
**OZ** PVC (Ambient max. 60°C)

**XX**

### 10. REMOTE MOUNTING LENGTH

**XXXX** 1000 mm up to 4000 mm

**XXXX**

### 11. OTHER OPTIONS

**XZ** Dry seal  
**HL** Helium leak test  
**TM** Material test certificate 2.2  
**TC** Material test certificate 3.1

**XX**

**Ordering Example : D104-S16-LF-DG-04N-OA-14N-B8**

## CONNECTION SIZE Vs RANGE CHART

Thread Size	1/2"	3/4"	1"	1 1/2"	2"
"Diaphragm Size (OD/ED) in "mm"	15/12	20/16	27/23	40/32	48/40
Range (bar)	0...70 to 0...700	0...40 to 0...700	0...25 to 0...700	0...4 to 0...600	0...4 to 0...400

### NOTES:

- Other sealing liquids are available, contact factory for further details.
- Remote mounting available in connection 1" and above.
- All metal diaphragms are laser welded to the Top Chamber.