







welding socket
Not included in the delivery

Application

- Food, beverage, and brewery industries
- Milk and dairy industry

- Pastes, powders, and crystalizing media
- Pharmaceutical industry

Special Features

Excellent for frequent cleaning

✓ Fast and easy install/uninstall

Description

Seal-Mate group of diaphragm seals come between the pressure measuring instrument and some medias which can damage the instrument or be harmful if they get directly in touch with the instrument. In many industrial processes, it happens a lot that the media cannot or should not get into direct contact with the instrument. Sometimes that is for the sake of keeping the instrument work properly as the media is too viscous and might easily clog the process connections, and sometimes it is for hygienic purposes.

The flexible metal diaphragm of InstruMate seals is made of SS316L by default and the space between this flexible diaphragm and the instrument process connection is filled with a filling fluid, chosen in best interest of where the instrument is going to be installed. So the intended pressure is transmitted via the flexible diaphragm to the filling fluid and then via the filling fluid to the pressure instrument.

InstruMate diaphragm seals are vacuum protected and also not sensitive to sudden sharp increase in pressure.

InstruMate sanitary diaphragm seal model 8213 is attached and detached to pipes by use of a clamp very easily. As a result, using InstruMate 8213 diaphragm seal with sterile connection speeds up the cleaning process of the seal. If Hygienic feature is going to be maintained in food or pharmaceutical industry, then InstruMate 8213 is a great choice because of its fast and easy removal from the plant.

C.I.P or S.I.P services for cleaning and sterilization process are easy to handle when you use InstruMate 8213 sanitary diaphragm

C.I.P. = Cleaned In Place

S.I.P. = Steamed In Place

Material Combinations

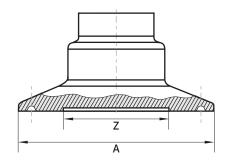
Versions	Body of the diaphragm seal	Diaphragm	Maximum permissible process temperature in °C	
Standard version	CC2161	SS316L	1	
Option	SS316L	Hastelloy C276	400 ¹	

^{1.} This value is the maximum temperature that the diaphragm seal can safely endure. Indeed the maximum permissible process temperature in operation is limited by system filling fluid and also the joining method.

Instrument Connection

Female Instrument connection						
Standard version	½ NPT					
Option	1/4 NPT, 1/2 BSP, 1/4 BSP, M20x1.5, M12x1.5					

Dimensions (in mm)



Process connection: Clamp connection per **DIN 32676**Pipe standard per **DIN 11866 row B** and **ISO 1127 row 1**

PN^1	DN	Dimensio	Lowest measuring	Highest			
PN		For pipe outer \emptyset x wall thickness	Pipe inner \emptyset	A	Z	range	measuring range
	26.0	26.9 26.9 x 1.6	23.7	50.5	24	NS63: 6bar	40bar 40bar
	20.9					NS100:16bar	
	33.7	33.7 x 2	29.7	50.5	30	NS63: 4bar	
40						NS100:10bar	
	42.4	42.4 x 2	38.4	64	35	2.5bar	40bar
	48.3	48.3 x 2	44.3	64	42	2.5bar	40bar
	60.3	60.3 x 2	56.3	77.5	50	2.5bar	25bar
25	76.1	76.1 x 2	72.1	91	50	2.5bar	25bar

Process connection: Clamp connection per **DIN 32676**Pipe standard per **DIN 11866 row C** or **ASME BPE**

PN ¹	DN	Dimensio	Lowest measuring	Highest measuring			
		For pipe outer \emptyset x wall thickness	Pipe inner \varnothing	A	Z	range	range
	1"	25.4 x 1.65	22.1	50.5	24	NS63: 6bar	40bar
	'					NS100:16bar	
40	1 1/2"	38.1 x 1.65	34.8	50.5	35	2.5bar	40bar
	2"	50.8 x 1.65	47.5	64	42	2.5bar	40bar
	2 1/2"	63.5 x 1.65	60.2	77.5	50	2.5bar	25bar
25	3"	76.2 x 1.65	72.9	91	50	2.5bar	25bar

^{1.} For maximum pressure range consider pressure rating of clamp.

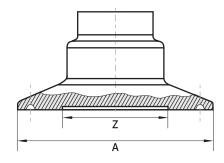
Further dimensions and higher nominal pressures on request

InstruMate

Process connection: Clamp connection per **DIN 32676**Pipe standard per **BS4825 part 3** and **O.D. tube**

PN ¹	DN	Dimensio	Lowest	Highest			
		For pipe outer \emptyset x wall thickness	Pipe inner \varnothing	A	Z	measuring range	measuring range
	1"	25.4 x 1.65	22.1	50.5	24	NS63: 6bar	40bar
						NS100:16bar	
40	1 1/2"	38.1 x 1.65	34.8	50.5	35	2.5bar	40bar
	2"	50.8 x 1.65	47.6	64	42	2.5bar	40bar
	2 1/2"	63.5 x 1.65	60.3	77.5	50	2.5bar	25bar
25	3″	76.2 x 1.65	73	91	50	2.5bar	25bar

Further dimensions and higher nominal pressures on request



Process connection: Clamp connection per **DIN 32676**Pipe standard per **DIN 11866 row A** and **DIN 11850 row 2**

PN ¹	DN	Dimensio	Lowest measuring	Highest measuring			
		For pipe outer \emptyset x wall thickness	Pipe inner \varnothing	A	Z	range	range
	25	29 x 1.5	26	50.5	24	NS63: 6bar	40bar 40bar
	23	23 X 1.3	20		24	NS100:16bar	
40	32	35 x 1.5	32	50.5	30	NS63: 4bar	
40						NS100:10bar	
	40	41 x 1.5	38	50.5	35	2.5bar	40bar
	50	53 x 1.5	50	64	42	2.5bar	40bar
	65	70 x 2	66	91	50	2.5bar	25bar
25	80	85 x 2	81	106	50	2.5bar	25bar
	100	104 x 2	100	119	65	1bar	25bar

^{1.} For maximum pressure range consider pressure rating of clamp.

Further dimensions and higher nominal pressures on request

02/2020 (InstruMate mission is continuous improvement. Always download the latest datasheet from website).

Process connection: Clamp connection per ISO 2852
Pipe standard per ISO 2037 and BS 4825 part 1

PN^1	DN	Dimensio	ons in mm			Lowest measuring	Highest measuring range
PN		For pipe outer \emptyset x wall thickness	Pipe inner \varnothing	A	Z	range	
	25	25 x 1.2	22.6	50.5	24	NS63: 6bar NS100:16bar	40bar
	28	28 x 1.2	25.6	50.5	24	NS63: 6bar NS100:16bar	40bar
40	33.7	33.7 x 1.2	31.3	50.5	30	NS63: 4bar NS100:10bar	40bar
	38	38 x 1.2	35.6	50.5	32	NS63: 4bar NS100:10bar	40bar
	40	40 x 1.2	37.6	64	35	2.5bar	40bar
	51	51 x 1.2	48.6	64	42	2.5bar	40bar
	63.5	63.5 x 1.6	60.3	77.5	50	2.5bar	25bar
	70	70 x 1.6	66.8	91	50	2.5bar	25bar
25	76.1	76.1 x 1.6	72.9	91	50	2.5bar	25bar
23	88.9	88.9 x 2	84.9	106	50	2.5bar	25bar
	101.6	101.6 x 2	97.6	119	65	1bar	25bar

^{1.} For maximum pressure range consider pressure rating of clamp.

Further dimensions and higher nominal pressures on request

How To Order

	Product Group Name	Model	Pipe standard	Process Connection size	body of diaphragm	Diaphragm	Instrument connection size	Level of cleanliness of wetted parts	Options
E.g.	Seal-Mate	8213	DIN 11866 row C	1 1/2	SS316L	SS316L	1/2 NPT	Oil and grease free	_

Or simply order by item number on the basis of your previous purchases.

