



Application

- ✓ Food, beverage, and brewery industries
- ✓ Milk and dairy industry
- ✓ Drink & beverage filling machines

Special Features

- ✓ Excellent for frequent cleaning
- ✓ Suitable for COP (cleaning out of place)
- ✓ 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 8212 is specially designed to endure high steam temperatures for sterilization of the process connection. InstruMate 8212 joins with pipe connection via a union nut available in all standard sizes. If hygienic feature is going to be maintained in food or pharmaceutical industry, then InstruMate 8212 is a great choice because of its fast and easy removal from the plant.

This sanitary diaphragm seal with grooved union nut is easy for handling COP service (cleaning out of place).

Material Combinations

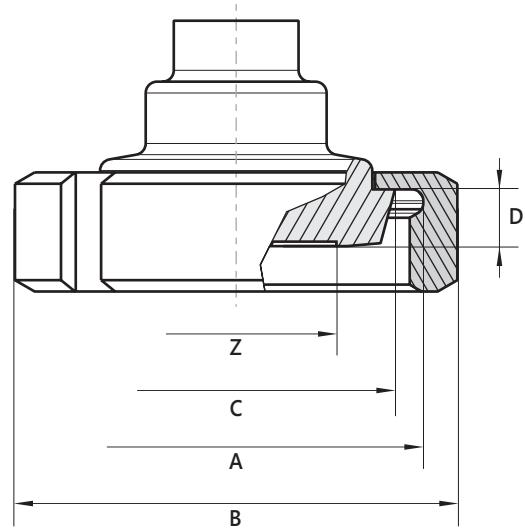
Versions	Diaphragm	Body of the diaphragm seal	Nut	Maximum permissible process temperature in °C
Standard version	SS316L	SS316L	SS304	400 ¹
Option	Hastelloy C276			

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	1/2 NPT
Option	1/4 NPT, 1/2 BSP, 1/4 BSP, M20x1.5, M12x1.5

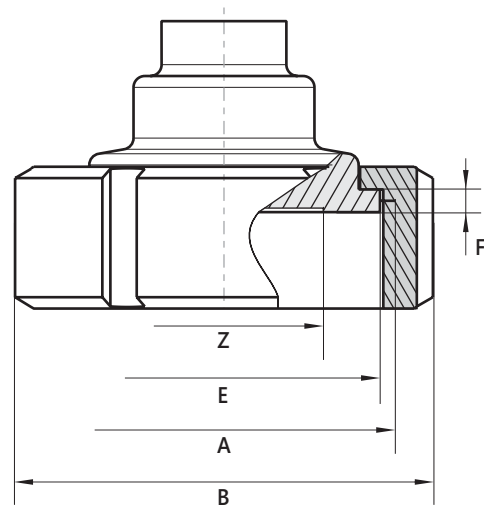
Dimensions (in mm)



Threaded pipe connection per **DIN 11851**
Pipes per **DIN 11850 row 2**

PN	DN	Pipe outer Ø x wall thickness	Dimensions in mm					Lowest measuring range	Highest measuring range
			A	B	C	D	Z		
40	25	29 x 1.5	RD 52 x 1/6	63	44	10	24	NS63: 6bar NS100:16bar	40bar
	32	35 x 1.5	RD 58 x 1/6	70	50		30	NS63: 4bar NS100:10bar	40bar
	40	41 x 1.5	RD 65 x 1/6	78	56		35	2.5bar	40bar
25	50	53 x 1.5	RD 78 x 1/6	92	68.5	11	42	2.5bar	40bar
	65	70 x 1.5	RD 95 x 1/6	112	86	12	50	2.5bar	25bar
	80	85 x 2	RD 110 x 1/4	127	100		50	2.5bar	25bar

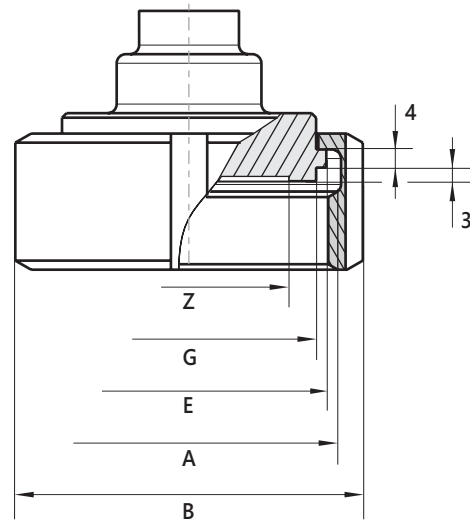
Further dimensions and higher nominal pressures on request



Threaded pipe connection per **SMS 1145**
Pipes per **ISO 1127 row 2** or **ISO 2037/1992**

PN	DN	Pipe outer Ø x wall thickness	Dimensions in mm					Lowest measuring range	Highest measuring range
			A	B	E	F	Z		
40	1 1/2"	38 x 1.2	RD 60 x 1/6	74	55	4	35	2.5bar	40bar
	2"	51 x 1.2	RD 70 x 1/6	84	65		42	2.5bar	40bar

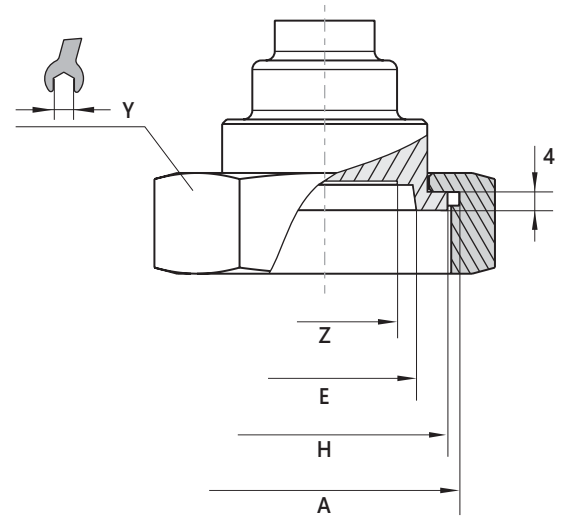
Further dimensions and higher nominal pressures on request



Threaded pipe connection per **IDF standard (ISO/DIS 2853 and BS 4825 part 4)**
Pipes per **ISO 1127 row 2** or **ISO 2037/1992**

PN	DN	Pipe outer Ø x wall thickness	Dimensions in mm					Lowest measuring range	Highest measuring range
			A	B	E	G	Z		
40	1 1/2"	38.6 x 1.5	1 1/2" IDF	64	47	42.7	35	2.5bar	40bar
	2"	51.6 x 1.5	2" IDF	79	60.5	56.2	42	2.5bar	40bar

Further dimensions and higher nominal pressures on request



Threaded pipe connection per **APV-RJT standard (BS 4825 part 5)**

Pipes per **BS 4825 part 1** or **O.D. tube**

PN	DN	Pipe outer Ø x wall thickness	Dimensions in mm					Lowest measuring range	Highest measuring range
			A	E	H	Y	Z		
40	1 1/2"	38.1 x 1.6	2 5/16 x 8"	40.5	54	65	35	2.5bar	40bar
	2"	50.8 x 1.6	2 7/8 x 6"	53.2	66.7	80	42	2.5bar	40bar

Further dimensions and higher nominal pressures on request

How To Order

Product Group Name	Model	connection standard	Process Connection size	Diaphragm	Instrument connection	Level of cleanliness of wetted parts	Options
<i>Example:</i> Seal-Mate	8212	SMS 1145	2"	SS316L	1/2 NPT	Oil and grease free	-

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

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