



### Application

- ✓ For contaminating or poisonous fluids
- ✓ For crystalizing or viscous media
- ✓ Concrete pump & painting lines
- ✓ Process industry

### Special Features

- ✓ Compact dimensions
- ✓ No gaskets or bolts
- ✓ Flush diaphragm

### 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 flush diaphragm seal with threaded process connection can be used for corrosive and hot media and also poisonous fluid which is dangerous for environments. The compact design makes Seal-Mate 8203 to be in the category of mini diaphragm seals which are suitable for applications with frequent maintenance.

## Material Combinations

Versions	Diaphragm seal and diaphragm	Diaphragm	Maximum permissible process temperature in °C
Standard version	SS316L	SS316L	400 <sup>1</sup>
Option		Monel 400	
		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.

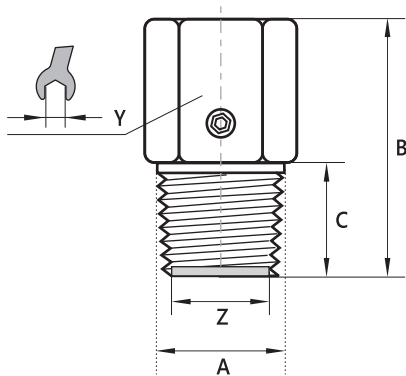
## Instrument and process connections

Standards	Male process connection		Female instrument connection	
	Standard	Options	Standard	Options
ASME B16.11	1/2 NPT	3/4 NPT 1 NPT 1 1/2 NPT	1/2 NPT	1/4 NPT
DIN 3852-2	G 1/2 A	G 3/4 A G 1 A G 1 1/2 A	G 1/2	G 1/4

\* It is advised to use 63mm (2.5") pressure gauges with this diaphragm seal.

Dimensions (in mm)

■ ASME B16.11

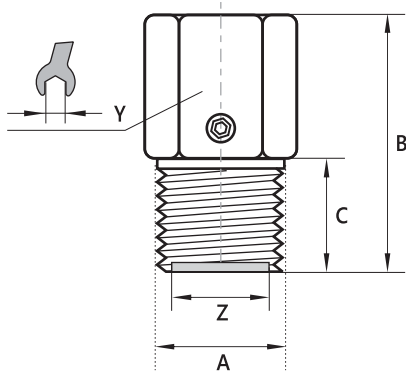


A: Thread  
 Y: Spanner width  
 Z: Effective diameter of diaphragm

A	Dimensions in mm				Lowest measuring range <sup>1</sup>	Highest measuring range
	B	C	Y	Z		
1/2 NPT	50	20	27	18	NS63: 40bar	NS63: 600bar
					NS100: 60bar	NS100: 600bar
3/4 NPT	50	20	27	24	NS63: 25bar	NS63: 400bar
					NS100: 40bar	NS100: 400bar
1 NPT	50	20	34	30	NS63: 16bar	NS63: 400bar
					NS100: 25bar	NS100: 400bar
1 1/4 NPT	50	21	42	35	NS63: 10bar	NS63: 250bar
					NS100: 16bar	NS100: 250bar
1 1/2 NPT	50	21	50	42	NS63: 6bar	NS63: 100bar
					NS100: 10bar	NS100: 100bar

1. With pressure transmitters, the lowest measuring pressure is 0...6bar.

■ DIN 3852-2



A: Thread  
 Y: Spanner width  
 Z: Effective diameter of diaphragm

A	Dimensions in mm				Lowest measuring range	Highest measuring range
	B	C	Y	Z		
G 1/2	50	20	27	18	NS63: 40bar	NS63: 600bar
					NS100: 60bar	NS100: 600bar
G 3/4	50	20	27	24	NS63: 25bar	NS63: 400bar
					NS100: 40bar	NS100: 400bar
G 1	50	20	34	30	NS63: 16bar	NS63: 400bar
					NS100: 25bar	NS100: 400bar
G 1 1/4	50	21	42	35	NS63: 10bar	NS63: 250bar
					NS100: 16bar	NS100: 250bar
G 1 1/2	50	21	50	42	NS63: 6bar	NS63: 100bar
					NS100: 10bar	NS100: 100bar

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## How To Order

	Product Group Name	Model	body material	Diaphragm material	Level of cleanliness of wetted parts	Instrument connection	Process connection	Options
<i>Example:</i>	Seal-Mate	8203	SS316L	SS316L	Oil & Grease Free	1/2 NPT Female	3/4 NPT Male	-

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

# InstruMate®

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