



PN250

Female process connection



PN250



PN100



Application

- ✓ For contaminating or poisonous fluids
- ✓ For hot or viscous media
- ✓ Process industry with possible pressure spike

Special Features

- ✓ Modifications of lower body on request
- ✓ Various process connections

Description

Seal-Mate group of diaphragm seals come between the pressure measuring instrument and some medias with 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 threaded diaphragm seal Model 8201 can be used for corrosive and hot media and also poisonous fluid which is dangerous for environments.

Material Combinations

Versions	Upper body of diaphragm seal	Lower body of diaphragm seal	Diaphragm	Maximum permissible process temperature with PTFE seal in °C	Maximum permissible process temperature with Metal seal in °C
Standard version	SS316	SS316L	SS316L	260 ¹	400 ¹
Option	SS316L	SS316L	SS316L		
			Monel 400		
			Hastelloy C276		

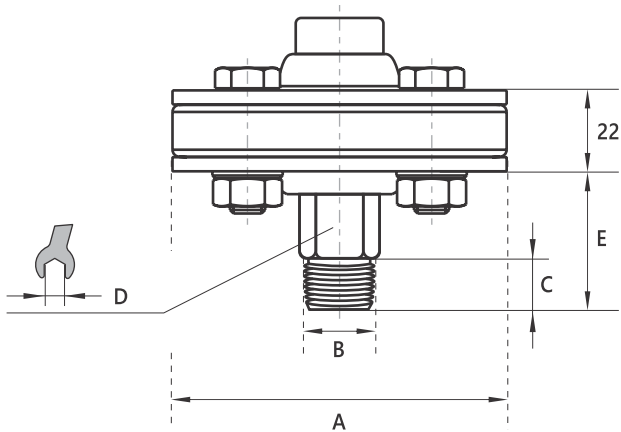
1. This value is the maximum temperature that the diaphragm seal can safely endure. Indeed the maximum permissible process temperature in operation is limited by system filling fluid and also the joining method.

Instrument and process connections

Standards	Male process connection		Female process connection		Female Instrument connection	
	Standard	Options	Standard	Options	Standard	Options
ASME B 1.20.1	1/2 NPT	1/4 NPT 3/8 NPT 3/4 NPT 1 NPT	1/2 NPT	1/4 NPT 3/8 NPT 3/4 NPT 1 NPT	1/2 NPT	1/4 NPT
DIN ISO 228-1	G 1/2 A	G 1/4 A G 3/8 A G 3/4 A G 1 A	G 1/2	G 1/4 G 3/8 G 3/4 G 1	G 1/2	G 1/4
DIN 13-1 (ISO 724)	M20 x 1.5	–	M20 x 1.5	–	M20 x 1.5	–

Dimensions (in mm)

■ Male Thread



B	Dimensions in mm			
	C	E	A	D
G 1/4 A	13	37	95	24
G 3/8 A	16	40		24
G 1/2 A	20	44		24
G 3/4 A	20	44		27
G 1 A	20	44		34
1/4 NPT	13	37		24
3/8 NPT	16	40		24
1/2 NPT	20	44		24
3/4 NPT	20	44		27
1 NPT	20	44		34
M20 x 1.5	20	44		24

A: Diameter of diaphragm

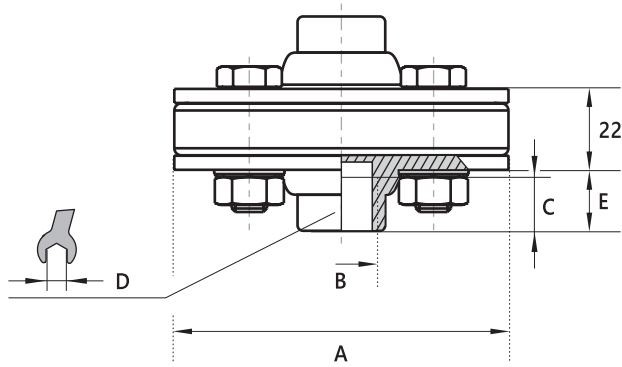
B: Thread

D: Spanner width

PN in bar	Number of screws	Lowest measuring range ¹	Highest measuring range
100	4	2.5 bar	100 bar
250	8	160 bar	250 bar

1. Compound ranges from as low as -1...+1.5 bar

■ Female Thread



B	Dimensions in mm			
	C	E	A	D
G 1/4	13	20	95	24
G 3/8	16			
G 1/2	18			
1/4 NPT	13			
3/8 NPT	16			
1/2 NPT	18			
M20 x 1.5	18			

A: Diameter of diaphragm

B: Thread

D: Spanner width

PN in bar	Number of screws	Lowest measuring range	Highest measuring range
100	4	2.5 bar	100 bar
250	8	160 bar	250 bar

1. Compound ranges from as low as -1...+1.5 bar

How To Order

Product Group Name	Model	PN	Upper Body Material	Lower Body Material	Diaphragm Material	Level of Cleanliness of Wetted Parts	Female Instrument connection	Process connection	Options
Example: Seal-Mate	8201	PN100	SS316	SS316L	SS316L	Oil & Grease Free	1/2 NPT	1/2 NPT male	-

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

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