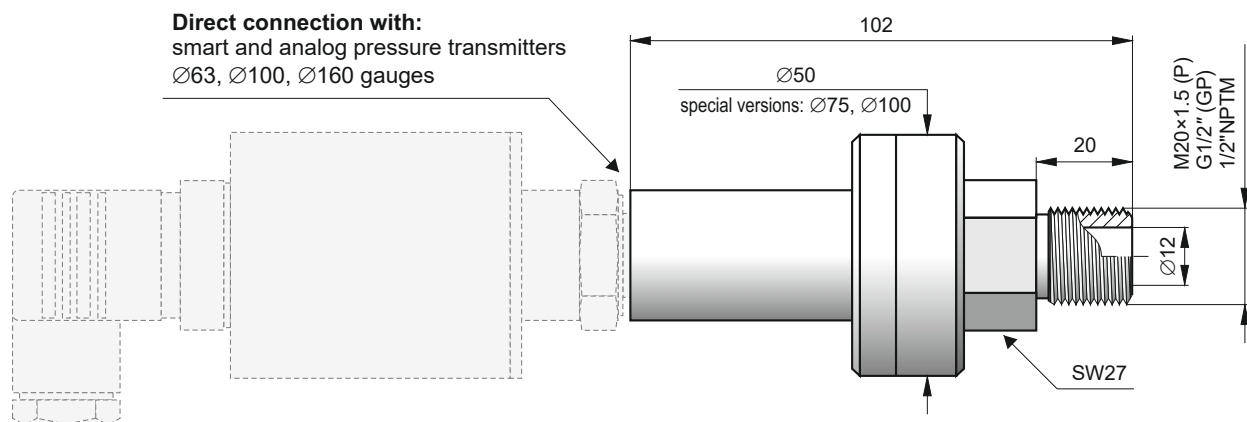


# Threaded seals with large diaphragm S-Mazut



## Application

The S-Mazut diaphragm seal is applicable to measurement of viscous liquids, at temperatures up to 150°C (300°C when remote diaphragm seal is used). A typical

application is to measure the pressure of heavy fuel oil (petroleum atmospheric residue) in burners and in heat centers of power boilers.

**Recommended minimum measuring range (bar),  
depending on the type of the set: pressure measuring device - diaphragm seal**

Diaphragm seal type	Pressure transmitter			Ø100 gauge		
	S-Mazut	S-Mazut75	S-Mazut100	S-Mazut	S-Mazut75	S-Mazut100
direct	2,5 bar	0,1 bar	0,05 bar	2,5 bar	1 bar	1 bar
remote	6 bar	0,4 bar	0,25 bar	6 bar	2,5 bar	1 bar

## Zero error from ambient temperature change

Diaphragm seal type	S-Mazut	S-Mazut75	S-Mazut100
direct	4 mbar / 10°C	2 mbar / 10°C	0,8 mbar / 10°C
Remote (capillary 2m)	5 mbar / 10°C	3 mbar / 10°C	1 mbar / 10°C

For a set: pressure transmitter - special diaphragm seal (special diaphragm seal means the larger diaphragm diameter), there is the following relation: the quantity of thermal errors decreases proportionally to the cubed value of the active diameter of the separating diaphragm (i.e. to the diameter value raised to the third power).

An additional zero error, resulting from temperature fluctuations in a medium, depends on the temperature gradient in the oil-based diaphragm sealing system. The error value is, in any case, significantly smaller than the error value shown above.

**Maximum measuring range** 0...70 bar

**Overpressure limit**

S-Mazut	110 bar
S-Mazut75	50 bar
S-Mazut100	40 bar

**Medium temperature range**

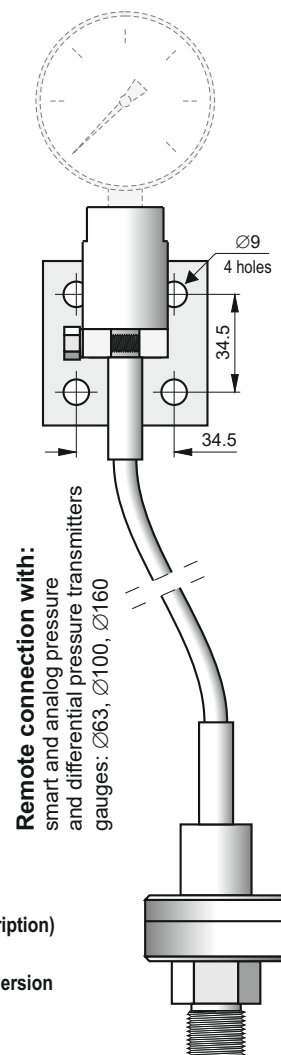
-10...315°C for remote seal

-10...150°C for direct seal

**Material of diaphragm and seal** 316Lss

## Special versions

Ø75 and Ø100 versions for low ranges  
Others



## Ordering procedure

direct diaphragm seal:  
**pressure measuring device / S-Mazut / type of process connection P, GP, 1/2"NPTM / special version (description)**

remote diaphragm seal:  
**pressure measuring device / S-MazutK / K = .... m / type of process connection P., G, 1/2"NPTM / special version (description)**

Transmitter or gauge  
- see the code in the  
appropriate catalogue sheet

Capillary  
length