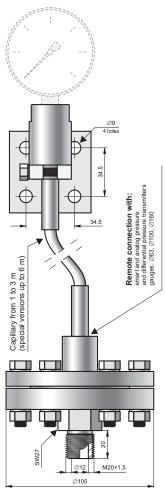
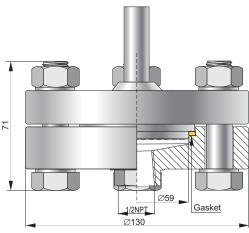


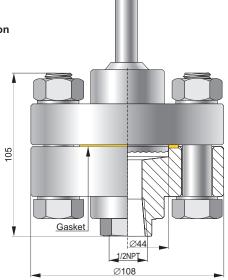
# Threaded seals with large diaphragm S-Comp...



Type S-Comp Mounting part with process connection M20×1.5 (P type); G1/2" (GP type)



Type S-Comp10M Mounting part with process connection 1/2"NPTF



Type S-Comp25M Type S-Comp60M Mounting part with process connection 1/2"NPTF



### **Application**

The diaphragm seal is a pressure-transmitting, diaphragm-type device. The pressure signal is sent to the cooperating pressure measuring device (pressure transmitter, pressure gauge) through manometric liquid filling the space between the separating diaphragm of the seal and the pressure measuring device. The diaphragm seal task is to isolate the pressure measuring device from damaging impacts caused by either medium or installation:

- low or high temperature, increased viscosity, impurities;
- vibrations of the installation (remote diaphragm seal);
- pressure fluctuations.

S-Comp diaphragm seals have a large separating diaphragm ( $\emptyset$ 70) while retaining a compact economic overall design. Benefits of S-Comp diaphragm seals include:

- the ability to take measurements within a narrow range;
- simplicity of assembly.

#### Maximum measuring range:

 Type S-Comp:
 0...16bar
 Type S-Comp10M:
 0...100bar

 Type S-Comp25M:
 0...250bar
 Type S-Comp60M:
 0...600bar

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

Diaphragm seal type	Transmitters APCE-2000*, PCE-28	Gauge ∅63	Gauge ∅100	Gauge ∅160
direct	0.2	1	1	1
remote	0.5	2.5	2.5	2.5

<sup>\*</sup> The ranges given in the table for the smart APC-2000 transmitter should be taken as set ranges.

#### Zero error from ambient temperature change

Diaphragm seal type	Absolute error of zero		
direct	0.6 mbar / 10°C		
Remote (2m capillary)	2 mbar / 10°C		

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 in the table.

#### Medium temperature range

-30...200°C for remote diaphragm seal -30...150°C for direct diaphragm seal

Material of diaphragm, flange and mounting part 00H17N14M2 (316Lss)

#### **Special versions**

Diaphragm made of Hastelloy C 276 Capillary outlet at the side of the diaphragm seal Direct diaphragm seal for medium temp. over 150°C Others

## Ordering procedure

**Example**: MS-100 gauge, measuring range 0÷6bar, process connection outlet bottom, remote threaded seal with large diaphragm and separable mounting part with process connection M20×1.5, capillary length 1.5 m.

 $MS-100 / 0 \div 6 \text{ bar } / S-CompK M20 \times 1.5 / K = 1.5 \text{ m}$