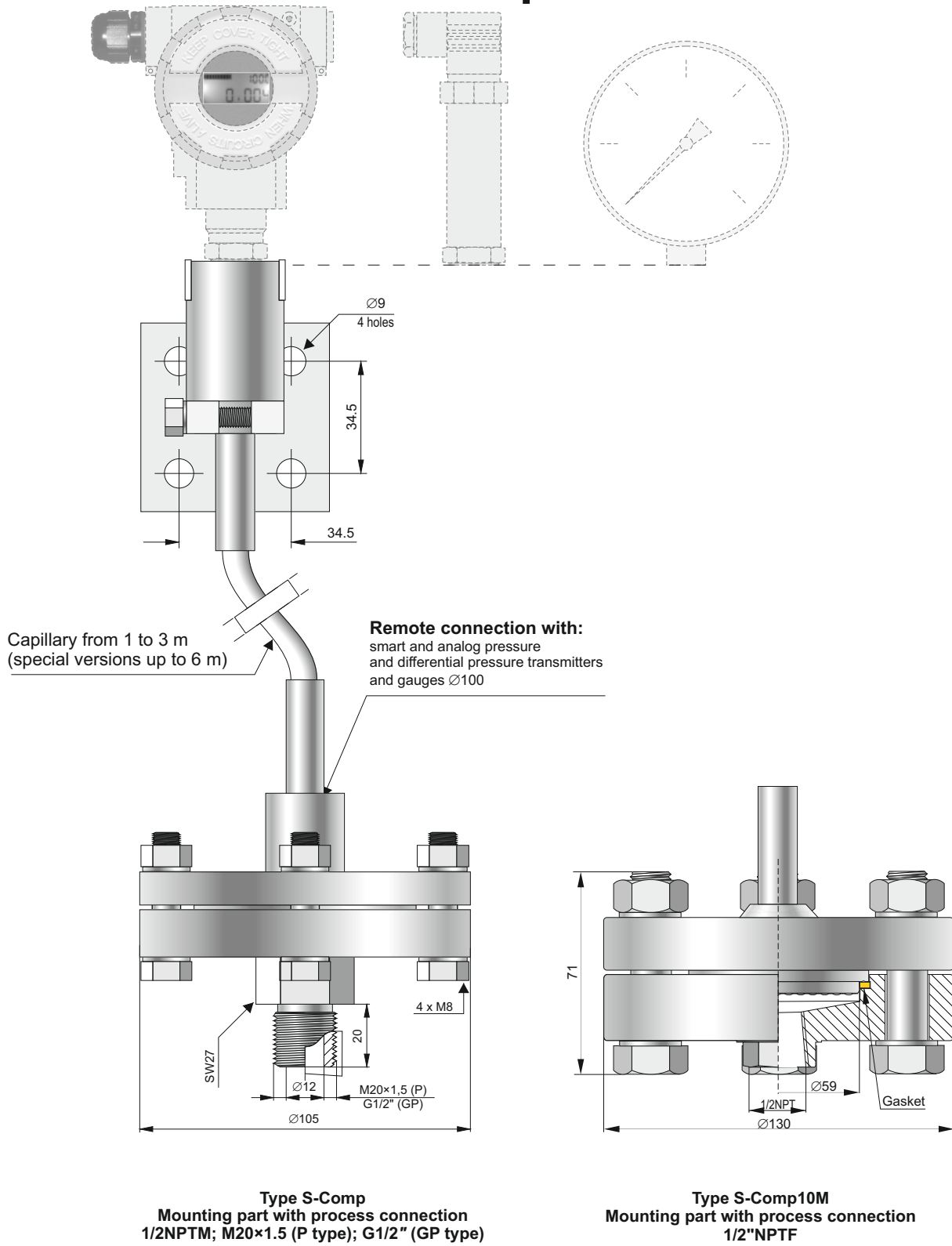


Threaded seals with large diaphragm S-Comp...



Application

The diaphragm seal is a pressure-transmitting, diaphragm-type device. The pressure signal is sent to the co-operating 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 (Ø70) 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...25bar

Type S-Comp10M: 0...100bar

Maximum capillary length for remote connection: 10m

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

Diaphragm seal type	Transmitters APC-2000*, PCE-28	Gauge Ø100
direct	0.2	1
remote	0.5	2.5

* 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

Special versions

Diaphragm made of Hastelloy C 276

Direct diaphragm seal for medium temp. over 150°C

Others

Material of diaphragm, flange and mounting part

00H17N14M2 (316Lss)

Ordering procedure

Model	Code	Description
S-Comp		Direct diaphragm seal, max pressure 25 bar, membrane diameter: Ø70mm
S-CompK		Remote diaphragm seal, max pressure 25 bar, membrane diameter: Ø70mm
S-Comp10M		Direct diaphragm seal, max pressure 100 bar, membrane diameter: Ø59mm
S-Comp10MK		Remote diaphragm seal, max pressure 100 bar, membrane diameter: Ø59mm
type of process connection for S-Comp and S-compK	/P..... /GP..... /1/2NPT.....	Thread M20x1.5 Thread G1/2" Thread 1/2NPTM
capillary length for S-CompK and S-Comp10MK	/K=.....	Input required capillary length in [m]
special versions	/Hastelloy..... /.....	Hastelloy membrane Description of required parameters

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 1/2NPTM, capillary length 1.5 m.

MS-100 / 0 ÷ 6 bar / S-CompK / 1/2NPTM / K = 1.5 m