

Your Partner for Pressure and Temperature Measurement

Customer-specific solutions for demanding measuring tasks

The ARMANO Messtechnik GmbH represents tradition and innovation in the production and distribution of precision pressure and temperature measuring instruments, which have an excellent reputation worldwide – for more than 120 years.

We are continually developing customer-specific solutions for a variety of applications requiring pressure and temperature measuring technology. Their use is manifold and there are always new applications.

Our products at a glance



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As precise as it gets

High-Soft Membrane

ARMANO Messtechnik GmbH





High-Soft Membrane

Cost savings with increased measurement results



1 With our High-Soft Membrane for diaphragm seals you are able to obtain, in combination with pressure gauges, pressure transmitters or other pressure measuring instruments, a pressure measurement that is nearly free of temperature-related additional errors.

Our High-Soft Membrane sets standards regarding the reduction of additional errors for medium temperatures in the range of $-40\text{ }^{\circ}\text{C}$ to $+400\text{ }^{\circ}\text{C}$ ($-40\text{ }^{\circ}\text{F}$ to $+752\text{ }^{\circ}\text{F}$). Metrologically, the High-Soft Membrane is at least 10 times better than the previous sinus-shaped membrane. Hence, we have the accuracy class range similar to that of a pressure transmitter.

Temperature-related Additional Errors in the Range $-40\text{ }^{\circ}\text{C}$ to $+400\text{ }^{\circ}\text{C}$ ($-40\text{ }^{\circ}\text{F}$ to $+752\text{ }^{\circ}\text{F}$)		
	High-Soft Membrane	Sinus Membrane
DN 50	0.038 mbar / 10 K (0.0006 psi/10 K)	0.42 mbar / 10 K (0.0061 psi/10 K)
DN 80	0.024 mbar / 10 K (0.0003 psi/10 K)	0.38 mbar / 10 K (0.0055 psi/10 K)

We can guarantee these values if pressure gauge and diaphragm seal are completed in our factory.

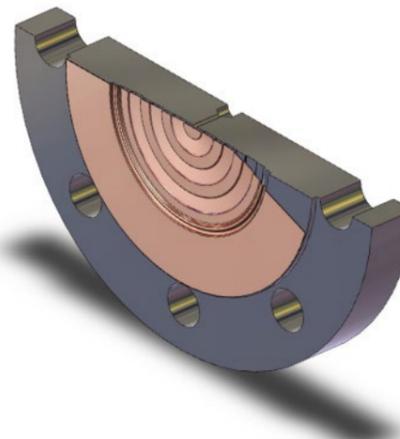
2 An essential economic advantage is that, instead of using the process connection DN 80, the smaller and less expensive process connection DN 50 can be installed in plants, without loss of measuring performance.

The additional error for the process connection DN 50 with integrated High-Soft Membrane is smaller than for the process connection DN 80 with Sinus Membrane.



3 Another advantage is the optional "membrane thickness". Regarding processes, where robustness/corrosion resistance (durability) are important factors, we offer, for example, thicker membranes.

The measuring results are comparable and to some extent even better than those obtained when using the Sinus Membrane.



4 Available are stainless steel (316L), Uranus B6, duplex, Hastelloy, tantalum, Monel, titanium, PTFE, PFA, ECTFE and others.

Conclusion

Instead of the Sinus Membrane, we therefore use our High-Soft Membrane as standard for all flange and cellular type chemical seals.

- More Advantages**
- ◆ Fast transient oscillation of the membrane
 - ◆ For static pressures $< 1\text{ bar abs.}$ ($< 14.5038\text{ psi abs.}$), sufficient long-term stability
 - ◆ Completely suitable for vacuum up to $+150\text{ }^{\circ}\text{C}$ ($+302\text{ }^{\circ}\text{F}$)
 - ◆ Minor bracing influence during the mounting of the flange
 - ◆ Higher mechanical load due to lower corrugation
 - ◆ Improved cleaning possibilities due to the shape of the membrane

