



PIEZORESISTIVE OEM CAPSULE

SERIES 6 / SERIES 6T

FOR SEALED GAUGE AND VENTED GAUGE PRESSURES

The Series 6 capsules are of all welded stainless steel construction, with integral media isolation diaphragm. No 'O'ring seals are used. The Series 6 uses a silicon TAB sensor mounted in the oil filled stainless steel capsule, providing a highly stable measuring cell with negligible hysteresis, high output signal and a life of millions of pressure cycles.

TAB (Tape Automated Bonding) is a flexible printed circuit system for interconnection between the silicon sensor and the capsule output pins, offering improved reliability and significantly lower production costs. Series 6 is a low cost sensor for OEM use, tested for function only, with no calibration data supplied. Series 6T is supplied tested, with calibration certificate: Linearity, sensitivity, zero point, temperature coefficients 0...50 °C and compensation resistor values (resistors not supplied).



Specifications

	Pressure Ranges (FS)					
Sealed Gauge (Low Pressure)	10	20	50	100	200	bar
Overpressure	15	30	75	150	300	bar
Sealed Gauge (High Pressure)	400	600				bar
Overpressure	600	800				bar
Vented Gauge	10	20				bar
Overpressure	15	30				bar
Constant Current Supply	1 mA nominal		3 mA max.			
Signal Output (FS)	150...250 mV @ 1 mA					
Bridge Resistance @ 25 °C	3,5 kΩ		± 20 %			
Offset at 25 °C	± 5 mV typ.		± 25 mV max.			
Accuracy ⁽¹⁾	± 0,5 %FS typ.		± 1,0 %FS max.			
Stability	± 0,1 %FS typ.		± 0,3 %FS max.			
Operating Temperature	-10...80 °C					
Temperature Coefficient						
- Zero	± 0,01 %FS/°C typ.		± 0,05 %FS/°C max.			
- Sensitivity	± 0,02 %/°C typ.		± 0,05 %/°C max.			
Housing and Diaphragm	Stainless steel AISI 316L (DIN 1.4404 / 1.4435)					

⁽¹⁾ Including linearity, hysteresis and repeatability. Linearity calculated as best straight line through zero.

Note: Generally, accuracy and overload is improved by factor of 2 to 4 if the sensor is used in the range of 0...50 %FS.

