



PIEZORESISTIVE OEM CAPSULE

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.

