# QUARTZ PRESSURE AND TEMPERATURE TRANSDUCER PDTK-P-M

### **APPLICATIONS**

The Quartz pressure transducer PDTK-P-M provides a precision pressure measurement with compensation of the temperature error in the operating temperature range.

The remarkable performance of this transducer is achieved through the use of a precision quartz crystal resonator, whose resonance frequency varies with the pressure-induced stress, in combination with a quartz crystal temperature sensor, which allows a thermal compensation of the pressure sensor frequency, and to achieve high accuracy over a wide temperature range.

### **FEATURES**

- Meteorological and barometric reference
- Pressure calibration equipment
- High accuracy pressure standard (0.06%FS)
- Stainless steel case (optionally with titanium)



### **OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS of the base model**

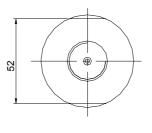
| PARAMETERS   |  | SPECIFICATIONS      | UNITS |
|--|--|---------------------|-------|
| Pressure range P   |  | 0 to 0.06(8.7);     | MPa   |
|  |  | 0.1(14.5); 40(5800) | (PSI) |
| Operating temperature range                                  |  | - 40 to + 80        | °C    |
| Pressure Accuracy  |  | 0.06; 0.1; 0.15     | %FS   |
| Temperature Accuracy   |  | 0.05; 0.1; 0.3      | %FS   |
| Temperature induced error in the operating temperature range |  | < ± 1               | %     |
| Pressure resolution  |  | 0.02                | %FS   |
| Temperature resolution                                       |  | 0.01                | %FS   |
| Frequency  | Pressure signal output "4". Frequency range    | 3003000             | 11-   |
| output   | Temperature signal output "3". Frequency range | 250600              | Hz    |
| Output amplitude (min) on load of 600 Ohm                    |  | 5                   | V     |
| Current consumption  |  | 30                  | mA    |
| Supply voltage   |  | 9 to 12             | V     |
| Size   |  | Ø 57 x 119          | mm    |
| Weight   |  | < 350               | gm    |
| Warranty period of maintenance                               |  | 1                   | year  |
| Warranty period of storage from the date of manufacture      |  | 10                  | year  |

During a warranty period the repair of transducer is carried out by the manufacturer.

## **PACKAGE DIMENSIONS**

UNITS: millimeters

# 99 99



# Increased view A Temperature signal output Pressure signal output GND GND



D-74821 Mosbach

Germany

www.AXTAL.com fon: +49 (6261) 939834 fax: +49 (6261) 939836 E-mail: <u>info@axtal.com</u>