

Piezoresistive Pressure Transmitters for automotive and industrial applications

Series 22 DT

Series 22 DT was developed and homologated specially for use in so-called "bivalent" vehicles fitted with engines for combined natural gas/gasoline operation. The unconventional design with a small mass swept by the flow results in a fast response with temperature changes, the temperature being measured by an NTC or PT sensor located directly behind the stainless steel separating diaphragm. The same diaphragm transmits pressure via a capillary to a stress-free mounted silicon measuring cell.

The signal processing for pressure and temperature is carried out by an electronic module connected to the sensors by flexible conductors. Mounted to the back of the electronic module, which is directly connected to the 6-pole plug connector are the EMC protection components. A special feature is the immunity from interference from electromagnetic fields up to 200 V/m.

Specifications

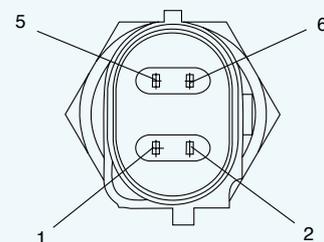
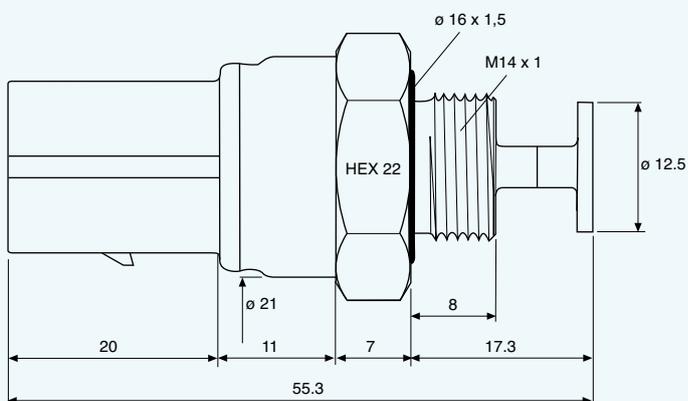
Pressure Range PA-22 DT 14 bar Sealed Gauge. Zero at atmospheric pressure (at calibration day)
Overpressure 25 bar

Supply 5 V \pm 0,25 V
Output 0,5 V...4,5V ratiometric
Temperature Range -40...140 °C

Accuracy (compensated range) \pm 4 %FS (-40...0 °C)
 \pm 2 %FS (0...90 °C)
 \pm 4 %FS (90...125 °C)

Isolation > 10 M Ω @ 45 VDC
Pressure Connection M14 x 1
Vibration 250 Hz @ 35 g 2000 Hz @ 15 g, X/Y/Z-axis
EMV-Protection EN 61000-6-1 to -6-4 / EN 61326-2-3
Material in Contact with Media Stainless Steel 316L (DIN 1.4435), Fluorosilicone (FVMQ)
Plug Tyco AMP (6 pole) C-284716
Temperature Output NTC, 5 k Ω at 25 °C
Protection IP67
Weight 36 g

Options Other pressure ranges and materials on request



1 +Vcc
2 OUT Pressure
5 GND
6 OUT Temp.