KELLER

PIEZORESISTIVE PRESSURE TRANSMITTERS   SERIES 22 DT

FOR AUTOMOTIVE AND INDUSTRIAL APPLICATIONS

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.
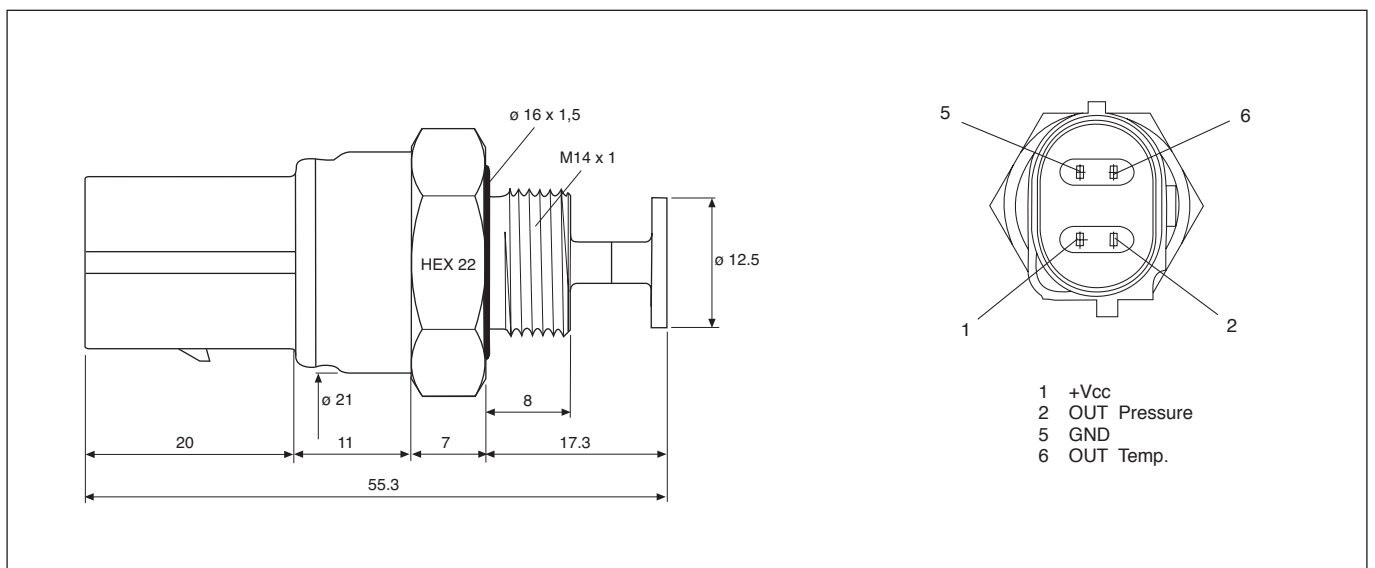
Specifications

Pressure Range PA-22 DT	14 bar Sealed Gauge. Zero at atmospheric pressure (at calibration day)
Overpressure	25 bar
Supply	5 V ± 0,25 V
Output	0,5 V…4,5V ratiometric
Temperature Range	-40…140 °C
Accuracy (compensated range)	± 4 %FS (-40…0 °C)
	± 2 %FS (0…90 °C)
	± 4 %FS (90…125 °C)
Isolation	> 10 MΩ @ 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 kΩ at 25 °C
Protection	IP67
Weight	36 g
Options	Other pressure ranges and materials on request

CE

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