

Sensaggio Technologies



Sensaggio Technologies, based in Rozzano (MI) Italy designs, manufactures and distributes ratiometric, absolute pressure sensors. The pressure sensors, based on piezoresistive technology using ceramic materials are TS, IATF and UL certified. The ratiometric pressure transducer utilizes a Piezoresistive Wheatstone bridge with a chemically etched ceramic diaphragm.

PERFORMANCE: resistant to extreme temperatures, excellent hysteresis, high accuracy, fast response time and excellent surge resistance

COMPATIBILITY: Suitable for HVAC-R refrigerant gases, also for new gas HFO 1234ze, R1234yf, R407c, and related oil.

RESISTANCE: suitable for critical applications, with aggressive fluids

COMPLIANCE: compliant with RoHS and Reach regulation — UL and TS certified

RANGE: 0-700 (psi) 0 -46 (bar)

OUTPUT: 0 to 5V, 4 to 20mA

TYPE: absolute

MEDIA: air, gases, liquids

APPLICATIONS:

- HVAC-T (transportation: bus, truck, ships, trains...)
- Oil system pressure
- Fuel system pressure
- HVAC after market
- AD blue
- HVAC-R (industrial automation)
- Process monitoring
- Automation process control
- Data instrumentation
- HVAC-R portable monitoring system



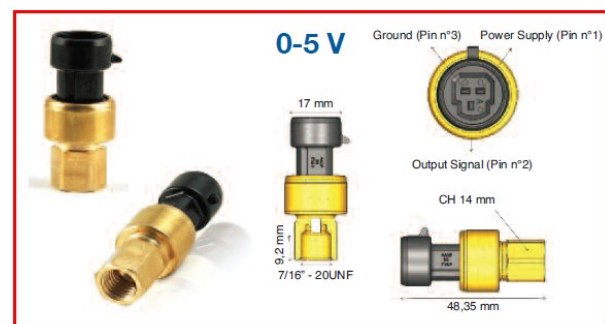
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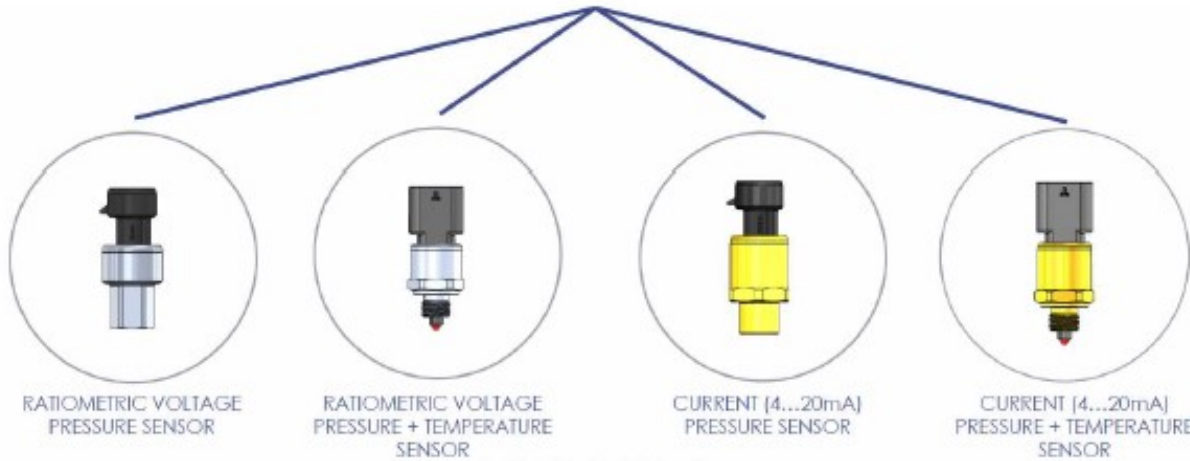
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AREAS: Automotive, Industrial, Medical, Consumer, Aviation/Defense



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GENERAL FEATURES

Pressure ranges	0 to 5.2 bar (abs), through 1 to 46 bar (abs) (other pressure range and transfer function available on request)
Over pressure	25 to 91 bar (abs) typical
Burst pressure	Brass, min 110 bar (abs)
Pressure connection	7/16" 20UNF (other connections available on request)
Pressure connection material	Brass (other materials available on request) AL SS
Tightening torque	Brass, 12 to 16 Nm
Electrical connection	Packard connector (other connections available on request)
Electrical connection material	PBT GF30

ELECTRICAL FEATURES

Power supply (Vdd)	5Vdc \pm 10% (Protected against polarity inversion and short circuit)
Supply current (Idd)	< 10 mA @ 5,5Vdc (8,5 mA typical)
Output voltage (Vout)	10% Vdd to 90% Vdd typical
Output current (Iout)	5mA typical
Output load	20 K Ω min. (Pull-up or Pull-down)
Insulation resistance	1 G Ω @ 50Vdc
Output response time	10 ms typical
Power supply overvoltage	18Vdc
Reverse voltage	-14Vdc

PERFORMANCE FEATURES

Operating temperature	-40°C to 135°C
Storage temperature	-40°C to 150°C
Accuracy	\pm 1,2% F.S. (linearity, hysteresis, repeatability and calibration) Static error band @ 25°C, 5.0Vdc
Temperature error	\pm 0,013% F.S./°C
Cycle life	10 millions F.S. cycles
IP code	IP67 (with connector female IP67 plugged)
Fluids compatibility	HVAC refrigerants, new HFO 1234ze refrigerant and associated oils (other fluids compatibilities available on request) most gases and liquids
Vacuum pressure (referred to refrigerant circuit)	0 bar (abs)
Drop (any axis)	1,5m
Vibration: IEC 60068-2-64:2008	12g (rms)
Shock: IEC 60068-2-27:2008	50g, 6ms
Weight	30 grams typical