

It is a ratiometric pressure device based on a piezoresistive ceramic technology.

Optimized design and economical advantage.

MADE IN ITALY
UL CERTIFIED



* **PERFORMANCES**

Resistant to extreme temperatures, excellent hysteresis, high accuracy, fast response time and excellent surge resistance

* **COMPATIBILITY**

Suitable for HVACR refrigerant gases (portable applications), also for new gas HFO-1234yf, 1234ze R407C - and related oils

* **RESISTANCE**

Suitable for critical application with aggressive fluids

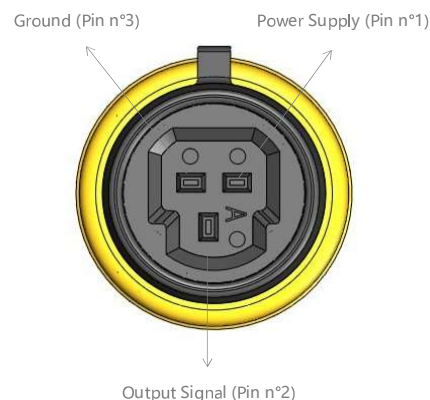
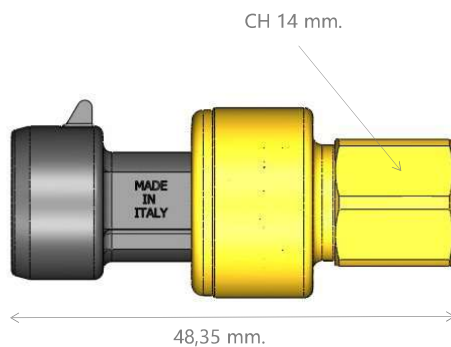
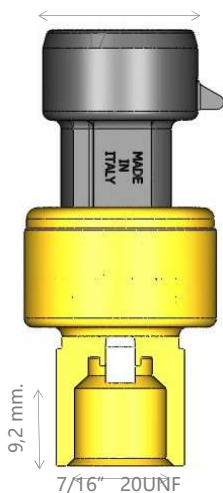
* **FLEXIBILITY**

Customizable with different materials, connectors and transferfunction

* **COMPLIANCE**

Compliant with Rohs and Reach Regulation

Other pressure range and transfer function are available on request



Pressure range [bar (abs)]	Pressure [psia]		Pressure [bar (abs)]		Version	Material	Over pressur		Burst pressur	
	10% Vdd	90% Vdd	10% Vdd	90% Vdd			psi	bar	psi	bar
0 ÷ 5,2	0	75.42	0	5,2	Female	Brass	363	25	1595	110
0 ÷ 10,3	0	149.39	0	10,3	Female	Brass	435	30	1595	110
0 ÷ 13,8	0	200.15	0	13,8	Female	Brass	551	38	1595	110
1 ÷ 18,3	14.5	265.42	1	18,3	Female	Brass	783	54	1595	110
1 ÷ 21,7	14.5	314.73	1	21,7	Female	Brass	900	62	1595	110
1 ÷ 35,5	14.5	514.88	1	35,5	Female	Brass	1015	70	2494	110
1 ÷ 46	14.5	667.17	1	46	Female	Brass	1320	91	2494	172

SENSAGGIO PRESSURE SENSOR – www.sensaggio.com

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)
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 ± 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 KΩ min. (Pull-up or Pull-down)
Insulation resistance	1 GΩ @ 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	± 1,2% F.S. (linearity, hysteresis, repeatability and calibration) Static error band @ 25°C, 5.0Vdc
Temperature error	± 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)
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

EMC FEATURES

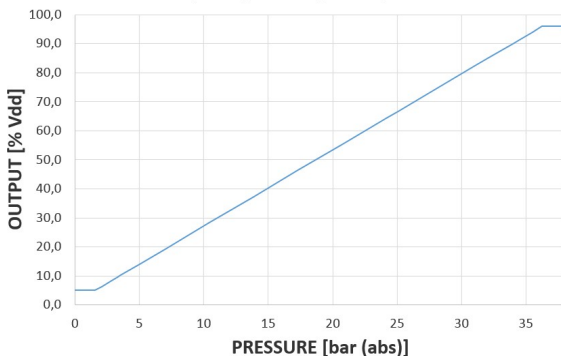
(standards CEI EN 61326-1:2013 and CEI EN 61326-2-3:2014)

Electrostatic discharge: CEI EN 61000-4-2:2011	±4KV contact ±8KV air
Radiated immunity: CEI EN 61000-4-3:2007	3V/m (80 MHz ÷ 1 GHz) 3V/m (1,4 GHz ÷ 2 GHz) 1V/m (2 GHz ÷ 2,17 GHz)
Electrical fast transient/Burst: CEI EN 61000-4-4:2013	±1KV
Surge: CEI EN 61000-4-5:2007	±1KV
Conducted immunity: CEI EN 61000-4-6:2014	3V (0,15 ÷ 80 MHz)

Note: F.S. (full scale): MAX output – Min output = 4V typical

EXAMPLE OF TRANSFER FUNCTION

$$V_{out} (\% V_{dd}) = K_2 * P [\text{bar abs}] + K_1$$



ERROR TOLERANCE

Tolerance: ±1,2% FS at 25°C Temperature error: ±0,013%/°C

