



Ratiometric Pressure Sensors



Frame
the QRcode



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Ratiometric Pressure Sensors

MADE IN ITALY INDUSTRIAL PRESSURE SENSORS

Suitable for mobile refrigeration

ASD pressure sensors, specific for air conditioning and refrigeration application, are ratiometric pressure devices based on a piezoresistive ceramic technology.

These sensors are fully design and manufactured in Italy joined the best technological performance with the optimized design and the economic advantages.



Performances

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



Resistances

Suitable for critical application with aggressive fluids.



Flexibility

Customizable with different materials, connectors and transfer function.



Compatibility

Suitable for HVACR refrigerant gases, also for new gas HFO 1234ze and related oils.



Compliance

Compliant with Rohs and Reach Regulation.



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Product code	Pressure range [bar (abs)]	Pressure		Pressure		Over pressure		Burst pressure		Material	Process connection	Electrical connection
		[psia]	[psia]	[bar (abs)]	[bar (abs)]	[psia]	[bar (abs)]	[psia]	[bar (abs)]			
		10% Vdd	90% Vdd	10% Vdd	90% Vdd					Brass	1/4" SAE FEMALE FLARE FITTING, WITH DEFLATOR 7/16-20 UNF2B THREAD	Packard Metri-Pack 3-Way (# 12065287)
230018	0 ÷ 5,2	0	75,42	0	5,2	363	25	1595	110			
230025	0 ÷ 10,3	0	149,39	0	10,3	435	30	1595	110			
230032	0 ÷ 13,8	0	200,15	0	13,8	551	38	1595	110			
230049	1 ÷ 18,3	14,5	265,42	1	18,3	783	54	1595	110			
230056	1 ÷ 21,7	14,5	314,73	1	21,7	900	62	1595	110			
230063	1 ÷ 35,5	14,5	514,88	1	35,5	1015	70	2494	172			
230070	1 ÷ 46	14,5	667,17	1	46	1320	91	2494	172			

Other pressure range and transfer functions are available on request





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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)
Tightening torque	Brass, 12 to 16 Nm
Electrical connection	Packard connector (other connections available on request)
Electrical connection material	PBT GF30

ELECTRICAL FEATURES

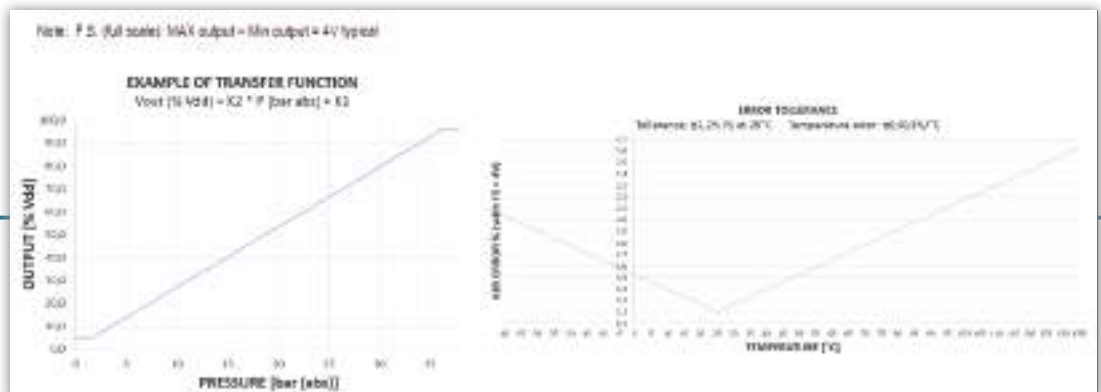
Power supply (Vdd)	5Vdc ± 10%. (Protected against polarity inversion and short circuit)
Supply current (Idd)	< 10 mA @ 5,5Vdc (8,5 mA typical)
Output voltage (Vout)	10% Vdd to 90% Vdd typical
Output current (Iout)	5mA typical
Output load	4,7 KΩ min.
Insulation resistance	1 GΩ @ 50Vdc
Output response 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	32 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	±4 kV contact ±8 kV 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	±1 kV
Surge: CEI EN 61000-4-5:2007	±1 kV
Conducted immunity: CEI EN 61000-4-6:2014	3V (0,15 ÷ 80 MHz)

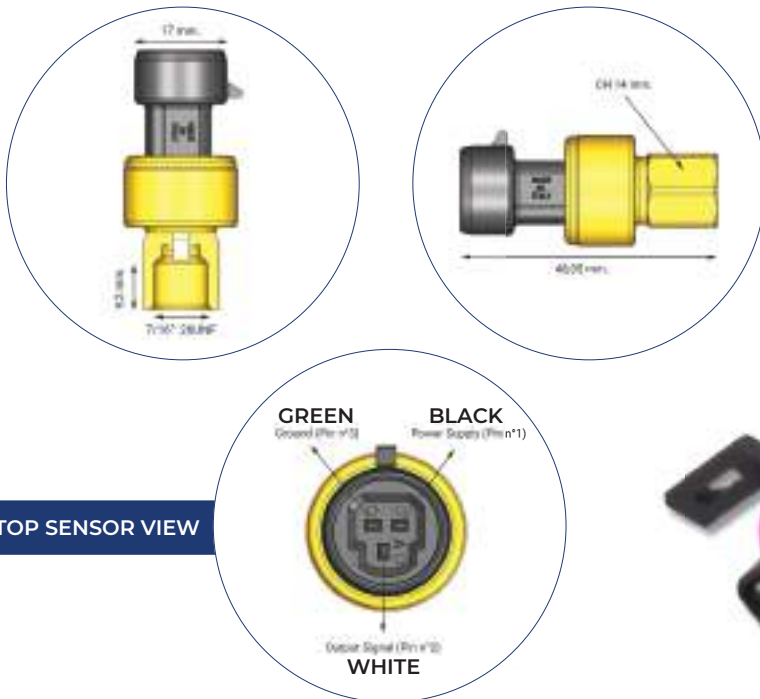




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Length (m)	Code	Wiring connection		
1,5 m	600101	BLACK wire	Pin1	Power supply
3,0 m	600125	WHITE wire	Pin2	Output signal
5,0 m	600132	GREEN wire	Pin3	Ground



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