

Model Number
176M42

CHARGE OUTPUT PRESSURE SENSOR

Revision: E
ECN #: 54516

Performance

	ENGLISH	SI	
Sensitivity(± 20 %)	17 pC/psi	247 pC/bar	
Measurement Range	20 psi	1.4 bar	
Maximum Pressure(Total)	400 psi	27.6 bar	
Resonant Frequency	> 30 kHz	> 30 kHz	
Non-Linearity	≤ 1 % FS	≤ 1 % FS	[1]

Environmental

	ENGLISH	SI	
Acceleration Sensitivity	≤ 0.01 psi/g	≤ .00069 bar/g	
Temperature Range(Continuous)	-94 to 986 °F	-70 to 530 °C	
Temperature Range(Receptacle)	-76 to 500 °F	-60 to 260 °C	
Temperature Response	See Graph	See Graph	[2]
Hazardous Area Approval	See Manual	See Manual	

Electrical

	ENGLISH	SI	
Output Polarity(Differential)	Differential	Differential	
Capacitance(with cable pin - pin)	< 193 pF	< 193 pF	
Resistance(Pin-Pin)(Room Temp)	≥ 10 ¹² Ohm	≥ 10 ¹² Ohm	
Resistance(Pin-Case)(Room Temp)	≥ 10 ¹² Ohm	≥ 10 ¹² Ohm	
Resistance(Pin-Pin)(986°F/530°C)	≥ 50 kohm	≥ 50 kohm	
Resistance(Pin-Case)(986°F/530°C)	≥ 100 kohm	≥ 100 kohm	

Physical

	ENGLISH	SI	
Sensing Element	UHT-12™	UHT-12™	
Sensing Geometry	Compression	Compression	
Housing Material	Nickel Alloy	Nickel Alloy	
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	7/16-27 2-Pin	7/16-27 2-Pin	
Cable Type	Overbraided Hardline	Overbraided Hardline	
Weight(with cable)	13.3 oz	376 gm	

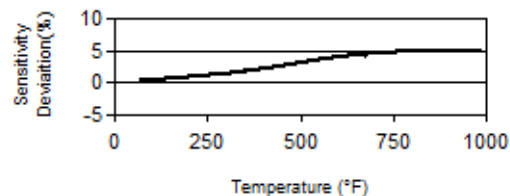
OPTIONAL VERSIONS

Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

NOTES:

- [1]Zero-based, least-squares, straight line method.
- [2]Typical.
- [3]See PCB Declaration of Conformance PS058 for details.

Typical Sensitivity Deviation vs Temperature



[3]

All specifications are at room temperature unless otherwise specified.
In the interest of constant product improvement, we reserve the right to change specifications without notice.
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Entered: ND	Engineer: RPF	Sales: DPC	Approved: RPF	Spec Number:
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