

ASMC Series Miniature Pressure & Temperature Transducer



bf1systems

The Competitive Advantage

The ASMC Series of High Performance Pressure and Temperature Transducers have been designed for high temperature installations in motorsport and automotive applications; ideal for high precision data acquisition or control systems. These transducers can be installed directly onto vehicles, or as part of a test stand or dyno.

The ASMC range has been specifically designed to operate in environments where high vibration, shock and temperatures are found, providing consistent, high quality data. Continuous operation up to 150°C allows for installations in hot zones. The sensor's modular construction and programmable amplifier allows a wide range of configuration options to be offered, with fast delivery times.

Pressure ranges are available between 1 to 50 Bar in either Absolute or Sealed Gauge reference. Industry standard 3-wire electrical connections for the Pressure signal and 2-wires for the Temperature signal allow configuration with most common ECUs and data logging systems. The ASMC Series is race proven in formulae around the world, offering a high specification, reliable sensor at a competitive price.

Technical Specifications

Pressure Reference	Absolute or Sealed Gauge
Standard Pressure Ranges (Bar)	1, 2, 5, 10, 20 & 50
Proof Pressure (Over Range)	300% of Range
Burst Pressure	>200 bar
Accuracy (Pressure)	±0.08% FS Combined Linearity & Hysteresis (CNLH)
Thermal Activity (Pressure)	<±0.25% FS TEB within Compensated Range
Accuracy (Thermistor)	PT1000: <±1°C 10k Ohm NTC: <±1%
Response Time (Thermistor)	<3 seconds (63.2% Change)
Outputs	Pressure: 0.5 to 4.5V (±0.5%) Temperature: NTC, 2-Wire 10KΩ @ 25°C or 2-Wire PT1000
Supply	5V (±0.5V) Ratiometric or 8-36Vdc regulated. Typical 5mA current draw
Circuit Protection (8-36V option)	Reverse Polarity, Input protection up to 45V
Insulation Resistance	>100MΩ at 100Vdc all cable terminations to housing
Operating Temperature Range	-40 to 150°C
Compensated Temperature Range	0 to 125°C
Storage Temperature Range	-40 to 150°C
Bandwidth	0-1000Hz Standard. 5000Hz on request.
Construction	17-4 Stainless Steel. Fully welded assembly
Electrical Connection	100cm 26AWG, 55 Spec Wire + DR25 Sleeve
Process Connection (Thread Size)	M8x1, M10x1 (Male Only)
Protection Class	IP67. Dust tight & water immersion to 1m for 30mins
Weight	16g (Excluding Cable)

bf1systems adopts a continuous development program which sometimes necessitates specification changes without notice.

Features

- Built-In Temp Sensor
- Miniature Size
- 1 to 50 Bar Range
- 150°C Operaton
- Amplified Output
- High Accuracy

Applications

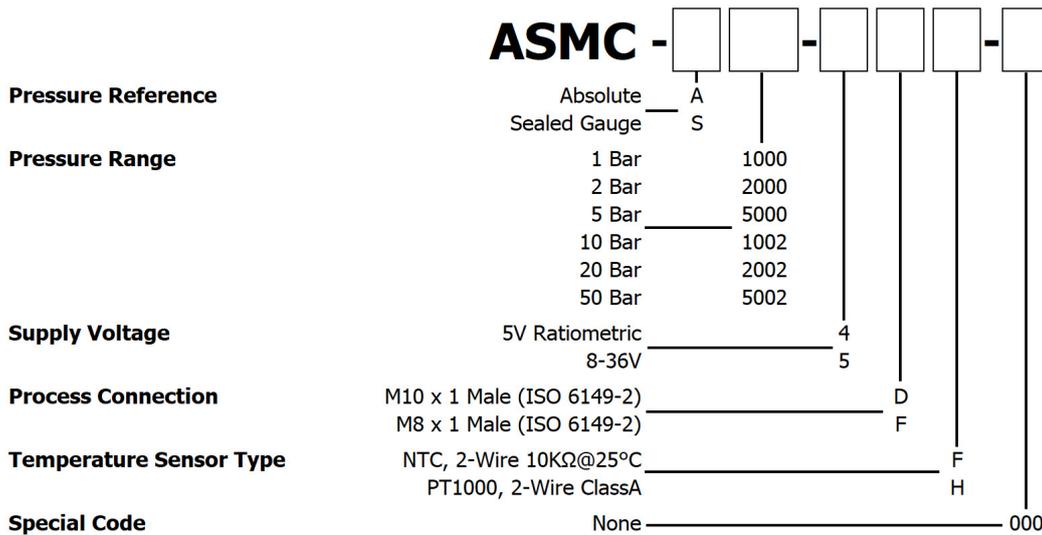
- Coolant
- Brakes
- Water
- Boost
- Fuel
- Oil

Contact Us:

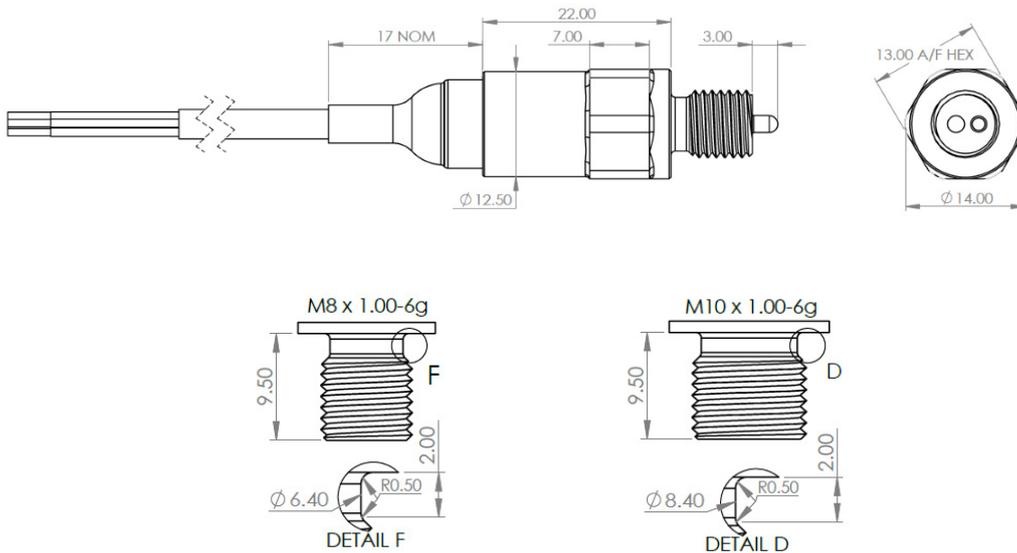
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Part Number Configuration



Mechanical Details



Thread	Installation Torque
M8x1.0	15Nm
M10x1.0	15-20Nm

Connection Details

+VE Supply	0V/GND	Output (P)	Output (T)	Output (T)
Red	Black	White	Blue	Green

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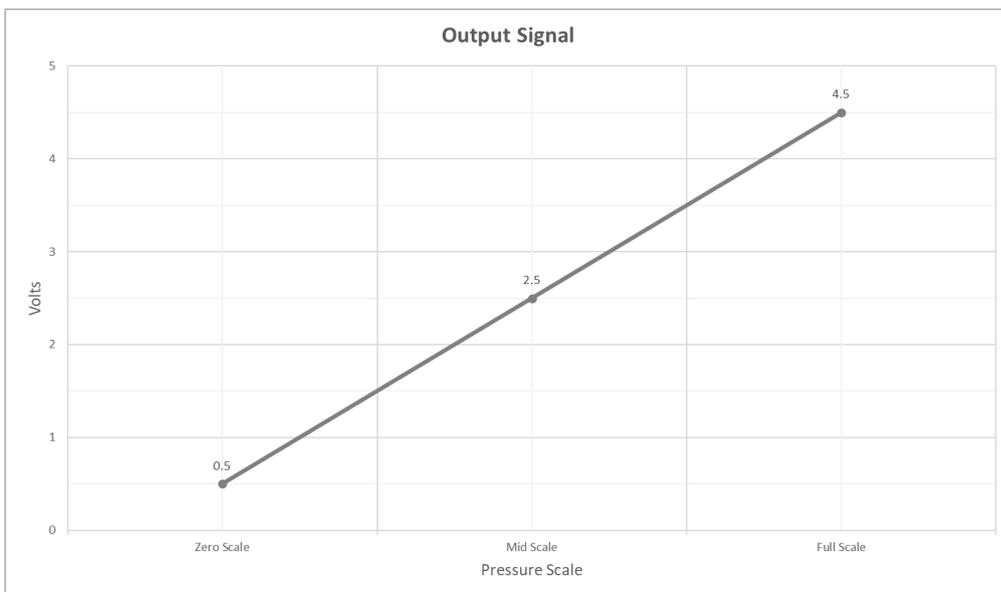
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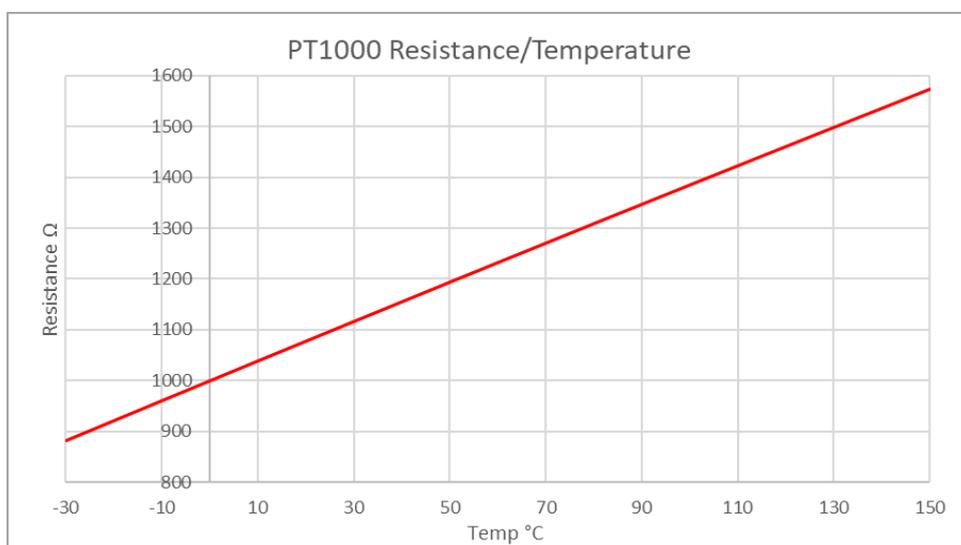
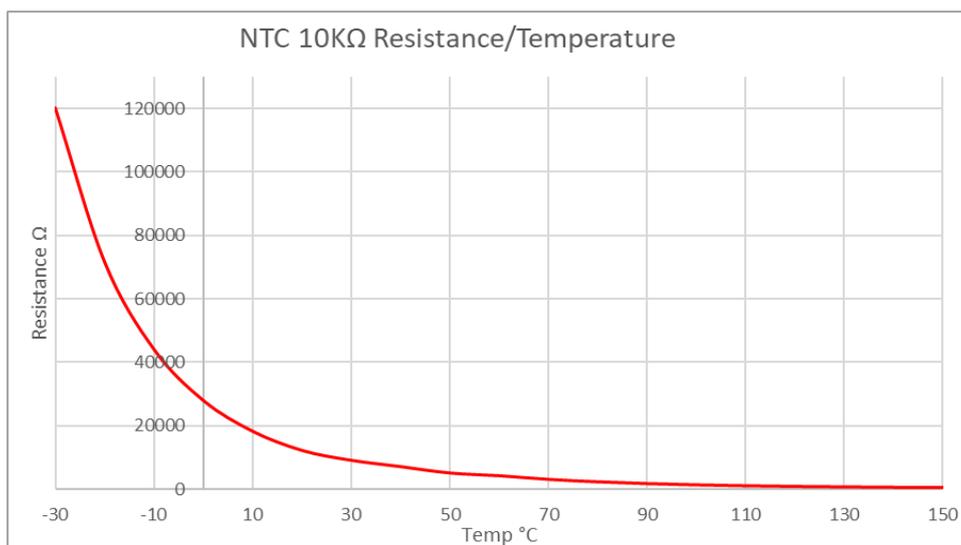
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Pressure Signal Graph



NTC 10KΩ / PT1000 Temperature Graphs



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The Competitive Advantage

Features

- Built-In Temp Sensor
- Rugged Construction
- 2 to 200 Bar Range
- Amplified Output
- $\pm 0.5\%$ Accuracy

Applications

- Coolant
- Brakes
- Water
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- Oil

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