

High Performance Pressure Sensors for Engines

Engine external applications



- High accuracy performance
- Superior repeatability and stability
- Fast millisecond response
- Insensitive to density or ionic media
- Monocrystalline hysteresis-free measuring structure
- Core products are packaged to unique applications

Engine pressure sensor applications require high performance as the sensors operate in an extremely harsh environment. Crane meets the need with a pressure sensor technology that is ideal for sensing engine externals.

Crane pressure sensors incorporate Silicon-On-Sapphire sensing technology for superior performance, reliability and accuracy. High repeatability and stability provide accuracy to within 1% or as specified of full-scale range. An optional integral temperature sensor located directly on the pressure diaphragm provides for optimum temperature compensation using remote digital compensation if desired for applications such as distributed control systems.

The Crane Advantage

With over 40 years of aircraft system experience in sensing, electronics and packaging, you can trust Crane for your high-performance pressure

requirements. Crane understands the severe demands of the aerospace environment. Reflecting a commitment to quality management, Crane is ISO 9001, AS9000 and TickIT certified.

Your Needs

Crane high performance pressure sensors feature a modular design which can be packaged to meet your individual interface and connection requirements. Crane is experienced at combining high accuracy electronics with the pressure sensor to provide flexible outputs. Let us help you design a solution for your engine externals application.



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Engine Applications

- Engine control pressure sensor
- Oil pressure sensor
- Oil or fuel filter differential pressure sensor
- Stall detect pressure sensor
- Bearing compartment pressure sensor
- Compressor pressure

General Characteristics

Range: Absolute, Differential, Gauge or Sealed
Gauge options

Operating Pressure: 15 psi to 1,000 psi full scale
or as specified

Media: Oil, Fuel, Air, Skydrol®

Safety: Proof = 1.5 X full scale psi
Burst = 2 X full scale psi, Fireproof or fire resistant

Accuracy: to 1% full scale or as specified

Response time: 5 msec

Range: Absolute

Environmental Characteristics

Standard Temperature: -55° C to +130° C

Extended Temperature: up to -75° C to +260° C

Vibration: >30 g, 10 - 3,000 Hz for std. pkg.

Shock: 100 g peak, 11 msec

Lightning/Dielectric: Up to 3,200 V
(depends on connector)

Storage: No limited life materials used

Physical characteristics

Size: 1.00 in. dia. X 3.5 in. long std. or customer specified

Weight: 150 gm for std. size or customer specified

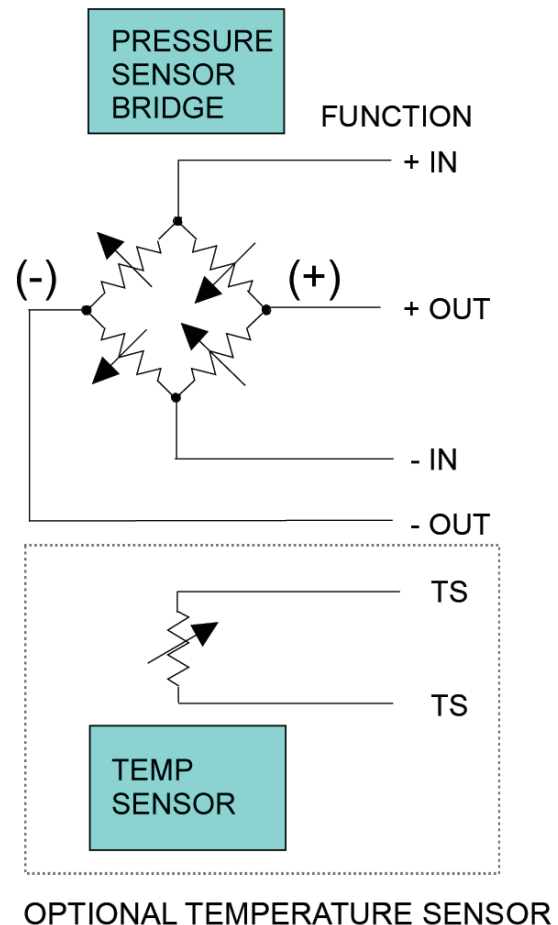
Connector: MS38999 or customer specified

Housing: Stainless steel

Ports: SAE AS 4395 (MS33656E4) or customer specified

Mounting: Flange, or customer specified

Resonance: >10 kHz



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