

0-400 Bar Pressure Sensor

0-400 Bar CAN Pressure Sensor

The PL-2100-01 Pressure Sensor is a rugged mil-spec device engineered for use in demanding defence and military vehicle applications where reliability, accuracy, and survivability are critical. Designed to withstand harsh operating conditions, the sensor combines a robust stainless steel construction, a 1/4" BSPP (G 1/4") threaded connection, with a D38999 connector and digitally transmits pressure data via a CANopen interface for seamless integration into modern military platforms and control systems.

Capable of measuring pressures from 0 to 400 bar (0 to 5,800 psi), the PL-2100-01 delivers high-accuracy performance of $\leq \pm 0.25\%$ BFSL across a wide operating temperature range of -40°C to $+135^{\circ}\text{C}$. Compliant with DEF STAN 59-411 Class A and MIL-STD-810G, the sensor is ideally suited for military hydraulic systems, armoured vehicles, power generation equipment, unmanned platforms, and other mission-critical applications operating in extreme environments.

The PL-2100-01 provides dependable pressure monitoring where environmental resilience, and long-term reliability are essential.

EMC APPROVALS

DEF STAN 59-411 Class A and MIL-STD-810G



Robust stainless steel construction

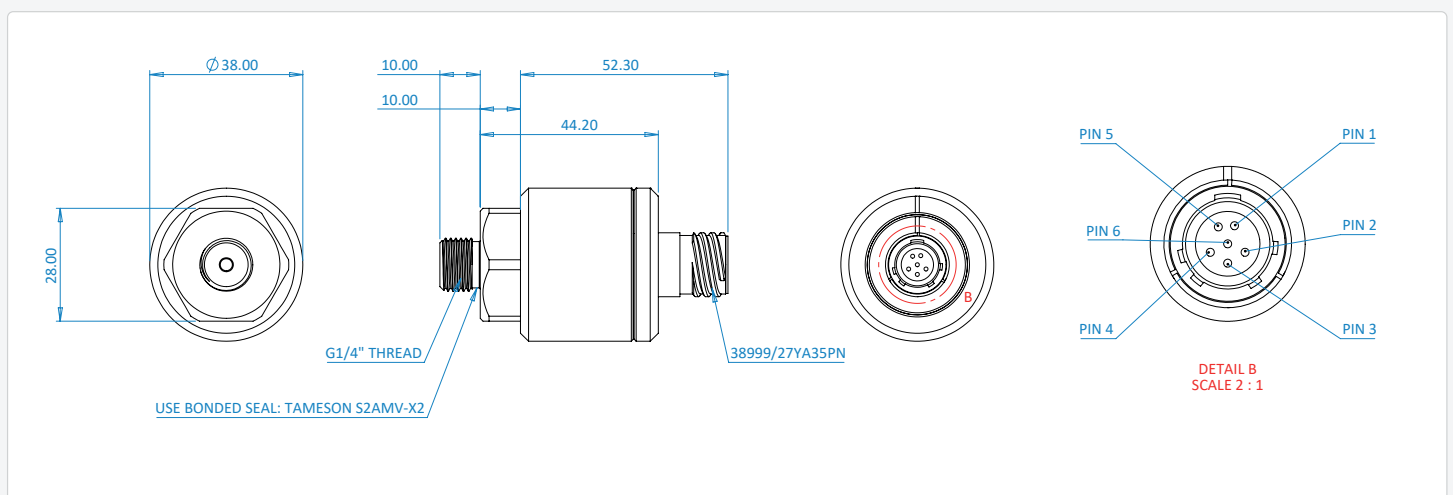


1/4" BSPP threaded design for simple fitment

Key Features

- Pressure range: 0 to 400 bar (0 to 5,800 psi)
- CAN Open output for pressure and temperature
- Compact rugged design with 1/4" BSPP (G 1/4") threaded connection
- Robust stainless steel construction
- Highly repeatable with accuracies of $\pm 0.25\%$ of full scale
- Excellent long-term stability
- Resistant to vibration and shock
- Corrosion-resistant for harsh environments
- Fast response of 1 kHz for dynamic pressure measurement

Pressure Sensor Dimensions



Pressure Measurement

Accuracy	≤ ±0.25% of full scale
Sensing Element	Piezoresistive Ceramic
Measurement Rate	1kHz

Electrical

Supply Voltage	8 - 36 VDC
Current Draw	13mA @ 28V

Output

Type	CAN Open
Output Range	0 - 400 bar

Environmental

Environmental Protection	IP67
Probe Pressure Rating	650 bar burst
Vibration	Designed to meet: 10Hz to 2000Hz sine sweep @10G (6hrs per each axis)
Shock	Designed to meet: 50G half sine wave for 11ms,10 times each axis
Operating Temperature	-40°C to +135°C

Mechanical

Construction Material	Stainless Steel 316L
Mass	183.5g
Threaded Connection	1/4" BSPP Thread (G 1/4")

Wiring Specification

Connector Options	MIL-DTL-D38999 / 27YA35PN
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Wiring Definition

Description	PIN Out
Supply (+)	1
Ground (GND)	2
CAN HI (in)	3
CAN LO (in)	4
CAN HI (out)	5
CAN LO (out)	6
Custom format options available	

Specifications may be subject to change without prior notice.