

SUCO - 0630/0631 PRESSURE SENSOR

CANopen/CAN J1939 Series

063025041B032
CANopen, 0..250Bar, G $\frac{1}{4}$, M12



- Type 0630: CANopen protocol according to CiA DS-301, Device profile according to CiA DS-404
- Type 0631: CAN J1939 protocol according to SAE J1939
- 14 Standard pressure ranges from 0..1 bar up to 0..600 bar
- M12 electrical connector

PRODUCT DESCRIPTION

The SUCO 0630 (CANopen) and 0631 (CAN J1939) are rugged digital pressure transmitters built in a stainless-steel (AISI 304) hex-22 housing, designed for harsh industrial and mobile-hydraulic environments. They cover a wide span of pressure ranges—from vacuum 0–1 bar up to high-pressure 0–600 bar (0–8,700 psi). Each unit features a fully welded 1.4542 stainless-steel measuring cell ensuring excellent media compatibility, with burst pressure ratings up to 1,050 bar (15 230 psi). Electrical compatibility includes supply voltages of 10–32 V DC and rugged M12 connectors. The CANopen 0630 adheres to CiA DS-301/404 standards while the 0631 supports SAE J1939 protocol—all via 1 Mb/s CAN 2.0 A/B interfaces. They deliver high accuracy ($\pm 0.5\%$ FS, $\pm 0.25\%$ BFSL), excellent repeatability ($\pm 0.1\%$), fast response (< 1 ms), and long-term drift capped at 0.1 % FS per year—all with a mechanical lifespan rated to 10 million pulses.

These CANbus pressure sensors are ideal for mobile machinery, off-highway vehicles, agriculture, rail, mining, and marine systems, especially where cabling simplicity and reliable networked communication are essential. The digital CAN interface supports not only pressure readings, but also real-time diagnostics, timestamps, and configurable parameters, enabling smart monitoring and predictive maintenance in multi-node control systems. Their durable stainless builds and IP67 protection make them ideal in wet, dusty or corrosive environments, while wide temperature tolerance (-40 to $+105$ °C ambient, -40 to $+100$ °C media) ensures stability across variable climates. With high overpressure ratings, weld-sealed sensors, and long service life, the 0630/0631 series are well-suited for high-reliability pressure monitoring and control in demanding mobile or industrial CANbus-enabled systems.

TECHNICAL DATA

Accuracy	$\pm 0.5\%$ FS
Burst pressure	9 bar
Connection	G1/4-E
Electrical connection	M12x1
IP class	IP67
Long term stability	$< \pm 0.1\%$ of full scale per year
Material of body	Stainless Steel 1.4301
Material of wetted parts	Stainless steel 1.4542
Mechanical life expectancy	10 Million cycles
Overpressure protection	6 Bar

Pressure range max	2.5 bar
Pressure range min	0 bar
Pressure reference	Gauge
Pressure rise	≤ 1 bar/ms
Repeatability	±0.1% FS
Response time	1 ms
Shock resistance	1000g according to IEC68-2-32
Signal type	CANopen, CAN 2.0 A
Supply voltage dc max	32 V DC
Supply voltage dc min	10 V DC
Temperature ambient from	-40 °C
Temperature ambient to	105 °C
Temperature error	1.5% FS
Temperature of media from	-40 °C
Temperature of media to	100 °C
Vibration resistance	20g according to IEC 68-2-6 and IEC 68-2-36
Weight	90 g