

SUCO - 0630/0631 PRESSURE SENSOR

CANopen/CAN J1939 Series

063060241B032
CANopen, 0..600Bar, 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	1050 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	840 Bar

Pressure range max	600 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