

SUCO 0533 ELECTRONIC PRESSURE SWITCH

053310220B002

NPN output (Low Side), NC, 0-100 Bar, 7/16 – 20 UNF,
M12 - DIN EN 61076-2-101-A



- One Switching Output
- Stainless Steel & Titanium Wetted Parts
- Silicon-On-Sapphire Technology
- Factory Set



PRODUCT DESCRIPTION

The SUCO 0533 electronic pressure switch is a high-performance, factory-configured device built with a robust stainless steel (AISI 303) and titanium, all-welded housing. It utilises advanced Silicon-on-Sapphire (SoS) sensor technology for exceptional accuracy ($\pm 0.5\%$ FS, resolution 0.1% FS) and long-term stability ($\pm 0.1\%$ FS/year), and is designed to withstand overpressure up to $4\times$ its rated range. Available ranges span from 0–10 bar to a massive 0–1,650 bar, with a single NPN (low-side) normally-closed transistor output capable of handling up to 0.5 A and featuring built-in protections for short circuit, reverse polarity, and overvoltage. It supports multiple pressure port threads ($G\frac{1}{4}$, $NPT\frac{1}{2}/NPT\frac{1}{4}$, UNF, M10, M14) and electrical connectors (DIN EN 175301-803-A, M12, AMP Superseal, Deutsch, 2 m cable), and it offers a fast response time (< 4 ms) and wide compensated temperature range for stable operation across -40°C to 125°C .

The 0533 excels in harsh mobile-hydraulic, industrial, and pneumatic environments, such as construction machinery, off-road vehicles, or process systems, where rugged build and reliable switching under dynamic pressures are essential. Its compact design and robust sensor technology make it suitable for safety interlock circuits, pressure alarms, and automated shutdown controls in PLC or relay-based systems. The device's narrow switching hysteresis and optional window function enable precise range monitoring, while the heavy-duty housing and integrated protections ensure dependable performance in conditions involving vibration, wash-down, and electrical noise, making it an ideal choice for long-term OEM applications needing precise, rugged pressure monitoring.

TECHNICAL DATA

GENERAL DATA

Adjustment range max	100 bar
Adjustment range min	0 bar
Electrical connection	M12x1
Function	Normally Closed
Output	NPN
Burst pressure	800 bar
Pressure max	400 bar

TEMPERATURE & MATERIALS DATA

Pin	Assignment
1	Chn
2	Out
3	Chn
4	Out

IP67
 $\Phi = 62.7 \text{ mm}$
 $\Phi = 12.10 \text{ mm}$
Order number: 001

Pin	Assignment
1	Chn
2	Out
3	Chn
4	Out

IP67
 $\Phi = 54 \text{ mm}$
 $\Phi = 12.10 \text{ mm}$
Order number: 002

Pin	Assignment
1	Chn
2	Out
3	Chn
4	Out

IP67
 $\Phi = 65 \text{ mm}$
 $\Phi = 12.10 \text{ mm}$
Order number: 004

Pin	Assignment
1	Chn
2	Out
3	Chn
4	Out

IP67
 $\Phi = 71 \text{ mm}$
 $\Phi = 12.10 \text{ mm}$
Order number: 003

Pin	Assignment
1	Chn
2	Out
3	Chn
4	Out

IP67
 $\Phi = 38 \text{ mm}$
 $\Phi = 12.10 \text{ mm}$
Order number: 008

Pin	Assignment
1	Chn
2	Out
3	Chn

IP67
 $\Phi = 38 \text{ mm}$
 $\Phi = 12.10 \text{ mm}$
Order number: 010

Cable connection

Pin	Assignment
1	Chn
2	Out
3	Chn
4	Out

IP67
 $\Phi = 45 \text{ mm}$
 $\Phi = 12.10 \text{ mm}$
Order number: 011

Thread code: 01

Thread code: 03

Thread code: 04

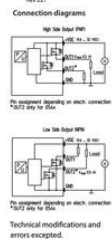
Thread code: 09

Thread code: 10

Thread code: 15

Thread code: 21

Thread code: 42



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