

SUCO 0510/0511 G1/4 ELECTRONIC PRESSURE SWITCH

Adjustable by user

0510200411002
NO, 0 - 2 Bar, G 1/4, NBR, M12x1



- Single switch point
- Small & compact
- Ceramic sensor
- Stainless steel housing

PRODUCT DESCRIPTION

The SUCO 0510 (NO) and 0511 (NC) models are compact, user-adjustable electronic pressure switches in a robust stainless-steel housing, featuring a ¼-inch G1/4 process connection. They incorporate a ceramic thick-film pressure sensor and PNP transistor output, operating on 9.6–32 VDC with built-in reverse-polarity and short-circuit protection. The adjustable switching range spans from 0–2 bar up to 0–250 bar, with default hysteresis between 2–98% of full scale, and an impressive accuracy of ± 0.5 % FS. Overpressure resilience is rated at 2 \times nominal range, and burst resistance reaches up to 500 bar. With <4 ms switching response, mechanical durability of 5 million cycles, IP65–IP67 protection (depending on connector), and EMC compliance, these switches excel in reliability and longevity.

These switches are ideal for hydraulic, pneumatic, and fluid monitoring applications where space is limited, but precision and adjustability are essential—think mobile hydraulics, industrial compressors, and OEM machinery. External set-screw enables easy field adjustment, while the broad connector options (DIN EN 175301, M12, Superseal, Deutsch) simplify integration into varied control systems. Users benefit from ceramic sensor stability, low temperature drift (~ 0.04 % FS/ $^{\circ}$ C), and repeatability (± 0.1 %), making them suitable for tasks like pressure safety cut-offs, pump control, and system diagnostics.

TECHNICAL DATA

GENERAL DATA

Adjustment range max	2 bar
Adjustment range min	0 bar
Electrical connection	M12x1
Process connection	G1/4

Function	Normally open
Output	PNP
Burst pressure	8 bar
Pressure max	4 bar

TEMPERATURE & MATERIALS DATA

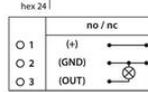
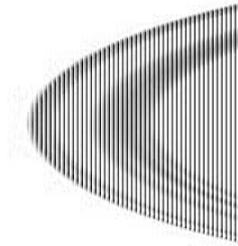
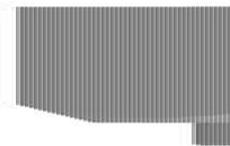
Temperature of media from	-30 °C
Temperature of media to	100 °C
Temperature ambient from	-30 °C
Temperature ambient to	100 °C
Material of body	Stainless steel 1.4305
Material of wetted parts	NBR, Stainless steel 1.4305
Material membrane	NBR

ADDITIONAL DATA

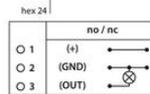
Supply voltage dc max	32 V DC
Supply voltage dc min	9.6 V DC
Pressure rise	≤ 1 bar/ms
Switching time	< 4 ms
Switching point adjustment range	3...100 % of adjustment range(full scale), set at factory
Weight	80 g

SAFETY & APPROVALS

IP class	IP67
Hysteresis	2...98% full scale, programmable at factory (maximum tolerance ±1.0% of adjustment range nominal pressure)
Shock resistance	500m / s ² ; 11 ms half sine wave; DIN EN 60068-2-27
Vibration resistance	20g; 4..2000 Hz sine wave, DIN EN 60068-2-6
EMC	EMC 2014/30/EU; EN 61000-6-2:2005; EN 61000-6-3:2007
Accuracy	±0.5 % of adjustment range (Full scale) at room temperature
Long term stability	±0.1 % of adjustment range (full scale) per year
Mechanical life expectancy	5,000,000 pulsations at rise rates to 1 bar/ms nominal pressure
Repeatability	±0.1 % of adjustment range (full scale)



<p>DIN EN 175301-803-A</p> <table border="1"> <tr><th>Pin</th><th>Assignment</th></tr> <tr><td>1</td><td>Ust</td></tr> <tr><td>2</td><td>Grnd</td></tr> <tr><td>3</td><td>Mus</td></tr> <tr><td>PE</td><td>PE</td></tr> </table> <p>IP67 x = 65 mm without cable x = 77 mm with cable Order number: 013</p>	Pin	Assignment	1	Ust	2	Grnd	3	Mus	PE	PE	<p>M 12 - DIN EN 61076-2-105 A</p> <table border="1"> <tr><th>Pin</th><th>Assignment</th></tr> <tr><td>1</td><td>Ust</td></tr> <tr><td>2</td><td>nc</td></tr> <tr><td>3</td><td>Grnd</td></tr> <tr><td>4</td><td>Mus</td></tr> </table> <p>IP67 x = 54 mm Order number: 002</p>	Pin	Assignment	1	Ust	2	nc	3	Grnd	4	Mus	<p>ISO 15170-A1-4.1</p> <table border="1"> <tr><th>Pin</th><th>Assignment</th></tr> <tr><td>1</td><td>Ust</td></tr> <tr><td>2</td><td>nc</td></tr> <tr><td>3</td><td>Grnd</td></tr> <tr><td>4</td><td>Mus</td></tr> </table> <p>IP67, shielded x = 56 mm Order number: 004</p>	Pin	Assignment	1	Ust	2	nc	3	Grnd	4	Mus
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