

SUCO 0510/0511 NPT1/4 ELECTRONIC PRESSURE SWITCH

Adjustable by user

0510102091013

NO, 0 - 100 Bar, NPT 1/4, NBR, DIN EN 175301-803-A



- Single Switch Point
- Small & Compact
- Ceramic Sensor
- Stainless Steel Housing

PRODUCT DESCRIPTION

The SUCO 0510/0511 series combines a compact stainless-steel (AISI 303) hex-24 housing with a high-performance ceramic thick-film sensor, offering exceptionally reliable, switchable pressure monitoring. Users can adjust the switching point and hysteresis on-site, covering ranges from just 0–2 bar up to 0–600 bar, with dual output configurations (NO or NC, PNP 500 mA capability), and visual LED status indication for easy diagnostics. They're designed to withstand overpressure of up to 2× rated pressure and meet IP67 protection when paired with sealed connectors. Installation versatility is further enhanced by an array of electrical (AMP Superseal, Deutsch, DIN, M12, cable) and process (1/4-inch NPT, BSP, UNF, metric) connection options.

This series is ideal for OEM and industrial systems that require compact, field-adjustable pressure monitoring. It excels in hydraulic and pneumatic applications—such as construction equipment, material handling, and mobile machinery—where ruggedness and precision under harsh conditions are essential. The ceramic sensor resists corrosion and is unaffected by contact wear, making it suitable for systems with vibration, fluid contamination, or wash-down environments. With its PNP switching logic and adjustable hysteresis, it integrates smoothly into PLCs or relay-based controls for safety interlocks, pressure alarms, or automated shutdowns. Its robust overpressure tolerance and durable housing also make it a solid choice for mobile hydraulics and fluid processing where long-term reliability is critical.

TECHNICAL DATA

GENERAL DATA

Adjustment range max	100 bar
Adjustment range min	0 bar
Electrical connection	DIN EN 175301-803-A
Process connection	1/4 NPT
Function	Normally open
Output	PNP
Burst pressure	300 bar
Pressure max	150 bar

TEMPERATURE & MATERIALS DATA

Temperature of media from	-30 °C
Temperature of media to	100 °C
Temperature ambient from	-30 °C

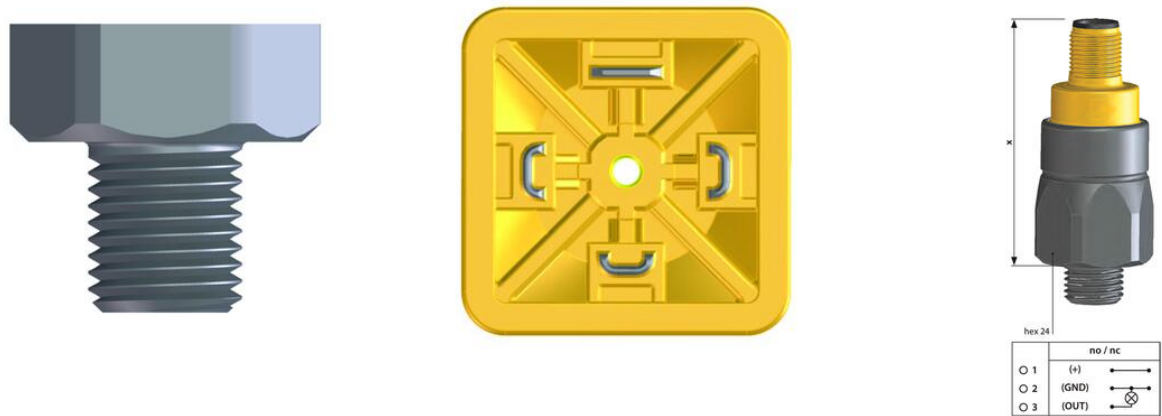
Temperature ambient to	100 °C
Material of body	Stainless steel 1.4305
Material of wetted parts	NBR, Stainless steel 1.4305
Material membrane	NBR

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	110 g

SAFETY & APPROVALS

IP class	IP65
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)



Pin	Assignment
1	U _{ref}
2	Gnd
3	M _{bus}
PE	PE

IP67

■ = 65 mm without cable exit
■ = 77 mm with cable exit

Order number: 001

Pin	Assignment
1	U _{ref}
2	PE
3	Gnd
4	M _{bus}

IP67

■ = 54 mm

Order number: 002

Pin	Assignment
1	U _{ref}
2	PE
3	Gnd
4	M _{bus}

IP67, PHEM

■ = 56 mm

Order number: 004

Pin	Assignment
1	M _{bus}
2	Gnd
3	U _{ref}

IP67

■ = 65 mm

Order number: 003

Pin	Assignment
A	U _{ref}
B	Gnd
C	M _{bus}

IP67, PHEM

■ = 65 mm

Order number: 018

Thread code: 41

Thread code: 09



no / nc	
○ 1	(+)
○ 2	(GND)
○ 3	(OUT)

Pin	Assignment
1	U _{ref}
2	Gnd
3	M _{bus}
PE	PE

IP67

■ = 65 mm without cable exit
■ = 77 mm with cable exit

Order number: 013

Pin	Assignment
1	U _{ref}
2	PE
3	Gnd
4	M _{bus}

IP67

■ = 54 mm

Order number: 002

Pin	Assignment
1	U _{ref}
2	PE
3	Gnd
4	M _{bus}

IP67, PHEM

■ = 56 mm

Order number: 004

Pin	Assignment
1	M _{bus}
2	Gnd
3	U _{ref}

IP67

■ = 65 mm

Order number: 003

Pin	Assignment
A	U _{ref}
B	Gnd
C	M _{bus}

IP67, PHEM

■ = 65 mm

Order number: 018

Thread code: 41

Thread code: 09