

SUCO 0510/0511 NPT1/4 ELECTRONIC PRESSURE SWITCH

Adjustable by user

0511400091004
NC, 0 - 4 Bar, NPT 1/4, NBR, 15170-A1-4.1

- 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	4 bar
Adjustment range min	0 bar
Process connection	1/4 NPT
Function	Normally Closed
Output	PNP
Burst pressure	20 bar
Pressure max	10 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

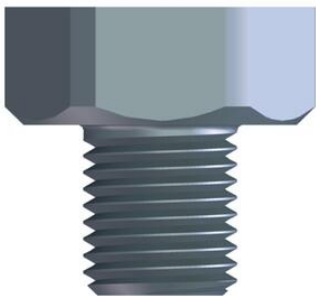
Material of body	Stainless steel 1.4305
Material of wetted parts	NBR, Stainless steel 1.4305
Material membrane	NBR

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

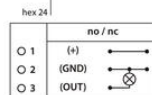
SAFETY & APPROVALS

IP class	IP67, IP6K9K
Hysteresis	2...98% full scale, programmable at factory (maximum tolerance ±1.0% of adjustment range nominal pressure)
Shock resistance	500m / s²; 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)



Technical drawings of two types of bolts:

- Left Bolt (Hex Bolt):**
 - Dimensions: h (head height), D (head diameter), L (total length).
 - Labels: "locking ring", "S 10.9 DIN 913", "DIN 913-2", "DIN 913-1".
 - Thread code: **41**
- Right Bolt (Hex Cap Screw):**
 - Dimensions: h (head height), L (total length).
 - Labels: "S 10.9", "DIN 913-1".
 - Thread code: **99**



Technical drawings of two types of screws:

- Left screw (Hex head):** Dimensions include a total length of 14, a head height of 10, and a thread length of 10. The thread is specified as 1/4 UNF-2B. The drawing is labeled with "DR 160 159-2", "DR 160-1", and "Size 1". The thread code is 41.
- Right screw (Torx head):** Dimensions include a total length of 18 and a thread length of 18. The drawing is labeled with "MPT 1.6". The thread code is 09.