

SUCO 0546 ELECTRONIC PRESSURE SWITCH

054610204B004

NPN output (Low Side), NO / NC, 0-100 Bar, NPT 1/8, Bayonet



- High over pressure and burst pressure
- Multiple pressure options available
- Stainless Steel design
- functions in a wide range of materials



PRODUCT DESCRIPTION

The SUCO 0546 is a compact, high-performance electronic pressure switch featuring dual NPN (low-side) outputs configured for both normally open (NO) and normally closed (NC) switching. Built with Silicon-on-Sapphire (SoS) sensor technology and housed in stainless steel with titanium wetted parts, it delivers excellent accuracy, durability, and compatibility with hydraulics, pneumatics, and even certain aggressive media. The switch offers a factory-set pressure range spanning from 0–10 bar up to 0–600 bar, with high overpressure protection up to 4× nominal and resistance to rapid pressure transients, handling ramp rates up to 5 000 bar/s. It supports up to 500 mA switching current, has multiple pressure port options (G $\frac{1}{4}$, NPT, UNF, M10, M14), and flexible electrical connections including M12, Deutsch, ISO bayonet, or cable lead, all with IP67 sealing.

Purpose-built for mobile hydraulics, industrial automation, and pneumatic systems, the SUCO 0546 excels in safety- and control-critical roles. Its dual output channels allow simultaneous use for primary system shutdown and secondary alarm activation. The stainless/titanium construction, high overpressure tolerance, and fast response time make it ideal for applications such as excavators, injection-moulding machines, compressor control, and hydraulic power units. The adjustable NO/NC outputs provide configuration flexibility, enabling users to integrate the switch into various logic systems. Robust sealing and rugged components ensure reliable performance in harsh environments, helping prevent system over-pressure, aiding preventive maintenance, and enhancing operator safety and process efficiency.

TECHNICAL DATA

GENERAL DATA

Adjustment range max	100 bar
Adjustment range min	0 bar
Process connection	1/8 NPT
Function	1 x N/O & 1 x N/C
Output	2 x NPN
Burst pressure	800 bar
Pressure max	400 bar

TEMPERATURE & MATERIALS DATA

Temperature of media from	-40 °C
Temperature of media to	125 °C
Temperature ambient from	-40 °C
Temperature ambient to	100 °C
Material of body	Stainless steel 1.4305
Material of wetted parts	Stainless steel 1.4305, Titanium

ADDITIONAL DATA

Supply voltage dc max	32 V DC
Supply voltage dc min	9.6 V DC
Pressure rise	≤ 5,000 bar/s
Switching time	< 2 ms
Switching point adjustment range	2 ... 100 % of the nominal pressure range (Full Scale, FS), programmable at factory
Weight	80 g

SAFETY & APPROVALS

IP class	IP67, IP6K9K
Hysteresis	0.2...99.8 % of the nominal pressure range (Full Scale), programmable at factory
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 the nominal pressure range (FS) at room temperature
Long term stability	±0.1 % of adjustment range (full scale) per year
Mechanical life expectancy	10,000,000 switching cycles at rise rates to 5,000 bar/s nominal pressure
Repeatability	±0.1 % full scale



