

SUCO 0545 ELECTRONIC PRESSURE SWITCH

054510221B002
NPN output (Low Side), NC/ NC, 0-100 Bar, 9/16 – 18
UNF, M12 - DIN



- Ideal choice for mobile hydraulic applications
- Functions in a wide range of temperatures
- All welded design
- High reliability, accuracy and process monitoring



PRODUCT DESCRIPTION

The SUCO 0545 electronic pressure switch is a high-performance, factory-set device featuring dual NPN (low-side) transistor outputs configured as normally closed, each capable of switching loads up to 500 mA. Built with a compact hex-22 stainless steel housing and equipped with a Silicon-on-Sapphire (SoS) sensor, it delivers excellent precision and reliability. The device provides high overpressure protection and rapid response capabilities, supporting pressure ranges from low bar up to several hundred bar, depending on variant. Field-configured pressure setpoints, adjustable hysteresis, diverse process ports (e.g., G $\frac{1}{4}$, NPT, M10, M14), and multiple electrical connector options (like M12, Deutsch, AMP Superseal, bayonet, or cable) ensure flexible installation to match various industrial requirements.

The 0545 series excels in applications where dependable and redundant pressure switching is required. Dual outputs enable fail-safe interlocks, redundant safety circuits, or staged alarm systems in hydraulic and pneumatic controls. Its durable, welded stainless-steel housing and SoS sensor provide high resistance to vibration, shock, and wash-down environments, ideal for mobile machinery, agricultural equipment, off-road vehicles, and industrial fluid power systems. Industries such as automation, material handling, and OEM machinery benefit from the device's fast response and high-current outputs for direct activation of relays or PLC inputs. The adjustable hysteresis and factory-configured settings offer precise thresholds for overpressure protection, machine shutdown, or system alerts, enhancing both safety and operational efficiency.

TECHNICAL DATA

GENERAL DATA

Adjustment range max	100 bar
Adjustment range min	0 bar
Electrical connection	M12x1
Process connection	9/16-18UNF
Function	2 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
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



