

## SUCO 0545 ELECTRONIC PRESSURE SWITCH

054525242B002

NPN output (Low Side), NC/ NC, 0-250 Bar, M14x1.5 –  
DIN EN ISO 9974-2, 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  | 250 bar  |
| Adjustment range min  | 0 bar    |
| Electrical connection | M12x1    |
| Process connection    | M14x1.5  |
| Function              | 2 x N/C  |
| Output                | 2 x NPN  |
| Burst pressure        | 2000 bar |
| Pressure max          | 1000 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 <sup>2</sup> ; 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                                                                |



