

## SUCO 0546 ELECTRONIC PRESSURE SWITCH

054660241B002

NPN output (Low Side), NO / NC, 0-600 Bar, G 1/4 –  
DIN EN ISO 1179-2, M12 - DIN



- 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  | 600 bar           |
| Adjustment range min  | 0 bar             |
| Electrical connection | M12x1             |
| Process connection    | G1/4              |
| Function              | 1 x N/O & 1 x N/C |
| Output                | 2 x NPN           |
| Burst pressure        | 2000 bar          |
| Pressure max          | 1650 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                                                                |



