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# SUCO 0544 ELECTRONIC PRESSURE SWITCH

054410242B004
NPN output (Low Side), NO / NO, 0-100 Bar, M14x1.5 – DIN EN ISO 9974-2, Bayonet

- Multiple Pressure options available
- High overpressure protection
- Adjustable pressure

### PRODUCT DESCRIPTION

The SUCO 0544 is a compact, high-performance electronic pressure switch employing Silicon-on-Sapphire (SoS) sensor technology, housed in rugged stainless steel (AISI 303) body and wetted parts for enhanced durability and media compatibility. It features dual NPN (low-side) outputs wired as normally open (NO/NO), each capable of switching currents up to 500 mA, ideal for reliable signal integration. The factory-configured models cover a wide range of setpoints with high overpressure protection of up to 4× nominal pressure. Sensor stability under high ramp rates and protection against electrical faults (e.g., reverse polarity, short circuit) ensure consistent operation in demanding hydraulic and pneumatic systems. Multiple connector and port options (G¼, NPT, M10, UNF, and electrical interfaces such as M12, Deutsch, cable lead, or bayonet) offer installation flexibility.
Engineered for industrial automation and mobile hydraulics, the SUCO 0544 excels in tasks demanding high precision and reliable switching. Typical applications include pressure control in hydraulic power units, mobile machinery, compressors, and pneumatic systems. The dual NPN outputs can be wired for alarm or control logic, such as sending one signal to a PLC and another to an indicator or safety circuit, synchronising operation and fault detection. Thanks to its stainless-steel housing, high overpressure resilience, and SoS sensor accuracy, this switch delivers stable performance in harsh conditions, vibration, fluid contamination, and temperature extremes, while safeguarding critical systems and enhancing machinery uptime and operator safety.

# TECHNICAL DATA

## GENERAL DATA

| | |
|---|---|
| **Adjustment range max** | 100 bar |
| **Adjustment range min** | 0 bar |
| **Process connection** | M14x1.5 |
| **Function** | 2 x N/O |
| **Output** | 2 x NPN |
| **Burst pressure** | 800 bar |
| **Pressure max** | 400 bar |

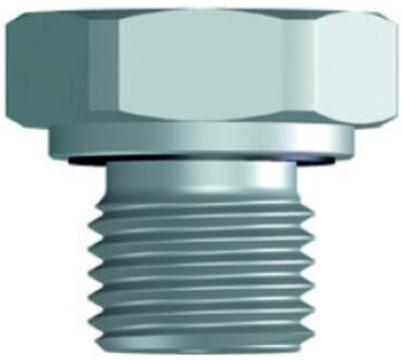
## TEMPERATURE & MATERIALS DATA

| | |
|---|---|
| **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 / 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 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 |