

## SUCO 0532 ELECTRONIC PRESSURE SWITCH

053225220B008  
NPN output (Low Side), NO, 0-250 Bar, 7/16 – 20 UNF,  
Deutsch DT04-4P



- One Switching Output
- Stainless Steel & Titanium Wetted Parts
- Silicon-On-Sapphire Technology
- Factory Set



### PRODUCT DESCRIPTION

The SUCO 0532 electronic pressure switch is a high-performance, factory-set device featuring a compact hex-22 stainless steel housing with titanium-wetted parts and welded design, eliminating elastomer seals. It utilises advanced Silicon-on-Sapphire (SoS) sensor technology, ensuring exceptional accuracy ( $\pm 0.5\%$  FS) and long-term stability ( $\pm 0.1\%$  FS/year), and delivers reliable overpressure protection up to  $4\times$  the rated range. Available with a single NPN (low-side) normally-open transistor output capable of handling up to 0.5 A, it supports pressure ranges from 0–10 bar up to 0–600 bar. The 0532 offers a wide choice of process ports and electrical connections, and includes factory-set switching point and hysteresis, along with a fast response time of under 4 ms.

The 0532 is ideal for high-integrity industrial and mobile hydraulic applications, such as in construction equipment, off-road vehicles, and pneumatic systems, where compactness, precision, and reliability are crucial. Its robust SoS sensor and welded housing offer high resilience to vibration, transient pressures, and wash-down conditions, making it suitable for severe environmental exposure. The NPN output with normally open configuration and field-programmed hysteresis allows seamless integration into PLC and relay-controlled systems for safety interlocks, pressure monitoring, and automated shutdown scenarios. The switch's fast response and low moving-part design reduce wear and improve lifespan, making the SUCO 0532 a dependable solution in OEM systems requiring compact, rugged, and high-precision pressure switching.

## TECHNICAL DATA

### GENERAL DATA

|                       |                 |
|-----------------------|-----------------|
| Adjustment range max  | 250 bar         |
| Adjustment range min  | 0 bar           |
| Electrical connection | Deutsch DT04-4P |
| Function              | Normally open   |
| Output                | 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, IP6K9K                                                              |
| Hysteresis                 | 2..99.8% of 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 adjustment range (Full scale) 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                                                         |



