

## SUCO 0532 ELECTRONIC PRESSURE SWITCH

053210120B007

NPN output (Low Side), NO, 0-10 Bar, 7/16 – 20 UNF,  
AMP Superseal 1.5



- 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  | 10 bar        |
| Adjustment range min  | 0 bar         |
| Electrical connection | AMP Superseal |
| Function              | Normally open |
| Output                | NPN           |
| Burst pressure        | 80 bar        |
| Pressure max          | 40 bar        |

### TEMPERATURE & MATERIALS DATA

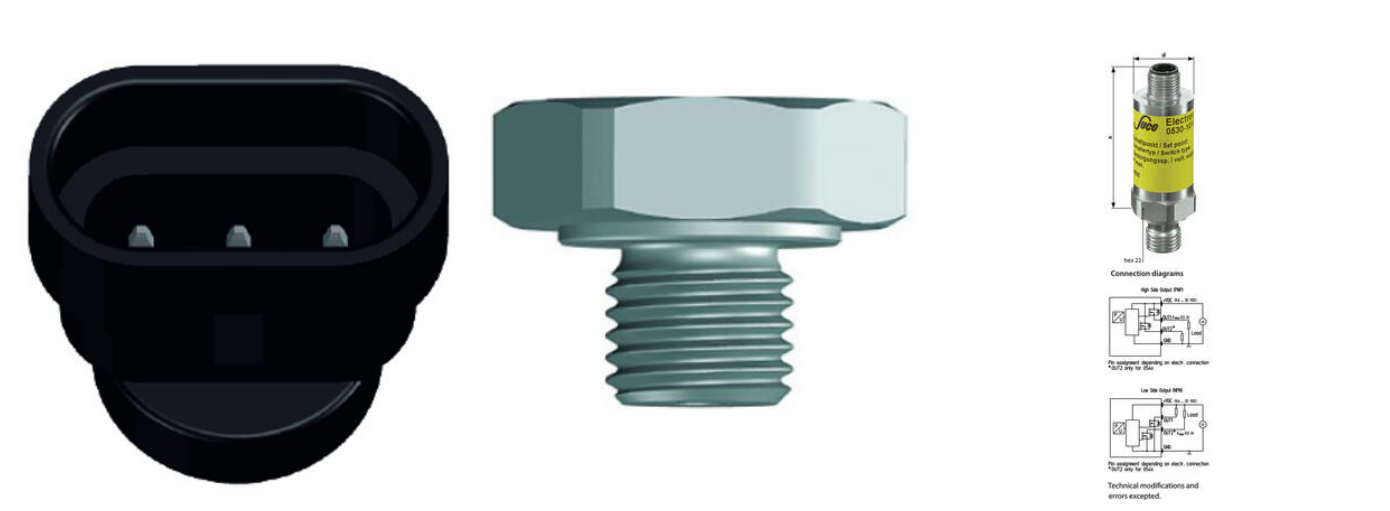
|                           |                                  |
|---------------------------|----------------------------------|
| Temperature of media from | -40 °C                           |
| Temperature of media to   | 125 °C                           |
| Temperature ambient from  | -40 °C                           |
| 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                 | 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                                                         |

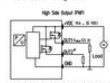


The diagram illustrates three different cable connection configurations for a 4-pin connector. Each configuration is shown with a top-down view of the connector and a corresponding table of pin assignments.

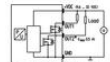
- DEUTSCH DT94-04P:** Shows a connector with pins 1, 2, 3, and 4. The wiring is: Pin 1 to Gnd, Pin 2 to Usw, Pin 3 to NC, and Pin 4 to Chd.
- DEUTSCH DT94-04F:** Shows a connector with pins 1, 2, 3, and 4. The wiring is: Pin 1 to A, Pin 2 to B, Pin 3 to Gnd, and Pin 4 to Chd.
- Cable connection:** Shows a cable with a 4-pin connector. The wiring is: Cable to Gnd, Usw, white, and black. The corresponding pin assignments are: Gnd, Usw, white, and black.



### Connection diagrams



\*Out2 only for 254x



\* (U) only for U.S.

Technical modifications and errors excepted.

| DEUTSCH DT04-4P                                                                     |            | DEUTSCH DT04-3P                                                                     |            | Cable connector                                                                     |            |
|-------------------------------------------------------------------------------------|------------|-------------------------------------------------------------------------------------|------------|-------------------------------------------------------------------------------------|------------|
|  |            |  |            |  |            |
| Pin                                                                                 | Assignment | Pin                                                                                 | Assignment | Cable                                                                               | Assignment |
| 1                                                                                   | Ch1        | A                                                                                   | Line       | red                                                                                 | Line       |
| 2                                                                                   | Line       | B                                                                                   | Ch2        | white                                                                               | Ch2        |
| 3                                                                                   | NC         | C                                                                                   | Ch3        | black                                                                               | Ch3        |
| 4                                                                                   | Ch2        |                                                                                     |            |                                                                                     |            |
| IP67 standard                                                                       |            | IP67 standard                                                                       |            | IP67                                                                                |            |
| • 38 pins                                                                           |            | • 38 pins                                                                           |            | • 64 pins                                                                           |            |
| • 67 mm                                                                             |            | • 67 mm                                                                             |            | • 22 mm (2nd) and 14 mm (3rd) cable length = 2 m                                    |            |
| Order number: 006                                                                   |            | Order number: 016                                                                   |            | Order number: 006                                                                   |            |