

SUCO 0532 ELECTRONIC PRESSURE SWITCH

053210221B010
NPN output (Low Side), NO, 0-100 Bar, 9/16 – 18 UNF,
Deutsch DT04-3P



- 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	100 bar
Adjustment range min	0 bar
Electrical connection	Deutsch DT04-3P
Process connection	9/16-18UNF
Function	Normally open
Output	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

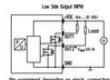
IP class	IP67, IP6K9K
Hysteresis	2..99.8% of nominal pressure range (full scale), programmable at factory
Shock resistance	500m / s²; 11 ms half sine wave; DIN EN 60068-2-27
Vibration resistance	20g; 4..2000 Hz sine wave, DIN EN 60068-2-6
EMC	EMC 2014/30/EU, EN 61000-6-2:2005, EN 61000-6-3:2007
Accuracy	±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



Connection diagrams



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*2012 only for this.

Technical modifications and errors excepted.

<p>EN 17530-803-A</p> <p>Pos. Assignment 1 Gnd 2 L 3 N 4 Gnd</p> <p>IP67</p> <p>• 16 mm • 10 mm • 10 mm • 10 mm</p> <p>Order number: 001</p> <p>* without copper socket = 0.70 mm, with copper socket = 1.70 mm</p>	<p>M 12 - EN 45326-1 011 A</p> <p>Pos. Assignment 1 Gnd 2 L 3 N 4 Gnd</p> <p>IP67</p> <p>• 12 mm • 8 mm • 10 mm • 10 mm</p> <p>Order number: 002</p>	<p>ISO 15170-A1-4-1</p> <p>Pos. Assignment 1 L 2 N 3 Gnd 4 Gnd</p> <p>IP67</p> <p>• 16 mm • 10 mm • 10 mm • 10 mm</p> <p>Order number: 004</p>	<p>AMP Supersal</p> <p>Pos. Assignment 1 L 2 N 3 Gnd 4 L+N</p> <p>IP67</p> <p>• 16 mm • 10 mm • 10 mm • 10 mm</p> <p>Order number: 007</p>
<p>DEUTSCH 2704-4F</p> <p>Pos. Assignment 1 Gnd 2 L 3 N 4 Gnd</p> <p>IP67</p> <p>• 16 mm • 10 mm • 10 mm • 10 mm</p> <p>Order number: 008</p>	<p>DEUTSCH 0704-3P</p> <p>Pos. Assignment 1 L+N 2 L 3 N 4 Gnd</p> <p>IP67</p> <p>• 12 mm • 8 mm • 10 mm • 10 mm</p> <p>Order number: 010</p>	<p>Cable connection</p> <p>Pos. Assignment 1 L+N 2 L 3 N 4 Gnd</p> <p>IP67</p> <p>• 16 mm • 10 mm (lead cable) • 10 mm (length) = 1.70 mm • 10 mm</p> <p>Order number: 011</p>	
<p>EN 50318-0123</p> <p>Thread code: 41</p>	<p>EN 50318-0124</p> <p>Thread code: 03</p>	<p>EN 50318-0125</p> <p>Thread code: 04</p>	<p>EN 50318-0126</p> <p>Thread code: 09</p>
<p>EN 50318-0127</p> <p>Thread code: 20</p>	<p>EN 50318-0128</p> <p>Thread code: 20</p>	<p>EN 50318-0129</p> <p>Thread code: 21</p>	<p>EN 50318-0130</p> <p>Thread code: 20</p>