

SUCO 0532 ELECTRONIC PRESSURE SWITCH

053225220B013

NPN output (Low Side), NO, 0-250 Bar, 7/16 – 20 UNF,
DIN EN 175301-803-A



- 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	DIN EN 175301-803-A
Function	Normally open
Output	NPN
Burst pressure	2000 bar
Pressure max	1000 bar

TEMPERATURE & MATERIALS DATA

Temperature of media from	-40 °C
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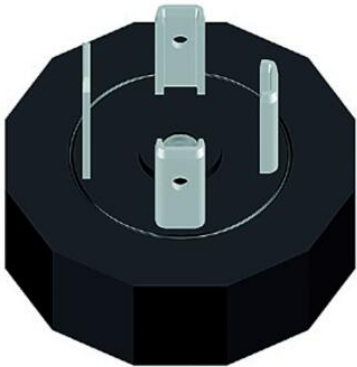
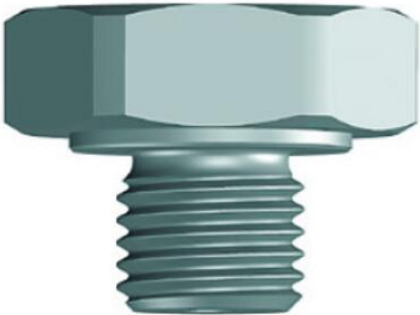
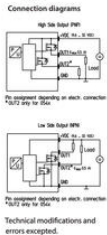
Temperature of media to	125 °C
Temperature ambient from	-40 °C
Temperature ambient to	100 °C
Material of body	Stainless steel 1.4305
Material of wetted parts	Stainless steel 1.4305, Titanium

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	110 g

SAFETY & APPROVALS

IP class	IP65
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



Pin	Assignment
1	U _{ext}
2	Out
3	Gnd
PS	PS

Pin1
 L = 62 / 76 mm^a
 Ø = 10 mm
 Order number: 020

Pin	Assignment
1	U _{ext}
2	Out
3	Gnd
PS	PS

Pin2
 L = 54 mm
 Ø = 10 mm
 Order number: 022

Pin	Assignment
1	U _{ext}
2	Out
3	Gnd
PS	PS

Pin2
 L = 65 mm
 Ø = 10 mm
 Order number: 024

Pin	Assignment
1	U _{ext}
2	Out
3	Gnd
PS	PS

Pin2
 L = 73 mm
 Ø = 10 mm
 Order number: 007

Pin	Assignment
1	Gnd
2	U _{ext}
3	PS
4	Out

Pin2
 L = 38 mm
 Order number: 008

Pin	Assignment
1	U _{ext}
2	Gnd
3	Out

Pin2
 L = 38 mm
 Order number: 010

Cable	Assignment
red	U _{ext}
white	Out
black	Gnd

Pin2
 L = 64 mm
 16-20 mm band adjust
 cable length = 2 m
 Ø = 12 mm
 Order number: 011

Thread code: 01

Thread code: 03

Thread code: 04

Thread code: 09

Thread code: 10

Thread code: 20

Thread code: 21

Thread code: 42

hex 22
 Connection diagrams
 up to 100 V AC
 16-20 mm band adjust
 cable length = 2 m
 Ø = 12 mm
 Order number: 011

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 Connection diagrams
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