OEM Automatic Ltd
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SUCO 0500/0501 ELECTRONIC PRESSURE SWITCH

Factory set

0501252411002
NC, 0 - 250 Bar, G 1/4, NBR, M12x1



- Single switch point
- Small & compact
- Ceramic sensor
- Stainless steel housing

PRODUCT DESCRIPTION

The SUCO 0500 and 0501 are compact, high-performance electronic pressure switches built around a ceramic thick-film sensor in a robust stainless steel (AISI 303) housing with a Hex-24 form factor. Factory-programmed with user-selectable switching points and hysteresis (2%–98%), these units feature a PNP high-side transistor output, with supply voltage ranging from 9.6–32 V DC and a maximum output current of 0.5 A (≤ 0.2 A above 50 °C). Pressure ranges span 0–2 to 0–250 bar, with overpressure resilience up to twice the nominal pressure and burst ratings up to 4×, depending on the model. They deliver rapid response, excellent accuracy, high repeatability, and long-term stability, while maintaining IP67 protection and resistance to vibration/shock in challenging environments. Advanced options include a USB PPD05 programming device for custom tuning of set points, hysteresis, delay, and window functions, and various connector/thread combinations (M12, DIN-43650, DT04, Superseal, cable).
The SUCO 0500/0501 series excels in precise pressure monitoring and safety control across hydraulics, mobile machinery, industrial automation, and process systems. Their high overpressure tolerance and rugged stainless-steel build ensure reliability in high-risk environments, while rapid response makes them ideal for pump protection, pressure interlock, and system shutdown scenarios. Ceramic sensors are chemically resistant, enabling use with hydraulic fluids, gases, and corrosive media. Programming flexibility allows for field customisation without mechanical intervention, a key advantage for OEMs and service teams requiring accurate, repeatable switching behaviour and reduced downtime.

TECHNICAL DATA

GENERAL DATA

Adjustment range max	250 bar
Adjustment range min	0 bar
Electrical connection	M12x1
Process connection	1/4 BSP
Function	Normally Closed
Output	PNP
Burst pressure	500 bar
Pressure max	375 bar

TEMPERATURE & MATERIALS DATA

Temperature of media from	-30 °C
Temperature of media to	100 °C
Temperature ambient from	-30 °C

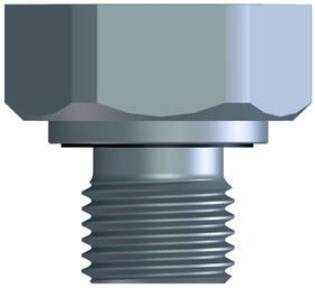
Temperature ambient to	100 °C
Material of body	Stainless steel 1.4305
Material of wetted parts	NBR, Stainless steel 1.4305
Material membrane	NBR

ADDITIONAL DATA

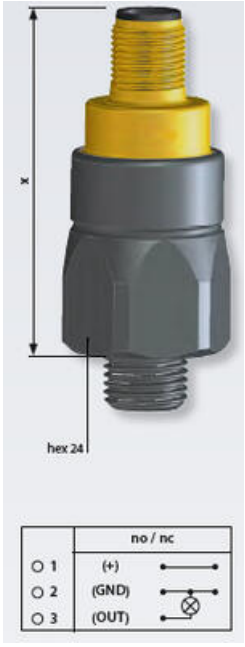
Supply voltage dc max	32 V DC
Supply voltage dc min	9.6 V DC
Pressure rise	≤ 1 bar/ms
Switching time	< 4 ms
Switching point adjustment range	3...100 % of adjustment range(full scale) nominal pressure, set at factory
Weight	80 g

SAFETY & APPROVALS

IP class	IP67
Hysteresis	2...98% full scale, programmable at factory (maximum tolerance ±1.0% of adjustment range nominal pressure)
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	5,000,000 pulsations at rise rates to 1,000 bar/s nominal pressure
Repeatability	±0.1 % of adjustment range (full scale) nominal pressure







DIN EN 175301-803-A



Pin	Assignment
1	Ub+
2	Gnd
3	U_{out}
PE	PE

IP65

x = 60 mm without coupler outlet
x = 77 mm with coupler outlet

Order number: 013

M 12 – DIN EN 61076-2-101 A



Pin	Assignment
1	Ub+
2	nc
3	Gnd
4	U_{out}

IP67

x = 54 mm

Order number: 002

ISO 15170-A1-4.1



Pin	Assignment
1	Ub+
2	nc
3	Gnd
4	U_{out}

IP67, IP69K

x = 56 mm

Order number: 004

AMP Superseal 1.5®



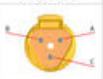
Pin	Assignment
1	U_{out}
2	Gnd
3	Ub+

IP67

x = 65 mm

Order number: 007

Deutsch DT04-3P



Pin	Assignment
A	Ub+
B	Gnd
C	U_{out}

IP67, IP69K

x = 65 mm

Order number: 010

Cabel connection



Pin	Assignment
red	Ub+
white	U_{out}
black	Gnd

IP67

x = 47 mm
(+ 25 mm bend relief)
Cable length – 2 m

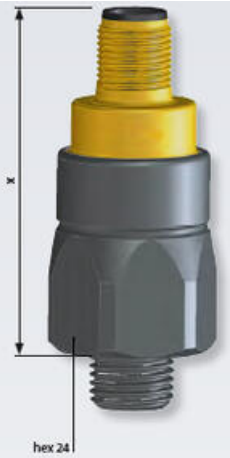
Order number: 031



Thread code: 01



Thread code: 09



	no / nc
○ 1	(+)
○ 2	(GND)
○ 3	(OUT)

DIN EN 175301-803-A



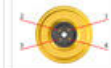
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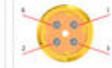
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IP67

x = 54 mm

Order number: 002

ISO 15170-A1-4.1



Pin	Assignment
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AMP Superseal 1.5®



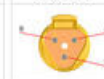
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1	U_{out}
2	Gnd
3	Ub+

IP67

x = 65 mm

Order number: 007

Deutsch DT04-3P



Pin	Assignment
A	Ub+
B	Gnd
C	U_{out}

IP67, IP69K

x = 65 mm

Order number: 010

Cabel connection



Pin	Assignment
red	Ub+
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