



SUCO 0530 ELECTRONIC PRESSURE SWITCH

053025209B010
PNP output (High Side), NO, 0-250 Bar, NPT 1/4,
Deutsch DT04-3P

- One switching output
- Stainless steel & titanium wetted parts
- Silicon-on-sapphire technology
- Factory set



PRODUCT DESCRIPTION

The SUCO 0530 is a high-performance electronic pressure switch featuring a rugged hex 22 stainless steel housing and titanium-wetted parts, designed for demanding environments. It uses a precision Silicon-on-Sapphire (SOS) sensing element for exceptional accuracy, low temperature drift, and long-term stability. This model provides a single PNP output with a “normally open” function, factory-set switching point and hysteresis, and high over-pressure protection to ensure safety under unexpected pressure spikes. It supports multiple pressure ranges up to 1,650 bar, thread options including G $\frac{1}{4}$, NPT, UNF, M10/M14, and electrical connector choices like Deutsch DT04, AMP Superseal, M12, bayonet, or pre-fitted cable, all rated to IP67/IP6K9K for water and dust resistance.

Built for rugged industrial and mobile-hydraulic use, the 0530 excels in situations requiring reliable pressure monitoring under harsh conditions. Typical applications include hydraulic systems in construction machinery, mobile equipment, pneumatic systems, and even high-pressure applications in test benches or process lines. The SOS sensor ensures rapid detection and long-term measurement consistency, while the all-welded stainless steel/titanium design resists corrosion and eliminates elastomer seals, ideal for harsh media and high change-rate pressures. With robust connector choices and factory-set parameters, it offers plug-and-play integration, minimal setup, and reliable performance, making it a trusted choice for sectors like heavy machinery, off-road vehicles, marine hydraulics, and industrial automation.

TECHNICAL DATA

GENERAL DATA

Adjustment range max	250 bar
Adjustment range min	0 bar
Electrical connection	Deutsch DT04-3P
Process connection	1/4 NPT
Function	Normally open
Output	PNP
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

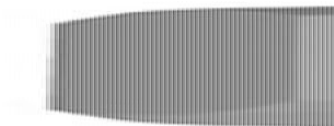
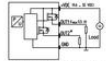




Fig. 22

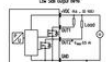
Connection diagrams

Up to 100 VDC



Pin assignment depending on each connector

100 VDC



Pin assignment depending on each connector

Technical modifications and errors excepted.

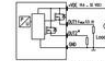
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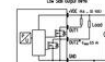
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