

SUCO 0530 ELECTRONIC PRESSURE SWITCH

053060203B004
PNP output (High Side), NO, 0-600 Bar, G 1/4 – DIN
3852-A, Bayonet ISO 15170-A1-4.1



- 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	600 bar
Adjustment range min	0 bar
Process connection	G1/4
Function	Normally open
Output	PNP
Burst pressure	2000 bar
Pressure max	1650 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

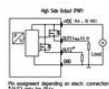
SAFETY & APPROVALS

IP class	IP67, IP6K9K
Hysteresis	2..99.8% of nominal pressure range (full scale), programmable at factory
Shock resistance	500m / s ² ; 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

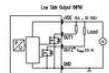




Connection diagrams



Pin assignment depending on each connector
7/8/12 only for 50A



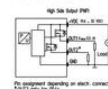
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Technical modifications and errors excepted.

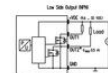
DR EN 175301-803-A <table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>5Vcc</td></tr><tr><td>2</td><td>Out</td></tr><tr><td>3</td><td>Out</td></tr><tr><td>4</td><td>Out</td></tr></table> <p>IP67</p> <p>• 60 / 70 mm² • Ø 10 mm • Ø 23 mm Order number: 001</p> <p>* without copper socket = 70 mm</p>	Pin	Assignment	1	5Vcc	2	Out	3	Out	4	Out	M 12 - DR EN 61576-3-001 A <table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>5Vcc</td></tr><tr><td>2</td><td>in</td></tr><tr><td>3</td><td>in</td></tr><tr><td>4</td><td>Out</td></tr></table> <p>IP67</p> <p>• 54 mm • Ø 10 mm • Ø 23 mm Order number: 002</p>	Pin	Assignment	1	5Vcc	2	in	3	in	4	Out	ISO 15175-A1-4-1 <table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>5Vcc</td></tr><tr><td>2</td><td>in</td></tr><tr><td>3</td><td>in</td></tr><tr><td>4</td><td>Out</td></tr></table> <p>IP67</p> <p>• 65 mm • Ø 10 mm • Ø 23 mm Order number: 004</p>	Pin	Assignment	1	5Vcc	2	in	3	in	4	Out	AMP Superseal <table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>Out</td></tr><tr><td>2</td><td>Out</td></tr><tr><td>3</td><td>5Vcc</td></tr></table> <p>IP67</p> <p>• 73 mm • Ø 26 mm Order number: 007</p>	Pin	Assignment	1	Out	2	Out	3	5Vcc
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