



SUCO 0530 ELECTRONIC PRESSURE SWITCH

053010141B002
PNP output (High Side), NO, 0-10 Bar, G 1/4 – DIN EN
ISO 1179-2, M12 - DIN EN 61076-2-101-A

- 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	10 bar
Adjustment range min	0 bar
Electrical connection	M12x1
Process connection	1/4 BSP
Function	Normally open
Output	PNP
Burst pressure	80 bar
Pressure max	40 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
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	Line
2	Out
3	Out
4	Out
5	Out

IP67
 L = 50 mm
 Ø = 30 mm
 Order number: 001

Pin	Assignment
1	Line
2	Line
3	NC
4	NC
5	Out

IP67
 L = 54 mm
 Ø = 22 mm
 Order number: 002

Pin	Assignment
1	Line
2	NC
3	NC
4	Out

IP67
 L = 54 mm
 Ø = 27 mm
 Order number: 004

Pin	Assignment
1	Out
2	Out
3	Line

IP67
 L = 71 mm
 Ø = 28 mm
 Order number: 007

Pin	Assignment
1	Line
2	Line
3	NC
4	Out

IP67
 L = 58 mm
 Ø = 22 mm
 Order number: 008

Pin	Assignment
1	Line
2	Line
3	Out

IP67
 L = 58 mm
 Ø = 22 mm
 Order number: 010

Pin	Assignment
1	Line
2	Line
3	Out
4	Out

IP67
 L = 58 mm
 Ø = 22 mm
 Order number: 011

Thread code: 41

Thread code: 03

Thread code: 04

Thread code: 09

Thread code: 05

Thread code: 20

Thread code: 21

Thread code: 42

hex 22

Connection diagrams

High Side PNP

Low Side PNP

Technical modifications and errors excepted.

Pin	Assignment
1	Line
2	Out
3	Out
4	Out
5	Out

IP67
 L = 50 mm
 Ø = 30 mm
 Order number: 001

Pin	Assignment
1	Line
2	Line
3	NC
4	NC
5	Out

IP67
 L = 54 mm
 Ø = 22 mm
 Order number: 002

Pin	Assignment
1	Line
2	NC
3	NC
4	Out

IP67
 L = 54 mm
 Ø = 27 mm
 Order number: 004

Pin	Assignment
1	Out
2	Out
3	Line

IP67
 L = 71 mm
 Ø = 28 mm
 Order number: 007

Pin	Assignment
1	Line
2	Line
3	NC
4	Out

IP67
 L = 58 mm
 Ø = 22 mm
 Order number: 008

Pin	Assignment
1	Line
2	Line
3	Out

IP67
 L = 58 mm
 Ø = 22 mm
 Order number: 010

Pin	Assignment
1	Line
2	Line
3	Out
4	Out

IP67
 L = 58 mm
 Ø = 22 mm
 Order number: 011

Thread code: 41

Thread code: 03

Thread code: 04

Thread code: 09

Thread code: 05

Thread code: 20

Thread code: 21

Thread code: 42

hex 22

Connection diagrams

High Side PNP

Low Side PNP

Technical modifications and errors excepted.