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# 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 G¼, 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 |

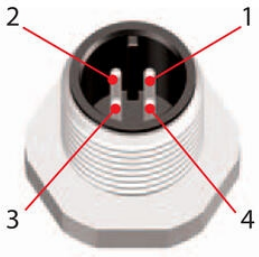
| | |
|---|---|
| **Temperature ambient to** | 100 °C |
| **Material of body** | Stainless steel 1.4305 |
| **Material of wetted parts** | Stainless steel 1.4305, Titanium |

## ADDITIONAL DATA

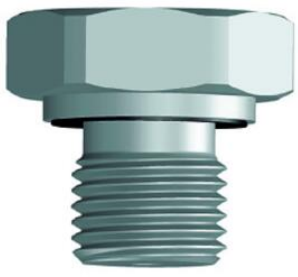
| | |
|---|---|
| **Supply voltage dc max** | 32 V DC |
| **Supply voltage dc min** | 9.6 V DC |
| **Pressure rise** | ≤ 5,000 bar/s |
| **Switching time** | < 2 ms |
| **Switching point adjustment range** | 2 … 100 % of the nominal pressure range Full Scale (FS), programmable at factory |
| **Weight** | 80 g |

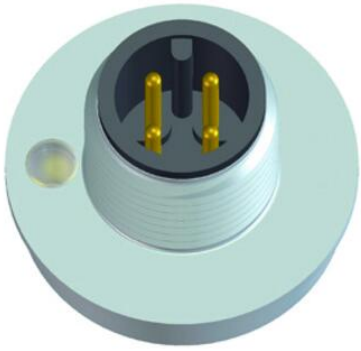
## SAFETY & APPROVALS

| | |
|---|---|
| **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 1** | Uv+ |
| **Pin 2** | nc |
| **Pin 3** | Gnd |
| **Pin 4** | Out |





### DIN EN 175301-803-A



| Pin | Assignment |
|---|---|
| 1 | Uv+ |
| 2 | Out |
| 3 | Gnd |
| PE | ⏚ |

IP65

x ~ 60 / 76 mm*

d ~ Ø 30 mm

**Order number: 001**

* without coupler socket x ~ 60 mm, with coupler socket x ~ 75 mm

### M 12 – DIN EN 61076-2-101 A



| Pin | Assignment |
|---|---|
| 1 | Uv+ |
| 2 | nc |
| 3 | Gnd |
| 4 | Out |

IP67

x ~ 54 mm

d ~ Ø 22 mm

**Order number: 002**

### ISO 15170-A1-K.1



| Pin | Assignment |
|---|---|
| 1 | Uv+ |
| 2 | nc |
| 3 | Gnd |
| 4 | Out |

IP67, IP69K

x ~ 65 mm mm

d ~ Ø 27 mm

**Order number: 004**

### AMP Superseal



| Pin | Assignment |
|---|---|
| 1 | Out |
| 2 | Gnd |
| 3 | Uv+ |

IP67

x ~ 73 mm

d ~ Ø 26 mm

**Order number: 007**

### DEUTSCH DT04-4P



| Pin | Assignment |
|---|---|
| 1 | Gnd |
| 2 | Uv+ |
| 3 | nc |
| 4 | Out |

IP67, IP69K

x ~ 74 mm

d ~ Ø 23 mm

**Order number: 004**

### DEUTSCH DT04-3P



| Pin | Assignment |
|---|---|
| A | Uv+ |
| B | Gnd |
| C | Out |

IP67, IP69K

x ~ 74 mm

d ~ Ø 23 mm

**Order number: 010**

### Cable connection



| Cable | Assignment |
|---|---|
| red | Uv+ |
| white | Out |
| black | Gnd |

IP67

x ~ 64 mm
(+ 20 mm bend relief)
cable length ~ 2 m

d ~ Ø 22 mm

**Order number: 011**



**Thread code: 41**



**Thread code: 03**



**Thread code: 04**



**Thread code: 09**



**Thread code: 20**



**Thread code: 20**



**Thread code: 21**



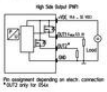
**Thread code: 42**



hex 22

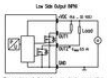
**Connection diagrams**

High Side Output (PNP)



Pin assignment depending on elect. connection
*OUT2 only for 05xx

Low Side Output (NPN)



Pin assignment depending on elect. connection
*OUT2 only for 05xx

Technical modifications and errors excepted.


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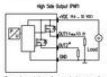
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hex 22

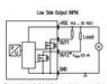
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