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# SUCO 0530 ELECTRONIC PRESSURE SWITCH

053060209B004
PNP output (High Side), NO, 0-600 Bar, NPT 1/4, 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 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** | 600 bar |
| **Adjustment range min** | 0 bar |
| **Process connection** | 1/4 NPT |
| **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 / 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 |



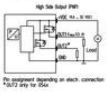






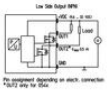

**Connection diagrams**

High Side Output (PNP)




Pin assignment depending on elect. connection
*OUT2 only for IFA4

Low Side Output (NPN)




Pin assignment depending on elect. connection
*OUT2 only for IFA4

Technical modifications and errors excepted.

| DIN EN 175301-803-A | M 12 – DIN EN 61076-2-101 A | ISO 15170-A1-4.1 | AMP Superseal |
|---|---|---|---|
|  |  |  |  |
| Pin / Assignment | Pin / Assignment | Pin / Assignment | Pin / Assignment |
| 1 / Uv+ | 1 / Uv+ | 1 / Uv+ | 1 / Out |
| 2 / Out | 2 / nc | 2 / nc | 2 / Gnd |
| 3 / Gnd | 3 / Gnd | 3 / Gnd | 3 / Uv+ |
| PE / ⏚ | 4 / Out | 4 / Out | |
| IP65 | IP67 | IP67, IP69K/X | IP67 |
| x ~ 60 / 76 mm* | x ~ 54 mm | x ~ 65 mm mm | x ~ 71 mm |
| d ~ Ø 30 mm | d ~ Ø 22 mm | d ~ Ø 27 mm | d ~ Ø 26 mm |
| **Order number: 001** | **Order number: 002** | **Order number: 004** | **Order number: 007** |

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

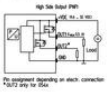
| DEUTSCH DT04-4P | DEUTSCH DT04-3P | Cable connection |
|---|---|---|
|  |  |  |
| Pin / Assignment | Pin / Assignment | Cable / Assignment |
| 1 / Gnd | A / Uv+ | red / Uv+ |
| 2 / Uv+ | B / Gnd | white / Out |
| 3 / nc | C / Out | black / Gnd |
| 4 / Out | | |
| IP67, IP69K/X | IP67, IP69K/X | IP67 |
| x ~ 34 mm | x ~ 39 mm | x ~ 66 mm (+ 20 mm bend relief) cable length ~ 2 m |
| d ~ Ø 23 mm | d ~ Ø 23 mm | d ~ Ø 22 mm |
| **Order number: 008** | **Order number: 010** | **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** |



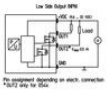

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