



SUCO 0530 ELECTRONIC PRESSURE SWITCH

053025120B011

PNP output (High Side), NO, 0-25 Bar, 7/16 – 20 UNF,
Cable connection

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



PRODUCT DESCRIPTION

The Suco high performance series of electronic pressure switches offers outstanding overpressure protection (up to 4x), long service life even under high pressure change rates whilst giving very low temperature error and excellent long-term stability. Using Silicon-on-sapphire technology for high reliability, EMC compatibility and accuracy there are five standard pressure ranges starting at 0-10 bar all the way up to 0-600 bar and a hysteresis of 0.2%-99.8%. Output option of PNP or NPN and the choice of normally open or normally closed with one switching output factory set (unadjustable by the user). The wetted parts are made of stainless steel and titanium in an all welded design ensuring excellent media compatibility with seven standard electrical connection options including Deutsch, DIN and M12 combined with eight standard thread type options.

Customer specific solutions are also available on request.

Application examples

- Automotive
- Braking systems
- Medical
- Mobile hydraulics
- Off highway
- Off-shore
- Rail

TECHNICAL DATA

GENERAL DATA

| | |
|-----------------------|----------------------|
| Adjustment range max | 25 bar |
| Adjustment range min | 0 bar |
| Electrical connection | Embedded 2m cable |
| Function | Normally open (SPST) |

| | |
|-----------------------|---------|
| Output | PNP |
| Burst pressure | 200 bar |
| Pressure max | 100 bar |

TEMPERATURE & MATERIALS DATA

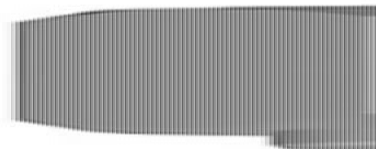
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|----------------------------------|----------------------------------|
| Temperature of media from | -40 °C |
| Temperature of media to | 125 °C |
| Temperature ambient from | -40 °C |
| Temperature ambient to | 100 °C |
| Material of body | Stainless 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 | 135 g |

SAFETY & APPROVALS

| | |
|-----------------------------------|---|
| IP class | IP67 |
| 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 |



| DIN EN 175301-803-A <table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>U_{int}</td></tr><tr><td>2</td><td>Out</td></tr><tr><td>3</td><td>Gnd</td></tr><tr><td>4</td><td>Out</td></tr></table> <p>IP67 • 62 / 76 mm² • 10 mm • 10 mm Order number: 001 <small>*without cable length = 10 m, with cable length = 10 m</small></p> | Pin | Assignment | 1 | U _{int} | 2 | Out | 3 | Gnd | 4 | Out | M 12 - DIN EN 61076-2-101-A <table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>U_{int}</td></tr><tr><td>2</td><td>Out</td></tr><tr><td>3</td><td>Gnd</td></tr><tr><td>4</td><td>Out</td></tr></table> <p>IP67 • 54 mm • 10 mm • 10 mm Order number: 002 <small>*without cable length = 10 m, with cable length = 10 m</small></p> | Pin | Assignment | 1 | U _{int} | 2 | Out | 3 | Gnd | 4 | Out | ISO 15176-A1-4.1 <table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>U_{int}</td></tr><tr><td>2</td><td>Out</td></tr><tr><td>3</td><td>Gnd</td></tr><tr><td>4</td><td>Out</td></tr></table> <p>IP67 • 65 mm • 10 mm • 10 mm Order number: 004 <small>*without cable length = 10 m, with cable length = 10 m</small></p> | Pin | Assignment | 1 | U _{int} | 2 | Out | 3 | Gnd | 4 | Out | AMP Supersal <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>Gnd</td></tr><tr><td>4</td><td>Out</td></tr></table> <p>IP67 • 71 mm • 10 mm Order number: 003 <small>*without cable length = 10 m, with cable length = 10 m</small></p> | Pin | Assignment | 1 | Out | 2 | Out | 3 | Gnd | 4 | Out |
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| Thread code 41 Thread code 40 Thread code 39 Thread code 38 | Thread code 35 Thread code 34 Thread code 33 Thread code 32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



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Connection diagrams



Pin assignment depending on each connector
 100% plug to 100%



Pin assignment depending on each connector
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Technical modifications and errors excepted.

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|---------------------------|---------------------------|
| Thread code 41 | Thread code 35 |
| Thread code 40 | Thread code 34 |
| Thread code 39 | Thread code 33 |
| Thread code 38 | Thread code 32 |
| Thread code 37 | Thread code 31 |
| Thread code 36 | Thread code 30 |



hex 22

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