



SUCO 0500/0501 ELECTRONIC PRESSURE SWITCH

Factory set

0500400412013
NO, 0 - 4 Bar, G 1/4, EPDM, DIN EN 175301-803-A

- Single switch point
- Small & compact
- Ceramic sensor
- Stainless steel housing

PRODUCT DESCRIPTION

The SUCO 0500/0501 performance series electronic pressure switch offers a small compact electronic switch without compromising on quality which comes factory set (unadjustable by the user) with overpressure protection (up to 2x), has a long service life and is also attractively priced especially at high volumes. Using a ceramic sensor in thick film technology for a good operating temperature range and accuracy, there are six standard pressure ranges starting from 0.2 bar all the way up to 0..100 bar and a hysteresis of 1%-98%, available in normally open or normally closed with a PNP transistor output. The wetted parts are made of ceramic, stainless steel and either NBR, EPDM OR FKM ensuring excellent media compatibility, with six standard electrical connection options including Deutsch, DIN and M12 combined with two 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 | 4 bar |
| Adjustment range min | 0 bar |
| Electrical connection | DIN EN 175301-803-A |
| Process connection | G1/4 |
| Function | Normally open (SPST) |
| Output | PNP |
| Burst pressure | 20 bar |
| Pressure max | 10 bar |

TEMPERATURE & MATERIALS DATA

| | |
|---------------------------|------------------------------|
| Temperature of media from | -30 °C |
| Temperature of media to | 125 °C |
| Temperature ambient from | -30 °C |
| Temperature ambient to | 100 °C |
| Material of body | Stainless steel 1.4305 |
| Material of wetted parts | EPDM, Stainless steel 1.4305 |
| Material membrane | EPDM |

ADDITIONAL DATA

| | |
|----------------------------------|--|
| Supply voltage dc max | 32 V DC |
| Supply voltage dc min | 9.6 V DC |
| Pressure rise | ≤ 1 bar/ms |
| Switching time | < 4 ms |
| Switching point adjustment range | 3...100 % of adjustment range(full scale) nominal pressure, set at factory |

| | |
|---------------|-------|
| Weight | 110 g |
|---------------|-------|

SAFETY & APPROVALS

| | |
|-----------------------------------|--|
| IP class | IP65 |
| Hysteresis | 2...98% full scale, programmable at factory (maximum tolerance $\pm 1.0\%$ of adjustment range nominal pressure) |
| 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 | $\pm 0.5\%$ of adjustment range (Full scale) at room temperature |
| Long term stability | $\pm 0.1\%$ of adjustment range (full scale) per year |
| Mechanical life expectancy | 5,000,000 pulsations at rise rates to 1,000 bar/s nominal pressure |
| Repeatability | $\pm 0.1\%$ of adjustment range (full scale) nominal pressure |



| DIN EN 175301-800-A | M 12 - DIN EN 61076-2-101-A | ISO 15179-A1-4-1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------------|--------------------------------|---|-----------------|---|-----|---|-----------------|--|-----|--|-----|-----------------|---|-----------------|---|-----------------|---|-----|---|-----------------|--|-----|------------|---|-----------------|---|----|---|-----|---|-----------------|
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Pin</th> <th>Assignment</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>U_{lv}</td> </tr> <tr> <td>2</td> <td>Gnd</td> </tr> <tr> <td>3</td> <td>U_{lv}</td> </tr> <tr> <td>PE</td> <td>PE</td> </tr> </tbody> </table> <p>IP67</p> <p>■ - 60 mm without cable outlet ■ - 77 mm with cable outlet</p> <p>Order number: 013</p> | Pin | Assignment | 1 | U _{lv} | 2 | Gnd | 3 | U _{lv} | PE | PE | <table border="1"> <thead> <tr> <th>Pin</th> <th>Assignment</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>U_{lv}</td> </tr> <tr> <td>2</td> <td>nc</td> </tr> <tr> <td>3</td> <td>Gnd</td> </tr> <tr> <td>4</td> <td>U_{lv}</td> </tr> </tbody> </table> <p>IP67</p> <p>■ - 54 mm</p> <p>Order number: 002</p> | Pin | Assignment | 1 | U _{lv} | 2 | nc | 3 | Gnd | 4 | U _{lv} | <table border="1"> <thead> <tr> <th>Pin</th> <th>Assignment</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>U_{lv}</td> </tr> <tr> <td>2</td> <td>nc</td> </tr> <tr> <td>3</td> <td>Gnd</td> </tr> <tr> <td>4</td> <td>U_{lv}</td> </tr> </tbody> </table> <p>IP67 IP68/IK</p> <p>■ - 56 mm</p> <p>Order number: 004</p> | Pin | Assignment | 1 | U _{lv} | 2 | nc | 3 | Gnd | 4 | U _{lv} |
| Pin | Assignment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | U _{lv} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Gnd | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | U _{lv} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PE | PE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pin | Assignment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | U _{lv} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | nc | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Gnd | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | U _{lv} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pin | Assignment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | U _{lv} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | nc | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Gnd | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | U _{lv} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>AMP Supersnarl 1.5P</p> | <p>Deutsch DT04-3P</p> | <p>Cable connection</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Pin</th> <th>Assignment</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>U_{lv}</td> </tr> <tr> <td>2</td> <td>Gnd</td> </tr> <tr> <td>3</td> <td>U_{lv}</td> </tr> </tbody> </table> <p>IP67</p> <p>■ - 60 mm</p> <p>Order number: 007</p> | Pin | Assignment | 1 | U _{lv} | 2 | Gnd | 3 | U _{lv} | <table border="1"> <thead> <tr> <th>Pin</th> <th>Assignment</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>U_{lv}</td> </tr> <tr> <td>B</td> <td>Gnd</td> </tr> <tr> <td>C</td> <td>U_{lv}</td> </tr> </tbody> </table> <p>IP67 IP68/IK</p> <p>■ - 61 mm</p> <p>Order number: 010</p> | Pin | Assignment | A | U _{lv} | B | Gnd | C | U _{lv} | <p>■ - 47 mm (+ 25 mm bend relief) Cable length: 2 m</p> <p>Order number: 011</p> | | | | | | | | | | | | | | |
| Pin | Assignment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | U _{lv} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Gnd | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | U _{lv} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pin | Assignment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A | U _{lv} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B | Gnd | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C | U _{lv} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thread code: 41 | Thread code: 00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



| DIN EN 175301-800-A | M 12 - DIN EN 61076-2-101-A | ISO 15179-A1-4-1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|-----------------|---|-----|---|-----------------|--|-----|--|-----|-----------------|---|-----------------|---|-----------------|---|-----|---|-----------------|--|-----|------------|---|-----------------|---|----|---|-----|---|-----------------|
|  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>U_{lv}</td></tr><tr><td>2</td><td>Gnd</td></tr><tr><td>3</td><td>U_{lv}</td></tr><tr><td>PE</td><td>PE</td></tr></table> <p>IP67</p> <p>■ - 60 mm without cable outlet ■ - 77 mm with cable outlet</p> <p>Order number: 013</p> | Pin | Assignment | 1 | U _{lv} | 2 | Gnd | 3 | U _{lv} | PE | PE | <table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>U_{lv}</td></tr><tr><td>2</td><td>nc</td></tr><tr><td>3</td><td>Gnd</td></tr><tr><td>4</td><td>U_{lv}</td></tr></table> <p>IP67</p> <p>■ - 54 mm</p> <p>Order number: 002</p> | Pin | Assignment | 1 | U _{lv} | 2 | nc | 3 | Gnd | 4 | U _{lv} | <table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>U_{lv}</td></tr><tr><td>2</td><td>nc</td></tr><tr><td>3</td><td>Gnd</td></tr><tr><td>4</td><td>U_{lv}</td></tr></table> <p>IP67 IP68/IK</p> <p>■ - 56 mm</p> <p>Order number: 004</p> | Pin | Assignment | 1 | U _{lv} | 2 | nc | 3 | Gnd | 4 | U _{lv} |
| Pin | Assignment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | U _{lv} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Gnd | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | U _{lv} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PE | PE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pin | Assignment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | U _{lv} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | nc | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Gnd | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | U _{lv} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pin | Assignment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | U _{lv} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | nc | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Gnd | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | U _{lv} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AMP Supersnarl 1.5P | Deutsch DT04-3P | Cable connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>U_{lv}</td></tr><tr><td>2</td><td>Gnd</td></tr><tr><td>3</td><td>U_{lv}</td></tr></table> <p>IP67</p> <p>■ - 60 mm</p> <p>Order number: 007</p> | Pin | Assignment | 1 | U _{lv} | 2 | Gnd | 3 | U _{lv} | <table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>A</td><td>U_{lv}</td></tr><tr><td>B</td><td>Gnd</td></tr><tr><td>C</td><td>U_{lv}</td></tr></table> <p>IP67 IP68/IK</p> <p>■ - 61 mm</p> <p>Order number: 010</p> | Pin | Assignment | A | U _{lv} | B | Gnd | C | U _{lv} | <p>■ - 47 mm (+ 25 mm bend relief) Cable length: 2 m</p> <p>Order number: 011</p> | | | | | | | | | | | | | | |
| Pin | Assignment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | U _{lv} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Gnd | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | U _{lv} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pin | Assignment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A | U _{lv} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B | Gnd | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C | U _{lv} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thread code: 41 | Thread code: 00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |