



## SUCO 0500/0501 ELECTRONIC PRESSURE SWITCH

Factory set

0501102417013  
NC, 0 - 100 Bar, G 1/4, TPE, 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	100 bar
Adjustment range min	0 bar
Electrical connection	DIN EN 175301-803-A
Process connection	G1/4
Function	Normally Closed (SPST)
Output	PNP
Burst pressure	300 bar
Pressure max	150 bar

### TEMPERATURE & MATERIALS DATA

Temperature of media from	-30 °C
Temperature of media to	110 °C
Temperature ambient from	-30 °C
Temperature ambient to	100 °C
Material of body	Stainless steel 1.4305
Material of wetted parts	TPE, Stainless steel 1.4305
Material membrane	TPE

### 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

<b>Weight</b>	110 g
---------------	-------

## SAFETY & APPROVALS

<b>IP class</b>	IP65
<b>Hysteresis</b>	2...98% full scale, programmable at factory (maximum tolerance $\pm 1.0\%$ of adjustment range nominal pressure)
<b>Shock resistance</b>	500m / s <sup>2</sup> ; 11 ms half sine wave; DIN EN 60068-2-27
<b>Vibration resistance</b>	20g: 4..2000 Hz sine wave, DIN EN 60068-2-6
<b>EMC</b>	EMC 2014/30/EU; EN 61000-6-2:2005; EN 61000-6-3:2007
<b>Accuracy</b>	$\pm 0.5\%$ of adjustment range (Full scale) at room temperature
<b>Long term stability</b>	$\pm 0.1\%$ of adjustment range (full scale) per year
<b>Mechanical life expectancy</b>	5,000,000 pulsations at rise rates to 1,000 bar/s nominal pressure
<b>Repeatability</b>	$\pm 0.1\%$ 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<sub>lv</sub></td> </tr> <tr> <td>2</td> <td>Gnd</td> </tr> <tr> <td>3</td> <td>U<sub>lv</sub></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 <sub>lv</sub>	2	Gnd	3	U <sub>lv</sub>	PE	PE	<table border="1"> <thead> <tr> <th>Pin</th> <th>Assignment</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>U<sub>lv</sub></td> </tr> <tr> <td>2</td> <td>nc</td> </tr> <tr> <td>3</td> <td>Gnd</td> </tr> <tr> <td>4</td> <td>U<sub>lv</sub></td> </tr> </tbody> </table> <p>IP67</p> <p>■ - 54 mm</p> <p>Order number: 002</p>	Pin	Assignment	1	U <sub>lv</sub>	2	nc	3	Gnd	4	U <sub>lv</sub>	<table border="1"> <thead> <tr> <th>Pin</th> <th>Assignment</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>U<sub>lv</sub></td> </tr> <tr> <td>2</td> <td>nc</td> </tr> <tr> <td>3</td> <td>Gnd</td> </tr> <tr> <td>4</td> <td>U<sub>lv</sub></td> </tr> </tbody> </table> <p>IP67 IP68/IK</p> <p>■ - 56 mm</p> <p>Order number: 004</p>	Pin	Assignment	1	U <sub>lv</sub>	2	nc	3	Gnd	4	U <sub>lv</sub>
Pin	Assignment																															
1	U <sub>lv</sub>																															
2	Gnd																															
3	U <sub>lv</sub>																															
PE	PE																															
Pin	Assignment																															
1	U <sub>lv</sub>																															
2	nc																															
3	Gnd																															
4	U <sub>lv</sub>																															
Pin	Assignment																															
1	U <sub>lv</sub>																															
2	nc																															
3	Gnd																															
4	U <sub>lv</sub>																															
<p><b>AMP Supersnarl 1.5P</b></p>	<p><b>Deutsch DT04-3P</b></p>	<p><b>Cable connection</b></p>																														
<table border="1"> <thead> <tr> <th>Pin</th> <th>Assignment</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>U<sub>lv</sub></td> </tr> <tr> <td>2</td> <td>Gnd</td> </tr> <tr> <td>3</td> <td>U<sub>lv</sub></td> </tr> </tbody> </table> <p>IP67</p> <p>■ - 60 mm</p> <p>Order number: 007</p>	Pin	Assignment	1	U <sub>lv</sub>	2	Gnd	3	U <sub>lv</sub>	<table border="1"> <thead> <tr> <th>Pin</th> <th>Assignment</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>U<sub>lv</sub></td> </tr> <tr> <td>B</td> <td>Gnd</td> </tr> <tr> <td>C</td> <td>U<sub>lv</sub></td> </tr> </tbody> </table> <p>IP67 IP68/IK</p> <p>■ - 61 mm</p> <p>Order number: 010</p>	Pin	Assignment	A	U <sub>lv</sub>	B	Gnd	C	U <sub>lv</sub>	<table border="1"> <thead> <tr> <th>Pin</th> <th>Assignment</th> </tr> </thead> <tbody> <tr> <td>red</td> <td>U<sub>lv</sub></td> </tr> <tr> <td>white</td> <td>U<sub>lv</sub></td> </tr> <tr> <td>black</td> <td>Gnd</td> </tr> </tbody> </table> <p>IP67</p> <p>■ - 47 mm (+ 25 mm band relief) Cable length: 2 m</p> <p>Order number: 011</p>	Pin	Assignment	red	U <sub>lv</sub>	white	U <sub>lv</sub>	black	Gnd						
Pin	Assignment																															
1	U <sub>lv</sub>																															
2	Gnd																															
3	U <sub>lv</sub>																															
Pin	Assignment																															
A	U <sub>lv</sub>																															
B	Gnd																															
C	U <sub>lv</sub>																															
Pin	Assignment																															
red	U <sub>lv</sub>																															
white	U <sub>lv</sub>																															
black	Gnd																															
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<sub>lv</sub></td></tr><tr><td>2</td><td>Gnd</td></tr><tr><td>3</td><td>U<sub>lv</sub></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 <sub>lv</sub>	2	Gnd	3	U <sub>lv</sub>	PE	PE	<table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>U<sub>lv</sub></td></tr><tr><td>2</td><td>nc</td></tr><tr><td>3</td><td>Gnd</td></tr><tr><td>4</td><td>U<sub>lv</sub></td></tr></table> <p>IP67</p> <p>■ - 54 mm</p> <p>Order number: 002</p>	Pin	Assignment	1	U <sub>lv</sub>	2	nc	3	Gnd	4	U <sub>lv</sub>	<table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>U<sub>lv</sub></td></tr><tr><td>2</td><td>nc</td></tr><tr><td>3</td><td>Gnd</td></tr><tr><td>4</td><td>U<sub>lv</sub></td></tr></table> <p>IP67 IP68/IK</p> <p>■ - 56 mm</p> <p>Order number: 004</p>	Pin	Assignment	1	U <sub>lv</sub>	2	nc	3	Gnd	4	U <sub>lv</sub>
Pin	Assignment																															
1	U <sub>lv</sub>																															
2	Gnd																															
3	U <sub>lv</sub>																															
PE	PE																															
Pin	Assignment																															
1	U <sub>lv</sub>																															
2	nc																															
3	Gnd																															
4	U <sub>lv</sub>																															
Pin	Assignment																															
1	U <sub>lv</sub>																															
2	nc																															
3	Gnd																															
4	U <sub>lv</sub>																															
<b>AMP Supersnarl 1.5P</b>	<b>Deutsch DT04-3P</b>	<b>Cable connection</b>																														
																																
<table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>U<sub>lv</sub></td></tr><tr><td>2</td><td>Gnd</td></tr><tr><td>3</td><td>U<sub>lv</sub></td></tr></table> <p>IP67</p> <p>■ - 60 mm</p> <p>Order number: 007</p>	Pin	Assignment	1	U <sub>lv</sub>	2	Gnd	3	U <sub>lv</sub>	<table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>A</td><td>U<sub>lv</sub></td></tr><tr><td>B</td><td>Gnd</td></tr><tr><td>C</td><td>U<sub>lv</sub></td></tr></table> <p>IP67 IP68/IK</p> <p>■ - 61 mm</p> <p>Order number: 010</p>	Pin	Assignment	A	U <sub>lv</sub>	B	Gnd	C	U <sub>lv</sub>	<table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>red</td><td>U<sub>lv</sub></td></tr><tr><td>white</td><td>U<sub>lv</sub></td></tr><tr><td>black</td><td>Gnd</td></tr></table> <p>IP67</p> <p>■ - 47 mm (+ 25 mm band relief) Cable length: 2 m</p> <p>Order number: 011</p>	Pin	Assignment	red	U <sub>lv</sub>	white	U <sub>lv</sub>	black	Gnd						
Pin	Assignment																															
1	U <sub>lv</sub>																															
2	Gnd																															
3	U <sub>lv</sub>																															
Pin	Assignment																															
A	U <sub>lv</sub>																															
B	Gnd																															
C	U <sub>lv</sub>																															
Pin	Assignment																															
red	U <sub>lv</sub>																															
white	U <sub>lv</sub>																															
black	Gnd																															
																																
Thread code: 41	Thread code: 00																															