



SUCO 0500/0501 ELECTRONIC PRESSURE SWITCH

Factory set

0501252417013
NC, 0 - 250 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	250 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	500 bar
Pressure max	375 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

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 inlet ■ - 77 mm with cable inlet</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 Supers seal 1.5°</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}	<table border="1"> <thead> <tr> <th>Pin</th> <th>Assignment</th> </tr> </thead> <tbody> <tr> <td>red</td> <td>U_{lv}</td> </tr> <tr> <td>white</td> <td>U_{lv}</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 _{lv}	white	U _{lv}	black	Gnd						
Pin	Assignment																															
1	U _{lv}																															
2	Gnd																															
3	U _{lv}																															
Pin	Assignment																															
A	U _{lv}																															
B	Gnd																															
C	U _{lv}																															
Pin	Assignment																															
red	U _{lv}																															
white	U _{lv}																															
black	Gnd																															
<p>Thread code: 41</p>	<p>Thread code: 00</p>																															



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 inlet ■ - 77 mm with cable inlet</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 Supers seal 1.5°	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}	<table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>red</td><td>U_{lv}</td></tr><tr><td>white</td><td>U_{lv}</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 _{lv}	white	U _{lv}	black	Gnd						
Pin	Assignment																															
1	U _{lv}																															
2	Gnd																															
3	U _{lv}																															
Pin	Assignment																															
A	U _{lv}																															
B	Gnd																															
C	U _{lv}																															
Pin	Assignment																															
red	U _{lv}																															
white	U _{lv}																															
black	Gnd																															
																																
Thread code: 41	Thread code: 00																															