

SUCO 0510/0511 G1/4 ELECTRONIC PRESSURE SWITCH

Adjustable by user

0510400413002
NO, 0 - 4 Bar, G 1/4, FKM, M12x1

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



PRODUCT DESCRIPTION

The SUCO 0510 (NO) and 0511 (NC) models are compact, user-adjustable electronic pressure switches in a robust stainless-steel housing, featuring a 1/4-inch G1/4 process connection. They incorporate a ceramic thick-film pressure sensor and PNP transistor output, operating on 9.6–32 VDC with built-in reverse-polarity and short-circuit protection. The adjustable switching range spans from 0–2 bar up to 0–250 bar, with default hysteresis between 2–98% of full scale, and an impressive accuracy of ± 0.5 % FS. Overpressure resilience is rated at 2× nominal range, and burst resistance reaches up to 500 bar. With <4 ms switching response, mechanical durability of 5 million cycles, IP65–IP67 protection (depending on connector), and EMC compliance, these switches excel in reliability and longevity.

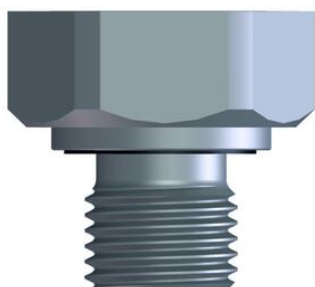
These switches are ideal for hydraulic, pneumatic, and fluid monitoring applications where space is limited, but precision and adjustability are essential—think mobile hydraulics, industrial compressors, and OEM machinery. External set-screw enables easy field adjustment, while the broad connector options (DIN EN 175301, M12, Superseal, Deutsch) simplify integration into varied control systems. Users benefit from ceramic sensor stability, low temperature drift (~ 0.04 % FS/°C), and repeatability (± 0.1 %), making them suitable for tasks like pressure safety cut-offs, pump control, and system diagnostics.

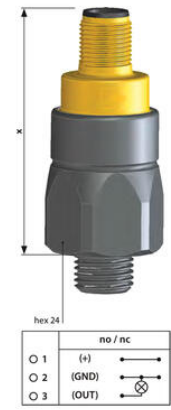
TECHNICAL DATA

Adjustment range min	0 bar
Adjustment range max	4 bar
Pressure max	10 bar
Function	Normally open

Electrical connection	M12x1
IP class	IP67
Material of body	Stainless steel 1.4305
Material of wetted parts	FKM, Stainless steel 1.4305
Material membrane	FKM
Temperature of media from	-20 °C
Temperature of media to	125 °C
Temperature ambient from	-30 °C
Temperature ambient to	100 °C
Process connection	G1/4
Weight	80 g

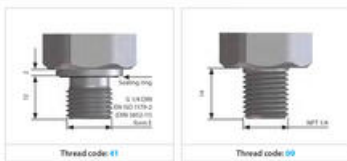
Pressure rise	≤ 1 bar/ms
Switching point adjustment range	3...100 % of adjustment range(full scale), set at factory
Switching time	< 4 ms
Shock resistance	500m / s ² ; 11 ms half sine wave; DIN EN 60068-2-27
Supply voltage dc max	32 V DC
Supply voltage dc min	9.6 V DC
Accuracy	±0.5 % of adjustment range (Full scale) at room temperature
Repeatability	±0.1 % of adjustment range (full scale)
Output	PNP
Vibration resistance	20g; 4..2000 Hz sine wave, DIN EN 60068-2-6
Burst pressure	20 bar
EMC	EMC 2014/30/EU; EN 61000-6-2:2005; EN 61000-6-3:2007
Hysteresis	2...98% full scale, programmable at factory (maximum tolerance ±1.0% of adjustment range nominal pressure)
Mechanical life expectancy	5,000,000 pulsations at rise rates to 1 bar/ms nominal pressure
Long term stability	±0.1 % of adjustment range (full scale) per year





DIN EN 175301-803-A	M 12 – DIN EN 61076-2-101-A	ISO 15170-A1-4-1																														
																																
<table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>V_{bat}</td></tr><tr><td>2</td><td>Gnd</td></tr><tr><td>3</td><td>M_{bus}</td></tr><tr><td>PE</td><td>PE</td></tr></table>	Pin	Assignment	1	V _{bat}	2	Gnd	3	M _{bus}	PE	PE	<table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>V_{bat}</td></tr><tr><td>2</td><td>nc</td></tr><tr><td>3</td><td>Gnd</td></tr><tr><td>4</td><td>M_{bus}</td></tr></table>	Pin	Assignment	1	V _{bat}	2	nc	3	Gnd	4	M _{bus}	<table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>V_{bat}</td></tr><tr><td>2</td><td>nc</td></tr><tr><td>3</td><td>Gnd</td></tr><tr><td>4</td><td>M_{bus}</td></tr></table>	Pin	Assignment	1	V _{bat}	2	nc	3	Gnd	4	M _{bus}
Pin	Assignment																															
1	V _{bat}																															
2	Gnd																															
3	M _{bus}																															
PE	PE																															
Pin	Assignment																															
1	V _{bat}																															
2	nc																															
3	Gnd																															
4	M _{bus}																															
Pin	Assignment																															
1	V _{bat}																															
2	nc																															
3	Gnd																															
4	M _{bus}																															
IP67 x = 60 mm without angle socket x = 77 mm with angle socket Order number: 013	IP67 x = 54 mm Order number: 002	IP67 IP69K x = 56 mm Order number: 004																														

AMP Superseal 1.5*	Deutsch DT04-3P																
<table border="1"> <thead> <tr> <th>Pin</th><th>Assignment</th></tr> </thead> <tbody> <tr><td>1</td><td>M_{bus}</td></tr> <tr><td>2</td><td>Gnd</td></tr> <tr><td>3</td><td>V_{bat}</td></tr> </tbody> </table>	Pin	Assignment	1	M _{bus}	2	Gnd	3	V _{bat}	<table border="1"> <thead> <tr> <th>Pin</th><th>Assignment</th></tr> </thead> <tbody> <tr><td>1</td><td>V_{bat}</td></tr> <tr><td>2</td><td>Gnd</td></tr> <tr><td>3</td><td>M_{bus}</td></tr> </tbody> </table>	Pin	Assignment	1	V _{bat}	2	Gnd	3	M _{bus}
Pin	Assignment																
1	M _{bus}																
2	Gnd																
3	V _{bat}																
Pin	Assignment																
1	V _{bat}																
2	Gnd																
3	M _{bus}																
IP67 x = 60 mm Order number: 003	IP67 IP69K x = 60 mm Order number: 018																



DIN EN 175301-803-A	M 12 – DIN EN 61076-2-101-A	ISO 15170-A1-4-1																														
<table border="1"> <thead> <tr> <th>Pin</th> <th>Assignment</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>V_{bat}</td> </tr> <tr> <td>2</td> <td>Gnd</td> </tr> <tr> <td>3</td> <td>M_{bus}</td> </tr> <tr> <td>PE</td> <td>PE</td> </tr> </tbody> </table>	Pin	Assignment	1	V _{bat}	2	Gnd	3	M _{bus}	PE	PE	<table border="1"> <thead> <tr> <th>Pin</th> <th>Assignment</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>V_{bat}</td> </tr> <tr> <td>2</td> <td>nc</td> </tr> <tr> <td>3</td> <td>Gnd</td> </tr> <tr> <td>4</td> <td>M_{bus}</td> </tr> </tbody> </table>	Pin	Assignment	1	V _{bat}	2	nc	3	Gnd	4	M _{bus}	<table border="1"> <thead> <tr> <th>Pin</th> <th>Assignment</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>V_{bat}</td> </tr> <tr> <td>2</td> <td>nc</td> </tr> <tr> <td>3</td> <td>Gnd</td> </tr> <tr> <td>4</td> <td>M_{bus}</td> </tr> </tbody> </table>	Pin	Assignment	1	V _{bat}	2	nc	3	Gnd	4	M _{bus}
Pin	Assignment																															
1	V _{bat}																															
2	Gnd																															
3	M _{bus}																															
PE	PE																															
Pin	Assignment																															
1	V _{bat}																															
2	nc																															
3	Gnd																															
4	M _{bus}																															
Pin	Assignment																															
1	V _{bat}																															
2	nc																															
3	Gnd																															
4	M _{bus}																															
<p>IP67</p> <p>x = 60 mm without angle socket</p> <p>x = 77 mm with angle socket</p> <p>Order number: 013</p>	<p>IP67</p> <p>x = 54 mm</p> <p>Order number: 002</p>	<p>IP67 IP69K</p> <p>x = 56 mm</p> <p>Order number: 004</p>																														

AMP Superseal 1.5*	Deutsch DT04-3P																
<table border="1"> <thead> <tr> <th>Pin</th><th>Assignment</th></tr> </thead> <tbody> <tr><td>1</td><td>M_{bus}</td></tr> <tr><td>2</td><td>Gnd</td></tr> <tr><td>3</td><td>V_{bat}</td></tr> </tbody> </table>	Pin	Assignment	1	M _{bus}	2	Gnd	3	V _{bat}	<table border="1"> <thead> <tr> <th>Pin</th><th>Assignment</th></tr> </thead> <tbody> <tr><td>1</td><td>V_{bat}</td></tr> <tr><td>2</td><td>Gnd</td></tr> <tr><td>3</td><td>M_{bus}</td></tr> </tbody> </table>	Pin	Assignment	1	V _{bat}	2	Gnd	3	M _{bus}
Pin	Assignment																
1	M _{bus}																
2	Gnd																
3	V _{bat}																
Pin	Assignment																
1	V _{bat}																
2	Gnd																
3	M _{bus}																
IP67 x = 60 mm Order number: 003	IP67 IP69K x = 60 mm Order number: 018																

