



SUCO 0532 ELECTRONIC PRESSURE SWITCH

053210209B010
NPN output (Low Side), NO, 0-100 Bar, NPT 1/4,
Deutsch DT04-3P

- One Switching Output
- Stainless Steel & Titanium Wetted Parts
- Silicon-On-Sapphire Technology
- Factory Set



PRODUCT DESCRIPTION

The SUCO 0532 electronic pressure switch is a high-performance, factory-set device featuring a compact hex-22 stainless steel housing with titanium-wetted parts and welded design, eliminating elastomer seals. It utilises advanced Silicon-on-Sapphire (SoS) sensor technology, ensuring exceptional accuracy ($\pm 0.5\%$ FS) and long-term stability ($\pm 0.1\%$ FS/year), and delivers reliable overpressure protection up to $4\times$ the rated range. Available with a single NPN (low-side) normally-open transistor output capable of handling up to 0.5 A, it supports pressure ranges from 0–10 bar up to 0–600 bar. The 0532 offers a wide choice of process ports and electrical connections, and includes factory-set switching point and hysteresis, along with a fast response time of under 4 ms.

The 0532 is ideal for high-integrity industrial and mobile hydraulic applications, such as in construction equipment, off-road vehicles, and pneumatic systems, where compactness, precision, and reliability are crucial. Its robust SoS sensor and welded housing offer high resilience to vibration, transient pressures, and wash-down conditions, making it suitable for severe environmental exposure. The NPN output with normally open configuration and field-programmed hysteresis allows seamless integration into PLC and relay-controlled systems for safety interlocks, pressure monitoring, and automated shutdown scenarios. The switch's fast response and low moving-part design reduce wear and improve lifespan, making the SUCO 0532 a dependable solution in OEM systems requiring compact, rugged, and high-precision pressure switching.

TECHNICAL DATA

GENERAL DATA

Adjustment range max	100 bar
Adjustment range min	0 bar
Electrical connection	Deutsch DT04-3P
Process connection	1/4 NPT
Function	Normally open
Output	NPN
Burst pressure	800 bar
Pressure max	400 bar

TEMPERATURE & MATERIALS DATA

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	80 g


SAFETY & APPROVALS

IP class	IP67, IP6K9K
Hysteresis	2..99.8% of nominal pressure range (full scale), programmable at factory
Shock resistance	500m / s²; 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	M 12 - DIN EN 91076-3-103-A	ISO 15170-A1-4.1	AMP Superseal																																								
<table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>Uv+</td></tr><tr><td>2</td><td>Uv-</td></tr><tr><td>3</td><td>Grnd</td></tr><tr><td>4</td><td>Uv+</td></tr></table> <p>Pin 3 L = 60 / 76 mm* Ø = Ø 10 mm Order number: 001</p>	Pin	Assignment	1	Uv+	2	Uv-	3	Grnd	4	Uv+	<table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>Uv+</td></tr><tr><td>2</td><td>Uv-</td></tr><tr><td>3</td><td>Grnd</td></tr><tr><td>4</td><td>Uv+</td></tr></table> <p>Pin 3 L = 64 mm Ø = Ø 10 mm Order number: 002</p>	Pin	Assignment	1	Uv+	2	Uv-	3	Grnd	4	Uv+	<table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>Uv+</td></tr><tr><td>2</td><td>Uv-</td></tr><tr><td>3</td><td>Grnd</td></tr><tr><td>4</td><td>Uv+</td></tr></table> <p>Pin 3 L = 65 mm Ø = Ø 17 mm Order number: 004</p>	Pin	Assignment	1	Uv+	2	Uv-	3	Grnd	4	Uv+	<table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>Uv+</td></tr><tr><td>2</td><td>Uv-</td></tr><tr><td>3</td><td>Grnd</td></tr><tr><td>4</td><td>Uv+</td></tr></table> <p>Pin 3 L = 75 mm Ø = Ø 10 mm Order number: 007</p>	Pin	Assignment	1	Uv+	2	Uv-	3	Grnd	4	Uv+
Pin	Assignment																																										
1	Uv+																																										
2	Uv-																																										
3	Grnd																																										
4	Uv+																																										
Pin	Assignment																																										
1	Uv+																																										
2	Uv-																																										
3	Grnd																																										
4	Uv+																																										
Pin	Assignment																																										
1	Uv+																																										
2	Uv-																																										
3	Grnd																																										
4	Uv+																																										
Pin	Assignment																																										
1	Uv+																																										
2	Uv-																																										
3	Grnd																																										
4	Uv+																																										

* without copper socket = 60 mm, with copper socket = 75 mm

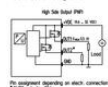
DEUTSCH DT04-4P	DEUTSCH DT04-3P	Cable connection																										
																												
<table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>Grnd</td></tr><tr><td>2</td><td>Uv+</td></tr><tr><td>3</td><td>Uv-</td></tr><tr><td>4</td><td>Grnd</td></tr></table>	Pin	Assignment	1	Grnd	2	Uv+	3	Uv-	4	Grnd	<table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>Uv+</td></tr><tr><td>2</td><td>Uv-</td></tr><tr><td>3</td><td>Grnd</td></tr></table>	Pin	Assignment	1	Uv+	2	Uv-	3	Grnd	<table><tr><th>Cable</th><th>Assignment</th></tr><tr><td>red</td><td>Uv+</td></tr><tr><td>white</td><td>Uv-</td></tr><tr><td>black</td><td>Grnd</td></tr></table>	Cable	Assignment	red	Uv+	white	Uv-	black	Grnd
Pin	Assignment																											
1	Grnd																											
2	Uv+																											
3	Uv-																											
4	Grnd																											
Pin	Assignment																											
1	Uv+																											
2	Uv-																											
3	Grnd																											
Cable	Assignment																											
red	Uv+																											
white	Uv-																											
black	Grnd																											
Pin 3	Pin 3	Pin 3																										
L = 38 mm	L = 38 mm	L = 68 mm																										
Ø = Ø 23 mm	Ø = Ø 23 mm	(ø 25 mm bend add)																										
Order number: 006	Order number: 010	Cable length = 2 m																										
		Ø = Ø 23 mm																										
		Order number: 011																										

Thread code: 41	Thread code: 43	Thread code: 44	Thread code: 49
<p> M 12x1 DIN 9132 A Thread code: 41 </p>	<p> M 12x1 DIN 9132 A Thread code: 43 </p>	<p> M 12x1 DIN 9132 A Thread code: 44 </p>	<p> M 12x1 DIN 9132 A Thread code: 49 </p>

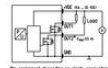
Thread code: 50	Thread code: 51	Thread code: 52	Thread code: 62
<p> M 12x1 DIN 9132 A Thread code: 50 </p>	<p> M 12x1 DIN 9132 A Thread code: 51 </p>	<p> M 12x1 DIN 9132 A Thread code: 52 </p>	<p> M 12x1 DIN 9132 A Thread code: 62 </p>







Connection diagrams



No separate signaling or data connection



Technical modifications and errors excepted.

DIN EN 175301-803-A	M 12 - DIN EN 91076-3-103-A	ISO 15170-A1-4.1	AMP Superseal																																								
																																											
<table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>Uv+</td></tr><tr><td>2</td><td>Uv-</td></tr><tr><td>3</td><td>Grnd</td></tr><tr><td>4</td><td>Uv+</td></tr></table>	Pin	Assignment	1	Uv+	2	Uv-	3	Grnd	4	Uv+	<table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>Uv+</td></tr><tr><td>2</td><td>Uv-</td></tr><tr><td>3</td><td>Grnd</td></tr><tr><td>4</td><td>Uv+</td></tr></table>	Pin	Assignment	1	Uv+	2	Uv-	3	Grnd	4	Uv+	<table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>Uv+</td></tr><tr><td>2</td><td>Uv-</td></tr><tr><td>3</td><td>Grnd</td></tr><tr><td>4</td><td>Uv+</td></tr></table>	Pin	Assignment	1	Uv+	2	Uv-	3	Grnd	4	Uv+	<table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>Uv+</td></tr><tr><td>2</td><td>Grnd</td></tr><tr><td>3</td><td>Uv-</td></tr><tr><td>4</td><td>Uv+</td></tr></table>	Pin	Assignment	1	Uv+	2	Grnd	3	Uv-	4	Uv+
Pin	Assignment																																										
1	Uv+																																										
2	Uv-																																										
3	Grnd																																										
4	Uv+																																										
Pin	Assignment																																										
1	Uv+																																										
2	Uv-																																										
3	Grnd																																										
4	Uv+																																										
Pin	Assignment																																										
1	Uv+																																										
2	Uv-																																										
3	Grnd																																										
4	Uv+																																										
Pin	Assignment																																										
1	Uv+																																										
2	Grnd																																										
3	Uv-																																										
4	Uv+																																										
<p>Pin 3</p> <p>• 60 / 76 mm*</p> <p>• Ø 10 mm</p> <p>Order number: 001</p>	<p>Pin 3</p> <p>• 54 mm</p> <p>• Ø 10 mm</p> <p>Order number: 002</p>	<p>Pin 3</p> <p>• 65 mm</p> <p>• Ø 12 mm</p> <p>Order number: 004</p>	<p>Pin 3</p> <p>• 75 mm</p> <p>• Ø 10 mm</p> <p>Order number: 007</p>																																								

* without copper socket = 60 mm, with copper socket = 75 mm

DEUTSCH DT04-4P	DEUTSCH DT04-3P	Cable connection																										
																												
<table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>Grnd</td></tr><tr><td>2</td><td>Uv+</td></tr><tr><td>3</td><td>Uv-</td></tr><tr><td>4</td><td>Grnd</td></tr></table>	Pin	Assignment	1	Grnd	2	Uv+	3	Uv-	4	Grnd	<table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>Uv+</td></tr><tr><td>2</td><td>Grnd</td></tr><tr><td>3</td><td>Uv-</td></tr></table>	Pin	Assignment	1	Uv+	2	Grnd	3	Uv-	<table><tr><th>Cable</th><th>Assignment</th></tr><tr><td>red</td><td>Uv+</td></tr><tr><td>white</td><td>Uv-</td></tr><tr><td>black</td><td>Grnd</td></tr></table>	Cable	Assignment	red	Uv+	white	Uv-	black	Grnd
Pin	Assignment																											
1	Grnd																											
2	Uv+																											
3	Uv-																											
4	Grnd																											
Pin	Assignment																											
1	Uv+																											
2	Grnd																											
3	Uv-																											
Cable	Assignment																											
red	Uv+																											
white	Uv-																											
black	Grnd																											
IP67 standard	IP67 standard	IP67																										
• L = 38 mm	• L = 38 mm	• L = 68 mm																										
• Ø 23 mm	• Ø 23 mm	(ø 25 mm bend add)																										
Order number: 006	Order number: 010	Cable length = 2 m • Ø 23 mm Order number: 011																										

Thread code: 41	Thread code: 43	Thread code: 44	Thread code: 49
<p> M 12x1 DIN 9132 A Thread code: 41 </p>	<p> M 12x1 DIN 9132 A Thread code: 43 </p>	<p> M 12x1 DIN 9132 A Thread code: 44 </p>	<p> M 12x1 DIN 9132 A Thread code: 49 </p>

Thread code: 50	Thread code: 51	Thread code: 52	Thread code: 62
<p> M 12x1 DIN 9132 A Thread code: 50 </p>	<p> M 12x1 DIN 9132 A Thread code: 51 </p>	<p> M 12x1 DIN 9132 A Thread code: 52 </p>	<p> M 12x1 DIN 9132 A Thread code: 62 </p>