



## SUCO 0530 ELECTRONIC PRESSURE SWITCH

053025204B004  
PNP output (High Side), NO, 0-250 Bar, NPT 1/8,  
Bayonet ISO 15170-A1-4.1

- One switching output
- Stainless steel & titanium wetted parts
- Silicon-on-sapphire technology
- Factory set



### PRODUCT DESCRIPTION

The Suco high performance series of electronic pressure switches offers outstanding overpressure protection (up to 4x), long service life even under high pressure change rates whilst giving very low temperature error and excellent long-term stability. Using Silicon-on-sapphire technology for high reliability, EMC compatibility and accuracy there are five standard pressure ranges starting at 0-10 bar all the way up to 0-600 bar and a hysteresis of 0.2%-99.8%. Output option of PNP or NPN and the choice of normally open or normally closed with one switching output factory set (unadjustable by the user). The wetted parts are made of stainless steel and titanium in an all welded design ensuring excellent media compatibility with seven standard electrical connection options including Deutsch, DIN and M12 combined with eight 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
Process connection	1/8 NPT
Function	Normally open (SPST)

<b>Output</b>	PNP
<b>Burst pressure</b>	2000 bar
<b>Pressure max</b>	1000 bar

## TEMPERATURE & MATERIALS DATA

<b>Temperature of media from</b>	-40 °C
<b>Temperature of media to</b>	125 °C
<b>Temperature ambient from</b>	-40 °C
<b>Temperature ambient to</b>	100 °C
<b>Material of body</b>	Stainless steel 1.4305
<b>Material of wetted parts</b>	Stainless steel 1.4305, Titanium

## ADDITIONAL DATA

<b>Supply voltage dc max</b>	32 V DC
<b>Supply voltage dc min</b>	9.6 V DC
<b>Pressure rise</b>	≤ 5,000 bar/s
<b>Switching time</b>	< 2 ms
<b>Switching point adjustment range</b>	2 ... 100 % of the nominal pressure range Full Scale (FS), programmable at factory
<b>Weight</b>	80 g

## SAFETY & APPROVALS

<b>IP class</b>	IP67, IP6K9K
<b>Hysteresis</b>	2..99.8% of nominal pressure range (full scale), programmable at factory
<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>	±0.5 % of adjustment range (Full scale) at room temperature
<b>Long term stability</b>	±0.1 % of adjustment range (full scale) per year
<b>Mechanical life expectancy</b>	10,000,000 switching cycles at rise rates to 5,000 bar/s nominal pressure
<b>Repeatability</b>	±0.1 % full scale



DIN EN 175301-803-A	M 12 - DIN EN 61076-2-101 A	ISO 15176-A1-4.1	AMP Superseal
Pin Assignment 1 Out 2 Out 3 Gnd 4 Out PS	Pin Assignment 1 Out 2 Out 3 Gnd 4 Out PS	Pin Assignment 1 Out 2 Out 3 Gnd 4 Out PS	Pin Assignment 1 Out 2 Out 3 Gnd 4 Out PS
PS1 • 60 / 70 mm <sup>2</sup> • Ø 10 mm Order number: 001	PS1 • 54 mm <sup>2</sup> • Ø 10 mm Order number: 002	PS1 • 65 mm <sup>2</sup> • Ø 10 mm Order number: 003	PS1 • 75 mm <sup>2</sup> • Ø 10 mm Order number: 007
<b>DEUTSCH DT04-4P</b>	<b>DEUTSCH DT04-3P</b>	<b>Cable connection</b>	
Pin Assignment 1 Gnd 2 Out 3 Out 4 Out PS1 PS1/PS2	Pin Assignment A Out B Gnd C Out PS1 PS1/PS2	Cable Assignment red Out white Out black Gnd PS1 PS1/PS2	
• 38 mm <sup>2</sup> • Ø 10 mm Order number: 004	• 38 mm <sup>2</sup> • Ø 10 mm Order number: 005	• 65 mm <sup>2</sup> (ø 20 mm braid add) cable length = 2 m • Ø 10 mm Order number: 011	
Thread code 41	Thread code 03	Thread code 04	Thread code 09
Thread code 00	Thread code 02	Thread code 21	Thread code 42



See 221

Connection diagrams

Up to 100 VDC



Pin assignment depending on each connector

100 VDC



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100 VDC

Technical modifications and errors excepted.

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