



## SUCO 0531 ELECTRONIC PRESSURE SWITCH

053125109B002  
PNP output (High Side), NC, 0-25 Bar, NPT 1/4, M12 -  
DIN EN 61076-2-101-A

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



### PRODUCT DESCRIPTION

### TECHNICAL DATA

#### GENERAL DATA

|                       |                        |
|-----------------------|------------------------|
| Adjustment range max  | 25 bar                 |
| Adjustment range min  | 0 bar                  |
| Electrical connection | M12x1                  |
| Process connection    | 1/4 NPT                |
| Function              | Normally Closed (SPST) |
| Output                | PNP                    |
| Burst pressure        | 200 bar                |
| Pressure max          | 100 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                                                                      |
| 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                                                         |



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Connection diagrams



For component depending on each connection

750/2000 for 30kV



For component depending on each connection

750/2000 for 30kV

Technical modifications and errors excepted.

| Pin | Assignment |
|-----|------------|
| 1   | Ch+        |
| 2   | Ch-        |
| 3   | Ch+        |
| 4   | Ch-        |

IP67  
 $\times = 60/70 \text{ mm}^2$   
 $\phi = 10 \text{ mm}$   
Order number: 001

| Pin | Assignment |
|-----|------------|
| 1   | Ch+        |
| 2   | Ch-        |
| 3   | NC         |
| 4   | Ch+        |
| 5   | Ch-        |

IP67  
 $\times = 54 \text{ mm}$   
 $\phi = 12/17 \text{ mm}$   
Order number: 002

| Pin | Assignment |
|-----|------------|
| 1   | Ch+        |
| 2   | Ch-        |
| 3   | NC         |
| 4   | Ch+        |
| 5   | Ch-        |

IP67  
 $\times = 65 \text{ mm}$   
 $\phi = 12/17 \text{ mm}$   
Order number: 004

| Pin | Assignment |
|-----|------------|
| 1   | Ch+        |
| 2   | Ch-        |
| 3   | Ch+        |
| 4   | Ch-        |

IP67  
 $\times = 71 \text{ mm}$   
 $\phi = 12/17 \text{ mm}$   
Order number: 007

| Pin | Assignment |
|-----|------------|
| 1   | Ch+        |
| 2   | Ch-        |
| 3   | NC         |
| 4   | Ch+        |

IP67  
 $\times = 58 \text{ mm}$   
 $\phi = 12/17 \text{ mm}$   
Order number: 008

| Pin | Assignment |
|-----|------------|
| 1   | Ch+        |
| 2   | Ch-        |
| 3   | Ch+        |

IP67  
 $\times = 58 \text{ mm}$   
 $\phi = 12/17 \text{ mm}$   
Order number: 010

Cable connection

| Cable | Assignment |
|-------|------------|
| red   | Ch+        |
| white | Ch-        |
| black | Ch+        |
| black | Ch-        |

IP67  
 $\times = 68 \text{ mm}$   
 $\phi = 12/17 \text{ mm}$   
Order number: 011

Thread code: 41

Thread code: 03

Thread code: 04

Thread code: 09

Thread code: 05

Thread code: 10

Thread code: 21

Thread code: 42

Electron 0530-10

hex 23

Connection diagrams

High load: 100 A, 24 V, 2.4 kW

Low load: 100 A, 24 V, 2.4 kW

Technical modifications and errors excepted.

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|-----|------------|
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| 3   | Ch+        |
| 4   | Ch-        |

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 $\phi = 10 \text{ mm}$   
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| 2   | Ch-        |
| 3   | NC         |
| 4   | Ch+        |
| 5   | Ch-        |

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Order number: 002

| Pin | Assignment |
|-----|------------|
| 1   | Ch+        |
| 2   | Ch-        |
| 3   | NC         |
| 4   | Ch+        |
| 5   | Ch-        |

IP67  
 $\times = 65 \text{ mm}$   
 $\phi = 12/17 \text{ mm}$   
Order number: 004

| Pin | Assignment |
|-----|------------|
| 1   | Ch+        |
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| 3   | Ch+        |
| 4   | Ch-        |

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