OEM Automatic Ltd
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SUCO 0530 ELECTRONIC PRESSURE SWITCH

053025209B011
PNP output (High Side), NO, 0-250 Bar, NPT 1/4, Cable connection

- 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
Electrical connection	Embedded 2m cable
Process connection	1/4 NPT

Function	Normally open (SPST)
Output	PNP
Burst pressure	2000 bar
Pressure max	1000 bar

TEMPERATURE & MATERIALS DATA

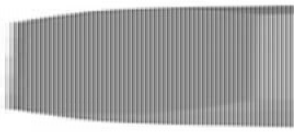
Temperature of media from	-40 °C
Temperature of media to	125 °C
Temperature ambient from	-40 °C
Temperature ambient to	100 °C
Material of body	Stainless steel 1.4305
Material of wetted parts	Stainless steel 1.4305, Titanium

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	135 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



DIN EN 175301-803-A

Pin	Assignment
1	Uv+
2	Out
3	Gnd
PE	⏚

IP65

x – 60 / 76 mm*

⌀ – Ø 30 mm

Order number: 001

M 12 – DIN EN 61076-2-101 A

Pin	Assignment
1	Uv+
2	nc
3	Gnd
4	Out

IP67

x – 54 mm

⌀ – Ø 22 mm

Order number: 002

ISO 15170-A1-6.1

Pin	Assignment
1	Uv+
2	nc
3	Gnd
4	Out

IP67, IP69K

x – 65 mm mm

⌀ – Ø 27 mm

Order number: 004

AMP Superseal

Pin	Assignment
1	Out
2	Gnd
3	Uv+

IP67

x – 71 mm

⌀ – Ø 26 mm

Order number: 007

DEUTSCH DT04-4P

Pin	Assignment
1	Gnd
2	Uv+
3	nc
4	Out

IP67, IP69K

x – 74 mm

⌀ – Ø 23 mm

Order number: 004

DEUTSCH DT04-3P

Pin	Assignment
A	Uv+
B	Gnd
C	Out

IP67, IP69K

x – 78 mm

⌀ – Ø 23 mm

Order number: 010

Cable connection

Cable	Assignment
red	Uv+
white	Out
black	Gnd

IP67

x – 66 mm
(+ 20 mm bend relief)
cable length – 2 m

⌀ – Ø 22 mm

Order number: 011

Thread code: 41

Thread code: 03

Thread code: 04

Thread code: 09

Thread code: 30

Thread code: 32

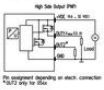
Thread code: 21

Thread code: 42

hex 22

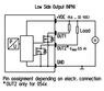
Connection diagrams

High Side Output PNP:



Pin assignment depending on elect. connection
*OUT2 only for 05xx

Low Side Output NPN:



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Technical modifications and errors excepted.

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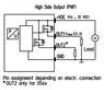

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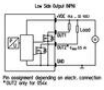

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