



SUCO 0532 ELECTRONIC PRESSURE SWITCH

053210141B013
NPN output (Low Side), NO, 0-10 Bar, G 1/4 – DIN EN
ISO 1179-2, DIN EN 175301-803-A

- 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 | 10 bar |
| Adjustment range min | 0 bar |
| Electrical connection | DIN EN 175301-803-A |
| Process connection | G1/4 |
| Function | Normally open |
| Output | NPN |
| Burst pressure | 80 bar |
| Pressure max | 40 bar |

TEMPERATURE & MATERIALS DATA

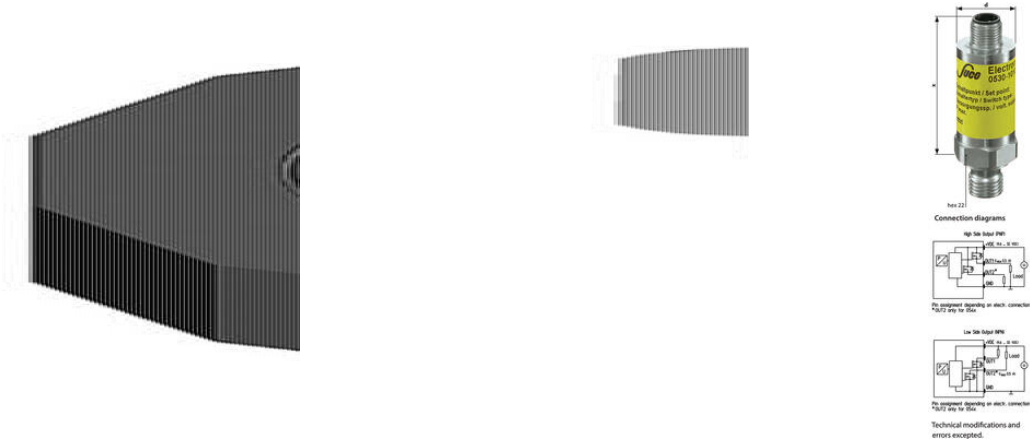
| | |
|---------------------------|----------------------------------|
| Temperature of media from | -40 °C |
| Temperature of media to | 125 °C |
| Temperature ambient from | -40 °C |
| Temperature ambient to | 100 °C |
| Material of body | Stainless steel 1.4305 |
| Material of wetted parts | Stainless 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 | 110 g |

SAFETY & APPROVALS

| | |
|----------------------------|---|
| IP class | IP65 |
| 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 91076-3-101-A | ISO 15170-A1-4.1 | AMP Superseal | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-----------------------------|------------------|---------------|-----|---|-----|---|------|---|-----|---|-----|------------|---|-----|---|-----|---|------|---|-----|---|-----|------------|---|-----|---|-----|---|------|---|-----|---|-----|------------|---|-----|---|-----|---|------|---|-----|
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| <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 (max) 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+ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 1 | Uv+ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Uv- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Grnd | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Uv+ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

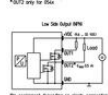
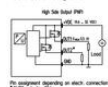
* without copper socket = 60 mm, with copper socket = 75 mm

| DEUTSCH DT04-4P | DEUTSCH DT04-3P | Cable connection | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|------|---|-----|---|-----|---|-----|---|-----|------------|---|-----|---|-----|---|------|---|-------|------------|-----|-----|-------|-----|-------|------|
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| Pin | Assignment | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Grnd | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Uv+ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Uv- | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Uv+ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 (band width)) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Order number: 006 | Order number: 010 | Cable length = 2 m | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Ø = Ø 22 mm | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Order number: 011 | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Thread code: 41 | Thread code: 43 | Thread code: 44 | Thread code: 49 |
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| <p> M 12x1 DIN 9132 A </p> | <p> M 12x1 DIN 9132 A </p> | <p> M 12x1 DIN 9132 A </p> | <p> M 12x1 DIN 9132 A </p> |
| Thread code: 50 | Thread code: 51 | Thread code: 51 | Thread code: 42 |
| <p> M 12x1 DIN 9132 A </p> | <p> M 12x1 DIN 9132 A </p> | <p> M 12x1 DIN 9132 A </p> | <p> M 12x1 DIN 9132 A </p> |



Connection diagrams



Technical modifications and errors excepted.

| DIN EN 175301-803-A | M 12 - DIN EN 91076-3-101-A | ISO 15170-A1-4.1 | AMP Superseal | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 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+ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Order number: 001 | Order number: 002 | Order number: 004 | Order number: 007 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* 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 = Ø 23 mm | • Ø = Ø 23 mm | • (ø 25 mm (band width)) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Order number: 006 | Order number: 010 | Order number: 011 | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Thread code: 41 | Thread code: 43 | Thread code: 44 | Thread code: 49 |
|---|---|---|---|
| <p> M 12x1 DIN 9132 A </p> | <p> M 12x1 DIN 9132 A </p> | <p> M 12x1 DIN 9132 A </p> | <p> M 12x1 DIN 9132 A </p> |
| Thread code: 50 | Thread code: 51 | Thread code: 51 | Thread code: 42 |
| <p> M 12x1 DIN 9132 A </p> | <p> M 12x1 DIN 9132 A </p> | <p> M 12x1 DIN 9132 A </p> | <p> M 12x1 DIN 9132 A </p> |