

Switching point easily adjustable.

High overpressure resistance and long working life even under harsh operating conditions.

Type 0150 as a changeover switch and with the possibility for manifold mounting.

Type 0151 as normally open or normally closed.

0150 / 0151 Technical data

| Type: | 0150 | 0151 |
| :--- | :---: | :---: |
| Voltage: | max. 250 V | max. 42 V |
| Contact rating: | see table below* | $\leq 4 \mathrm{~A} / 100 \mathrm{VA}$ |
| Temperature stability: | $-20^{\circ} \mathrm{C}-+100^{\circ} \mathrm{C}$ | $-5^{\circ} \mathrm{C}-+120^{\circ} \mathrm{C}$ |
| Switching frequency: | $200 / \mathrm{min}$ |  |
| Mechanical life expectancy: | $10^{6} \mathrm{cycles}$ |  |
| Pressure rise rate: | $\leq 1 \mathrm{bar} / \mathrm{ms}$ |  |
| Vibration resistance: | $10 \mathrm{~g} / 5-200 \mathrm{~Hz}$ sine-wave |  |
| Shock resistance: | $294 \mathrm{~m} / \mathrm{s}^{2} ; 14 \mathrm{~ms}$ half-sine-wave |  |
| Body material: | aluminium |  |
| Degree of protection: | IP65 socket device fitted | IP65, terminals IP00 |
| Weight in grams: | approx. 270 g | approx. 140 g |

*0150 Electrical values (for technical explanation see also page 9)

| Rated operating voltage $\mathrm{U}_{\mathrm{e}}$ : | Rated operational current $\mathrm{l}_{\mathrm{e}} /$ Application category |
| :---: | :---: |
| 250 Volt AC $50 / 60 \mathrm{~Hz}$ | 5 Ampere / AC 12 |
| 250 Volt AC $50 / 60 \mathrm{~Hz}$ | 1 Ampere / AC 14 |
| 24 Volt DC | 3.5 / 3.5 Ampere / DC 12 / DC 13 |
| 50 Volt DC | 2/1 Ampere / DC 12 / DC 13 |
| 75 Volt DC | 1/0.5 Ampere / DC 12 / DC 13 |
| 125 Volt DC | 0.3 / 0.2 Ampere / DC 12 / DC 13 |
| 250 Volt DC | 0.25 / 0.2 Ampere / DC 12 / DC 13 |
| Rated insulation voltage $\mathrm{U}_{\mathrm{i}}$ : | 300 Volt |
| Rated operating current $\mathrm{U}_{\text {imp }}$ : | 2.5 kV |
| Rated thermal current $\mathrm{I}_{\text {the: }}$ | 6 Ampere |
| Switching overvoltage: | $<2.5 \mathrm{kV}$ |
| Rated frequency: | DC and $50 / 60 \mathrm{~Hz}$ |
| Short circuit current rating of the device: | to 6.3 Ampere |
| Rated short-circuit current: | <350 Ampere |
| Tightening torque of terminal screws: | $<0.35 \mathrm{Nm}$ |
| Cable diameter: | $0.5-1.5 \mathrm{~mm}^{2}$ |

## Comparison absolute pressure / relative pressure



Indication: Desired switching points within the range of the vacuum have to be indicated relatively to the atmospheric pressure (normal pressure).

## Accessories



Rubber protective cap
for series 0151
with two cable entries for $1.7-2.2 \mathrm{~mm}$ cable diameter

With fitted cap IP54

Suitable for voltages up to 42 V


24 VDC: 1-1-61-652-021

## CE marking

SUCO vacuum switches rated with a voltage up to 250 V are covered by the Low Voltage Directive 73/23/EEC.
An EC Declaration of Conformity has been issued for these vacuum switches and is on file at our offices. The corresponding switches bear the CE mark in our catalogue.

Degree of protection IPXX The type approval does not apply without restriction to all environmental conditions. It is the responsibility of the user to check whether the electrical connection complies with regulations other than those stated and whether it can be used for special applications which could not be foreseen by us.

## Oxygen warning!

When using oxygen, the relevant safety regulations must be observed. In addition, we recommend that a maximum operating pressure of 10 bar must not be exceeded.


- Aluminium body
- Max. voltage 250 V

■ Overpressure safe up to 20 bar $^{1)}$

- With socket device similar to DIN EN 175301 (DIN 43650)

■ Hysteresis approx. 50-150 mbar (non-adjustable)

| pmax. <br> in bar | Adjustment <br> range in mbar <br> (rel.) | Tolerance in mbar <br> (at room temperature) | Thread | Order number: |
| :--- | :--- | :--- | :--- | :--- |

0150 Vacuum switch

| $20^{1)}$ | $100-950$ | $\pm 50$ | G $1 / 8$ female | 0150 | 456 | 15 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Diaphragm material - areas of application

| ECO | Air, oils, greases, fuels |  | 4 |
| :--- | :--- | :--- | :--- |
| Temperature stability: $-20^{\circ} \mathrm{C}-+100^{\circ} \mathrm{C}$ | $\downarrow$ | $\downarrow$ | $\downarrow$ |



[^0]- Brass body
- With M3 screw or spade terminals
- Max. voltage 42 V
- Overpressure safe up to 35 bar $^{1)}$

| Pmax. <br> in bar | Adjustment <br> range in mbar <br> (rel.) | Tolerance in mbar <br> (at room temperature) | Thread | Order number: |
| :--- | :--- | :--- | :--- | :--- |

0151 Vacuum switch with screw terminals, normally open (no) $\rightarrow \mid:$

| $35^{1)}$ | $200-950$ | $\pm 100$ | G 1/8 female | 0151 | 452 | 15 | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 001 |  |  |  |  |  |  |

0151 Vacuum switch with M3 screw terminals, normally closed (nc) $\rightarrow$ :|

| $35^{1)}$ | $200-950$ | $\pm 100$ | G 1/8 female | 0151 | 453 | 15 | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

0151 Vacuum switch with spade terminals, normally open (no) $\rightarrow \mid:$

| $35^{1)}$ | $200-950$ | $\pm 100$ | G $1 / 8$ female | 0151 | 454 | 15 | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

0151 Vacuum switch with spade terminals, normally closed (nc) $\rightarrow$ :|

| $35^{1)}$ | $200-950$ | $\pm 100$ | G $1 / 8$ female | 0151 | 455 | 15 | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Diaphragm material - areas of application

| FKM | Air, oils, greases, fuels | 3 |
| :--- | :--- | :--- |
| Temperature range: $-5^{\circ} \mathrm{C}-+120^{\circ} \mathrm{C}$ | $\downarrow$ | $\downarrow$ |
| Order number: | $0151-\mathrm{XXX}$ | $15-3-001$ |

With female thread


With female thread


Our pressure switches are also available with factory pre-set switching points.

For further technical data and accessories see page 50/51.


[^1]
[^0]:    ${ }^{1)}$ Static pressure, dynamic pressures should be 30 to $50 \%$ lower. These values refer to the hydraulic or pneumatic part of the pressure switch.

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