

## SUCO - 0166/0169 PRESSURE SWITCH

Compact design



0166408031031

1..10 bar, G1/4, Nc, NBR, Spade

- Up to 42 V
- Spade or screw terminals
- Six adjustment ranges from 0,1..1 bar to 50..150 bar
- Normally open or normally closed
- Overpressure safety of 300 bar or 600 bar



### PRODUCT DESCRIPTION

The SUCO 0166 (diaphragm) and 0169 (piston) series offer compact and cost-effective pressure monitoring in a robust zinc-plated steel body with a hex 24 head. Operating up to 42 V AC/DC and supporting up to 4 A resistive load, these switches feature either spade (AMP 6.3 × 0.8 mm) or M3 screw terminals and are available in six adjustable setpoint ranges. They provide stable switching accuracy ( $\pm 0.2$ – $0.5$  bar depending on range) and overpressure resilience up to 300 bar (0166) or 600 bar (0169), with burst pressures reaching around 400 bar. Featuring IP65 protection when used with an optional cable cap, mechanical life expectancy of 1 million cycles at  $\leq 50$  bar, vibration resistance of 10 g, and shock tolerance up to  $294 \text{ m/s}^2$ , they deliver reliable performance across  $-40$  °C to  $+120$  °C.

In practical use, the 0166/0169 switches are ideal for hydraulic and pneumatic systems in industrial machinery, mobile hydraulics, and water treatment setups where on-site adjustability and rugged performance are required. The adjustable pressure range is easily set on installation, and units may also be factory pre-set and sealed for tamper prevention. Their reliable SPST output (NO or NC) is suited to pump control, safety shutdowns, alarms, and general system monitoring. The diaphragm type is well-suited for sensitive fluid applications, while the piston variant is better for higher pressures—offering OEMs flexibility in integrating these reliable, galvanically isolated switches without the need for external power.

### TECHNICAL DATA

|                          |                        |
|--------------------------|------------------------|
| Adjustment range min     | 1 bar                  |
| Adjustment range max     | 10 bar                 |
| Pressure max             | 400 bar                |
| Function                 | Normally Closed        |
| Electrical connection    | Spade (AMP 6,3x0,8 mm) |
| IP class                 | IP00                   |
| Approvals                | CSA US, RoHS II        |
| Material of body         | Galvanized steel       |
| Material of wetted parts | Galvanized steel, NBR  |
| Material membrane        | NBR                    |

|                             |         |
|-----------------------------|---------|
| Temperature of media from   | -40 °C  |
| Temperature of media to     | 100 °C  |
| Contact rating max          | 4 A     |
| Voltage ac/dc max           | 42 V    |
| Voltage ac/dc min           | 10 V    |
| Temperature ambient from    | -40 °C  |
| Temperature ambient to      | 80 °C   |
| Deviation max               | ±0,5    |
| Max switching frequency/min | 200     |
| Process connection          | 1/4 BSP |
| Weight                      | 90 g    |

|                            |                     |
|----------------------------|---------------------|
| Type Pressure Switch       | High accuracy       |
| Mechanical life expectancy | 1 million exchanges |

