Pressure switches 30 A/F

Changeover switch

CE marking

SUCO pressure switches rated with an operating limit of 250 V are covered by the Low Voltage Directive 73/23/EC.

An EC Declaration of Conformity has been issued for these pressure switches and is on file at our offices. The corresponding switches bear the CE mark in our catalogue.

- ***Mounting options for wall or manifold mounting enable easy, free-maintenance installation.***
- ***Easily user-adjustable switching point.***
- ***High overpressure safety.***
- ***Socket device allows easy assembly on site.***

Technical data

Temperature stability for diaphragm / seal materials:	NBR -40 °C – +100 °C EPDM -30 °C – +120 °C FKM -5 °C – +120 °C
Switching frequency:	200 / min.
Mechanical life expectancy:	10^6 cycles (life expectancy of diaphragm pressure switches only for pressures up to max. 50 bar)
Pressure rise rate:	≤ 1 bar/ms
Hysteresis:	Type 0159: approx. 10 – 30 % (not adjustable) Type 0161, 0162, 0175: approx. 10 – 30 % (factory adjustable)
Vibration resistance:	10 g / 5 – 200 Hz sine-wave
Shock resistance:	294 m/s^2; 14 ms half-sine-wave
Body material:	Aluminium
Degree of protection:	IP 65 socket device fitted
Weight in grams:	Type 0159, 0161, 0162 approx. 240 g Type 0175: approx. 310 g

Electrical Values **0159** **0161/0162**

Rated operating voltage U_e:	Rated operating current I_e		Application category
250 Volt AC 50 / 60 Hz	2.5 Ampere	5 Ampere	AC 12
250 Volt AC 50 / 60 Hz	1 Ampere	1 Ampere	AC 14
24 Volt DC	2 / 2 Ampere	3.5 / 3.5 Ampere	DC 12 / DC 13
50 Volt DC	1 / 0.5 Ampere	2 / 1 Ampere	DC 12 / DC 13
75 Volt DC	0.75 / 0.4 Ampere	1 / 0.5 Ampere	DC 12 / DC 13
125 Volt DC	0.3 / 0.2 Ampere	0.3 / 0.2 Ampere	DC 12 / DC 13
250 Volt DC	0.3 / 0.2 Ampere	0.25 / 0.2 Ampere	DC 12 / DC 13

Rated insulation voltage U_i:	300 V
Rated impulse withstand voltage U_{imp}:	2.5 kV
Rated thermal current I_{the}:	6 Ampere
Switching overvoltage:	< 2.5 kV
Rated frequency:	DC und 50 / 60 Hz
Short circuit current rating:	0159: up to 2.5 Ampere 0161/0162: up to 6.3 Ampere
Rated short-circuit current:	< 350 Ampere
Tightening torque of terminal screws:	< 0.35 Nm
Cross section:	0.5 – 1.5 mm^2

- Aluminium body
- With changeover switch and silver contacts
- Overpressure safe to 200 / 600 bar[1)]
- Max. voltage 250 V
- Switching point continuously adjustable by turning knurled screw while in operation.

$p_{max.}$ in bar	Adjustment range in bar	Tolerance at room temperature	Thread	Order number:				
0159 Diaphragm pressure switches								
200[1)]	0.2 – 2	± 0.2 – 0.3	G 1/4 female	0159	426 14	X	001
	0.5 – 5	± 0.2 – 0.5		0159	427 14	X	001
	1 – 10	± 0.5		0159	428 14	X	001
	2 – 20	± 1.0		0159	429 14	X	001
	5 – 50	± 3.0		0159	430 14	X	001
	10 – 100	± 3.0 – 5.0		0159	431 14	X	001
0159 Piston pressure switches								
600[1)]	10 – 100	± 3.0 – 5.0	G 1/4 female	0159	432 14	X	001
	25 – 250	± 5.0 – 7.0		0159	433 14	X	001
	40 – 400	± 5.0 – 9.0		0159	434 14	X	001

Diaphragm / seal material – areas of application

NBR	Hydraulic / machine oil, heating oil, air, nitrogen etc.	1
EPDM	Brake fluid, ozone, acetylene, hydrogen etc.	2
FKM	Hydraulic fluids (HFA, HFB, HFD), petrol/gasoline etc.	3

Temperature ranges of diaphragm / seal materials see page 42

Order number:	0159 – XXX 14 – X – 001

Degree of protection IP65

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.

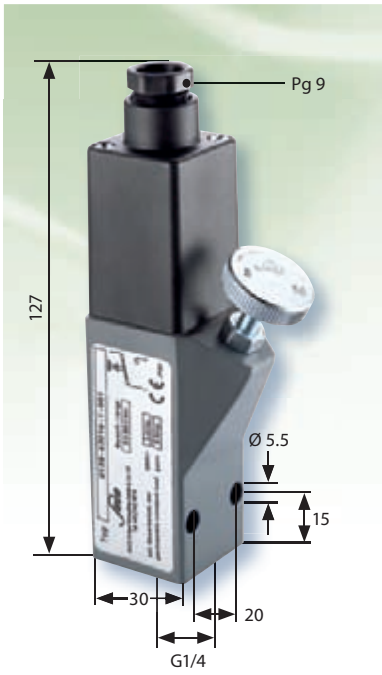
Warning !

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

Piston pressure switches are only to a limited extent suitable for use with gases.
See explanation on page 9.

[1)] Static pressure, dynamic pressures should be 30 to 50% lower. These values refer to the hydraulic or pneumatic part of the pressure switch.

With female thread



- *Our pressure switches are also available with factory preset switching points.*
- *For further technical data and electrical values see page 42 .*