

GENERAL

FLUID	: air or neutral gas, filtered, lubricated or not
CONNECTION	: G1/4 or subbase mounting
PRESSURE SETTING	: see table below
HYSTERESIS	: adjustable at option with a potentiometer
MAX. PRESSURE	: 16 bar
OPERATING TEMPERATURE	: 0 °C to 60 °C
ELECTRICAL CONNECTION	: CM6 (Pg7P) connector size 15 (4 pins) rotatable by 90°
MAX. SUPPLY VOLTAGE	: 24 V - DC
PROTECTION DEGREE	: IP65
MOUNTING POSITION	: optional

CONSTRUCTION

Body: polycarbonate (PC)
Sealings: nitrile (NBR)
Internal parts: stainless steel diaphragm

FUNCTION

The pressure switch/pressure sensor detects pressure rates electronically. The signal at the switching output changes as soon as the switching threshold is reached. A digital output (PNP switching output for connection to PLC) and an analog output with a voltage proportional to the inlet pressure is standard. The switch-on and switch-off points can be adjusted independently.

STRUCTURE

The pressure switch/pressure sensor is equipped with an electronic pressure sensor with amplifier electronics. The lack of moving parts enables high switching frequencies and a long service life. The electronics provide for a precise switching point. The pressure switch has a high temperature resistance and repeatability.

OPERATION

The switching threshold and hysteresis can be adjusted very precisely by means of two potentiometers. The switching status is indicated by LED. The PNP output switches to +24 V as soon as the switching threshold P2 is reached (increase of pressure at the input). The PNP output switches back to 0 V only when the pressure falls below the switching threshold P1.

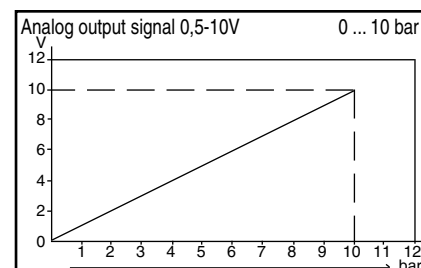
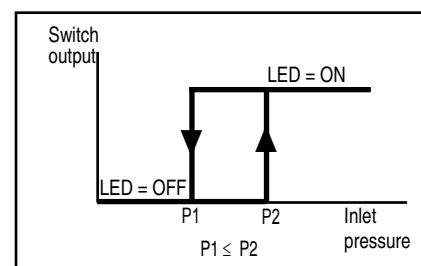
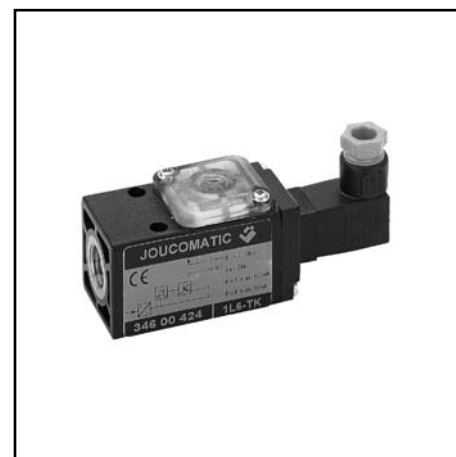
ELECTRICAL CHARACTERISTICS

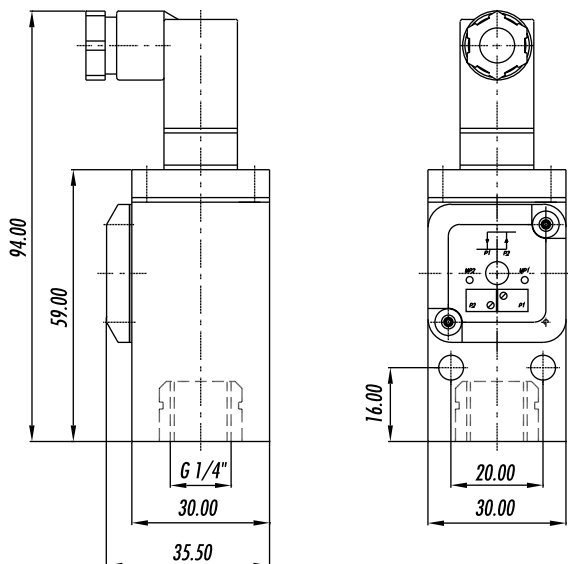
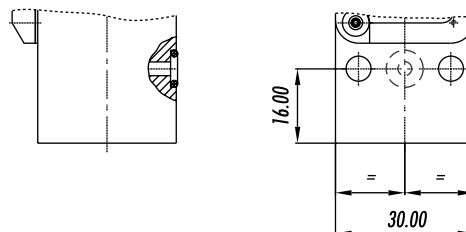
voltage *	max. power ratings	outputs
24 V DC +/-10%	600 mW (without load at the output)	PNP - open collector output switches max. 500 mA to +24 V, short circuit proof. Feedback output 0.5 ... 10 V proportional to the inlet pressure.

* Residual ripple: 10 %

SPECIFICATIONS

type	designation	pressure ratings (bar)	catalogue number
	Electronic pressure switch with pneumatic connection on the side, G1/4 thread	-0,05 ... -1 0,1 ... 2 0,3 ... 6 0,5 ... 10 0,8 ... 16	34900001 34900002 34900003 34900004 34900005
	Electronic pressure switch with pneumatic connection in the subbase	-0,05 ... -1 0,1 ... 2 0,3 ... 6 0,5 ... 10 0,8 ... 16	34900006 34900007 34900008 34900009 34900010



DIMENSIONS
G 1/4" version

Subbase mounted version

CONNECTOR ASSIGNMENT

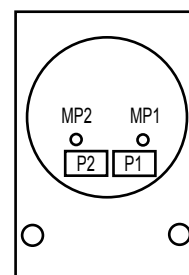
Connector type mPm, size 15 mm

- | | | |
|-------|--------------------|---|
| Pin 1 | : + 24 V DC | (power) |
| Pin 2 | : GND | (power) |
| Pin 3 | : switching output | (PNP, max. 500 mA; short-circuit and overload protection) |
| Pin 4 | : feedback value | (0.5 ... 10 V, max. 10 mA) |

ADJUSTMENT OF THE SWITCHING THRESHOLD

A voltmeter is required to adjust the switching thresholds (hysteresis) and the pressure switch/pressure sensor must be supplied with power (pin 1 = +24 V, Pin 2 = GND).

- 1) Remove the transparent cover.
- 2) Connect the voltmeter to the measuring point MP2 and to GND (Pin 2) to adjust the switching threshold (P2). It can be adjusted between 0.5 V and 10 V with potentiometer P2.
- 3) Connect the voltmeter to MP1 to adjust the switching threshold P1. The lower switching threshold (i.e. the hysteresis) can be adjusted from 0.5 V up to the P2 value with potentiometer P1. P1 is therefore always \leq P2.



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