

# Pressure Sensors

Low-Pressure P-E Converter, M5, 1.5 to 15 psi

## Pneumatic-Electric Pressure Switch Type PE-1000

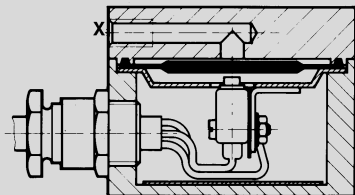


A pneumatic signal at the pilot port X applies pressure to a diaphragm, which actuates an electrical switch.

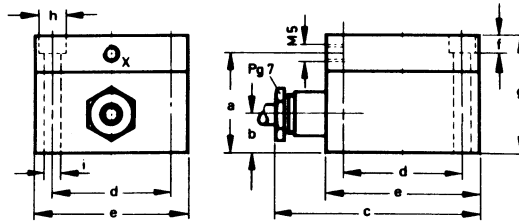
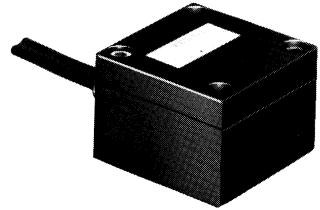
### Permissible electrical load

Direct Current			Alternating Current		
Voltage, VDC	Resistance Load, A	Inductance Load, A	Voltage, VAC	Resistance Load, A	Inductance Load, A
up to 15	15	5	up to 110	10	5
30	2	1	230	5	5
115	0.4	0.03			
230	0.2	0.02			

These are standard values based on a switching frequency of 60 switch cycles per minute.



X = Signal Port



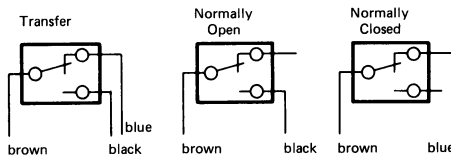
### Dimensions

- a 1.17 in / 29.7 mm
- b 0.45 in / 11.5 mm
- c 2.36 in / 60 mm
- d 1.38 in / 35 mm
- e 1.77 in / 45 mm
- f 0.18 in / 4.6 mm
- g 1.36 in / 34.4 mm
- h 0.32 in / 8 mm
- i 0.19 in / 4.8 mm

At high switching frequencies or when large inductances are switched, an RC spark-suppression circuit must be provided for DC operation. Ideally, the circuit should be arranged in parallel to the switch or load, with R and C being connected in series.

The following relationship should be observed for spark-suppression elements: Capacitor C should be as large in  $\mu\text{F}$  as load current I is in A and should be rated for an operating voltage of at least 630 to 1000 V. Resistance R should equal load resistance with a rating of approximately one-half to one watt.

### Connection diagrams:



Order Number	Part No./Type	3719 PE-1000
Medium		Compressed air (filtered, unlubricated)
Mounting		2 holes through housing
Connection	Pneumatic	M5
	Electrical	4-wire cable with ground 40 in / 1 m long
Signal Pressure Range*		1.5 to 15 psi / 0.1 to 1 bar
Electrical Load		See table above
Type of Protection per DIN 40050		IP 65
Design		Pneumatically actuated electrical microswitch
Material		Housing: Al, anodized. Seals: Buna N.
Weight		0.507 lb / 0.230 kg

\*14 to 140°F / -10 to +60°C