



## 0570

## Electronic pressure switches

- Anodised aluminium and die-casted zinc
- Ceramic measuring cell in thick-film technology
- Supply voltage 12 ... 30 VDC
- Overpressure protection to 290 / 2,175 / 8,700 psi (20 / 150 / 600 bar)<sup>1)</sup>
- Programmable using keypad on front
- Switching time delay (setting from 0 to 3 s)
- Peak value memory (within the measurement range)
- Pin protection possible to prevent misuse
- Socket device included

$p_{\max}$ in psi (bar)	Burst pressure in psi (bar)	Adjustment range in psi (bar)	Thread	Order number:
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## 0570 Electronic switches

290 psi <sup>1)</sup> (20 bar) <sup>1)</sup>	360 psi (25 bar)	0 – 145 psi (0 – 10 bar)	1/4 BSPP female	0570 – 467 14 – X – 001
2,175 psi <sup>1)</sup> (150 bar) <sup>1)</sup>	2,540 psi (175 bar)	0 – 1,450 psi (0 – 100 bar)		0570 – 468 14 – X – 001
8,700 psi <sup>1)</sup> (600 bar) <sup>1)</sup>	10,150 psi (700 bar)	0 – 5,800 psi (0 – 400 bar)		0570 – 469 14 – X – 001

## Seal material – Application areas

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

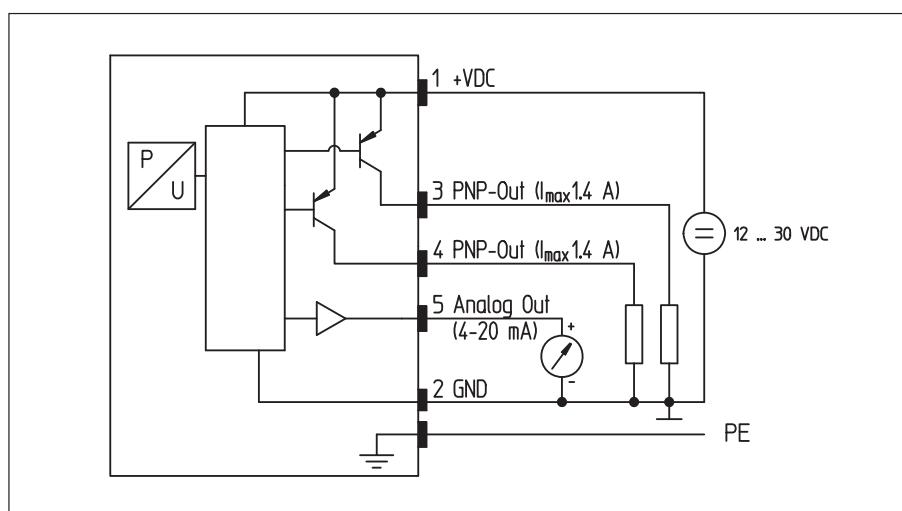
Refer to page 119 for the temperature range and application thresholds of sealing materials



Order number:

0570 – XXX 14 – X – 001

## Wiring chart



<sup>1)</sup> Static pressure, dynamic pressure 30 to 50% lower. Values refer to the hydraulic or pneumatic part of the electronic pressure switch.

## Technical details

Type:	<b>0570 Electronic pressure switches</b>
Switching function:	NC/NO, programmable, 2 switching points, switching time delay, zero point reset, peak value memory (within adjustment range), switching point counter
Settings:	Programmable using keypad on front
Outputs:	2 transistor outputs (each 1.4 A DC12 / PNP) 1 analogue output (4 – 20 mA)
Supply voltage $U_B$ :	12 – 30 VDC
Switching status display:	2 LEDs (yellow)
Pressure display:	Current pressure displayable in bar or PSI on 3-digit LED (red)
Life expectancy:	5,000,000 pulsations at rise rates to 14.5 psi/ms (1 bar/ms) at $p_{nom}$
Pressure rise rate:	$\leq 14.5 \text{ psi/ms}$ ( $\leq 1 \text{ bar/ms}$ )
Switching time:	< 4 ms
Switching time delay:	Adjustable between 0 and 3.0 s
Differential:	1 – 99 % FS, programmable from keypad
Accuracy:	$\pm 0.5\%$ (FS at room temperature)
Accuracy, display:	$\pm 0.5\%$ (FS at room temperature) $\pm 2$ digits
Temperature drift:	$\pm 0.2\% / 34^\circ\text{F}$ ( $1^\circ\text{C}$ )
Temperature range:	NBR (BunaN), EPDM: $-4^\circ\text{F} \dots +176^\circ\text{F}$ ( $-20^\circ\text{C} \dots +80^\circ\text{C}$ ) FKM (Viton®): $+23^\circ\text{F} \dots +176^\circ\text{F}$ ( $-5^\circ\text{C} \dots +80^\circ\text{C}$ )
Temperature compensation:	$-4^\circ\text{F} \dots +176^\circ\text{F}$ ( $-20^\circ\text{C} \dots +80^\circ\text{C}$ ), error $\leq \pm 1.5\%$ overall
Materials:	Wetted parts anodised aluminium, body made of die-casted zinc
Vibration resistance:	10 g at 5 ... 2000 Hz sine wave; DIN EN 60068-2-6
Shock resistance:	294 m/s <sup>2</sup> ; 11 ms half sine wave; DIN EN 60068-2-27
Protection class:	IP65
EMV:	acc. to EN 50081-1, EN 50081-2, EN 50082-2
Weight:	approx. 12 oz (340 g)
Access pin:	The switch can be protected with a pin between 1 and 999

## E.4

menu-controlled

Menu-controlled electronic  
pressure switches

display



- Menu-controlled, simple programming of switching functions
- 2 switching outputs and 1 analogue output
- Numerous programming functions, such as
  - switching time delay
  - zero point reset
  - peak value memory
  - switching point counter
- Current pressure value and switching states shown on 3-digit display
- Very high switching currents up to 1.4 A