### **Electronic Switch**

### ES2000



#### Features:

- Stainless Steel housing
- Rugged construction
- Excellent linearity
- Excellent long term stability
- Wide temperature range



#### **Description:**

This Electronic Pressure Switch offers the accuracy of an electronic pressure switch in an economical package. It is available in two different configurations: as a dual pressure switch or as a single switch with integrated 4-20 mA analog output. Setpoints and deadband are easily adjusted by using the keypad and user-friendly menu. Analog transducer outputs are scalable from 25% to 100% of the full adjustable range. A 10-bit microprocessor provides built-in self diagnostics and allows for switch time delays and pressure cycling up to 100 times per second. For applications requiring precision pressure monitoring and control at an affordable price, this pressure switch is the ideal solution.

SKU	Description
F0428-017	2 Switching Outputs, 0 to 10 bar
F0428-018	2 Switching Outputs, 0 to 50 bar
F0428-019	2 Switching Outputs, 0 to 100 bar
F0428-020	2 Switching Outputs, 0 to 200 bar
F0428-021	2 Switching Outputs, 0 to 400 bar
F0428-022	2 Switching Outputs, 0 to 600 bar
F0428-127	1 Analogue Output 4-20mA, 0 to 10 bar
F0428-128	1 Analogue Output 4-20mA, 0 to 50 bar
F0428-129	1 Analogue Output 4-20mA, 0 to 100 bar
F0428-130	1 Analogue Output 4-20mA, 0 to 200 bar
F0428-131	1 Analogue Output 4-20mA, 0 to 400 bar
F0428-132	1 Analogue Output 4-20mA, 0 to 600 bar





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Linearity Error:	±0.5%	±0.5% f. s. at 77°F (25°C)					
Repeatability:	±0.1%	±0.1% f. s.					
Sensor Element:	Piezore	Piezoresistive silicone measuring sensor					
Material Wetted Parts: Seals: Housing:	Viton®	304 stainless steel Viton® (FKM fluorelastomer) Aluminum die-cast					
Measuring Ranges (psi):	150	750	1500	3000	6000	9000	
Proof Pressure (psi):	220	1100	2175	4400	9000	11,600	
Process Connection (male):	1/4-18	1/4-18 NPT, 7/16-20 37° JIC, G1/4, 7/16-20 UNF SAE-4					
<b>Electrical Connection:</b>	Plug M	Plug M 12 x 1; 4-pin					
Power Supply:	15 to 3	15 to 32 VDC reverse polarity protected					
Power Consumption:	approx	approx. 50 mA (without load)					
A/D-Converter Resolution: Scanning Rate:		10 bit (1,024 steps per measure span) 200/s (for peak value memory)					
Analog Output Current Output: Load:  Load Influence: Scanning Rate: Voltage Output: Rating: Adjustment Range:	RI = 600 0.3% / 5 ms 0 to 10 max. 10	I = (Ub-12 \ 0 ohm at 2 100 ohm VDC (optic	4 VDC	of			

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Transistor Switching Output(s) PNP: Switching Function: Adjustment Range and Hysteresis: Switching Frequency: Contact Rating: Delay: Status Display(s):	Normally open / normally closed, standard-/window-mode 0% to 125% f. s. max. 100 Hz Switching current 400 mA, short-circuit-proof 0.0 to 9.9 s adjustable Green LED(s)				
<b>Digital Display</b> Display Range: Display Rate:	3-digit 7-segment LED display, height 10 mm, (0.39 inches), red -1 to 999 20/s				
Error Display:	Orange LED (alarm)				
Local Operating Interface:	3 push buttons				
Temperature Range Media: Ambient: Storage:	-13°F to 212°F (-25°C to +100°C) 14°F to 158°F (-10°C to +70°C) -22°F to 176°F (-30°C to +80°C)				
Temperature Influence:	±0.2% f.s. /10K				
Compensation Range:	14°F to 158°F (-10°C to +70°C)				
Enclosure Rating:	Type 4, for indoor use only, (NEMA 4 / IP65)				
Dimensions (Housing):	1-7/16" X 5-1/8" (36 mm x 130 mm) (without electrical plug)				
Additional Features:	Microprocessor, self-monitoring with error code display; all parameters are configured by keypad.  Keypad lock, rugged construction, vibration and shockproof, long term stability.				
Weight:	Approx. 0.4 lb (200g)				
Approvals:	c/ULus: file No. E42816				

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