# Compact 2000 / M5/2N System Valves

E/P and Vacuum/Electric Converters

## Pneumatic Electric Pressure Switch



A pneumatic signal at the pilot port X applies pressure to a diaphragm, that actuates an electrical switch. Available for mounting on 1N or 2N mounting racks.

Type PE-1/8-1N Moisture resistant model: Type PE-1/8-1N-SW

Type PE-1/8-2N Moisture resistant model: Type PE-1/8-2N-SW

Type PE-PK-4 Moisture resistant model: Type PE-PK-4-SW

Two switches on 2N sub-base **Type PE-PK-3 x 2-2N** 

Vacuum Electric Switch For converting a vacuum signal intoan electrical signal, with sub-base

Type VPE-1/8 Moisture resistant design Type VPE-1/8-SW

∽ Św

Type VPE-1/8-2N Moisture resistant design Type VPE-1/8-2N-SW

Permissible electrical load:

Type PE, VPE				Type PESW, VPESW							
Direct Current			Alternating Current			Direct Current			Alternating Current		
Volt- age VDC	Load in Ohms A	Induc- tive Load A	Volt- age VAC	Load in Ohms A	Induc- tive Load A	Volt- age VDC	Load in Ohms A	Induc- tive Load A	Volt- age VAC	Load in Ohms A	Induc- tive Load A
12 24 60 110 220 250	6 6 1 0.5 0.25	6 6 0.5 0.2 0.1	250	6	2	15 30 50 75 125 250	10 7 2 1 0.5 0.25	2 2 1 0.5 0.4 0.2	125 250	5 5	5 5

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Accessory:

Protective Cover Type SPE, 6210

Order Number	6217 PE-1/8-1N	13681 PE-PK-3 x 2-2N	12592 VPE-1/8	
	6484 PE-1/8-1N-SW		12593 VPE-1/8-SW	
	7860 PE-1/8-2N	7470 PE-PK-4	12594 VPE-1/8-2N	
	7862 PE-1/8-2N-SW	7471 PE-PK-4-SW	12595 VPE-1/8-2N-SW	
Medium	Compressed air (filtered,	Compressed air (filtered, lubricated or unlubricated)		

(Ref. 4.410, 4.410r, 4.411, 4.415) (10.87, 10.85) (Ref. 11.4/20-1, 25-1) (98)



Pneumatic Electric Pressure Switch, Type PEN-M5



The PEN-M5 solid state pneumatic/electric converter offers triple switching function selection in a single, compact unit; use it as a:

- Differential pressure switch
- Vacuum switch

Pressure switch

Order Num	ber	8625 PEN-M5 (PNP) 14116 PEN-M5 (NPN) SA 5483				
Medium		Compressed air (filtered, lubricated or unlubricated)				
Design		Metal bellow and contactless reed switch				
Mounting		2 thru holes in housing or on 2n mounting frame				
Connection	pneumatic	M5				
	electrical	3 strand wire 3 m / 10 ft long				
Pressure	pressure switch	3.75 to 120 psi / 0.25 to 8 bar (P <sub>1</sub> )				
Range	vacuum switch	6 in to 21 in Hg / -0.20 to -0.7 bar (P <sub>2</sub> )				
	differential pressure switch	28 in Hg to 120 psi / -0.95 to 8 bar, Hysteresis max. 3.75 psi / 0.25 bar (P <sub>1</sub> >P <sub>2</sub> )				
Direct Current		12 to 30V DC (Residual ripple max. 10%), Residual voltage at UB=24V DC				
Max Switching Current		350 mA (PNP-output)				
Min Load Re	esistance	470 Ω				
Type of Pro	tection	IP 67 (DIN 40050)				
Temperatur	e Range	-4 to 140°F / -20 to +60°C				
Switching F	requency	Max. 70 Hz				
Ref 8 3/10	1) (98)					

(Ref. 8.3/10-1) (98)

## Pressure Switch (Adjustable) Type PEV-1/4-B VPEV-1/8

With plug connector per DIN 43650 Adjustable pneumatic signals (PEV) or vacuum signals(VPEV) are converted to electrical signals by the pressure actuated switch.

#### Accessory: Mounting plate

- APL-2N-PEV (PEV-1/4-B) - APL-2N-VPEV (VPEV-1/8)

for mounting switch on 2n mounting racks. See page 687.

Order Number		10773 PEV-1/4-8	150261 VPEV-1/8			
Medium PEV		Compressed air (filtered, lubricated or unlubricated) and non-corrosive liquid media				
	VPEV	Compressed air (filtered, lubricated or unlubricated)				
Design		Electro-pneumatic signal converter				
Mounting		2 holes through housing or plate mounted				
Connection		G 1/4 ISO	G 1/8 ISO			
Pressure Adjustmen	t Range	15 to 180 psi / 1 to 12 bar	2.32 to 23.2 psi / 0.16 to 1.6 bar (vacuum 5.9 to 29.9 in Hg / -0.2 to 1 bar			
Repetition Accuracy		± 3%				
Max. Switching Free	luency	3.3 Hz				
Max. Voltage		250V AC / 125 V DC				
Electrical Load	Resistance	5 A at 250 AC; 0.4A at 125V DC				
	Inductive	0.5 at 250 AC; 0.025A at 125V DC				
Type of Protection		IP 65 (Din 40050)				
Materials		Housing: Aluminum, Mg, Si				

-4 to 176°F / -20 to +80°C

(Ref. 8.3/20-1, 25-1) (98)



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## **Product Range and Company Overview**

## **A Complete Suite of Automation Services**

Our experienced engineers provide complete support at every stage of your development process, including: conceptualization, analysis, engineering, design, assembly, documentation, validation, and production.



**Custom Automation Components** Complete custom engineered solutions



**Custom Control Cabinets** Comprehensive engineering support and on-site services



**Complete Systems** Shipment, stocking and storage services

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With a comprehensive line of more than 30,000 automation components, Festo is capable of solving the most complex automation requirements.



Electromechanical Electromechanical actuators, motors, controllers & drives



**Pneumatics** Pneumatic linear and rotary actuators, valves, and air supply



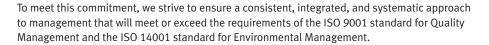
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Festo is a leading global manufacturer of pneumatic and electromechanical systems, components and controls for industrial automation, with more than 12,000 employees in 56 national headquarters serving more than 180 countries. For more than 80 years, Festo has continuously elevated the state of manufacturing with innovations and optimized motion control solutions that deliver higher performing, more profitable automated manufacturing and processing equipment. Our dedication to the advancement of automation extends beyond technology to the education and development of current and future automation and robotics designers with simulation tools, teaching programs, and on-site services.

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Festo Corporation is committed to supply all Festo products and services that will meet or exceed our customers' requirements in product quality, delivery, customer service and satisfaction.





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