OEM-EP Miniature Pressure Controller

Pressure Controllers



Measuring just $26 \text{mm} \times 27 \text{mm} \times 60 \text{mm}$, the OEM-EP (Electronic Pressure Control Unit) is the smallest electronic pressure controller available on the market, configured specifically for the analytical instrumentation and life science OEM markets.

The OEM-EP can be configured to control pressure or flow and can replace manual regulators, flow controllers, and needle valves, providing integral closed loop proportional control for sensitive instrumentation applications. This product uses Parker Hannifin's patented VSO® proportional valve, as well as the proven circuitry of its successful larger products.

Features

- Silent operation
- High accuracy
- "Set and Forget" closed loop control
- Low power consumption
- Long life
- Analog control

Physical Properties

Valve Technology:

Thermally compensated proportional valve

Media:

Non-corrosive gases

Operating Environment:

0 to 50°C (32 to 131°F)

Storage Temperature:

-40 to 65°C (-40 to 131°F)

Length: 1.02 in (26 mm)

Width: 1.06 in (27 mm)

Height: 2.36 in (60 mm)

Porting: 10-32 female ports

Electrical

Main Power:

24 VDC \pm 10%

Input Control Signal:

0-5 VDC standard

Monitor Output Voltage:

0-5 volts

Current Requirement:

<400 mA

Electrical Connector:

6 pin miniature interface cable included

Performance Characteristics

Pressure Ranges:

Pressure Accuracy:

± 0.2% FS typical*

± 1.5% FS max

Response:

<15 msec

(Response time to target pressure is output volume dependent)

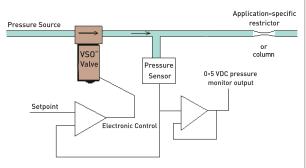
Linearity:

< +1.5% FS

*Contact factory for details.

Configurations

Custom configurations are available. Contact factory for details.



PRESSURE CONTROL: ALTERNATE CONFIGURATION

Pressure Source

VS0
Valve

Pressure
Sensor

0-5 VDC pressure
monitor output

Electronic Control

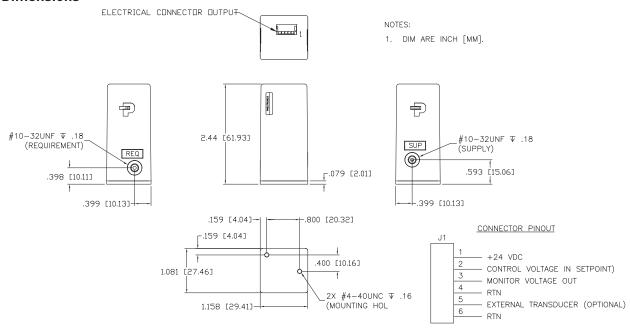
PRESSURE CONTROL: STANDARD CONFIGURATION



VSO is a registered trademark of Parker Hannifin Corporation.

OEM-EP Pressure Controllers

Dimensions



Ordering Information

	part number					
	990-005101-002	990-005101-015	990-005101-100	990-005103-002	990-005103-015	990-005103-100
Family	0EM-EP	0EM-EP	0EM-EP	0EM-EP	0EM-EP	0EM-EP
Configuration 1	Standard	Standard	Standard	Standard	Standard	Standard
Effective orifice	0.01	0.01	0.01	0.03	0.03	0.03
Power	24 vdc					
Control Voltage ²	0-5 vdc					
Pressure range	0 - 2 psig	0 - 15 psig	0 - 100 psig	0 - 2 psig	0 - 15 psig	0 - 100 psig

part number

	990-005123-015	990-005123-050	990-005123-100	
Family	0EM-EP	0EM-EP	0EM-EP	
Configuration 1	Alternate	Alternate	Alternate	
Effective orifice	0.03	0.03	0.03	
Power	24 vdc	24 vdc	24 vdc	
Control Voltage ²	0-5 vdc	0-5 vdc	0-5 vdc	
Pressure range	0 - 15 psig	0 - 50 psig	0 - 100 psig	

¹ Standard Configurations have a slight constant bleed to atmosphere to accurately control pressure and are typically used to pressurize closed volumes of

Alternate Configuration are typically selected for gas flow applications and do not have an internal bleed.

² Control starts at approximately 10% of full scale control voltage and pressure rating allowing for positive shuttoff. Pressure control may not be possible below 10% of full scale rating.



NOTE: Please consult Parker Precision Fluidics for other considerations. For more detailed information, visit us on the Web, or call and refer to Performance Spec. #790-002247-001 and Drawing #890-003182-001.

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