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ISO 9001 CERTIFIED



P/N 313339 B Date: 09-17 ECO: 0218065

ENGLISH

Parker Electronic Valve (PEV) Actuator Installation Information

Operation

Prior to installing the P-Series Electronic Valve (PEV) the included safety bulletins must be read and understood.

Liquid Tempera	ture Range
-60°C to 120°C	(-76°F to 248°F)

Ambient Temperature Range -40°C to 50°C (-40°F to 122°F)

Power Supply Voltage

Figure 1: Components

4 - Hex Wrench (2 mm)

6 - Power/Communications Cable

inch

2

1

Figure 3: Minimum Clearance

5 - Lubricant, O-Ring

24 Vdc @ 1.3 Amp

1 - PEV Actuator

2 - Set Screw (Qtv 4)

3 - O-ring Actuator

IP Rating IP67 / NEMA 6

Input Signal

4 - 20 mA

Figure 4: Electrical Connections A - Backup Module Connector

- (M12 4 Pin) B - Power/Communications Connector (M12 - 8 Pin)
 - Figure 5: Controller 1 - Digital Display 2 - Enter 3 - Down 4 - Up

L

Dimension

н

Installation

All personnel working on valves must be qualified to work on refrigeration systems. If there are any questions contact Refrigerating Specialties before proceeding with the work.

mm

50

25

Actuators are packed for maximum protection. Unpack carefully. Check the carton to make sure all items are unpacked, see Figure 1 for the list of items included.

Do not remove the protective coverings from the bottom of the electronic controller until it is ready to be installed.

The actuator should be installed in a location where it is easily accessible for adjustment and maintenance, see Figure 3 for clearance information. The location should be such that the controller cannot be easily damaged by material handing equipment.

Prior to installing the PEV actuator to the valve body check if the valve body is mounted in the upright horizontal position, as shown in Figure 2. The valve body must be installed with the arrow pointing in the direction of flow for the valve to function properly.

The first step in attaching the PEV actuator to the valve is to lubricate the actuator o-ring with silicone grease, as shown in Figure 2. Before attaching the actuator to the valve body check to see that the set screws are not going to cause any interference. If the set screws are protruding into the bore use the hex wrench to back out the set screws. Now slide the actuator onto the valve and press down until the flat surface the actuator touches the valve. Once the actuator is in position use the hex wrench to tighten the set screws.

Wiring

At a minimum the PEV actuator will have to be connected to a 24 Vdc power supply (pins 1 & 8) and be provided with a 4-20 mA control signal (pins 5 & 6).

Pin	Color	Description
1	Brown	24 Vdc(+)
2	Red	Backup power in (+)
3	Orange	Alarm output
4	Yellow	4-20 mA output (+)
5	Green	4-20 mA input (-)
6	Blue	4-20 mA input (+)
7	Purple	4-20 mA output (-)
8	Gray	Ground



Parameter List

- 01. PEV Configuration
- 02 Mode
- 03. Direction
- 04. Speed
- 05. Quick Manual Mode Input
- 06. Forced Calibration
- 07. Failsafe
- % Open During Failsafe 08
- 09. Failsafe Module Available
- Password 13.
- 21. Alarm History
- 22. Alarm Count 23.
- Analog Input 24.
- Software Version

See bulletin 24-00 for information on the PEV valve.

A01 No Valve Size Selected A02 Failsafe Charging

Alarm List

- A03 4 - 20 mA Input Error
- A04 Power Supply Failure