



Specification Sheet

E-7 Electronic Two-Stage Preset Valve

**LIQUID
CONTROLS**
A Unit of IDEX Corporation



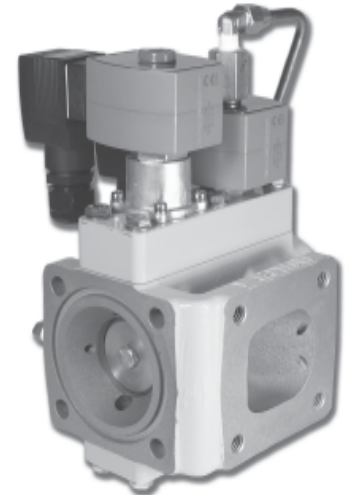
The Liquid Controls E-7 Electronic, Two-Stage, Preset Valve is designed for refined fuel applications including gasoline, gasohol, diesel fuel, and fuel oil. The valve is available as part of a complete, new metering system with electronic registration or as a retrofit when upgrading from mechanical to electronic registration. The E-7 valve may be used with M5, M7, and M10 Class 1 meters.

Features of the E-7 Valve include:

- Indexible design for 90° rotational adjustment of valve outlet.
- Interchangeability (same mounting dimensions) with the V-7 and K-7 mechanical valves.
- Two-stage operation for preset deliveries.
- Fast response for quick valve shut-off.

The E-7 Series electronically-actuated piston valve is mounted on the meter outlet and provides a compact installation. The valve is operated by two solenoids. These solenoids control two-stage closure with a dwell period to eliminate hydraulic shock.

The valve solenoids are wired to a Liquid Controls LectroCount Electronic Register and are controlled by the register software. During a delivery, the valve opens to allow full flow through the meter. For preset deliveries, the full flow solenoid de-energizes at the point where dwell flow is activated. This reduces the flow rate through the meter. Once the delivery preset volume is reached, the valve fully closes without hydraulic shock to the system.



Technical Specifications

Environmental Rating

NEMA 4X

Safety

Designed to meet Class I, Division 2 requirements

Materials of Construction

Valve Body: Aluminum

Elastomers: Viton O-Rings, Teflon Seal, Acetal Wear Rings

Pilot Control System

Solenoids, Tubing and Fittings: Brass solenoids and fittings with flared copper tubing

Temperature Rating

-40° to 160°F (-40° to 71°C)

Pressure Rating

Maximum non-shock working pressure

- 150 PSI (10.3 BAR)

Maximum differential pressure

- 100 PSI (6.9 BAR)

Maximum Nominal Flow

150 GPM (568 L/min) for 30 SSU products

Viscosity Range

30 to 100 SSU

Products

Class 1: refined fuels (gasoline, gasohol, diesel fuel, and fuel oil)

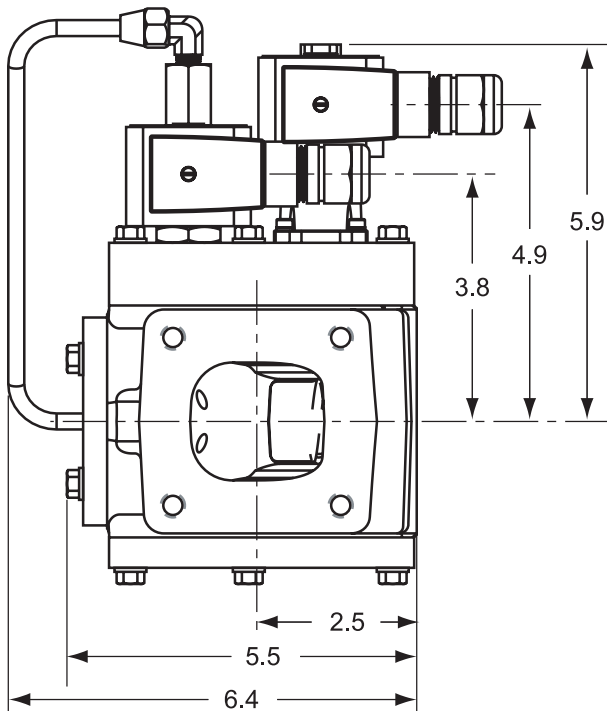
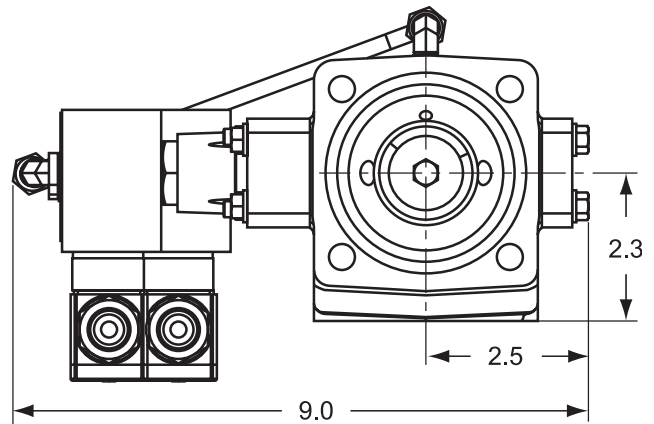
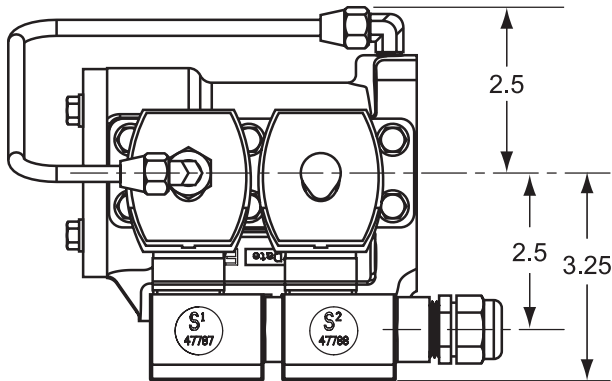
Solenoids

Voltage: +10.2 to 13.6 VDC

(Optional Voltage: +20.4 to 27.2 VDC)

Current: S1: 1 Amp, S2: 2 Amps maximum

Dimensional Drawing



NOTE: Dimensions shown are not for construction use.
Consult factory when certified Engineering Drawings are required.



LIQUID CONTROLS

A Unit of IDEX Corporation
105 Albrecht Drive
Lake Bluff, IL 60044-2242
1.800.458.5262 • 847.295.1050
Fax: 847.295.1057
www.lcmeter.com

© 2004 Liquid Controls
Pub. No. 500330
(12/04)

