

V70900-99

3-Way, Pilot-Assist, Compact Size Solenoid

Valcor Nuclear - High Flow Air Pilot Valve



DESCRIPTION

Valcor Nuclear has created this compact size and low weight 3-way, internally piloted, nuclear-qualified solenoid valve, to be used primarily as a pilot operator on large control valves in nuclear power plants. It has been designed specifically to prevent the chronic operational problems, associated with conventional solenoid valves currently installed in many PWR, BWR and CANDU plants. V70900-99 is ideal for use in host of safety-related, high flow solenoid valve applications. Its single coil design is both highly reliable and adaptable. Its versatility offers improvements for a variety of applications and configurations, including 2-way (one port plugged), normally closed, with AC or DC voltages. 10 psi minimum operating pressure differential is required, however, the valve vents to 0 psi.

APPLICATION

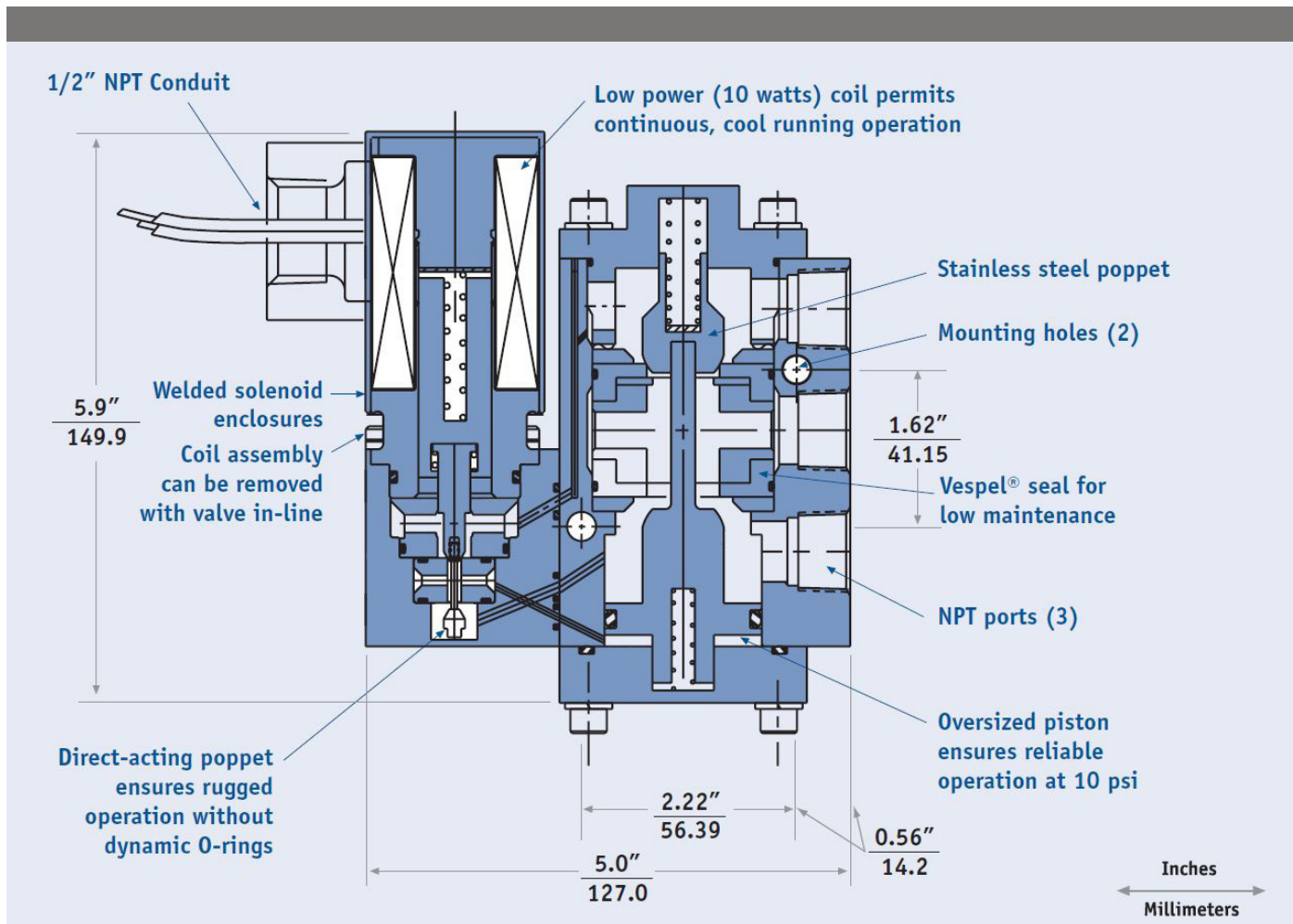
The principal function is pressurizing and venting pneumatic diaphragm actuator air cylinders under extremely harsh environmental conditions, including chemical spray. This is suitable for control rod drive (CDR) applications in certain boiling water reactors (BWR) plants currently using single coil solenoid valves. These valves may also be used on compressors and turbines.

FEATURES

- Compact size, low weight and rugged construction are special characteristics; can replace outdated valves in most cases
- Optional configurations available using mounting brackets and side-faced port connections
- Internal flow path sealing by stainless steel poppets on Vespel or Arlon 1000 polyimide seats.
- Available in aluminum, forged brass or stainless steel body material
- Solenoid enclosure is all stainless steel, seal welded construction for NEMA-4,-7 compliance (Water tight and explosion proof)
- Class H Insulation
- Coil requires less than 10 watts of power; cool running/potted coil design.
- Can be mounted in any position
- Virtually maintenance-free. Coil replacement in the field can be made without disturbing in-line piping.



SOLENOID VALVE SERIES 70900-99



Specifications

Operating Pressure and Flow Ratings

Operating Modes Normally Open/Closed	Operating Pressure (PSIG)	Ambient Temp.	Min. Volts DC	Cv
NO and NC	10-150	150°F	48	1.2 to 45

Electrical Data

Voltage	48 VDC, 120 VAC, 125 VDC
Electrical Connector	36" leads