



Moderate Flow Air Pilot Valve

3-Way, Direct-Acting, Compact Size Solenoid
Model V70900-65



DESCRIPTION

Valcor Nuclear has created this compact size and low weight 3-way, direct-acting, balanced poppet, nuclear-qualified solenoid valve, to be used as pilot operators on control valves in nuclear power plants.

It has been designed specifically to prevent the chronic operational problems, associated with the conventional solenoid valves currently installed in many PWR, BWR and CANDU plants.

Valcor Model V70900-65 is ideal for use in a host of safety-related, moderate flow solenoid valve applications. The principal function is pressurizing and venting pneumatic diaphragm actuators, air cylinders under extremely harsh environmental conditions.

These valves may also be used on compressors and turbines.

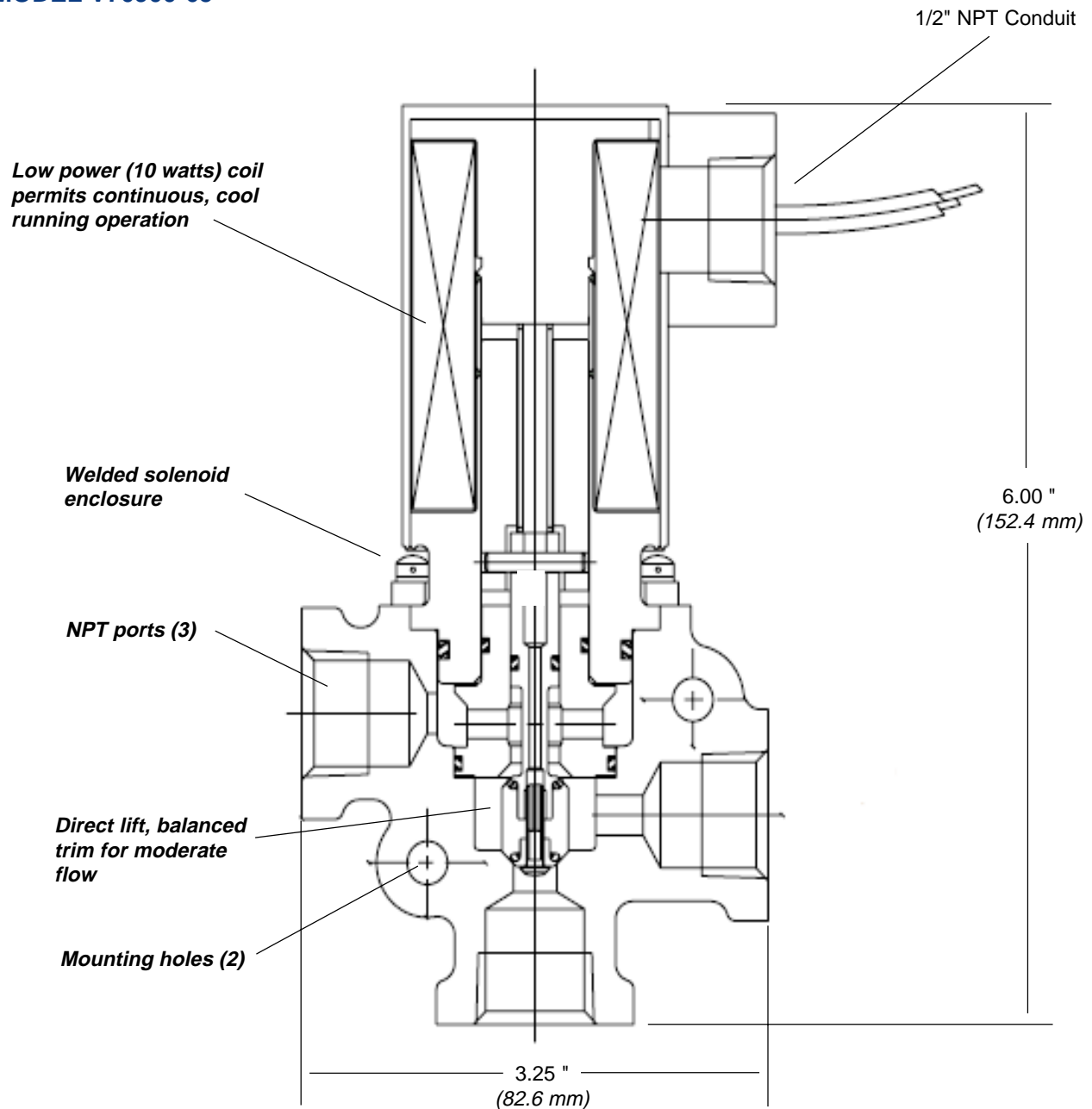
Its cool running single coil design is both highly reliable and adaptable. Its versatility offers significant im-

provements for a variety of applications and configurations, including 2-way (*one port plugged*), normally closed, normally open and universal modes, with AC or DC voltages. No minimum operating pressure differential is required in any mode.

THE V70900-65 INCORPORATES THESE OUTSTANDING FEATURES

- Compact size, low weight and rugged construction are special characteristics; can replace outdated valves in most cases
- 3/8" NPT is standard; also available in 1/8", 1/4" and 1/2" line size
- Direct-acting, balanced poppet, *with no diaphragms*
- Universal operation - normally open, normally closed, selector or diverter modes feasible with same design
- Internal flow path sealing by O-ring poppets on metal seats
- Brass is standard; also available in aluminium or stainless steel
- Mounting brackets available as an option
- 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 power; cool running/potted design
- Powered with 48 VDC; 120 VAC/125 VDC, or other voltage options also available
- Can be mounted in any attitude
- Maintenance-free. Coil replacement in the field can be made without disturbing in-line piping
- Designed for continuous duty up to 150°F (66°C) ambient
- Qualified life - 40 years for coil & 10 years for O-rings

**OUTLINE DIMENSIONS
MODEL V70900-65**



TYPICAL SPECIFICATIONS

Fluid: Air/Inert Gas
 Size: 3/8" NPT
 Operating Pressure: 0-150 psig (10.3 bar)
 Operating Temperature: 150°F (66°C)
 Flow, C_v: >0.2 up to 1.2
 Leakage, per MSS-SP-61: 25 sccm @ 150 psig (10.3 bar)
 (Bubble tight at factory)
 Voltage: 98-136 VAC/90-140 VDC/48VDC
 Power 10 Watts
 Response Time: 30 m-sec
 Weight: 4.5lb (2.0kg) for brass



Valcor Nuclear

Valcor Engineering Corporation®
 2 Lawrence Road • Springfield, New Jersey 07081
 973-467-8400 • Fax: 973-467-8382
 E-mail: nuclear@valcor.com • http://www.valcor.com