



# 2-Way Normally Closed Low Temperature Gas Shutoff Valve With Proof of Closure

Stainless Steel Body • 1" NPT

**2/2**  
**SERIES**  
HV434696  
(DC Peak & Hold)  
HV434562 (AC)

## Features

- Proof-of-Closure Switch - Class I, Div. 1 enclosure
- Ambient temperature range; -40°F to 125°F (-40°C to 52°C)
- Low power DC Peak & Hold constructions reduce energy consumption to 0.85 watt (Hold)
- Zero minimum pressure differential
- Maximum operating pressure differential up to 50 psi
- Resilient soft seating for tight shutoff
- Complies with ANSI/ISA-12.27.01.2003 single seal requirements
- Meets the metallurgical requirements of NACE MR0175-2003 (DC only)
- For on-off or gas pilot control of commercial and industrial gas burners

**Fluid:** Fuel Gas

## Construction

Valve Parts in Contact with Fluids	
Body	304 Stainless Steel
Seals and Disc	Low Temp. NBR
Diaphragm	
Core Tube	305 Stainless Steel
Rider Ring	PTFE
Core and Plugnut	430F Stainless Steel
Springs	Stainless Steel (AC), Inconel (DC)

## Electrical

DC Peak & Hold					
Standard Coil and Class of Insulation	Watt Rating and Power Consumption		Hold PWM Duty Cycle (@ 500-2000 Hz)	Spare Coil Number	Nominal Ambient Temp. °F (°C)
	Peak Watts	Hold Watts	Min.	Explosionproof	
F	23.6	0.85 ①	19%	501696	-40 to 125 (-40 to 52)

**Standard Voltages:** 12, 24VDC

① Peak and hold design requires full line voltage for 0.2 to 0.5 seconds to open valve; then refer to the specified Hold PWM Duty Cycle in the above table.

*External PWM controller required; Consult factory for additional information.*

**IMPORTANT:** Supervisory and leakage current above .010 amp will cause improper operation. Consult your local ASCO sales office for additional assistance.

AC					
Standard Coil and Class of Insulation	Watt Rating and Power Consumption			Spare Coil Number	Nominal Ambient Temp. °F (°C)
	Watts	VA Holding	VA Inrush	Explosionproof	
F	16.1	35	180	272614	-40 to 125 (-40 to 52)

**Standard Voltages:** 24, 120, 240 Volts AC, 60Hz (or 110, 220, 230 volts AC, 50 Hz)

## Solenoid Enclosures

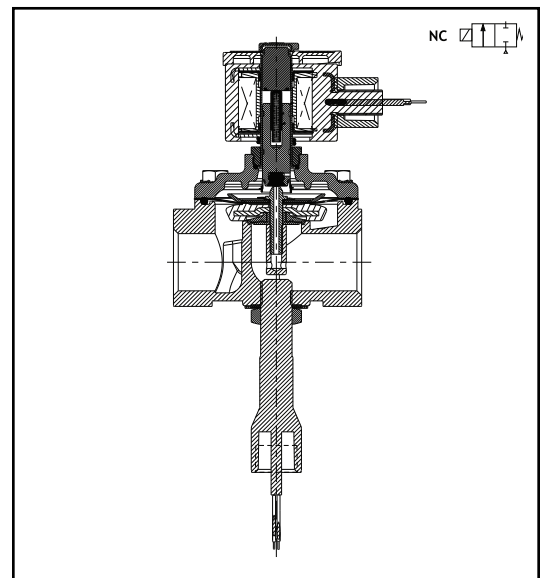
Explosionproof and Watertight Types 3, 3S, 4, 4X, 6, 6P, 7, and 9

## Leads

Standard 72" for coil & POC switch

## Valve Response Time

**Opening Time:** Less than 1 second; **Closing Time:** Less than 1 second



## Approvals

CSA Certified

- 1) Valves for Hazardous Locations, File 013976
- 2) Automatic Gas Valves Z21.21 CSA 6.5 C/I Safety Shutoff, File 112872
- 3) Standard C22.2 No. 139 "Electrically Operated Valves, File 112872
- 4) ANSI/ISA- 12.27.01- 2003 Single Seal requirements  
*Consult factory for Canadian Registration Numbers (CRN)*

## Proof of Closure Switch

Switch is factory set and non-adjustable

Type: Hermetically Sealed SPDT

Electrical Load: 2 amp at 120/60 / 1 amp at 24 VDC

Enclosure: 303 Stainless Steel, Class I, Div. 1

COMBUSTION

### Specifications

Pipe Size (in)	Orifice Size (in)	Cv Flow	Gas Capacity		Operating Pressure Differential (psi) ③		Fluid Temp. Range °F (°C) ④	Catalog Number	Voltage		Const. Ref.	Agency CSA	Wattage
			Btu/hr. ①	Btu/hr. ②	Min.	Max.			DC	AC			
<b>COMBUSTION (Fuel Gas) - Normally Closed (Closed when de-energized)</b>													
1	1	10.2	544,000	6,509,000	0	50	-40 to 125 (-40 to 52)	HV434696011	12 VDC	-	1	○	23.6
						35		HV434696012	24 VDC	-			
								HV434562001	-	24/60	2	○	
								HV434562002	-	120/60			
								HV434562004	-	240/60			
								HV434562003	-	110/50			
HV434562005	-	220/50											
HV434562006	-	230/50											

○ = Safety Shutoff Valve.

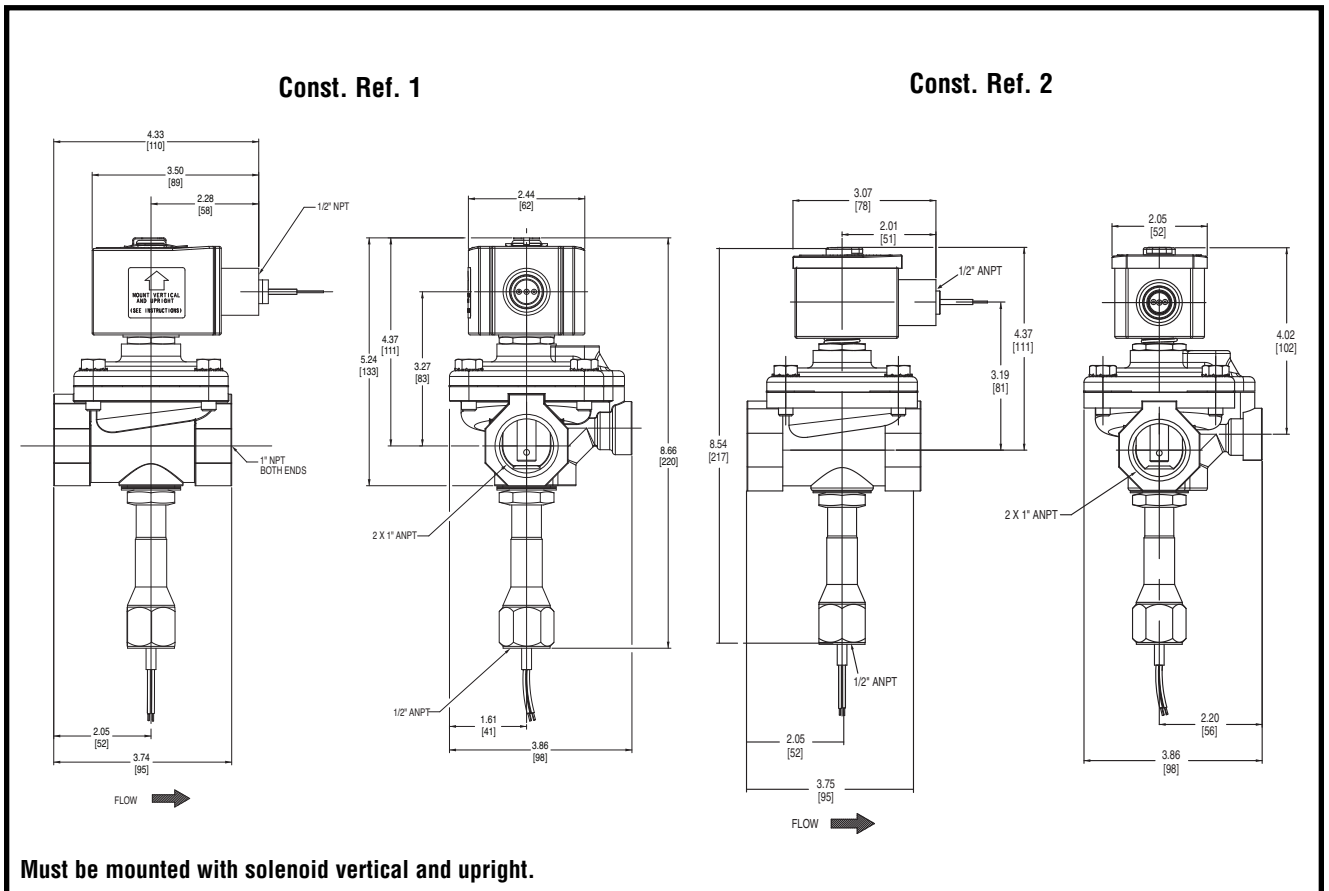
① 1" W.C. Drop at 2" W.C. Inlet Pressure, 1,000 Btu/Cu.ft. or more, 0.64 Specific Gravity Gas

② Per CSA 6.5 at 25% Inlet Pressure / 10% pressure drop

③ Dewpoint - To prevent freezing of condensed water vapor in the valve, the fuel gas must have a dewpoint of at least 18°F (10°C) below the minimum temperature to which any point of the system will be exposed.

④ Safe Working Pressure (SWP): 100 psi, is the line or system pressure to which the valve may be subjected without being damaged. To ensure proper operation, the Maximum Operating Pressure Differential (MOPD) stamped on the nameplate must be adhered to.

### Dimensions: Inches (mm)



**Must be mounted with solenoid vertical and upright.**