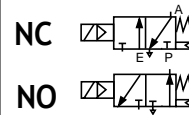




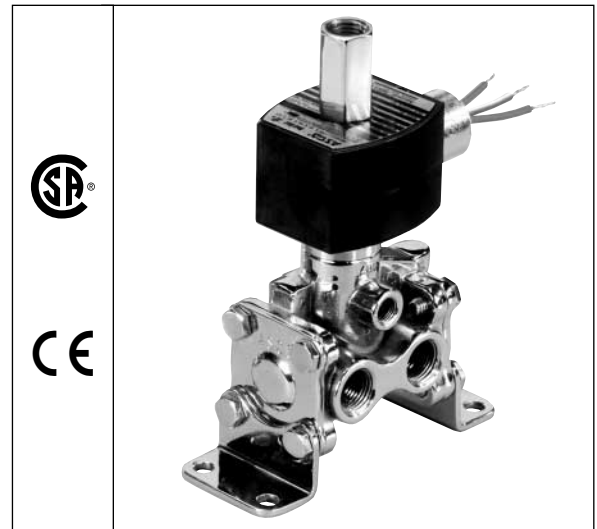
Air Piloted • Spring Return • Shutdown System
Zero Minimum Solenoid Valves
 Brass or Stainless Steel Bodies
 Air and Inert Gas • 1/4" to 1/2" NPT



3/2
 SERIES
8316

Features

- Brass body construction for general atmospheres; Stainless Steel for corrosive atmospheres.
- Can be internally piloted, or externally piloted to convert valve to zero minimum operation by flipping a gasket.
- When externally piloted, loss of electrical power or auxiliary air exhausts air from the actuator and shifts process valve to its original position.
- When internally piloted, loss of electric power returns the valve to its original position.
- Also available with Low Power or Intrinsically Safe solenoids. *See Special Service Valve Section.*



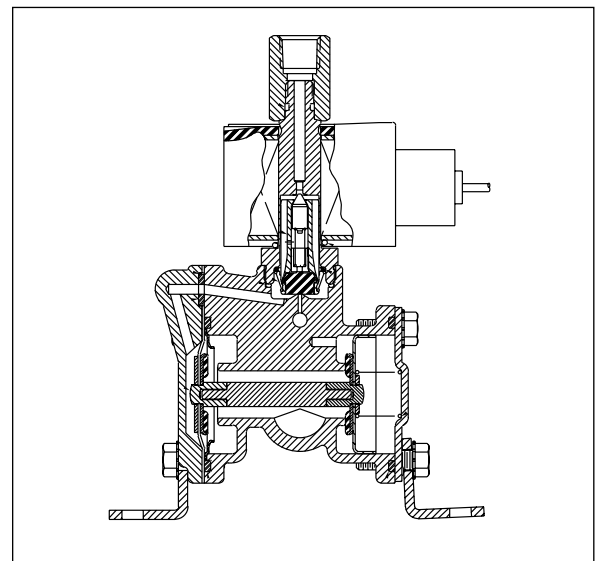
Construction

Valve Parts in Contact with Fluids		
Body	Brass	316 Stainless Steel
End Plate	304 Stainless Steel	316 Stainless Steel
Seals and Discs	Low Temp Buna NBR	FKM (Suffix V)
Core Tube	305 Stainless Steel	
Core Guide	CA	
Shading Coil	Copper	Silver

Electrical

Standard Coil and Class of Insulation	Watt Rating and Power Consumption				Spare Coil Part No.					
	DC Watts	Watts	AC		General Purpose		Explosionproof (EF)		Explosionproof (EV)	
			VA Holding	VA Inrush	AC	DC	AC	DC	AC	DC
F	11.6	10.1	25	50	238610	238710	238614	238714	274614	274714

Standard Voltages: 24, 120, 240, 480 volts AC, 60 Hz (or 110, 220 volts, AC, 50 Hz).
 6, 12, 24, 120, 240 volts DC. Must be specified when ordering. Other voltages are available when required.



Nominal Ambient Temperature Ranges:
 Standard Construction: AC: -4°F to 125°F (-20°C to 52°C)
 DC: -4°F to 104°F (-20°C to 40°C)
 -40°F on certain models (consult factory)

Suffix V Construction: AC: 32°F to 125°F (0°C to 52°C)
 DC: 32°F to 104°F (0°C to 40°C)

Approvals:

Valves with prefix "EF" or "EV"; UL approved and CSA certified solenoid. Meets applicable CE directives.

Installation:

All valves may be mounted in any position. 316 Stainless Steel mounting brackets available from ASCO. Add suffix "MB".

Solenoid Enclosures

<p>Brass Body Valves: Standard: Watertight, Types 1, 2, 3, 3S, 4, and 4X. Optional: Explosionproof and Watertight, Types 3, 3S, 4, 4X, 6, 6P, 7, and 9. (Add prefix "EF" to catalog number.)</p> <p>Stainless Steel Valves: Standard: Explosionproof and Watertight, Types 3, 3S, 4, 4X, 6, 6P, 7, and 9. <i>See Optional Features Section for other available options.</i></p>
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Specifications (English units)

Pipe Size (ins.)	Orifice Size (ins.)	Cv Flow Factor	Min.	Max. Air Press. (psi)		Catalog Number		Constr. Ref. No.	Max. Fluid Temp. °F		Watt Rating/Class of Coil Insulation	
				AC	DC	Brass	Stainless Steel		AC	DC	AC	DC
NORMALLY CLOSED (Closed when de-energized) ①												
1/4	5/16	1.5	②	150	120	8316G1	EV8316G81V	1	180	120	10.1/F	11.6/F
3/8	5/16	1.8	②	150	120	8316G2	EV8316G82V	1	180	120	10.1/F	11.6/F
3/8	5/8	4	②	150	120	8316G3	-	3	180	120	10.1/F	11.6/F
1/2	5/8	4	②	150	120	8316G4	EV8316G84V	3	180	120	10.1/F	11.6/F

Notes: ① Consult factory for Normally Open and other forms of flow.
 ② Zero minimum when valve selection gasket is in external position and proper auxiliary air pressure is applied. See graph below for pilot line pressure vs. mainline pressure. Minimum 15 psi (1 bar) operating pressure differential when selection gasket is in the internal position.

IMPORTANT: Internal mode Minimum Operating Pressure Differential must be maintained between the pressure and exhaust ports. Supply and exhaust piping must be full area and unrestricted. ASCO flow controls and similar components must be installed in the cylinder lines only.

Specifications (Metric units)

Pipe Size (ins.)	Orifice Size (mm)	Kv Flow Factor (m3/h)	Min.	Max. Air Press. (bar)		Catalog Number		Constr. Ref. No.	Max. Fluid Temp. °C		Watt Rating/Class of Coil Insulation	
				AC	DC	Brass	Stainless Steel		AC	DC	AC	DC
NORMALLY CLOSED (Closed when de-energized)*												
1/4	8	1.29	②	10	8	8316G1	EV8316G81V	1	81.4	48.4	10.1/F	11.6/F
3/8	8	1.54	②	10	8	8316G2	EV8316G82V	1	81.4	48.4	10.1/F	11.6/F
3/8	16	3.43	②	10	8	8316G3	-	3	81.4	48.4	10.1/F	11.6/F
1/2	16	3.43	②	10	8	8316G4	EV8316G84V	3	81.4	48.4	10.1/F	11.6/F

Dimensions: inches (mm)

Constr. Refs. 1

Constr. Refs. 3

INTERNAL PILOTING MODE FLOW DIAGRAMS

De-Energized	Energized

EXTERNAL PILOTING MODE FLOW DIAGRAMS

De-Energized with Auxiliary Pressure Applied	Energized with Auxiliary Pressure Applied