

Features

- Designed for quick venting to 0 psi through the exhaust orifice
- Resilient seated poppets for tight shutoff
- Air is exhausted to quickly shift control valves
- Multi-industry applications
- Mountable in any position

Construction

Valve Parts in Contact with Fluids		
Body	Brass	304 Stainless Steel
Seals and Disc	NBR (PA upper disc for 8317 Series)	
Diaphragm	CR (8317 Series only)	
Core Tube	305 Stainless Steel	
Core and Plugnut	430F Stainless Steel	
Core Springs	302 Stainless Steel and 17-7 PH Stainless Steel	
Shading Coil	Copper	Silver
Pilot Seat Cartridge and Disc-Holder	CA (8321 Series only)	
Piston	Brass and 303 Stainless Steel (8321 only)	

Electrical

Standard Coil and Class of Insulation	Watt Rating and Power Consumption				Spare Coil Part Number			
	DC Watts	AC			General Purpose		Explosionproof	
		Watts	VA Holding	VA Inrush	AC	DC	AC	DC
F	10.6	6.1	16	30	238210	238310	238214	238314
F	11.6	10.1	25	50	238610	238710	238614	238714

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 available when required.

Solenoid Enclosures

Standard: Watertight, Types 1, 2, 3, 3S, 4, and 4X.

Optional: Explosionproof and Watertight, Types 3, 3S, 4, 4X, 6, 6P, 7, and 9.
(To order, add prefix "EF" to the catalog number.)

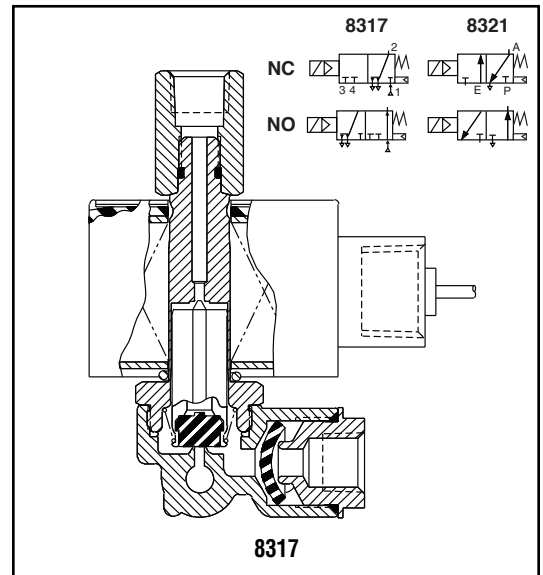
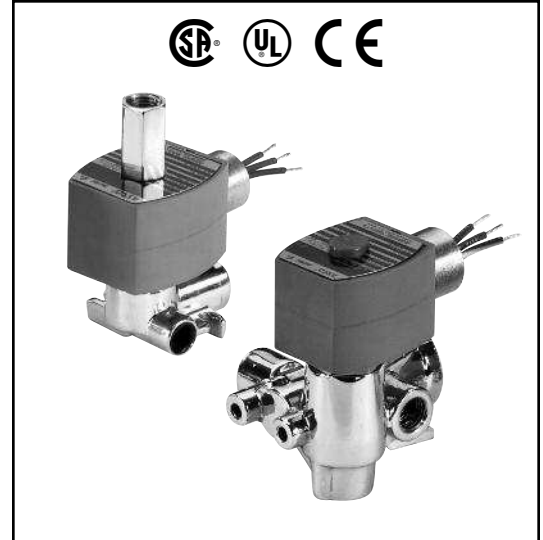
See *Optional Features Section* for other available options.

Nominal Ambient Temp. Ranges

AC: 32°F to 125°F (0°C to 52°C)

DC: 32°F to 104°F (0°C to 40°C)

Refer to *Engineering Section* for details.



Approvals

CSA certified. UL listed General Purpose Valves.
Meets applicable CE directives.

Refer to *Engineering Section* for details.

ATEX/IECEx certified with prefix "EV" as listed.

Refer to *Optional Features Electrical Section* for details.

Important

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

**3/2
SERIES
8317
8321**



**THORNE &
DERRICK
INTERNATIONAL**

Thorne & Derrick
+44 (0) 191 490 1547
www.heatingandprocess.com

ASCO®

3-WAY

Specifications (English units)

Pipe Size (in)	Orifice Size (in)		Cv Flow Factor		Operating Pressure Differential (psi)							Max. Fluid Temp. °F		Brass Body		Stainless Steel Body		Watt Rating/ Class of Coil Insulation ③	
						Max. AC			Max. DC										
	Press.	Exh.	Press.	Exh.	Min. ①	Air-Inert Gas	Water	Lt. Oil ① @45 SSU	Air-Inert Gas	Water	Lt. Oil ① @45 SSU	AC	DC	Catalog Number	Const. Ref.	Catalog Number	Const. Ref.	AC	DC
NORMALLY CLOSED (Pressure at Port 2) / NORMALLY OPEN (Pressure at Port 3)																			
1/4	3/32	1/4	.20	.73	5 ②	80	50	50	40	30	15	180	104	8317G007	2	8317G008	4	10.1/F	11.6/F
NORMALLY CLOSED (Closed when de-energized)																			
1/4	3/32	1/4	.20	.73	5 ②	150	150	95	75	55	30	180	104	8317G035	2	8317G036 ④	4	10.1/F	11.6/F
1/4	9/32	11/32	.80	1.2	10	200	200	200	200	200	200	180	120	8321G001	3	-	-	6.1/F	10.6/F
3/8	9/32	11/32	.80	1.2	10	200	200	200	200	200	200	180	120	8321G002	3	-	-	6.1/F	10.6/F
NORMALLY CLOSED (Closed when de-energized), Air Only - Vents to Atmosphere																			
1/4	3/32	1/4	.20	.73	5	150	-	-	-	-	-	180	-	8317G023	1	8317G024 ④	5	10.1/F	-
NORMALLY OPEN (Open when de-energized)																			
1/4	3/32	1/4	.15	.73	5 ②	160	160	95	75	45	25	180	104	8317G053	2	8317G054	4	10.1/F	11.6/F
1/4	9/32	11/32	.80	1.2	10	200	200	200	200	200	200	180	120	8321G003	3	-	-	6.1/F	10.6/F
3/8	9/32	11/32	.80	1.2	10	200	200	200	200	200	200	180	120	8321G004	3	-	-	6.1/F	10.6/F
① Rating for 8321 valves established with 300 SSU light oil. ② Minimum Operating Pressure Differential on light oil is 10 psi. ③ On 50 hertz service, the watt rating for the 6.1/F solenoid is 8.1 watts. ④ ATEX/IECEx certified with prefix "EV".																			

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Specifications (Metric units)

Pipe Size (in)	Orifice Size (mm)		Kv Flow Factor (m³/h)		Operating Pressure Differential (bar)							Max. Fluid Temp. °C		Brass Body		Stainless Steel Body		Watt Rating/ Class of Coil Insulation ③	
					Max. AC			Max. DC						Catalog Number	Const. Ref.	Catalog Number	Const. Ref.		
	Press.	Exh.	Press.	Exh.	Min. ①	Air-Inert Gas	Water	Lt. Oil ① @45 SSU	Air-Inert Gas	Water	Lt. Oil ① @45 SSU	AC	DC						
NORMALLY CLOSED (Pressure at Port 2) / NORMALLY OPEN (Pressure at Port 3)																			
1/4	2	6	.17	.63	.3 ②	6	3	3	2.7	2	1	82	40	8317G007	2	8317G008	4	10.1/F	11.6/F
NORMALLY CLOSED (Closed when de-energized)																			
1/4	2	6	.17	.63	.3 ②	10	10	7	5	4	2	82	40	8317G035	2	8317G036 ④	4	10.1/F	11.6/F
1/4	7	9	.69	1.0	.7	14	14	14	14	14	14	82	49	8321G001	3	-	-	6.1/F	10.6/F
3/8	7	9	.69	1.0	.7	14	14	14	14	14	14	82	49	8321G002	3	-	-	6.1/F	10.6/F
NORMALLY CLOSED (Closed when de-energized), Air Only - Vents to Atmosphere																			
1/4	2	6	.17	.63	.3	10	-	-	-	-	-	82	-	8317G023	1	8317G024 ④	5	10.1/F	-
NORMALLY OPEN (Open when de-energized)																			
1/4	2	6	.13	.63	.3 ②	11	11	7	5	3	2	82	40	8317G053	2	8317G054	4	10.1/F	11.6/F
1/4	7	9	.69	1.0	.7	14	14	14	14	14	14	82	49	8321G003	3	-	-	6.1/F	10.6/F
3/8	7	9	.69	1.0	.7	14	14	14	14	14	14	82	49	8321G004	3	-	-	6.1/F	10.6/F
① Rating for 8321 valves established with 300 SSU light oil. ② Minimum Operating Pressure Differential on light oil is .7 bar. ③ On 50 hertz service, the watt rating for the 6.1/F solenoid is 8.1 watts. ④ ATEX/IECEx certified with prefix "EV".																			

① Rating for 8321 valves established with 300 SSU light oil. ② Minimum Operating Pressure Differential on light oil is .7 bar.

③ On 50 hertz service, the watt rating for the 6.1/F solenoid is 8.1 watts. ④ ATEX/IECEx certified with prefix "EV".



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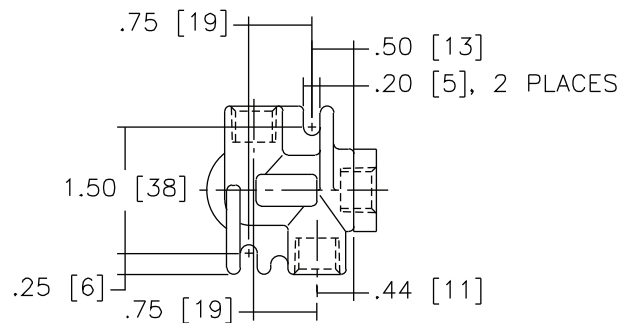
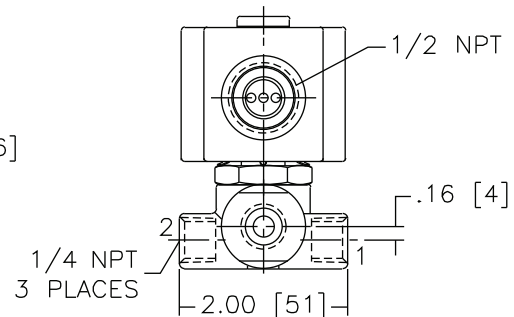
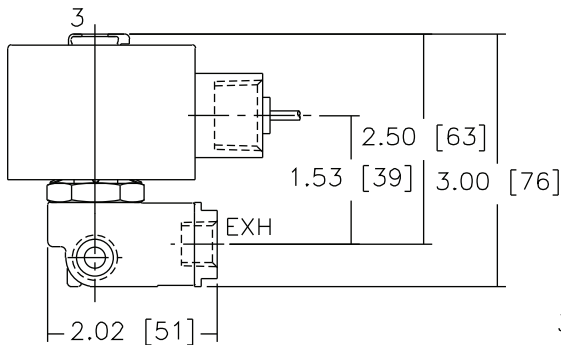
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Dimensions: inches (mm)

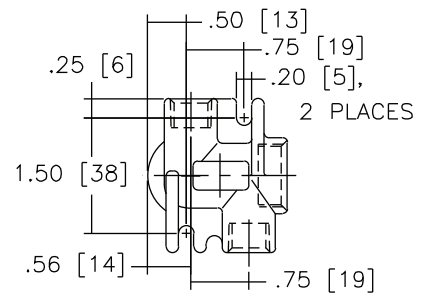
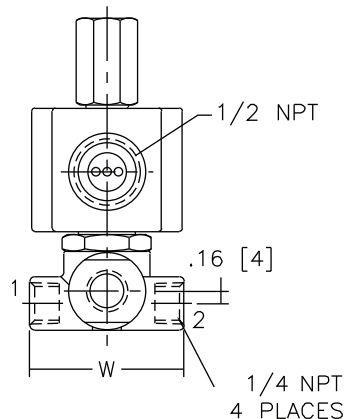
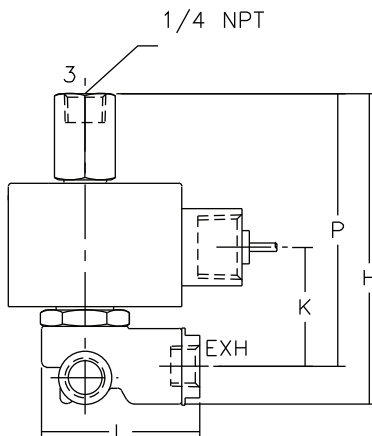
3-WAY

Const. Ref.		H	K	L	P	W
2	in	4.04	1.55	2.05	3.54	2.00
	mm	103	39	52	90	51
4	in	4.02	1.53	2.02	3.52	2.00
	mm	102	39	51	89	51

Const. Ref. 1, 5



Const. Ref. 2, 4



Dimensions: inches (mm)

Const. Ref. 3

