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TECHNOLOGY GROUP

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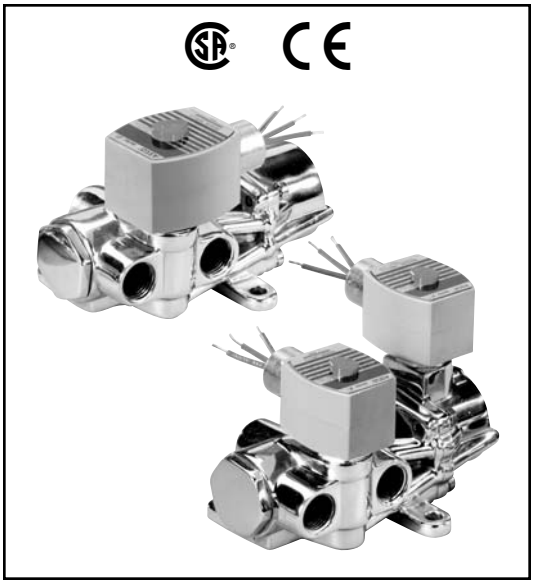
**Expert team | Trust guarantee | 100% satisfaction**

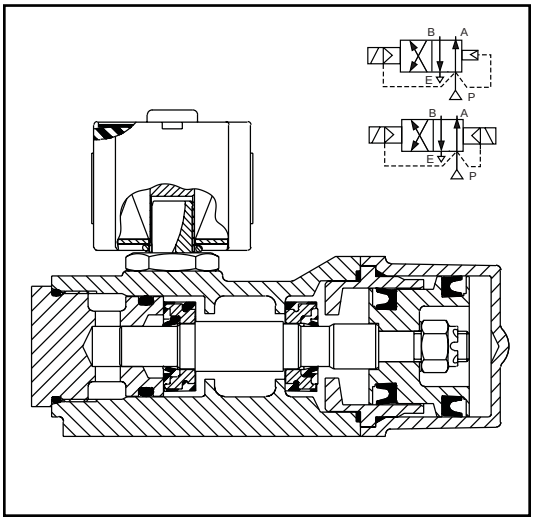
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Find the *Emerson / Asco EF8344G082* at our website: *Click HERE*

## Features

- Sturdy, robust construction
- Piston-operated poppet design provides high flow
- For use with air or water
- Wide range of sizes and flow rates
- Single or dual solenoid constructions
- Dual solenoid can be shifted with a momentary signal and remain in position even if electrical power is lost
- Mountable in any position






## Construction

| Valve Parts in Contact with Fluids | |
|---|---|
| **Body** | Brass |
| **Seals and Disc** | NBR |
| **Core Tube** | 305 Stainless Steel |
| **Core and Plugnut** | 430F Stainless Steel |
| **Springs** | 302 Stainless Steel / 17-7PH Stainless Steel |
| **Shading Coil** | Copper |
| **Pilot Seat Cartridge and Disc-Holder** | CA |
| **Shaft Gasket** | PA |

## Electrical

| Standard Coil and Class of Insulation | Watt Rating and Power Consumption | | | | Spare Coil Part Number | | | |
|---|---|---|---|---|---|---|---|---|
| | | AC | | | General Purpose | | Explosionproof | |
| | DC Watts | 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 |
| F | 22.6 | 17.1 | 40 | 70 | 238610 | 238710 | 238614 | 238714 |

**Dual Solenoid Operation:** Minimum coil on-time for dual solenoid valves is 0.3 seconds on air service and 1.0 seconds on liquids.

**Caution:** Do not energize both solenoids simultaneously.
*Refer to Engineering Section for details.*

**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.

## 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. Meets applicable CE directives.

## 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.

• Loss of air pressure may allow valve to shift on dual solenoid constructions.

ASCO®



## Specifications (English units)

| Pipe Size (ins.) | Orifice Size (ins.) | Cv Flow Factor | | Operating Pressure Differential (psi) | | | | | | | Max. Fluid Temp. °F | | Brass Body | | Watt Rating/ Class of Coil Insulation | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | ① | Max. AC | | | Max. DC | | | | | | | | |
| | | Press. | Exh. | Min. | Air-Inert Gas | Water | Lt. Oil @ 300 SSU | Air-Inert Gas | Water | Lt. Oil @ 300 SSU | AC | DC | Catalog Number | Const. Ref. | AC | DC |
| **SINGLE SOLENOID** | | | | | | | | | | | | | | | | |
| 1/4 | 1/4 | .80 | 1.0 | 10 | 150 | 125 | 125 | 125 | 125 | 125 | 180 | 150 | 8344G070 | 1 | 10.1/F | 11.6/F |
| 1/4 | 1/4 | .80 | 1.0 | 10 | 250 ② | 250 ② | 250 ② | 250 ② | 250 ② | 250 ② | 180 | 180 | 8344G000 | 1 | 17.1/F | 22.6/F |
| 3/8 | 3/8 | 1.4 | 2.2 | 10 | 150 | 125 | 125 | 125 | 125 | 125 | 180 | 150 | 8344G072 | 2 | 10.1/F | 11.6/F |
| 3/8 | 1/4 | .80 | 1.0 | 10 | 250 ② | 250 ② | 250 ② | 250 ② | 250 ② | 250 ② | 180 | 180 | 8344G001 | 1 | 17.1/F | 22.6/F |
| 1/2 | 3/8 | 1.4 | 2.2 | 10 | 150 | 125 | 125 | 125 | 125 | 125 | 180 | 150 | 8344G074 | 2 | 10.1/F | 11.6/F |
| 1/2 | 3/8 | 1.4 | 2.2 | 10 | 250 ② | 250 ② | 250 ② | 250 ② | 250 ② | 250 ② | 180 | 180 | 8344G027 | 2 | 17.1/F | 22.6/F |
| 3/4 | 3/4 | 5.2 | 5.6 | 10 | 150 | 125 | 125 | 125 | 125 | 125 | 180 | 150 | 8344G076 | 3 | 10.1/F | 11.6/F |
| 3/4 | 3/4 | 5.2 | 5.6 | 10 | 250 ② | 250 ② | 250 ② | 250 ② | 250 ② | 250 ② | 180 | 180 | 8344G029 | 3 | 17.1/F | 22.6/F |
| 1 | 3/4 | 5.2 | 5.6 | 10 | 150 | 125 | 125 | 125 | 125 | 125 | 180 | 150 | 8344G078 | 3 | 10.1/F | 11.6/F |
| 1 | 3/4 | 5.2 | 5.6 | 10 | 250 ② | 250 ② | 250 ② | 250 ② | 250 ② | 250 ② | 180 | 180 | 8344G031 | 3 | 17.1/F | 22.6/F |
| **DUAL SOLENOID ③** | | | | | | | | | | | | | | | | |
| 1/4 | 1/4 | .80 | 1.0 | 10 | 250 | 200 | 125 | 125 | 125 | 100 | 180 | 120 | 8344G044 | 4 | 6.1/F | 10.6/F |
| 3/8 | 3/8 | 1.4 | 2.2 | 10 | 250 | 200 | 125 | 125 | 125 | 100 | 180 | 120 | 8344G080 | 6 | 6.1/F | 10.6/F |
| 3/8 | 3/8 | 1.4 | 2.2 | 10 | 300 | 300 | 200 | - | - | - | 180 | - | 8344G050 | 7 | 10.1/F | - |
| 1/2 | 3/8 | 1.4 | 2.2 | 10 | 250 | 200 | 125 | 125 | 125 | 100 | 180 | 120 | 8344G082 | 6 | 6.1/F | 10.6/F |
| 3/4 | 3/4 | 5.2 | 5.6 | 10 | 300 | 300 | 200 | 125 | 125 | 100 | 180 | 120 | 8344G054 | 8 | 10.1/F | 10.6/F |
| 1 | 3/4 | 5.2 | 5.6 | 10 | 300 | 300 | 200 | 125 | 125 | 100 | 180 | 120 | 8344G056 | 8 | 10.1/F | 10.6/F |

① 25 psi (1.7 bar) minimum on light oil service. ② For best results, do not use valve rated 250 psi (17 bar) on mainline pressure of less than 125 psi (9 bar).
③ On 50 hertz service, the watt rating for the 6.1/F solenoid is 8.1 watts.

## Specifications (Metric units)

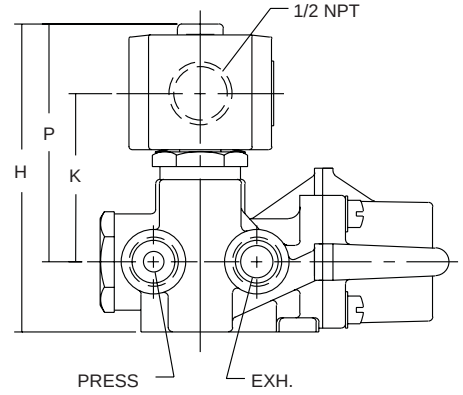
| Pipe Size (ins.) | Orifice Size (mm) | Kv Flow Factor (m3/h) | | Operating Pressure Differential (bar) | | | | | | | Max. Fluid Temp. °C | | Brass Body | | Watt Rating/ Class of Coil Insulation | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | ① | Max. AC | | | Max. DC | | | | | | | | |
| | | Press. | Exh. | Min. | Air-Inert Gas | Water | Lt. Oil @ 300 SSU | Air-Inert Gas | Water | Lt. Oil @ 300 SSU | AC | DC | Catalog Number | Const. Ref. | AC | DC |
| **SINGLE SOLENOID** | | | | | | | | | | | | | | | | |
| 1/4 | 6 | .69 | .86 | 0.7 | 10 | 9 | 9 | 9 | 9 | 9 | 82 | 65 | 8344G070 | 1 | 10.1/F | 11.6/F |
| 1/4 | 6 | .69 | .86 | 0.7 | 17 ② | 17 ② | 17 ② | 17 ② | 17 ② | 17 ② | 82 | 82 | 8344G000 | 1 | 17.1/F | 22.6/F |
| 3/8 | 10 | 1.2 | 1.89 | 0.7 | 10 | 9 | 9 | 9 | 9 | 9 | 82 | 65 | 8344G072 | 2 | 10.1/F | 11.6/F |
| 3/8 | 6 | .69 | .86 | 0.7 | 17 ② | 17 ② | 17 ② | 17 ② | 17 ② | 17 ② | 82 | 82 | 8344G001 | 1 | 17.1/F | 22.6/F |
| 1/2 | 10 | 1.2 | 1.89 | 0.7 | 10 | 9 | 9 | 9 | 9 | 9 | 82 | 65 | 8344G074 | 2 | 10.1/F | 11.6/F |
| 1/2 | 10 | 1.2 | 1.89 | 0.7 | 17 ② | 17 ② | 17 ② | 17 ② | 17 ② | 17 ② | 82 | 82 | 8344G027 | 2 | 17.1/F | 22.6/F |
| 3/4 | 19 | 4.5 | 4.80 | 0.7 | 10 | 9 | 9 | 9 | 9 | 9 | 82 | 65 | 8344G076 | 3 | 10.1/F | 11.6/F |
| 3/4 | 19 | 4.5 | 4.80 | 0.7 | 17 ② | 17 ② | 17 ② | 17 ② | 17 ② | 17 ② | 82 | 82 | 8344G029 | 3 | 17.1/F | 22.6/F |
| 1 | 19 | 4.5 | 4.80 | 0.7 | 10 | 9 | 9 | 9 | 9 | 9 | 82 | 65 | 8344G078 | 3 | 10.1/F | 11.6/F |
| 1 | 19 | 4.5 | 4.80 | 0.7 | 17 ② | 17 ② | 17 ② | 17 ② | 17 ② | 17 ② | 82 | 82 | 8344G031 | 3 | 17.1/F | 22.6/F |
| **DUAL SOLENOID ③** | | | | | | | | | | | | | | | | |
| 1/4 | 6 | .80 | .86 | 0.7 | 17 | 14 | 9 | 9 | 9 | 7 | 82 | 49 | 8344G044 | 4 | 6.1/F | 10.6/F |
| 3/8 | 10 | 1.4 | 1.89 | 0.7 | 17 | 14 | 9 | 9 | 9 | 7 | 82 | 49 | 8344G080 | 6 | 6.1/F | 10.6/F |
| 3/8 | 10 | 1.4 | 1.89 | 0.7 | 21 | 21 | 14 | - | - | - | 82 | - | 8344G050 | 7 | 10.1/F | - |
| 1/2 | 10 | 1.4 | 1.89 | 0.7 | 17 | 14 | 9 | 9 | 9 | 7 | 82 | 49 | 8344G082 | 6 | 6.1/F | 10.6/F |
| 3/4 | 19 | 5.2 | 4.80 | 0.7 | 21 | 21 | 14 | 9 | 9 | 7 | 82 | 49 | 8344G054 | 8 | 10.1/F | 10.6/F |
| 1 | 19 | 5.2 | 4.80 | 0.7 | 21 | 21 | 14 | 9 | 9 | 7 | 82 | 49 | 8344G056 | 8 | 10.1/F | 10.6/F |

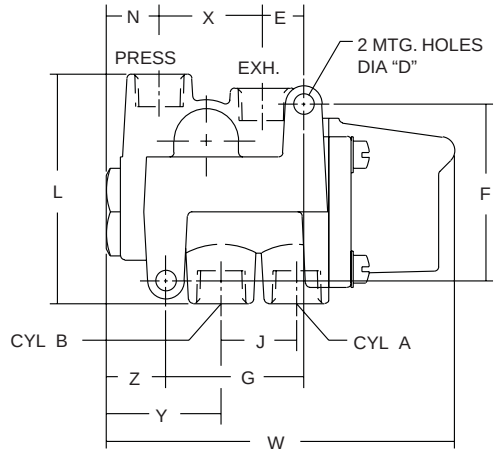
① 25 psi (1.7 bar) minimum on light oil service. ② For best results, do not use valve rated 250 psi (17 bar) on mainline pressure of less than 125 psi (9 bar).
③ On 50 hertz service, the watt rating for the 6.1/F solenoid is 8.1 watts.

## Dimensions inches (mm)

| Const. Ref. | | ØD | E | F | G | H | J | K | L | N | P | W | X | Y | Z | Exhaust Pipe Size |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ins. | Ø .28 | .56 | 2.41 | 1.88 | 4.08 | 1.03 | 2.15 | 3.13 | .72 | 3.12 | 4.75 | 1.41 | 1.56 | .81 | 3/8 |
| | mm | Ø 7.1 | 14 | 61 | 48 | 104 | 26 | 55 | 80 | 18 | 79 | 121 | 36 | 40 | 21 | 3/8 |
| 2 | ins. | Ø .34 | .75 | 3.12 | 2.63 | 4.06 | 1.50 | 1.97 | 3.18 | .83 | 2.94 | 6.06 | 1.88 | 1.90 | .84 | 1/2 |
| | mm | Ø 8.6 | 19 | 79 | 67 | 103 | 38 | 50 | 81 | 21 | 75 | 154 | 47 | 48 | 21 | 1/2 |
| 3 | ins. | Ø .34 | 1.34 | 3.81 | 3.88 | 4.86 | 2.09 | 2.34 | 4.56 | 1.56 | 3.31 | 8.25 | 2.12 | 2.63 | 1.16 | 1 |
| | mm | Ø 8.6 | 34 | 97 | 99 | 123 | 53 | 59 | 116 | 39 | 84 | 210 | 54 | 67 | 30 | 1 |
| 4 | ins. | Ø .28 | .56 | 2.41 | 1.88 | 4.34 | 1.03 | 2.52 | 3.13 | .72 | 3.38 | 4.81 | 1.41 | 1.56 | .81 | 3/8 |
| | mm | Ø 7.1 | 14 | 61 | 48 | 110 | 26 | 64 | 80 | 18 | 86 | 122 | 36 | 40 | 21 | 3/8 |
| 6 | ins. | Ø .34 | .75 | 3.12 | 2.63 | 4.50 | 1.50 | 2.52 | 3.18 | .83 | 3.38 | 6.06 | 1.88 | 1.90 | .84 | 1/2 |
| | mm | Ø 8.6 | 19 | 79 | 67 | 114 | 38 | 64 | 81 | 21 | 86 | 154 | 47 | 48 | 21 | 1/2 |
| 7 | ins. | Ø .34 | .75 | 3.12 | 2.63 | 4.68 | 1.50 | 2.59 | 3.18 | .83 | 3.56 | 6.06 | 1.88 | 1.90 | .84 | 1/2 |
| | mm | Ø 8.6 | 19 | 79 | 67 | 119 | 38 | 66 | 81 | 21 | 90 | 154 | 47 | 48 | 21 | 1/2 |
| 8 | ins. | Ø .34 | 1.34 | 3.81 | 3.88 | 5.56 | 2.09 | 3.03 | 4.56 | 1.55 | 4.00 | 8.25 | 2.12 | 2.63 | 1.16 | 1 |
| | mm | Ø 8.6 | 34 | 97 | 99 | 141 | 53 | 77 | 116 | 39 | 102 | 210 | 54 | 67 | 30 | 1 |

**Const. Ref 1 - 3**

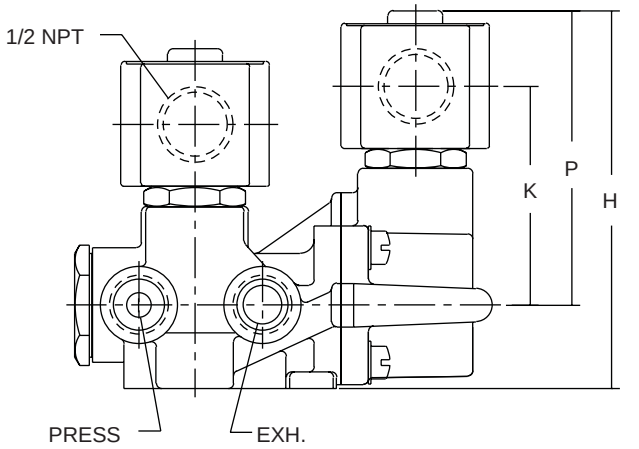


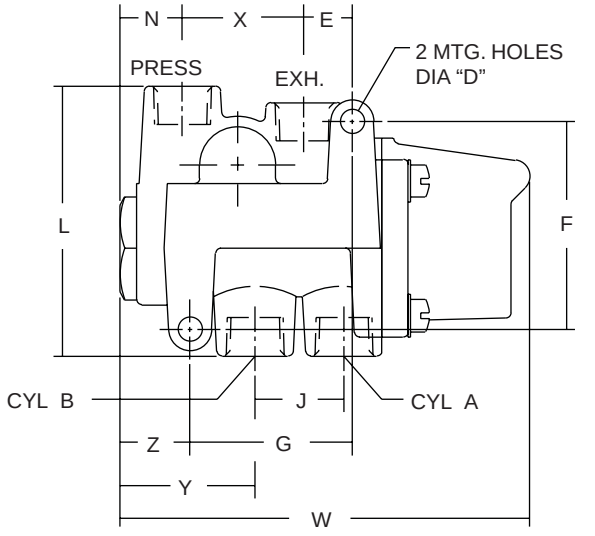



## Dimensions inches (mm)



**Const. Ref. 4 - 8**



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