

Features

- Molded one-piece solenoid with highly efficient solenoid cartridge and special low wattage coil
- Increased ambient temperature capabilities up to 175°F (80°C)
- Designed for use in automation of plant control systems to provide:
 - PLC compatibility
 - Reduced battery drain
 - Reduced heat rise
 - Reduced wiring cost
- Wide selection includes 2/2 normally closed, 3/2 normally closed (including Quick Exhaust), 3/2 universal, 4/2, 5/2, & 5/3
- Air or inert gas only
- Lower-cost alternative to intrinsically safe valves in critical applications not requiring a safety barrier

Construction

| Valve Parts in Contact with Fluids | | | |
|--|-------------------------|-------|-----------------|
| Body | Aluminum | Brass | Stainless Steel |
| Seals and Discs | PUR, NBR, CR, as listed | | |
| Sleeve | 304L Stainless Steel | | |
| Core and Plugnut | 430F Stainless Steel | | |
| Core Springs | 302 Stainless Steel | | |
| Pilot Seat Cartridge (Series 8316 & 8344 only) | POM | | |
| Rider Rings | PTFE | | |
| Spring Retainer | POM | | |

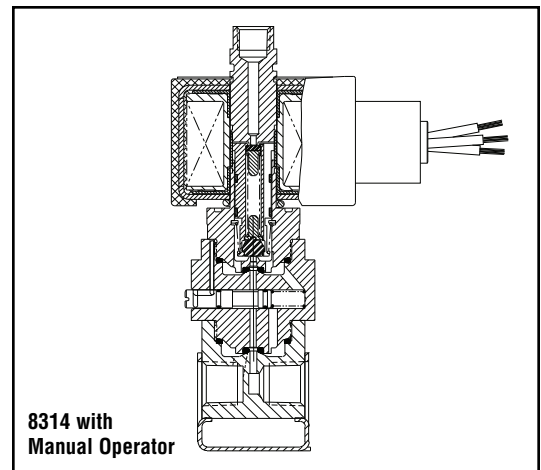
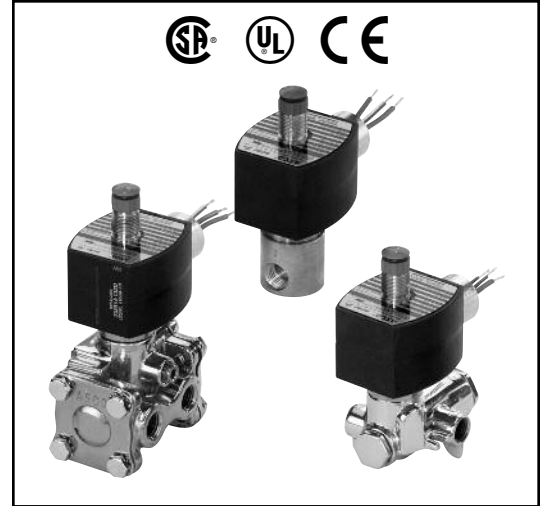
Electrical

| Description | Wattage | Max. Ambient Temp. | T Code | Insulation Class | TPL |
|--|---------|--------------------|--------|------------------|--------|
| Standard Ambient Version | 1.4 W | 140°F (60°C) | T6 | F | - |
| High Ambient Version | 1.8 W | 179°F (80°C) | T5 | F | #23033 |
| Surge Suppression Version | 1.7 W | 140°F (60°C) | T6 | F | - |
| Surge Suppression High Ambient Version | 2.0 W | 179°F (80°C) | T5 | F | #23033 |

ⓘ **IMPORTANT:** Supervisory and leakage current above the drop out current listed will cause improper operation. Consult your local ASCO sales office for additional assistance.

| Description | Wattage | Voltage (DC) | Min. Pull In (mA) | 3-Way Drop Out (mA) ⓘ | 2-Way Drop Out (mA) ⓘ | Coil resistance @ 68°F (20°C) (ohms) |
|--|---------|--------------|-------------------|-----------------------|-----------------------|--------------------------------------|
| Standard Ambient Version | 1.4 W | 12V | 83.5 | 13.9 | 3.2 | 102 |
| | | 24V | 42.0 | 7.0 | 1.6 | 410 |
| | | 48V | 21.4 | 3.6 | 0.8 | 1640 |
| | | 120V | 8.7 | 1.4 | 0.3 | 10000 |
| High Ambient Version | 1.8 W | 12V | 94.3 | 15.7 | 3.6 | 80 |
| | | 24V | 47.9 | 8.0 | 1.8 | 320 |
| | | 48V | 24.0 | 4.0 | 0.9 | 1260 |
| Surge Suppression Version | 1.7 W | 12V | 94.3 | 15.7 | 3.6 | 80 |
| | | 24V | 47.9 | 8.0 | 1.8 | 320 |
| | | 48V | 22.7 | 3.8 | 0.9 | 1470 |
| Surge Suppression High Ambient Version | 2.0 W | 12V | 105.3 | 17.6 | 4.0 | 64 |
| | | 24V | 54.1 | 9.0 | 2.1 | 270 |
| | | 48V | 24.0 | 4.0 | 0.9 | 1260 |

| 24VDC Spare Coil P/N | Standard Ambient Temp. Version | High Ambient Temp Version |
|---|--------------------------------|---------------------------|
| General Purpose | 238710-902-D* | 238710-908-D* |
| Explosion Proof | 238714-902-D* | 238714-905-D* |
| Explosion Proof, Corrosion Resistant | 274714-902-D* | 274714-905-D* |
| Explosion Proof, Surge Suppression | 276006-006-D* | 276006-106-D* |
| Explosion Proof, Corrosion Resistant, Surge Suppression | 276007-006-D* | 276007-106-D* |



SPECIAL SERVICE PILOT

Ordering

Normal Ambient Version
EV8551G322 24VDC

High Ambient Version (always add TPL #23033)
EFX8316G301-23033 24VDC

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 catalog number. For explosionproof with 316 Stainless Steel hub and trim, specify prefix "EV".) Surge suppression coils also available "MF" prefix.

See *Optional Features Section* for other available options.

Approvals

UL listed General Purpose Valves (Hazardous Location Classified). EV8345G381 solenoid only UL listed. CSA certified; nonincendive for Class I, Division 2 UL E25549. Meets applicable CE directives.

SIL 3 capable per IEC 61508 on 8314 and 8316 const. Third party certification provided by EXIDA.

Refer to *Engineering Section* for details.

ATEX/IECEx certified with prefix "EV" as listed. Refer to *Optional Features Electrical Section* for details.

Nominal Ambient Temp. Ranges

| Series | Body Material | Normal Temperature Range | High Ambient Temp Version |
|----------|-------------------------|--------------------------------|---|
| 8553 | Stainless Steel | -40°F to 140°F (-40°C to 60°C) | Not Available |
| 8551 | Brass | -40°F to 140°F (-40°C to 60°C) | |
| 8553 | Aluminum | -13°F to 140°F (-25°C to 60°C) | |
| 8551 | | 5°F to 140°F (-15°C to 60°C) | |
| 8551 | Stainless Steel | -40°F to 140°F (-40°C to 60°C) | Low Limit is the same as Normal Temperature Ratings, but High Limit is 176°F (80°C) |
| 8262 | Brass / Stainless Steel | -40°F to 140°F (-40°C to 60°C) | |
| 8314 | | -40°F to 140°F (-40°C to 60°C) | |
| 8317 | | -20°F to 140°F (-29°C to 60°C) | |
| 8316* | | -20°F to 140°F (-29°C to 60°C) | |
| 8223 | Brass only | -4°F to 140°F (-20°C to 60°C) | |
| 8344 | | -4°F to 140°F (-20°C to 60°C) | |
| 8316G334 | | -4°F to 140°F (-20°C to 60°C) | |

*Does not include 8316G334; Includes 8316H374. **Note:** 8553 not available in brass

Important

These solenoid valves are intended for use on clean dry air or inert gas, filtered to 40 micrometres or better. The dew point of the media should be at least 10°C (18° F) below the minimum temperature to which any portion of the clean air/inert gas system could be exposed to prevent freezing. If lubricated air is used, the lubricants must be compatible with Nitrile elastomers. Diester oils may cause operational problems. Instrument air in compliance with ANSI/ISA Standard 7.0.01-1996 exceeds the above requirements and is, therefore, an acceptable media for these valves.

Specifications (English units)

| Pipe Size (in) | Orifice Size (in) | Cv Flow Factor | | Operating Pressure Differential (psi) | | Max. Fluid and Ambient Temp. °F | Brass Body | | Stainless Steel Body | |
|---|-------------------|----------------------|---------------------|---------------------------------------|------|---------------------------------|-----------------|-------------|----------------------|-------------|
| | | | | Air-Inert Gas | | | Catalog Number | Const. Ref. | Catalog Number | Const. Ref. |
| | | Pressure to Cylinder | Cylinder to Exhaust | Min. | Max. | | | | | |
| 2/2 VALVES, NORMALLY CLOSED, with NBR Disc | | | | | | | | | | |
| 1/4 | 1/16 | .08 | | 0 | 150 | 140 | 8262G320 | 18 | 8262G386 ⑥⑨ | 18 |
| 3/8 | 5/16 | 1.5 | | 10 | 150 | 140 | 8223G323 | 19 | - | - |
| 1/2 | 3/8 | 3.2 | | 25 | 150 | 140 | 8223G303 ⑨ | 20 | 8223G310 ⑥⑨ | 20 |
| 3/2 VALVES, UNIVERSAL OPERATION (Normally Closed or Normally Open) with NBR Disc – SIL 3 Capable, Certified by Exida ⑦ ⑧ | | | | | | | | | | |
| 1/4 | 1/16 | .08 | .08 | 0 | 150 | 140 | 8314G300 | 1 | 8314G301 ⑥⑨ | 2 |
| 3/2 VALVES, NORMALLY CLOSED (Closed when de-energized) with NBR Disc – SIL 3 Capable, Certified by Exida ⑦ | | | | | | | | | | |
| 1/4 | 5/16 | 1.5 | 1.5 | ⑤ | 150 | 140 | 8316G301 ③⑨ | 3 | EV8316G381 ⑥⑨ | 3 |
| 3/8 | 5/16 | 1.8 | 1.8 | ⑤ | 150 | 140 | 8316G302 ③⑨ | 3 | EV8316G382 ⑥⑨ | 3 |
| 3/8 | 5/8 | 4 | 4 | ⑤ | 150 | 140 | 8316G303 ③⑨ | 3A | - | - |
| 1/2 | 5/8 | 4 | 4 | ⑤ | 150 | 140 | 8316G304 ③⑨ | 3A | EV8316G384 ⑥⑨ | 3A |
| 3/4 | 11/16 | 5.5 | 5.5 | 10 | 150 | 140 | 8316H374 ③ | 4 | - | - |
| 1 | 1 | 13 | 13 | 10 | 150 | 140 | 8316G334 ③⑨ | 5 | - | - |
| 3/2 VALVES, UNIVERSAL (Normally Closed or Normally Open) "Quick Exhaust" with CR Diaphragm and NBR Disc | | | | | | | | | | |
| 1/4 | ② | .08 | .73 | 5 | 150 | 140 | 8317G307 ① | 6 | 8317G308 ①⑥ | 7 |
| 4/2 VALVES, with NBR Disc and Seals | | | | | | | | | | |
| 1/4 | 1/16 | .08 | .08 | 10 | 150 | 140 | 8345G301 ①③ | 6 | EV8345G381 ①③⑥ | 8 |
| 4/2 VALVES, Brass Body with NBR Disc | | | | | | | | | | |
| Pipe Size (in) | Orifice Size (in) | Cv Flow Factor | | Operating Pressure Differential (psi) | | Max. Fluid and Ambient Temp. °F | Single Solenoid | | Dual Solenoid | |
| | | | | Air-Inert Gas | | | Catalog Number | Const. Ref. | Catalog Number | Const. Ref. |
| | | Pressure to Cylinder | Cylinder to Exhaust | Min. | Max. | | | | | |
| 1/4 | 1/4 | .80 | 1 | 10 | 150 | 140 | 8344G370 ①③ | 9 | 8344G344 ③ | 12 |
| 3/8 | 3/8 | 1.4 | 2.2 | 10 | 150 | 140 | 8344G372 ①③⑨ | 11 | 8344G380 ③⑨ | 10 |
| 1/2 | 3/8 | 1.4 | 2.2 | 10 | 150 | 140 | 8344G374 ①③⑨ | 11 | 8344G382 ③⑨ | 10 |
| 3/4 | 3/4 | 5.2 | 5.6 | 10 | 150 | 140 | 8344G376 ①③ | 13 | 8344G354 ③ | 14 |
| 1 | 3/4 | 5.2 | 5.6 | 10 | 150 | 140 | 8344G378 ①③ | 13 | 8344G356 ③ | 14 |

① There are two exhaust flows in the exhaust mode (pilot and main). The pilot exhaust must be connected to the main exhaust when the air or inert gas cannot be exhausted to atmosphere.
 ② For "Quick Exhaust" valves, pressure port is 1/16", exhaust port is 1/4".
 ③ **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.
 ⑤ Zero minimum when valve selection gasket is in external position and proper auxiliary air pressure is applied. Minimum 15 psi Operating Pressure Differential when selection gasket is in the internal position.
 ⑥ Can be used for *dry* natural gas service with the EF or EV prefix.
 ⑦ Safety manual and FMEDA (Failure Modes Effects and Diagnostic Analysis) report available.
 ⑧ SIL 3 Capable, Certified by Exida, only valid when used as Normally Closed.
 ⑨ ATEX/IECEx certified with prefix "EV".

Specifications (English units)

| Body Material | Pipe Size (in) | Orifice Size (in) | Cv Flow Factor | Single Solenoid | | | | | Dual Solenoid | | | | |
|---|----------------|-------------------|----------------|---------------------------------------|------|---------------------|-----------------|-------------|---------------------------------------|-----|---------------------|-----------------|-------------|
| | | | | Operating Pressure Differential (psi) | | Max. Fluid Temp. °F | Catalog Number | Const. Ref. | Operating Pressure Differential (psi) | | Max. Fluid Temp. °F | Catalog Number | Const. Ref. |
| | | | | Air-Inert Gas | | | | | Air-Inert Gas | | | | |
| | | | | Min. | Max. | Min. | Max. | | | | | | |
| 3/2, 5/2, 5/3 VALVES, with NBR and PUR Seals | | | | | | | | | | | | | |
| Aluminum 3/2 | 1/4 | 1/4 | .86 | 30 | 150 | 140 | 8551G305 ⑦ | 21 | 30 | 150 | 140 | 8551G306 ⑦ | 21 |
| Aluminum 5/2 | | | | | | | 8551G317 ⑦ | 22 | | | | 8551G318 ⑦ | 22 |
| Aluminum 5/3 Center Closed | | | | | | | - | 22 | | | | 8551G367 ⑦ | 22 |
| Aluminum 5/3 Center Open | | | | | | | - | 22 | | | | 8551G368 ⑦ | 22 |
| Brass 3/2 | | | | | | | EF8551G307 ②⑦ | 21 | | | | EF8551G308 ②⑦⑧ | 21 |
| Brass 5/2 | | | | | | | EF8551G319 ②⑦⑧ | 22 | | | | EF8551G320 ②⑦ | 22 |
| 316L Stainless Steel 3/2 | | | | | | | EV8551G313 ③⑥⑦⑧ | 21 | | | | EV8551G314 ③⑥⑦⑧ | 21 |
| 316L Stainless Steel 5/2 | EV8551G321 ③⑥⑧ | 22 | EV8551G322 ③⑥⑧ | 22 | | | | | | | | | |
| Aluminum 3/2 | 1/2 | 1/2 | 3.7 | 30 | 150 | 140 | 8553G305 ⑦ | 21 | 30 | 150 | 140 | 8553G306 ⑦ | 21 |
| Aluminum 5/2 | | | | | | | 8553G317 ⑦ | 22 | | | | 8553G318 ⑦ | 22 |
| 316L Stainless Steel 3/2 | | | | | | | EV8553G313 ③⑥⑦⑧ | 21 | | | | EV8553G314 ③⑥⑦⑧ | 21 |
| 316L Stainless Steel 5/2 | | | | | | | EV8553G321 ③⑥⑦⑧ | 22 | | | | EV8553G322 ③⑥⑦⑧ | 22 |
| 316L Stainless Steel 5/2 | | | | | | | EV8553G321 ③⑥⑦⑧ | 22 | | | | EV8553G322 ③⑥⑦⑧ | 22 |

② Brass construction supplied standard with EF solenoid. ③ Stainless steel construction supplied standard with EV solenoid.
 ④ Can be used for **dry** natural gas service with the EF or EV prefix. ⑦ Solenoid only approvals with EF of EV prefix, no approvals with general purpose coil (no prefix).
 ⑧ ATEX/IECEx certified with prefix "EV".

SPECIAL SERVICE
PILOT

| Body Material | Pipe Size (in) | Orifice Size (in) | Cv Flow Factor | Single Solenoid | | | | | Dual Solenoid | | | | |
|--|----------------|-------------------|----------------|---------------------------------------|------|---------------------|-----------------|-------------|---------------------------------------|-----|---------------------|-----------------|-------------|
| | | | | Operating Pressure Differential (psi) | | Max. Fluid Temp. °F | Catalog Number | Const. Ref. | Operating Pressure Differential (psi) | | Max. Fluid Temp. °F | Catalog Number | Const. Ref. |
| | | | | Air-Inert Gas | | | | | Air-Inert Gas | | | | |
| | | | | Min. | Max. | Min. | Max. | | | | | | |
| 3/2, 5/2, 5/3 VALVES, with NBR and PUR Seals, NAMUR Mount | | | | | | | | | | | | | |
| Aluminum 3/2, 5/2 | 1/4 | 1/4 | .86 | 30 | 150 | 140 | 8551G301 ① | 23 | 30 | 150 | 140 | 8551G302 ① | 23 |
| Aluminum 5/3 Center Closed | | | | | | | - | - | | | | 8551G365 ⑦ | 24 |
| Aluminum 5/3 Center Open | | | | | | | - | - | | | | 8551G366 ⑦ | 24 |
| Brass 3/2, 5/2 | | | | | | | EF8551G303 ②①⑦ | 23 | | | | EF8551G304 ②①⑦ | 23 |
| 316L Stainless Steel 3/2, 5/2 | 1/2 | 1/2 | 3.7 | 30 | 150 | 140 | EV8551G309 ③⑥⑧ | 24 | 30 | 150 | 140 | EV8551G310 ③⑥⑧ | 24 |
| Aluminum 3/2, 5/2 | | | | | | | 8553G301 ⑦ | 24 | | | | 8553G302 ⑦ | 24 |
| 316L Stainless Steel 3/2, 5/2 | | | | | | | EV8553G309 ③⑥⑦⑧ | 24 | | | | EV8553G310 ③⑥⑦⑧ | 24 |

① 1/8" NPT exhaust for 1/4" aluminum and brass. ② Brass construction supplied standard with EF solenoid. ③ Stainless steel construction supplied standard with EV solenoid.
 ④ Can be used for **dry** natural gas service with the EF or EV prefix. ⑦ Solenoid only approvals with EF of EV prefix, no approvals with general purpose coil (no prefix).
 ⑧ ATEX/IECEx certified with prefix "EV".

Specifications (Metric units)

| Pipe Size (in) | Orifice Size (mm) | Kv Flow Factor (m3/h) | | Operating Pressure Differential (bar) | | Max. Fluid and Ambient Temp. °C | Brass Body | | Stainless Steel Body | |
|---|-------------------|-----------------------|---------------------|---------------------------------------|------|---------------------------------|-----------------|-------------|----------------------|-------------|
| | | | | Air-Inert Gas | | | Catalog Number | Const. Ref. | Catalog Number | Const. Ref. |
| | | Pressure to Cylinder | Cylinder to Exhaust | Min. | Max. | | | | | |
| 2/2 VALVES, NORMALLY CLOSED, with NBR Disc | | | | | | | | | | |
| 1/4 | 2 | .07 | | 0 | 10 | 60 | 8262G320 | 18 | 8262G386 ⑥⑨ | 18 |
| 3/8 | 8 | 1.29 | | 0.7 | 10 | 60 | 8223G323 | 19 | - | - |
| 1/2 | 10 | 2.74 | | 1.7 | 10 | 60 | 8223G303 ⑨ | 20 | 8223G310 ⑥⑨ | 20 |
| 3/2 VALVES, UNIVERSAL OPERATION (Normally Closed or Normally Open) with NBR Disc – SIL 3 Capable, Certified by Exida ⑦ ⑧ | | | | | | | | | | |
| 1/4 | 2 | .07 | .07 | 0 | 10 | 60 | 8314G300 | 1 | 8314G301 ⑥⑨ | 2 |
| 3/2 VALVES, NORMALLY CLOSED (Closed when de-energized) with NBR Disc – SIL 3 Capable, Certified by Exida ⑦ | | | | | | | | | | |
| 1/4 | 8 | 1.29 | 1.29 | ⑤ | 10 | 60 | 8316G301 ③⑨ | 3 | EV8316G381 ⑥⑨ | 3 |
| 3/8 | 8 | 1.37 | 1.37 | ⑤ | 10 | 60 | 8316G302 ③⑨ | 3 | EV8316G382 ⑥⑨ | 3 |
| 3/8 | 16 | 2.57 | 2.57 | ⑤ | 10 | 60 | 8316G303 ③⑨ | 3A | - | - |
| 1/2 | 16 | 3.43 | 3.43 | ⑤ | 10 | 60 | 8316G304 ③⑨ | 3A | EV8316G384 ⑥⑨ | 3A |
| 3/4 | 17 | 4.71 | 4.71 | 0.7 | 10 | 60 | 8316H374 ③ | 4 | - | - |
| 1 | 25 | 11.14 | 11.14 | 0.7 | 10 | 60 | 8316G334 ③⑨ | 5 | - | - |
| 3/2 VALVES, UNIVERSAL (Normally Closed or Normally Open) "Quick Exhaust" with CR Diaphragm and NBR Disc | | | | | | | | | | |
| 1/4 | ② | .07 | .63 | 0.3 | 10 | 60 | 8317G307 ① | 6 | 8317G308 ①⑥⑨ | 7 |
| 4/2 VALVES, with NBR Disc and Seals | | | | | | | | | | |
| 1/4 | 2 | .07 | .07 | 0.7 | 10 | 60 | 8345G301 ①③ | 6 | EV8345G381 ①③⑥⑨ | 8 |
| 4/2 VALVES, Brass Body with NBR Disc | | | | | | | | | | |
| Pipe Size (in) | Orifice Size (mm) | Kv Flow Factor (m3/h) | | Operating Pressure Differential (bar) | | Max. Fluid and Ambient Temp. °C | Single Solenoid | | Dual Solenoid | |
| | | | | Air-Inert Gas | | | Catalog Number | Const. Ref. | Catalog Number | Const. Ref. |
| | | Pressure to Cylinder | Cylinder to Exhaust | Min. | Max. | | | | | |
| 1/4 | 6 | 0.69 | 0.86 | 0.7 | 10 | 60 | 8344G370 ①③ | 9 | 8344G344 ③ | 12 |
| 3/8 | 10 | 1.20 | 1.89 | 0.7 | 10 | 60 | 8344G372 ①③⑨ | 11 | 8344G380 ③⑨ | 10 |
| 1/2 | 10 | 1.20 | 1.89 | 0.7 | 10 | 60 | 8344G374 ①③⑨ | 11 | 8344G382 ③⑨ | 10 |
| 3/4 | 19 | 4.46 | 4.80 | 0.7 | 10 | 60 | 8344G376 ①③ | 13 | 8344G354 ③ | 14 |
| 1 | 19 | 4.46 | 4.80 | 0.7 | 10 | 60 | 8344G378 ①③ | 13 | 8344G356 ③ | 14 |

① There are two exhaust flows in the exhaust mode (pilot and main). The pilot exhaust must be connected to the main exhaust when the air or inert gas cannot be exhausted to atmosphere.
 ② For "Quick Exhaust" valves, pressure port is 1/16", exhaust port is 1/4".
 ③ **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.
 ④ Zero minimum when valve selection gasket is in external position and proper auxiliary air pressure is applied. Minimum 1.0 bar Operating Pressure Differential when selection gasket is in the internal position.
 ⑤ Can be used for *dry* natural gas service with the EF or EV prefix.
 ⑥ Safety manual and FMEDA (Failure Modes Effects and Diagnostic Analysis) report available.
 ⑦ SIL 3 Capable, Certified by Exida, only valid when used as Normally Closed.
 ⑧ ATEX/IECEx certified with prefix "EV".

SPECIAL SERVICE PILOT

Specifications (Metric units)

| Body Material | Pipe Size (in) | Orifice Size (mm) | Kv Flow Factor (m3/h) | Single Solenoid | | | | | Dual Solenoid | | | | |
|---|----------------|-------------------|-----------------------|---------------------------------------|------|---------------------|-----------------|-------------|---------------------------------------|----|---------------------|-----------------|-------------|
| | | | | Operating Pressure Differential (bar) | | Max. Fluid Temp. °C | Catalog Number | Const. Ref. | Operating Pressure Differential (bar) | | Max. Fluid Temp. °C | Catalog Number | Const. Ref. |
| | | | | Air-Inert Gas | | | | | Air-Inert Gas | | | | |
| | | | | Min. | Max. | Min. | Max. | | | | | | |
| 3/2, 5/2, 5/3 VALVES, with NBR and PUR Seals | | | | | | | | | | | | | |
| Aluminum 3/2 | 1/4 | 6 | .7 | 2 | 10 | 60 | 8551G305 ⑦ | 21 | 2 | 10 | 60 | 8551G306 ⑦ | 21 |
| Aluminum 5/2 | | | | | | | 8551G317 ⑦ | 22 | | | | 8551G318 ⑦ | 22 |
| Aluminum 5/3 Center Closed | | | | | | | - | 22 | | | | 8551G367 ⑦ | 22 |
| Aluminum 5/3 Center Open | | | | | | | - | 22 | | | | 8551G368 ⑦ | 22 |
| Brass 3/2 | | | | | | | EF8551G307 ②⑦ | 21 | | | | EF8551G308 ②⑦⑧ | 21 |
| Brass 5/2 | | | | | | | EF8551G319 ②⑦⑧ | 22 | | | | EF8551G320 ②⑦ | 22 |
| 316L Stainless Steel 3/2 | | | | | | | EV8551G313 ③⑥⑦⑧ | 21 | | | | EV8551G314 ③⑥⑦⑧ | 21 |
| 316L Stainless Steel 5/2 | | | | | | | EV8551G321 ③⑥⑧ | 22 | | | | EV8551G322 ③⑥⑧ | 22 |
| Aluminum 3/2 | 1/2 | 13 | 3.15 | 2 | 10 | 60 | 8553G305 ⑦ | 21 | 2 | 10 | 60 | 8553G306 ⑦ | 21 |
| Aluminum 5/2 | | | | | | | 8553G317 ⑦ | 22 | | | | 8553G318 ⑦ | 22 |
| 316L Stainless Steel 3/2 | | | | | | | EV8553G313 ③⑥⑦⑧ | 21 | | | | EV8553G314 ③⑥⑦⑧ | 21 |
| 316L Stainless Steel 5/2 | | | | | | | EV8553G321 ③⑥⑦⑧ | 22 | | | | EV8553G322 ③⑥⑦⑧ | 22 |
| 316L Stainless Steel 5/2 | | | | | | | EV8553G321 ③⑥⑦⑧ | 22 | | | | EV8553G322 ③⑥⑦⑧ | 22 |

② Brass construction supplied standard with EF solenoid. ③ Stainless steel construction supplied standard with EV solenoid.
 ⑥ Can be used for **dry** natural gas service with the EF or EV prefix. ⑦ Solenoid only approvals with EF of EV prefix, no approvals with general purpose coil (no prefix).
 ⑧ ATEX/IECEx certified with prefix "EV".

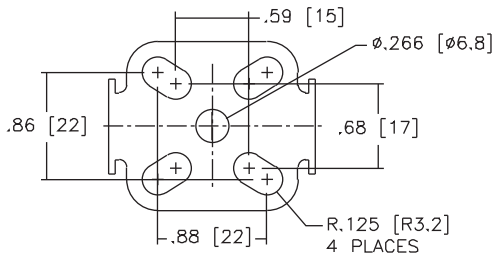
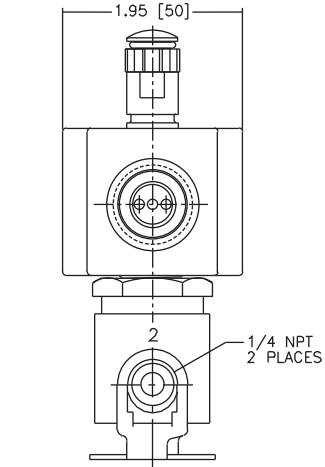
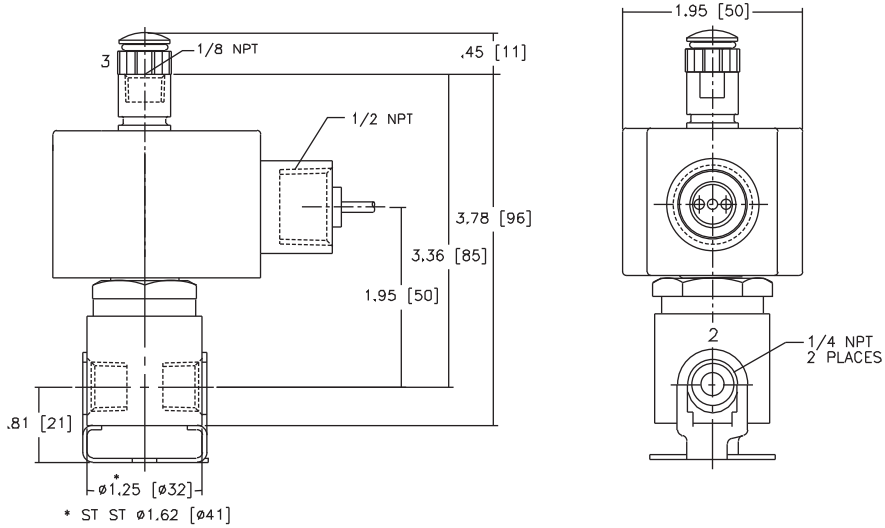
SPECIAL SERVICE PILOT

| Body Material | Pipe Size (in) | Orifice Size (mm) | Kv Flow Factor (m3/h) | Single Solenoid | | | | | Dual Solenoid | | | | |
|--|----------------|-------------------|-----------------------|---------------------------------------|------|---------------------|-----------------|-------------|---------------------------------------|----|---------------------|-----------------|-------------|
| | | | | Operating Pressure Differential (bar) | | Max. Fluid Temp. °C | Catalog Number | Const. Ref. | Operating Pressure Differential (bar) | | Max. Fluid Temp. °C | Catalog Number | Const. Ref. |
| | | | | Air-Inert Gas | | | | | Air-Inert Gas | | | | |
| | | | | Min. | Max. | Min. | Max. | | | | | | |
| 3/2, 5/2, 5/3 VALVES, with NBR and PUR Seals, NAMUR Mount | | | | | | | | | | | | | |
| Aluminum 3/2, 5/2 | 1/4 ① | 6 | .7 | 2 | 10 | 60 | 8551G301 ① | 23 | 2 | 10 | 60 | 8551G302 ① | 23 |
| Aluminum 5/3 Center Closed | | | | | | | - | - | | | | 8551G365 ⑦ | 24 |
| Aluminum 5/3 Center Open | | | | | | | - | - | | | | 8551G366 ⑦ | 24 |
| Brass 3/2, 5/2 | | | | | | | EF8551G303 ②①⑦ | 23 | | | | EF8551G304 ②①⑦ | 23 |
| 316L Stainless Steel 3/2, 5/2 | 1/2 | 13 | 3.15 | 2 | 10 | 60 | EV8551G309 ③⑥⑧ | 24 | 2 | 10 | 60 | EV8551G310 ③⑥⑧ | 24 |
| Aluminum 3/2, 5/2 | | | | | | | 8553G301 ⑦ | 24 | | | | 8553G302 ⑦ | 24 |
| 316L Stainless Steel 3/2, 5/2 | | | | | | | EV8553G309 ③⑥⑦⑧ | 24 | | | | EV8553G310 ③⑥⑦⑧ | 24 |

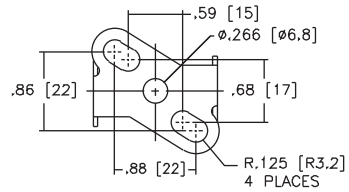
① 1/8" NPT exhaust for 1/4" aluminum and brass. ② Brass construction supplied standard with EF solenoid. ③ Stainless steel construction supplied standard with EV solenoid.
 ⑥ Can be used for **dry** natural gas service with the EF or EV prefix. ⑦ Solenoid only approvals with EF of EV prefix, no approvals with general purpose coil (no prefix).
 ⑧ ATEX/IECEx certified with prefix "EV".

Dimensions: inches (mm)

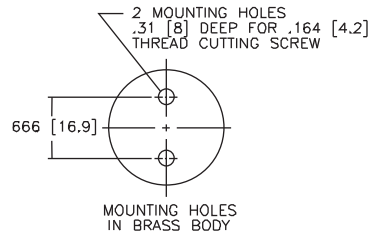
Const. Ref. 1, 2



CONSTR. 2
MTG BRACKET FOR ST ST.



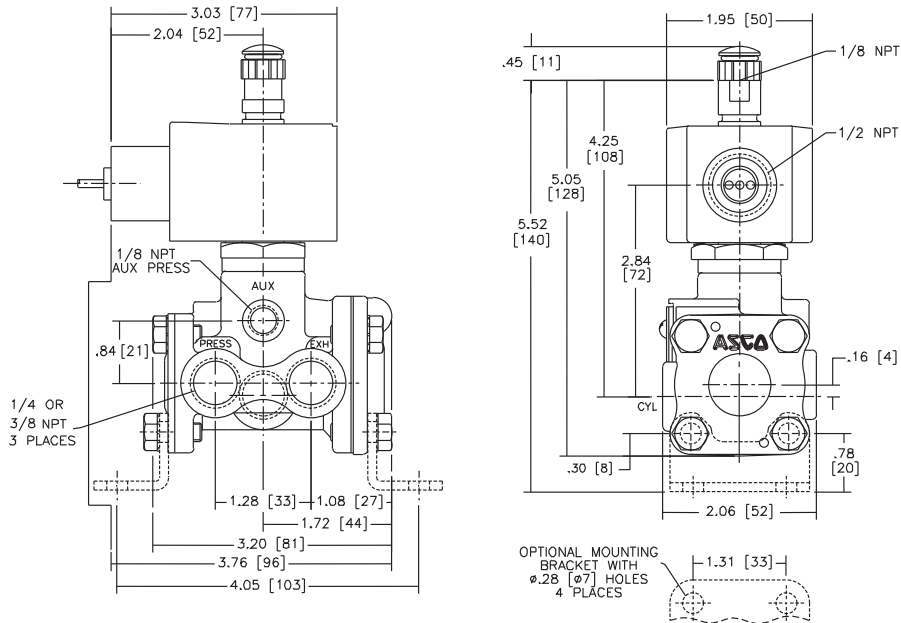
CONSTR. 1
MTG BRACKET FOR BRASS



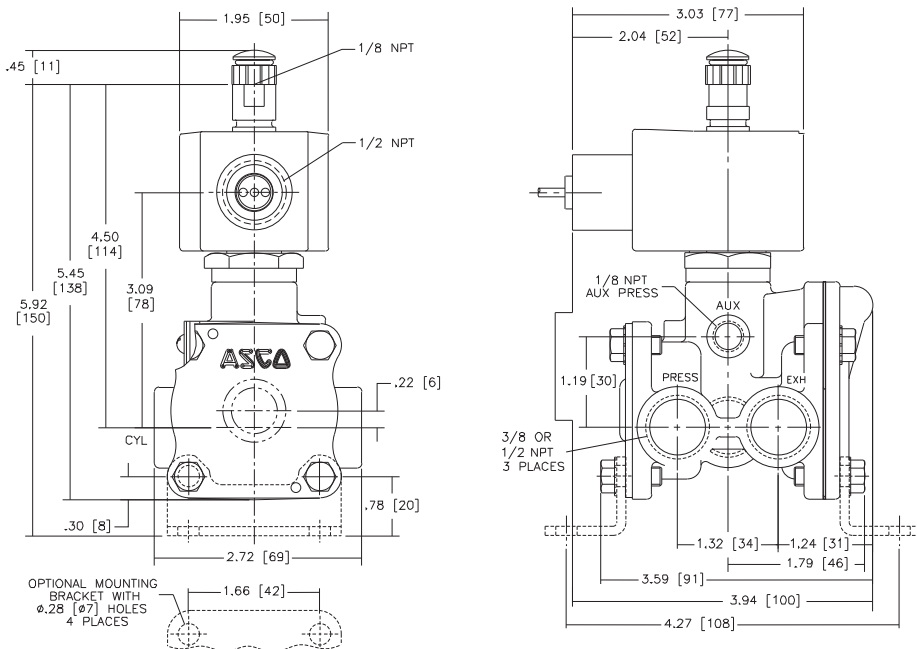
SPECIAL SERVICE
PILOT

Dimensions: inches (mm)

Const. Ref. 3



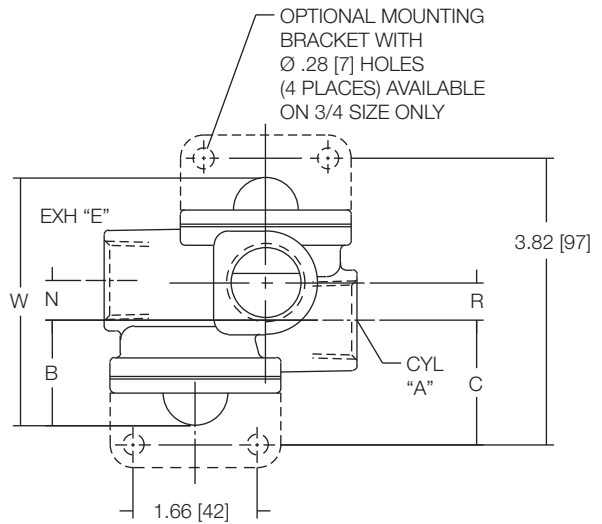
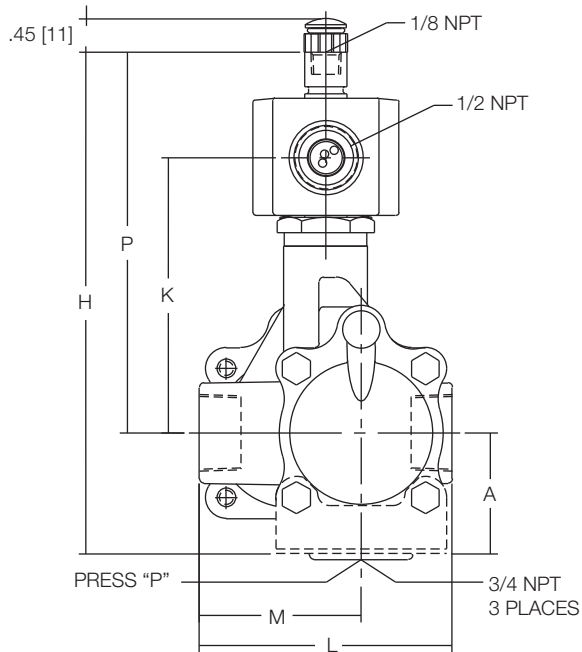
Const. Ref. 3A



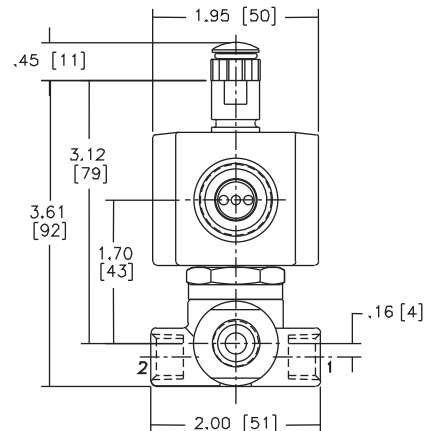
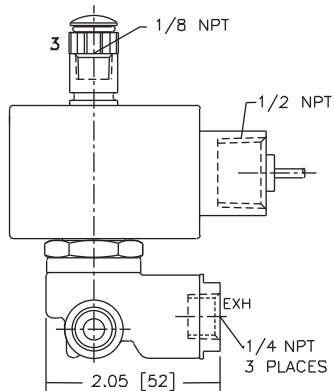
Dimensions: inches (mm)

| Const. Ref. | | A | B | C | H | K | L | M | N | P | R | W |
|-------------|----|------|------|------|------|------|------|------|-----|------|------|------|
| 4 | in | 1.61 | 1.41 | 1.66 | 6.78 | 3.68 | 3.38 | 2.16 | .53 | 5.09 | .50 | 3.31 |
| | mm | 41 | 36 | 42 | 172 | 93 | 86 | 55 | 13 | 129 | 13 | 84 |
| 5 | in | X | 1.78 | X | 7.40 | 3.93 | 4.44 | 2.81 | .87 | 5.34 | 1.74 | 5.31 |
| | mm | X | 45 | X | 188 | 100 | 113 | 71 | 22 | 136 | 44 | 135 |

Const. Ref. 4, 5



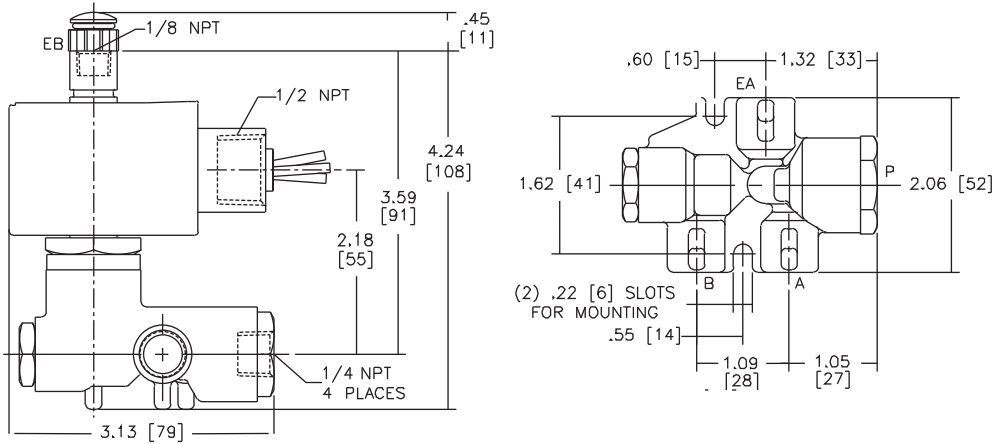
Const. Ref. 6, 7



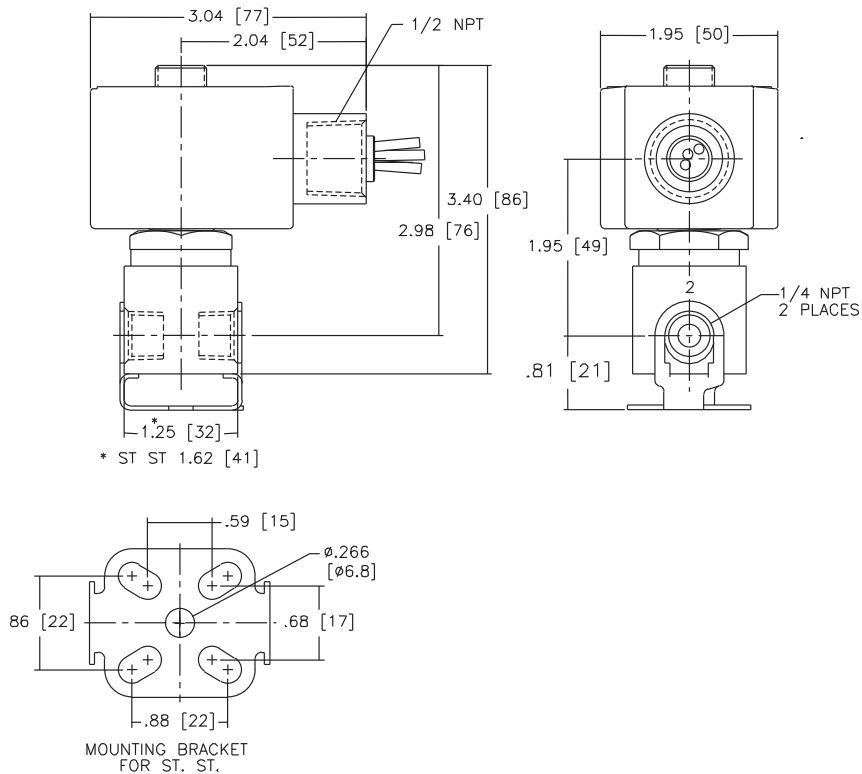
SPECIAL SERVICE
PILOT

Dimensions: inches (mm)

Const. Ref. 8



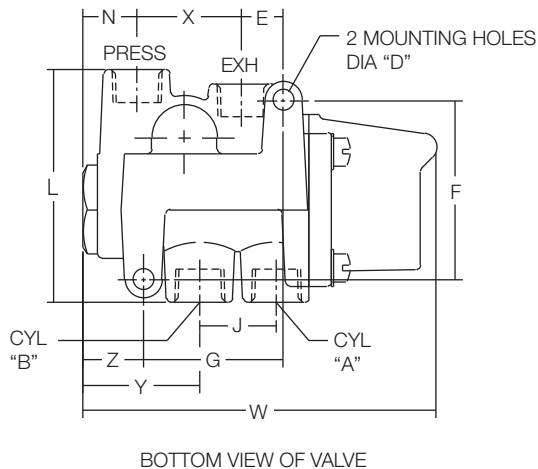
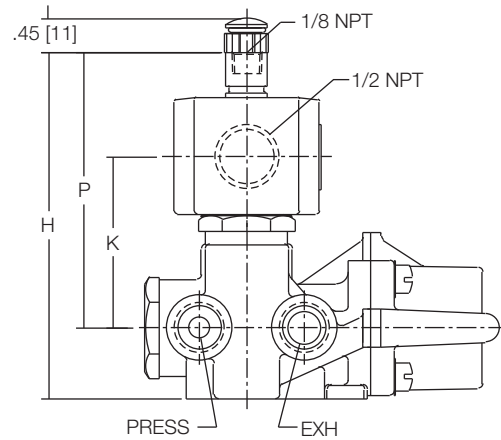
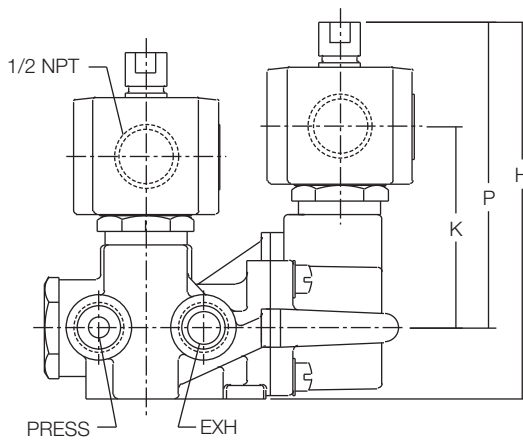
Const. Ref. 18



Dimensions: inches (mm)

| Const. Ref. | | Dia "D" | E | F | G | H | J | K | L | N | P | W | X | Y | Z | Exhaust Pipe Size |
|-------------|----|---------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------------------|
| 9 | in | Ø .28 | .56 | 2.41 | 1.88 | 4.67 | 1.03 | 2.30 | 3.12 | .72 | 3.72 | 4.75 | 1.41 | 1.56 | .81 | 3/8 |
| | mm | 7 | 14 | 61 | 48 | 119 | 26 | 58 | 79 | 18 | 95 | 121 | 36 | 40 | 21 | |
| 10 | in | Ø .34 | .76 | 3.12 | 2.62 | 4.89 | 1.50 | 2.11 | 3.18 | .83 | 3.77 | 6.06 | 1.86 | 1.89 | .83 | 1/2 |
| | mm | 9 | 16 | 79 | 67 | 118 | 38 | 70 | 81 | 21 | 90 | 154 | 48 | 49 | 21 | |
| 11 | in | Ø .34 | .76 | 3.12 | 2.62 | 4.65 | 1.50 | 2.11 | 3.18 | .83 | 3.53 | 6.06 | 1.86 | 1.89 | .83 | 1/2 |
| | mm | 9 | 35 | 97 | 99 | 138 | 53 | 54 | 116 | 40 | 99 | 210 | 54 | 67 | 30 | |
| 12 | in | Ø .28 | .56 | 2.41 | 1.88 | 5.06 | 1.03 | 2.71 | 3.12 | .72 | 4.12 | 4.81 | 1.41 | 1.56 | .81 | 3/8 |
| | mm | 7 | 14 | 61 | 48 | 129 | 26 | 69 | 79 | 18 | 105 | 122 | 36 | 40 | 21 | |
| 13 | in | Ø .34 | .78 | 3.12 | 2.62 | 5.27 | 1.50 | 2.49 | 3.19 | .84 | 4.16 | 6.06 | 1.88 | 1.91 | .84 | 1 |
| | mm | 9 | 16 | 79 | 67 | 134 | 38 | 63 | 81 | 21 | 106 | 154 | 48 | 49 | 21 | |
| 14 | in | Ø .34 | 1.38 | 3.81 | 3.88 | 6.09 | 2.09 | 3.18 | 4.56 | 1.56 | 4.59 | 8.25 | 2.12 | 2.62 | 1.16 | 1 |
| | mm | 9 | 35 | 97 | 99 | 155 | 53 | 81 | 116 | 40 | 117 | 210 | 54 | 67 | 30 | |

Const. Ref. 9, 10, 11, 12, 13, 14

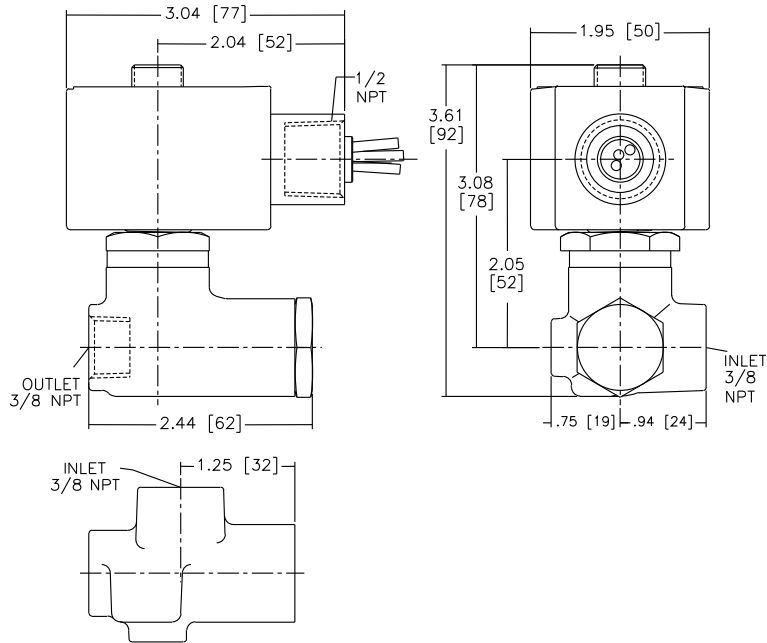


BOTTOM VIEW OF VALVE

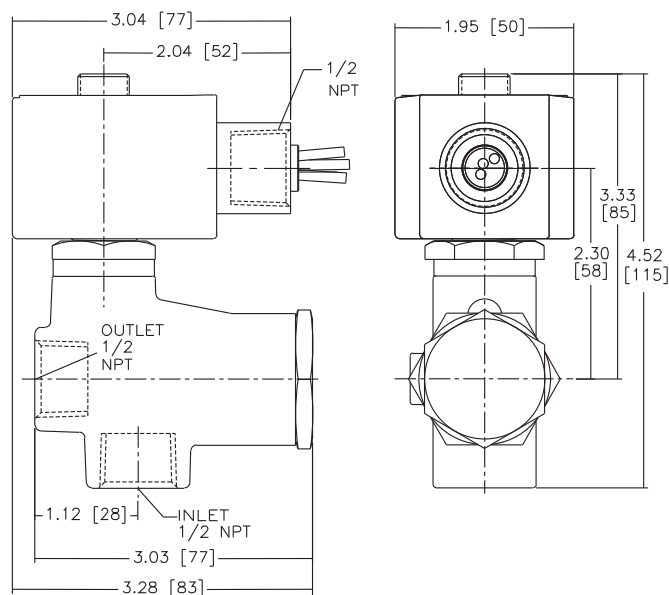
SPECIAL SERVICE
PILOT

Dimensions: inches (mm)

Const. Ref. 19







Const. Ref. 20



Dimensions: inches (mm)





| Series | 8551 | 8553 |
|--------|------------|------------|
| NPT | 1/4 | 1/2 |
| L1 ① | 5.12 (132) | 6.00 (153) |
| L2 ① | 6.73 (171) | 7.80 (198) |
| H2 | 4.38 (111) | 4.77 (121) |
| H1 | 1.10 (28) | 1.58 (40) |
| W | 1.77 (45) | 2.85 (72) |

① Manual override option MH adds .250" (6.4),
MS option adds .468" (11.9) to each solenoid endcap.

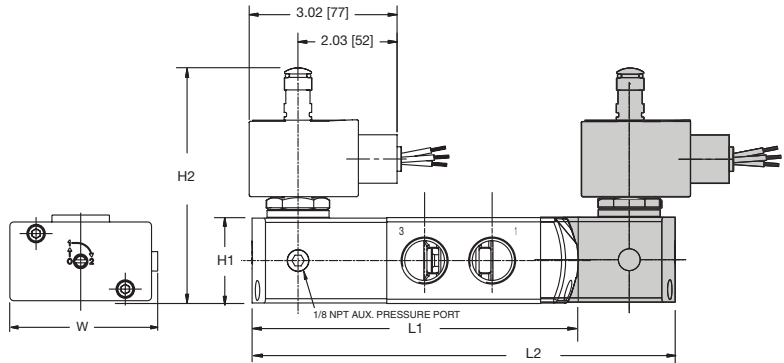
| Optional Manual Operators | | |
|---------------------------|--|---|
| Add Suffix | | Description |
| MO |  | Push and turn to lock with flat head screwdriver slot |
| MI |  | Momentary push in with flat head screwdriver slot |
| MH |  | Momentary push in by hand |
| MS |  | Push and turn to lock by hand |

| Series | 8551 | 8553 |
|--------|------------|------------|
| NPT | 1/4 | 1/2 |
| L1 ① | 5.63 (144) | 7.06 (180) |
| L2 ① | 7.20 (183) | 8.86 (225) |
| H2 | 4.38 (111) | 4.77 (121) |
| H1 | 1.10 (28) | 1.58 (40) |
| W | 1.77 (45) | 2.85 (72) |

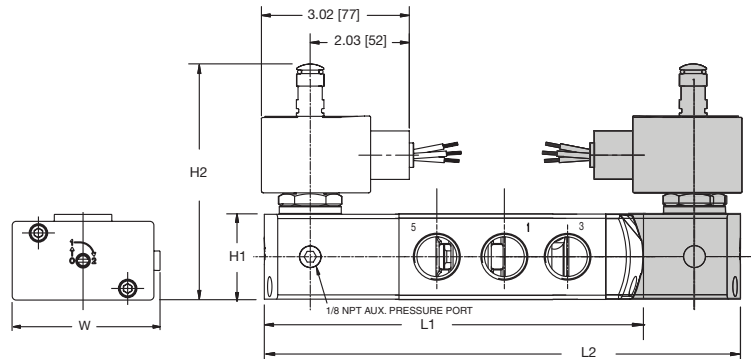
① Manual override option MH adds .250" (6.4),
MS option adds .468" (11.9) to each solenoid endcap.

| Optional Manual Operators | | |
|---------------------------|---|---|
| Add Suffix | | Description |
| MO |  | Push and turn to lock with flat head screwdriver slot |
| MI |  | Momentary push in with flat head screwdriver slot |
| MH |  | Momentary push in by hand |
| MS |  | Push and turn to lock by hand |

Const. Ref. 21



Const. Ref. 22



Dimensions: inches (mm)

| Series | 8551 (Aluminum, Brass) |
|--------|------------------------|
| NPT | 1/4 |
| L1 ① | 4.96 (126) |
| L2 ① | 6.49 (165) |
| H2 | 4.38 (111) |
| H1 | 1.57 (40) |
| W | 1.77 (45) |

① Manual override option MH adds .250" (6.4),
MS option adds .468" (11.9) to each solenoid endcap.

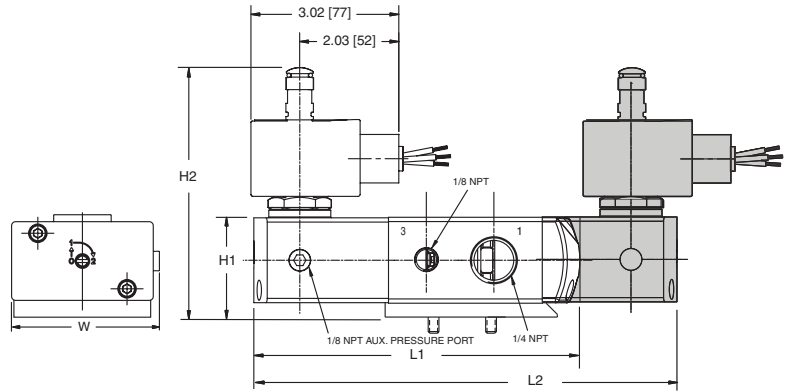
| Optional Manual Operators | | |
|---------------------------|--|---|
| Add Suffix | | Description |
| MO | | Push and turn to lock with flat head screwdriver slot |
| MI | | Momentary push in with flat head screwdriver slot |
| MH | | Momentary push in by hand |
| MS | | Push and turn to lock by hand |

| Series | 8551 (316L SS) | 8551 (5/3) | 8553 |
|--------|----------------|------------|------------|
| NPT | 1/4 | 1/4 | 1/2 |
| L1 ① | 5.20 (132) | - | 7.08 (180) |
| L2 ① | 6.73 (171) | 7.44 (189) | 8.85 (225) |
| H2 | 4.38 (111) | 4.38 (111) | 4.77 (121) |
| H1 | 1.57 (40) | 1.57 (40) | 2.08 (53) |
| W | 1.77 (45) | 1.77 (45) | 2.87 (73) |

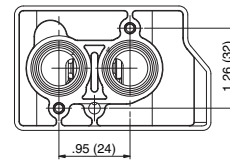
① Manual override option MH adds .250" (6.4),
MS option adds .468" (11.9) to each solenoid endcap.

| Optional Manual Operators | | |
|---------------------------|--|---|
| Add Suffix | | Description |
| MO | | Push and turn to lock with flat head screwdriver slot |
| MI | | Momentary push in with flat head screwdriver slot |
| MH | | Momentary push in by hand |
| MS | | Push and turn to lock by hand |

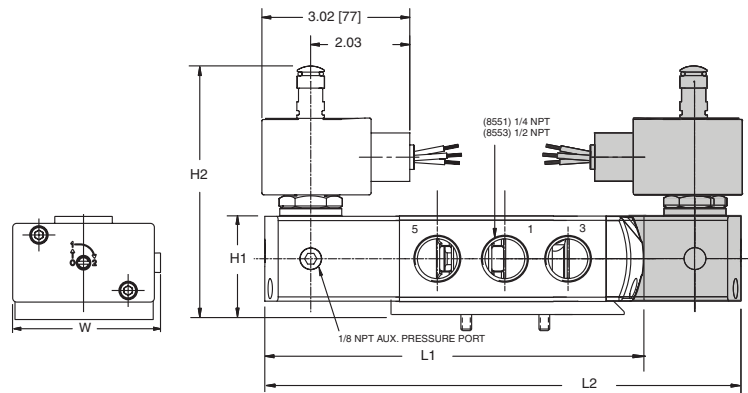
Const. Ref. 23



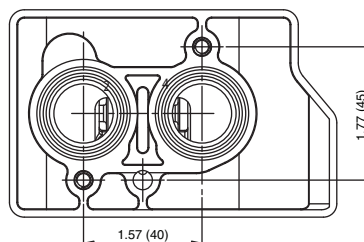
8551 NAMUR Footprint



Const. Ref. 24



8553 NAMUR Footprint



8551 NAMUR Footprint

