

Air and Inert Gas Intrinsically Safe Valves

Brass, Aluminum, or Stainless Steel Bodies 1/4" to 1" NPT



Features

- Intrinsically safe solenoid enclosures to provide corrosion resistance in harsh environments
- Designed solely for installation in intrinsically safe areas, with properly approved and sized current and voltagelimiting safety barriers
- Acceptable for use in hazardous locations, as classified by the National Electrical Code: Classes I, II, and III, Division 1, including Groups A through G
- Electronically enhanced solenoids have efficient cartridge operators and nonpolarized coils
- Triple redundant diodes prevent electrical pulse from flowing back into the hazardous area
- Mountable in any position

Solenoid Operators

WBIS: Watertight, Type 3, 3S, 4, 4X, IP-67. Liquid Crystal Polymer (LCP) overmolded with 1/2" NPT conduit connection and screw terminals for simple wiring. The terminal block will accommodate 18 gage (AWG) wire, and grounding screw is located inside the enclosure.

ISSC: DIN 43650/ISO 4400, IP-65 Epoxy overmolded with Din Connector supplied, suitable to accept wiring cable diameters of 0.310 to 0.400 inches.

Solenoid Construction

| Gasket Cover | NBR |
|--------------------|----------------------|
| Cover Screw | 18-8 Stainless Steel |
| Cover Screw Gasket | NBR |
| Sleeve | 430F Stainless Steel |
| Nameplate | Stainless Steel |
| Burp Cap Assembly | PA/CR |

Valve Construction

| Valve Parts in Cont | Valve Parts in Contact with Fluids | | | | | | | | | | | |
|--|------------------------------------|-----------------|-----------------|--|--|--|--|--|--|--|--|--|
| Body | Aluminum | Brass | Stainless Steel | | | | | | | | | |
| Seals and Discs | PUR, N | IBR, FKM, CR, | as listed | | | | | | | | | |
| Sleeve | 30 |)4L Stainless S | Steel | | | | | | | | | |
| Core and Plugnut | 430F Stainless Steel | | | | | | | | | | | |
| Core Springs | 302 Stainless Steel | | | | | | | | | | | |
| Pilot Seat Cartridge (Series 8316 & 8344 only) | CA | | | | | | | | | | | |
| Rider Rings | PTFE | | | | | | | | | | | |
| Spring Retainer | CA | | | | | | | | | | | |

Electrical

Nominal Wattage is 0.35 @ 24 VDC Maximum Allowable "Off" State Current to the Valves must be less than 1 mA.

Electronically Enhanced "IS" Solenoid: Maximum Capacitor Charge Time — 1 second

Minimum Time between Cycles — 1 second

Minimum Drop Current to Reset Electronic Coil — 2 mA

Nominal Temperature Rise at 24 VDC and 300 Ohms — 2°C (36°F) Maximum Recommended Wire Run (#18 Wire) — 1.5 miles from harri

Maximum Recommended Wire Run (#18 Wire) — 1.5 miles from barrier to valve **Important:** Minimum series resistance of 200 ohms required in wiring circuit if a safety barrier is not used for non-"IS" system. IS ValvesR5



Ordering Information

The LCP Intrinsically Safe solenoid enclosure is designated by the prefix "WBIS". The Epoxy Din Connector is ordered by prefix "ISSC".

Example: WBIS8314A300 ISSC8314A300 WBIS: 274445-001* ISSC: 268976-001*

Nominal Ambient Temp. Ranges

| Series | Body Material | Temperature Range | | | | |
|---------------|-----------------|--------------------------------|--|--|--|--|
| 8551/8553 | Aluminum | 5°F to 140°F (-15°C to 60°C) | | | | |
| 8262 | | | | | | |
| 8314 | Brass & | | | | | |
| 8317 | Stainless Steel | -40°F to 140°F (-40°C to 60°C) | | | | |
| 8551 | | | | | | |
| 8551/8553 | Stainless Steel | | | | | |
| 8316 Suffix V | Misc. | 32°F to 140°F (0°C to 60°C) | | | | |
| All Other | WISC. | -4°F to 140°F (-20°C to 60°C) | | | | |

Approvals

FM approved under J.I.3W8A8. AX (3610). CSA certified under File LR-13976. ATEX Ex II1G Ex ia IIC T6 approved IEC Ga Ex ia IIC T6 approved Meets applicable CE directives. *Refer to Engineering Section for details.*

Important

These solenoids are intended for use on clean, dry air or inert gas filtered to 50 micrometers or better. To prevent freezing, the dew point of the media should be at least $18^{\circ}F$ (-8°C) below the minimum temperature to which any portion of the clean air or gas system could be exposed. Instrument air in compliance with ANSI/ISA Standard S7.3-1975 (R1981) exceeds the above requirements and is, therefore, an acceptable medium for these valves.

Maximum Entity Parameters

| | • | |
|------------|-----------------|-----------------|
| Entity | Groups A-D | Groups C-D |
| Parameters | V max - 30 VDC | V max - 34 VDC |
| | I max - 100 mA | I max - 125 mA |
| | Capacitance = 0 | Capacitance = 0 |
| | Inductance = 0 | Inductance = 0 |

Standard Voltage: 24 VDC only (±10%) Minimum Operating Current: 0.028 amps

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Specifications (English units)

| 2/2 VALVES, | NORMALLY (| CLOSED, with | NBR Disc | | | | | | | | |
|--|---|---|--|--|--|---|--|---|--|----------------|--|
| | | | | | j Pressure tial (psi) | | | | | | |
| Pipe | Orifice | | | Air-Ine | ert Gas | | Brass Body | 1 | Stainless Steel Body | | |
| Size (ins.) | Size (ins.) | Cv F Fac | low tor | Min. | Max. | Max. Fluid and Ambient Temp. °F | Catalog Number | Const. Ref. | Catalog Number | Const Ref. | |
| 1/4 | 1/16 | .0 | 18 | 0 | 150 | 140 | WBIS8262A320 | 1 | WBIS8262A386 | 1A | |
| 3/8 | 5/16 | 1. | .5 | 10 | 150 | 140 | WBIS8223A323 | 2 | - | - | |
| 1/2 | 3/8 | 3 | .2 | 25 | 150 | 140 | WBIS8223A303 | 3 | WBIS8223A310 | 3 | |
| 3/2 VALVES | | • | | | • | | | | | | |
| | | Cv F | low | | j Pressure tial (psi) | | | | | | |
| Pipe | Orifice | Fac | | Air-Ine | ert Gas | | Brass Body | 1 | Stainless Steel | Body | |
| Size | Size | Pressure to | Cylinder to | | | Max. Fluid and | | Const. | | Const. | |
| (ins.) | (ins.) | Cylinder | Exhaust | Min. | Max. | Ambient Temp. °F | Catalog Number | Ref. | Catalog Number | Ref. | |
| | | Pressure at a | | | 450 | 140 | | | | | |
| 1/4 | 1/16 | .08 | .08 | 0 | 150 | 140 | WBIS8314A300 | 4 | WBIS8314A301 | 4A | |
| | | ed when de-e | | | | | | - | 1 | | |
| 1/4 | 5/16 | 1.5 | 1.5 | 6 | 150 | 140 | WBIS8316A301 3 | 5 | WBIS8316A381V (5) | 8 | |
| 3/8 | 5/16 | 1.8 | 1.8 | 6 | 150 | 140 | WBIS8316A302 ③ | 5 | WBIS8316A382V (5) | 8 | |
| 3/8 | 5/8 | 4 | 4 | 6 | 150 | 140 | WBIS8316A303 3 | 6 | - | - | |
| 1/2 | 5/8 | 4 | 4 | 6 | 150 | 140 | WBIS8316A304 3 | 6 | WBIS8316A384V (5) | 9 | |
| 3/4 | 11/16 | 5.5 | 5.5 | 10 | 150 | 140 | WBIS8316A374 3 | 7 | - | - | |
| 1 | 1 | 13 | 13 | 10 | 150 | 140 | WBIS8316A334 3 | 7A | - | - | |
| UNIVERSAL | OPERATION (| Normally Clos | ed or Normal | ly Open) "Qu | ick Exhaust" v | with CR Diaphragm an | d NBR Disc | | | | |
| 1/4 | 2 | .08 | .73 | 5 | 150 | 140 | WBIS8317A307 ① | 10 | WBIS8317A308 ① | 11 | |
| 4/2 VALVES, | with NBR Dis | c and Seal | | | | | | | | | |
| 1/4 | 1/16 | .08 | .08 | 10 | 150 | 140 | WBIS8345A301 13 | 12 | WBIS8345A381 13 | 12 | |
| 4/2 VALVES, | Brass Body w | vith NBR Disc | | | | | Single Solenoid | Const. Ref. | Dual Solenoid | Const. Ref. | |
| 1/4 | 1/4 | .80 | 1 | 10 | 150 | 140 | WBIS8344A370 13 | 13 | WBIS8344A344 3 | 16 | |
| 3/8 | 3/8 | 1.4 | 2.2 | 10 | 150 | 140 | WBIS8344A372 13 | 14 | WBIS8344A380 3 | 17 | |
| 1/2 | 3/8 | 1.4 | 2.2 | 10 | 150 | 140 | WBIS8344A374 13 | 14 | WBIS8344A382 3 | 17 | |
| 3/4 | 3/4 | 5.2 | 5.6 | 10 | 150 | 140 | WBIS8344A376 13 | 15 | WBIS8344A354 3 | 18 | |
| 1 | 3/4 | 5.2 | 5.6 | 10 | 150 | 140 | WBIS8344A378 13 | 15 | WBIS8344A356 3 | 18 | |
| exhaust mus not be exhau 2 For "Quick 3 IMPORTAI between the area, unrestr | t be connected sted to the atr Exhaust" valv NT: A minimum pressure and e | ves, pressure p n operating pr exhaust ports. ow controls an | exhaust when t port is 1/16", e essure differer Supply and ex | the air or ineri xhaust port is ntial must be i khaust piping | t gas can 1/4". maintained must be full | © Zero minimum who auxiliary air pressure pressure vs. mainline | in disc FKM only (pilot i en valve selection gasket is applied. See chart on pressure. Minimum 15 t is in the internal positic | t is in extern page 146 fo psi Operatin | al position and proper or auxiliary | | |



Specifications (English units)

| | | | | | | Single f | Solenoid | | | | Dual So | lenoid | |
|------------------------------|--------------|-----------------|------------|---------|---------------------------|---------------|----------------|--------|---------|---------------------------|---------------|----------------|--------|
| | | ' | | | g Pressure ntial (psi) | | | | | g Pressure ntial (psi) | | | |
| Body | Pipe Size | Orifice Size | Cv Flow | Air-Ine | ert Gas | Max. Fluid | Catalog | Const. | Air-In/ | ert Gas | Max. Fluid | Catalog | Const. |
| Material | (ins.) | (ins.) | Factor | Min. | Max. | Temp.°F | | Ref. | Min. | Max. | Temp.°F | | Ref. |
| 3/2, 5/2, 5/3 VALVES, with N | BR and F | PUR Seal | IS | | | | | | | | | | |
| Aluminum 3/2 | | · · · | | · · · | | · ا | WBIS8551A305 | 19 | | | · · | WBIS8551A306 | 19 |
| Aluminum 5/2 | ' | ' | | ' | | ' | WBIS8551A317 | 20 | 1 | | 1 | WBIS8551A318 | 20 |
| Aluminum 5/3 Center Closed | 1 | ' | | ' | ! | 1 ' | - | - | 1 | | 1 | WBIS8551A367 | 20 |
| Aluminum 5/3 Center Open | 1/4 | 1/4 | .86 | | | ' | - | - | 1 | | ' | WBIS8551A368 | 20 |
| Brass 3/2 | 1/4 | 1/4 | .00 | i | ! | 1 1 | WBIS8551A307 | 19 | 1 | | 1 | WBIS8551A308 | 19 |
| Brass 5/2 | 1 | ' | | 30 | 150 | 140 | WBIS8551A319 | 20 | 30 | 150 | 140 | WBIS8551A320 | 20 |
| 316L Stainless Steel 3/2 | ' | ' | | 30 | 150 | 140 | WBIS8551A313 2 | 19 | - 30 | 150 | 140 | WBIS8551A314 2 | 19 |
| 316L Stainless Steel 5/2 | 1 | ' | | ' | ! | ' | WBIS8551A321 2 | 20 | 1 | | ' | WBIS8551A322 2 | 20 |
| Aluminum 3/2 | | | | 1 ' | ! | ' | WBIS8553A305 | 19 | 1 | | ' | WBIS8553A306 | 19 |
| Aluminum 5/2 | 1/2 | 1/2 | 3.7 | ' | | ' | WBIS8553A317 | 20 | 1 | | ' | WBIS8553A318 | 20 |
| 316L Stainless Steel 3/2 | 1/2 | 1/2 | 3.1 | ' | | ' | WBIS8553A313 @ | 19 | 1 | | ' | WBIS8553A314 @ | 19 |
| 316L Stainless Steel 5/2 | ' | ' | | ' | | ' | WBIS8553A321 @ | 20 | 1 | | ' | WBIS8553A322 2 | 20 |
| | | | | | · | | | | | | · | | |
| | | | | | | Single { | Solenoid | | | | Dual So | lenoid | |

| | | | | | | Single S | olenoid | _ | Dual Solenoid | | | | | | |
|-------------------------------|---|-----------------|--|----------|--------|---------------|----------------|-----------------------|--------------------------|---------|---------------|----------------|--------|--|--|
| | Bing Orifing Cu | | Operating Pressure Differential (psi) | | | | | Operating Differen |) Pressure tial (psi) | | | | | | |
| Body | Pipe Size | Orifice Size | Cv Flow | Air-Ine | rt Gas | Max. Fluid | Catalog | Const. | Air-Ine | ert Gas | Max. Fluid | Catalog | Const. | | |
| Material | (ins.) | (ins.) | Factor | Min. | Max. | Temp.°F | Number | Ref. | Min. | Max. | Temp.°F | Number | Ref. | | |
| 3/2, 5/2, 5/3 VALVES, with N | BR and P | PUR Seal | s, NAMU | IR Mount | | | | | | | | | | | |
| Aluminum 3/2, 5/2 | | | | | | | WBIS8551A301 ① | 21 | | | | WBIS8551A302 ① | 21 | | |
| Aluminum 5/3 Center Closed | | | | | | | - | - | 1 | | | WBIS8551A365 | 22 | | |
| Aluminum 5/3 Center Open | 1/4 | 1/4 | .86 | | | | - | - | 1 | | | WBIS8551A366 | 22 | | |
| Brass 3/2, 5/2 | | | | 30 | 150 | 140 | WBIS8551A303 ① | 21 | 30 | 150 | 140 | WBIS8551A304 ① | 21 | | |
| 316L Stainless Steel 3/2, 5/2 | | | | | | | WBIS8551A309 2 | 22 | 1 | | | WBIS8551A310 2 | 22 | | |
| Aluminum 3/2, 5/2 | 1/2 | 1/2 | 3.7 | | | | WBIS8553A301 | 22 | 1 | | | WBIS8553A302 | 22 | | |
| 316L Stainless Steel 3/2, 5/2 | 1/2 | 1/2 | 5.7 | | | | WBIS8553A309 2 | 22 | 1 | | | WBIS8553A310 2 | 22 | | |
| ① 1/8" NPT exhaust for 1/4" a | ① 1/8" NPT exhaust for 1/4" aluminum and brass. ② Can be used for <i>dry</i> natural gas service. | | | | | | | | | | | | | | |



Specifications (Metric units)

| | | | | Differen | Pressure tial (bar) | - | | | | |
|--|--------------|----------------------------|----------------|---------------|------------------------|------------------------------------|------------------|----------------|-------------------|----------------|
| Pipe | Orifice | | | Air-Ine | ert Gas | | Brass Body | | Stainless Steel | |
| Size (ins.) | Size (mm) | Kv F Factor | - | Min. | Max. | Max. Fluid and Ambient Temp. °C | Catalog Number | Const. Ref. | Catalog Number | Const. Ref. |
| 1/4 | 1 | | 17 | 0 | 10.3 | 60 | WBIS8262A320 | 1 | WBIS8262A386 | 1A |
| 3/8 | 8 | 1.29 0.7 1 | | 10.3 | 60 | WBIS8223A323 | 2 | - | - | |
| 1/2 | 10 | 2.74 | | 1.7 | 10.3 | 60 | WBIS8223A303 | 3 | WBIS8223A310 | 3 |
| 3/2 VALVES | 2 VALVES | | | | | | | | | |
| | | Kv F | Inw | | Pressure tial (bar) | | | | | |
| Pipe | Orifice | Factor | - | Air-Ine | ert Gas | | Brass Body | , | Stainless Steel | Body |
| Size | Size | Pressure to | Cylinder to | | | Max. Fluid and | | Const. | | Const. |
| (ins.) | (mm) | Cylinder Pressure at an | Exhaust | Min. | Max. | Ambient Temp. °C | Catalog Number | Ref. | Catalog Number | Ref. |
| 1/4 | 2 | .07 | .07 | 0 | 10.3 | 60 | WBIS8314A300 | 4 | WBIS8314A301 | 4A |
| | - | ed when de-er | | 0 | 10.0 | 00 | WD100314A000 | - | WD100314A301 | -70 |
| 1/4 | 8 | 1.29 | 1.29 | 6 | 10.3 | 60 | WBIS8316A301 3 | 5 | WBIS8316A381V (5) | 8 |
| 3/8 | 8 | 1.37 | 1.37 | 6 | 10.3 | 60 | WBIS8316A302 ③ 5 | | WBIS8316A382V (5) | 8 |
| 3/8 | 16 | 3.43 | 3.43 | 6 | 10.3 | 60 | WBIS8316A303 ③ 6 | | - | - |
| 1/2 | 16 | 3.43 | 3.43 | 6 | 10.3 | 60 | WBIS8316A304 ③ 6 | | WBIS8316A384V (5) | 9 |
| 3/4 | 17 | 4.71 | 4.71 | 0.7 | 10.3 | 60 | WBIS8316A374 3 | 7 | - | - |
| 1 | 25 | 11.14 | 11.14 | 0.7 | 10.3 | 60 | WBIS8316A334 3 | 7A | - | - |
| UNIVERSAL | OPERATION (N | lormally Close | ed or Normally | / Open) "Quic | k Exhaust" wi | th CR Diaphragm and | NBR Disc | | | |
| 1/4 | 2 | .07 | .63 | 0.3 | 10.3 | 60 | WBIS8317A307 ① | 10 | WBIS8317A308 ① | 11 |
| 4/2 VALVES, | with NBR Dis | c and Seal | | | | | 1 | | | |
| 1/4 | 2 | .07 | .07 | 0.7 | 10.3 | 60 | WBIS8345A301 103 | 12 | WBIS8345A381 13 | 12 |
| 4/2 VALVES, | Brass Body w | ith NBR Disc | | | | | Single Solenoid | Const. Ref. | Dual Solenoid | Const Ref. |
| 1/4 | 6 | .69 | .86 | 0.7 | 10.3 | 60 | WBIS8344A370 13 | 13 | WBIS8344A344 3 | 16 |
| 3/8 | 10 | 1.20 | 1.89 | 0.7 | 10.3 | 60 | WBIS8344A372 13 | 14 | WBIS8344A380 3 | 17 |
| 1/2 | 10 | 1.20 | 1.89 | 0.7 | 10.3 | 60 | WBIS8344A374 13 | 14 | WBIS8344A382 3 | 17 |
| 3/4 | 19 | 4.46 | 4.80 | 0.7 | 10.3 | 60 | WBIS8344A376 13 | 15 | WBIS8344A354 ③ | 18 |
| 1 19 4.46 4.80 0.7 10.3 60 WBIS8344A378 ①③ 15 WBIS8344A356 ③ 18 ① There are two exhaust flows in the exhaust mode (pilot and main). The pilot ⑤ Diaphragm and main disc FKM only (pilot is low-temperature NBR). | | | | | | | | | | |
| exhaust must be connected to the main exhaust when the air or inert gas can not be exhausted to the atmosphere. @ For "Quick Exhaust" valves, pressure port is 1/16", exhaust port is 1/4". @ 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. @ Ero minimum when valve selection gasket is in external position and proper auxiliary air pressure is applied. See chart on page 146 for auxiliary pressure Differential when selection gasket is in the internal position. | | | | | | | | | | |



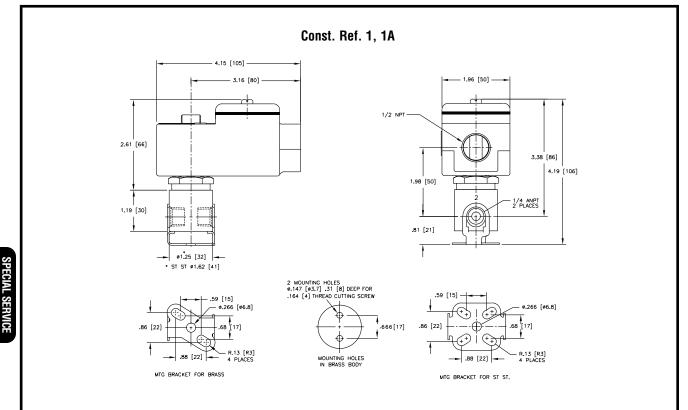
Specifications (Metric units)

| , | · · · · | | | | | Single ? | Solenoid | | | | Dual So | lenoid | , |
|-------------------------------|--------------|-------------|--------|-------------------------------|---------------------------|----------|----------------|---------|---------------|---------------------------|---------|----------------|------|
| ' | | | | | g Pressure ntial (bar) | | | | | g Pressure ntial (bar) | | 1 | |
| Body | Pipe Size | | | Max. Fluid | Catalog | Const. | Air-In/ | ert Gas | Max. Fluid | Catalog | Const. | | |
| Material | (ins.) | (mm) | Factor | Min. | Max. | Temp.°C | | Ref. | Min. | Max. | Temp.°C | | Ref. |
| 3/2, 5/2, 5/3 VALVES, with NE | BR and F | 'UR Seal | IS | | | | | | | | | | |
| Aluminum 3/2 | , , | | | | ' | | WBIS8551A305 | 19 | ,, | | | WBIS8551A306 | 19 |
| Aluminum 5/2 | 1 ' | ' | 1 ' | ' | ' | 1 | WBIS8551A317 | 20 | 1 ' | | 1 7 | WBIS8551A318 | 20 |
| Aluminum 5/3 Center Closed | 1 ' | ' | 1 ' | ' | ' | 1 | - | - | 1 ' | | 1 7 | WBIS8551A367 | 20 |
| Aluminum 5/3 Center Open | 1/4 | 6 | .7 | ' | ' | r | - | - | 1 ' | | 1 7 | WBIS8551A368 | 20 |
| Brass 3/2 | 1/4 | | .' ' | ' | ' | 1 | WBIS8551A307 | 19 | 1 ' | | | WBIS8551A308 | 19 |
| Brass 5/2 | 1 ' | ' | 1 ' | 2 | 10 | 60 | WBIS8551A319 | 20 | 2 | 10 | 60 | WBIS8551A320 | 20 |
| 316L Stainless Steel 3/2 | 1 ' | ' | ' | 2 | | | WBIS8551A313 2 | 19 | | 10 | | WBIS8551A314 2 | 19 |
| 316L Stainless Steel 5/2 | 1 ' | ' | ' | ' | ' | 1 | WBIS8551A321 2 | 20 | 1 ' | | 1 | WBIS8551A322 2 | 20 |
| Aluminum 3/2 | , | · · · · · · | | ' | ' | r | WBIS8553A305 | 19 | 1 ' | | 1 | WBIS8553A306 | 19 |
| Aluminum 5/2 | 1/2 | 13 | 3.7 | ' | ' | r | WBIS8553A317 | 20 | 1 ' | | 1 | WBIS8553A318 | 20 |
| 316L Stainless Steel 3/2 | 1/2 | | 3.1 | ' | ' | 1 | WBIS8553A313 @ | 19 | 1 ' | | 1 7 | WBIS8553A314 2 | 19 |
| 316L Stainless Steel 5/2 | 1' | ' | ' | ' | ' | | WBIS8553A321 2 | 20 | 1' | | | WBIS8553A322 2 | 20 |
| | | | | | | | | | | | | | |
| · | | | | Single Solenoid Dual Solenoid | | | | | | | | | |

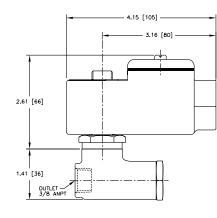
| | | | | | | Single S | olenoid | | Dual Solenoid | | | | | | |
|-------------------------------|---|-----------------|------------|---------|--|---------------|----------------|--------|---------------|--------|------------------------|----------------|--------|--|--|
| | . . | a | | | Dperating Pressure Differential (bar) | | ntial (bar) | | | | Operating Different | | | | |
| Body | Pipe Size | Orifice Size | Kv Flow | Air-Ine | ert Gas | Max. Fluid | Catalog | Const. | Air-Ine | rt Gas | Max. Fluid | Catalog | Const. | | |
| Material | (ins.) | (mm) | Factor | Min. | Max. | Temp.°C | | Ref. | Min. | Max. | Temp.°C | Number | Ref. | | |
| 3/2, 5/2, 5/3 VALVES, with N | BR and P | UR Seal | s, NAMU | R Mount | | | | | | | | | | | |
| Aluminum 3/2, 5/2 | | | | | | | WBIS8551A301 ① | 21 | | | | WBIS8551A302 ① | 21 | | |
| Aluminum 5/3 Center Closed | | | | | | | - | - | | | | WBIS8551A365 | 22 | | |
| Aluminum 5/3 Center Open | 1/4 | 6 | .7 | | | | - | - | | | | WBIS8551A366 | 22 | | |
| Brass 3/2, 5/2 | | | | 2 | 10 | 60 | WBIS8551A303 ① | 21 | 2 | 10 | 60 | WBIS8551A304 ① | 21 | | |
| 316L Stainless Steel 3/2, 5/2 | | | | | | | WBIS8551A309 2 | 22 | | | | WBIS8551A310 2 | 22 | | |
| Aluminum 3/2, 5/2 | 1/2 | 13 | 3.7 | | | | WBIS8553A301 | 22 | | | | WBIS8553A302 | 22 | | |
| 316L Stainless Steel 3/2, 5/2 | 1/2 | 13 | 5.7 | | | | WBIS8553A309 2 | 22 | | | | WBIS8553A310 2 | 22 | | |
| ① 1/8" NPT exhaust for 1/4" a | ① 1/8" NPT exhaust for 1/4" aluminum and brass. ② Can be used for <i>dry</i> natural gas service. | | | | | | | | | | | | | | |

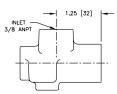


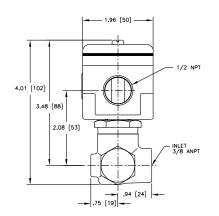
Dimensions: inches (mm)



Const. Ref. 2

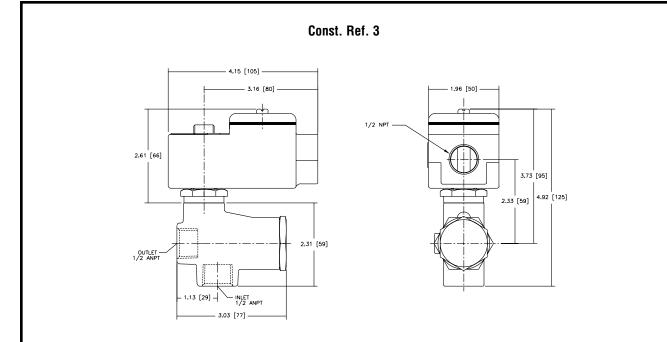




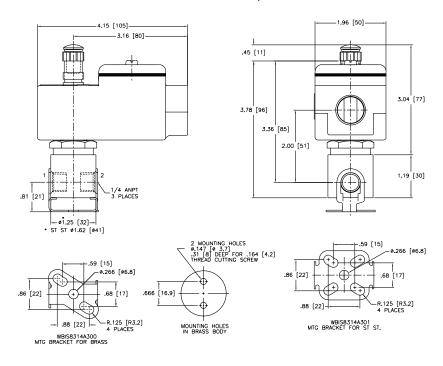




Dimensions: inches (mm)

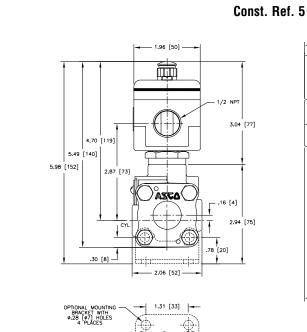


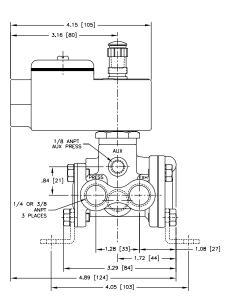
Const. Ref. 4, 4A



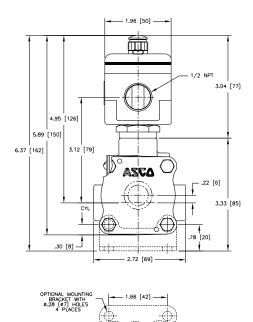


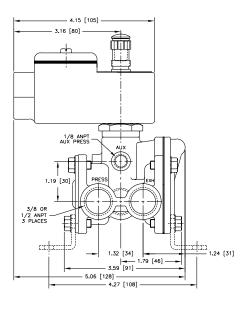
Dimensions: inches (mm)





Const. Ref. 6



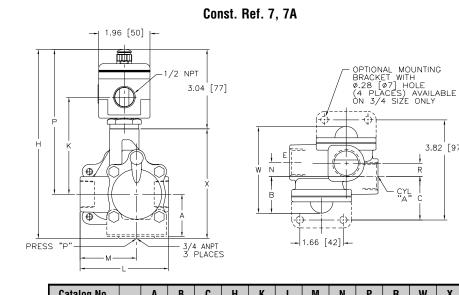


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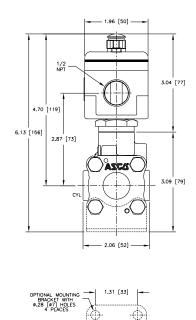
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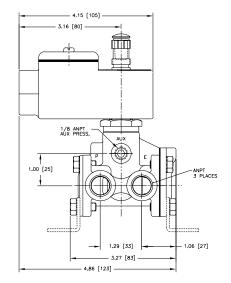
Dimensions: inches (mm)



| Cata | log No. | | A | В | C | Н | K | L | Μ | N | Р | R | W | Х |
|-------|-----------|------|------|------|------|------|------|------|------|-----|------|------|------|------|
| WRIS | B316A374 | ins. | 1.61 | 1.41 | 1.66 | 7.23 | 3.71 | 3.38 | 2.16 | .53 | 5.54 | .50 | 3.31 | 4.19 |
| WDIS | 0010A074 | mm | 41 | 36 | 42 | 184 | 94 | 86 | 55 | 13 | 141 | 13 | 84 | 106 |
| WDIG | 8316A334 | ins. | - | 1.78 | - | 7.85 | 3.96 | 4.44 | 2.81 | .87 | 5.79 | 1.74 | 5.32 | 481 |
| WDISC | 03 TUA334 | mm | - | 45 | - | 199 | 100 | 113 | 71 | 22 | 147 | 44 | 135 | 122 |

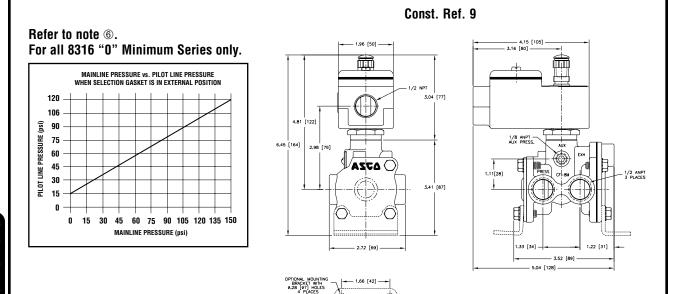
Const. Ref. 8





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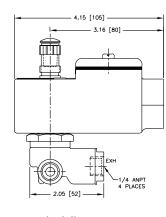
Dimensions: inches (mm)

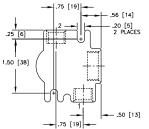


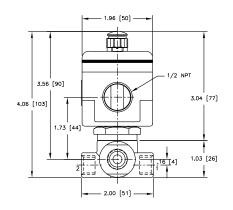
Const. Ref. 10

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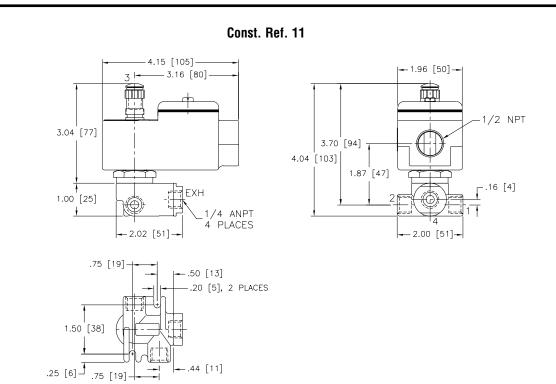




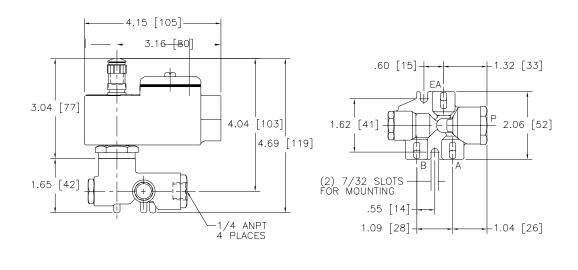




Dimensions: inches (mm)

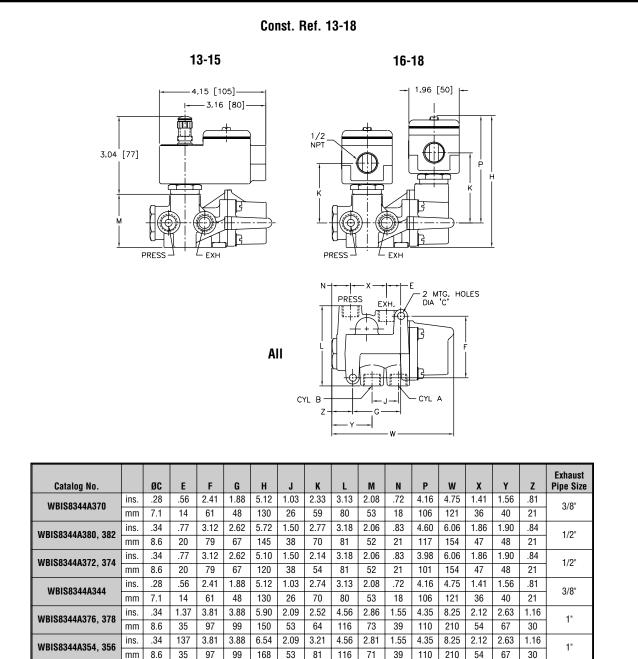


Const. Ref. 12



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Dimensions: inches (mm)



IMPORTANT: Valves can be mounted in any position.



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) |

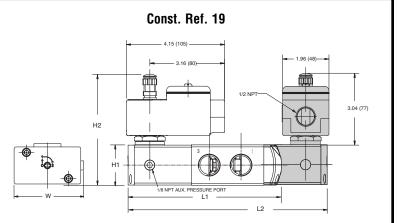
 Manual override option MH adds .250" (6.4), MS option adds .468" (11.9) to each solenoid endcap.

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

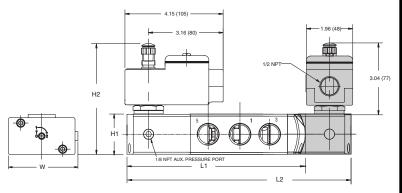
| Series | 8551 | 8553 |
|--------|------------|------------|
| NPT | 1/4 | 1/2 |
| L1 ① | 5.63 (144) | 7.06 (180) |
| L2 ① | 7.20 (183) | 8.86 (225) |
| H2 | 4.38 (111) | 4.77 (121) |
| H1 | 1.10 (28) | 1.58 (40) |
| W | 1.77 (45) | 2.85 (72) |

 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 | |
| МІ | | Momentary push in with flat head screwdriver slot | |
| МН | | Momentary push in by hand | |
| MS | | Push and turn to lock by hand | |



Const. Ref. 20





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) |
| | |

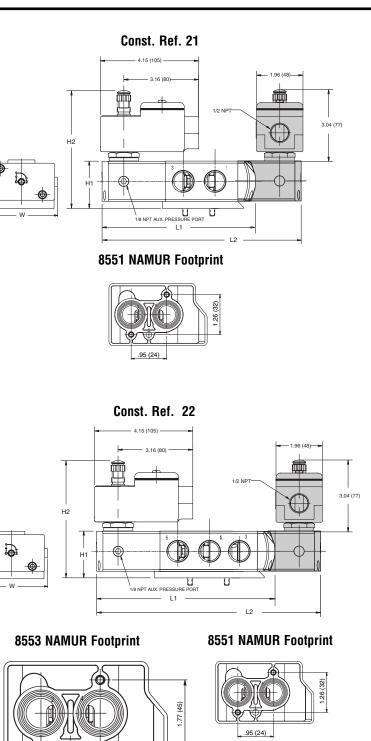
Manual override option MH adds .250" (6.4), MS option adds .468" (11.9) to each solenoid endcap.

| 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 |
| МН | | 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) |

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 | $\uparrow 0 0 2$ | Momentary push in with flat head screwdriver slot |
| МН | | Momentary push in by hand |
| MS | | Push and turn to lock by hand |



1.57 (40)

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