

AS Series

- ▶ MOPD: 110 PSI (7.5 Bar) Plastic Body or 150 PSI (10 Bar) Metal Body
- ▶ C_v Range: 0.020 to 0.300 (K_v Range: 0.017 to 0.256)
- ▶ 4.5 Watts (Plastic Body) or 7 Watts (Metal Body)

The AS Series is a 2-way isolation valve, designed to control the flow of various aggressive liquids and gases with several body and diaphragm materials. With a modular design, the AS offers performance flexibility and the protection your media needs from the solenoid's internal components. Numerous port configurations, voltage options, and coil constructions enable the AS Series to be a truly versatile miniature inert isolation valve, easily integrated into any complex or demanding system.

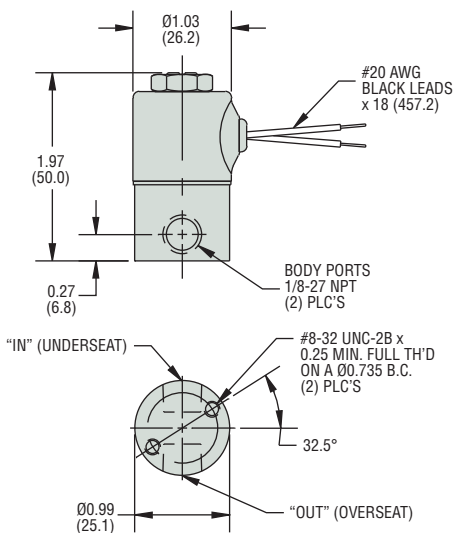
Typical Applications

- Analytical Instruments
- Clinical Diagnostic Analyzers
- Bio-Instrumentation

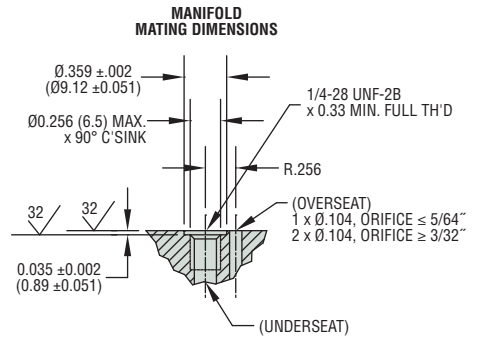
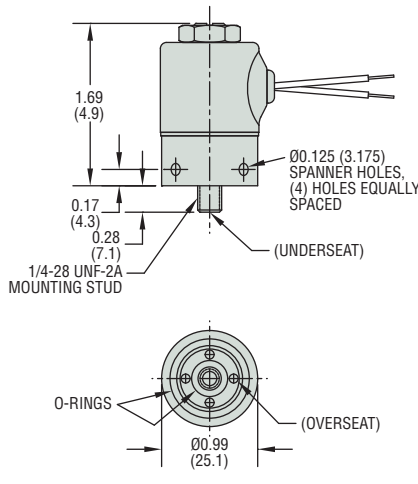


Dimensions

Threaded Port Body

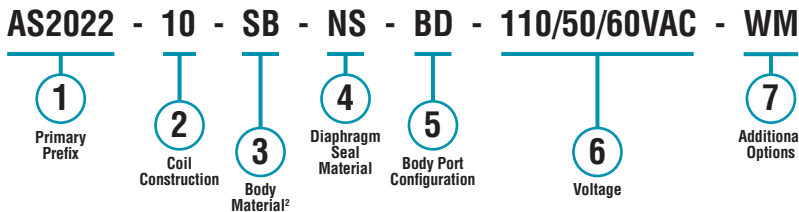


Manifold Mount Body



How To Order

Use the **Bold** characters from the choices listed on the following page to construct a product code.



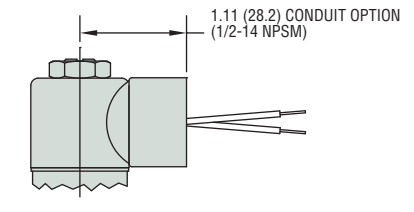
Example:

AS2022-10-SB-NS-BD-110/50/60VAC-WM

2-Way N.C. (1/2" (12.70mm) conduit housing) solenoid valve, with externally rectified coil (lead-wires only), 304 stainless steel body, nitrile (NSF/FDA) diaphragm seal, #10-32 female straight thread, operating at 110/50/60 Volt AC with rectified coil and mounting bracket.

Alternate 1/2" Conduit Housing

Available on all body configurations



Notes

1. After the Primary Prefix, any "-Code" may be blank when standard (blank) selections are specified.
2. The Body Material option code, when specified, supercedes the standard body material indicated by the Primary Prefix.

SOLENOID VALVES

Part Prefix Table ①

| Body Material | Orifice | | MOPD | | Max Back Pressure | | C _v | K _v | ① Primary Prefix | |
|---|---------|------|------|-----|-------------------|-----|----------------|----------------|------------------|-----------------|
| | Body | | psig | bar | psig | bar | Body | | Grommet Housing | Conduit Housing |
| | inches | mm | | | | | | | | |
| 303 Stainless Steel ¹ | 1/32 | 0.79 | 150 | 10 | 5 | 0.7 | 0.020 | 0.017 | AS2011 | AS2021 |
| | 3/64 | 1.19 | 110 | 7.6 | 5 | 0.7 | 0.035 | 0.030 | AS2012 | AS2022 |
| | 1/16 | 1.59 | 90 | 6.2 | 5 | 0.7 | 0.065 | 0.055 | AS2013 | AS2023 |
| | 5/64 | 1.98 | 70 | 4.8 | 5 | 0.7 | 0.090 | 0.077 | AS2014 | AS2024 |
| | 3/32 | 2.38 | 45 | 3.1 | 5 | 0.7 | 0.155 | 0.132 | AS2015 | AS2025 |
| | 1/8 | 3.18 | 15 | 1.0 | 5 | 0.3 | 0.240 | 0.205 | AS2016 | AS2026 |
| | 5/32 | 3.97 | 5 | 0.3 | 5 | 0.3 | 0.300 | 0.256 | AS2017 | AS2027 |
| Polypropylene (1/8-27 NPT Female Thread body port only) | 3/64 | 1.19 | 110 | 7.6 | 5 | 0.7 | 0.035 | 0.030 | AS2032 | AS2042 |
| | 1/8 | 3.18 | 15 | 1.0 | 5 | 0.7 | 0.240 | 0.205 | AS2036 | AS2046 |

* Other body orifice sizes may be available, consult factory.

② Coil Construction

(blank) = Tape-wrapped, Class-B, with 18" (45.7cm) lead-wires*

W__ = Tape-wrapped coil, lead-wires, non-standard length (specify in inches)

1 = Encapsulated coil, Class-B, lead-wires

2 = Molded coil, Class-F, lead-wires

3 = Encapsulated coil, Class-H, lead-wires

4 = Encapsulated coil, Class-B, 3/16" (4.76mm) spade terminals
- 1/4" (6.35mm) spade optional

10 = Externally rectified coil (lead-wires only)

11 = Tape-wrapped coil, Class-H, lead-wires

HC2 = Encapsulated coil, Class-B, EN175301-803 Style C, Industrial, 9.4mm, 2+1 poles

③ Body Material (Replaces Standard 303 SS)

BB = Brass

SB = 304 Stainless Steel

SBS = 316 Stainless Steel

④ Diaphragm Seal Material

(blank) = Viton® diaphragm*

E = EPR diaphragm

NS = Nitrile (NSF/FDA) diaphragm

PF = Perfluoroelastomer diaphragm

⑤ Body Port Configuration

(blank) = 1/8-27 NPT female thread*

LB = 1/4-18 NPT female thread²

BD = #10-32 female straight thread
- max. orifice = 1/8" (3.18mm)²

LT = 1/8-28 BSPT female thread²

LU = 1/4-19 BSPT female thread²

MM = Manifold mount (1/4-28 UNF-2A mounting stud)^{2†}

MM3 = Manifold mount (5/16-24 UNF-2A mounting stud)^{2†}

OB = Omit body (operator style)²

BI = Bottom over-seat port, female thread

- max. orifice = 1/8" (3.18mm)²

BIM = Bottom over-seat port, 1/8-27 NPT male thread

- max. orifice = 5/64" (1.98mm), brass body only)²

BO = Bottom under-seat port, female thread²

BOM = Bottom under-seat port, 1/8-27 NPT male thread

- max. orifice = 1/8" (3.18mm), brass body only)²

RL = 90° porting - left hand²

RR = 90° porting - right hand²

⑥ Voltage

__VDC = DC (specify voltage)

__VAC = AC Rectified only (specify voltage)

⑦ Additional Options

Y = Yoke

WM = Mounting bracket

OC = Cleaned for oxygen use

* Standard selection; will be used unless otherwise specified. Standard selections are not referenced in final part number.

Notes

- Use Prefixes from these rows if you want to use any of the other Body Materials listed under selection ③. Simply add the respective material code in the 3rd part number position (See Example).
- Not available with Polypropylene bodies.

† Teflon® o-ring not suitable for manifold mount.

Gems specializes in the design and manufacturing of custom solenoid valves and fluidic systems. If you don't see what you're looking for, or have a question, contact us at 800-378-1600 or info@gemssensors.com.