

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.

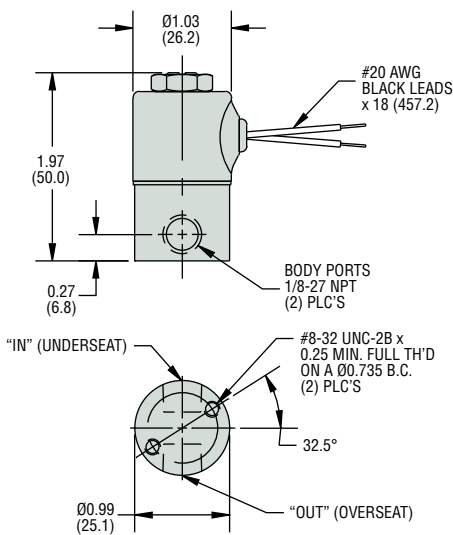
Typical Applications

- Analytical Instruments
- Clinical Diagnostic Analyzers
- Bio-Instrumentation

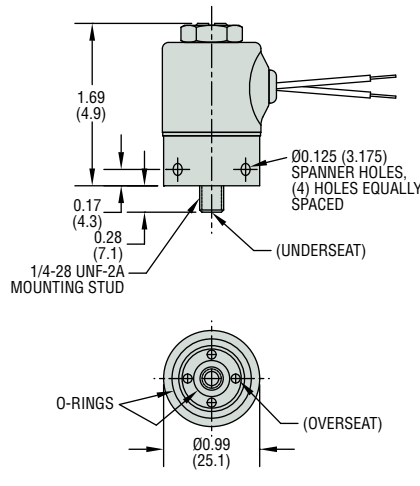


Dimensions

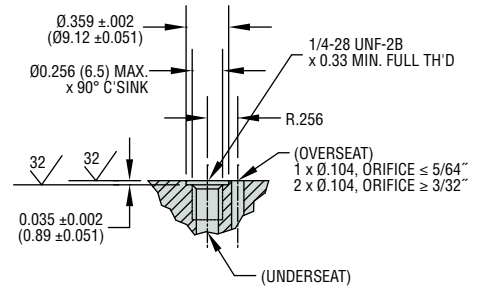
Threaded Port Body



Manifold Mount Body

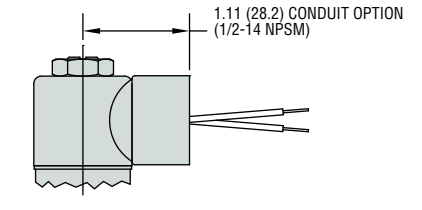


MANIFOLD MATING DIMENSIONS

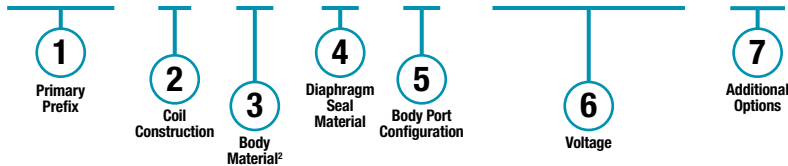


Alternate 1/2" Conduit Housing

Available on all body configurations



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



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.

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.

Part Prefix Table ①

Body Material	Orifice		MOPD*		C _v	K _v	① Primary Prefix	
	Body		psig	bar			Body	Grommet Housing
	inches	mm						
303 Stainless Steel ¹	1/32	0.79	150	10	0.020	0.017	AS2011	AS2021
	3/64	1.19	110	7.6	0.035	0.030	AS2012	AS2022
	1/16	1.59	90	6.2	0.065	0.055	AS2013	AS2023
	5/64	1.98	70	4.8	0.090	0.077	AS2014	AS2024
	3/32	2.38	45	3.1	0.155	0.132	AS2015	AS2025
	1/8	3.18	15	1.0	0.240	0.205	AS2016	AS2026
	5/32	3.97	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	0.035	0.030	AS2032	AS2042
	1/8	3.18	15	1.0	0.240	0.205	AS2036	AS2046

* Excessive downstream pressure and/or restrictions may increase closing time.

② Coil Construction

- (blank) = Tape-wrapped, Class B (130°C), with 18" (45.7cm) lead wires*
- W___ = Tape-wrapped coil, lead wires, non-standard length (specify length in inches)
- 10 = Externally rectified coil (AC voltages and lead wires only)
- 1 = Encapsulated coil, Class B (130°C), lead wires
- 3 = Encapsulated coil, Class H (180°C), lead wires
- 4 = Encapsulated coil, Class B (130°C), 3/16" (4.76mm) spade terminals (1/4" (6.35mm) spade terminal optional)
- 11 = Tape-wrapped coil, Class H (180°C), lead wires
- HC2 = Encapsulated coil, Class B (130°C), 9.4mm DIN (EN175301-803 Style C Industrial 2+1 poles)

③ Body Material (Replaces Standard 303 SS)

- BB = Brass
- SB = 304 Stainless Steel
- SB5 = 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

1. 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).
2. 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.