

AG Series

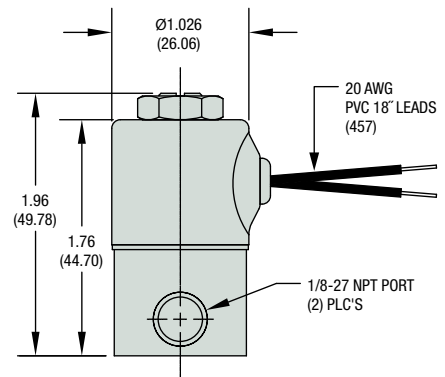
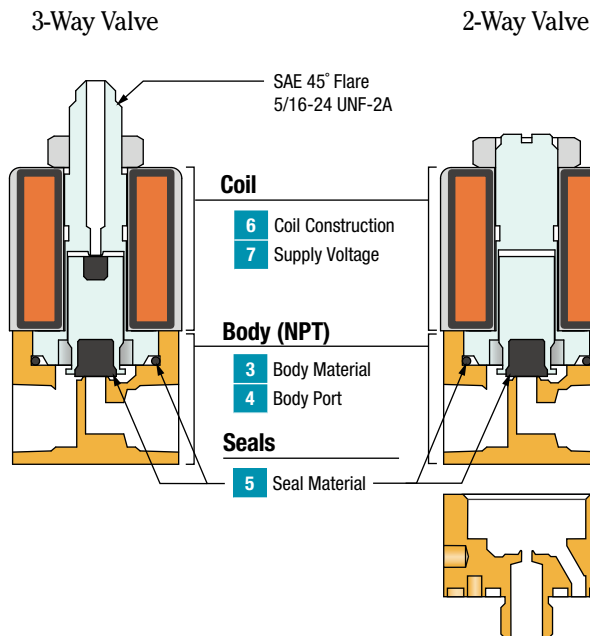
- ▶ MOPD: 1000 PSI (69 Bar)
- ▶ C_v Range: 0.019 to 0.300 (K_v Range: 0.016 to 0.256)
- ▶ 7 Watts

The AG Series gives you a highly adaptable design for practically all applications requiring flow between C_v 0.019 and 0.300 (K_v 0.016 to 0.259). This robust 2- or 3-way miniature solenoid utilizes a stainless steel body to resist corrosion for most acids, alkaline solutions, and harsh environments. Available in numerous port configurations, orifice sizes, and material combinations, the AG Series is a highly flexible valve that fulfills the requirements for most applications.

Typical Applications

- Stainless Steel Bodies:
- Medical Equipment
 - Laboratory Equipment
 - Food Processing Equipment

Reference



Example Shown
Part Number: AG2022-01LC-B-G1-203
From How to Order example below.

How To Order

Valve Part Numbers are built from a series product codes. Use the **Bold** product codes from the choices listed on the following page to construct a complete Part Number.

AG	20	22	-	01	LC	-	B	-	G1	-	203
Series	1	2	-	3	4	-	5	-	6	-	7
	Function	MOPD		Body Material	Body Port		Seal Material		Coil Construction		Supply Voltage

Product Description from Example Shown Above:

AG2022-01LC-B-G1-203

- AG2022 = AG Series with 2-Way Normally Closed Valve **Function**; 100 MOPD
- 01LC = 303 Stainless Steel **Body Material**; 1/8" NPT Female **Body Port**
- B = Nitrile (Buna-N) **Seal Material** (Plunger Seal and Internal O-Ring)
- G1 = Grommet Housing, Tape-Wrapped (Class B) **Coil Construction**
- 203 = 12 VDC **Supply Voltage**

AG Series – Part Number Build

Build a Valve Part Number by filling in the boxes below using the related code numbers on this page.

AG			-			-		-			-		
Series	1	2		3	4		5		6			7	

1 + 2 Valve Function & Maximum Operating Pressure Differential

Valve Function	Code	MOPD		C _v		K _v		Orifice			
		psig	bar	Body	Stop	Body	Stop	Body		Stop	
								inches	mm	inches	mm
2-WAY Normally Closed	2001	1000	69	0.020	—	0.017	—	1/32	0.79	—	—
	2004	500	34	0.035	—	0.030	—	3/64	1.19	—	—
	2007	300	21	0.065	—	0.055	—	1/16	1.59	—	—
	2011	200	14	0.090	—	0.077	—	5/64	1.98	—	—
	2014	175	12	0.155	—	0.132	—	3/32	2.38	—	—
	2022	100	6.9	0.240	—	0.205	—	1/8	3.18	—	—
	2029	50	3.4	0.300	—	0.256	—	5/32	3.97	—	—
3-WAY Normally Closed	3111	200	14	0.019	0.019	0.016	0.016	1/32	0.79	1/32	0.79
	3117	150	10	0.040	0.040	0.034	0.034	3/64	1.19	3/64	1.19
	3122	100	6.9	0.070	0.070	0.060	0.060	1/16	1.59	3/64	1.19
	3126	75	5.2	0.070	0.070	0.060	0.060	1/16	1.59	1/16	1.59
	3129	50	3.4	0.170	0.040	0.145	0.034	3/32	2.38	3/64	1.19
3-WAY Normally Open	3217	150	10	0.019	0.019	0.016	0.016	1/32	0.79	1/32	0.79
	3222	100	6.9	0.040	0.040	0.034	0.034	3/64	1.19	3/64	1.19
	3223	90	6.2	0.070	0.040	0.060	0.034	1/16	1.59	3/64	1.19
	3226	75	5.2	0.070	0.070	0.060	0.060	1/16	1.59	1/16	1.59
	3229	50	3.4	0.170	0.040	0.145	0.034	3/32	2.38	3/64	1.19
3-WAY Multi Purpose	3320	125	8.6	0.019	0.019	0.016	0.016	1/32	0.79	1/32	0.79
	3322	100	6.9	0.040	0.040	0.034	0.034	3/64	1.19	3/64	1.19
	3323	90	6.2	0.070	0.040	0.060	0.034	1/16	1.59	3/64	1.19
	3326	75	5.2	0.070	0.070	0.060	0.060	1/16	1.59	1/16	1.59
	3334	25	1.7	0.170	0.040	0.145	0.034	3/32	2.38	3/64	1.19
3-WAY Directional Control	3410	225	16	0.019	0.019	0.016	0.016	1/32	0.79	1/32	0.79
	3417	150	10	0.040	0.040	0.034	0.034	3/64	1.19	3/64	1.19
	3422	100	6.9	0.070	0.040	0.060	0.034	1/16	1.59	3/64	1.19
	3426	75	5.2	0.070	0.070	0.060	0.060	1/16	1.59	1/16	1.59
	3429	50	3.4	0.155	0.040	0.132	0.034	3/32	2.38	3/64	1.19

3 Body Material

- 01 303 Stainless Steel
- 03 Brass
- 05 316 Stainless Steel
- XX No Body
(4 Body Port OB only)

4 Body Port

- LC 1/8" NPT Female
- MM Manifold Mount
(1/4"-28 Stud)
- OB Omit Body (operator only)*
(3 Body Material XX only)

5 Seal Material

- B Nitrile
- E EPR
- V Viton®

6 Coil Construction

- G1 Grommet Housing,
Tape-Wrapped (Class B) Lead Wires
- G5 Grommet Housing,
Epoxy Encapsulated (Class B) Lead Wires

7 Supply Voltages

- AC Voltage - Copper shading ring standard
- 111 120/60 VAC
- DC Voltage
- 203 12 VDC
- 204 24 VDC

* Contact Gems for the operator orifice drawings

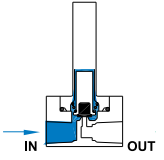
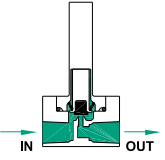
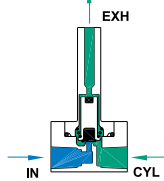
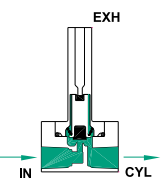
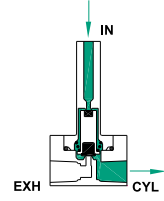
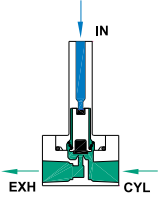
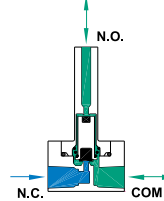
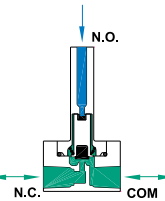
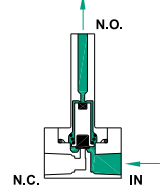
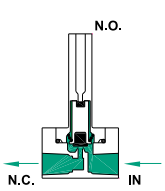
AG Series – Additional Component Details & Dimensions

1 Valve Function

Flow Schematics

Flow Key

- Blocked Flow
- Free Flow
- O/S = Over Seat
- U/S = Under Seat

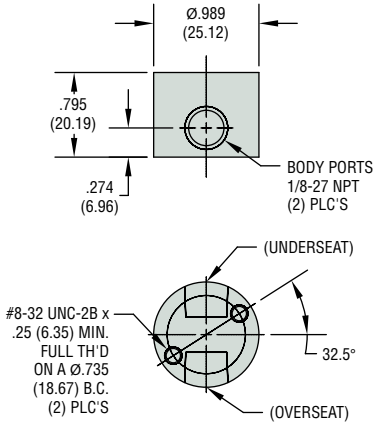
Valve Type	De-Energized	Energized
2-Way Normally Closed		
3-Way Normally Closed		
3-Way Normally Open		
3-Way Multi Purpose		
3-Way Directional Control		

AG Series – Additional Component Details & Dimensions, cont.

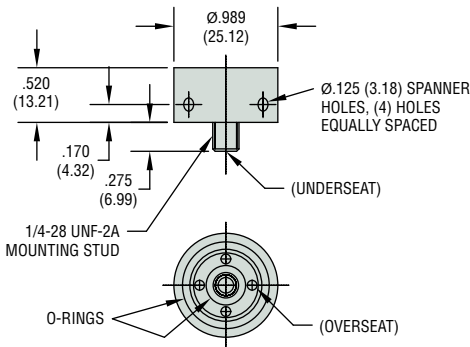
4 Body Port

Note: Contact Gems for the operator orifice drawings

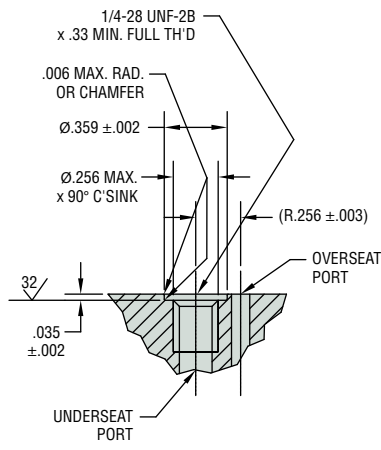
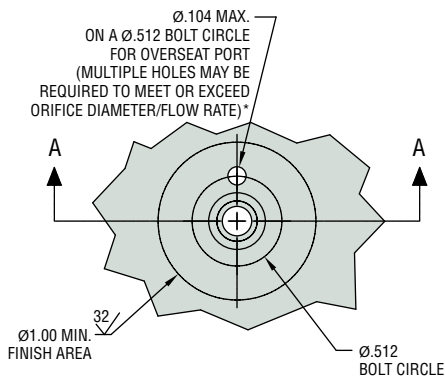
1/8" NPT Port (LC)



Manifold Mount 1/4"-28 Stud Body (MM)



Manifold Preparation



* If the total area of overseat port is less than the orifice diameter, then the overseat is the restrictor.

Valve Type	Overseat Port	Underseat Port
2-Way N.C.	IN	OUT
3-Way N.C.	CYL	IN
3-Way N.O.	CYL	EXH
3-Way M.P.	COM	N.C.
3-Way D.C.	IN	N.C.

6 Coil Construction

