

General Purpose Solenoid Valve

Brass Body | 3-Way Direct Acting | 1/8" to 1/4"



Features

- Provide flow switching and diversion for liquids and gases in 3-way control applications
- Fast response time for reliable and immediate fluid control
- Designed for seamless integration with electronic control systems, enabling automated and remote operation
- Designed for operation under low differential pressure conditions
- Can be mounted vertically or horizontally
- Compact body design ideal for tight spaces
- Durable brass construction suited for a wide range of compatible media including water, air, and other low viscosity fluids
- Engineered for durability and long service life under frequent switching conditions
- Suitable for commercial and residential applications

Materials of Construction

Valve Parts	Material
Body	Brass
Components	Stainless Steel
Seal	NBR
Shading Ring	Copper

*Consult a chemical compatibility expert for correct seal and valve body material choice.
 **A pre-filter is recommended to prevent debris from damaging the sealing surface and internal components
 *** The valve body is threaded at the base and can be mounted using an M5 mounting screw

Industrial Applications

- Process Fluid Diversion Systems
- Hydronic HVAC Control Circuits for Heated and Chilled Water Distribution Lines
- Water Treatment and Filtration Equipment
- Laboratory and Pilot Plant Fluid Routing
- Industrial Cleaning and Washdown Systems
- Cooling System Bypass and Diverting Control
- Process Water and Utility Distribution Network
- Fluid Dispensing System requiring Flow Switching or Venting
- Solar Water Heater Circulation Control
- Aquarium or Aquaculture Systems
- Automatic Irrigation Control Systems

*These are not intended for use in medical life support, combustion, aviation, aerospace, automotive or similar applications

Approvals

- CE certified for EMC Compliance in accordance with: 61000-6-3:2007 + A1:2011 and EN 61000-6-1:2007

Electrical Data

Pipe Size (in)	Power Rating (Holding)			Coil Connection	Coil Class	Protection Class
	AC, 60 Hz VA	DC Watts				
	110V	12V	24V			
1/8	22	13		DIN 43650A	H	IP 65
1/4	22	13				

- (1) Valves are designed to be normally closed (NC)
- (2) Valves are suitable for continuous energization (100% duty cycle) within rated voltage and ambient temperature limits
- (3) AC power ratings shown represent steady state (Holding) VA at rated voltage, 50/60 Hz, and 40 °C (104 °F) ambient temperature
- (4) Electrical values are nominal with a tolerance of ±10 % unless otherwise specified

Specifications

Pipe Connection		Orifice (mm)	Flow Coefficient Value Cv	Flow Rate GPM @60 PSI	Operating Pressure (psi)			Operating Temperature (°F)	
Size (in)	Thread Connection				Min	Max		Min	Max
						AC	DC		
1/8	NPT - Female	1.5	0.09	0.70	0	115	115	25	195
1/4	NPT - Female	1.5	0.09	0.70	0	115	115	25	195

*Valves are designed to be normally closed (NC)

**There is no minimum pressure requirement, however, this valve may not be suitable for gravity-fed applications due to its small orifice size

General Purpose Solenoid Valve

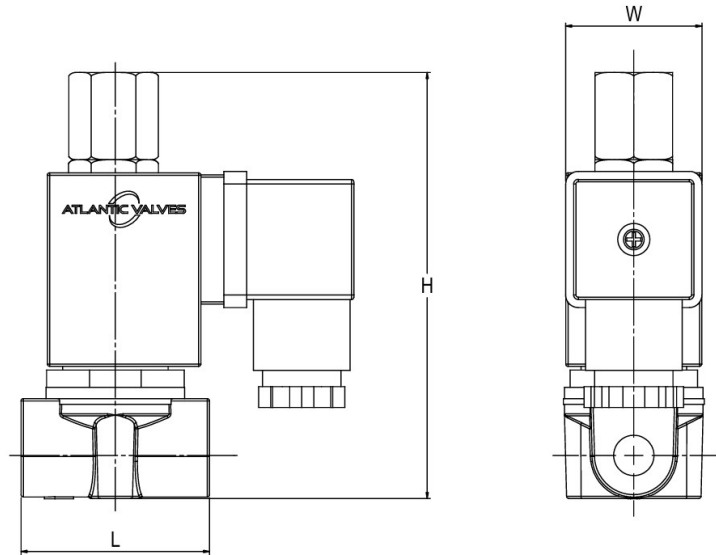
Brass Body | 3-Way Direct Acting | 1/8" to 1/4"

231Y SERIES

Dimension

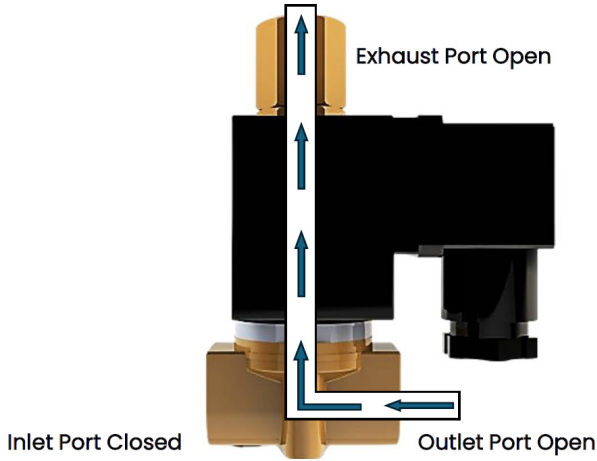
Pipe Size (in)	Dimension (in)			Weight (lb)
	H	L	W	
NORMALLY CLOSED (NC)				
1/8	3.70	1.68	1.12	0.77
1/4	3.70	1.68	1.12	0.77

- (1) Weight and dimension may vary slightly from production
- (2) Dimension shown are nominal and provided for reference only
- (3) Dimension tolerance: ± 5% unless otherwise specified
- (4) H = Overall Height, L = Port to Port Length, W = Overall Width

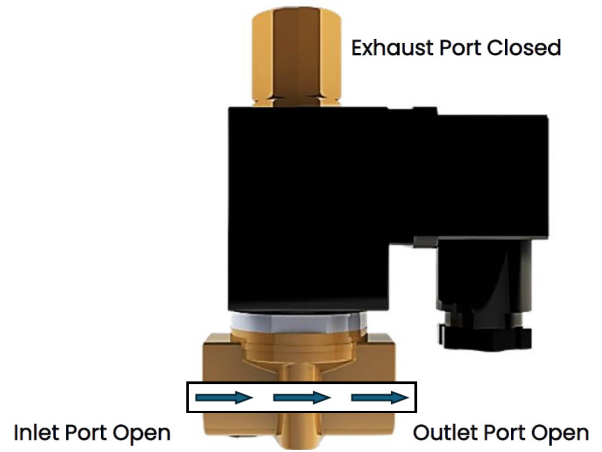


Flow Diagram

VALVE DE-ENERGIZED



VALVE ENERGIZED



Product Ordering Code

231Y	-	X	X	-	X	X																															
VALVE SERIES <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>CODE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>231Y</td> <td>BRASS, 3-WAY SOLENOID VALVE SERIES</td> </tr> </tbody> </table>		CODE	DESCRIPTION	231Y	BRASS, 3-WAY SOLENOID VALVE SERIES	PIPE SIZE <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>CODE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>1/8" (DN 6)</td> </tr> <tr> <td>6</td> <td>1/4" (DN 8)</td> </tr> </tbody> </table>		CODE	DESCRIPTION	3	1/8" (DN 6)	6	1/4" (DN 8)	VOLTAGE USED <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>CODE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>12V</td> <td>12V</td> </tr> <tr> <td>24V</td> <td>24V</td> </tr> <tr> <td>110V</td> <td>110V</td> </tr> </tbody> </table>		CODE	DESCRIPTION	12V	12V	24V	24V	110V	110V	VALVE TYPE <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>CODE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>(BLANK)</td> <td>NORMALLY CLOSED (NC)</td> </tr> </tbody> </table>		CODE	DESCRIPTION	(BLANK)	NORMALLY CLOSED (NC)	TYPE OF CURRENT <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>CODE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>AC</td> <td>ALTERNATING CURRENT</td> </tr> <tr> <td>DC</td> <td>DIRECT CURRENT</td> </tr> </tbody> </table>		CODE	DESCRIPTION	AC	ALTERNATING CURRENT	DC	DIRECT CURRENT
CODE	DESCRIPTION																																				
231Y	BRASS, 3-WAY SOLENOID VALVE SERIES																																				
CODE	DESCRIPTION																																				
3	1/8" (DN 6)																																				
6	1/4" (DN 8)																																				
CODE	DESCRIPTION																																				
12V	12V																																				
24V	24V																																				
110V	110V																																				
CODE	DESCRIPTION																																				
(BLANK)	NORMALLY CLOSED (NC)																																				
CODE	DESCRIPTION																																				
AC	ALTERNATING CURRENT																																				
DC	DIRECT CURRENT																																				

EXAMPLE:
231Y-3-110VAC indicates a brass, three way solenoid valve, 1/8" NPT-Female, normally closed configuration with 110V AC coil