

# General Purpose Solenoid Valve

Brass Body | 2-Way Semi-Direct Acting | 3/8" to 2"



## Features

- Provides on/off control of inert liquids and gases
- Fast-acting response time
- Gravity feed capable; ideal for low pressure fluid
- Can be mounted vertically or horizontally
- Durable construction suited for a wide range of compatible media including water and air
- Suitable for commercial and residential applications

## Materials of Construction

Valve Parts	Material
Body	Brass
Components	Stainless Steel
Seal	Viton® Diaphragm
Shading Ring	Copper

Consult a chemical compatibility expert for correct seal and valve body material choice

## Electrical Data

Pipe Size (in)	Power Rating (Holding)				Coil Connection		Protection Class	
	AC, 60 Hz VA		DC Watts		NC	NO	NC	NO
	24V	110V	12V	24V				
3/8	19	15	16	28	Lead Wires	DIN 43650B	NEMA 3	NEMA 4/IP65
1/2	19	15	16	28				
3/4	19	15	16	28				
1	19	15	16	28				
1 1/4	(2)	35	21	30				
1 1/2	23	35	21	30	(3)	DIN 43650A	(4)	
2	23	35	21	30				

- (1) Normally Open valve type is not available for 3/8" size
- (2) 24V AC coil is not available for 1 1/4" size
- (3) Lead Wires for 12V DC, 24V DC, and 110V AC; DIN 43650A for 24V AC
- (4) NEMA 3 for 12V DC, 24V DC, and 110V AC; NEMA 4/IP 65 for 24V AC
- (5) NC - Normally Closed; NO - Normally Open
- (6) Valves are suitable for continuous energization (100% duty cycle) within rated voltage and ambient temperature limits
- (7) AC power ratings shown represent steady state (Holding) VA at rated voltage, 50/60 Hz, and 40 °C ambient temperature.
- (8) Electrical values are nominal with a tolerance of ±10 % unless otherwise specified

## Industrial Applications

- Washing Machine
- Humidifiers
- Water Sprinkler System
- Industrial Water Control
- Air Compressors and Pneumatic Systems
- Water Treatment and Filtration Equipment
- Process Water Distribution
- Fluid Dispensing and Dosing System

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

## Approvals

- CE certified for EMC Compliance. Meets EN 61000-6-3:2007 + A1:2011 and EN 61000-6-1:2007
- RoHS compliant in accordance with Directive 2011/65/EU

## Specifications

Pipe Connection		Orifice (mm)	Flow Coefficient Value Cv	Operating Pressure (psi)						Operating Temperature (°F)	
				Water			Air				
				Size (in)	Thread Connection	Min	Max		Min	Max	
<b>NORMALLY CLOSED (NC)</b>											
3/8	NPT - Female	15	3.5	0	145	115	7	145	115	15	250
1/2	NPT - Female	15	3.5	0	145	115	7	145	115	15	250
3/4	NPT - Female	20	7.6	0	145	115	7	145	115	15	250
1	NPT - Female	25	12.0	0	145	115	7	145	115	15	250
1 1/4	NPT - Female	32	24.0	0	145	90	7	145	90	15	250
1 1/2	NPT - Female	40	29.0	0	145	90	7	145	90	15	250
2	NPT - Female	50	48.0	0	145	90	7	145	90	15	250
<b>NORMALLY OPEN (NO)</b>											
1/2	NPT - Female	15	3.5	0	90	90	7	90	90	15	250
3/4	NPT - Female	20	7.6	0	90	90	7	90	90	15	250
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1 1/2	NPT - Female	40	29.0	0	90	90	7	90	90	15	250
2	NPT - Female	50	48.0	0	90	90	7	90	90	15	250

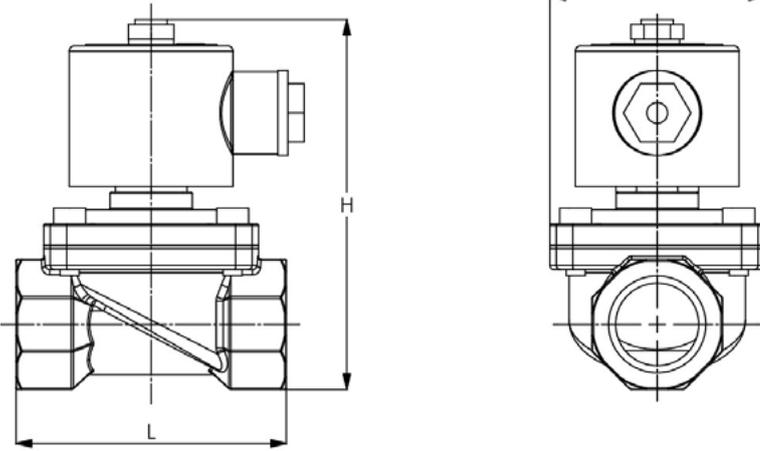
\*For water service, the valve operates in direct-acting mode, allowing operation from 0 psi differential pressure

\*\*For air service, the valve operates in a semi-direct acting mode, requiring a minimum differential pressure of 7 psi for reliable operation.

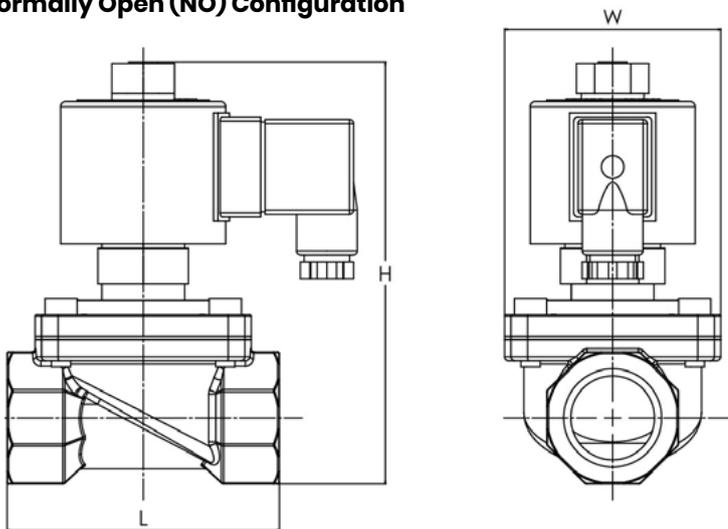
# General Purpose Solenoid Valve

Brass Body | 2-Way Semi-Direct Acting | 3/8" to 2"

## Normally Closed (NC) Configuration



## Normally Open (NO) Configuration



## Dimension

Pipe Size (in)	Dimension (in)			Weight (lb)
	H	L	W	
<b>NORMALLY CLOSED (NC)</b>				
3/8	4.00	2.36	2.00	1.56
1/2	4.00	2.36	1.95	1.56
3/4	4.25	2.65	2.00	1.63
1	4.50	3.25	2.60	2.44
1 1/4	5.80	4.00	3.25	4.44
1 1/2	6.00	4.33	3.35	4.88
2	6.50	5.30	4.25	6.81
<b>NORMALLY OPEN (NO)</b>				
1/2	4.30	2.36	1.95	1.63
3/4	4.70	2.65	2.00	1.75
1	5.00	3.20	2.60	2.88
1 1/4	5.80	4.00	3.25	4.88
1 1/2	6.60	4.50	3.25	5.50
2	7.15	5.30	4.25	7.25

- (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

## Product Ordering Code

<b>B</b>	<b>ZW</b>	-	<b>15</b>	<b>K</b>	-	<b>110V</b>	<b>AC</b>																																		
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**EXAMPLE:**  
**BZW-15K-110VAC** indicates a brass body ZW series valve, 1/2" NPT-Female, normally open configuration with 110V AC coil