

# ASCO™ Water Conditioning & Purification Valves

Pilot Operated | Composite Body | 1/2" to 1" Pipe Size

2/2  
SERIES  
212

## Applications

Water purification, conditioning and distribution in commercial/ industrial markets with reverse osmosis systems. Reverse osmosis systems are found in several drinking water applications including restaurants, food & beverage equipment, and grocery store vegetable misting.

## Features

- Composite body valve
- 2-way, normally closed and normally open
- FasN™ connection system available in:
  - Turn & Lock, NPT thread
- Tested and certified by NSF International
- Mountable in any position, upright preferred
- Manual override available on all normally closed constructions

## Construction

Valve Parts in Contact with Fluids	
Body	Composite, Engineered Plastic (PPE)
Core Tube / Bonnet	Stainless Steel
Core and Plugnut	Stainless Steel
Springs	Stainless Steel
Seals and Disc	EPDM, TPE
Shading Coil	Copper

## Electrical

Connection Type	Standard Coil and Class of Insulation	Watt Rating and Power consumption				Spare coil Family	
		DC Watts	AC Watts	VA Holding	VA Inrush	DC	AC
<b>Normally Closed</b>							
Conduit	F	6.9	6.3	8.8	12.1	400117	400117
Leaded	F	6.9	6.3	8.8	12.1	400117	400117
DIN	F	6.9	6.3	8.8	12.1	400127	400127
<b>Normally Open</b>							
Conduit	F	10	11	15.5	19.4	400119	433763
Leaded	F	10	11	15.5	19.4	400119	433763
DIN	F	10	11	15.5	19.4	400129	433765

**Standard Voltages:** AC: 24/60, 120/60, 240/60. DC: 12 and 24.  
Must be specified when ordering, see How to Order Chart.

## Solenoid Enclosures

- Conduit Hub
- Open Frame (Leaded) 18" lead
- DIN (11 mm Form B) – Watertight IP 65 when used with DIN connector kit for SC coils (see kits below)

## Kits

- Female DIN connector kit for coils 226061-001-\*
- 1/2" NPT conduit hub kit for leaded coils 224735-001-\*  
(Kits contains 10 pcs of each: connector, gasket, and attaching screw.)
- Mounting bracket kit = 297395-004

## Kits for end connection

End Connection Type	Kit Numbers			
	3/8"	1/2"	3/4"	1"
NPT Thread Connector kit	M200453A00	M200454A00	M200455A00	M200456A00
Turn & Lock Connector kit	M200340A00	M200101A00	M200104A00	M200343A00



## Nominal Ambient Temp. Ranges

Normally Closed, Normally Open DC: 32F to 120F (0C to 49C)  
Normally Open AC: 32F to 100F (0C to 38C)

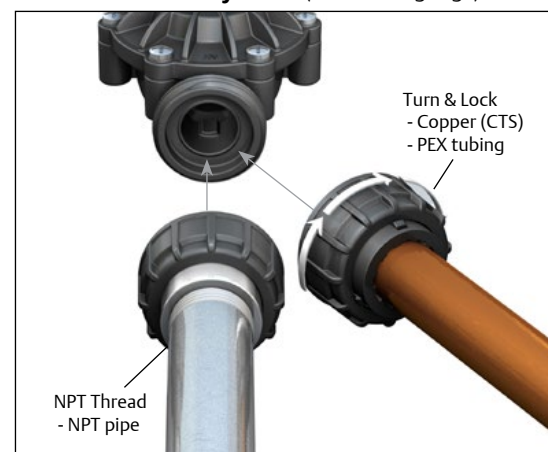
## Approvals

- UL recognized coil – File E153691\*
- CSA certified coil – see CSA file No. 234503\*
- Meets applicable CE directives.
- Tested and certified by NSF International:
  - NSF 61–G: Drinking Water System Components (includes Lead Free requirements)
  - NSF 169: Special Purpose Food Equipment and Devices
  - NSF 42 : Drinking Water Treatment Units – Material and Structural Integrity Requirements
  - NSF 372: Drinking Water System Components – Lead Content Certification

The NSF Certification Program is accredited by the Standards Council of Canada and ANSI.

\*For UL & CSA approvals on NO AC coils, please consult Emerson.

## FasN Connection System (See Ordering Page)



## Specifications English units (Metric)

Pipe Size (in)	Orifice Size in (mm)	FasN End Connections System	Flow Factor Cv (Kv)	Operating Pressure Differential psi (bar)							Max. Fluid Temp. °F (°C) ①	Catalog Number	Wattage	
				Min	Max. AC			Max. DC					AC	DC
					Air-Inert Gas	Water	Light Oil @ 300 SSU	Air-Inert Gas	Water	Light Oil @ 300 SSU				
<b>DRINKING WATER VERSION: NSF 61-G, 169, 42</b>														
<b>General Service - Normally Closed ②</b>														
1/2	3/4 (19)	NPT thread / NPT thread	4.5 (3.9)	5 (0.3)	–	150 (10.3)	–	–	150 (10.3)	–	150 (66)	8212A019	6.3	6.9
1/2	3/4 (19)	NPT thread / Turn & Lock	4.5 (3.9)	5 (0.3)	–	150 (10.3)	–	–	150 (10.3)	–	150 (66)	8212A023	6.3	6.9
1/2	3/4 (19)	Turn & Lock / Turn & Lock	4.5 (3.9)	5 (0.3)	–	150 (10.3)	–	–	150 (10.3)	–	150 (66)	K212A025	6.3	6.9
3/4	3/4 (19)	NPT thread / NPT thread	7 (6.1)	5 (0.3)	–	150 (10.3)	–	–	150 (10.3)	–	150 (66)	8212A037	6.3	6.9
3/4	3/4 (19)	NPT thread / Turn & Lock	7 (6.1)	5 (0.3)	–	150 (10.3)	–	–	150 (10.3)	–	150 (66)	8212A041	6.3	6.9
3/4	3/4 (19)	Turn & Lock / Turn & Lock	7 (6.1)	5 (0.3)	–	150 (10.3)	–	–	150 (10.3)	–	150 (66)	K212A043	6.3	6.9
1	1 (25.4)	NPT thread / NPT thread	13 (11.2)	5 (0.3)	–	150 (10.3)	–	–	150 (10.3)	–	122 (50)	8212A055	6.3	6.9
1	1 (25.4)	NPT thread / Turn & Lock	13 (11.2)	5 (0.3)	–	150 (10.3)	–	–	150 (10.3)	–	122 (50)	8212A059	6.3	6.9
1	1 (25.4)	Turn & Lock / Turn & Lock	13 (11.2)	5 (0.3)	–	150 (10.3)	–	–	150 (10.3)	–	122 (50)	K212A061	6.3	6.9
<b>General Service - Normally Open</b>														
1/2	3/4 (19)	NPT thread / NPT thread	4.5 (3.9)	5 (0.3)	–	120 (8.3)	–	–	90 (6.2)	–	150 (66)	8212A020	11	10
1/2	3/4 (19)	NPT thread / Turn & Lock	4.5 (3.9)	5 (0.3)	–	120 (8.3)	–	–	90 (6.2)	–	150 (66)	8212A024	11	10
1/2	3/4 (19)	Turn & Lock / Turn & Lock	4.5 (3.9)	5 (0.3)	–	120 (8.3)	–	–	90 (6.2)	–	150 (66)	K212A026	11	10
3/4	3/4 (19)	NPT thread / NPT thread	7 (6.1)	5 (0.3)	–	120 (8.3)	–	–	90 (6.2)	–	150 (66)	8212A038	11	10
3/4	3/4 (19)	NPT thread / Turn & Lock	7 (6.1)	5 (0.3)	–	120 (8.3)	–	–	90 (6.2)	–	150 (66)	8212A042	11	10
3/4	3/4 (19)	Turn & Lock / Turn & Lock	7 (6.1)	5 (0.3)	–	120 (8.3)	–	–	90 (6.2)	–	150 (66)	K212A044	11	10
1	1 (25.4)	NPT thread / NPT thread	13 (11.2)	5 (0.3)	–	120 (8.3)	–	–	90 (6.2)	–	122 (50)	8212A056	11	10
1	1 (25.4)	NPT thread / Turn & Lock	13 (11.2)	5 (0.3)	–	120 (8.3)	–	–	90 (6.2)	–	122 (50)	8212A060	11	10
1	1 (25.4)	Turn & Lock / Turn & Lock	13 (11.2)	5 (0.3)	–	120 (8.3)	–	–	90 (6.2)	–	122 (50)	K212A062	11	10
<b>LEAD FREE VERSION - NSF 372 Lead content certification</b>														
<b>General Service - Normally Closed ②</b>														
1/2	3/4 (19)	NPT thread / NPT thread	4.5 (3.9)	5 (0.3)	–	150 (10.3)	–	–	150 (10.3)	–	150 (66)	8212A519	6.3	6.9
1/2	3/4 (19)	NPT thread / Turn & Lock	4.5 (3.9)	5 (0.3)	–	150 (10.3)	–	–	150 (10.3)	–	150 (66)	8212A523	6.3	6.9
1/2	3/4 (19)	Turn & Lock / Turn & Lock	4.5 (3.9)	5 (0.3)	–	150 (10.3)	–	–	150 (10.3)	–	150 (66)	K212A525	6.3	6.9
3/4	3/4 (19)	NPT thread / NPT thread	7 (6.1)	5 (0.3)	–	150 (10.3)	–	–	150 (10.3)	–	150 (66)	8212A537	6.3	6.9
3/4	3/4 (19)	NPT thread / Turn & Lock	7 (6.1)	5 (0.3)	–	150 (10.3)	–	–	150 (10.3)	–	150 (66)	8212A541	6.3	6.9
3/4	3/4 (19)	Turn & Lock / Turn & Lock	7 (6.1)	5 (0.3)	–	150 (10.3)	–	–	150 (10.3)	–	150 (66)	K212A543	6.3	6.9
1	1 (25.4)	NPT thread / NPT thread	13 (11.2)	5 (0.3)	–	150 (10.3)	–	–	150 (10.3)	–	122 (50)	8212A555	6.3	6.9
1	1 (25.4)	NPT thread / Turn & Lock	13 (11.2)	5 (0.3)	–	150 (10.3)	–	–	150 (10.3)	–	122 (50)	8212A559	6.3	6.9
1	1 (25.4)	Turn & Lock / Turn & Lock	13 (11.2)	5 (0.3)	–	150 (10.3)	–	–	150 (10.3)	–	122 (50)	K212A561	6.3	6.9
<b>General Service - Normally Open</b>														
1/2	3/4 (19)	NPT thread / NPT thread	4.5 (3.9)	5 (0.3)	–	120 (8.3)	–	–	90 (6.2)	–	150 (66)	8212A520	11	10
1/2	3/4 (19)	NPT thread / Turn & Lock	4.5 (3.9)	5 (0.3)	–	120 (8.3)	–	–	90 (6.2)	–	150 (66)	8212A524	11	10
1/2	3/4 (19)	Turn & Lock / Turn & Lock	4.5 (3.9)	5 (0.3)	–	120 (8.3)	–	–	90 (6.2)	–	150 (66)	K212A526	11	10
3/4	3/4 (19)	NPT thread / NPT thread	7 (6.1)	5 (0.3)	–	120 (8.3)	–	–	90 (6.2)	–	150 (66)	8212A538	11	10
3/4	3/4 (19)	NPT thread / Turn & Lock	7 (6.1)	5 (0.3)	–	120 (8.3)	–	–	90 (6.2)	–	150 (66)	8212A542	11	10
3/4	3/4 (19)	Turn & Lock / Turn & Lock	7 (6.1)	5 (0.3)	–	120 (8.3)	–	–	90 (6.2)	–	150 (66)	K212A544	11	10
1	1 (25.4)	NPT thread / NPT thread	13 (11.2)	5 (0.3)	–	120 (8.3)	–	–	90 (6.2)	–	122 (50)	8212A556	11	10
1	1 (25.4)	NPT thread / Turn & Lock	13 (11.2)	5 (0.3)	–	120 (8.3)	–	–	90 (6.2)	–	122 (50)	8212A560	11	10
1	1 (25.4)	Turn & Lock / Turn & Lock	13 (11.2)	5 (0.3)	–	120 (8.3)	–	–	90 (6.2)	–	122 (50)	K212A562	11	10

① Prevent from freezing. ② Manual Override is available for all Normally Closed constructions. See "How to Order" section for ordering details.

# ASCO™ Water Conditioning & Purification Valves

Pilot Operated | Composite Body | 1/2" to 1" Pipe Size

**2/2  
SERIES  
212**

## How to Order

**8 2 1 2 A 0 1 9 S 0 1 0 0 F 0**

### FasN End Connection

8	NPT
K	Turn & Lock

### Valve Designation

Refer to the Specifications Section

### Coil Electrical Connection

S0	DIN Type coil without connector
L0	Leaded coil
L1	Leaded coil with 1/2" NPT threaded conduit adaptor

### Voltages

<b>AC (Normally Closed)</b>	
F4	24V, 60 Hz
F0	120V, 60 Hz; 110V, 50 Hz
F6	240V, 60 Hz; 220V 50 Hz
<b>AC (Normally Open)</b>	
F4	24V, 60 Hz
F2	120V, 60 Hz
FF	240V, 60 Hz
<b>DC (Normally Open and Normally Closed)</b>	
F3	12V
F1	24V

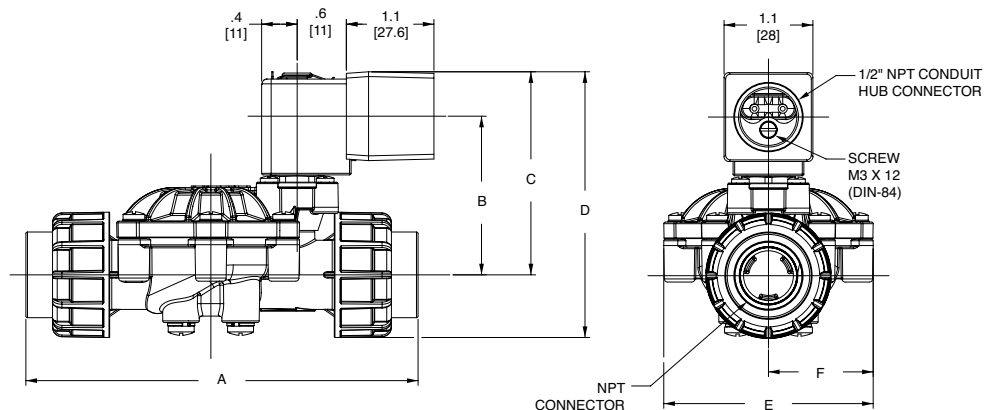
### Pressure Vessel Options

100	No options
101	Manual Override (stainless steel)
200	Mounting Bracket (stainless steel)
201	Manual Override with Mounting Bracket

## Dimensions: inches (mm)

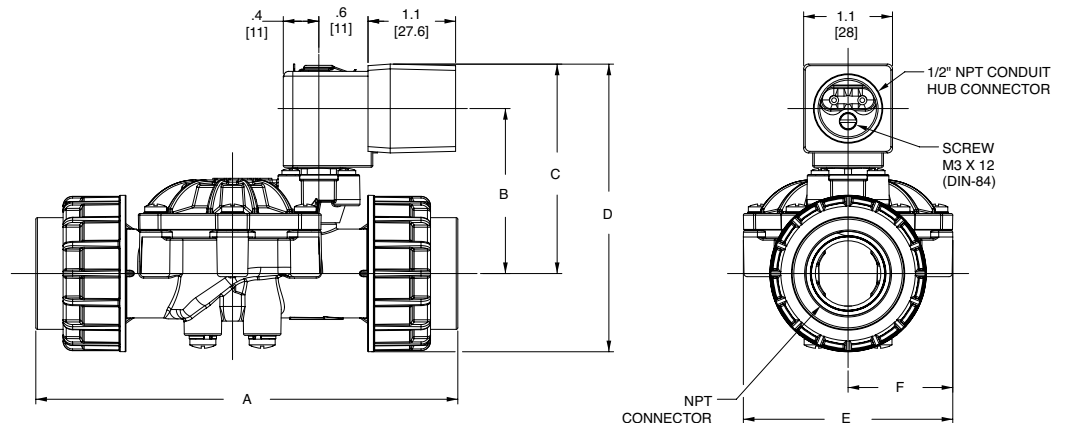
Pipe Size		A	B	C	D	E	F
1/2"	in	4.9	2	2.5	3.3	2.6	1.3
	mm	124	50	64	84	66	336

### 1/2" NPT CONNECTOR WITH CONDUIT HUB CONNECTOR



Pipe Size		A	B	C	D	E	F
3/4"	in	5.2	2	2.6	3.6	2.6	1.3
	mm	133	50	66	91	66	33
1"	in	6.5	2.3	2.8	3.7	3.2	1.6
	mm	164	59	71	95	81	41

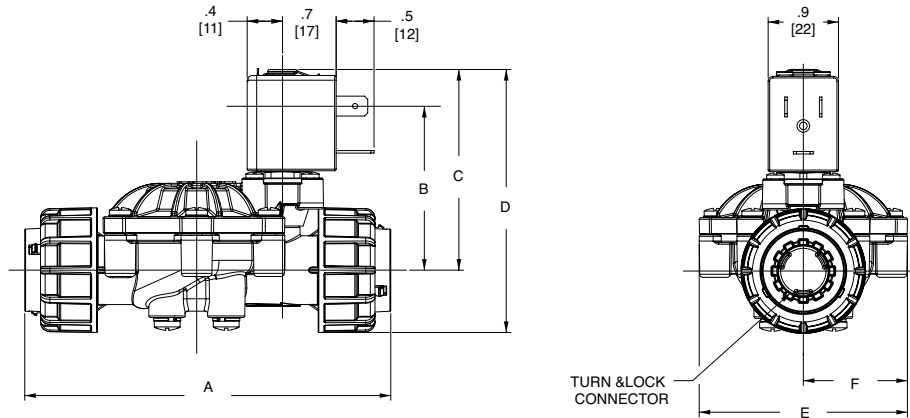
### 3/4" & 1" NPT CONNECTOR WITH CONDUIT HUB CONNECTOR



## Dimensions: inches (mm)

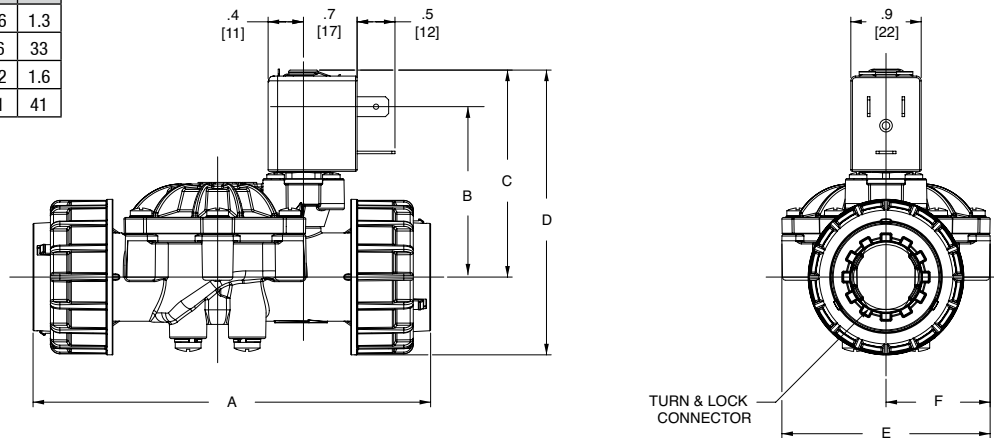
Pipe Size		A	B	C	D	E	F
1/2"	in	4.6	2	2.5	3.3	2.6	1.3
	mm	117	50	64	84	66	336

**1/2" TURN & LOCK CONNECTION**  
WITH DIN CONNECTION



Pipe Size		A	B	C	D	E	F
3/4"	in	4.8	2	2.6	3.6	2.6	1.3
	mm	121	50	66	91	66	33
1"	in	6.1	2.3	2.8	3.7	3.2	1.6
	mm	154	59	71	95	81	41

**3/4" & 1" TURN & LOCK CONNECTION**  
WITH DIN CONNECTION



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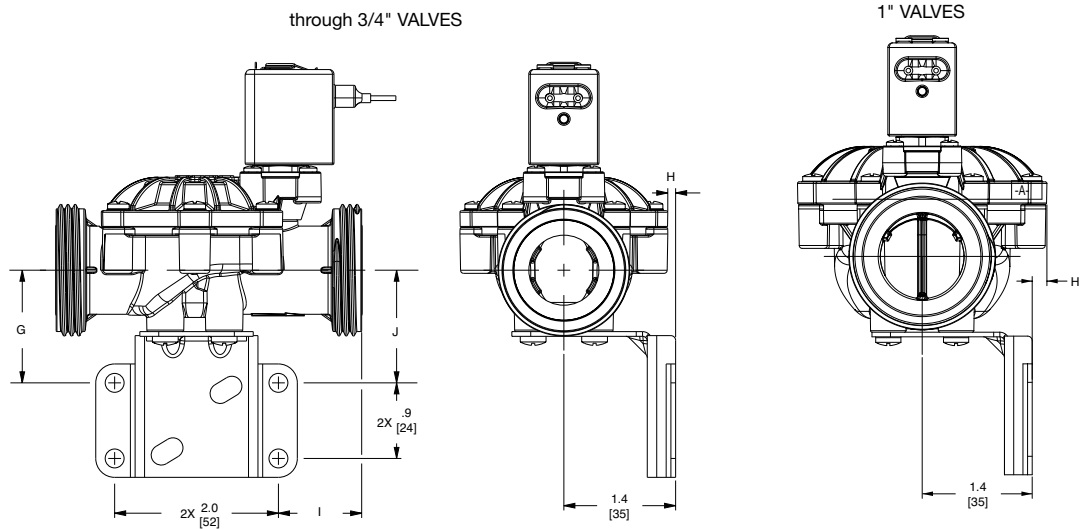
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## Dimensions: inches (mm)

Pipe Size		G	H	I	J
1/2"	in	1.2	0.1	0.8	1.2
	mm	31	3	2.0	31
3/4"	in	1.4	0.1	1.0	1.4
	mm	36	3	26	36
1"	in	1.6	0.2	1.5	1.6
	mm	41	5	38	41

### SHOWN WITH OPTIONAL MOUNTING BRACKET

FOR VALVES WITH ANY END CONNECTOR



Pipe Size		A	B	C	D
1/2"	in	2.6	1.3	3.0	3.7
	mm	65	32	76	93
3/4"	in	2.6	1.3	3.1	3.9
	mm	67	34	78	99
1"	in	2.8	1.5	3.3	4.2
	mm	72	39	83	108

### SHOWN WITH OPTIONAL MANUAL OVERRIDE

FOR VALVES WITH ANY END CONNECTOR

