



Series  
WE02

# 3-Piece NPT Stainless Steel Ball Valve

Full Port, Vented Ball, Electric or Pneumatic Actuators



WE02-DHD00



WE02-DDA01



WE02-DDA01-AA01



WE02-DTD01-A



WE02-CTI01-A

The Series WE02 incorporates a full port 3-piece SS ball valve for great flow rates with minimal pressure drop. The valve features a blowout proof stem for added safety, reinforced PTFE seats and seals for longer life, and a 316 SS (ASTM CF8M) ball for better performance. Actuators are direct mounted creating a compact assembly for tight spaces. Limit switches are able to be mounted directly to the valves allowing for remote position indication.

The Series WE02 can be configured with either an electric or pneumatic actuator. Electric actuators are available in weatherproof or explosion-proof, a variety of supply voltages and two-position or modulating control. Two-position actuators use the supply voltage to drive the valve open or closed, while the modulating actuator accepts a 4 to 20 mA input for valve positioning. Actuators feature thermal overload protection and permanently lubricated gear train.

## SPECIFICATIONS VALVE

**Service:** Compatible liquids and gases.  
**Body:** 3-piece.

**Line Sizes:** 1/2 to 3"

**End Connections:** Female NPT.

**Pressure Limits:** 20" Hg to 1000 psi (-0.7 to 69 bar).

**Wetted Materials:**

Body and ball: 316 SS (CF8M);

Stem: 316 SS;

Seat: RTFE/PTFE;

Seal, Washer, and Packing: PTFE.

**Temperature Limits:** -20 to 392°F (-29 to 200°C).

**Other Materials:**

O-ring: Fluoroelastomer;

Handle: 304 SS;

Washer: 301 SS;

Stem Nut, Locking Device,

Gland Ring: 304 SS;

Handle Sleeve: PVC.

## ACTUATORS

**Pneumatic "DA" and "SR" Series**

**Type:** DA series is double acting and SR series is spring return (rack and pinion).

**Normal Supply Pressure:**

DA: 40 to 115 psi (2.7 to 7.9 bar);

SR: 80 psi (5.5 bar).

**Maximum Supply Pressure:** 120 psi (8.6 bar).

**Air Connections:**

DA01: 1/8" female NPT;

DA02 to DA05: 1/4" female NPT;

SR02 to SR07: 1/4" female NPT.

**Housing Material:** Anodized aluminum body and epoxy coated aluminum end caps.

**Temperature Limits:** -40 to 176°F (-40 to 80°C).

**Accessory Mounting:** NAMUR standard.

The pneumatic double acting actuator uses an air supply to drive the valve open and closed. The actuator has two supply ports, with one driving the valve open and the other driving the valve closed. Spring return pneumatic actuators use the air supply to open the valve, and internally loaded springs return the valve to the closed position. Also available is the SN solenoid valve to electrically switch the air supply pressure between the air supply ports for opening and closing the valve. Actuators are constructed of anodized and epoxy coated aluminum for years of corrosion free service.

## FEATURES

- Capable of being configured to fit any application
- Limit switches can be mounted to manual valves for remote monitoring

## Electric "TD" and "MD" Series

**Power Requirements:** 110 VAC, 220 VAC, 24 VAC or 24 VDC (MD models not available in 24 VDC).

**Power Consumption:** See manual.

**Cycle Time (per 90°):**

TD01: 4 s;

MD01: 10 s;

TD02 and MD02: 20 s;

TD03 and MD03: 30 s.

**Duty Rating:** 85%.

**Enclosure Rating:** NEMA 4X (IP67).

**Housing Material:** Powder coated aluminum.

**Temperature Limits:** -22 to 140°F (-30 to 60°C).

**Electrical Connection:** 1/2" female NPT.

**Modulating Input:** 4 to 20 mA.

**Standard Features:** Manual override, position indicator, and TD models come with two limit switches.

## Electric "TI" and "MI" Series

**Power Requirements:** 110 VAC, 220 VAC, 24 VAC or 24 VDC.

**Power Consumption:** See manual.

**Cycle Time (per 90°):**

TI01 and MI01: 2.5 s;

TI02 and MI02: 5 s;

TI03 and MI03: 5 s;

TI04 and MI04: 10 s;

TI05 and MI05: 15 s.

**Duty Rating:**

Two-Position: TI01-TI05: 25%;

Modulating: MI01-MI05: 75%.

**Enclosure Rating:** NEMA 7.

**Housing Material:** Powder coated aluminum.

**Temperature Limits:** -40 to 140°F (-40 to 60°C).

**Electrical Connection:** 1/2" female NPT.

**Modulating Input:** 4 to 20 mA.

**Standard Features:** Position indicator and two limit switches.

**Popular Models**

Size	Cv (gal/min)	Hand Operated Model	Double Acting Pneumatic Model	Spring Return Pneumatic Model	NEMA 4X Two-Position Electric (110 VAC) Model	NEMA 4X Modulating Electric (110 VAC) Model
1/2"	36.64	WE02-CHD00	WE02-CDA01	WE02-CSR02	WE02-CTD01-A	WE02-CMD01-A
3/4"	67.69	WE02-DHD00	WE02-DDA01	WE02-DSR02	WE02-DTD01-A	WE02-DMD01-A
1"	110.27	WE02-EHD00	WE02-EDA02	WE02-ESR03	WE02-ETD01-A	WE02-EMD01-A
1-1/4"	184.73	WE02-FHD00	WE02-FDA02	WE02-FSR03	WE02-FTD01-A	WE02-FMD01-A
1-1/2"	266.62	WE02-GHD00	WE02-GDA03	WE02-GSR04	WE02-GTD02-A	WE02-GMD01-A
2"	485.3	WE02-HHD00	WE02-HDA03	WE02-HSR05	WE02-HTD02-A	WE02-HMD02-A
2-1/2"	791.57	WE02-IHD00	WE02-IDA04	WE02-ISR07	WE02-ITD03-A	WE02-IMD03-A
3"	1151.95	WE02-JHD00	WE02-JDA05	WE02-JSR07	WE02-JTD03-A	WE02-JMD03-A

**WE02 Hand Operated and Pneumatic Actuator Model Chart**

Example Series	WE02 WE02	CSR02	N	N	09	WE02-CSR02-NN09 316SS 3-Piece NPT	
<b>Size and Actuators</b>		CHD00				1/2" Hand Operated	
		DHD00				3/4" Hand Operated	
		EHD00				1" Hand Operated	
		FHD00				1-1/4" Hand Operated	
		GHD00				1-1/2" Hand Operated	
		HHD00				2" Hand Operated	
		IHD00				2-1/2" Hand Operated	
		JHD00				3" Hand Operated	
		CDA01				1/2" Double Acting	
		DDA01				3/4" Double Acting	
		EDA02				1" Double Acting	
		FDA02				1-1/4" Double Acting	
		GDA03				1-1/2" Double Acting	
		HDA03				2" Double Acting	
		IDA04				2-1/2" Double Acting	
		JDA05				3" Double Acting	
	<b>Solenoid</b>			N			No Solenoid
			A			NEMA 4X NAMUR Solenoid	
<b>Solenoid Voltage</b>				N			No Solenoid
				A			110 VAC
				B			220 VAC
				C			24 VAC
				D			24 VDC
			E			12 VDC	
<b>Positioner and Switches</b>						00	None
						01	42AD0 Exp Limit Switch
					02	45VD0 Exp Position Transmitter	
					03	42AD0-B ATEX Limit Switch	
					04	42AD0-IE IECEX Limit Switch	
					05	VPI-M01 NEMA 4X Limit Switch	
					06	QV-210101 Poly Limit Switch	
					07	VPS and P1 Prox Switch	
					08	265ER-D5 Positioner	
				09	285ER-D5 Smart Positioner		
<b>Options</b>					NO	Fail Open Spring Return Actuator	

**WE02 Electric Actuator Model Chart**

Example Series	WE02 WE02	EDT01	B	WE02-ETD01-B 316SS 3-Piece NPT
<b>Size and Actuators</b>		CTD01		1/2" NEMA 4X Two-Position
		DTD01		3/4" NEMA 4X Two-Position
		ETD01		1" NEMA 4X Two-Position
		FTD01		1-1/4" NEMA 4X Two-Position
		GTD02		1-1/2" NEMA 4X Two-Position
		HTD02		2" NEMA 4X Two-Position
		ITD03		2-1/2" NEMA 4X Two-Position
		JTD03		3" NEMA 4X Two-Position
		CMD01		1/2" NEMA 4X Modulating
		DMD01		3/4" NEMA 4X Modulating
		EMD01		1" NEMA 4X Modulating
		FMD01		1-1/4" NEMA 4X Modulating
		GMD01		1-1/2" NEMA 4X Modulating
		HMD02		2" NEMA 4X Modulating
		IMD03		2-1/2" NEMA 4X Modulating
		JMD03		3" NEMA 4X Modulating
		CTI01		1/2" Exp Two-Position
		DTI01		3/4" Exp Two-Position
		ETI02		1" Exp Two-Position
		FTI02		1-1/4" Exp Two-Position
	GTI03		1-1/2" Exp Two-Position	
	HTI04		2" Exp Two-Position	
	ITI05		2-1/2" Exp Two-Position	
	JTI05		3" Exp Two-Position	
	CMI01		1/2" Exp Electric Modulating	
	DMI01		3/4" Exp Electric Modulating	
	EMI02		1" Exp Electric Modulating	
	FMI02		1-1/4" Exp Electric Modulating	
	GMI03		1-1/2" Exp Electric Modulating	
	HMI04		2" Exp Electric Modulating	
	IMI05		2-1/2" Exp Electric Modulating	
	JMI05		3" Exp Electric Modulating	
<b>Actuator Voltage</b>			A	110 VAC
			B	220 VAC
			C	24 VAC
			D	24 VDC

**ACCESSORIES**

- R2-2120, Air Regulator
- AFR2-2, Instrument Air Filter Regulator
- VB-01, Volume Booster

VALVES  
  
Valve, Ball, Automated