

Series WE02

3-Piece NPT Stainless Steel Ball Valve

Full Port, Vented Ball, Electric or Pneumatic Actuators



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.

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

SPECIFICATIONS

VALVE

Service: Compatible liquids and gases.

Body: 3-piece. Line Sizes: 1/2 to 3".

End Connections: Female NPT.

Pressure Limits: 28" Hg to 1000 psi

(-0.7 to 69 bar) up to 250°F. **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

Temperature Limits: -40 to 176°F (-40

to 80°C).

Accessory Mounting: NAMUR

standard.

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 instruction

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

NDT

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 instruction

manual.

Cycle Time (per 90°): See instruction

manual.

Duty Rating: See instruction manual. Enclosure Rating: NEMA 7, designed to meet hazardous locations: Class I, Group C & D; Class II, Group E, F & G; Division I & II.

Housing Material: Powder coated

aluminum.

Temperature Limits: -40 to 140°F

(-40 to 60°C).

Electrical Connection: 1/2" female

NDT

Modulating Input: 4 to 20 mA.
Standard Features: Position indicator

and two limit switches.

product video

Popular Models

NEMA 4X Two-NEMA 4X **Hand Operated Double Acting** Spring Return **Position Electric Modulating Electric** Size (gal/min) (110 VAC) Model Model Pneumatic Model Pneumatic Model (110 VAC) Model 1/2" 36.64 WE02-CHD00 WE02-CDA01 WE02-CSR02 WE02-CTD01-A WE02-CMD01-A WE02-DHD00 3/4" 67.69 WE02-DDA01 WE02-DSR02 WE02-DTD01-A WE02-DMD01-A 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 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 1151.95 WE02-JHD00 WE02-JDA05 WE02-JSR07 WE02-JTD03-A WE02-JMD03-A 3″

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WE02 Hand Op	erated	and Pne	eun	nat	ic A	ctua	tor Model Chart
Example	WE02	CSR02	N	N	09		WE02-CSR02-NN09
Series	WE02						316SS 3-Piece NPT
Size and		CHD00					1/2" Hand Operated
Actuators		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
		JDA04					3" Double Acting
		CSR02					1/2" Spring Return
		DSR02					3/4" Spring Return
		ESR03					. •
							1" Spring Return
		FSR03					1-1/4" Spring Return
		GSR04					1-1/2" Spring Return
		HSR05					2" Spring Return
		ISR07					2-1/2" Spring Return
		JSR07					3" Spring Return
Solenoid			N				No Solenoid
			Α				NEMA 4X NAMUR Solenoid
Solenoid				N			No Solenoid
Voltage				Α			110 VAC
				В			220 VAC
				С			24 VAC
				D			24 VDC
				Ε			12 VDC
Positioner					00		None
and Switches					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
Options						NO	Fail Open Spring Return Actuator
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WE02 Electric Actuator Model Chart

Example	WE02	ETD01	В	WE02-ETD01-B
Series	WE02			316SS 3-Piece NPT
Size and		CTD01		1/2" NEMA 4X Two-Position
Actuators		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 ITI05		2" Exp Two-Position
				2-1/2" Exp Two-Position
		JTI05 CMI01		3" Exp Two-Position
		DMI01		1/2" Exp Electric Modulating 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
Actuator		0.000	Α	110 VAC
Voltage			В	220 VAC
			C	24 VAC
			D	24 VDC

ACCESSORIES

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