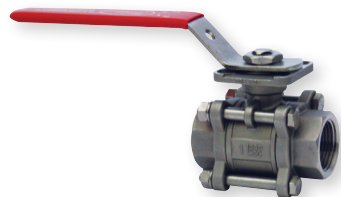
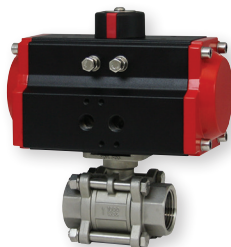


# 3-PIECE NPT STAINLESS STEEL BALL VALVES

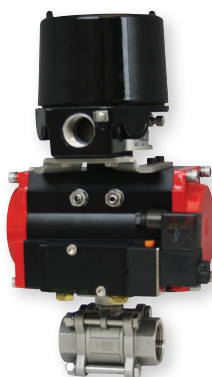
Full Port, Vented Ball, Electric or Pneumatic Actuators



WE02-DHD00



WE02-DDA01



WE02-DDA01-AA01



WE02-DTD01-A



WE02-CTI01-A



The **Series WE02 3-Piece NPT Stainless Steel Ball Valves** incorporate a full port 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 4-20 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/BENEFITS

- Capable of being configured to fit any application
- Limit switches can be mounted to manual valves for remote monitoring
- Vented ball to reduce operating torque
- Weatherproof or explosion-proof electric actuators
- Double acting or spring return anodized aluminum pneumatic actuators
- 3-piece design for each replacement of seals
- Full port design reduces the pressure drop across the valve

## APPLICATIONS

- Gas or liquid flow control
- Ideal for quick bubble tight shut-off

## 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.

**Agency Approvals:** Meets the technical requirements of EU Directive 2011/65/ EU (RoHS II).

### 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.

#### 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 NPT.

**Modulating Input:** 4-20 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 NPT.

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

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

# 3-PIECE NPT STAINLESS STEEL BALL VALVES

Full Port, Vented Ball, Electric or Pneumatic Actuators

MODEL CHART						
Size	Cv (gal/min)	Popular Hand Operated Model	Popular Double Acting Pneumatic Model	Popular Spring Return Pneumatic Model	Popular NEMA 4X Two Position Electric (110 VAC) Model	Popular 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

MODEL CHART - HAND OPERATED & PNEUMATIC ACTUATOR						
Example	WE02	-CSR02	-N	N	09	WE02-CSR02-NN09
Series	WE02					316 SS 3-piece NPT
Size and Actuator		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
		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
Solenoid		HSR05				2" spring return
		ISR07				2-1/2" spring return
		JSR07				3" spring return
			N	A		No solenoid NEMA 4X NAMUR solenoid
Solenoid Voltage				N		No solenoid
				A		110 VAC
				B		220 VAC
				C		24 VAC
				D		24 VDC
Positioner and Switches					00	None
					01	42AD0 exp limit switch
					02	45VD0 exp position transmitter
					03	42AD0-B ATEX limit switch
					04	42AD0-IE IECEX limit switch
					06	QV-210101 poly limit switch
					07	VPS and P1 prox switch
					08	265ER-D5 positioner
Options					09	285ER-D5 smart positioner
					NO	Fail open spring return actuator

ACCESSORIES	
Model	Description
AFR4	Air filter regulator 0 to 120 psi
VB-01	Volume booster

MODEL CHART - ELECTRIC ACTUATOR			
Example	WE02	-ETD01	-B WE02-ETD01-B
Series	WE02		316 SS 3-piece NPT
Size and Actuator		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
Actuator Voltage		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
		A	110 VAC
		B	220 VAC
		C	24 VAC
		D	24 VDC

REPAIR KIT	
Model	Valve Series and Size
VRK-10	WE02-1/2"
VRK-11	WE02-3/4"
VRK-12	WE02-1"
VRK-14	WE02-1-1/2"
VRK-15	WE02-2"
VRK-16	WE02-2-1/2"
VRK-17	WE02-3"
Parts List - Included in Kit	
1 PTFE thrust washer	
1 FKM O-ring	
2 PTFE stem packing	
2 PTFE seals	
2 RTFE seats	