

3-PIECE NPT STAINLESS STEEL BALL VALVE

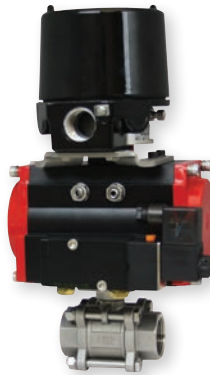
Full Port, Vented Ball, Electric or Pneumatic Actuators



WE02-DHD00



WE02-DDA01



WE02-DDA01-AA01



WE02-DTD01-A



WE02-CTI01-A



Scan here
to watch
product video

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/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.

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 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 NPT.

Modulating Input: 4 to 20 mA.

Standard Features: Position indicator and two limit switches.

3-PIECE NPT STAINLESS STEEL BALL VALVE

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 | |
| | HSR05 | | | | 2" spring return | |
| | ISR07 | | | | 2-1/2" spring return | |
| | JSR07 | | | | 3" spring return | |
| Solenoid | | | N | | | No solenoid |
| | | | A | | | NEMA 4X NAMUR solenoid |
| Solenoid Voltage | | | | N | | No solenoid |
| | | | | A | | 110 VAC |
| | | | | B | | 220 VAC |
| | | | | C | | 24 VAC |
| | | | | D | | 24 VDC |
| | | | E | | 12 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 |
| | | | | | 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 |

| 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 |
| | | 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 | |
| Actuator Voltage | | | A | 110 VAC |
| | | | B | 220 VAC |
| | | | C | 24 VAC |
| | | | D | 24 VDC |

| ACCESSORIES | |
|-------------|---------------------------------|
| Model | Description |
| R2-2120 | Air regulator |
| AFR2-2 | Instrument air filter regulator |
| VB-01 | Volume booster |