

Series WE03

3-Piece Tri-Clamp Stainless Steel Ball Valve

Cavity Filled, Full Port, Electric or Pneumatic Actuators



WE03-DHD00



WE03-DDA01



WE03-DDA01-AA07



WE03-DDA01-AA06



WE03-DTD01-A



to watch product video

The Series WE03 incorporates a full port 3-piece tri-clamp 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 WE03 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

VAI VF

Service: Compatible liquids and gases.

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

End Connections: Tri-clamp ends. 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

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: 1/4" female NPT;

SR02 to SR04: 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.

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

FEATURES

- · Capable of being configured to fit any application
- · Limit switches can be mounted to manual valves for remote monitoring
- · Cavity filled valve for sanitary applications

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.

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

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

Cycle Time (per 90°): See instruction

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

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

and two limit switches.

VALVES

Popular Models

| | | | | | NEMA 4X Two- | NEMA 4X |
|--------|-----------|---------------|-----------------|-----------------|-------------------|---------------------|
| | Cv | Hand Operated | Double Acting | Spring Return | Position Electric | Modulating Electric |
| Size | (gal/min) | Model | Pneumatic Model | Pneumatic Model | (110 VAC) Model | (110 VAC) Model |
| 1/2″ | 14.39 | WE03-CHD00 | WE03-CDA01 | WE03-CSR02 | WE03-CTD01-A | WE03-CMD01-A |
| 3/4" | 42.25 | WE03-DHD00 | WE03-DDA01 | WE03-DSR02 | WE03-DTD01-A | WE03-DMD01-A |
| 1″ | 86.17 | WE03-EHD00 | WE03-EDA02 | WE03-ESR03 | WE03-ETD01-A | WE03-EMD01-A |
| 1-1/2" | 223.61 | WE03-GHD00 | WE03-GDA02 | WE03-GSR04 | WE03-GTD01-A | WE03-GMD01-A |
| 2″ | 437.98 | WE03-HHD00 | WE03-HDA02 | WE03-HSR04 | WE03-HTD02-A | WE03-HMD02-A |

| WE03 Hand Operated and Pneumatic Actuator Model Chart | | | | | | | |
|---|------|-------|---|--------|----|-----|---|
| Example | WE03 | EDA02 | Α | Α | 06 | | WE03-EDA02-AA06 |
| Series | WE03 | | | | | | 316 SS 3-Piece Tri-Clamp |
| Size and | | CHD00 | | | | | 1/2" Hand Operated |
| Actuator | | DHD00 | | | | | 3/4" Hand Operated |
| | | EHD00 | | | | | 1" Hand Operated |
| | | GHD00 | | | | | 1-1/2" Hand Operated |
| | | HHD00 | | | | | 2" Hand Operated |
| | | CDA01 | | | | | 1/2" Double Acting |
| | | DDA01 | | | | | 3/4" Double Acting |
| | | EDA02 | | | | | 1" Double Acting |
| | | GDA02 | | | | | 1-1/2" Double Acting |
| | | HDA02 | | | | | 2" Double Acting |
| | | CSR02 | | | | | 1/2" Spring Return |
| | | DSR02 | | | | | 3/4" Spring Return |
| | | ESR03 | | | | | 1" Spring Return |
| | | GSR04 | | | | | 1-1/2" Spring Return |
| | | HSR04 | | | | | 2" Spring Return |
| Solenoid | | | N | | | | No Solenoid |
| | | | Α | ļ., | | | NEMA 4X NAMUR Solenoid |
| Solenoid | | | | N | | | No Solenoid |
| Voltage | | | | Α | | | 110 VAC |
| | | | | В | | | 220 VAC |
| | | | | С | | | 24 VAC |
| | | | | D E | | | 24 VDC |
| Positioner | | | | E | 00 | | 12 VDC |
| and Switches | | | | | 00 | | None |
| and Switches | | | | | 02 | | 42AD0 Exp Limit Switch |
| | | | | | 03 | | 45VD0 Exp Position Transmitter 42AD0-B ATEX Limit Switch |
| | | | | | 04 | | 42AD0-B AT EX 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 Positioner |
| Options | | | | | 09 | NO | Fail Open Spring Return Actuator |
| Options | | | | | | 140 | Tail Open Opining Neturn Actuator |

| W/E03 | Electric | Actuator | Model | Chart |
|-------|----------|----------|-------|-------|

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|----------|------|-------|---|--------------------------------|
| Example | | CMD01 | Α | WE03-CMD01-A |
| Series | WE03 | | | 316 SS 3-Piece Tri-Clamp |
| Size and | | CTD01 | | 1/2" NEMA 4X Two-Position |
| Actuator | | DTD01 | | 3/4" NEMA 4X Two-Position |
| | | ETD01 | | 1" NEMA 4X Two-Position |
| | | GTD01 | | 1-1/2" NEMA 4X Two-Position |
| | | HTD02 | | 2" NEMA 4X Two-Position |
| | | CMD01 | | 1/2" NEMA 4X Modulating |
| | | DMD01 | | 3/4" NEMA 4X Modulating |
| | | EMD01 | | 1" NEMA 4X Modulating |
| | | GMD01 | | 1-1/2" NEMA 4X Modulating |
| | | HMD02 | | 2" NEMA 4X Modulating |
| | | CTI01 | | 1/2" Exp Two-Position |
| | | DTI01 | | 3/4" Exp Two-Position |
| | | ETI02 | | 1" Exp Two-Position |
| | | GTI02 | | 1-1/2" Exp Two-Position |
| | | HTI02 | | 2" Exp Two-Position |
| | | CMI01 | | 1/2" Exp Electric Modulating |
| | | DMI01 | | 3/4" Exp Electric Modulating |
| | | EMI02 | | 1" Exp Electric Modulating |
| | | GMI02 | | 1-1/2" Exp Electric Modulating |
| | | HMI02 | | 2" Exp Electric Modulating |
| Actuator | | | Α | 110 VAC |
| Voltage | | | В | 220 VAC |
| | | | С | 24 VAC |
| | | | D | 24 VDC |

ACCESSORIES

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