

Series WE04

# **2-Piece Flanged Stainless Steel Ball Valve** 150# ANSI Flange, Vented Ball, Electric or Pneumatic Actuators



The Series WE04 incorporates a full port 2-piece flanged 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 WE04 can be configured with either a pneumatic or electric 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: 2-piece. Line Sizes: 1/2 to 3". End Connections: 150# ANSI flange. Pressure Limits: 28" Hg to 275 psi (-0.7 to 19 bar) up to 392°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 DA04: 1/4″ female NPT SR02 to SR06: 1/4″ female APT.

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 240 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" NPT female Modulating Input: 4 to 20 mA. Standard Features: Position indicator and two limit switches.

#### **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″	36.64	WE04-CHD00	WE04-CDA01	WE04-CSR02	WE04-CTD01-A	WE04-CMD01-A
3/4″	67.69	WE04-DHD00	WE04-DDA01	WE04-DSR02	WE04-DTD01-A	WE04-DMD01-A
1″	101.63	WE04-EHD00	WE04-EDA03	WE04-ESR03	WE04-ETD01-A	WE04-EMD01-A
1-1/2″	266.62	WE04-GHD00	WE04-GDA03	WE04-GSR04	WE04-GTD02-A	WE04-GMD01-A
2″	485.3	WE04-HHD00	WE04-HDA03	WE04-HSR05	WE04-HTD02-A	WE04-HMD02-A
2-1/2″	816.9	WE04-IHD00	WE04-IDA04	WE04-ISR06	WE04-ITD03-A	WE04-IMD03-A
3″	1121.84	WE04-JHD00	WE04-JDA04	WE04-JSR06	WE04-JTD03-A	WE04-JMD03-A

#### WE04 Hand Operated and Pneumatic Actuator Model Chart

Example	WE04	GDA03	Α	В	05		WE04-GDA03-AB05
Series	WE04						316 SS 2-Piece Flanged
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
		IHD00					2-1/2" Hand Operated
		JHD00					3" Hand Operated
		CDA01					1/2" Double Acting
		DDA01					3/4" Double Acting
		EDA03					1" 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
		GSR04					1-1/2" Spring Return
		HSR05					2" Spring Return
		ISR06					2-1/2" Spring Return
		JSR06					3" Spring Return
Solenoid			Ν				No Solenoid
			A				NEMA 4X NAMUR Solenoid
Solenoid				N			No Solenoid
Voltage				A			110 VAC
				В			220 VAC
				С			24 VAC
				D E			24 VDC
Positioner			-		00		12 VDC None
and Switches					00		42AD0 Exp Limit Switch
and Switches					01		45VD0 Exp Position Transmitter
					02		42AD0-B ATEX Limit Switch
					03		42AD0-BATEX 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
- puono							

## WE04 Electric Actuator Model Chart

Example	WE04	ITD03	в	WE04-ITD03-B
Series	WE04			316 SS 2-Piece Flanged
Size and		CTD01		1/2" NEMA 4X Two-Position
Actuator		DTD01		3/4" NEMA 4X Two-Position
		ETD01		1" 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
		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
		GTI03		1-1/2" Exp Two-Position
		HTI04		2" Exp Two-Position
		ITI04		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
		GMI03		1-1/2" Exp Electric Modulating
		HMI04		2" Exp Electric Modulating
		IMI04		2-1/2" Exp Electric Modulating
		JMI05		3" Exp Electric Modulating
Actuator			A	110 VAC
Voltage			В	220 VAC
			С	24 VAC
			D	24 VDC

Valves, Ball, Automated

#### ACCESSORIES

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