

SERIES WE04 | 2-PIECE FLANGED STAINLESS STEEL BALL VALVE

FEATURES/BENEFITS

- Eliminates threads and reduces installation and maintenance time
- Vented ball to reduce operating torque
- Full port design reduces the pressure drop across the valve
- Limit switches can be mounted to manual valves for remote monitoring
- Weatherproof or explosion-proof electric actuators
- Double acting or spring return anodized aluminum pneumatic actuators



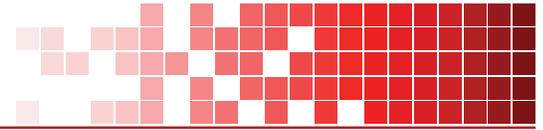
APPLICATIONS

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

DESCRIPTION

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. 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.





VALVE SPECIFICATIONS

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: 316SS; 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.

PNEUMATIC ACTUATOR ("DA" & "SR" SERIES) SPECIFICATIONS

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.

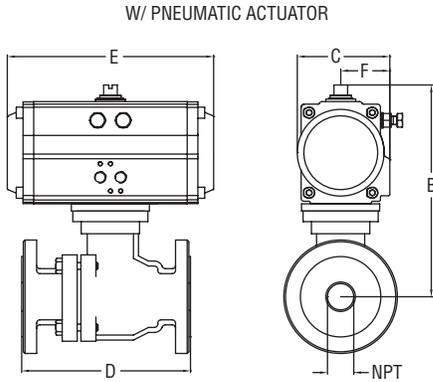
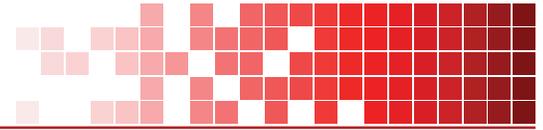
ELECTRIC ACTUATOR ("TD" & "MD" SERIES) SPECIFICATIONS

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 ACTUATOR ("TI" & "MI" SERIES) SPECIFICATIONS

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.





DOUBLE ACTING PNEUMATIC ACTUATOR							
NPT	1/2"	3/4"	1"	1-1/2"	2"	2-1/2"	3"
B	5-1/8" 131 mm	5-3/8" 135 mm	6-5/8" 167 mm	7-1/4" 184 mm	7-5/8" 193 mm	8-7/8" 225 mm	9-1/8" 232 mm
C	2-3/8" 61 mm	2-3/8" 61 mm	3-1/4" 82 mm	3-1/4" 82 mm	3-1/4" 82 mm	3-3/4" 94 mm	3-3/4" 94 mm
D	4-1/4" 108 mm	4-5/8" 117 mm	5" 128 mm	6-1/2" 165 mm	7" 178 mm	7-1/2" 191 mm	8" 203 mm
E	4-5/8" 116 mm	4-5/8" 116 mm	6-5/8" 169 mm	6-5/8" 169 mm	6-5/8" 169 mm	7-7/8" 201 mm	7-7/8" 201 mm
F	1-1/2" 37 mm	1-1/2" 37 mm	1-3/4" 46 mm	1-3/4" 46 mm	1-3/4" 46 mm	2" 52 mm	2" 52 mm

SPRING RETURN PNEUMATIC ACTUATOR							
NPT	1/2"	3/4"	1"	1-1/2"	2"	2-1/2"	3"
B	5-5/8" 143 mm	5-3/4" 147 mm	6-5/8" 167 mm	7-3/4" 196 mm	8-3/8" 213 mm	9-5/8" 245 mm	9-7/8" 252 mm
C	2-3/4" 71 mm	2-3/4" 71 mm	3-1/4" 82 mm	3-3/4" 94 mm	4" 101 mm	4-1/4" 109 mm	4-1/4" 109 mm
D	4-1/4" 108 mm	4-5/8" 117 mm	5" 128 mm	6-1/2" 165 mm	7" 178 mm	7-1/2" 191 mm	8" 203 mm
E	5-3/4" 145 mm	5-3/4" 145 mm	6-5/8" 169 mm	7-7/8" 201 mm	8-1/4" 209 mm	9-1/2" 242 mm	9-1/2" 242 mm
F	1-5/8" 41 mm	1-5/8" 41 mm	1-3/4" 46 mm	2" 52 mm	2-1/8" 55 mm	2-1/4" 58 mm	2-1/4" 58 mm

HOW TO ORDER – HAND OPERATED & PNEUMATIC ACTUATOR

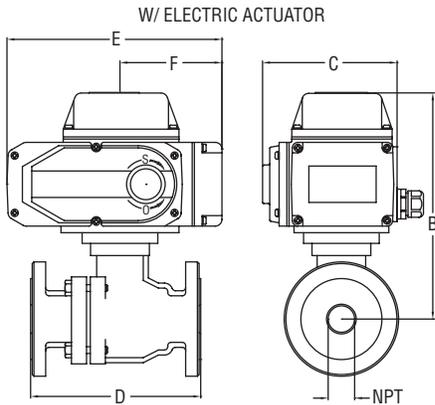
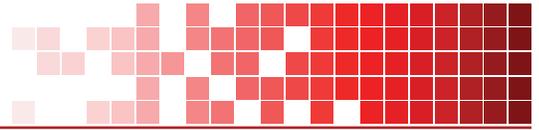
Use the **bold** characters from the chart below to construct a product code.

	WE04	-X	X	-X	X	X	-X	
SERIES							OPTIONS	
WE04 - 316 SS 2-piece flanged							-NO - Fail open spring return actuator	
SIZE							POSITIONER AND SWITCHES	
-C - 1/2" -G - 1-1/2"							00 - 42AD0 exp limit switch	
-D - 3/4" -H - 2"							01 - 45VD0 exp position transmitter	
-E - 1" -I - 2-1/2"							02 - 42AD0-B ATEX limit switch	
-F - 1-1/4" -J - 3"							03 - 42AD0-IE IECEx limit switch	
ACTUATOR							04 - QV-210101 poly limit switch	
HD00 - Hand operated							06 - VPS and P1 prox switch	
DA01 - Double acting (1/2" to 3/4")							07 - 265ER-D5 positioner	
DA03 - Double acting (1" to 2")							08 - 265ER-D5 positioner	
DA04 - Double acting (2-1/2" to 3")							09 - 285ER-D5 smart positioner	
SR02 - Spring return (1/2" to 3/4")							SOLENOID VOLTAGE	
SR03 - Spring return (1")							N - No Solenoid C - 24 VAC	
SR04 - Spring return (1-1/2")							A - 110 VAC D - 24 VDC	
SR05 - Spring return (2")							B - 220 VAC E - 12 VDC	
SR06 - Spring return (2-1/2" to 3")							SOLENOID	
							-N - No Solenoid	
							-A - NEMA 4X NAMUR solenoid	

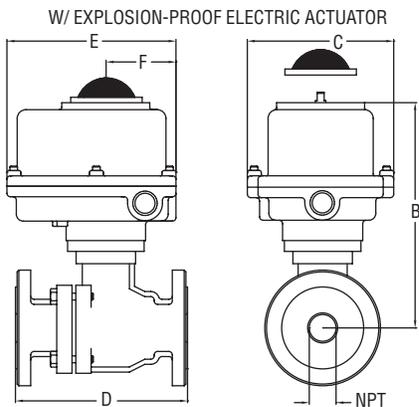
ACCESSORIES

Model	Description
R2-2120	Air regulator
AFR4	Air filter regulator 0 to 120 psi
VB-01	Volume booster





ELECTRIC PNEUMATIC ACTUATOR							
NPT	1/2"	3/4"	1"	1-1/2"	2"	2-1/2"	3"
B	6-7/8"	7-1/8"	8-3/4"	9-3/8"	10-3/8"	11-1/4"	11-1/2"
	176 mm	181 mm	221 mm	239 mm	265 mm	285 mm	292 mm
C	5-1/4"	5-1/4"	9-3/8"	9-3/8"	8-1/2"	8-1/2"	8-1/2"
	133 mm	133 mm	239 mm	239 mm	216 mm	216 mm	216 mm
D	4-1/4"	4-5/8"	5"	6-1/2"	7"	7-1/2"	8"
	108 mm	117 mm	128 mm	165 mm	178 mm	191 mm	203 mm
E	6-1/8"	6-1/8"	8-1/2"	8-1/2"	8-1/2"	8-1/2"	8-1/2"
	154 mm	154 mm	217 mm	217 mm	216 mm	216 mm	216 mm
F	2-3/4"	2-5/8"	5"	5"	5-3/8"	5-3/8"	5-3/8"
	68 mm	68 mm	126 mm	126 mm	136 mm	136 mm	136 mm



EXPLOSION-PROOF ELECTRIC ACTUATOR							
NPT	1/2"	3/4"	1"	1-1/2"	2"	2-1/2"	3"
B	7-1/4"	7-3/8"	7-1/2"	8-1/4"	3-3/8"	10-3/8"	10-5/8"
	183 mm	188 mm	192 mm	209 mm	85 mm	263 mm	270 mm
C	4-1/2"	4-1/2"	4-1/2"	4-1/2"	4-1/2"	4-3/4"	4-3/4"
	113 mm	121 mm	121 mm				
D	4-1/4"	4-5/8"	5"	6-1/2"	7"	7-1/2"	8"
	108 mm	117 mm	128 mm	165 mm	178 mm	191 mm	203 mm
E	6-1/4"	6-1/4"	6-1/4"	6-1/4"	6-1/4"	7-3/4"	7-3/4"
	160 mm	196 mm	196 mm				
F	3"	3"	3"	3"	3"	3-7/8"	3-7/8"
	77 mm	98 mm	98 mm				

HOW TO ORDER – HAND OPERATED & PNEUMATIC ACTUATOR

Use the **bold** characters from the chart below to construct a product code.

<p>SERIES</p> <p>WE04 - 316 SS 2-piece flanged</p> <p>Size</p> <p>-C - 1/2" -G - 1-1/2"</p> <p>-D - 3/4" -H - 2"</p> <p>-E - 1" -J - 2-1/2"</p> <p>-F - 1-1/4" -J - 3"</p> <p>Actuator</p> <p>TD01 - NEMA 4X two-position (1/2" to 1-1/4")</p> <p>TD02 - NEMA 4X two-position (1-1/2" to 2")</p> <p>TD03 - NEMA 4X two-position (2-1/2" to 3")</p> <p>MD01 - NEMA 4X modulating (1/2" to 1-1/2")</p> <p>MD02 - NEMA 4X modulating (2")</p> <p>MD03 - NEMA 4X modulating (2-1/2" to 3")</p> <p>TI01 - Exp two-position (1/2" to 3/4")</p> <p>TI02 - Exp two-position (1" to 1-1/4")</p> <p>TI03 - Exp two-position (1-1/2")</p> <p>TI04 - Exp two-position (2")</p> <p>TI05 - Exp two-position (2-1/2" to 3")</p> <p>MI01 - Exp electric modulating (1/2" to 3/4")</p> <p>MI02 - Exp electric modulating (1" to 1-1/4")</p> <p>MI03 - Exp electric modulating (1-1/2")</p> <p>MI04 - Exp electric modulating (2")</p> <p>MI05 - Exp electric modulating (2-1/2" to 3")</p>	<p>WE04 -X X -X</p> <p style="text-align: right;">ACTUATOR VOLTAGE</p> <p>-A - 110 VAC</p> <p>-B - 220 VAC</p> <p>-C - 24 VAC</p> <p>-D - 24 VDC</p>
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