

SERIES WE02 | 3-PIECE STAINLESS STEEL BALL VALVE

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

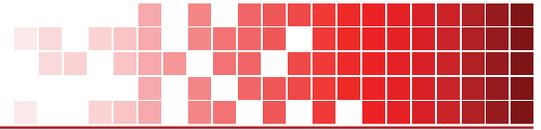
APPLICATIONS

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

DESCRIPTION

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.





VALVE SPECIFICATIONS

Service	Compatible liquids and gases.
Body	2-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: 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.

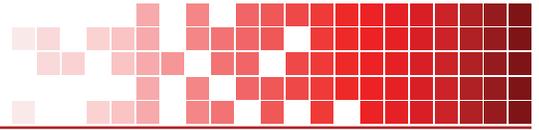
ELECTRIC ACTUATOR ("TD" & "MD" SERIES) SPECIFICATIONS

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.

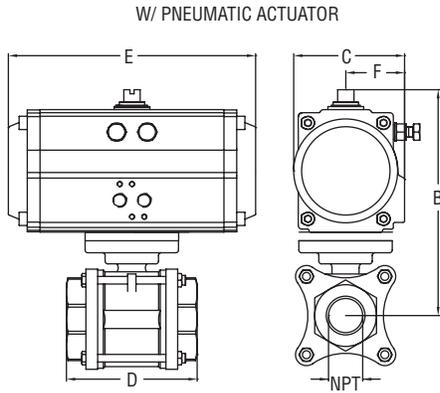
ELECTRIC ACTUATOR ("TI" & "MI" SERIES) SPECIFICATIONS

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.





DIMENSIONS



DOUBLE ACTING PNEUMATIC ACTUATOR								
NPT	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
B	4-5/8"	4-3/4"	5-1/2"	5-3/4"	6-7/8"	7-1/4"	8-3/8"	9"
	116 mm	120 mm	141 mm	146 mm	174 mm	184 mm	212 mm	228 mm
C	2-3/8"	2-3/8"	2-3/4"	2-3/4"	3-1/4"	3-1/4"	3-3/4"	4"
	61 mm	61 mm	71 mm	71 mm	82 mm	82 mm	94 mm	101 mm
D	2-1/2"	3"	3-3/8"	4"	4-3/8"	5-1/8"	6-3/8"	7-3/8"
	65 mm	75 mm	85 mm	101 mm	112 mm	130 mm	162 mm	188 mm
E	4-5/8"	4-5/8"	5-3/4"	5-3/4"	6-5/8"	6-5/8"	7-7/8"	8-1/4"
	116 mm	116 mm	145 mm	145 mm	169 mm	169 mm	201 mm	209 mm
F	1-1/2"	1-1/2"	1-5/8"	1-5/8"	1-3/4"	1-3/4"	2"	2-1/8"
	37 mm	37 mm	41 mm	41 mm	46 mm	46 mm	52 mm	55 mm

SPRING RETURN PNEUMATIC ACTUATOR								
NPT	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
B	5"	5-1/8"	6-1/8"	6-3/8"	7-1/4"	7-7/8"	9-5/8"	10"
	128 mm	132 mm	157 mm	162 mm	185 mm	201 mm	245 mm	253 mm
C	2-3/4"	2-3/4"	3-1/4"	3-1/4"	3-3/4"	4"	4-3/4"	4-3/4"
	71 mm	71 mm	82 mm	82 mm	94 mm	101 mm	122 mm	122 mm
D	2-1/2"	3"	3-3/8"	4"	4-3/8"	5-1/8"	6-3/8"	7-3/8"
	65 mm	75 mm	85 mm	101 mm	112 mm	130 mm	162 mm	188 mm
E	5-3/4"	5-3/4"	6-5/8"	6-5/8"	7-7/8"	8-1/4"	10-7/8"	10-7/8"
	145 mm	145 mm	169 mm	169 mm	201 mm	209 mm	275 mm	275 mm
F	1-5/8"	1-5/8"	1-3/4"	1-3/4"	2"	8-1/4"	10-7/8"	10-7/8"
	41 mm	41 mm	46 mm	46 mm	52 mm	209 mm	275 mm	275 mm

HOW TO ORDER

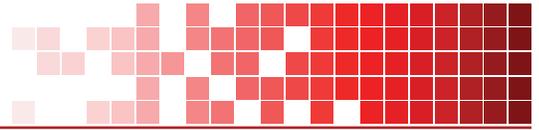
Use the **bold** characters from the chart below to construct a product code.

<p>SERIES _____</p> <p>WE02 - 316 SS 3-piece NPT</p> <p>SIZE _____</p> <p>-C - 1/2" -G - 1-1/2" -D - 3/4" -H - 2" -E - 1" -I - 2-1/2" -F - 1-1/4" -J - 3"</p> <p>ACTUATOR _____</p> <p>HD00 - Hand operated DA01 - Double acting (1/2" to 3/4") DA02 - Double acting (1" to 1-1/4") DA03 - Double acting (1-1/2" to 2") DA04 - Double acting (2-1/2") DA05 - Double acting (3")</p> <p>SR02 - Spring return (1/2" to 3/4") SR03 - Spring return (1" to 1-1/4") SR04 - Spring return (1-1/2") SR05 - Spring return (2") SR07 - Spring return (2-1/2" to 3")</p>	<p>WE02 -X X -X X X -X</p>	<p>OPTIONS</p> <p>-NO - Fail open spring return actuator</p> <p>POSITIONER AND SWITCHES</p> <p>00 - 42AD0 exp limit switch 01 - 45VD0 exp position transmitter 02 - 42AD0-B ATEX limit switch 03 - 42AD0-IE IECEx limit switch 04 - QV-210101 poly limit switch 06 - VPS and P1 prox switch 07 - 265ER-D5 positioner 08 - 265ER-D5 positioner 09 - 285ER-D5 smart positioner</p> <p>SOLENOID VOLTAGE</p> <p>N - No Solenoid C - 24 VAC A - 110 VAC D - 24 VDC B - 220 VAC E - 12 VDC</p> <p>SOLENOID</p> <p>-N - No Solenoid -A - NEMA 4X NAMUR solenoid</p>
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ACCESSORIES

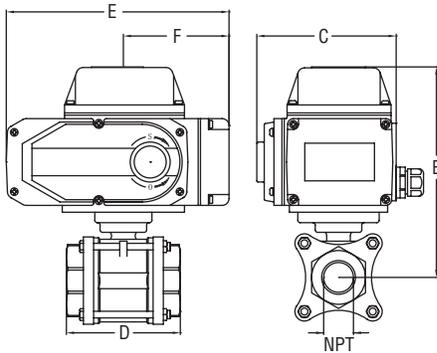
Model	Description
R2-2120	Air regulator
AFR4	Air filter regulator 0 to 120 psi
VB-01	Volume booster





DIMENSIONS

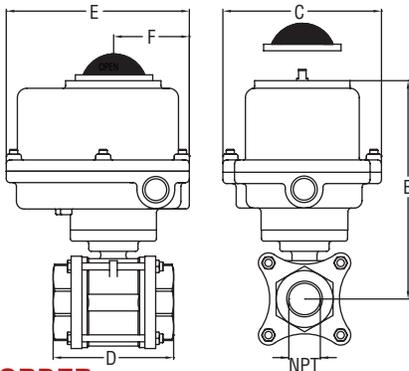
W/ ELECTRIC ACTUATOR



ELECTRIC ACTUATOR

NPT	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
B	6-5/8"	6-3/4"	7-1/8"	7-3/8"	7-3/4"	8-1/8"	9-7/8"	10-1/8"
	169 mm	172 mm	182 mm	187 mm	197 mm	205 mm	250 mm	258 mm
C	4-1/2"	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	2-1/2"	3"	3-3/8"	4"	4-3/8"	5-1/8"	6-3/8"	7-3/8"
	65 mm	75 mm	85 mm	101 mm	112 mm	130 mm	162 mm	188 mm
E	6-1/4"	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"	3-7/8"	3-7/8"
	77 mm	98 mm	98 mm					

W/ EXPLOSION-PROOF ELECTRIC ACTUATOR



EXPLOSION-PROOF ELECTRIC ACTUATOR

NPT	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
B	6-3/8"	6-1/2"	8-3/8"	8-1/2"	8-7/8"	10"	10-3/4"	11"
	162 mm	165 mm	211 mm	217 mm	227 mm	253 mm	272 mm	280 mm
C	5-1/4"	5-1/4"	9-3/8"	9-3/8"	9-3/8"	8-1/2"	8-1/2"	8-1/2"
	133 mm	133 mm	239 mm	239 mm	239 mm	216 mm	216 mm	216 mm
D	2-1/2"	3"	3-3/8"	4"	4-3/8"	5-1/8"	6-3/8"	7-3/8"
	65 mm	75 mm	85 mm	101 mm	112 mm	130 mm	162 mm	188 mm
E	6-1/8"	6-1/2"	8-1/2"	8-1/2"	8-1/2"	8-1/2"	8-1/2"	8-1/2"
	154 mm	154 mm	217 mm	217 mm	217 mm	216 mm	216 mm	216 mm
F	2-3/4"	2-5/8"	5"	5"	5"	5-3/8"	5-3/8"	5-3/8"
	68 mm	68 mm	126 mm	126 mm	126 mm	136 mm	136 mm	136 mm

HOW TO ORDER

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

SERIES _____ **WE02** **-X** **X** **-X**

WE02 - 316 SS 3-piece NPT

SIZE _____

-C - 1/2" **-G** - 1-1/2"
-D - 3/4" **-H** - 2"
-E - 1" **-I** - 2-1/2"
-F - 1-1/4" **-J** - 3"

ACTUATOR VOLTAGE

-A - 110 VAC
-B - 220 VAC
-C - 24 VAC
-D - 24 VDC
-E - 12 VDC

ACTUATOR

- TD01** - NEMA 4X two-position (1/2" to 1-1/4")
- TD02** - NEMA 4X two-position (1-1/2" to 2")
- TD03** - NEMA 4X two-position (2-1/2" to 3")
- MD01** - NEMA 4X modulating (1/2" to 1-1/2")
- MD02** - NEMA 4X modulating (2")
- MD03** - NEMA 4X modulating (2-1/2" to 3")
- TI01** - Exp two-position (1/2" to 3/4")
- TI02** - Exp two-position (1" to 1-1/4")
- TI03** - Exp two-position (1-1/2")
- TI04** - Exp two-position (2")
- TI05** - Exp two-position (2-1/2" to 3")
- MI01** - Exp electric modulating (1/2" to 3/4")
- MI02** - Exp electric modulating (1" to 1-1/4")
- MI03** - Exp electric modulating (1-1/2")
- MI04** - Exp electric modulating (2")
- MI05** - Exp electric modulating (2-1/2" to 3")

ACCESSORIES

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

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