

SERIES WE07 | 2-PIECE FLANGED STAINLESS STEEL V-BALL VALVE

FEATURES/BENEFITS

- The 60° and 90° balls offer an equal percentage flow characteristic
- Bubble tight shut off at high pressure drops
- Limit switches can be mounted to manual valves for remote monitoring
- Available with a variety of electric and pneumatic actuators

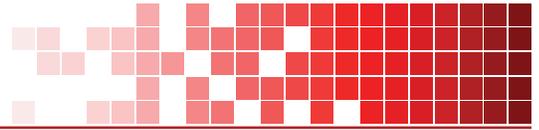
APPLICATIONS

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

DESCRIPTION

The **SERIES WE07** incorporates a V-port ball valve for impressive flow rates with minimal pressure drop. Quarter turn control ball valves are compact, lighter weight and much less expensive than comparable sized globe valves and segmented control valves. They also offer bubble tight shut off with zero leakage and can withstand high pressure drops. The 60° and 90° balls offer an equal percentage flow characteristic. W. E. Anderson's V-port ball valves have been designed to offer maximum flow characteristics that are substantially higher than comparably sized globe valves. The natural flow pattern of ball valves increases flow rates and in many applications valves smaller than pipeline size can be used. The Series WE07 can be configured with 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 close, while the modulating actuator accepts a 4 to 20 mA input for valve positioning. Actuators feature thermal overload protection and a 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 SV3 solenoid valve to electrically switch the air supply pressure between the air supply ports for opening and closing the valve





VALVE SPECIFICATIONS

Service	Compatible liquids and gases.
Body	2-piece.
Line Sizes	1/2 to 3".
End Connections	150# ANSI flange.
Pressure Limits	20" Hg to 275 psi (-0.7 to 19 bar).
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, land 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 SR06: 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.

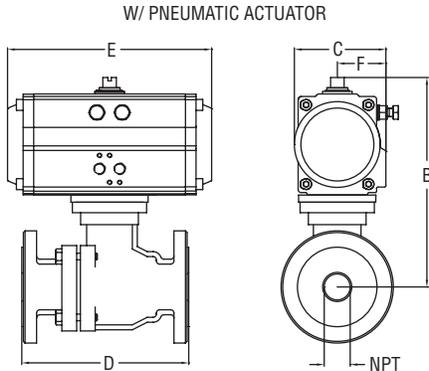
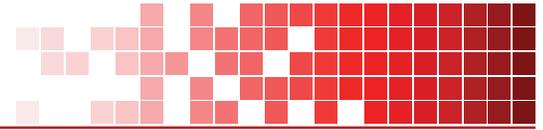
ELECTRIC ACTUATOR ("TD" & "MD" SERIES) SPECIFICATIONS

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

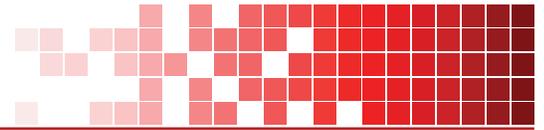
Use the **bold** characters from the chart below to construct a product code.

<p>SERIES</p> <p>WE07 - 316 SS 2-piece 150# ANSI flange</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") DA03 - Double acting (1" to 2") DA04 - Double acting (2-1/2" to 3")</p> <p>V-BALL ANGLE</p> <p>-T - 1/2" 60° v-ball -N - 3/4" 90° v-ball</p>	<p>WE07 -X 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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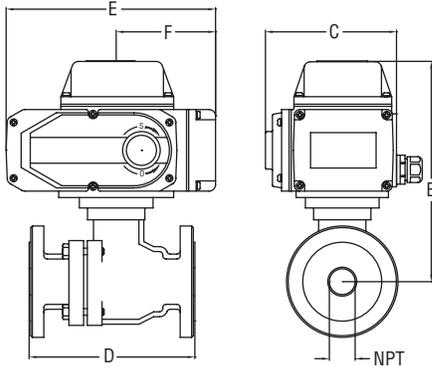
ACCESSORIES

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





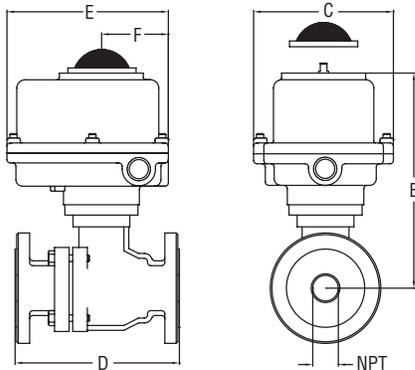
W/ ELECTRIC ACTUATOR



ELECTRIC 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	238 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

W/ EXPLOSION-PROOF ELECTRIC ACTUATOR



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.

	WE07	-X	X	-X	-X	
SERIES						ACTUATOR VOLTAGE
WE07 - 316 SS 2-piece 150# ANSI flange						-A - 110 VAC
SIZE						-B - 220 VAC
-C - 1/2" -G - 1-1/2"						-C - 24 VAC
-D - 3/4" -H - 2"						-D - 24 VDC
-E - 1" -J - 2-1/2"						V-BALL ANGLE
-F - 1-1/4" -J - 3"						-T - 1/2" 60° v-ball
ACTUATOR						-N - 3/4" 90° v-ball
TD01 - NEMA 4X two-position (1/2" to 1")						TI03 - Exp two-position (1-1/2")
TD02 - NEMA 4X two-position (1-1/2" to 2")						TI04 - Exp two-position (2" to 2-1/2")
TD03 - NEMA 4X two-position (2-1/2" to 3")						TI05 - Exp two-position (3")
MD01 - NEMA 4X modulating (1/2" to 1-1/2")						MI01 - Exp electric modulating (1/2" to 3/4")
MD02 - NEMA 4X modulating (2")						MI02 - Exp electric modulating (1")
MD03 - NEMA 4X modulating (2-1/2" to 3")						MI03 - Exp electric modulating (1-1/2")
TI01 - Exp two-position (1/2" to 3/4")						MI04 - Exp electric modulating (2" to 2-1/2")
TI02 - Exp two-position (1")						MI05 - Exp electric modulating (3")

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