Dwyer

2-PIECE FLANGED STAINLESS STEEL V-BALL VALVES 150# ANSI Flange, V-Ball, Electric or Pneumatic Actuators



WE07-DHD00-T



WF07-DDA01-T-AA03



WE07-DDA01-T-NN09



WF07-DTD01-T-A



WE07-CTI01-T-A





The Series WE07 2-Piece Flanged Stainless Steel V-Ball Valves incorporate 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

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.

comparably sized globe valves. The natural flow pattern of ball valves increases flow

Two-position actuators use the supply voltage to drive the valve open or close, while the modulating actuator accepts a 4-20 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.

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

SPECIFICATIONS

VALVE

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) 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.

Agency Approvals: Meets the technical requirements of EU Directive 2011/65/ FU (RoHS II)

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 to DA04: 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).

standard

Accessory Mounting: NAMUR

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

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

Modulating Input: 4-20 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" female

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

and two limit switches.

2-PIECE FLANGED STAINLESS STEEL V-BALL VALVES 150# ANSI Flange, V-Ball, Electric or Pneumatic Actuators

MODEL CHART							
	Cv (gal/min)		Popular Popular		Popular NEMA 4X	Popular NEMA 4X	
			Popular	Double Acting Spring Return		Two Position	Modulating
			Hand Operated	Pneumatic	Pneumatic	Electric	Electric
Size	60°	90°	Model	Model	Model	(110 VAC) Model	(110 VAC) Model
1/2"	7.9	9.1	WE07-CHD00-T	WE07-CDA01-T	WE07-CSR02-T	WE07-CTD01-T-A	WE07-CMD01-T-A
3/4"	13.6	14.2	WE07-DHD00-T	WE07-DDA01-T	WE07-DSR02-T	WE07-DTD01-T-A	WE07-DMD01-T-A
1″	22.3	29.1	WE07-EHD00-T	WE07-EDA03-T	WE07-ESR03-T	WE07-ETD01-T-A	WE07-EMD01-T-A
1-1/2"	46.2	75.5	WE07-GHD00-T	WE07-GDA03-T	WE07-GSR04-T	WE07-GTD02-T-A	WE07-GMD01-T-A
2"	104.7	138.4	WE07-HHD00-T	WE07-HDA03-T	WE07-HSR05-T	WE07-HTD02-T-A	WE07-HMD02-T-A
2-1/2"	147.5	220.3	WE07-IHD00-T	WE07-IDA04-T	WE07-ISR06-T	WE07-ITD03-T-A	WE07-IMD03-T-A
3″	209.1	308.3	WE07-JHD00-T	WE07-JDA04-T	WE07-JSR06-T	WE07-JTD03-T-A	WE07-JMD03-T-A

MODEL CHART - HAND OPERATED & PNEUMATIC ACTUATOR								
	WE07	-CSR02	_	_	_	09	NEU	WE07-CSR02-T-NN09
Example	_	-CSRU2	-1	-IN	IA	09		
Series	WE07		_					316 SS 2-piece 150# ANSI flange
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
V-Ball			Т					60° v-ball
Angle			N					90° v-ball
Solenoid				N				No solenoid
				Α				NEMA 4X NAMUR solenoid
Solenoid					Ν			No solenoid
Voltage					Α			120 VAC
					В			220 VAC
					С			24 VAC
					D			24 VDC
					Е			12 VDC
Positioner						00		None
and						01		42AD0 exp limit switch
Switches						02		45VD0 exp position transmitter
						03		42AD0-B ATEX limit switch
						04		42AD0-IE IECEX limit switch
						06		QV-210101 poly limit switch
						07		VPS and P1 prox switch
						80		265ER-D5 positioner
						09		285ER-D5 smart positioner
Options							NO	Fail open spring return actuator

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

Size and Actuator						
Series WE07 316 SS 2-piece 150# ANSI flang Size and Actuator DTD01 1/2" NEMA 4X two-position 3/4" NEMA 4X two-position 1-1/2" NEMA 4X two-position 1-1/2" NEMA 4X two-position 2" NEMA 4X two-position 2" NEMA 4X two-position 1/2" NEMA 4X modulating MD01 1-1/2" NEMA 4X modulating 1-1/2" NEMA 4X modulating 1-1/2" NEMA 4X modulating 2" NEMA 4X modulating 2" NEMA 4X modulating 1/2" NEMA 4X modulating 1/2" exp two-position 1/2" exp two-position 1/2" exp two-position 1-1/2" exp two-position 1/2" exp electric modulating 3/4" exp electric modulating 1/2" exp electric modulating 1/2" exp electric modulating 1-1/2" exp electric				RIC		
Size and Actuator	Example	WE07	-ETD01	-T	-B	WE07-ETD01-T-B
Actuator	Series	WE07				316 SS 2-piece 150# ANSI flange
## ETD01 1" NEMA 4X two-position 1-1/2" NEMA 4X two-position 2" NEMA 4X two-position 2-1/2" NEMA 4X two-position 2-1/2" NEMA 4X two-position 1/2" NEMA 4X two-position 1/2" NEMA 4X modulating 3/4" NEMA 4X modulating 3/4" NEMA 4X modulating 1" NEMA 4X modulating 1" NEMA 4X modulating 1" NEMA 4X modulating 1" NEMA 4X modulating 2" NEMA 4X modulating 2" NEMA 4X modulating 1/2" exp two-position 1/2" exp two-position 1/2" exp two-position 1/2" exp two-position 1" exp two-position 1/2" exp two-position 1/2" exp two-position 1/2" exp two-position 1/2" exp electric modulating 3/4" exp electric modulating 1" exp electric modulating 2-1/2" exp electric modulating 2-1/2" exp electric modulating 2-1/2" exp electric modulating 3" exp electric modulating 4" exp electric modulating 4" exp electric modulating 4" exp	Size and		CTD01			1/2" NEMA 4X two-position
GTD02 HTD02 HTD02 HTD03 JTD03 JTD03 JTD03 CMD01 DMD01 DMD01 EMD01 GMD01 J** NEMA 4X two-position GMD01 J** NEMA 4X modulating J** Exp two-position J** Exp two-po	Actuator		DTD01			3/4" NEMA 4X two-position
HTD02			ETD01			1" NEMA 4X two-position
ITD03			GTD02			
JTD03						· ·
CMD01						
DMD01						· ·
EMD01 1" NEMA 4X modulating 1-1/2" NEMA 4X modulating 1-1/2" NEMA 4X modulating 2" NEMA 4X modulating 2" NEMA 4X modulating 2" NEMA 4X modulating 2-1/2" NEMA 4X modulating 1/2" exp two-position 1/2" exp two-position 3/4" exp two-position 1" exp two-position 1" exp two-position 1" exp two-position 1" exp two-position 1-1/2" exp two-position 2" exp two-position 17104 2-1/2" exp two-position 3" exp two-position 1/2" exp electric modulating 1/2" exp electric modulating 1" exp electric modulating 2" exp electric modulating 1/2" exp electric modulating 2" exp electric modulating 2" exp electric modulating 2" exp electric modulating 2" exp electric modulating 3" exp electric modulating 4						
GMD01 HMD02 IMD03 JMD03 JMD03 CTI01 DTI01 ETI02 GTI03 HTI04 JTI05 JTI05 CMI01 DMI01 JTI05 GMI03 JM003 GMI03 HTI04 JTI05 GMI03 JM104 JTI05 GMI03 JM104 JM104 JM104 JM104 JM104 JM104 JM104 JM105 JM105 JM105 JM105 JM105 JM105 JM106 JM107 JM107 JM107 JM107 JM108 JM108 JM108 JM109						
HMD02						,
IMD03						
JMD03 3" NEMA 4X modulating 1/2" exp two-position 3/4" exp two-position 1" exp two-position 1-1/2" exp two-position 1-1/2" exp two-position 1-1/2" exp two-position 2" exp two-position 2" exp two-position 1/104 2-1/2" exp two-position 3" exp two-position 3" exp two-position 1/2" exp electric modulating 1/2" exp electric modulating 1/2" exp electric modulating 1-1/2" exp electric modulating 1-1/2" exp electric modulating 2" exp electric modulating 2" exp electric modulating 2" exp electric modulating 3" exp electric modulating 3" exp electric modulating 2" exp electric modulating 3" exp electric m						
CTI01						_
DTI01			0			,
ETI02 1" exp two-position 1-1/2" exp two-position 1-1/2" exp two-position 2" exp two-position 2-1/2" exp two-position 3" exp two-position 1/2" exp electric modulating 1/2" exp electric modulating 2/4" exp electric modulating 2/4" exp electric modulating 2/4" exp electric modulating 1" exp electric modulating 1/2" exp electric modulating 1/2" exp electric modulating 2" exp electric modulating 2" exp electric modulating 2" exp electric modulating 3" exp electric modulating 4						
GTI03						
HTI04						
ITI04			00			
JTI05 3" exp two-position 1/2" exp electric modulating 3/4" exp electric modulating 3/4" exp electric modulating 1" exp electric modulating 1-1/2" exp electric modulating 2-1/2" exp electric modulating 3" exp electric modulating 3" exp electric modulating 3" exp electric modulating 4 110 VAC						
CMI01						
DMI01						
EMI02 1" exp electric modulating 1-1/2" exp electric modulating 1-1/2" exp electric modulating 2" exp electric modulating 2" exp electric modulating 2-1/2" exp electric modulating 3" exp electric modulating 3" exp electric modulating 4" exp electric modulating 2-1/2" exp electric modulating 3" exp electric modulating 4" exp electric modulating 2-1/2" exp electric modulating 3" exp electric modulating 4" exp electric modulating 2-1/2" exp electric modulating 3" exp electric modulating 4" exp electric modulating 2-1/2" exp electric modulating 3" exp electric modulating 3" exp electric modulating 4-1/2" exp el			0			
GMI03						, ,
HMI04						, ,
IMI04 2-1/2" exp electric modulating 3" exp electric modulating 3" exp electric modulating 4" exp electric modulating 5" exp						
JMI05 3" exp electric modulating						
V-Ball T 60° v-ball Angle N 90° v-ball Actuator A 110 VAC Voltage B 220 VAC						
Angle N 90° v-ball Actuator A 110 VAC Voltage B 220 VAC	V-Ball			Т		' '
Actuator A 110 VAC Voltage B 220 VAC				١.		00 1 20
Voltage B 220 VAC	Actuator				Α	110 VAC
9					l	
					С	24 VAC
D 24 VDC					-	-:

REPAIR KIT								
Model Valve Series and Size								
VRK-27	WE07-1/2"							
VRK-28	WE07-3/4"							
VRK-29	WE07-1"							
VRK-31	WE07-1-1/2"							
VRK-32	WE07-2"							
VRK-33 WE07-2-1/2"								
VRK-34 WE07-3"								
Parts List - Included in Kit								
1 PTFE t	1 PTFE thrust washer							
1 FKM O-ring								
2 PTFE stem packing								
2 PTFE seals								
2 RTFE seats								