

2-PIECE FLANGED STAINLESS STEEL V-BALL VALVES

150# ANSI Flange, V-Ball, Electric or Pneumatic Actuators



WE07-DHD00-T



WE07-DDA01-T-NN09



WE07-CTI01-T-A



WE07-DDA01-T-AA03



WE07-DTD01-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 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 4-20 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.

BENEFITS/FEATURES

- 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.

Compliance: Meets the technical requirements of EU Directive 2011/65/ EU (RoHS II).

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 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 "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 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: 4-20 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 and D; Class II, Group E, F and G; Division I and II.

Housing Material: Powder coated aluminum.

Temperature Limits: -40 to 140°F (-40 to 60°C).

Electrical Connection: 1/2" female NPT.

Modulating Input: 4-20 mA.

Standard Features: Position indicator and two limit switches.

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MODEL CHART							
Size	Cv (gal/min)		Popular Hand Operated Model	Popular Double Acting Pneumatic Model	Popular Spring Return Pneumatic Model	Popular NEMA 4X Two Position Electric (110 VAC) Model	Popular NEMA 4X Modulating Electric (110 VAC) Model
	60°	90°					
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 AND PNEUMATIC ACTUATOR							
Example	WE07	-CSR02	-T	-N	N	09	WE07-CSR02-T-NN09
Series	WE07						316 SS 2-piece 150# ANSI flange
Size and Actuator		CHD00					1/2" hand operated
		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 Angle			T				60° v-ball
			N				90° v-ball
Solenoid				N			No solenoid
				A			NEMA 4X NAMUR solenoid
Solenoid Voltage					N		No solenoid
					A		120 VAC
					B		220 VAC
					C		24 VAC
					D		24 VDC
					E		12 VDC
Positioner and Switches						00	None
						01	42AD0 exp limit switch
						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
						08	265ER-D5 positioner
						09	285ER-D5 smart positioner
Options						NO	Fail open spring return actuator

ACCESSORIES	
Model	Description
VB-01	Volume booster

MODEL CHART - ELECTRIC ACTUATOR					
Example	WE07	-ETD01	-T	-B	WE07-ETD01-T-B
Series	WE07				316 SS 2-piece 150# ANSI flange
Size and Actuator		CTD01			1/2" NEMA 4X two-position
		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
	V-Ball Angle		CTI01		
		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
V-Ball Angle				T	
			N		90° v-ball
Actuator Voltage				A	110 VAC
				B	220 VAC
				C	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 thrust washer	
1 FKM O-ring	
2 PTFE stem packing	
2 PTFE seals	
2 RTFE seats	