### Dwyer

## 3-PIECE NPT STAINLESS STEEL V-BALL VALVES V-Port, Vented Ball, Electric or Pneumatic Actuators



WE06-DHD00-T



WF06-DDA01-T



WE06-DDA01-T-AA01



WE06-CTI01-T-A



WF06-DTD01-T-4



The Series WE06 3-Piece NPT 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.

Limit switches can be mounted directly to the valves allowing for remote position

The Series WE06 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.

### FEATURES/BENEFITS

- $\bullet$  The  $60^\circ$  and  $90^\circ$  balls offer an equal percentage flow characteristic
- · 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 bubble tight shut off at high pressure drops

#### **SPECIFICATIONS**

#### VALVE

Service: Compatible liquids and gases.

Body: 3-piece.

Line Sizes: 1/2 to 3".

End Connections: Female NPT. Pressure Limits: 20" Hg to 1000 psi

(-0.7 to 69 bar) up to 250°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 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 "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.

# 3-PIECE NPT STAINLESS STEEL V-BALL VALVES V-Port, Vented Ball, Electric or Pneumatic Actuators

MODEL CHART								
	Cv (gal/min)		Popular Hand	Popular Double Acting	Popular Spring Return	Popular NEMA 4X Two Position	Popular NEMA 4X Modulating	
Size	60°	90° Operated Model		Pneumatic Model	Pneumatic Model	Electric (110 VAC) Model	Electric (110 VAC) Model	
1/2"	7.9	9.1	WE06-CHD00-T	WE06-CDA01-T	WE06-CSR02-T	WE06-CTD01-T-A	WE06-CMD01-T-A	
3/4"	13.6	14.2	WE06-DHD00-T	WE06-DDA01-T	WE06-DSR02-T	WE06-DTD01-T-A	WE06-DMD01-T-A	
1″	22.3	29.1	WE06-EHD00-T	WE06-EDA02-T	WE06-ESR03-T	WE06-ETD01-T-A	WE06-EMD01-T-A	
1-1/4"	31.5	53.7	WE06-FHD00-T	WE06-FDA02-T	WE06-FSR03-T	WE06-FTD01-T-A	WE06-FMD01-T-A	
1-1/2"	46.2	75.5	WE06-GHD00-T	WE06-GDA03-T	WE06-GSR04-T	WE06-GTD02-T-A	WE06-GMD01-T-A	
2″	104.7	138.4	WE06-HHD00-T	WE06-HDA03-T	WE06-HSR05-T	WE06-HTD02-T-A	WE06-HMD02-T-A	
2-1/2"	147.5	220.3	WE06-IHD00-T	WE06-IDA04-T	WE06-ISR07-T	WE06-ITD03-T-A	WE06-IMD03-T-A	
3″	209.1	308.3	WE06-JHD00-T	WE06-JDA05-T	WE06-JSR07-T	WE06-JTD03-T-A	WE06-JMD03-T-A	

MODEL CHART - HAND OPERATED & PNEUMATIC ACTUATOR								
Example	WE06	-CSR02	-T	-N	N	09		WE06-CSR02-T-NN09
Series	WE06							316 SS 3-piece NPT
Size and		CHD00						1/2" hand operated
Actuator		DHD00						3/4" hand operated
		EHD00						1" hand operated
		FHD00						1-1/4" 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
		EDA02						1" double acting
		FDA02						1-1/4" double acting
		GDA03						1-1/2" double acting
		HDA03						2" double acting
		IDA04						2-1/2" double acting
		JDA05						3" double acting
		CSR02						1/2" spring return
		DSR02						3/4" spring return
		ESR03						1" spring return
		FSR03						1-1/4" spring return
		GSR04						1-1/2" spring return
		HSR05						2" spring return
		ISR07						2-1/2" spring return
		JSR07						3" spring return
V-Ball			Т					60° v-ball
Angle			N					90° v-ball
Solenoid				N				No solenoid
				Α				NEMA 4X NAMUR solenoid
Solenoid					N			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
						08		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			

					'
MODEL C	HART -	- ELECTR	RIC A	ACT	UATOR
Example		-ETD01	-T		WE06-ETD01-T-B
Series	WE06				316 SS 3-piece NPT
Size and		CTD01			1/2" NEMA 4X two-position
Actuator		DTD01			3/4" NEMA 4X two-position
		ETD01			1" NEMA 4X two-position
		FTD01			1-1/4" 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
		FMD01			1-1/4" 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
		CTI01 DTI01			1/2" exp two-position
		ETI02			3/4" exp two-position 1" exp two-position
		FTI02			1-1/4" exp two-position
		GTI02			1-1/2" exp two-position
		HTI04			2" exp two-position
		ITI05			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
		FMI02			1-1/4" exp electric modulating
		GMI03			1-1/2" exp electric modulating
		HMI04			2" exp electric modulating
		IMI05			2-1/2" exp electric modulating
		JMI05			3" exp electric modulating
V-Ball			Т		60° v-ball
Angle			N		90° v-ball
Actuator				Α	110 VAC
Voltage				В	220 VAC
				С	24 VAC
				D	24 VDC

REPAIR KIT						
Model	Valve Series and Size					
VRK-10	WE06-1/2"					
VRK-11	WE06-3/4"					
VRK-12	WE06-1"					
VRK-14 WE06-1-1/2"						
VRK-15	WE06-2"					
VRK-16	WE06-2-1/2"					
VRK-17	WE06-3"					
Parts List - Included in Kit						
1 PTFE thrust washer						
1 FKM O-ring						
2 PTFE stem packing						
2 PTFE seals						
2 RTFE seats						