

## BUTTERFLY VALVES

Lug or Wafer, EPDM or PTFE, Electric or Pneumatic Actuators



WE20-CHD00-LE



WE20-EDA06-LE



WE20-ETD04-LE-A



WE20-CDA04-WP-AA07



WE20-CDA04-WP-NN08



The **Series WE20 Butterfly Valves** are offered in lug or wafer body styles and is equipped with a PTFE or EPDM liner. The most critical aspect of the Series WE20 Butterfly Valves is the cartridge seat design, which alleviates installation problems associated with common "dove tail design" seats. Valve torques are lower and more consistent as the seat dynamics are not dependent on being coupled between two flanges. Precision machining of the disc and body allow the cartridge design to maintain a tighter disc to seat tolerance, providing a perfect low torque seal each and every time the valve is cycled. The seat to disc seal is independent of flange support and capable of full rated dead end service.

Actuators are directly 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 WE20 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.

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. Actuators are constructed of anodized and epoxy coated aluminum for years of corrosion free service.

## FEATURES/BENEFITS

- Machined flats attach disc/stem - no pins
- Phenolic backed cartridge seat design for extended service and ease of replacement
- Extended neck for insulation - no fabricated extensions required
- Capable of being configured to fit any application
- 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, gases, and steam.

**Body:** 2-way, wafer or lug butterfly.

**Line Sizes:** 2 to 12".

**End Connections:** Lug and wafer pattern designed for flanges that are ANSI Class 125 (B16.1) and ANSI Class 150 (B16.5) dimension.

**Pressure Limits:** 225 psi (15.5 bar).

**Wetted Materials:** Body Material: Ductile iron; Disc: 316 SS; Seat: EPDM or PTFE; O-ring: EPDM; Stem: 410 SS.

**Temperature Limits:** Disc: EPDM: -50 to 250°F (-46 to 121°C); PTFE: 0 to 300°F (-18 to 149°C).

**Bearings:** Nylatron.

**Operator:** 2 to 6" 10-position locking hand lever; 8 to 12": manual gear.

## 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: 70 to 115 psi (4.8 to 7.9 bar).

**Maximum Supply Pressure:** 120 psi (8.6 bar).

**Air Connections:** DA03 thru DA11: 1/4" FNPT; SR03 thru SR11: 1/4" FNPT.

**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 or 24 VAC.

**Power Consumption:** See instruction manual.

**Cycle Time (per 90°):** TD01 and MD01: 4 s; TD02 and MD02: 20 s; TD03 and MD03: 30 s; TD04 and MD04: 30 s; TD05 and MD05: 30 s; TD06 and MD06: 45 s; TD07 and MD07: 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 "TH and MH 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:** -22 to 140°F (-30 to 60°C).

**Electrical Connection:** 1/2" female NPT.

**Modulating Input:** 4 to 20 mA.

**Standard Features:** Position indicator and two limit switches.



SERIES WE20 | W.E. ANDERSON™ BY DWYER

# BUTTERFLY VALVES

Lug or Wafer, EPDM or PTFE, Electric or Pneumatic Actuators

### MODEL CHART

Size	Cv (gal/min)	Popular Hand Operated Model	Price	Popular Double Acting Pneumatic Model	Price	Popular Spring Return Pneumatic Model	Price	NEMA 4X Two-Position Electric (110 VAC) Model	Price	NEMA 4X Modulating Electric (110 VAC) Model	Price
2"	135	WE20-AHD00-WE	\$105.00 <sup>Ⓟ</sup>	WE20-ADA03-WE	\$244.00 <sup>Ⓟ</sup>	WE20-ASR04-WE	\$282.00 <sup>Ⓟ</sup>	WE20-ATD02-WE-A	\$604.00 <sup>Ⓟ</sup>	WE20-AMD02-WE-A	\$1097.00 <sup>Ⓟ</sup>
2-1/2"	220	WE20-BHD00-WE	119.00 <sup>Ⓟ</sup>	WE20-BDA03-WE	262.00 <sup>Ⓟ</sup>	WE20-BSR04-WE	300.00 <sup>Ⓟ</sup>	WE20-BTD02-WE-A	622.00 <sup>Ⓟ</sup>	WE20-BMD02-WE-A	1118.00 <sup>Ⓟ</sup>
3"	302	WE20-CHD00-WE	133.00 <sup>Ⓟ</sup>	WE20-CDA04-WE	300.00 <sup>Ⓟ</sup>	WE20-CSR06-WE	372.00 <sup>Ⓟ</sup>	WE20-CTD02-WE-A	640.00 <sup>Ⓟ</sup>	WE20-CMD02-WE-A	1133.00 <sup>Ⓟ</sup>
4"	600	WE20-DHD00-WE	177.00 <sup>Ⓟ</sup>	WE20-DDA05-WE	373.00 <sup>Ⓟ</sup>	WE20-DSR07-WE	460.00 <sup>Ⓟ</sup>	WE20-DTD03-WE-A	960.00 <sup>Ⓟ</sup>	WE20-DMD03-WE-A	1546.00 <sup>Ⓟ</sup>
5"	1022	WE20-EHD00-WE	222.00 <sup>Ⓟ</sup>	WE20-EDA06-WE	470.00 <sup>Ⓟ</sup>	WE20-ESR08-WE	618.00 <sup>Ⓟ</sup>	WE20-ETD04-WE-A	1216.00 <sup>Ⓟ</sup>	WE20-EMD04-WE-A	1803.00 <sup>Ⓟ</sup>
6"	1579	WE20-FHD00-WE	278.00 <sup>Ⓟ</sup>	WE20-FDA07-WE	568.00 <sup>Ⓟ</sup>	WE20-FSR09-WE	915.00 <sup>Ⓟ</sup>	WE20-FTD04-WE-A	1285.00 <sup>Ⓟ</sup>	WE20-FMD04-WE-A	1873.00 <sup>Ⓟ</sup>
8"	3136	WE20-GHD00-WE	685.00 <sup>Ⓟ</sup>	WE20-GDA08-WE	994.00 <sup>Ⓟ</sup>	WE20-GSR10-WE	1422.00 <sup>Ⓟ</sup>	WE20-GTD05-WE-A	1788.00 <sup>Ⓟ</sup>	WE20-GMD05-WE-A	2436.00 <sup>Ⓟ</sup>
10"	5340	WE20-HHD00-WE	943.00 <sup>Ⓟ</sup>	WE20-HDA09-WE	1463.00 <sup>Ⓟ</sup>	WE20-HSR11-WE	2282.00 <sup>Ⓟ</sup>	WE20-HTD06-WE-A	2488.00 <sup>Ⓟ</sup>	WE20-HMD06-WE-A	3165.00 <sup>Ⓟ</sup>
12"	8250	WE20-IHD00-WE	1377.00 <sup>Ⓟ</sup>	WE20-IDA11-WE	1957.00 <sup>Ⓟ</sup>	WE20-ISR11-WE	2375.00 <sup>Ⓟ</sup>	WE20-ITD07-WE-A	2732.00 <sup>Ⓟ</sup>	WE20-IMD07-WE-A	3283.00 <sup>Ⓟ</sup>

Ⓟ Items are subject to Schedule B discounts.

### MODEL CHART - HAND OPERATED & PNEUMATIC ACTUATOR

Example	WE20	-BSR04	-WE	-A	A	00	WE20-BSR04-WE-AA00	Price	
Series	WE20						Butterfly valve	-	
Size and Actuator	AHD00						2" hand operated	\$105.00 <sup>Ⓟ</sup>	
	BHD00						2-1/2" hand operated	119.00 <sup>Ⓟ</sup>	
	CHD00						3" hand operated	133.00 <sup>Ⓟ</sup>	
	DHD00						4" hand operated	177.00 <sup>Ⓟ</sup>	
	EHD00						5" hand operated	222.00 <sup>Ⓟ</sup>	
	FHD00						6" hand operated	278.00 <sup>Ⓟ</sup>	
	GHD00						8" hand operated	685.00 <sup>Ⓟ</sup>	
	HH00						10" hand operated	943.00 <sup>Ⓟ</sup>	
	IHD00						12" hand operated	1377.00 <sup>Ⓟ</sup>	
	ADA03						2" double acting	244.00 <sup>Ⓟ</sup>	
	BDA03						2-1/2" double acting	262.00 <sup>Ⓟ</sup>	
	CDA04						3" double acting	300.00 <sup>Ⓟ</sup>	
	DDA05						4" double acting	373.00 <sup>Ⓟ</sup>	
	EDA06						5" double acting	470.00 <sup>Ⓟ</sup>	
	FDA07						6" double acting	568.00 <sup>Ⓟ</sup>	
	GDA08						8" double acting	994.00 <sup>Ⓟ</sup>	
	HDA09						10" double acting	1463.00 <sup>Ⓟ</sup>	
	IDA11						12" double acting	1957.00 <sup>Ⓟ</sup>	
	Body Type /Liner	ASR04		WE				Wafer-EPDM	-
		BSR04		WP				Wafer-PTFE	+51.50 <sup>Ⓟ</sup>
CSR06			LE				Lug-EPDM	+8.30 <sup>Ⓟ</sup>	
DSR07			LP				Lug-PTFE	+60.00 <sup>Ⓟ</sup>	
ESR08				N			No solenoid	-	
FSR09				A			NEMA 4X NAMUR solenoid	+51.50 <sup>Ⓟ</sup>	
FSR09					N		No solenoid	-	
GSR10					A		120 VAC	-	
HSR11					B		220 VAC	-	
ISR11					C		24 VAC	-	
					D		24 VDC	-	
				E		12 VDC	-		
Positioner and Switches						00	None	-	
						01	42AD0 exp limit switch	+237.00 <sup>Ⓟ</sup>	
						02	45VD0 exp position transmitter	+541.00 <sup>Ⓟ</sup>	
						03	42AD0-B ATEX limit switch	+333.00 <sup>Ⓟ</sup>	
						04	42AD0-IE IECEX limit switch	+330.00 <sup>Ⓟ</sup>	
						06	QV-210101 poly limit switch	+148.00 <sup>Ⓟ</sup>	
						07	VPS and P1 prox switch	+212.50 <sup>Ⓟ</sup>	
						08	265ER-D5 positioner	+659.00 <sup>Ⓟ</sup>	
						09	285ER-D5 smart positioner	+1545.00 <sup>Ⓟ</sup>	
Options						NO	Fail open spring return actuator	-	

Ⓟ Items are subject to Schedule B discounts.

### MODEL CHART - ELECTRIC ACTUATOR

Example	WE20	-DMH05	-WE	-A	WE20-DMH05-WE-A	Price
Series	WE20				Butterfly valve	-
Size and Actuator	ATD02				2" NEMA 4X two-position	\$604.00 <sup>Ⓟ</sup>
	BTD02				2-1/2" NEMA 4X two-position	622.00 <sup>Ⓟ</sup>
	CTD02				3" NEMA 4X two-position	640.00 <sup>Ⓟ</sup>
	DTD03				4" NEMA 4X two-position	960.00 <sup>Ⓟ</sup>
	ETD04				5" NEMA 4X two-position	1216.00 <sup>Ⓟ</sup>
	FTD04				6" NEMA 4X two-position	1285.00 <sup>Ⓟ</sup>
	GTD05				8" NEMA 4X two-position	1788.00 <sup>Ⓟ</sup>
	HTD06				10" NEMA 4X two-position	2488.00 <sup>Ⓟ</sup>
	ITD07				12" NEMA 4X two-position	2732.00 <sup>Ⓟ</sup>
	AMD02				2" NEMA 4X modulating	1097.00 <sup>Ⓟ</sup>
	BMD02				2-1/2" NEMA 4X modulating	1118.00 <sup>Ⓟ</sup>
	CMD02				3" NEMA 4X modulating	1133.00 <sup>Ⓟ</sup>
	DMD03				4" NEMA 4X modulating	1546.00 <sup>Ⓟ</sup>
	EMD04				5" NEMA 4X modulating	1803.00 <sup>Ⓟ</sup>
	FMD04				6" NEMA 4X modulating	1873.00 <sup>Ⓟ</sup>
	GMD05				8" NEMA 4X modulating	2436.00 <sup>Ⓟ</sup>
	HMD06				10" NEMA 4X modulating	3165.00 <sup>Ⓟ</sup>
	IMD07				12" NEMA 4X modulating	3283.00 <sup>Ⓟ</sup>
	ATH03				2" exp two-position	604.00 <sup>Ⓟ</sup>
	BTH03				2-1/2" exp two-position	622.00 <sup>Ⓟ</sup>
	CTH05				3" exp two-position	2558.00 <sup>Ⓟ</sup>
	DTH05				4" exp two-position	2617.00 <sup>Ⓟ</sup>
	ETH06				5" exp two-position	2942.00 <sup>Ⓟ</sup>
	FTH08				6" exp two-position	3231.00 <sup>Ⓟ</sup>
	GTH09				8" exp two-position	3731.00 <sup>Ⓟ</sup>
	HTH10				10" exp two-position	5741.00 <sup>Ⓟ</sup>
	ITH11				12" exp two-position	6383.00 <sup>Ⓟ</sup>
AMH03				2" exp electric modulating	1097.00 <sup>Ⓟ</sup>	
BMH03				2-1/2" exp electric modulating	1118.00 <sup>Ⓟ</sup>	
CMH05				3" exp electric modulating	3798.00 <sup>Ⓟ</sup>	
DMH05				4" exp electric modulating	3858.00 <sup>Ⓟ</sup>	
EMH06				5" exp electric modulating	4182.00 <sup>Ⓟ</sup>	
FMH08				6" exp electric modulating	4203.00 <sup>Ⓟ</sup>	
GMH09				8" exp electric modulating	4723.00 <sup>Ⓟ</sup>	
HMH10				10" exp electric modulating	6820.00 <sup>Ⓟ</sup>	
IMH11				12" exp electric modulating	7670.00 <sup>Ⓟ</sup>	
Material/Liner			WE		Wafer-EPDM	-
			WP		Wafer-PTFE	+51.50 <sup>Ⓟ</sup>
			LE		Lug-EPDM	+8.30 <sup>Ⓟ</sup>
			LP		Lug-PTFE	+60.00 <sup>Ⓟ</sup>
Actuator Voltage				A	110 VAC	-
				B	220 VAC	-
				C	24 VAC	+72.50 <sup>Ⓟ</sup>
				D	24 VDC	+72.50 <sup>Ⓟ</sup>

Ⓟ Items are subject to Schedule B discounts.

### ACCESSORIES

Model	Description	Price
AFR4	Air filter regulator 0 to 120 psi	\$69.50 <sup>Ⓟ</sup>
VB-01	Volume booster	176.00 <sup>Ⓟ</sup>

Ⓟ Items are subject to Schedule B discounts.