

11. TECHNICAL DATA

Type 58 Elastomer Seated Butterfly Valves



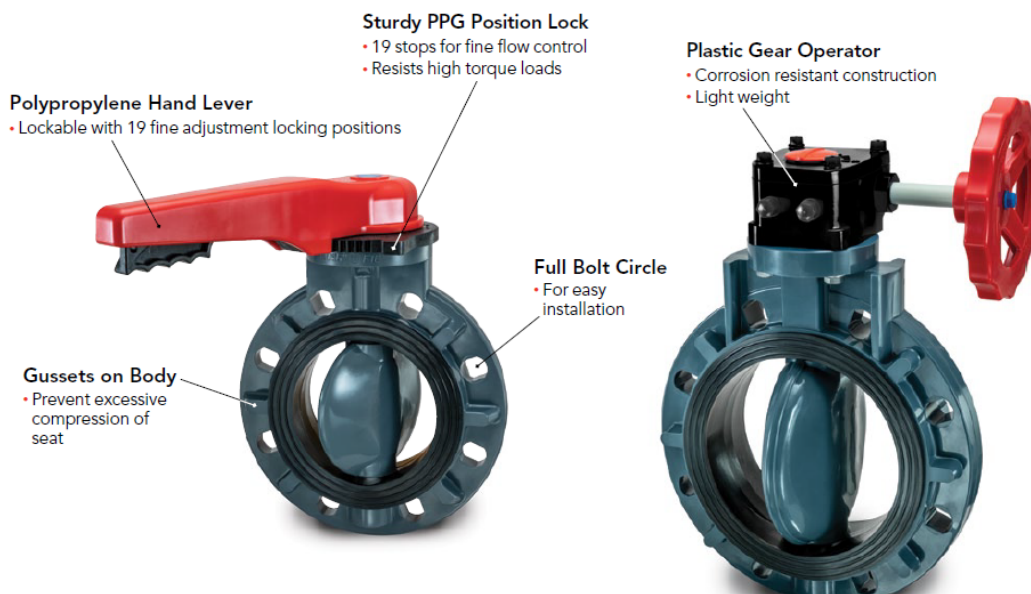
Chemline Type 58 Butterfly Valves are designed for ON/OFF and throttling control applications in heavy industries. They have a large size range, 1-1/2" to 24". All sizes have Polypropylene (PP) bodies as standard, offered at prices competitive with similar PVC body valves. A higher pressure/temperature safety factor is a bonus especially for hazardous services. Prices are much lower than similar PP body valves. A choice of disc and seat materials is available as well bodies in PVDF.



Type 58 Elastomer Seated Butterfly Valves

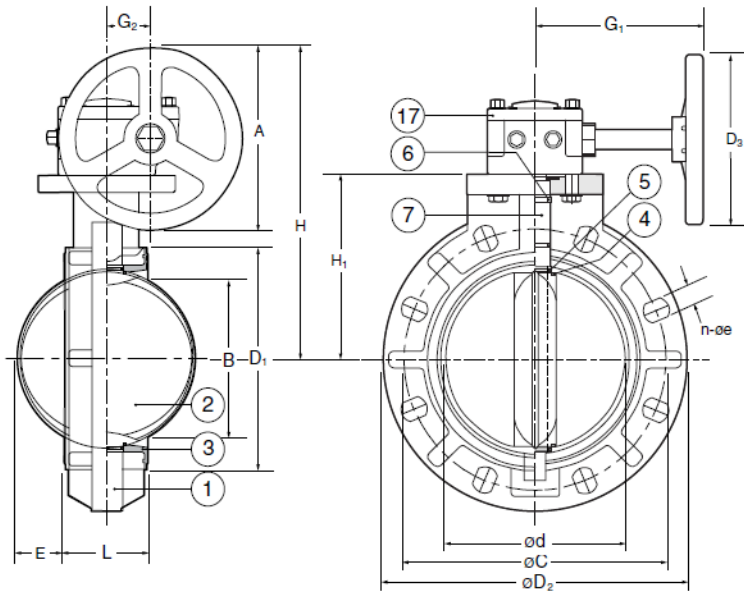


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1-1/2" to 24" Gear Operated

PARTS

▲ Recommended Spare Parts

No.	Part	Pcs.	Materials	
1	Body	1	PP, PVDF	
2	Disc	1	PP, CPVC, PVDF	
3▲	Seat	1	EPDM, FPM (Viton®)	
4▲	Large Seat O-Ring	2	EPDM, FPM (Viton®)	
5▲	Small Seat O-Ring	2	EPDM, FPM (Viton®)	
6▲	Shaft O-Ring	1	EPDM, FPM (Viton®)	
7	Shaft	1-1/2" to 8"	1	316 SS
		10" to 20"	1	PP coated/ encapsulated 4140 SS
		24"		410 SS
8	Shaft Washer	1	PP	
10	Hand Lever	1	PPG	
11	Trigger	1	PPG	
12	Spring	1	304 SS	
13	Pin	1	PP	
14	Position Lock Plate	1	PPG	
15	Plate Screw	3	304 SS	
16	Hand Lever Screw	1	304 SS	
17	Gear Operator	1	ABS PP hand wheel & 304 SS shaft	
18	Handle Screw Washer	1	304 SS	
19	Hand Lever Cap	1	PPG	

WORKING PRESSURES PSI

Size	PP Body / PP Disc			PP Body / PVC Disc	PP Body / CPVC Disc			PVDF Body / PVDF Disc			
	-20 to 60°C -4 to 140°F	70°C 158°F	80°C 176°F	0 to 50°C 32 to 122°F	0 to 60°C 32 to 140°F	90°C 194°F	-20 to 60°C -4 to 140°F	80°C 176°F	100°C 212°F	120°C 248°F	
1-1/2"	150	120	100	150	150	90	150	100	90	75	
2"	150	120	100	150	150	90	150	100	90	75	
2-1/2"	150	120	100	150	150	90	150	100	90	75	
3"	150	120	100	150	150	90	150	100	90	75	
4"	150	120	100	150	150	90	150	100	90	75	
6"	150	120	100	150	150	75	150	100	90	75	
8"	150	120	90	150	150	75	150	90	75	60	
10"	150	120	90	150	150	75	150	90	75	60	
12"	110	90	60	-	-	-	110	60	45	30	
14"	110	90	60	-	-	-	-	-	-	-	
16"	90	60	45	-	-	-	-	-	-	-	
18"	75	60	45	-	-	-	-	-	-	-	
20"	50	40	30	-	-	-	-	-	-	-	
24"	50	40	30	-	-	-	-	-	-	-	



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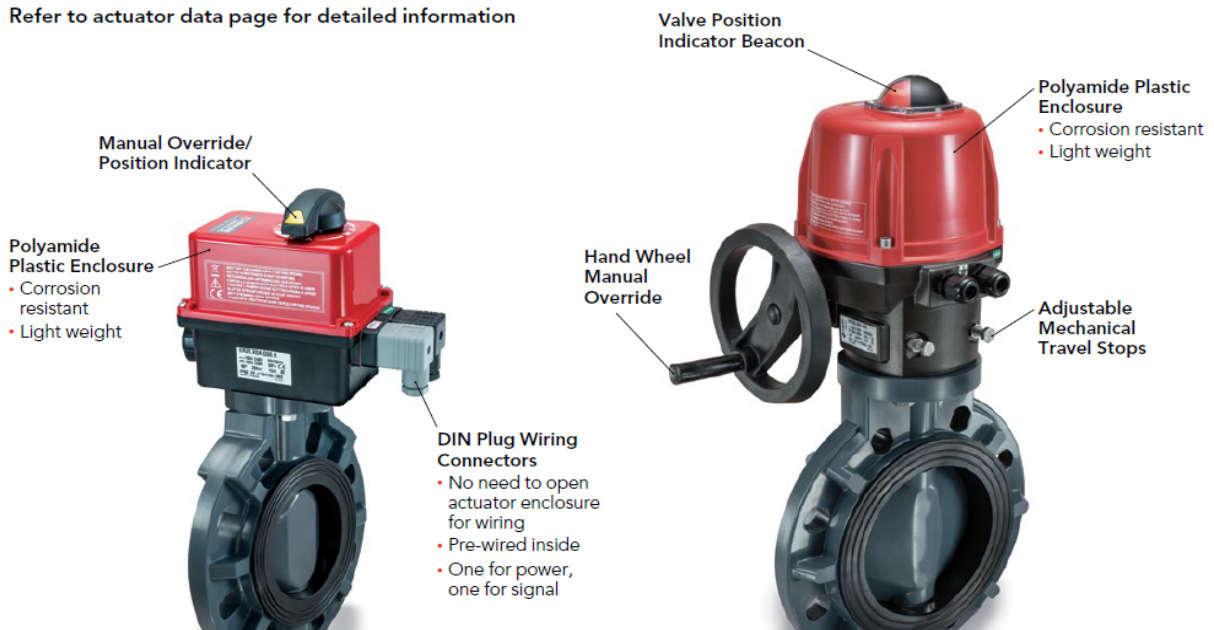
Electric Actuator Selection

Model	ER Series	V Series
FEATURES	FULL FEATURE	HIGHER TORQUE
Type 58 valve sizes	1-1/2" to 4"	1-1/2" to 24"
Voltage	120/240 VAC (50/60 Hz) 12/24 VDC 24 VAC (50/60 Hz)	120/240 VAC (50/60 Hz) 12/24 VDC 24 VAC (50/60 Hz)
Cycle Time sec/90°	12	30
Duty Cycle	80%	80%
CSA	Approved	Approved
ON/OFF Control	3-Wire/2-Wire	3-Wire/2-Wire
Gear Train	Spur Gears	Epicyclic
Mechanical Travel Stops	Fixed	Adjustable
DIN Plug Wiring Connectors	✓	X
Two Position Feedback Switches	✓	✓
Valve Position Indicator	Knob	Dome
Manual Override	Declutching	Without Declutching
Override Device	Knob	Hand Wheel
Operating Temperature Range	-10 to 60C (15 to 140°F)	-20 to 70C (-4 to 158°F)
Onboard Electronic Torque Limiter	✓	✓
Onboard General Fault Relay	✓	✓
Onboard Diagnostics	✓	✓
ENCLOSURE OPTIONS		
Metal Cover for IP68 Rating	X	✓
Low Temperature Option	X	-50 to 70C (-58 to 158°F)
POSITION FEEDBACK OPTIONS		
Position Feedback Potentiometer	✓	✓
Transmitter	✓	✓
Extra Limit Switches ¹	✓	✓
CONTROL OPTIONS		
Digital Positioner	✓	✓
Failsafe Internal Battery Pack	✓	✓
Local/Remote Control Switch Box	✓	✓
MODBUS Module	✓	✓
Bluetooth Control	✓	✓

¹ 2 feedback switches are already supplied as standard

Electric Actuation

Refer to actuator data page for detailed information



Electric Actuation Item Numbers

Item numbers are for actuators including mounting to valve and bench testing

Model	ER Series				V Series				
	Valve Size	Max. Line Pressure (psi)	Cycle Time/90°	120/240 VAC (50/60 Hz)	12/24 VDC & 24 VAC (50/60 Hz)	Max. Line Pressure (psi)	Cycle Time/90°	120/240 VAC (50/60 Hz)	12/24 VDC & 24 VAC (50/60 Hz)
				Item No.	Item No.			Item No.	Item No.
1-1/2"	150	12 sec	58015-ER20.12	58015-ER20.346	150	30 sec	58015-VS150.12	58015-VS150.346	
2"	150	12 sec	58020-ER20.12	58020-ER20.346	150	30 sec	58020-VS150.12	58020-VS150.346	
2-1/2"	150	12 sec	58025-ER20.12	58025-ER20.346	150	30 sec	58025-VS150.12	58025-VS150.346	
3"	150	12 sec	58030-ER35.12	58030-ER35.346	150	30 sec	58030-VS150.12	58030-VS150.346	
4"	150	12 sec	58040-ER60.12	58040-ER60.346	150	30 sec	58040-VS150.12	58040-VS150.346	
6"	-	-	-	-	150	30 sec	58060-VS150.12	58060-VS150.346	
8"	-	-	-	-	150	30 sec	58080-VS300.12	58080-VS300.346	
10"	-	-	-	-	150	30 sec	58100-VT600.12	-	
12"	-	-	-	-	150	30 sec	58120-VT600.12	-	
14"	-	-	-	-	150	30 sec	58140-VT600.12	-	
16"	-	-	-	-	85	30 sec	58160-VT1500.12	-	
18"	-	-	-	-	75	30 sec	58180-VT1500.12	-	
20"	-	-	-	-	75	30 sec	58200-VT1500.12	-	
24"	-	-	-	-	75	30 sec	58240-VT2400.12	-	

Electric Actuation

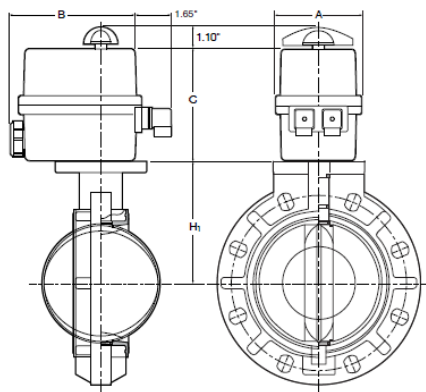
Refer to actuator data page for detailed information



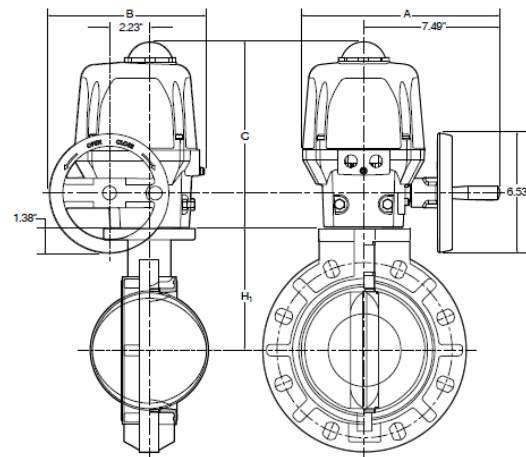
ER Series



VS Series



ER Series



VS Series

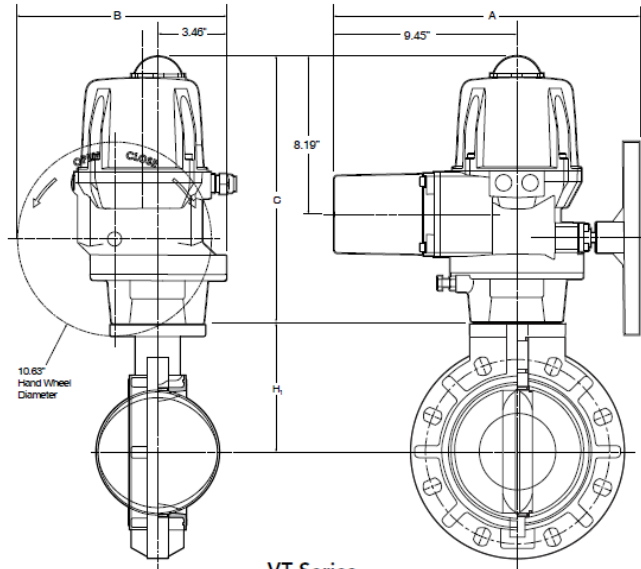


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DIMENSIONS INCHES

Size	Actuator	A	B	C	H ₁
1-1/2"	ER20	3.62	5.34	4.88	3.8
2"	ER20	3.62	5.34	4.88	3.8
2-1/2"	ER20	3.62	5.34	4.88	4.3
3"	ER35	5.04	5.94	5.98	4.5
4"	ER60	5.04	5.94	5.98	5.4
6"	VS150 ¹	7.49	6.85	10.16	6.9
8"	VS300	7.49	6.85	10.16	8.4
10"	VT600	18.98	11.81	14.57	9.6
12"	VT600	18.98	11.81	14.57	12.0
14"	VT600	18.98	11.81	14.57	11.8
16"	VT1500	22.52	15.31	18.38	13.4
18"	VT1500	22.52	15.31	18.38	15.4
20"	VT1500	22.52	15.31	18.38	16.6
24"	VT2400	22.52	15.31	18.38	19.2

¹VS150 is available on 1-1/2" to 4" valves



Pneumatic Actuation

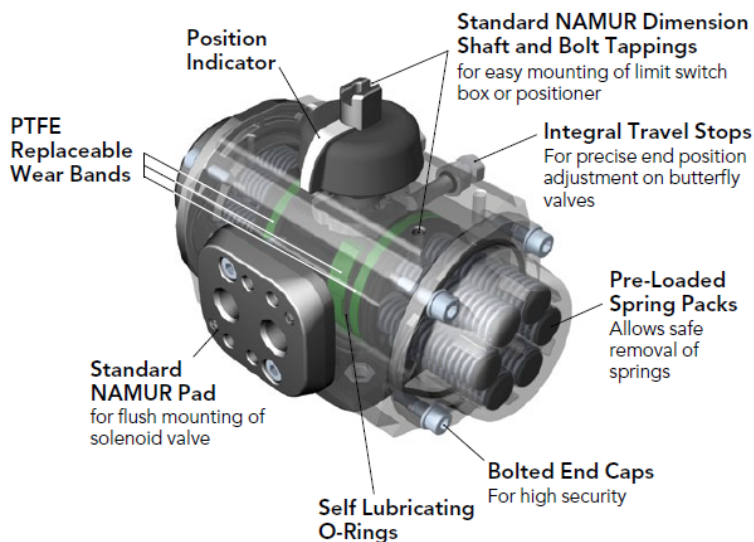
Refer to actuator data page for detailed information.

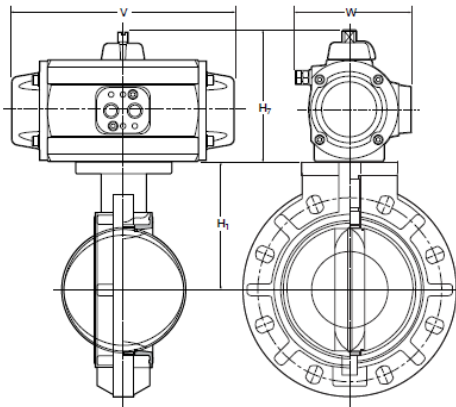
All pneumatic actuators have these STANDARD FEATURES:

- Aluminum rack and pinion type
- Coating is two-part epoxy/Rilsan polyamide, applied inside and out. Epoxy offers high chemical resistance and Rilsan offers coating durability.
- Rated for over one million cycles
- ISO standard valve mounting dimensions allow for direct mounting of most valves
- Mechanical travel stops are standard. They allow up to 5 degrees of piston travel adjustment
- Standardized accessories (solenoid valves, limit switch boxes, positioners) may be direct mounted



PA Series





DIMENSIONS INCHES

Size	H ₁	Spring Return				Double Acting			
		Actuator ¹	H ₂	V	W	Actuator ¹	H ₂	V	W
1-1/2"	3.8	PAS00	4.38	6.00	3.31	PAD00	4.38	6.00	3.31
2"	3.8	PAS05	5.05	7.91	4.00	PAD00	4.38	6.00	3.31
2-1/2"	4.3	PAS05	5.05	7.91	4.00	PAD00	4.38	6.00	3.31
3"	4.5	PAS10	2.21	8.83	4.08	PAD05	5.05	7.91	4.00
4"	5.4	PAS15	5.82	10.40	4.70	PAD05	5.05	7.91	4.00
6"	6.9	PAS25	7.26	14.02	6.04	PAD20	6.15	12.19	5.02
8"	8.4	PAS40	10.71	23.54	8.90	PAD25	7.26	14.02	6.04
10"	9.6	PAS40	10.71	23.54	8.90	PAD30	8.31	16.83	6.97
12"	12.0	PAS50	12.16	27.32	10.57	PADA40	10.71	17.48	8.90
14"	11.8	PAS50	12.16	27.32	10.57	PADA40	10.71	17.48	8.90
16"	13.4	PAS70	16.85	29.23	15.85	PAD60	14.49	26.40	13.01
18"	15.4	PAS60	14.49	26.40	13.01	PAD70	16.85	29.23	15.85
20"	16.6	PAS70	16.85	29.23	15.85	PAD70	16.85	29.23	15.85
24"	19.2	PAS70 ²	-	-	-	PAD70	16.85	29.23	15.85

¹Actuator sizes are based on normal 80 psi available air supply

²PA70 on 24" valve requires 100 psi available air supply

Pneumatic Actuation

Refer to actuator data page for detailed information

Pneumatic Actuation Item Numbers

Item numbers are for actuators including mounting to valve and bench testing. Actuators are sized for "normal" service. For gas, vapour or severe chemical service, consult Chemline.



PA Series

Double Acting

Valve Size	Max. Line Pressure (psi)	Air Supply Pressure (psi)		
		60	80	100
		Item No.	Item No.	Item No.
1-1/2"	150	58015-PAD00	58015-PAD00	58015-PAD00
2"	150	58020-PAD00	58020-PAD00	58020-PAD00
2-1/2"	150	58025-PAD05	58025-PAD00	58025-PAD00
3"	150	58030-PAD05	58030-PAD05	58030-PAD00
4"	150	58040-PAD10	58040-PAD05	58040-PAD05
6"	150	58060-PAD25	58060-PAD20	58060-PAD15
8"	150	58080-PAD25	58080-PAD25	58080-PAD25
10"	150	58100-PADA40	58100-PAD30	58100-PAD30
12"	100	58120-PADA40	58120-PADA40	58120-PAD30
14"	100	58140-PADA40	58140-PADA40	58140-PADA40
16"	110	58160-PAD70	58160-PAD60	58160-PAD60
18"	110	58180-PAD70	58180-PAD70	58180-PAD60
20"	110	-	58200-PAD70	58200-PAD60
24"	110	-	58240-PAD70	58240-PAD70

Spring Return

Actuators listed are for elastomer seated Type 61 butterfly valves in the fail closed position. For fail open, consult Chemline.

Valve Size	Max. Line Pressure (psi)	Air Supply Pressure (psi)		
		60	80	100
		Item No.	Item No.	Item No.
1-1/2"	150	58015-PAS05	58015-PAS00	58015-PAS00
2"	150	58020-PAS10	58020-PAS05	58020-PAS05
2-1/2"	150	58025-PAS15	58025-PAS05	58025-PAS05
3"	150	58030-PAS15	58030-PAS10	58030-PAS10
4"	150	58040-PAS20	58040-PAS15	58040-PAS15
6"	150	58060-PAS30	58060-PAS25	58060-PAS25
8"	150	58080-PASR40	58080-PASR40	58080-PAS30
10"	150	58100-PAS50	58100-PASR40	58100-PASR40
12"	100	58120-PAS50	58120-PAS50	58120-PASR40
14"	100	58140-PAS50	58140-PAS50	58140-PAS50
16"	110	58160-PAS70	58160-PAS70	58160-PAS70
18"	110	58180-PAS70	58180-PAS60	58180-PAS50
20"	110	58200-PAS70	58200-PAS70	58200-PAS70
24"	110	-	-	58240-PAS70