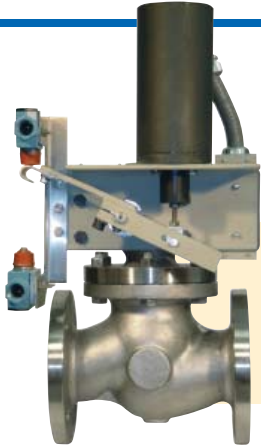


2-WAY VALVE DESIGN

APPLICATION:

Clark-Cooper's Rotary Shaft Style Solenoid Valves are used to control the flow of **Extremely Corrosive Fluids • Dirty Fluids • Viscous Fluids • Cryogenics • Fuel Oils • Flammable Liquids and Gases • Steam • High Temperature Liquids and Gases • Heat Transfer Liquids**. The valves are used for applications where it is desirable to have the solenoid and all its magnetic components isolated from the process fluid.

FULLY ELECTRIC



Valve Shown is a 4" - Full Port, 316 Stainless Steel, 150# ANSI Flanged, Fully Electric Valve.
Type: Normally Closed, Energize to Open
Options:
• (2) SPDT Position Indicating Switches
• Terminal Box mounted on back of bracket

FULLY ELECTRIC VALVE controls process liquids and gases without ancillary pneumatic or hydraulic systems.

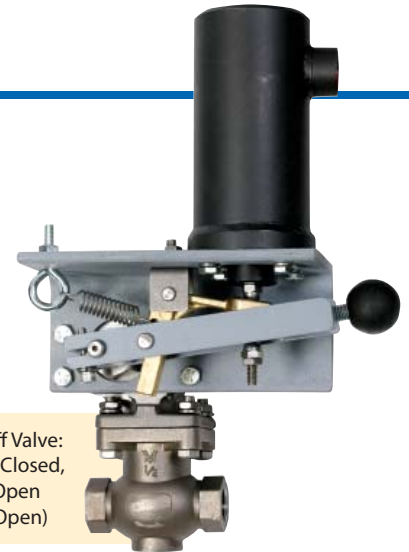
- **NORMALLY CLOSED, ENERGIZE TO OPEN:** Valve opens when energized and closes when de-energized.
- OR**
- **NORMALLY OPEN, ENERGIZE TO CLOSE:** Valve closes when energized and opens when de-energized.

EMERGENCY TRIP VALVES

MANUALLY RESET, EMERGENCY SHUT OFF VALVE immediately stops the flow of fluid when an emergency or shutdown condition exists.

- **ELECTRICALLY TRIPPED CLOSED:** Valve immediately closes upon electrical signal. **MANUALLY RESET OPEN.**
- OR**
- **TRIPS CLOSED ON LOSS OF POWER:** Valve immediately closes on loss of power. **MANUALLY RESET OPEN.**
- OR**
- **HEAT ACTUATED CLOSED:** Valve immediately closes at 135°F, 165°F, 212°F, 286°F or 386°F. **MANUALLY RESET OPEN.**

When the emergency condition has passed, the valve **MUST BE** manually reset to the open position.



Emergency Shut-off Valve:
Electrically Tripped Closed,
Manually Reset Open
(Shown Latched Open)

MANUALLY RESET, EMERGENCY DISCHARGE VALVE immediately releases fluid when an emergency condition exists. Used for emergency dump, deluge or purge systems.

- **ELECTRICALLY TRIPPED OPEN:** Valve immediately opens upon electrical signal. **MANUALLY RESET CLOSED.**
- OR**
- **TRIPS OPEN ON LOSS OF POWER:** Valve immediately opens on loss of power. **MANUALLY RESET CLOSED.**
- OR**
- **HEAT ACTUATED OPEN:** Valve immediately opens at 135°F, 165°F, 212°F, 286°F or 386°F. **MANUALLY RESET CLOSED.**

When the emergency condition has passed, the valve **MUST BE** manually reset to the closed position.



Emergency Discharge Valve: Electrically Tripped Open, Manually Reset Closed (Shown Tripped Open)



2-WAY VALVES 1/2" TO 6" PIPE SIZE • FULL PORT

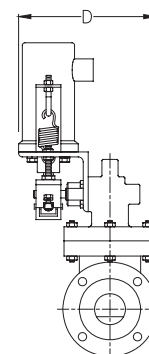
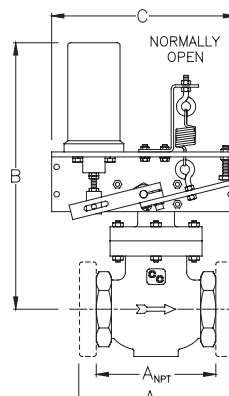
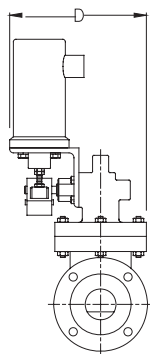
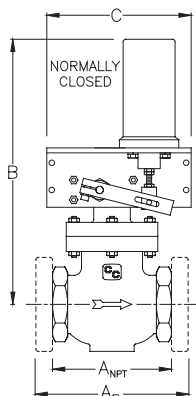
2-Way Valve Characteristics

NO DIFFERENTIAL PRESSURE REQUIRED TO OPEN
All valves operate from zero to maximum pressure listed in table.

Pipe Size (inches)	C _v	Solenoid Series	MOPD* (PSIG)				Shipping Wt. (lbs.) (for NPT)	Dimensions (inches)					
			Direct Operated		Pilot Assisted			A NPT	A 150# Flange	A 300# Flange	B	C	D
			Normally Closed	Normally Open	Normally Closed	Normally Open							
1/2	5.6	400	500	400	2160	2160	13	3.3	4.3	5.5	12.5	7.0	5.0
		800	2160	2000	NA	NA	18				14.5		
3/4	8.5	400	125	100	1200	1200	15	3.5	7.0	7.6	12.8	8.5	5.5
		800	800	720	NA	NA	20				14.8		
1	11.9	400	50	50	1200	1200	18	4.2	7.3	7.8	13.0	9.2	5.5
		800	375	300	NA	NA	23				15.0		
1-1/2	46.4	400	10	10	500	450	25	4.9	6.5	7.5	15.5	12.0	7.0
		800	75	75	1200	1200	30				17.5		
2	67.2	400	5	5	200	200	45	6.0	8.0	9.0	16.0	14.0	8.0
		800	25	25	720	720	50				18.0		
3	152	800	NA	NA	275	275	78	NA	9.5	NA	20.5	20.0	10.0
4	215	800	NA	NA	150	150	135	NA	11.5	NA	22.0	21.5	11.0
6	468	800	NA	NA	75	60	275	NA	16.0	NA	24.0	22.0	11.5

*MOPD = Maximum Operating Pressure Differential
NOTE: Use higher (800 Series) MOPD for all Trip Valves.

Weights and dimensions are approximate.
Maximum Fluid Temperature 550°F



Available Construction Materials are listed on Page 3.

Solenoid Characteristics

Solenoid Coil: Class H, Continuous Duty
18" long, 18 gage wire leads

Solenoid Enclosure: NEMA 4X, Watertight and Corrosion Resistant and NEMA 7, Explosion-proof, Class I, Groups B, C and D, Division 1

Conduit Connection: 1/2" NPT

AC voltages suitable with 50 and 60 Hertz

Solenoid Series	Voltage	Amps Inrush †	Amps Holding
400	24V AC/DC	18.0	1.0
	48V DC	12.0	0.6
	120V AC/DC	5.0	0.3
	240V AC/DC	4.0	0.1
800	24V AC/DC	27.0	2.0
	48V DC	25.0	1.0
	120V AC/DC	16.0	0.5
	240V AC/DC	8.0	0.2

† Amps inrush duration of approximately 1 second.

NOTE: Trip valves use the 400 Series solenoid.

ETL LISTED



Conforms to
UL Std. 1203
Certified to CAN/CSA Std.
C22.2 No.30

Consult Factory for
Listing Details.

