



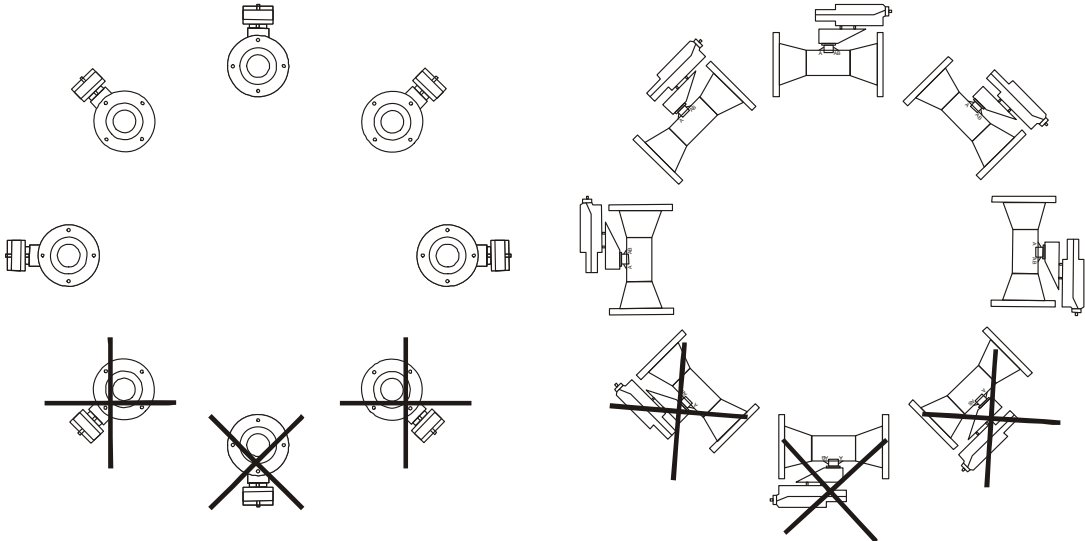
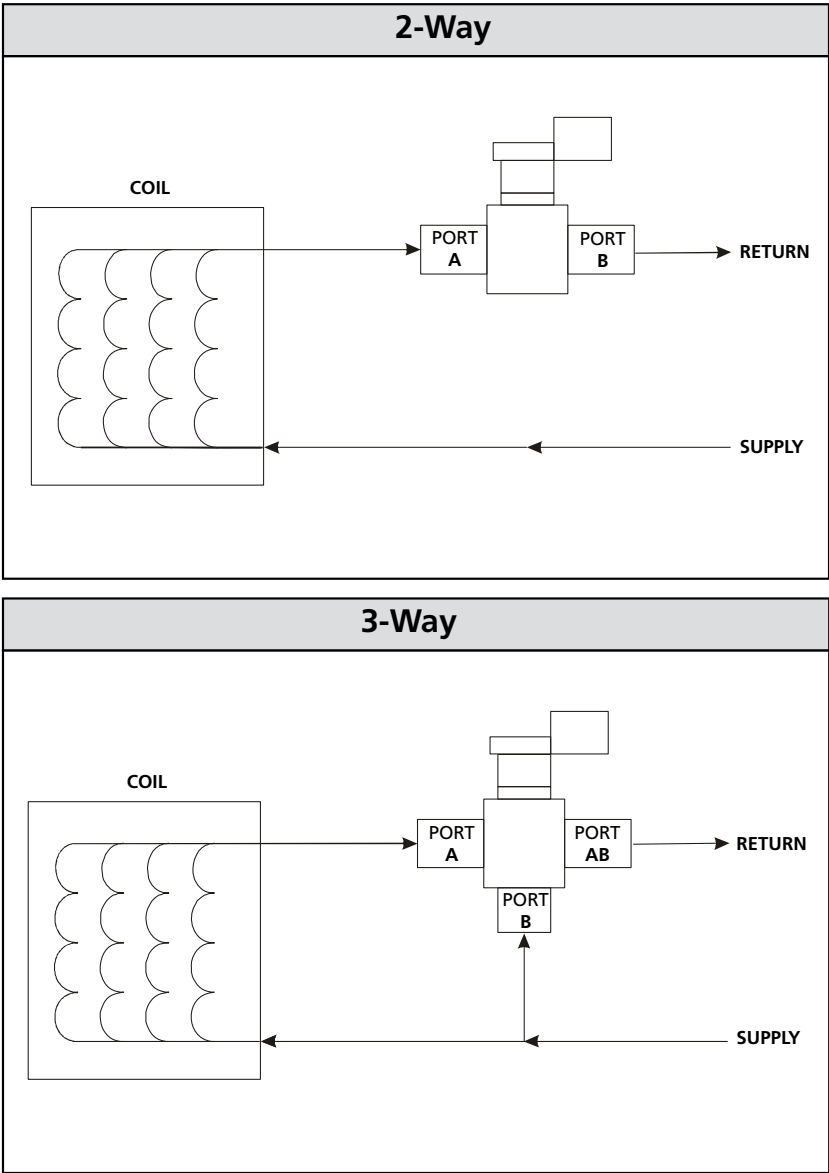
STM-Series – Submittal/Technical Data

09/21/15

Technical Specifications		
Service		Hot Water, Chilled Water, 50/50 Glycol Solutions, and 25 psig (172 kPa) Saturated Steam for HVAC Systems
Valve Fluid Temperature Limits		0 to 284°F (-18 to 140°C)
Valve Body Pressure/ Temperature Rating	Water	ANSI Class 125/150 250 psi at -20 to 100°F (29 to 38°C) 235psi at: 200°F (93°C) 218psi at: 284°F (140°C)
	Steam	25 psig (172 kPa) Saturated Steam for HVAC Systems
Maximum Close-Off Pressure	Two-Way	100 psi (689 kPa)
	Three-Way	50 psi (345 kPa)
Maximum Recommended Operating Pressure Drop		30 psi (207 kPa) for quiet service
Flow Characteristics	Two-Way	Equal Percentage
	Three-Way	Equal Percentage Flow Characteristics of In-line Port or Linear Percentage Flow Characteristics of Angle Port
Rangeability		Greater than 500:1
Leakage	Two/Three-Way	0.01% of Maximum Flow, Control Port, ANSI/FCI 70-2, Class 4
	Three-Way	1% of Maximum Flow, Bypass Port
End Connections		ANSI Class 125 Flange
Minimum Ambient Operating Temperature	-4°F (-20°C)	D24-210/DC24-310 Series Non-Spring Return Actuators
	-40°F (-40°C)	DS-180 Series Spring Return Actuators
Maximum Ambient Operating Temperature	122°F (50°C)	D24-210/DC24-310 Series Non-Spring Return Actuators
	131°F (55°C)	DS-180 Series Spring Return Actuators
Materials	Body	Brass
	Flanges	Ductile Iron
	Ball	300 Series Stainless Steel
	Stem	300 Series Stainless Steel
	Seats	Graphite Reinforced PTFE with EPDM O-Ring Backing
	Stem Seals	EPDM O-Rings
	Flow Control Disk	Amodel AS-1145HS Polyphthalamide Resin

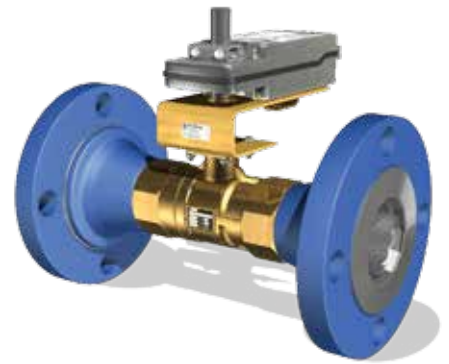
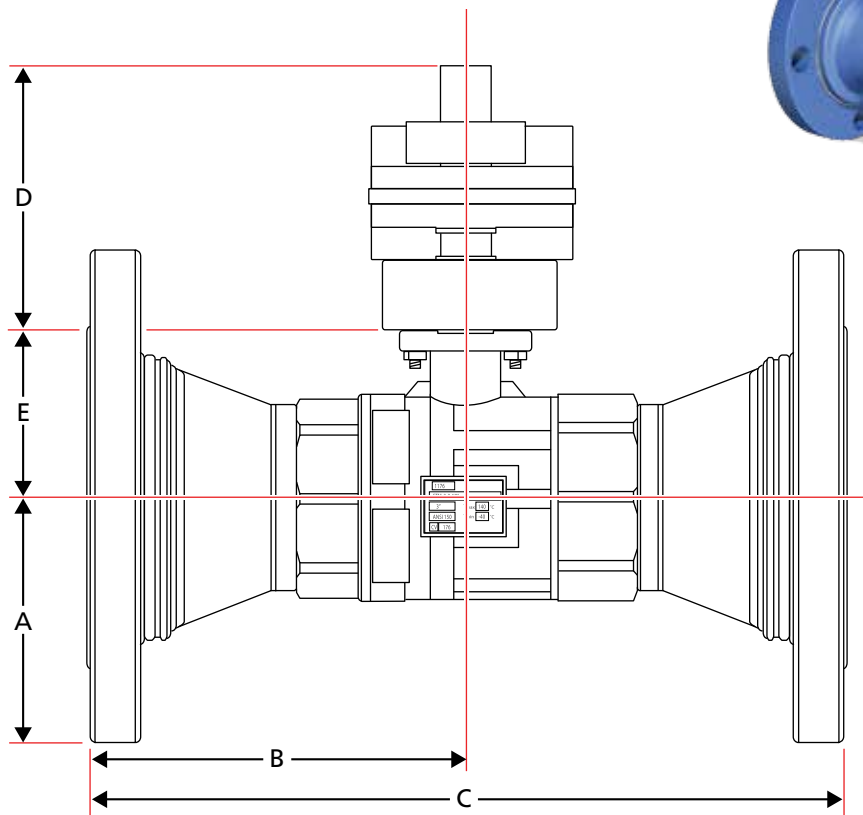
Disclaimer - The performance specifications are nominal and conform to acceptable industry standards. For application at conditions beyond these specifications, consult the local Bray office. Bray, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

STM - Piping Diagrams



Recommended Mounting Positions for Non-Steam Applications

STM - 2-Way Dimensions

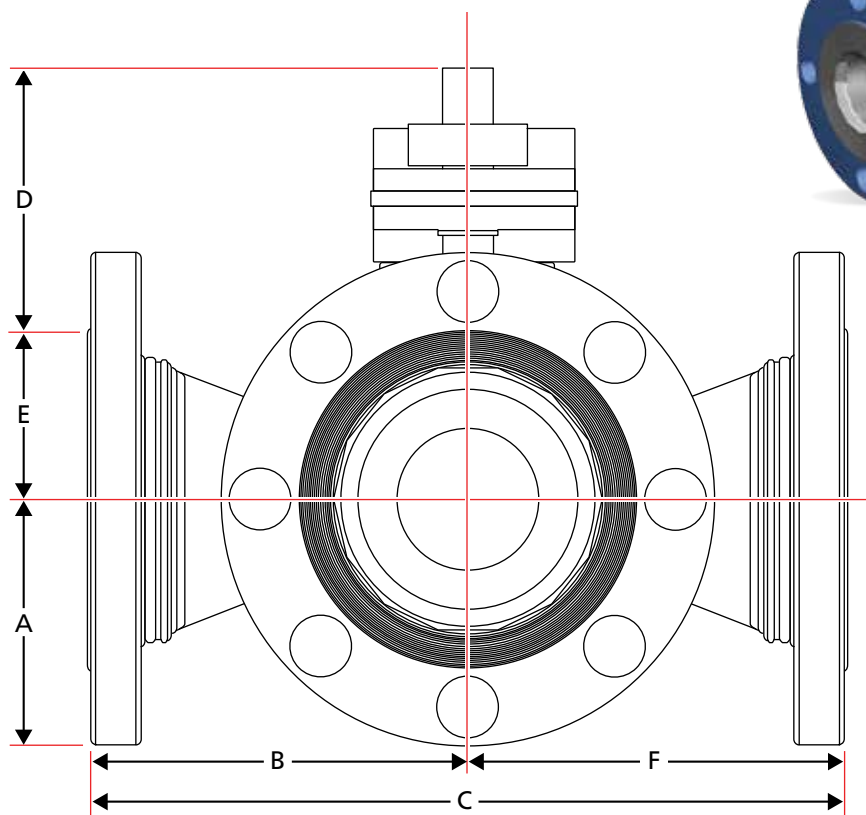


2-Way STM Dimensions

Valve Models	Size in.(mm)	Flow Coefficient		Bolt Hole Diameter	Number of Bolt Holes	A	B	C	D	E	Weight	
		Cv	Kv								lbs.	kg.
STM 250-2-47	2 1/2 (65)	47	40.7	5.50 (139)	4	3.50 (89)	5.71 (145)	11.42 (290)	6.00 (152)	2.90 (74)	34	15
STM 250-2-74		74	64.0									
STM 250-2-117		117	101.2									
STM 3-2-74	3 (80)	74	64.0	6.00 (152)	4	3.75 (95)	6.10 (155)	12.20 (310)	6.00 (152)	2.90 (74)	36	16
STM 3-2-117		117	101.2									
STM 3-2-176		176	152.2									
STM 3-2-211		211	182.5									
STM 4-2-117	4 (100)	117	101.2	7.50 (191)	8	4.50 (114)	6.89 (175)	13.77 (350)	6.00 (152)	2.90 (74)	44	20
STM 4-2-176		176	152.2									

- Allow a minimum of 4 inches for actuator removal.
- Weights are for valve bodies only.
- Dimensions may vary depending on the actuator
- Dimensions Shown are based on largest actuator available for this series.

STM - 3-Way Dimensions



3-Way STM Dimensions

Valve Models	Size in.(mm)	Flow Coefficient		Bolt Hole Diameter	Number of Bolt Holes	A	B	C	D	E	F 3-way only	Weight	
		Cv	Kv									lbs.	kg.
STM 250-3-47	2 1/2 (65)	47	40.7	5.50 (139)	4	3.50 (89)	5.71 (145)	11.42 (290)	6.00 (152)	2.90 (74)	2.90 (74)	43	20
STM 250-3-74		74	64.0										
STM 250-3-117		117	101.2										
STM 3-3-74	3 (80)	74	64.0	6.00 (152)	4	3.75 (95)	6.10 (155)	12.20 (310)	6.00 (152)	2.90 (74)	2.90 (74)	49	22
STM 3-3-117		117	101.2										
STM 3-3-176		176	152.2										
STM 3-3-211		211	182.5										
STM 4-3-117	4 (100)	117	101.2	7.50 (191)	8	4.50 (114)	6.89 (175)	13.77 (350)	6.00 (152)	2.90 (74)	2.90 (74)	62	28
STM 4-3-176		176	152.2										

- Allow a minimum of 4 inches for actuator removal.
- Weights are for valve bodies only.
- Dimensions may vary depending on the actuator
- Dimensions Shown are based on largest actuator available for this series.