5 Bray COMMERCIAL

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STM-Series – Submittal/Technical Data

08/23/21

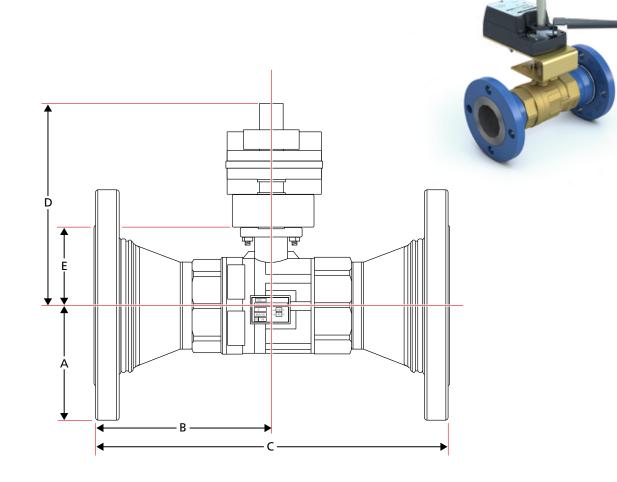
Technical Specifications

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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	-4°F (-20°C)	D24-210/DC24-310 Series Non-Spring Return Actuators								
Temperature	-40°F (-40°C)	DS-180 Series Spring Return Actuators								
Maximum Ambient Operating	122°F (50°C)	D24-210/DC24-310 Series Non-Spring Return Actuators								
Temperature	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								
Warranty		5 Years limited from time of shipment.								
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STM - 2-Way Dimensions



2-Way STM Dimensions

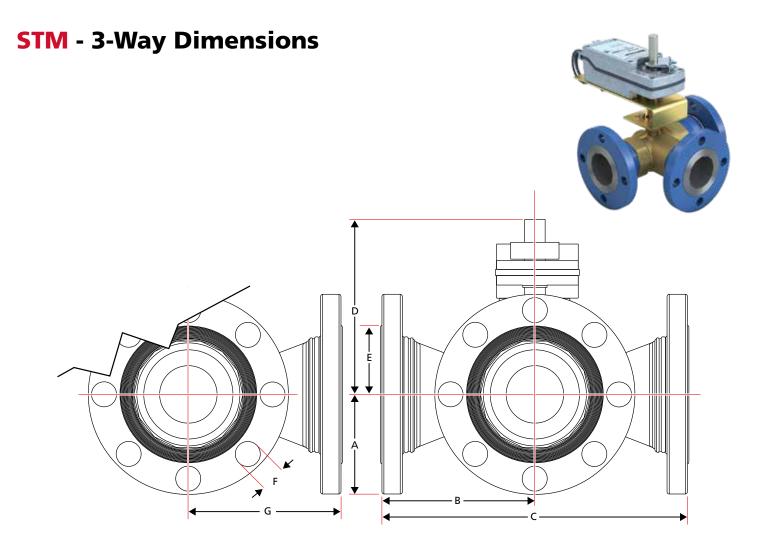
Valve Models	Size in.(mm)		efficient Kv	Bolt Hole Diameter	Number of Bolt Holes	А	В	с	D	E	Weight Ibs. kg.	
STM 250-2-47	2 1/2	47	40.7	5.50 (139)	4	3.50 (89)	5.71 (145)	11.42 (290)	10.25 (260)	2.05 (52.1)	34	15
STM 250-2-74		74	64.0									
STM 250-2-117	(05)	117	101.2									
STM 3-2-74	3 (80)	74	64.0	6.00 (152)	4	3.75 (95)	6.10 (155)	12.20 (310)	10.25 (260)	2.49 (63.2)		16
STM 3-2-117		117	101.2								36	
STM 3-2-176		176	152.2								30	
STM 3-2-211*		211	182.5									
STM 4-2-117	4	117	101.2	7.50 (191)	8	4.50 (114)	6.89 (175)	13.77 (350)	10.25 (260)	3.09 (75.5)	44	20
STM 4-2-176*	(100)	176	152.2									

- Allow a minimum of 4 inches for actuator removal. - Weights are for valve bodies only.

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Dimensions may vary depending on the actuator
 Dimensions Shown are based on largest actuator available for this series.

* Reduced Port Valve - No characterizing disc.



3-Way STM Dimensions														
Valve Models	Size in.(mm)	Flow Co Cv	efficient Kv	Bolt Hole Diameter	Number of Bolt Holes	А	В	с	D	E	F	G	Weight	
STM 250-3-47	2 1/2 (65)	47	40.7	5.50 (139)	4	3.50 (89)	5.71 (145)	11.42 (290)	10.25 (260)		0.75 (19.1)	5.87 (149)	43	20
STM 250-3-74		74	64.0											
STM 250-3-117	(05)	117	101.2											
STM 3-3-74		74 6	64.0	6.00 (152)	4	3.75 (95)	6.10 (155)	12.20 (310)	10.25 (260)	-	0.75 (19.1)	6.26 (159)	49	22
STM 3-3-117	3	117	101.2											
STM 3-3-176	(80)	(80) 176	152.2											
STM 3-3-211*		211	182.5											
STM 4-3-117	4	117	101.2	7.50 (191)	8	4.50	6.89 (175)	13.77 (350)	10.25 (260)	3.09 (75.5)	0.75 (19.1)	7.05 (179)	62	28
STM 4-3-176*	(100)	176	152.2			(114)								
Allow a minimum of A inches for actuator removal														

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.
Bypass Cv/Kv is 50% of the nominal service Cv.
* Reduced Port Valve - No characterizing disc.

