

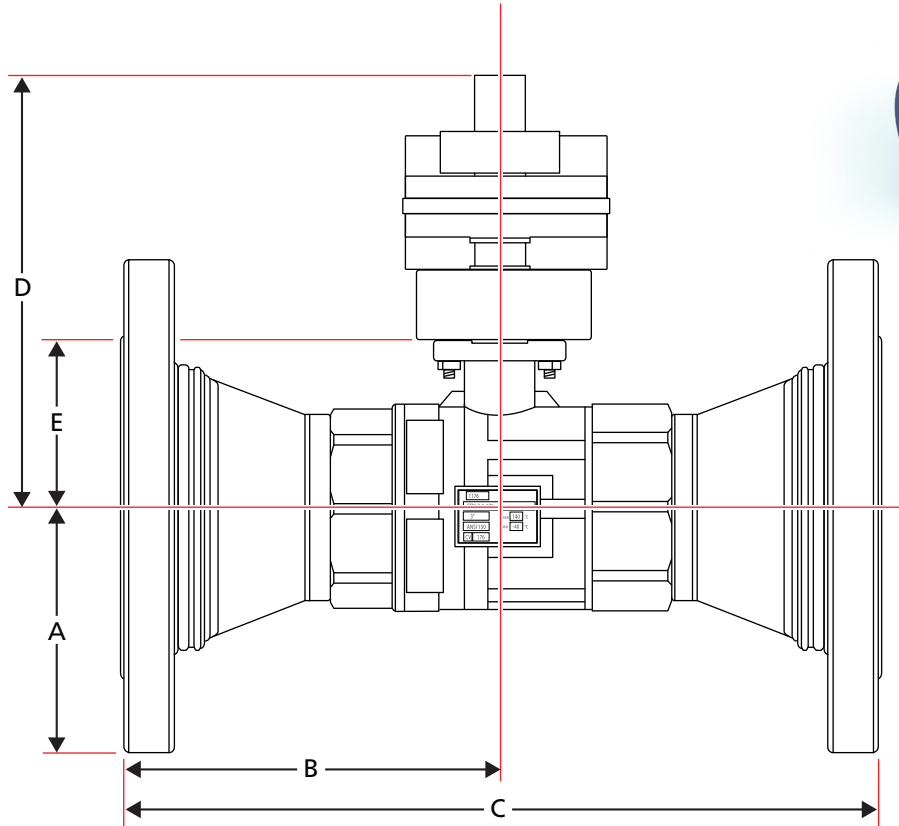
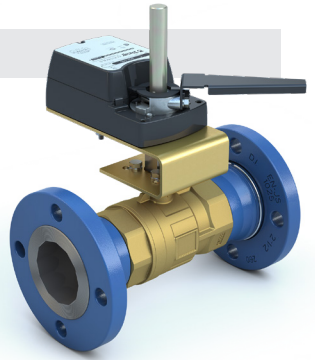
Technical Specifications - Valve		
Service	Hot Water, Chilled Water, 50/50 Glycol Solutions, and 25 PSIG (172 kPa) Saturated Steam for HVAC Systems	
Size Range	2-Way & 3-Way	2-1/2" through 4" (DN 65 to 100)
Valve Fluid Temperature Limits	0 to 284°F (-18 to 140°C)	
Valve Body Pressure/ Temperature Rating	Water	ANSI Class 150 250 PSI at -20° to 100°F (29° to 38°C) 235 PSI at: 200°F (93°C) 218 PSI at: 284°F (140°C)
	Steam	25 PSIG (172 kPa) Saturated Steam for HVAC Systems
Maximum Close-Off Pressure	2-Way	100 PSI (689 kPa)
	3-Way	50 PSI (345 kPa)
Maximum Recommended Operating Pressure Drop	30 PSI (207 kPa) for quiet service	
Flow Characteristics	2-Way	Equal Percentage
	3-Way	Equal Percentage Flow Characteristics of In-line Port or Linear Percentage Flow Characteristics of Angle Port
Rangeability	Greater than 500:1	
Leakage	2-Way & 3-Way	0.01% of Maximum Flow, Control Port, ANSI/FCI 70-2, Class 4
	3-Way	1% of Maximum Flow, Bypass Port
End Connections	ANSI Class 150 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 & 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.	

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.

Soft Touch Max - Model Number Matrix

STM	Prefix: Soft Touch Max							Valve Series	
	3	Valve Size (2-1/2" to 4")						Valve Size	
		-						-	
		2	2-Way or 3 Way					Valve Type	
			-						
			74					Cv	
			/					/	
D(M)24-210 24V, D-210 Series						Actuator Selection			
DC(M)24-310-T 24V, DC-310 Series									
D(M)S24-180-T 24V, DS-180 Series									
STM	3	-	2	-	74	/	D(M)24-210	3" Soft Touch Max Body, 2-Way, Flow Coefficient Cv of 74, 24V DC24-310-T Actuator	Example

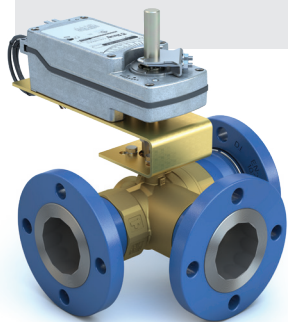
Soft Touch Max - 2- Way Dimensions



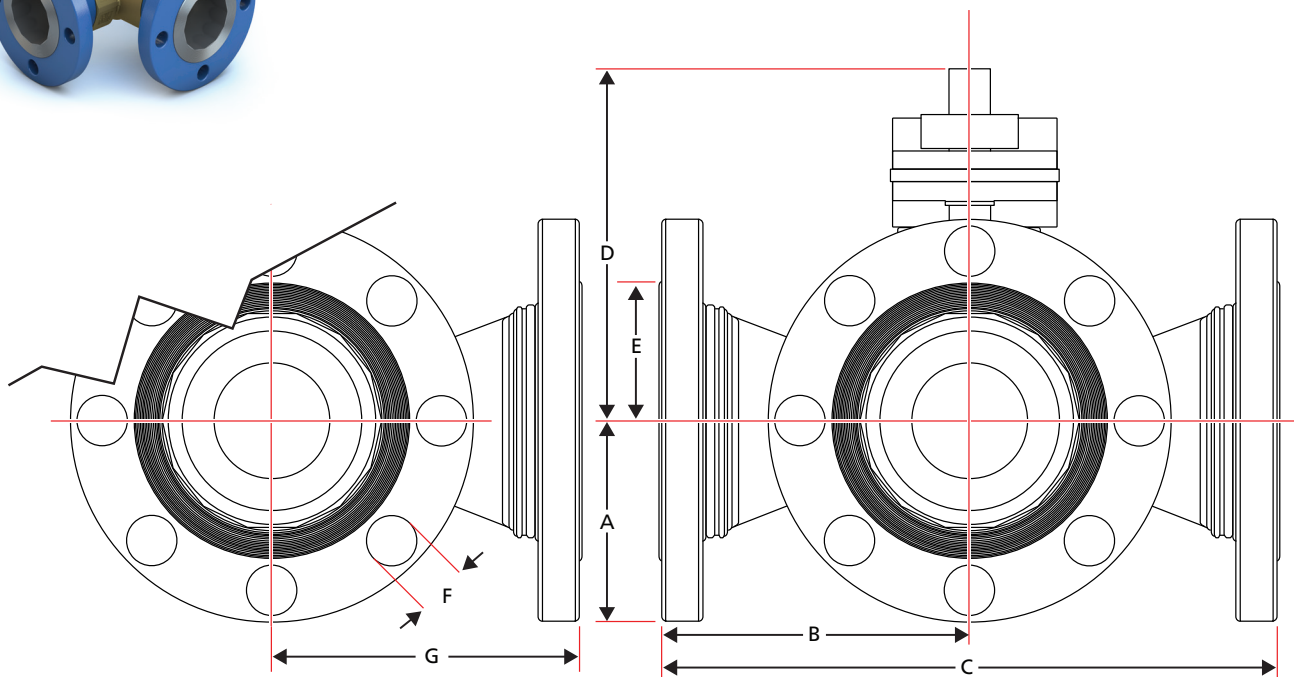
STM - 2-Way Dimensions — 2-1/2" - 4"

Valve Model Number	Size		Flow Coefficient		Please Reference the Illustration														
					Bolt Hole Diameter		Number of Bolt Holes	A		B		C		D		E		Weight	
	in.	mm	Cv	Kv				in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs	kg
STM 250-2-47	2.5	65	47	40.7	5.50	139	4	3.50	89	5.71	145	11.42	290	10.25	260	2.05	52	34	15
STM 250-2-74			74	64.0															
STM 250-2-117			117	101.2															
STM 3-2-74	3.0	80	74	64.0	6.00	152	4	3.75	95	6.10	155	12.20	310	10.25	260	2.49	63	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	4.0	100	117	101.2	7.50	191	8	4.50	114	6.89	175	13.77	350	10.25	260	3.09	76	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.
- * Reduced Port Valve - No characterizing disc.



Soft Touch Max - 3- Way Dimensions



STM - 3-Way Dimensions — 2-1/2" - 4"

Valve Model Number	Size		Flow Coefficient		Please Reference the Illustration																		
					Bolt Hole Diameter		Number of Bolt Holes	A		B		C		D		E		F		G		Weight	
	in.	mm	Cv	Kv				in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs	kg
STM 250-3-47	2.5	65	47	40.7	5.50	139	4	3.50	89	5.71	145	11.42	290	10.25	260	2.05	52	0.75	19.1	5.87	149	43	20
STM 250-3-74			74	64.0																			
STM 250-3-117			117	101.2																			
STM 3-3-74	3.0	80	74	64.0	6.00	152	4	3.75	95	6.10	155	12.20	310	10.25	260	2.49	63	0.75	19.1	6.26	159	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	4.0	100	117	101.2	7.50	191	8	4.50	114	6.89	175	13.77	350	10.25	260	3.09	76	0.75	19.1	7.05	179	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.
- * Reduced Port Valve - No characterizing disc.