



## SoftTouch 2 – Submittal/Technical Data

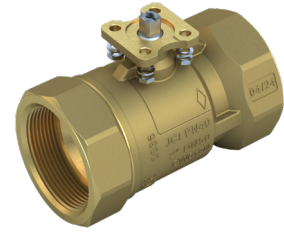
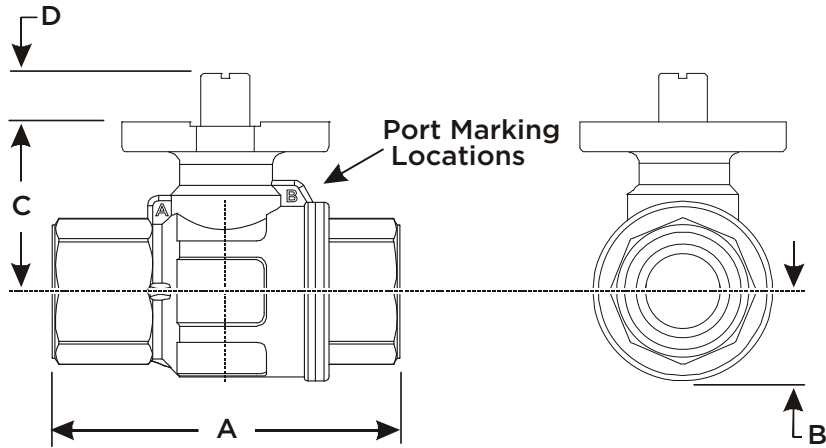
### Characterized Ball Valves 2-Way & 3-Way – 1/2" - 2"

#### ST2 Ball Valves - Valve Body Specifications

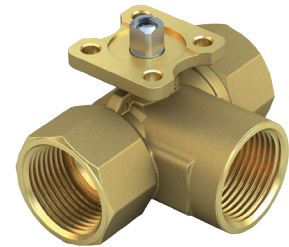
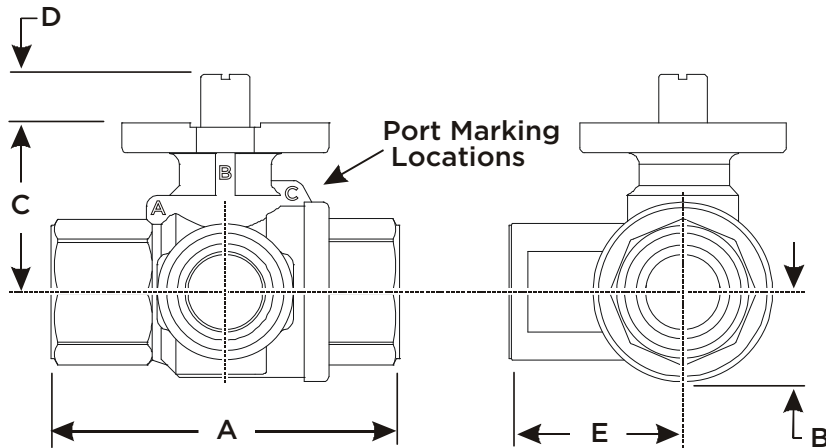
Technical Specifications - Valve Body			
Service	Hot Water, Chilled Water, Condenser Water up to 50% Glycol 15 PSIG (103 kPa) Saturated Steam for HVAC Systems		
Size Range	2-Way & 3-Way - 1/2" through 2" (DN 15 to 50)		
Valve Body Pressure/ Temperature Rating	Cold Working Pressure	580 PSI (PN 40)	
	Water (with Standard Mounting)	-22°F to 203°F (-30°C to 95°C)	
	Water (with "High Temp" Mounting)	-22°F to 284°F (-30°C to 140°C)	
	Steam (with "High Temp" Mounting)	15 PSIG (103 kPa) at 284°F (140°C)	
Maximum Recommended Operating Pressure Drop	50 PSI Maximum Differential Pressure for Valves with Characterized Flow Control Disk and 30 PSI Maximum for Quiet Service Ball Valves		
Flow Characteristics	2-Way	Equal Percentage	
	3-Way	Equal Percentage Port A, Linear Port B (Bypass)	
Rangeability	Greater than 500:1		
Ambient Conditions	See Actuator Specifications		
Close-Off	200 PSI		
Leakage	.01% of Maximum Flow per ANSI/FCI 70-2, Class 4 1% of Maximum Flow for Three-Way Bypass Port		
End Connections	NPT or BSP Threaded		
Materials	Body	Forged Brass	
	Ball	300 Series Stainless Steel	
	Stem		
	Seats	Graphite-Reinforced PTFE with EPDM O-Ring backing	
	Stem Seals	EPDM Double O-Rings	
	Characterizing Disk	AMODEL® AS-1145HS Polyphthalamide Resin	
Weights (Valve Body Only)	Size	2-Way	3-Way
	1/2"	0.8 lb. (.36 kg)	1.3 lb. (.57 kg)
	3/4"	1.0 lb. (.45 kg)	1.5 lb. (.68 kg)
	1"	1.8 lb. (.82 kg)	2.8 lb. (1.3 kg)
	1-1/4"	2.3 lb. (1.0 kg)	4.3 lb. (1.9 kg)
	1-1/2"	3.8 lb. (1.7 kg)	6.3 lb. (2.8 kg)
	2"	5.0 lb. (2.3 kg)	8.2 lb. (3.7 kg)
Compliance CRN	OC16910.5		
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.

## SoftTouch 2 Ball Valves - Valve Dimensions



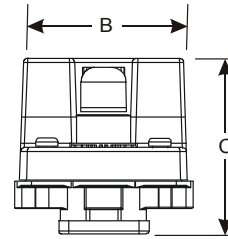
2-WAY - VALVE BODY DIMENSIONS in. (mm)						
ST2 Valve Model # Prefix	Size		A	B	C	D
	in.	mm				
ST2-05-2-...	0.5	15	2-1/2 (64)	5/8 (17)	1-7/32 (31)	11/32 (9)
ST2-75-2-...	.75	20	2-13/16 (71)	5/8 (17)	1-7/32 (31)	11/32 (9)
ST2-1-2-...	1.0	25	3-7/16 (87)	3/4 (19)	1-5/16 (33)	11/32 (9)
ST2-125-2-...	1.25	32	3-15/16 (100)	1 (26)	1-23/32 (44)	11/32 (9)
ST2-150-2-...	1.5	40	4-5/16 (109)	1-1/8 (29)	1-7/8 (48)	11/32 (9)
ST2-2-2-...	2.0	50	4-7/8 (124)	1-1/2 (37)	2-1/16 (53)	11/32 (9)



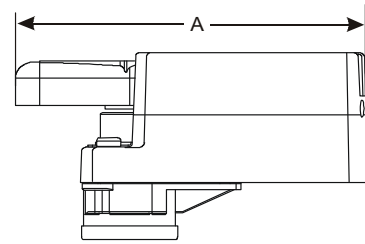
3-WAY - VALVE BODY DIMENSIONS in. (mm)							
ST2 Valve Model # Prefix	Size		A	B	C	D	E
	in.	mm					
ST2-05-3-...	0.5	15	2-1/2 (64)	5/8 (17)	1-7/32 (31)	11/32 (9)	1-1/4 (32)
ST2-75-3-...	.75	20	2-13/16 (71)	5/8 (17)	1-7/32 (31)	11/32 (9)	1-13/32 (36)
ST2-1-3-...	1.0	25	3-7/16 (87)	3/4 (19)	1-5/16 (33)	11/32 (9)	1-45/64 (43)
ST2-125-3-...	1.25	32	3-15/16 (100)	1 (26)	1-23/32 (44)	11/32 (9)	1-31/32 (50)
ST2-150-3-...	1.5	40	4-5/16 (109)	1-1/8 (29)	1-7/8 (48)	11/32 (9)	2-11/64 (55)
ST2-2-3-...	2.0	50	4-7/8 (124)	1-1/2 (37)	2-1/16 (53)	11/32 (9)	2-27/64 (62)

## SoftTouch 2 Ball Valves - Actuator Dimensions

COMMERCIAL ACTUATOR DIMENSIONS in. (mm)				
Direct Mount Actuator Model Number	A Length	B Width	C Height	Weight lbs. (kg)
VA(M)-35 Series	5.2 (132)	2.8 (71)	2.1 (53)	1.3 (0.59)
VA(M)S-27 Series	6.4 (163)	3.3 (84)	2.3 (58)	2.0 (0.9)
VAM-90 Series	5.4 (137)	3.2 (81)	2.4 (62)	2.0 (0.9)
VA(M)S-70 Series	6.3 (160)	3.9 (99)	2.3 (58)	3.8 (1.7)



COMMERCIAL ACTUATOR DIMENSIONS in. (mm)				
Universal Mount Actuator Model Number	A Length	B Width	C Height	Weight lbs. (kg)
D(M)-70 Series	7.1 (180)	3.9 (99)	2.5 (64)	2.9 (1.3)



Thermal Barrier Dimensions in. (mm)			
High Temperature Thermal Barrier	A Length	B Width	C Height
HT	-	-	1.4 (35)

