



3-Way Industrial Ball Valve Specification and Installation Instructions

Models

STAxXXXS1: 3-way, 1/2", Reduced Port, NPT female
STBXXXXS1: 3-way, 3/4", Reduced Port, NPT female
STCXXXXS1: 3-way, 1", Reduced Port, NPT female
STDXXXXS1: 3-way, 1-1/4", Reduced Port, NPT female
STEXXXXS1: 3-way, 1-1/2", Reduced Port, NPT female
STFXXXXS1: 3-way, 2", Reduced Port, NPT female

Features

- High flow characteristics with low pressure drops
- Maximum close-off pressure of 300 PSI
- Maximum valve body rating of 400 PSIG

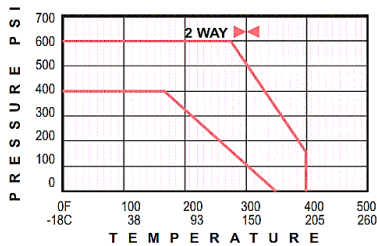
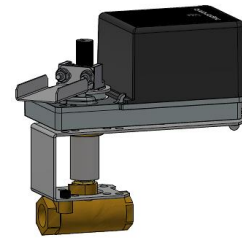
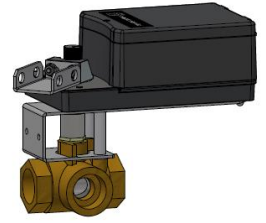


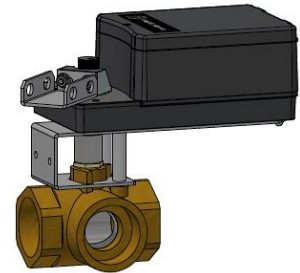
Fig. 1 Pressure vs. Temperature



With B Series
Actuators (1/2"-3/4")



With T Series
Actuators (1"- 1-1/2")



With R Series Actuators (2")

Models

Size	3-Way Models	Cv	Kv	Close Off PSI
1/2"	STA0048XS1	5	4	100
3/4"	STB0120XS1	12	10	100
1"	STC0140XS1	14	12	300
1-1/4"	STD0210XS1	21	18	300
1-1/2"	STE0340XS1	34	29	150
2"	STF0470XS1	47	40	75

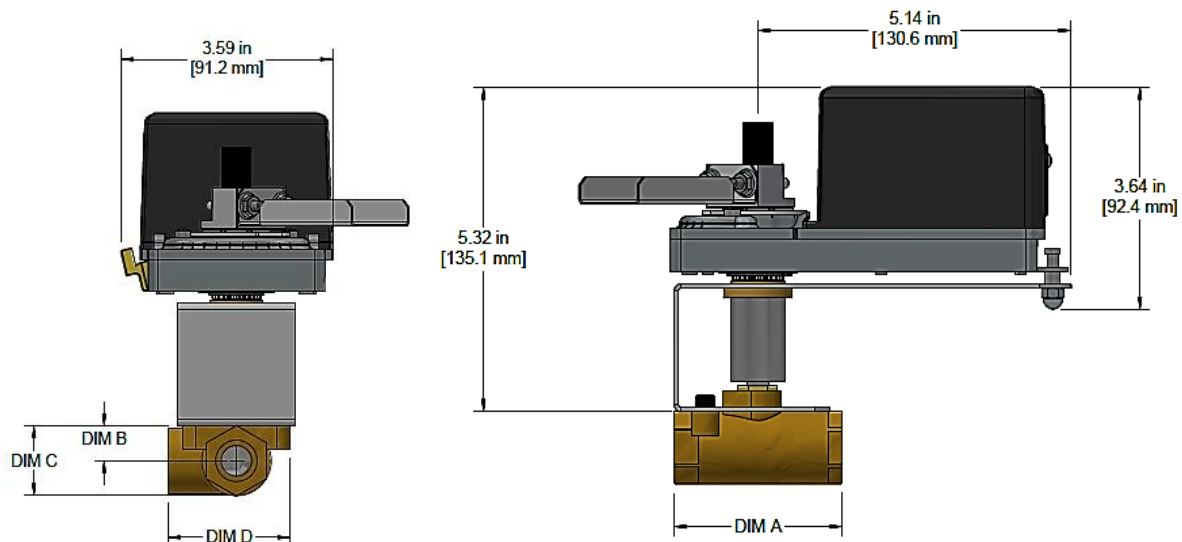


Technical Data

Specification		All Models
Actuator Compatibility		All Neptronic B, T, and R series actuators
Sizes		½" to 2"
Range Cv [Kv]		5 to 47 [4 to 40]
Service		Hot water, Chilled Water, Glycol up to 50%, 15 PSIG, Saturated Steam (Optional: 150 PSIG saturated steam)
Valve Flow Type		3 Way: Modified Linear
Static Pressure & Temperature		Refer to Fig. 1 above
Maximum Working Pressure		3 Way: 400 PSIG WOG
Leakage		0%
Materials	Body	Bronze
	Ball and Stem	Stainless Steel
	Stem Seals	Composite of reinforced Teflon & EPDM "O" rings
	Seats	Reinforced Teflon
End Connections		Standard NPT Female

Dimensions

Mounted on B Series Actuators



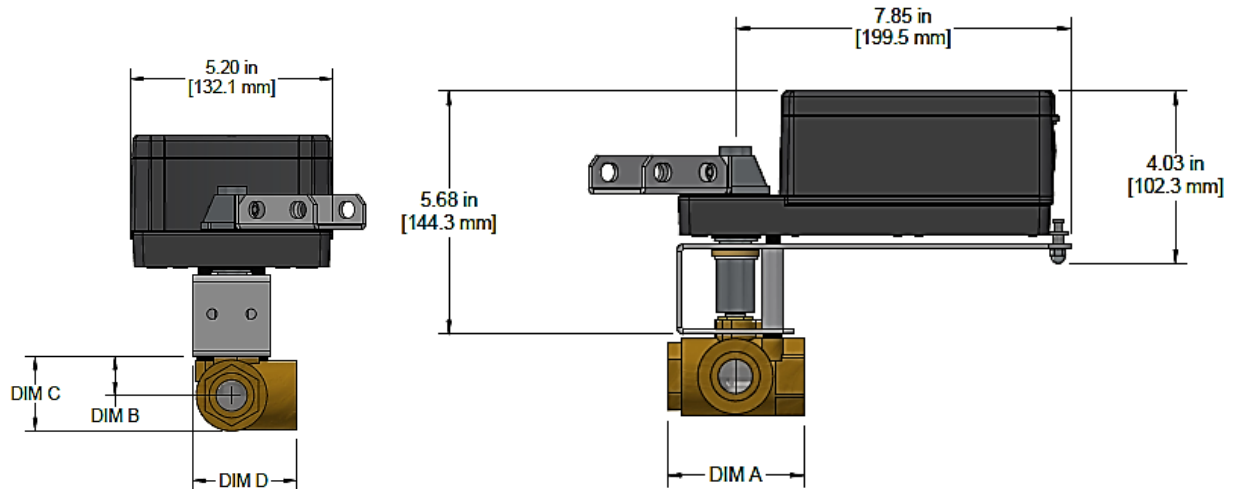
Valve Size (Brass)	Valve Model Prefix	A	B	C	D
½"	STA0048XS1	2.75in [70mm]	0.60in [15mm]	1.20in [30mm]	2.00in [53mm]
¾"	STB0120XS1	3.00in [76mm]	0.80in [20mm]	1.60in [40mm]	2.50in [64mm]



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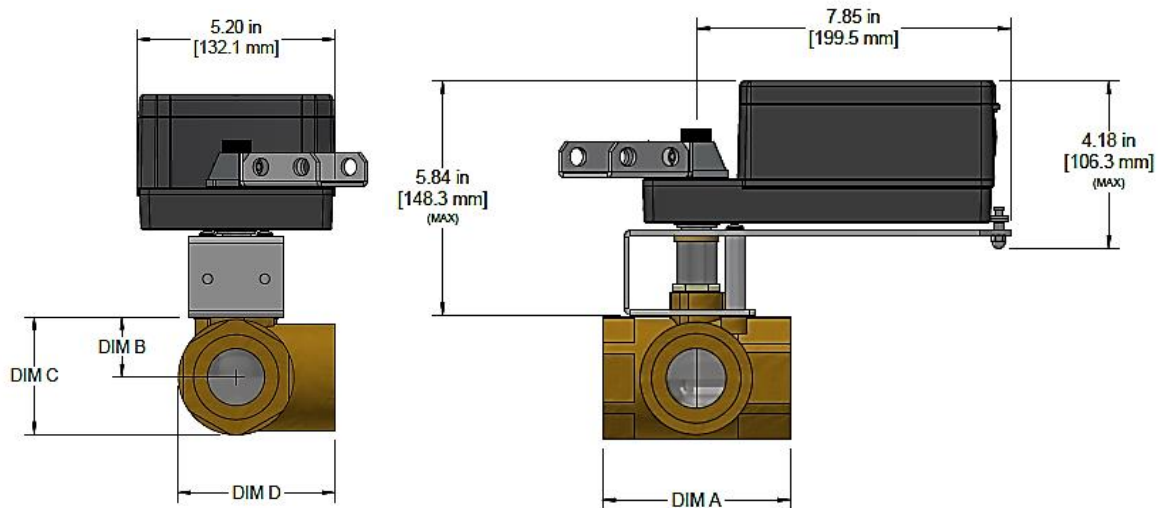
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Mounted on T Series Actuators



Valve Size (Brass)	Valve Model Prefix	A	B	C	D
1"	STC0140XS1	3.20 in [82 mm]	0.98 in [25 mm]	1.89 in [48 mm]	2.66 in [68 mm]
1-1/4"	STD0210XS1	3.98 in [101 mm]	1.23 in [31 mm]	2.40 in [61 mm]	3.37 in [86 mm]
1-1/2"	STE0340XS1	4.40 in [112 mm]	1.39 in [34 mm]	2.72 in [69 mm]	3.68 in [94 mm]

Mounted on R Series Actuators



Valve Size (Brass)	Valve Model Prefix	A	B	C	D
2"	STF0470XS1	4.69 in [119 mm]	1.58 in [40 mm]	3.09 in [79 mm]	4.10 in [105 mm]

Note: These dimensions depend on the supplier and can be changed without any warning.



Recycling at end of life: please return this product to your Neptronic local distributor for recycling. If you need to find the nearest Neptronic authorized distributor, please consult www.neptronic.com.