



B Series ½" to 2" 2-Way and 3-Way Bronze Control Valves

Description

The B Series is a light-industrial bronze control valve range for pressure, flow and temperature control of steam, gases and liquids.

Available in 2-way and 3-way body configurations for modulating control with PM Series pneumatic actuators or Belimo NV or AF Series electric actuators.

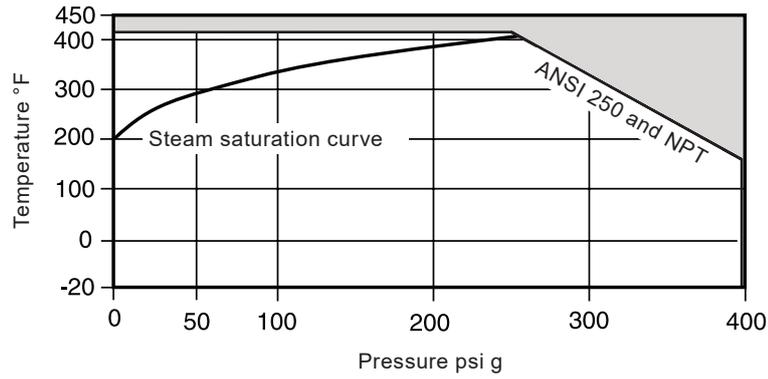
For enhanced control, any of the extensive range of Spirax Sarco positioners may be fitted to pneumatic actuators.

Technical specifications

Body sizes	½", ¾", 1", 1¼", 1½", 2"	
Body material	ASTM B62	
Connection	Screwed NPT	
Body rating	400 psi g @ 150 °F / 250 psi g @ 400 °F	
Characteristic	2-Way: Equal Percentage or Linear 3-Way: Linear	
Rangeability	50:1	
Temperature range	-20 °F to 400 °F	
Leakage rate	Metal Seating (2 Way and 3 Way Valves)	ANSI/FCI 70-2, Class IV
	PTFE Soft seating (2 Way, Equal Percentage only)	ANSI/FCI 70-2, Class VI



Operating range



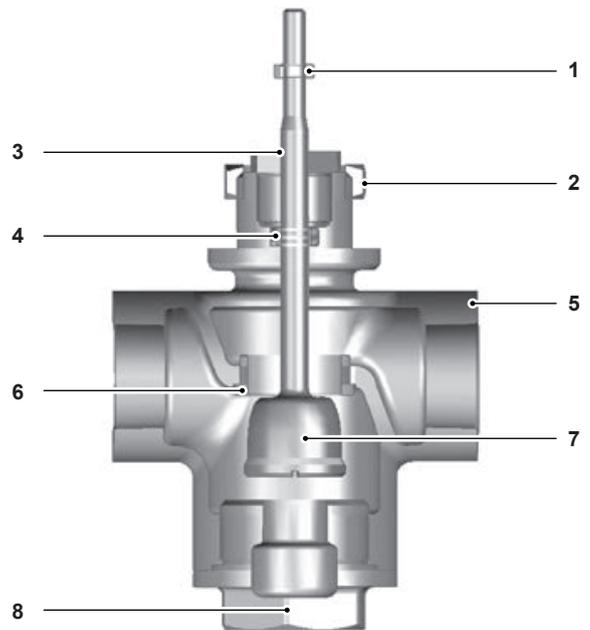
The product **must not** be used in this region.

Control valve Cv values

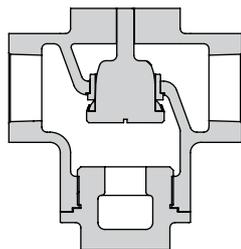
1/2"		3/4"		1"		1 1/4"		1 1/2"		2"	
Cv 6	Cv 3.5	Cv 8	Cv 6	Cv 13	Cv 8	Cv 20	Cv 13	Cv 28	Cv 20	Cv 50	Cv 28

Materials

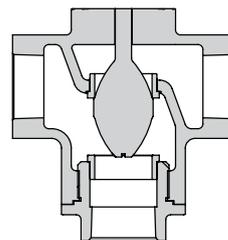
No.	Part	Material
1	Locknut	Stainless steel
2	Bonnet nut	Steel
3	Gland nut	Brass
4	Stem seal	PTFE/EPDM
5	Body cast	Bronze
6	Seat	Stainless steel
7	Head and stem	Stainless steel
8	Plug	Cast bronze



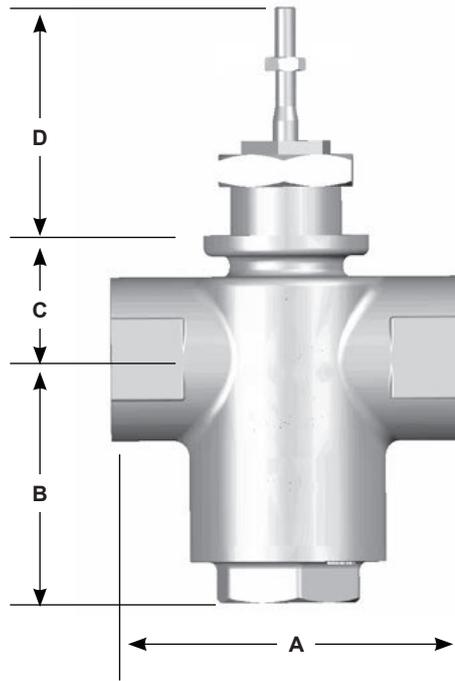
Detail of soft seal option



Detail of 3-Way option



Dimensions and weights (inches and pounds)



Size	A End to end	B Bottom to centerline	C Centerline to actuator shoulder	D Actuator shoulder to end of stem (closed position)	Weight
1/2"	3.5	2.5	1.4	90	4
3/4"	3.5	2.5	1.4	90	4
1"	4.25	3	1.5	90	4.8
1 1/4"	5.3	3.8	2.0	90	10
1 1/2"	5.3	3.8	2.0	90	10
2"	6.6	4.5	2.3	90	17

Control valve selection guide

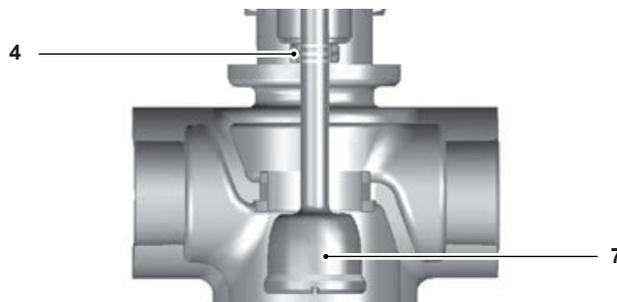
Valve Size	½", ¾", 1", 1¼", 1½", 2"	2"
Valve Series	B Series	B
Valve Characteristic	L = Linear	E
	E = Equal percentage	
	M = Mixing linear (3-way)	
Design standards	A= ANSI/ASTM specifications	A
Body Material	5 = Bronze	5
Connections	1 = Threaded NPT	1
Seating option	G = Soft seal (PTFE) (Equal Percentage Only)	
Cv	To be specified	50
Connection Type	To be specified	NPT

Selection guide example

2	B	E	A	5	1			C _v 50	NPT
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Spare parts

Stem Seal	4
Head and Stem	7



How to order

Example: 1 x 2" BEA51 Cv 50 NPT. Control Valve with PM720R actuator.