

Baumann™ SV Electric Actuator with 24000 Control Valves

The Baumann SV electric control valve series is specifically designed for Baumann sliding-stem control valves. It is used for temperature and humidity control for HVAC (hot and chilled water, steam, glycol, etc.), semiconductor manufacturing (clean rooms, make-up air handlers, recirculation air handlers, humidification, chillers, jackets, and glycol systems), and for many industrial environments such as textiles, food and beverage, and tire manufacturing.

Features

Actuator

- Multi-Function Technology™ (MFT) provides standard auto calibration and signal select ability at the factory or in the field
- Valve failure modes available: close, open, and last position
- Choice of power supply: 24VAC or 24VDC
- Stem position feedback transmitter available

Valve

- High quality S21800 SST and S31600 SST internal valve trim parts are standard; S41600 trim and PTFE seating options are available
- Dual stem and plug guiding provides increased stability during plug travel
- Available equal percentage and linear characterized trims to match process loop dynamics



Baumann 24000CVF Valve with SV Electric Actuator

Specifications

Actuator specifications are shown in table 1.

Manual Override

The valve stem position can be adjusted by inserting a 4 mm hex head screwdriver into the housing cover.

Table 1. Actuator Specifications

ACTUATOR TYPE		SVX24-MFT	SVK24-MFT
POWER FAILURE		Lock in last position	Fail Open / Fail Closed
ACTION		Direct or Reverse	
POWER CONSUMPTION		4 W	8.5 W
TRANSFORMER SIZE		6 VA (class 2 power source)	21 VA (class 2 power source)
TRAVEL		12.7 and 19.1 mm (0.50 and 0.75 inches)	
MATERIAL	Housing	Aluminum die cast and plastic casing	
	YOKE Legs	Aluminum	
ENCLOSURE RATING		NEMA 2, / IP 54 UL Enclosure Type 2	
INPUT SIGNAL		2 - 10 VDC or 4 - 20 mA input signal	
POWER SUPPLY		24 VAC or 24 VDC	
ELECTRICAL CONNECTION		3 ft, 18GA appliance cable, 0.5 inch conduit fitting	
AMBIENT TEMPERATURE		-30 to 50°C (-22 to 122°F)	
RELATIVE HUMIDITY RANGE		5 to 95% RH, non-condensing	
OUTPUT THRUST		1500 N (337 lbf)	
VALVE STEM POSITION FEEDBACK OUTPUT		2-10 VDC (0.5 mA maximum)	
SHUTOFF CLASS		Class IV or VI per ANSI/FCI 70-2 (Refer to Valve Technical Bulletin)	
TRAVEL TIME		35 seconds	
NOISE LEVEL		< 45 dB(A)	
MANUAL OVERRIDE		4 mm Hex Head	
POSITION INDICATION		Travel Indicator on Yoke	
SPLIT RANGE CAPABILITY		Yes	
AGENCY APPROVALS		CE (A), UL 60730-1A/-2 -14, CSA E60730-1:02 (CE approval for actuator only)	
QUALITY STANDARD		ISO 9001	
WEIGHT		1.3 kg (2.9 lbs)	1.6 kg (3.6 lbs)

Baumann 24000 Bronze Control Valve

Table 2. Maximum Allowable Pressure Drops

VALVE SIZE		ORIFICE DIAMETER		PLUG TRAVEL		SHUTOFF Metal Seat CL IV		SHUTOFF Soft Seat CL VI	
DN	NPS	mm	in	mm	in	bar	psi	bar	psi
15, 20, 25	1/2, 3/4, 1	6.3	0.25	12.7	0.5	17	250	17	250
		9.5	0.375	12.7	0.5	17	250	17	250
15	1/2	20.6	0.8125	12.7	0.5	17	250	17	250
20	3/4	20.6	0.8125	12.7	0.5	17	250	17	250
25	1	20.6	0.8125	12.7	0.5	17	250	17	250
		26.9	1.0625	12.7	0.5	17	250	17	250
40	1-1/2	31.8	1.25	19.1	0.75	17	249	13	184
		38.1	1.5	19.1	0.75	12	176	8	121
50	2	38.1	1.5	19.1	0.75	12	176	8	121
		50.8	2	19.1	0.75	7	101	4	59

Baumann 24000C Carbon Steel Control Valve

Table 3. Maximum Allowable Pressure Drops

VALVE SIZE		ORIFICE DIAMETER		PLUG TRAVEL		SHUTOFF Metal Seat CL IV		SHUTOFF Soft Seat CL VI	
DN	NPS	mm	in	mm	in	bar	psi	bar	psi
15, 20, 25	1/2, 3/4, 1	6.3	0.25	12.7	0.5	20	290	20	290
		9.5	0.375	12.7	0.5	20	290	20	290
15	1/2	20.6	0.8125	12.7	0.5	20	290	20	290
20	3/4	20.6	0.8125	12.7	0.5	20	290	20	290
25	1	20.6	0.8125	12.7	0.5	20	290	20	290
		27.0	1.0625	12.7	0.5	20	290	18	264
40	1-1/2	31.8	1.25	19.1	0.75	17	249	13	184
		38.1	1.5	19.1	0.75	12	176	8	121
50	2	38.1	1.5	19.1	0.75	12	176	8	121
		50.8	2	19.1	0.75	7	101	4	59

Baumann 24000S Stainless Steel Control Valves

Table 4. Maximum Allowable Pressure Drops

VALVE SIZE		ORIFICE DIAMETER		PLUG TRAVEL		SHUTOFF Metal Seat CL IV		SHUTOFF Soft Seat CL VI	
DN	NPS	mm	in	mm	in	bar	psi	bar	psi
15, 25	1/2, 1	4.0	0.156	12.7	0.5	50	720	50	720
		6.4	0.25	12.7	0.5	50	720	50	720
25	1	7.9	0.3125	12.7	0.5	50	720	50	720
		9.5	0.375	12.7	0.5	50	720	50	720
		20.6	0.8125	12.7	0.5	39	560	32	466
40	1-1/2	31.8	1.25	19.1	0.75	17	249	13	184
50	2	38.1	1.5	19.1	0.75	12	176	8	121
80	3	50.8	2	19.1	0.75	7	101	4	59

Baumann 24000CVF/SVF Carbon Steel and Stainless Steel Flanged Control Valve

Table 5. Maximum Allowable Pressure Drops

VALVE SIZE		ORIFICE DIAMETER		PLUG TRAVEL		SHUTOFF Metal Seat CL IV		SHUTOFF Soft Seat CL VI	
DN	NPS	mm	in	mm	in	bar	psi	bar	psi
15	1/2	4.0	0.156	12.7	0.5	50	720	50	720
		6.4	0.25	12.7	0.5	50	720	50	720
20	3/4	7.9	0.3125	12.7	0.5	50	720	50	720
25	1	9.5	0.375	12.7	0.5	50	720	50	720
15	1/2	20.6	0.8125	12.7	0.5	39	560	32	466
20	3/4	20.6	0.8125	19.1	0.75	39	560	32	466
25	1	20.6	0.8125	19.1	0.75	39	560	32	466
		27.0	1.0625	12.7	0.5	23	339	18	264
40	1-1/2	31.8	1.25	19.1	0.75	17	249	13	184
		38.1	1.5	19.1	0.75	12	176	8	121
50	2	38.1	1.5	19.1	0.75	12	176	8	121
		50.8	2	19.1	0.75	7	101	4	59

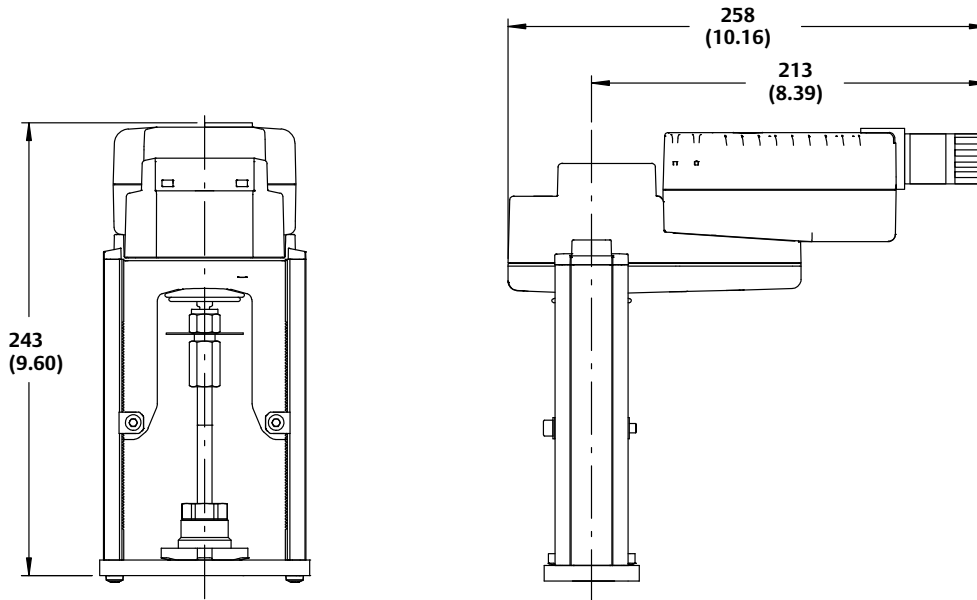
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SV Electric Actuator

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Figure 1. Baumann SV Electric Actuator Dimensions



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