

Actuator for ball valves, 10 Nm

S10..V



Description

The electric actuator series S10..V for ball valves are used in heating, refrigeration and air conditioning systems.

- For valves from DN40 to DN50
- Power supply 24 VAC / DC and 230 VAC
- Function: open / closed or 3 point and proportional action
- Shaft dimension □ 9 mm square (fixed)
- Direction of rotation selectable by switch
- Actuator with 1 m connection cable
- Optional 1 adjustable SPDT auxiliary switch



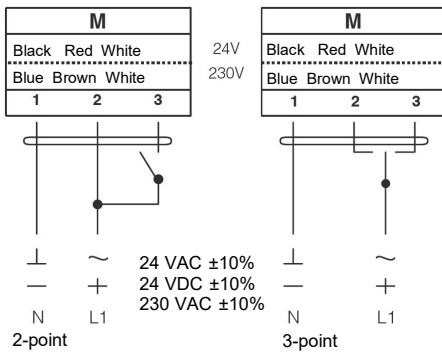
Technical specifications

Models	S10AV	S10BV	S10AMV
Nominal torque	Nm	10	
Power supply	V	24 AC/DC ±10%	24 AC/DC ±10%
Frequency	Hz	50/60	
Power consumption			
- in operation	W	6.0	
- end position	W	4.0	
Rated power	VA	14	
Running time	s	70...90	
Electrical connection		1 m PVC cable	
Auxiliary switch rating		3 (1.5) A / 250 VAC	
Sound power level	max. db (A)	40	
Control signal (input)		2-3 point	0(2)...10 V DC 0(4)...20 mA
Position signal (output)			0...10 VDC
Life Cycle	rotations	60.000	
Angle of rotation		90° (95° mechanical limitation)	
Direction of rotation		CW / CCW	
Protection class		III	III
Protection degree		IP54	
Working range °C		-20...+50°C	
Working range RH		5...95% RH, non-condensating	
Storage temperature		-30...+60°C	
Maintenance		free	
Weight	g	1100	
Standards		CE-conformity, RoHs	
Option		suffix S for models with 1 SPDT auxiliary switch	



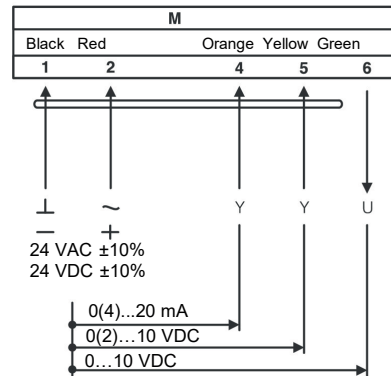
Electrical wirings

Wiring diagram S10AV / S10BV

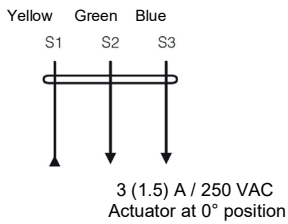
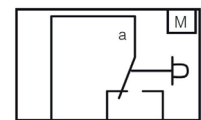


Connect via safety isolating transformer!

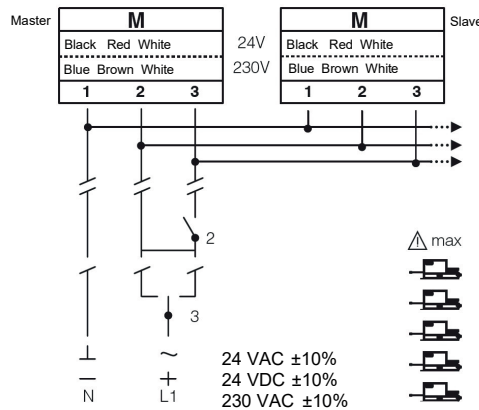
Wiring diagram S10AMV



Wiring diagram S10AV / S10BV
Auxiliary switch

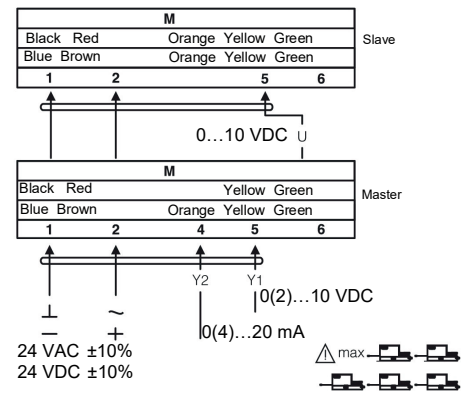


Wiring diagram S10AV / S10BV
Parallel connection



Parallel connection of maximum 5 S10..V (S1) actuators is possible. Power consumption must be observed!

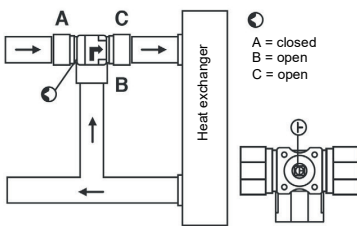
Wiring diagram S10AMV
Parallel connection



During parallel operation, the output signal (terminal 6, 0...10 VDC) of the master actuator must be connected to terminal 5 of the next slave actuator.

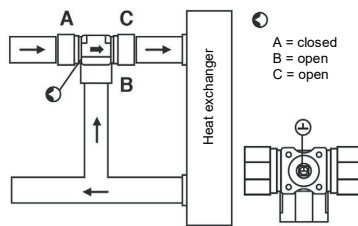
Installation

Mixing closed

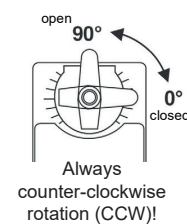


Ball valve actuators must operate CCW!

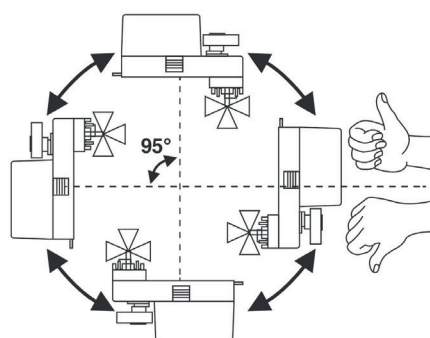
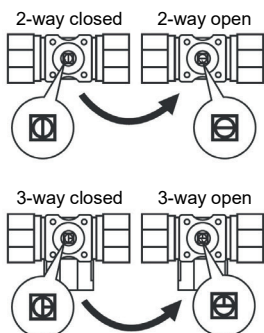
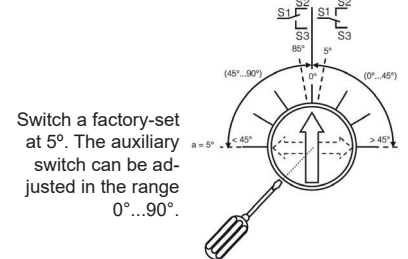
Mixing open



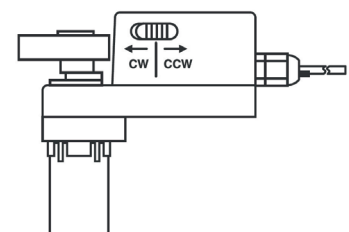
Actuator position



Auxiliary switch



Change of rotation direction

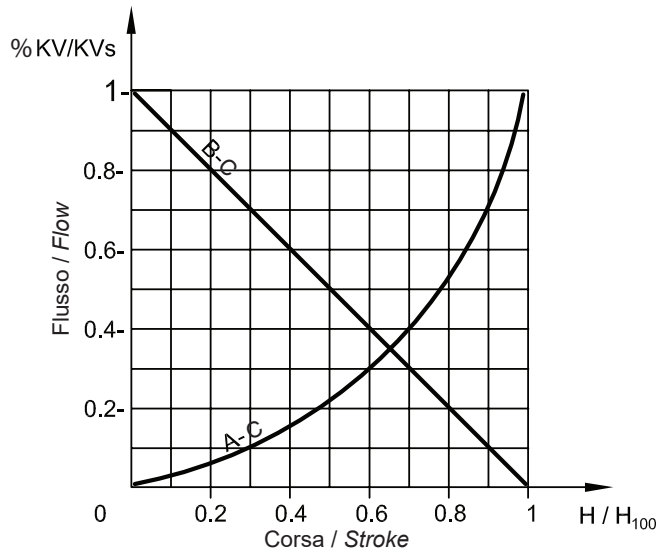


Factory setting: clockwise (CW). Direction of rotation can be changed by toggling between CW/CCW switch on the actuator housing.

S10..V



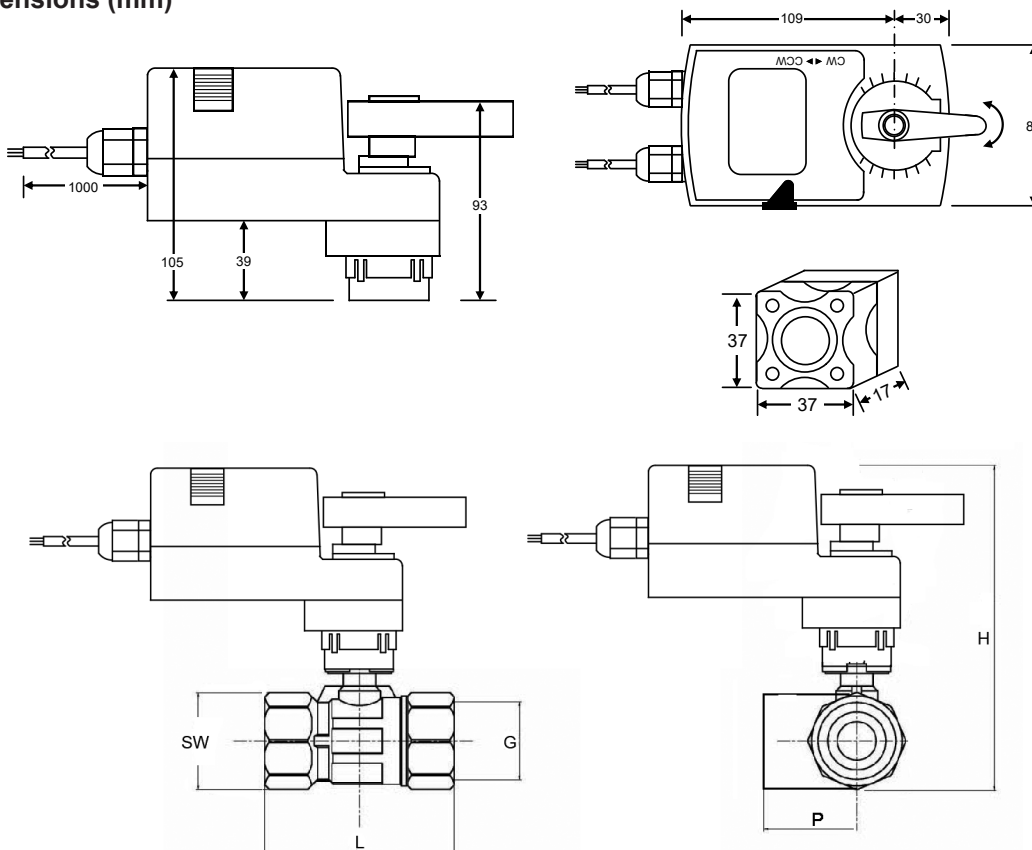
Control flow characteristics



A-C equal-percentage way
 B-C bypass lineare way
 3-way used as mixing inlet in A and B, outlet C
 3-way used as diverting inlet in C, outlet from A and B

C way constant flow
A way variable flow
B (bypass) way variable flow

Dimensions (mm)



DN mm	G	L	H	SW	P	weight 2 way (kg)	weight 3 way (kg)
40	G 1" 1/2	106	181,60	56	52	1,2	1,4
50	G 2"	128	192,70	70	69	1,95	2,2
65	Flange 145	97	136	-	-	4,5	-
80	Flange 160	108	140	-	-	6,8	-
100	Flange 180	120	202	-	-	8,6	-

The contents are subject to revision or change without notice.