



## ■ 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%	230 AC	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		100...150	
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	2-3 point	0...10 VDC
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	II	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	

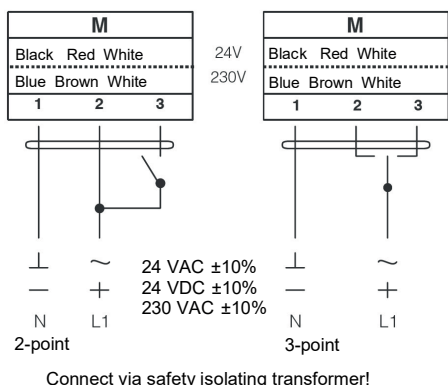
Operate the manual control without applying excessive force, keeping the release button pressed for the entire stroke of movement. Rotate slowly and smoothly, avoiding jerky movements or sudden changes in direction.

# S10..V

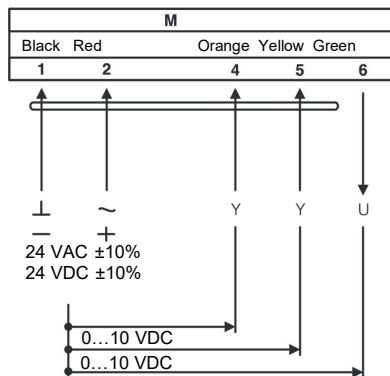


## Electrical wirings

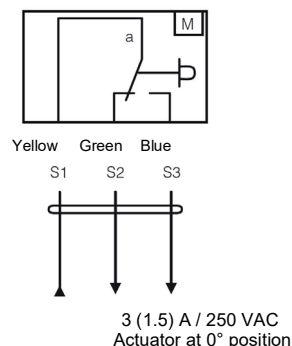
Wiring diagram S10AV / S10BV



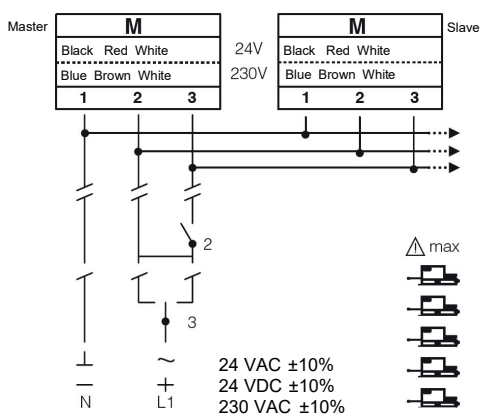
Wiring diagram S10AMV



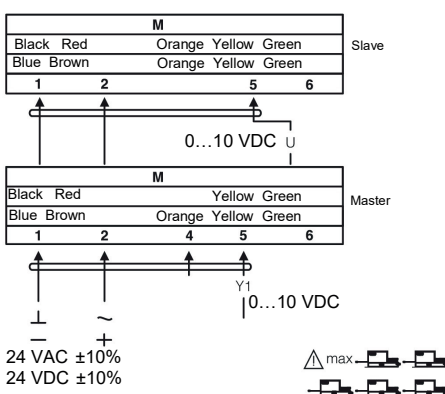
Wiring diagram S10AV / S10BV  
Auxiliary switch



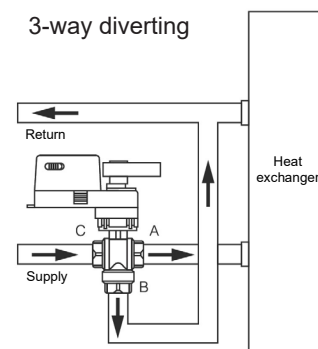
Wiring diagram S10AV / S10BV  
Parallel connection



Wiring diagram S10AMV  
Parallel connection



3-way diverting



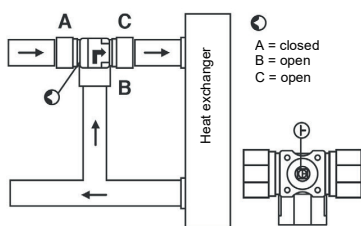
Diverting application:  
Fluid enters through one inlet (C) and exits through two outlets (A & B).

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

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.

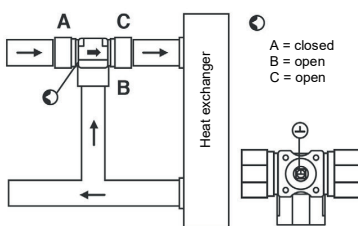
## Installation

Mixing closed

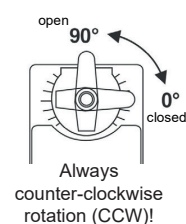


Ball valve actuators must operate CCW!

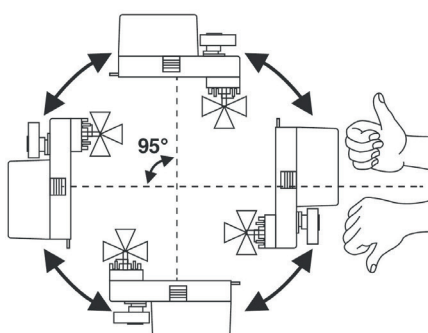
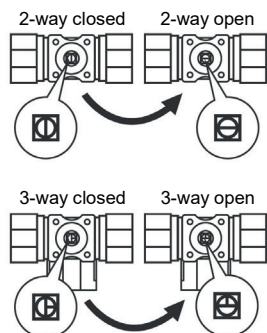
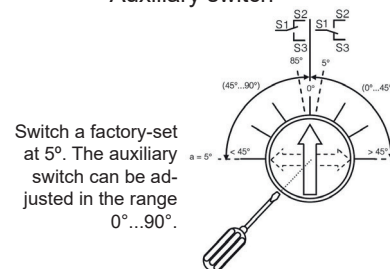
Mixing open



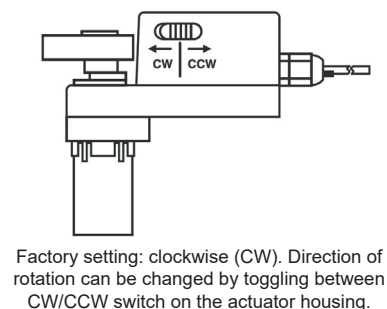
Actuator position



Auxiliary switch



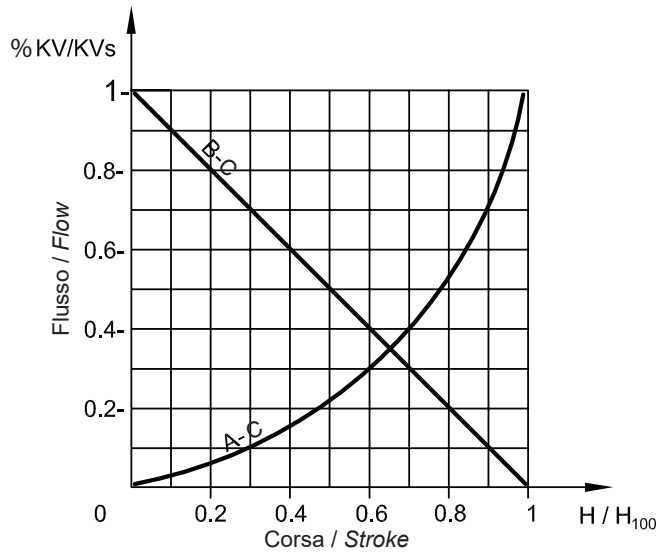
Change of rotation direction



# S10..V



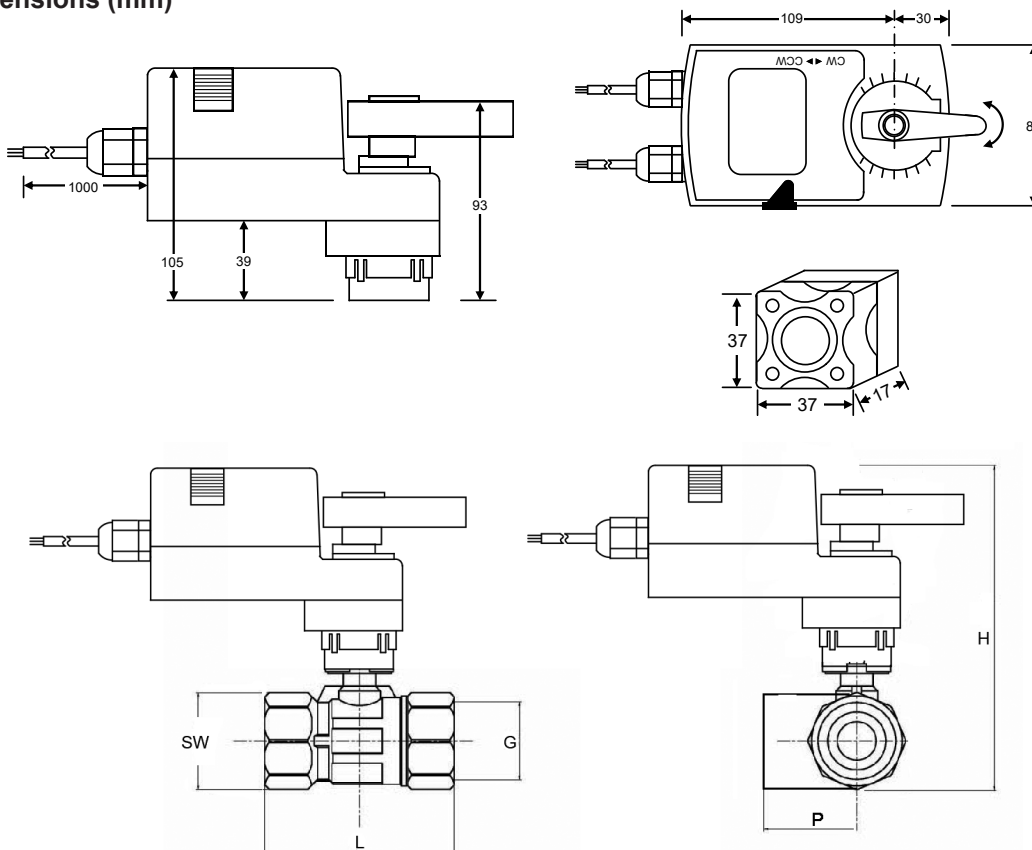
## Control flow characteristics



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.