

# SR12 SERIES MOTORIZED VALVES

## DESCRIPTION

SR12 series motorized valves are used to control the opening or closing for the pipe in the chilled/hot water system so to control the room temperature. The valve is driven by hysteresis synchronous motor with spring return. It is normally close ball valve.

When the thermostat is working, it will provide an opening signal, and the motorized valve will be opened. Then the chilled/hot water enters the coil and the coil starts to supply the cold/warm air to the room. When the room temperature rises to the set point, the thermostat will cut the valve power off. At the same time the valve will be closed by return spring and shut off the water to the coil. The room temperature will be kept in the setting range all the time through the opening and closing the valve.

SR12 series motorized valves have two types: normally close 2-way and diverting 3-way. They have four sizes: 1/2", 3/4", 1" and 1<sup>1/4</sup>". There are eleven kinds of specifications classified by the access type and the fluid characteristic. There are also different pipe connection for customers' selection: BSP(G), NPT(N), SWEAT(S), INVERTED FLARE(F), etc. The valves models with KA behind are equipped with auxiliary switches to control other devices and meet different requirements.

SR12 series motorized valves' plates and covers are made of hard ABS plastic. They have high differential pressure, low noise and reliable characteristics. It is designed to withstand high temperature condition in many concealed fan coil applications.

SR12 series motorized valves have detachable and non-detachable types. The detachable valve actuator and valve body is connected with supporting axis and matching button. It is convenient to install and be wiring for the valve actuator can be installed after the installation of the valve body.



## MATERIAL AND TECHNICAL DATA

MATERIAL	VALVE BODY	Forged brass
	SEAL MATERIAL	Nitrile butadiene rubber (NBR)
	CHASSIS & COVER	Fireproof ABS engineering plastic
WORKING MEDIA		Chilled / hot water
MEDIA TEMPERATURE		2~94°C (36~201°F)
PRESSURE RATING		2.1MPa
RATING VOLTAGE		220VAC±10%, 50/60Hz
POWER		6.5W
DRIVING PARTS		Driven by synchronous motor, spring return
OPERATION DURATION		Motor: about 15s after power on      Spring: 5s after power off
AMBIENT TEMPERATURE		0~60°C (32~140°F)
STORAGE TEMPERATURE		-20~65°C Max. Rh, no condensation

## SPECIFICATIONS AND DATA

MODEL	TYPE	Kv	SIZE	CLOSING-OFF PRESSURE	POWER SUPPLY
SR12(G)/(N)/(S)C21520A4	Normally close 2-Way	2.0	G1/2"	0.25MPa	24Vac, 110Vac, 120V, 220/230Vac±10% 50-60HZ
SR12(G)/(N)/(S)C21532A4		3.2		0.20MPa	
SR12(G)/(N)/(S)C22032A4		3.2	G3/4"	0.20MPa	
SR12(G)/(N)/(S)C22046A4		4.6	G1"	0.15MPa	
SR12(G)/(N)/(S)C22557A4		5.7		0.10MPa	
SR12(G)/(N)/(S)C22568A4		6.8		0.08MPa	
SR12(G)/(N)/(S)C232A0A4		10.0	G1 <sup>1/4</sup> "	0.08Mpa	
SR12(G)/(N)/(S)B31532A4	Diverting 3-Way	3.2	G1/2"	0.20MPa	
SR12(G)/(N)/(S)B32046A4		4.6	G3/4"	0.15MPa	
SR12(G)/(N)/(S)B32557A4		5.7	G1"	0.10MPa	
SR12(G)/(N)/(S)B33284A4		8.4	G1 <sup>1/4</sup> "	0.08Mpa	

- A1=24Vac; A2=110Vac; A3=120Vac; A4=220Vac/230Vac
- Accessories: Auxiliary switch (250Vac/3A). If you want to order the switch, please add an "S" behind the model name.

# DIMENSIONS

MODEL	DIMENSION (mm)						
	A	B	C	D	E	F (2-way)	G (3-way)
1/2", 2-Way	80	40	91	68	65	108	--
1/2", 3-Way	80	40	91	68	65	--	118
3/4", 2-Way	89	44	91	68	65	108	--
3/4", 3-Way	89	44	91	68	65	--	120
1", 2-Way	93	44	91	68	65	110	--
1", 3-Way	93	44	91	68	65	--	126
1 1/4", 2-Way	105	54	91	68	65	124	--
1 1/4", 3-Way	105	54	91	68	65	--	139

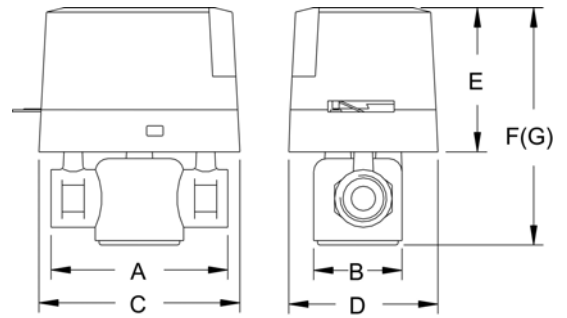
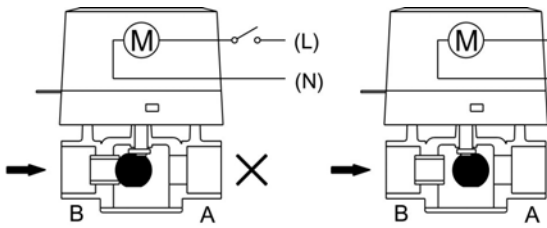


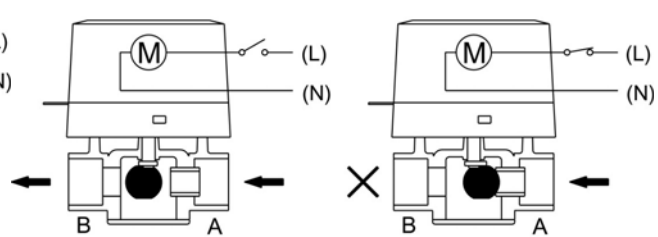
Fig. 1

# WORKING SITUATION

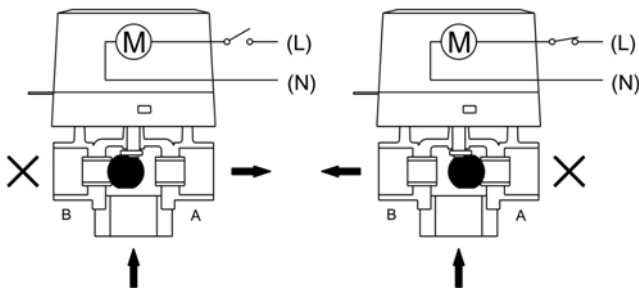
## 2-way normally close valve



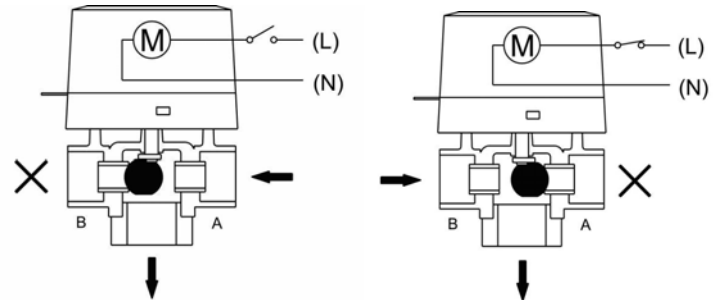
## 2-way normally open valve



## 3-way diverted valve

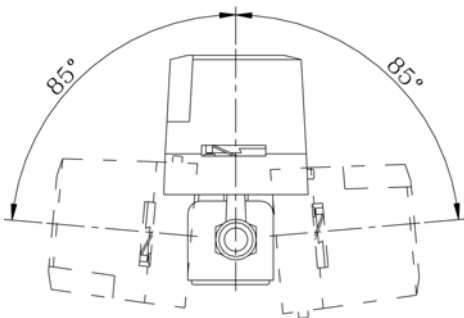


## 3-way mixing valve

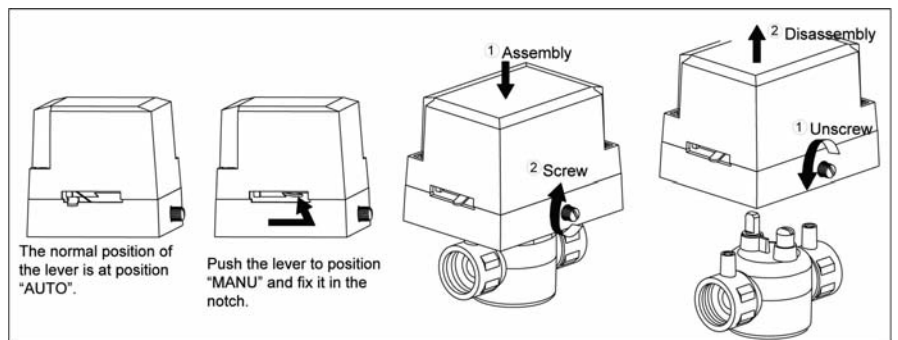


# INSTALLATION

## Permitted angle of installation



## Assembly/Disassembly indication



**\* Notice:** When the valve is mounted on vertical pipe, it must be prevented from dripping. If the valve is used in high-rise building, please install pressure reducing valve on branch pipe of ground floor.

**Notice:** After installation, must remove the lever stopper before the first use.