

SR2020 SERIES DETACHABLE VALVE

DESCRIPTION

SR2020 Series motorized valve is constituted with SRA2000 series actuator and SRV2020 series valve body. It is used to control the opening or closing for the pipe in chilled/hot water system to control the room temperature. The actuator is driven by hysteresis synchronous motor, and returned by spring. Valve is normally close. When the thermostat is asked to work, it sends a signal to the actuator to the valve. After the valve is opened, the chilled/hot water enters the coil, and cold/warm air is supplied to the room. When the room temperature rises to the set point, the thermostat sends a signal to the actuator to cut off the power, and the spring shuts down the valve, so the water to the coil is shut off. The room temperature is kept in the setting range all the time through opening or closing the valve.

SR2020 series motorized valve has two types—normally close 2-way and mixing 3-way, three sizes—1/2", 3/4" and 1". There are six models according to the different flow types and fluid characteristics.

The actuator is connected to the valve body by nut. It can be mounted after the valve body. It is convenient-mounted and flexible wire-connection. The flat design of the actuator makes it can be mounted against the wall for saving space. This product is reliable, long-life, and low noise. It can instead of SR2010 series detachable valve and can work in the high temperature environment, which is often occurred in the concealed fan coil units.



MATERIAL AND TECHNICAL DATA

MODEL		SR2020 Series valve
MATERIAL	VALVE BODY	Forged brass
	VALVE STEM	Stainless steel (AISI302)
	SEAL MATERIAL	Nitrile butadiene rubber (NBR)
	ACTUATOR PLATE	Casting aluminum alloyed
	ACTUATOR COVER	Fireproof ABS engineering plastic (UL94V-0)
WORKING MEDIA		Chilled / Hot water
MEDIA TEMPERATURE		2~94℃
HUMIDITY		100%
WORKING ENVIRONMENTAL TEMPERATURE		0~60℃ Max. RH: No condensation
STORAGE TEMPERATURE		-20~65℃ Max. RH: No condensation
PROTECTION CLASS		IP20

SRA2020 ACTUATOR TECHNICAL DATA

MODEL	RATED VOLTAGE	POWER	REV	DRIVING WAY	OPERATION TIME WHEN FIT WITH SRV20X0 VALVE BODY
SRA2100-220	AC220V ± 10%	6W	4RPM	Driven by synchronous hysteresis motor Spring return	Fully open duration: About 10s after power-on; Closed duration: About 5s after power-off
SRA2100-110	AC110V ± 10%				
SRA2100-24	AC24V ± 10%				
SRA2100-220R3	AC220V ± 10%	6W	3RPM		Fully open duration: About 19s after power-on; Closed duration: About 7s after power-off
SRA2100-110R3	AC110V ± 10%				
SRA2100-24R3	AC24V ± 10%				

SRV2020 VALVE BODY TECHNICAL DATA

MODEL	TYPE	SIZE	Kv FACTOR			CLOSING-OFF PRES. (kPa)	RATING PRES. (MPa)	OPTIONAL ACTUATORS
SRV2220-15	Normally close 2-way	G1/2"	0.6	1.0	1.5	250	1.6	SRA2100-220 SRA2100-110 SRA2100-24
SRV2320-15	Mixing 3-way	G1/2"	1.5			250		
SRV2220-20	Normally close 2-way	G3/4"	1.6	2.5	3.5	100		
SRV2320-20	Mixing 3-way	G3/4"	2.5			100		
SRV2220-25	Normally close 2-way	G1"	2.5	4.8		60		SRA2110-220 SRA2110-110 SRA2110-24
SRV2320-25	Mixing 3-way	G1"	4.8			60		

* Optional auxiliary switch: 125~250Vac/3A

TYPE	DIMENSIONS (mm)		
	A	B	C
G1/2" 2-way	54	14	100
G1/2" 3-way	54	30	100
G3/4" 2-way	63	19	103
G3/4" 3-way	63	32	103
G1" 2-way	78	20	106
G1" 3-way	78	38	106

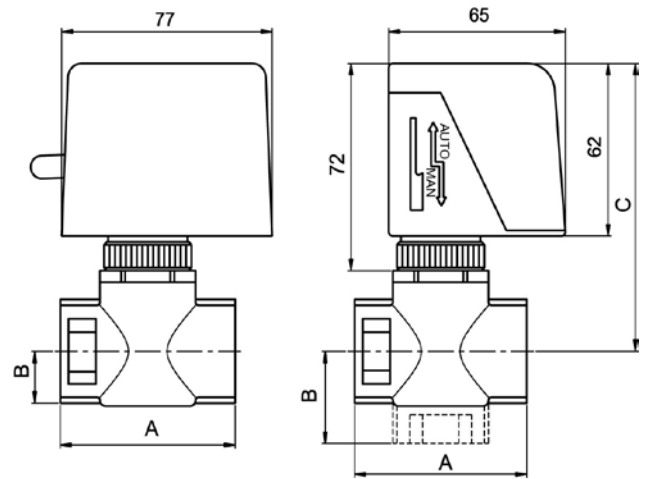


Fig. 1 Dimensions

OPERATION INSTRUCTION

When the valve is mounted on horizontal pipe, the angle must be positioned less than 85° (See Fig. 2).

When the valve is mounted on vertical pipe, it must be prevented from dripping.

When installation, please note the arrow direction of the valve. Move the manual operating lever slowly and hold in the retaining notch, and then the valve is in normal-opened position. When the valve is first powered on, the lever goes back to the automatic position again.

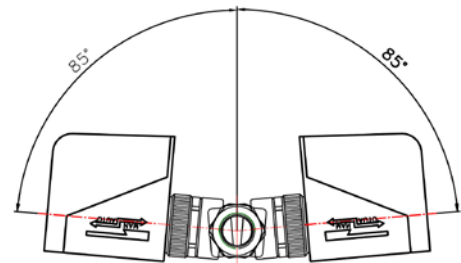


Fig. 2 Installation Position

INSTALLATION

Normal-closed 2-way and mixing 3-way valve are installed as Fig. 3 & 4. For high building, pressure-reducing valve should be installed on branch pipe at ground floor.

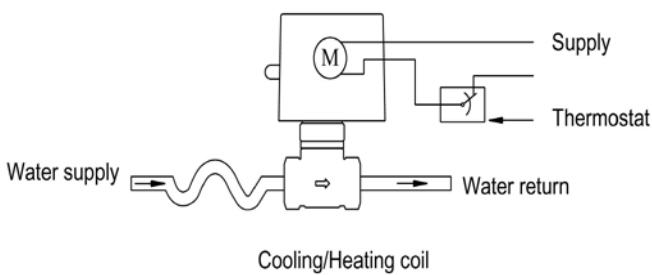


Fig. 3 2-Way Valve

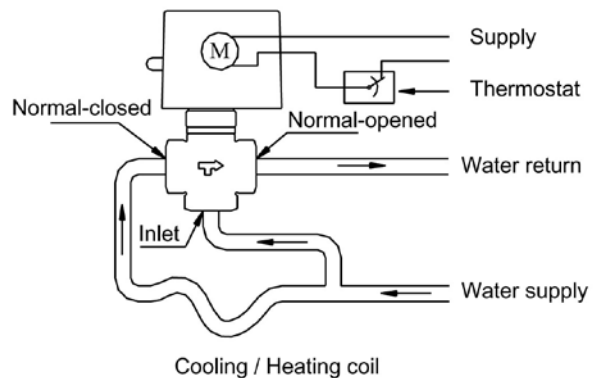


Fig. 4 3-Way Valve

When the valve is with auxiliary micro switch, the wiring diagram is as the following:

