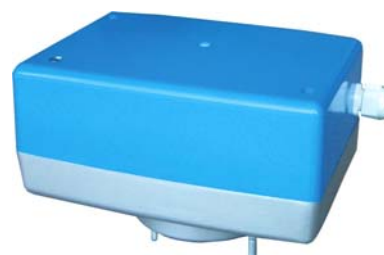


SBA06 SERIES BALL VALVE ACTUATOR

DESCRIPTION

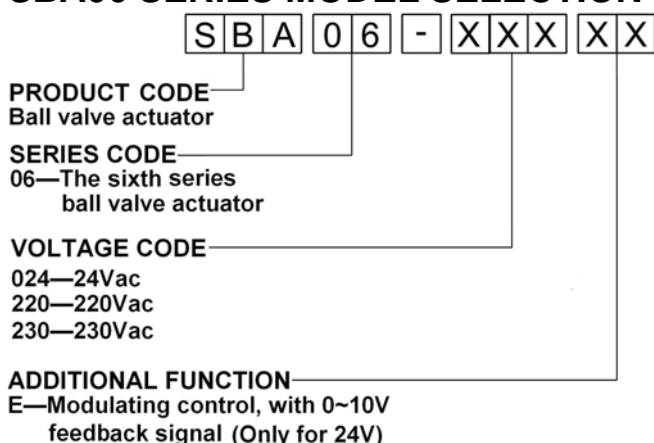
SBA06 series ball valve actuator is using bi-directional motor. Matching with SBV series flange ball valve, it is mainly used in central air-conditioning system, heating system, water treatment, and production industry to control the flow of chilled/hot medium.



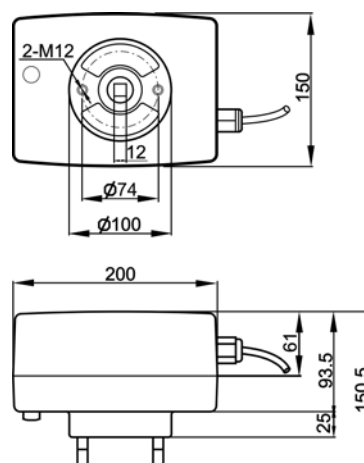
CHARACTERISTIC

- Bi-directional AC motor
- Easy & flexible installation
- Position feedback auxiliary switch for option
- High strength die-casting aluminum alloy chassis, fireproof ABS engineering plastic, measure up UL94V-0 standard
- Built-in limiter for power saving and longer motor life
- Suitable for DN125-DN150 flanged ball valve
- 0(2)~10V dc or 0(4)~20mA dc control input signal, proportional control, and 0~10V feedback signal.

SBA06 SERIES MODEL SELECTION



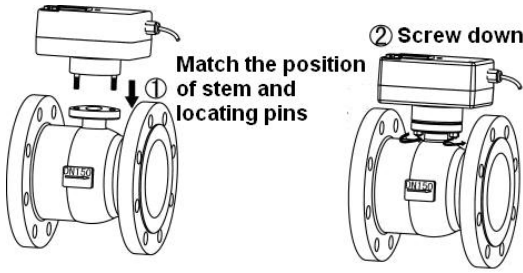
DIMENSIONS



SPECIFICATIONS AND DATA

MODEL	SBA06-024E	SBA06-024	SBA06-220	SBA06-230
POWER SUPPLY	24Vac	24Vac	220Vac	230Vac
POWER CONSUMPTION	Load 11VA	Load 10VA		
CONTROL SIGNAL	0(2)~10V dc or 0(4)~20mA dc	—		
DEFAULT SETTING	Input: 0~10Vdc Work mode: DA	—		
CURRENT FREQUENCY	50/60Hz			
TORQUE	≥65Nm			
OPERATION TIME (0~90 °)	120s (50Hz) / 100s (60Hz)			
ROTATABLE ANGEL	90° < Limiter ≤ 95°			
CONNECTING WIRES	0.5~1 mm ²			
MATERIAL	HOUSING	ABS self-queching engineering plastic		
	CHASSIS	Die-casting aluminum alloy		
	GEAR	Brass HPb59-1; Steel 40Cr,45		
OPERATION TEMP.	-5~+50℃			
STORAGE TEMP.	-30~+70℃			
IP CLASS	IP54			

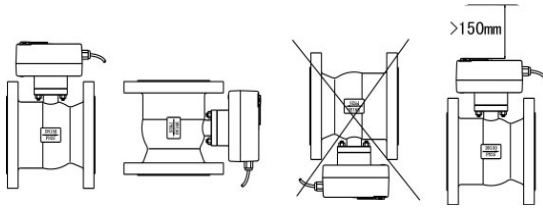
INSTALLATION



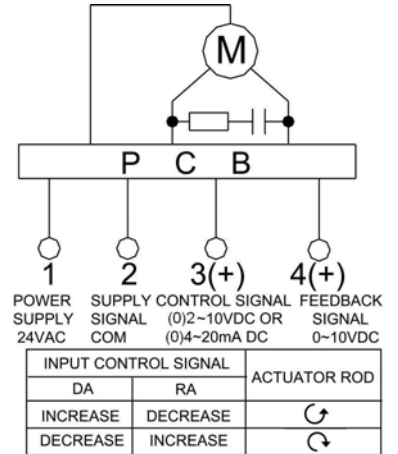
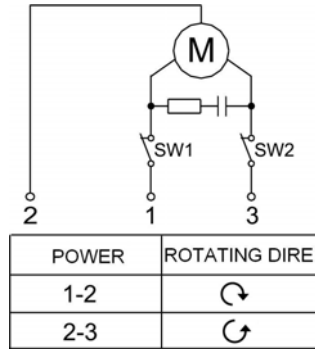
MANUAL LEVER



DIMENSIONS PCB WIRING



WIRING



WARNING:

- Cut off power supply when repairing or maintaining.
- Do not connect or disconnect wire when power is on.

PCB SETTING

- Study status:** After power is on, set JP1 switch as request (refer to the following list). First, switch "4" of JP1 to position ON, then press SW1 STUDY/REPOSITON button, buzzer will sound every 5 seconds, and the actuator stem is going down (opening valve) until gears are blocked (has reached the maximum stroke). Then the stem will go upward until gears are blocked again (has been in the initial position). Buzzer will make a long sound to indicate the study status is over. MCU will keep the data in memory even power is off.
Then switch "4" of JP1 back to position OFF to transform to running status. If this step is missed, the actuator will operate as usual, but it will go through the study status every time when power is on.
- Running status:** The actuator will return to fully closed position every time when power is on. It will close the valve at first, and then the buzzer will make a long sound to indicate the actuator is ready for control signal.
- Study/running status shift:** If user needs to switch study/running status, make sure the JP1 has been set correctly, then press SW1 STUDY/REPOSITON button. Don't need to cut off power.

JP1 SWITCH SETTING					PCB DIAGRAM
STATUS SWITCH	CTRL SIGNAL	0~10V DC	2~10V DC	0~20mA DC	
RUNNING STATUS	DA	OFF ON 1 2 3 4	OFF ON 1 2 3 4	OFF ON 1 2 3 4	OFF ON 1 2 3 4
	RA	OFF ON 1 2 3 4	OFF ON 1 2 3 4	OFF ON 1 2 3 4	OFF ON 1 2 3 4
STUDY STATUS	DA	OFF ON 1 2 3 4	OFF ON 1 2 3 4	OFF ON 1 2 3 4	OFF ON 1 2 3 4
	RA	OFF ON 1 2 3 4	OFF ON 1 2 3 4	OFF ON 1 2 3 4	OFF ON 1 2 3 4

DEFAULT SETTING

OFF ON
1 2 3 4

NOTICE: We strongly recommend that JP1 switch should be set on running status in normal use.

SBV SERIES

FLANGED CAST IRON BALL VALVE BODY

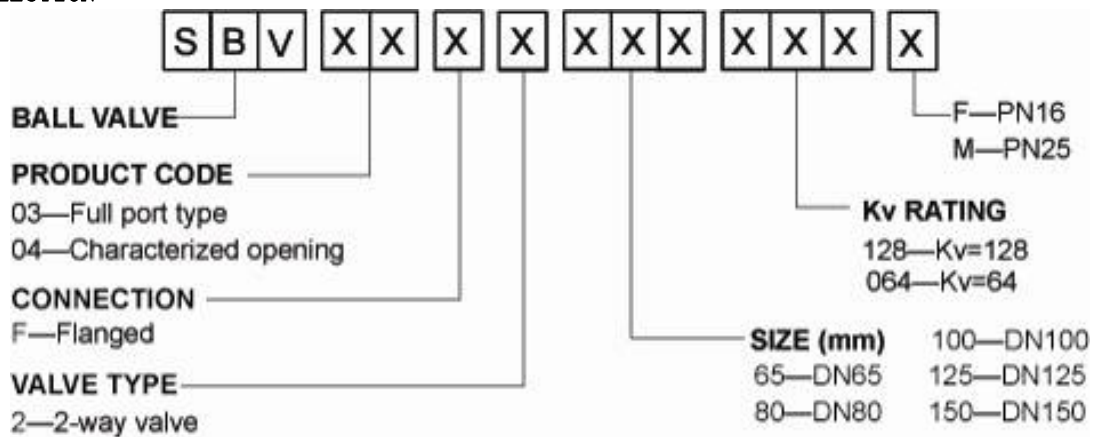
DESCRIPTION

SBV series flange casting iron ball valve bodies are widely used to control water flow in central air-conditioning, heating system. It has SBV03 full port model and SBV04 characterized opening model. Matched with SBA05 and SBA06 series actuator, the valve is driven by actuators and can be rotated to different angle. There are five sizes: DN65, DN80, DN100, DN125 and DN150. And there are full port and characterized opening types.



ACTUATOR APPLICATION	VALVE SIZE	ACTUATOR CONNECTION
SBA05	DN65, DN80, DN100	Screw cap & bolt
SBA06	DN125, DN150	Bolt

MODEL SELECTION



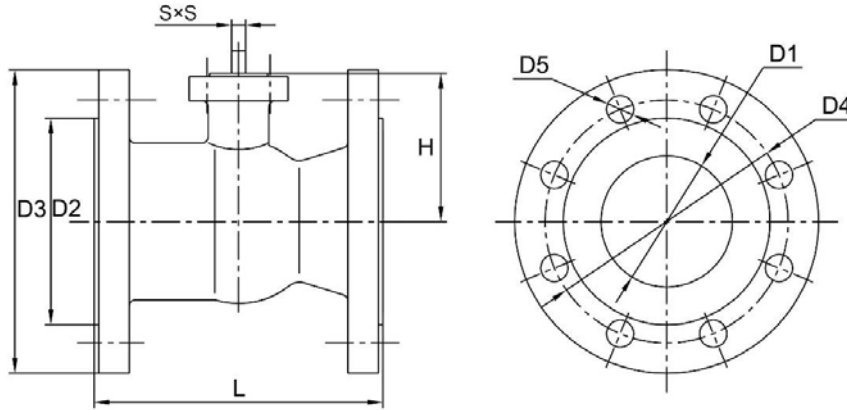
TECHNICAL DATA

MODEL	TYPE	FLOW RATE		SIZE	CLOSS OFF PRES. (MPa)	RATED BODY PRES. (MPa)
		Kv	Cv			
SBV03F265128F(M)	2-way full port	128	150	DN65	0.6	1.6 (2.5)
SBV04F265064F(M)	2-way chara. opening	64	75			
SBV03F280136F(M)	2-way full port	136	159	DN80		
SBV04F280102F(M)	2-way chara. opening	102	119			
SBV03F2100218F(M)	2-way full port	218	255	DN100		
SBV04F2100163F(M)	2-way chara. opening	163	190			
SBV03F2125274F(M)	2-way full port	274	320	DN125		
SBV04F2125260F(M)	2-way chara. opening	260	304			
SBV03F2150507F(M)	2-way full port	507	593	DN150		
SBV04F2150416F(M)	2-way chara. opening	416	487			

MATERIALS & TECHNICAL DATA

MATERIAL	VALVE BODY	HT250
	BALL	304 SS
	VALVE SEAT	PTFE
	VALVE STEM	304 SS
	O-RING	NBR
WORKING TEMP.		Chilled/hot water, ≤50% glycol
MEDIA TEMP.		2~94℃

DIMENSIONS (MM)



DIMENSIONS		L	H	D1	D2	D3	D4	D5	S×S	QTY OF FLANGE HOLES	HOLE THREAD
SIZE											
DN65	PN16	190	98	82	120	185	145	18	9×9	4 / 8	M16
	PN25										
DN80	PN16	190	98	82	136	200	160	18	9×9	8	M16
	PN25										
DN100	PN16	230	108	102	156	220	180	18	9×9	8	M16
	PN25				162	235	190	23			M20
DN125	PN16	254	115	125	188	250	210	18	12×12	8	M16
	PN25				270	220	26	M24			
DN150	PN16	267	133	154	210	285	240	22	12×12	8	M20
	PN25				215	300	250	26			M24

INSTALLATION & ADJUSTMENT

SBV series 2-way valve is match to SBA series actuator. Please notice that the mark “—” on valve stem indicates the ports on the valve ball. And make sure the Installation Mark is match with the slot on the actuator stem.

