

SRD03 FLOATING DAMPER ACTUATOR

DESCRIPTION

SRD03 floating damper actuator uses bi-directional AC motor. It is compact, small volume, smart design, and has high IP class and various torques. It is widely used for damper control in air-conditioning system, and angular travel control and zone valve control in water circuit.



CHARACTERISTICS

- VARIOUS TORQUES

— 2, 4, 6, 8, 10, 15, 20, 30 Nm

- HIGH DEPENDABLE PERFORMANCE

— Adjustable limiter

— With overload protection function, the actuator can stop automatically at the end of stroke without limit switch.

- SIMPLE AND CONVENIENT FUNCTION TESTING

It is also convenient to test the function of damper operation: push the manual button on the actuator, the gearings inside the actuator will break away. The damper can be operated manually as keeping push the manual button.

PLEASE DO NOT OPERATE WHEN POWER IS ON!

- SIMPLE INSTALLATION

Square shaft type: Fix with square damper shaft. Damper shaft dimensions: For 2~10Nm, Ø10~16 □8~11; for 15~30Nm, Ø15~20 □10~14.

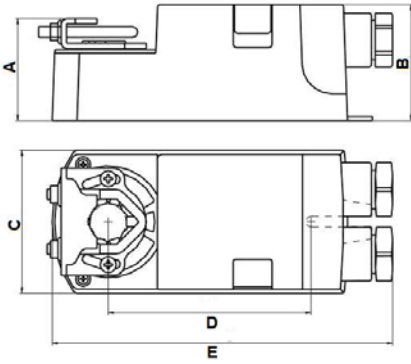
SPECIFICATIONS AND TECHNICAL DATA

MODEL	SRD03-02XXX	SRD03-04XXX	SRD03-06XXX	SRD03-08XXX	SRD03-10XXX	SRD03-15XXX	SRD03-20XXX	SRD03-30XXX
TORQUE	≥2Nm	≥4Nm	≥6Nm	≥8Nm	≥10Nm	≥15Nm	≥20Nm	≥30Nm
OPERATION TIME (50Hz, 90°)	108s (50Hz) / 90s (60Hz)				125s (50Hz)	118s (50Hz)		165s (50Hz)
POWER CONSUMPTION	24V, 110V and 120V products: 3VA 220V and 230V products: 6VA					24V: 4.5VA 220V: 8VA		
CABLE	0.5~1.5mm ²							
ROTATE ANGLE	90° < Mechanical limitation ≤ 95°							
NOISE LEVEL	Maximum 45dB(A)							
IP CLASS	IP 54							
AMBIENT TEMP.	-5°C ~ +50°C							
STORAGE TEMP.	-30°C ~ +70°C							
USEFUL LIFE	>60000 cycles							

Notice: Power supply: rated voltage±10%

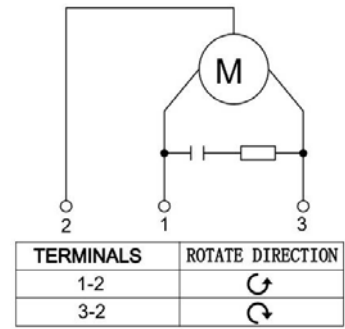
XXX indicates the voltage of power supply.

DIMENSIONS (mm)

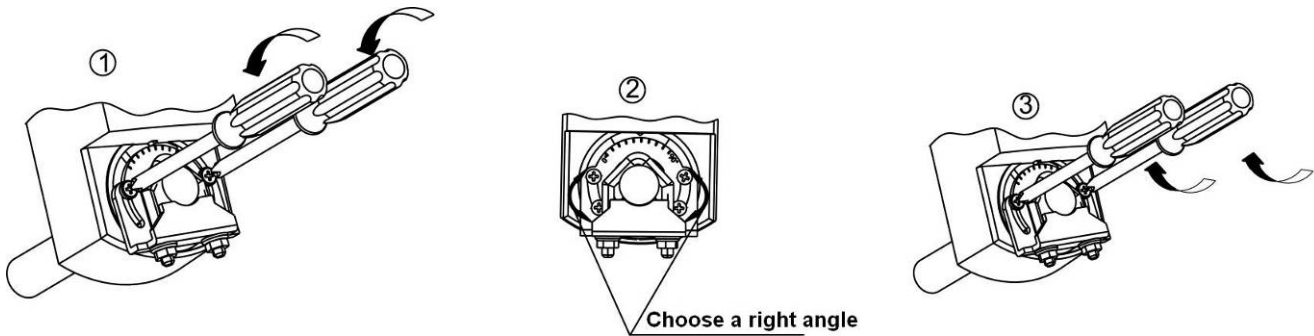


Model	Dimensions (mm)				
	A	B	C	D	E
SRD03-02... SRD03-10	47.5	54	66.5	94	158
SRD03-15... SRD03-30	50.5	58	90	151	208

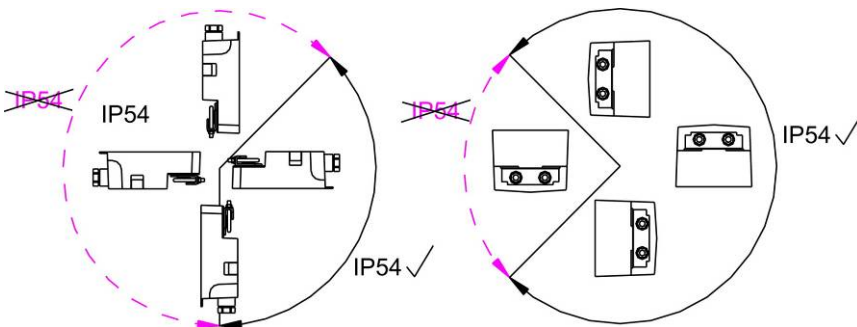
WIRING DIAGRAM



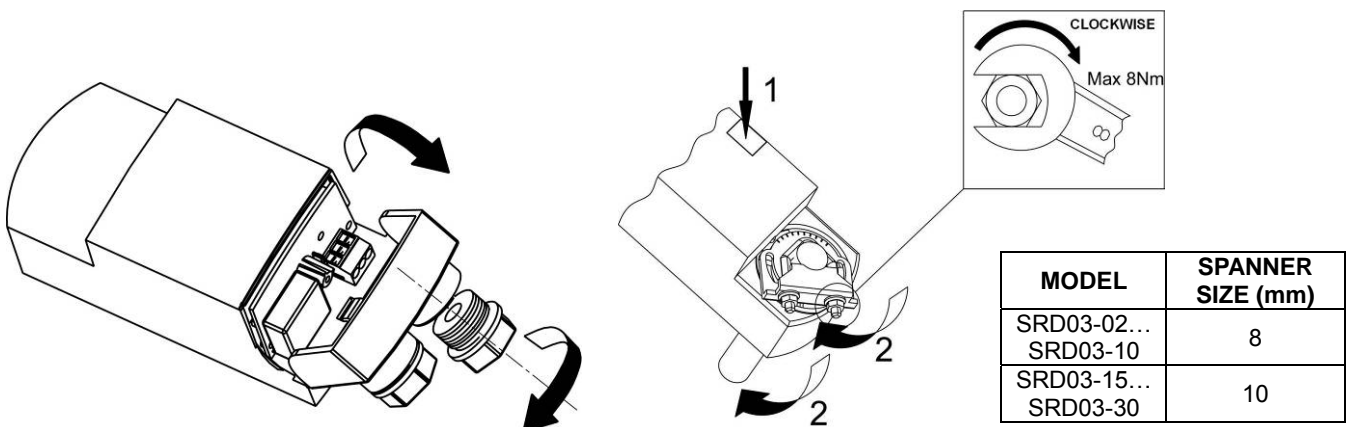
LIMITED ANGLE DIAGRAM



INSTALLATION POSITION & IP CLASS



DISASSAMBLING WIRING TERMINAL



D04	D03	D02	D01
090417	081024	070629	070329

SRD03 INTELLIGENT DAMPER ACTUATOR

DESCRIPTION

SRD03 intelligent damper actuator is an electromechanical product, which uses bi-directional AC synchron motor. It is compact, small volume, smart design, and has high IP class and various torques. The actuator will automatically adjust and record stroke. SRD03 intelligent damper actuator is widely used for damper control in air-conditioning system, and angular travel control and zone valve control in water circuit.



CHARACTERISTICS

- VARIOUS TORQUES

— 2, 4, 6, 8, 10, 15, 20, 30 Nm

- HIGH DEPENDABLE PERFORMANCE

— Adjustable limiter

— Hall switch sensor

— With overload protection function, the actuator can stop automatically at the end of stroke without limit switch.

- SELF-ADJUSTING FUNCTION, AUTOMATIC RECORD STROKE DATA

- WORKING STATUS FAST SHIFT

- ACCEPT 0(2)~10VDC OR 0(4)~20mA DC INPUT SIGNAL, PROPORTIONAL CONTROL

- 0~10 VDC FEEDBACK SIGNAL

- SIMPLE AND CONVENIENT FUNCTION TESTING

It is also convenient to test the function of damper operation: push the manual button on the actuator, the gears inside the actuator will break away. The damper can be operated manually as keeping push the manual button. PLEASE DO NOT OPERATE WHEN POWER IS ON!

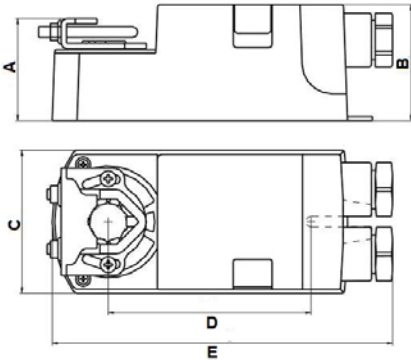
- SIMPLE INSTALLATION

Square shaft type: Fix with square damper shaft. Damper shaft dimensions: for 2~10Nm, Ø10~16 □8~11; for 15~30Nm, Ø15~20 □10~14

SPECIFICATIONS AND TECHNICAL DATA

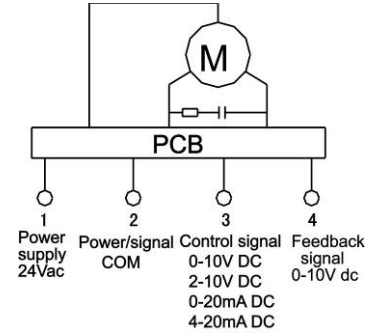
MODEL	SRD03-02024E	SRD03-04024E	SRD03-06024E	SRD03-08024E	SRD03-10024E	SRD03-15024E	SRD03-20024E	SRD03-30024E
TORQUE	≥2Nm	≥4Nm	≥6Nm	≥8Nm	≥10Nm	≥15Nm	≥20Nm	≥30Nm
OPERATION TIME (50Hz, 90°)	108s (50Hz) / 90s (60Hz)				125s (50Hz)	118s (50Hz)		165s (50Hz)
POWER COMP.	4VA					5.5VA		
POWER SUPPLY	24Vac±10%							
CONTROL SIGNAL	0-10Vdc; 2-10Vdc; 0-20mA dc or 4-20mA dc							
CABLE	0.5~1.5mm ²							
ROTATE ANGLE	90° < Mechanical limitation ≤ 95°							
NOISE LEVEL	Maximum 45dB(A)							
POSITION INDICATION	0~10Vdc position feedback signal output							
IP CLASS	IP 54							
AMBIENT TEMP.	-5°C ~ +50°C							
STORAGE TEMP.	-30°C ~ +70°C							
USEFUL LIFE	>60000 cycles							

DIMENSIONS (mm)

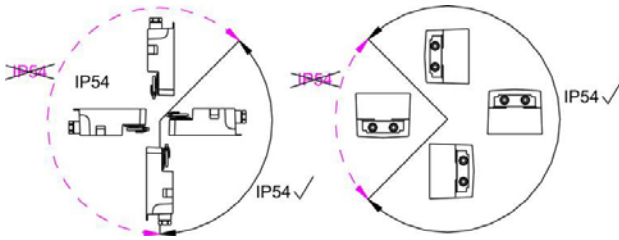


Model	Dimensions (mm)				
	A	B	C	D	E
SRD03-02... SRD03-10	47.5	54	66.5	94	158
SRD03-15... SRD03-30	50.5	58	90	151	208

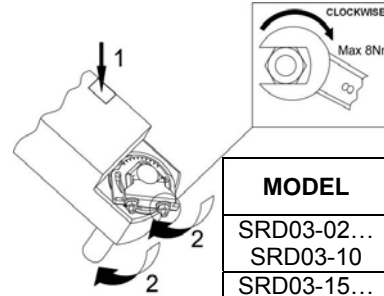
INPUT CONTROL SIGNAL		ROTATE DIRECTION
DA	RA	
INCREASING	DECREASING	
DECREASING	INCREASING	



INSTALLATION POSITION & IP CLASS

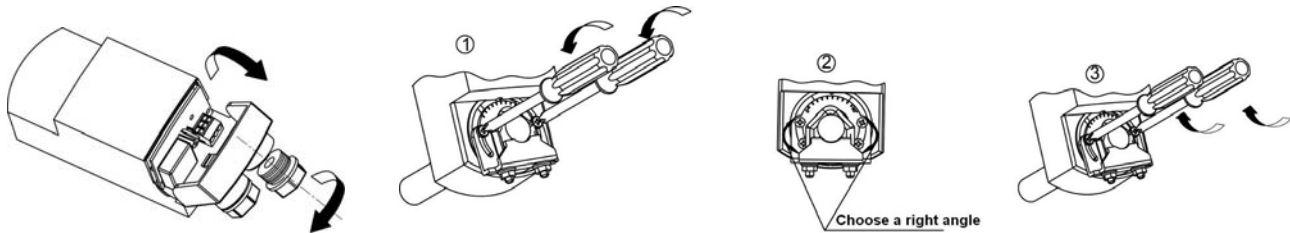


INSTALLATION



MODEL	SPANNER SIZE (mm)
SRD03-02... SRD03-10	8
SRD03-15... SRD03-30	10

DISASSAMBLY WIRING TERMINAL



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 is running clockwise (opening) until gears are blocked (has reached the maximum stroke). Then the actuator will go back until gears are blocked again (has been at 0° 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 reposition (search 0° 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.
- Working status shift:** If user needs to shift to other working 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:					DEFAULT SETTING
CONTROL SIGNAL		0~10V DC	2~10V DC	0~20mA DC	
RUNNING STATUS	DA				
	RA				
STUDY STATUS	DA				
	RA				

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

D03	D02	D01
090417	081024	070428