

This damper actuator is designed for damper control in HVAC systems.

**◆ Features**

- Torque: 10Nm, 20Nm
- Nominal Voltage: AC/DC 24V and AC 230V
- Control Method: 2 point/3 point


**◆ Order Code**

S8081-XXDX/X

Supply Voltage: AC/DC 24V and AC 230V  
 Auxiliary Switches F: 2 SPDT  
 N: no SPDT  
 Control Type: D(Digital) on/off  
 Torque: 10Nm, 20Nm



**◆ S8081-10/20D Technical Specifications**

Items	S8081-10DN(F)	S8081-20DN(F)
Torque (Nm)	10Nm	20Nm
Stopping Torque (Nm)	> 10Nm	> 20Nm
Damper Size (m <sup>2</sup> )	2m <sup>2</sup>	4m <sup>2</sup>
Running Time (sec)	60s	75s
Nominal Voltage (V)	AC/DC 24V; AC 230V 50/60Hz	
Supply Voltage Range	AC/DC 19.2-28.8V; AC 85-265V	
Power Consumption (on)	2.5W(24V); 3.5W(230V)	
Power Consumption (off)	0.7W(24V); 1W(230V)	
Reactive Power (VA)	7	
Weight (Kg)	0.9Kg	
Control Signal	2 point/3 point	
Rotation Angle	0~90°(Max 93°)	
Rotation Direction	L/R switch	
Positional Feedback	None or 2 Auxiliary Switches	
Life Cycle	≥70000	
Sound Power Level	≤45dB	
Electrical Protection Class	II/III	
Ingress Protection	IP54	
Ambient Temperature	-30~+50°C	
Ambient Humidity	5~95% RH	
Storage Temperature	-40~+80°C	
Shaft Diameter	 12-26.7 mm, pair with Shaft Block 3 for smaller shafts	
Accessories	1m cable	
Compliance	CE, UKCA, UL, EAC, RoHS certificates	

## S8081 Series Standard Damper Actuators

This damper actuator is designed for damper control in HVAC systems.

### ◆ Features

- Torque: 10Nm, 20Nm
- Nominal Voltage: AC/DC 24V
- Control Method: 0(2)-10V or 0(4)-20mA Analogue


### ◆ Order Code

S8081-XXAX/X

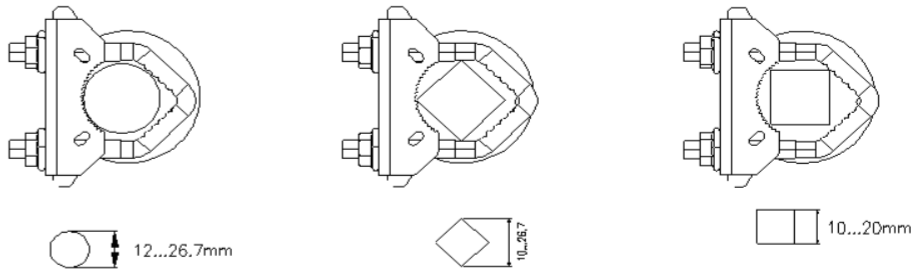
Supply Voltage: AC/DC 24V  
 Auxiliary Switches F: 2 SPDT  
 N: no SPDT  
 Control Type: A(Analogue) Modulating  
 Torque: 10Nm, 20Nm



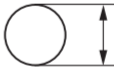

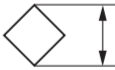
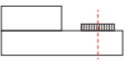
### ◆ S8081-10/20A Technical Specifications

Items	S8081-10AN(F)	S8081-20AN(F)
Torque (Nm)	10Nm	20Nm
Stopping Torque (Nm)	>10Nm	>20Nm
Damper Size (m <sup>2</sup> )	2m <sup>2</sup>	4m <sup>2</sup>
Running Time (sec)	60s	75s
Nominal Voltage (V)	AC/DC 24V; AC/DC 24V 50/60Hz	
Supply Voltage Range	AC/DC 19.2-28.8V	
Power Consumption (on)	2.5W	
Power Consumption (off)	0.7W	
Reactive Power (VA)	7	
Weight (Kg)	0.9Kg	
Control Signal	0(2)-10V or 0(4)-20mA Analogue	
Rotation Angle	0~90°(Max 93°)	
Rotation Direction	L/R switch	
Positional Feedback	None or 2 Auxiliary Switches	
Life Cycle	≥70000	
Sound Power Level	≤45dB	
Electrical Protection Class	III	
Ingress Protection	IP54	
Ambient Temperature	-30~+50°C	
Ambient Humidity	5~95% RH	
Storage Temperature	-40~+80°C	
Shaft Diameter	 12-26.7 mm, pair with Shaft Block 3 for smaller shafts	
Accessories	1m cable	
Compliance	CE, UKCA, UL, EAC, RoHS certificates	

◆ S8081-10/20 Shaft Dimensions



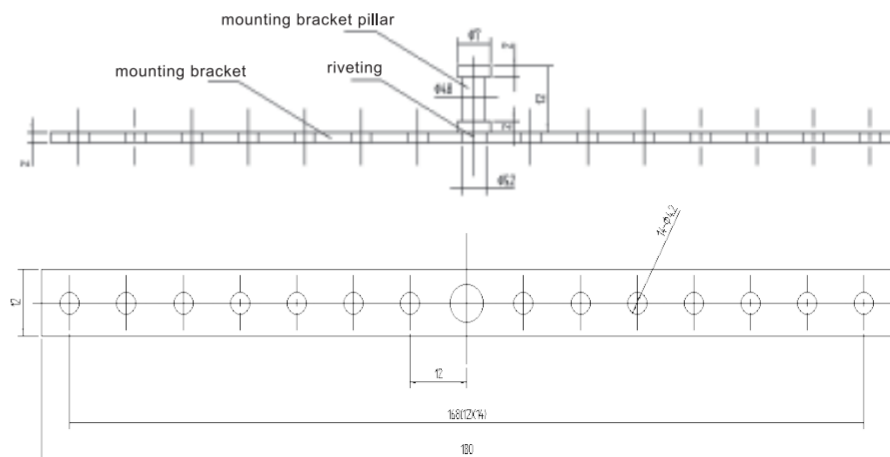
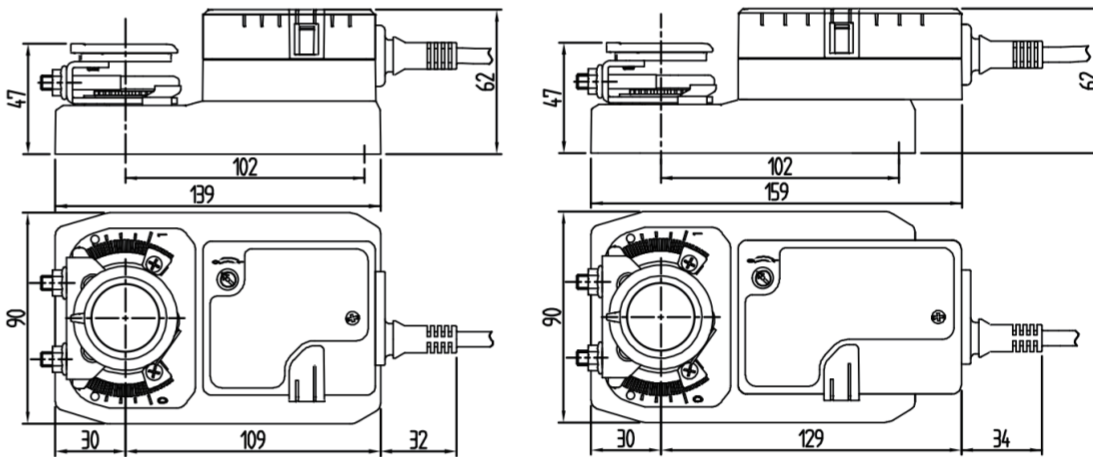
Unit: mm

Shaft	Length			
	≥42	12.....26.7	≥10	≤26.7

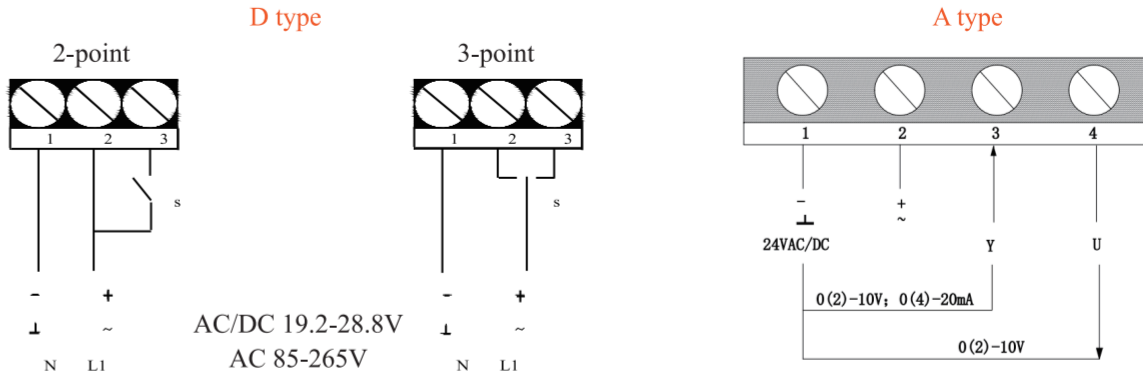
◆ S8081-10/20 Dimensions unit (mm)

S8081-10/20AN/24V  
S8081-10/20DN/24V

S8081-10/20AF/24V  
S8081-10/20DF/24V  
S8081-10/20DN(F)/230V

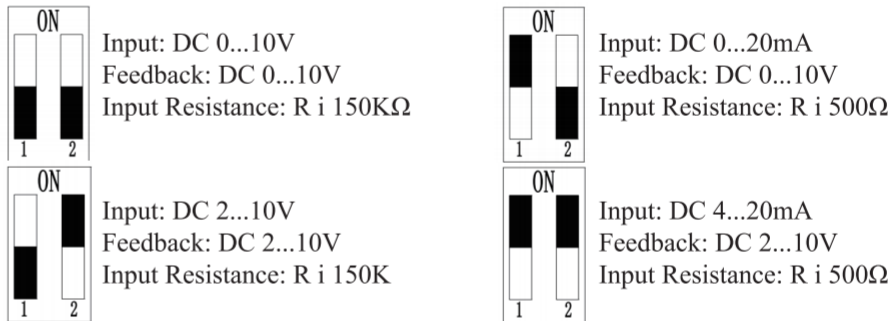


◆ S8081 Wiring Diagrams

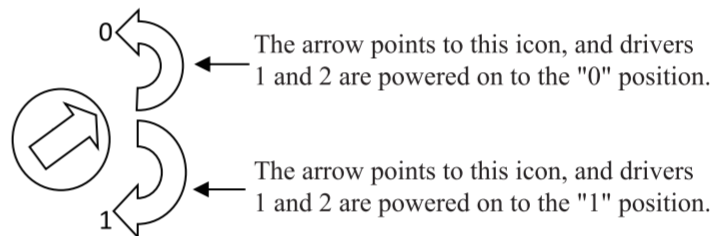


◆ A Type Control Signal and Input Impedance Selections

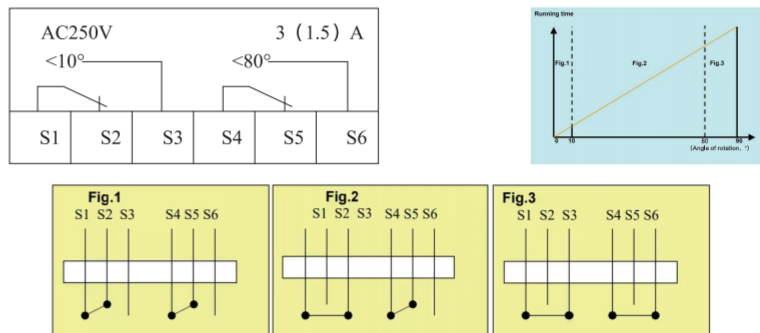
According to the needs of the site, the position of the SW1 DIP switch in the circuit board can be adjusted to achieve the conversion of control signal and feedback signal, see the figure below for details



◆ Direction of Rotation



◆ Auxiliary Switch Diagrams



1. The installation must be carried out by personnel who have received relevant training or relevant work experience. During the installation process, be careful not to operate with power on, and install the actuator according to the regulations.
2. The device contains electrical and electronic accessories, so it is prohibited to dispose of it as ordinary garbage after the product is scrapped. The disposal method should comply with the regulations and requirements of the local government.