

# F30F series Fire Smoke Damper Actuator



The damper actuator are specially designed for the air dampers of the HVAC Systems.

**Torque:**

3.5Nm、5Nm、 10Nm、 15Nm、 20Nm

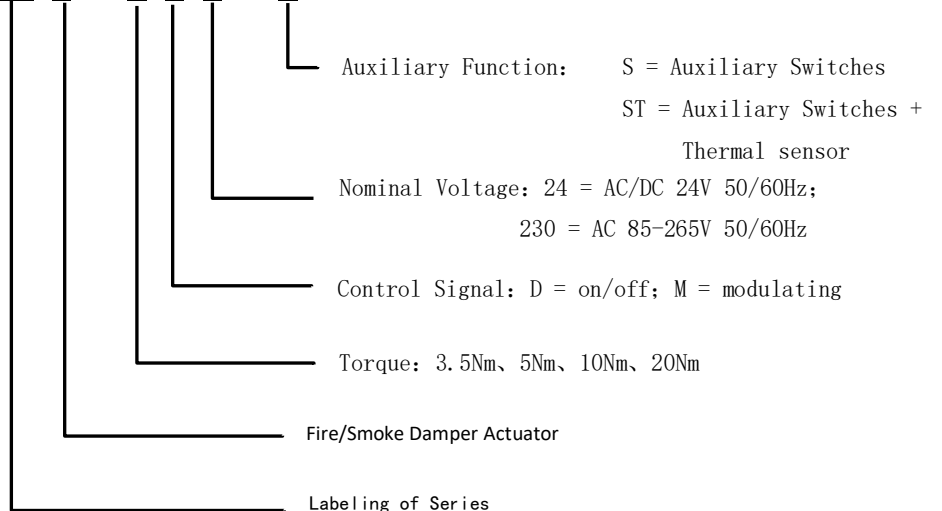
**Supply voltage and Control signal:**

AC/DC19.2-28.8V or AC85-265V, on/off

AC/DC19.2-28.8V, 0-10V modulating

**Order Code:**

**F30 F - X X X - X**



# F30F series Fire Smoke Damper Actuator

## 3.5Nm Product Table



Model	Torque	Running Time	Nominal Voltage	Auxiliary Function
F30F-3.5D24-S	3.5Nm	motor<70s; spring returning< 30s	AC/DC 24V or AC 230V	2 SPDT
F30F-3.5D230-S				
F30F-3.5M24-S				
F30F-3.5D24-ST				2 SPDT & Thermal sensor
F30F-3.5D230-ST				

## F30F-3.5-S Specifications

Model	F30F-3.5D24-S	F30F-3.5D230-S	F30F-3.5M24-S
	F30F-3.5D24-ST	F30F-3.5D230-ST	

### Electrical Specifications

Nominal Voltage (V)	AC/DC 24V 50/60Hz	AC 230V 50/60Hz	AC/DC 24V 50/60Hz
Nominal Voltage Range	AC/DC 19.2-28.8V	AC 85-265V	AC/DC 19.2-28.8V
Power consumption	2.5W (in operation) 1.6W (Holding)		
Cable	on/off: 1m cable 2*0.75mm <sup>2</sup> ; modulating: 1m cable 4*0.5mm <sup>2</sup> ; Signal feedback: 1m cable 6*0.5mm <sup>2</sup>		

### General Parameters

Torque	3.5Nm		
Damper area (m <sup>2</sup> )	0.8		
Running time	motor<70s; spring returning<30s		
Control	on/off		0-10V
Angle of rotation	0~90° (Max 93°)		
Direction of rotation	L/R switches		
Positional feedback	2 SPDT		
Life cycle	≥70000		
Noise level	50dB; 62dB		

### Operation Environment

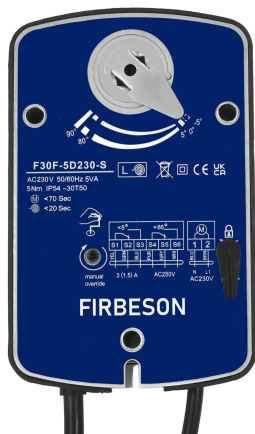
Protection class	II/III		
Protection level	IP54		
Ambient temperature	-30~+55°C, Max safe operating temp: 75° C		
Ambient humidity	5~95%RH		
Non-operating temperature	-40~+80°C		

### Dimensions

Shaft	10*10/12*12mm		
Weight (Kg)	1.2		
Certificates	CE, UKCA, UL, RoHS		

# F30F series Fire Smoke Damper Actuator

## 5Nm Product Table



Model	Torque	Running Time	Nominal Voltage	Auxiliary Function
F30F-5D24-S	5Nm	motor<70s;	AC/DC 24V or AC 230V	2 SPDT
F30F-5D230-S		spring returning < 20s		
F30F-5M24-S		motor<120s;		
F30F-5D24-ST		spring returning<20s		2 SPDT & Thermal sensor
F30F-5D230-ST		motor<70s;		
F30F-5D230-ST	spring returning<20s			

## F30F-5-S Specifications

Model	F30F-5D24-S	F30F-5D230-S	F30F-5M24-S
		F30F-5D24-ST	

### Electrical Specifications

Nominal Voltage (V)	AC/DC 24V 50/60Hz	AC 230V 50/60Hz	AC/DC 24V 50/60Hz
Nominal Voltage Range	AC/DC19. 2-28. 8V	AC 85-265V	AC/DC19. 2-28. 8V
Power consumption	5W (in operation)		
	2. 5W (Holding)		
Cable	on/off: 1m cable 2*0. 75mm <sup>2</sup> ; modulating: 1m cable 4*0. 5mm <sup>2</sup> ; Signal feedback: 1m cable 6*0. 5mm <sup>2</sup>		

### General Parameters

Torque	5Nm		
Damper area (m <sup>2</sup> )	1		
Running time	motor<70s; spring returning<20s		motor<120s; spring
Control signal	on/off		0-10V
Angle of rotation	0~90° (Max 93°)		
Direction of rotation	L/R switches		
Positional feedback	2 SPDT		1 SPDT
Life cycle	≥70000		
Noise level	50dB; 62dB		

### Operation Environment

Protection class	II/III		
Protection level	IP54		
Ambient temperature	-30~+55°C, Max safe operating temp: 75° C		
Ambient humidity	5~95%RH		
Non-operating temperature	-40~+80°C		

### Dimensions

Shaft	10*10/12*12mm		
Weight (Kg)	1. 6		
Certificates	CE, UKCA, UL, RoHS		

# F30F series Fire Smoke Damper Actuator

## 10Nm Product Table

Model	Torque	Running time	Nominal Voltage	Auxiliary function
F30F-10D24-S	10Nm	motor<100s; spring returning<30s	AC/DC 24V or AC 230V	2 SPDT
F30F-10D230-S				
F30F-10M24-S				
F30F-10D24-ST		motor<120s; spring returning<30s		2 SPDT & Thermal sensor
F30F-10D230-ST				



## F30F-10-S Specifications

Model	F30F-10D24-S	F30F-10D230-S	F30F-10M24-S
	F30F-10D24-ST	F30F-10D230-ST	

### Electrical Specifications

Nominal Voltage (V)	AC/DC 24V 50/60Hz	AC 230V 50/60Hz	AC/DC 24V 50/60Hz
Nominal Voltage Range	AC/DC19.2-28.8V	AC 85-265V	AC/DC19.2-28.8V
Power consumption	5W (in operation) 2.5W (Holding)		
Cable	on/off: 1m cable 2*0.75mm <sup>2</sup> ; modulating: 1m cable 4*0.5mm <sup>2</sup> ; Signal feedback: 1m cable 6*0.5mm <sup>2</sup>		

### General Parameters

Torque	10Nm		
Damper area (m <sup>2</sup> )	2		
Running time	motor<100s; spring returning<30s	motor<120s; spring	
Control	on/off		0-10V
Angle of rotation	0~90° (Max 93°)		
Direction of rotation	L/R switches		
Positional feedback	2 SPDT		
Life cycle	≧70000		
Noise level	50dB; 62dB		

### Operation Environment

Protection class	II /III		
Protection level	IP54		
Ambient temperature	-30~+55°C, Max safe operating temp: 75° C		
Ambient humidity	5~95%RH		
Non-operating temperature	-40~+80°C		

### Dimensions

Shaft	10*10/12*12mm		
Weight (Kg)	2.6		
Certificates	CE, UKCA, UL, RoHS		

# F30F series Fire Smoke Damper Actuator

## 15Nm Product Table



Model	Torque	Running Time	Nominal Voltage	Auxiliary Function
F30F-15D24-S	15Nm	motor<130s; spring returning< 30s	AC/DC 24V or AC 230V	2 SPDT
F30F-15D230-S				
F30F-15M24-S				
F30F-15D24-ST				2 SPDT & Thermal sensor
F30F-15D230-ST				

## F30F-15-S Specifications

Model	F30F-15D24-S	F30F-15D230-S	F30F-15M24-S
	F30F-15D24-ST	F30F-15D230-ST	

### Electrical Specifications

Nominal Voltage (V)	AC/DC 24V 50/60Hz	AC 230V 50/60Hz	AC/DC 24V 50/60Hz
Nominal Voltage Range	AC/DC 19.2-28.8V	AC 85-265V	AC/DC 19.2-28.8V
Power consumption	6W (in operation) 2.5W (Holding)		
Cable	on/off: 1m cable 2*0.75mm <sup>2</sup> ; modulating: 1m cable 4*0.5mm <sup>2</sup> ; Signal feedback: 1m cable 6*0.5mm <sup>2</sup>		

### General Parameters

Torque	15Nm		
Damper area (m <sup>2</sup> )	3		
Running time	motor<130s; spring returning<30s		
Control	on/off	0-10V	
Angle of rotation	0~90° (Max 93°)		
Direction of rotation	L/R switches		
Position	2 SPDT		
Life cycle	≧70000		
Noise level	50dB; 62dB		

### Operation Environment

Protection class	II/III		
Protection level	IP54		
Ambient temperature	-30~+55°C, Max safe operating temp: 75° C		
Ambient humidity	5~95%RH		
Non-operating temperature	-40~+80°C		

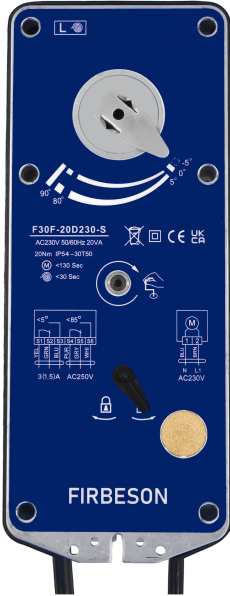
### Dimensions

Shaft	10*10/12*12mm		
Weight (Kg)	2.6		
Certificates	CE, UKCA, UL, RoHS		

# F30F series Fire Smoke Damper Actuator

## 20Nm Product Table

Model	Torque	Running Time	Nominal Voltage	Auxiliary Function
F30F-20D24-S	20Nm	motor<130s; spring returning< 30s	AC/DC 24V or AC 230V	2 SPDT
F30F-20D230-S				
F30F-20M24-S				
F30F-20D24-ST				2 SPDT & Thermal sensor
F30F-20D230-ST				



## F30F-20-S Specifications

Model	F30F-20D24-S	F30F-20D230-S	F30F-20M24-S
	F30F-20D24-ST	F30F-20D230-ST	

### Electrical Specifications

Nominal Voltage (V)	AC/DC 24V 50/60Hz	AC 230V 50/60Hz	AC/DC 24V 50/60Hz
Nominal Voltage Range	AC/DC19. 2-28. 8V	AC 85-265V	AC/DC19. 2-28. 8V
Power consumption	7W (in operation) 2. 5W (Holding)		
Cable	on/off: 1m cable 2*0. 75mm <sup>2</sup> ; modulating: 1m cable 4*0. 5mm <sup>2</sup> ; Signal feedback: 1m cable 6*0. 5mm <sup>2</sup>		

### General Parameters

Torque	20Nm		
Damper area (m <sup>2</sup> )	4		
Running time	motor<130s; spring returning<30s		
Control	on/off		0-10V
Angle of rotation	0~90° (Max 93°)		
Direction of rotation	L/R switches		
Position	2 SPDT		
Life cycle	≧70000		
Noise level	50dB; 62dB		

### Operation Environment

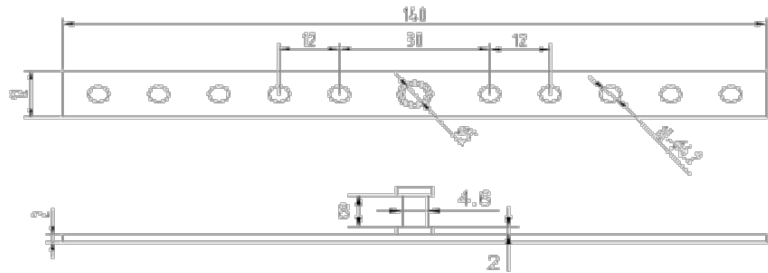
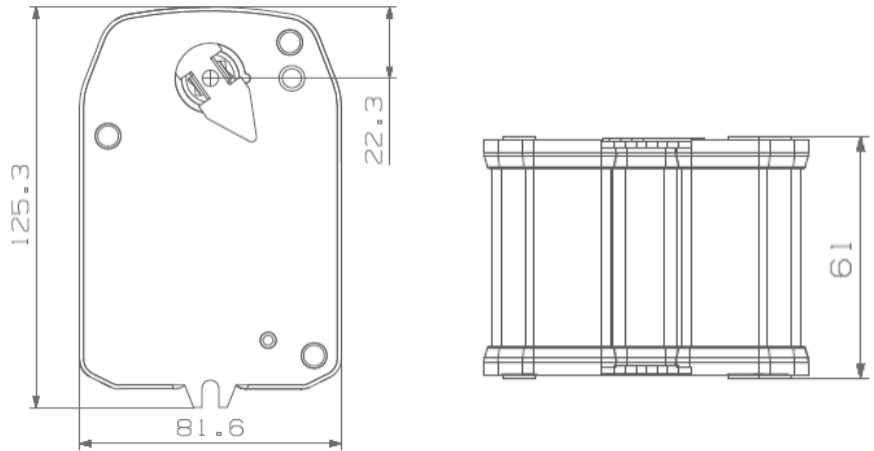
Protection class	II /III		
Protection level	IP54		
Ambient temperature	-30~+55°C, Max safe operating temp: 75° C		
Ambient humidity	5~95%RH		
Non-Operating temperature	-40~+80°C		

### Dimensions

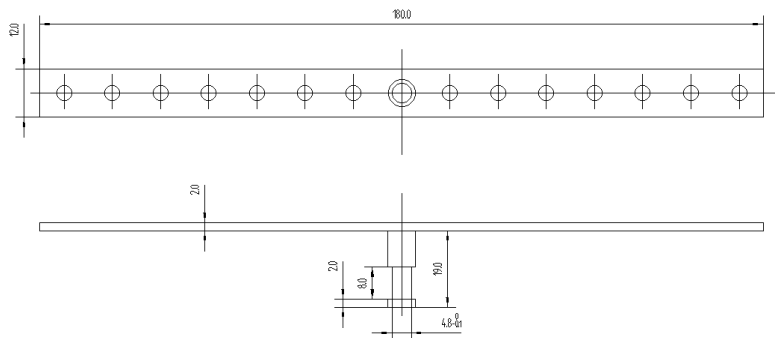
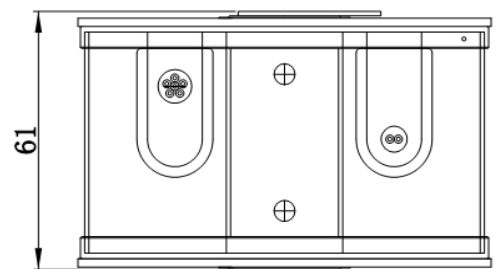
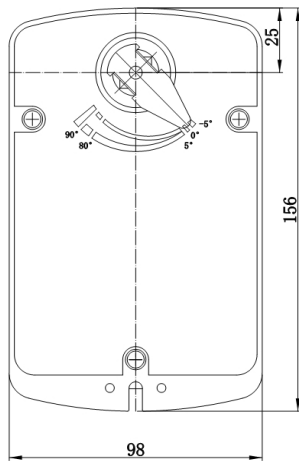
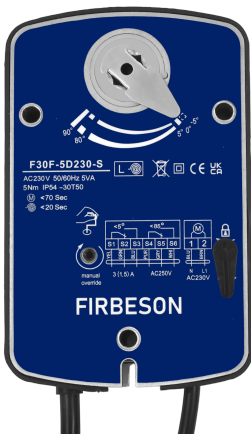
Shaft	10*10/12*12mm		
Weight (Kg)	2. 6		
Certificates	CE, UKCA, UL, RoHS		

# F30F series Fire Smoke Damper Actuator

## F30F-3.5 Dimensions (mm)

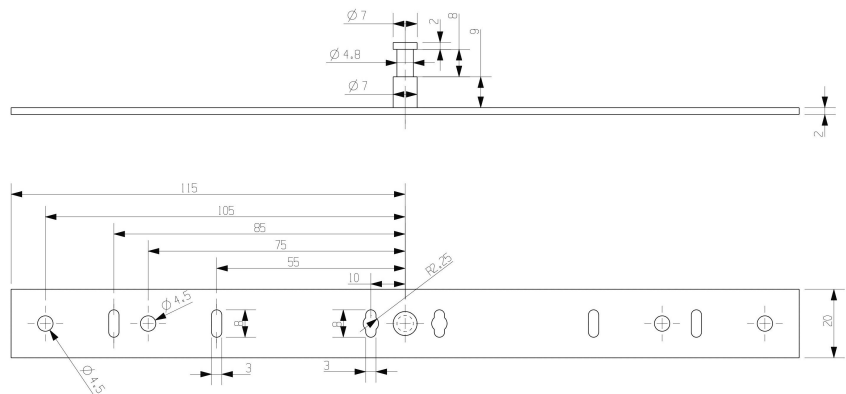
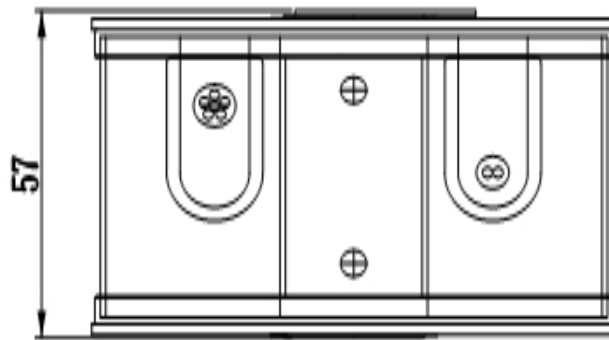
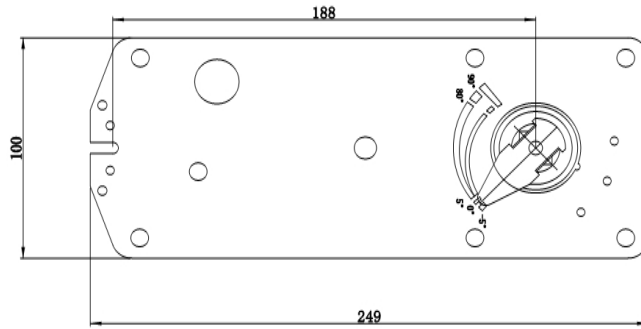


## F30F-5 Dimensions (mm)



# F30F series Fire Smoke Damper Actuator

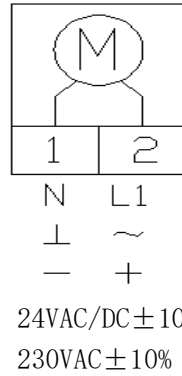
F30F-10/15/20 Dimensions (mm)



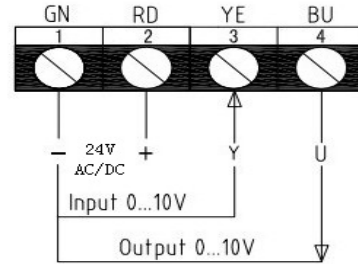
# F30F series Fire Smoke Damper Actuator

## Wiring Instructions

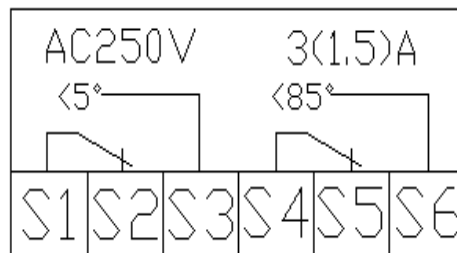
F30F-XD



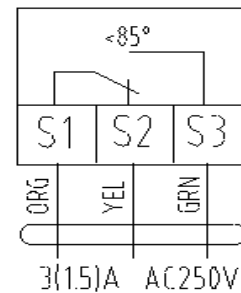
F30F-XM



## Auxiliary switches



## F30F-5M Auxiliary



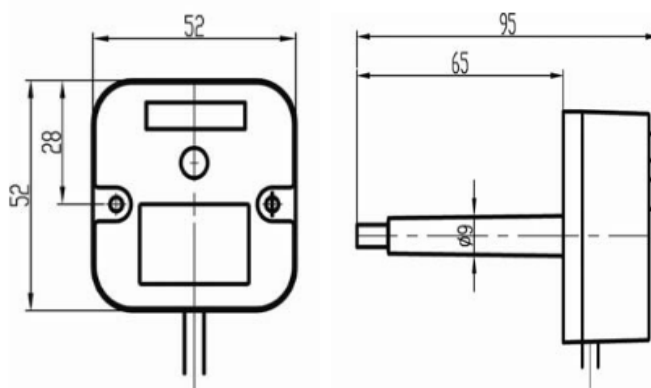
## Special Notice: Manual Operation Instructions

Insert the handle into the hexagon socket and turn it clockwise (or anticlockwise) evenly and slowly in the direction indicated on the product's instruction diagram. The output shaft will then rotate clockwise (or anticlockwise). Once the output shaft reaches the desired position, manually turn the locking key 90° in the direction indicated on the product label. The output shaft will now be locked in place. To unlock, simply turn the locking key clockwise (or anticlockwise) once more.

[Note:] Under no circumstances should manual operation be attempted whilst the actuator is undergoing rapid rebound, as this may result in failure to secure the manual position and damage to components.

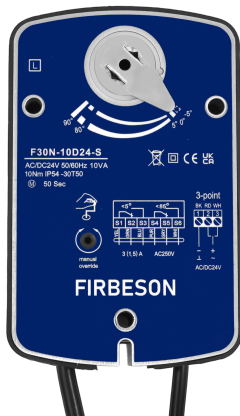
## 72°C Thermal Sensor

Including: Ambient (TS1) and wind chill temperature probe (TS2)  
 When the ambient temperature exceeds 72°C, TS1 will disconnect;  
 When the pipeline temperature exceeds 72°C, TS2 will disconnect.



# F30N series Non-Spring Return Smoke Damper Actuator

The damper actuator are specially designed for the air dampers of the HVAC Systems



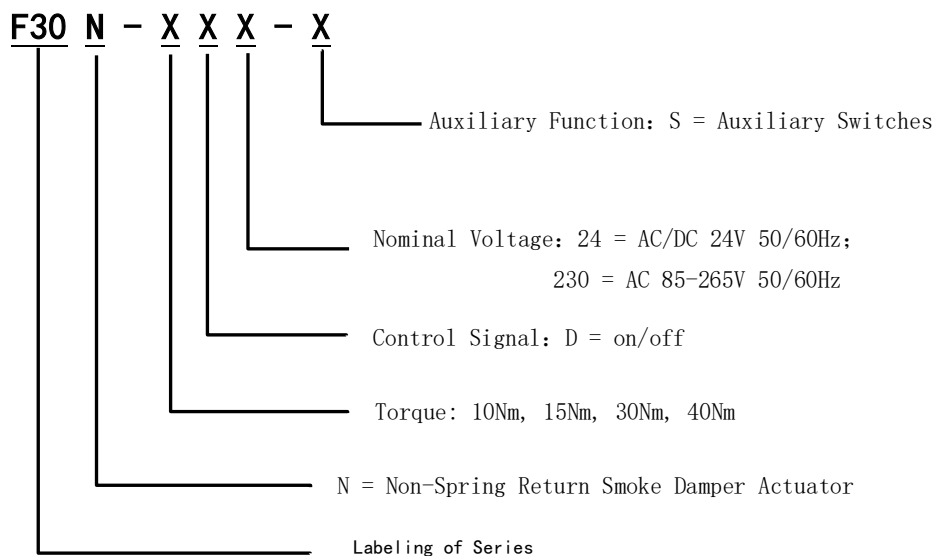
**Torque:**

10Nm、15Nm、30Nm、40Nm

**Supply voltage and Control signal:**

AC/DC 19.2–28.8V or AC 85–265V, on/off

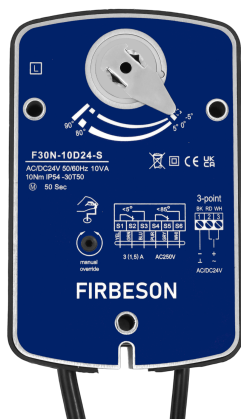
**Order Code:**



# F30N series Non-Spring Return Smoke Damper Actuator

## 10Nm、15Nm Product Table

Model	Torque	Running Time	Nominal Voltage	Auxiliary Function
F30N-10D24-S	10Nm	motor : 50s	AC/DC 24V or AC 230V	2 SPDT
F30N-10D230-S				
F30N-15D24-S	15Nm			
F30N-15D230-S				



## F30N-10/15D-S Specifications

Model	F30N-10D24-S	F30N-15D24-S
		F30N-10D230-S

### Electrical Specifications

Nominal Voltage (V)	AC/DC 24V 50/60Hz; AC 230V 50/60Hz	
Nominal Voltage Range	AC/DC 19.2-28.8V; AC 85-265V	
Power consumption	3W	5W
	1W	1W
Cable	2, 3 points: 1m cable 3*0.75mm <sup>2</sup> ; modulating: 1m cable 4*0.5mm <sup>2</sup> ; signal feedback: 1m	

### General Parameters

Torque	10Nm	15Nm
Damper area (m <sup>2</sup> )	2	3
Running time	motor: 50s	
Control	2, 3 points	
Angle of rotation	0~90° (Max 93°)	
Direction of rotation	L/R switches	
Positional feedback	2 SPDT	
Life cycle	≧70000	
Noise level	50dB	

### Operation Environment

Protection class	II/III
Protection level	IP54
Ambient temperature	-30~+55°C
Ambient humidity	5~95%RH
Non-operating temperature	-40~+80°C

### Dimensions

Shaft	10*10/12*12mm
Weight (Kg)	1.5
Certificates	CE, UKCA, UL, RoHS

# F30N series Non-Spring Return Smoke Damper Actuator

## 30Nm、40Nm Product Table

Model	Torque	Running Time	Nominal Voltage	Auxiliary Function
F30N-30D24-S	30Nm	motor: 60s	AC/DC 24V or AC 230V	2 SPDT
F30N-30D230-S				
F30N-40D24-S	40Nm			
F30N-40D230-S				



## F30N-30/40D-S Specifications

Model	F30N-30D24-S	F30N-40D24-S
	F30N-30D230-S	F30N-40D230-S

### Electrical Specifications

Nominal Voltage (V)	AC/DC 24V 50/60Hz; AC 230V 50/60Hz	
Nominal Voltage Range	AC/DC19.2-28.8V; AC 85-265V	
Power consumption	6W, 6.5W	
	1W	
Cable	2, 3 points: 1m cable 3*0.75mm <sup>2</sup> ; modulating: 1m cable 4*0.5mm <sup>2</sup> ; signal feedback: 1m	

### General Parameters

Torque	30Nm	15Nm
Damper area (m <sup>2</sup> )	6	8
Running time	motor: 60s	
Control	2, 3 points	
Angle of rotation	0~90° (Max93°)	
Direction of rotation	L/R switches	
Positional feedback	2 SPDT	
Life cycle	≧70000	
Noise level	50dB	

### Operation Environment

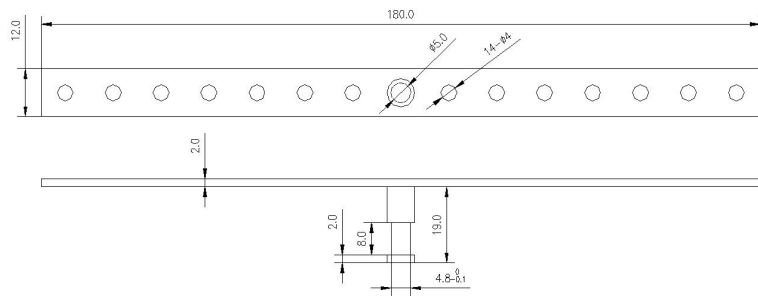
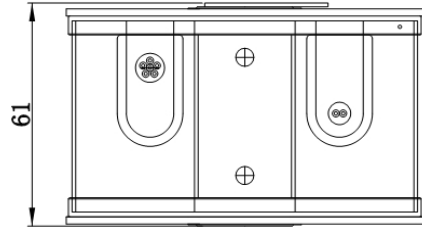
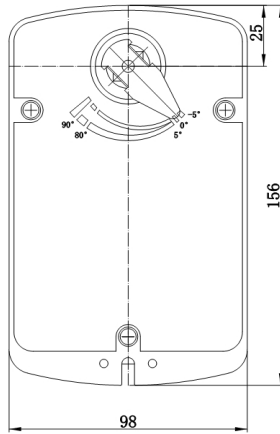
Protection class	II /III	
Protection level	IP54	
Ambient temperature	-30~+55°C	
Ambient humidity	5~95%RH	
Non-operating temperature	-40~+80°C	

### Dimensions

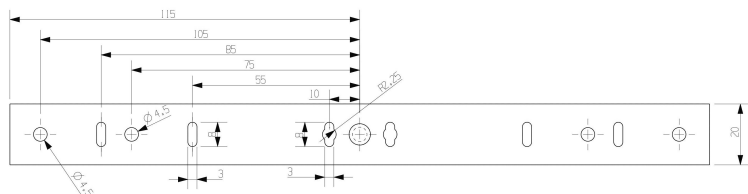
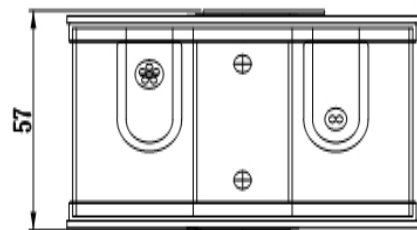
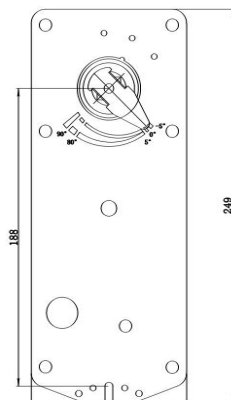
Shaft	10*10/12*12mm	
Weight (Kg)	2	
Certificates	CE, UKCA, UL, RoHS	

# F30N series Non-Spring Return Smoke Damper Actuator

F30N10/15 Dimensions (mm)



F30N30/40 Dimensions (mm)



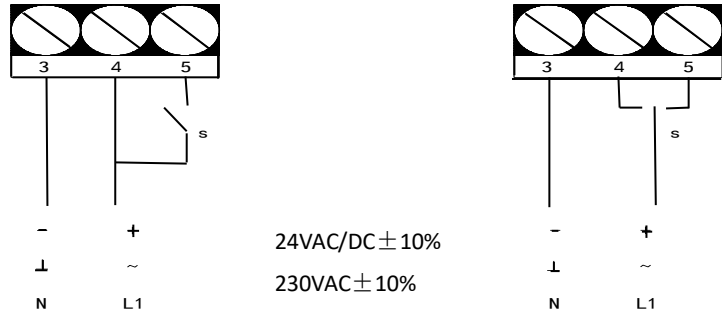
# F30N series Non-Spring Return Smoke Damper Actuator

## Wiring Instructions

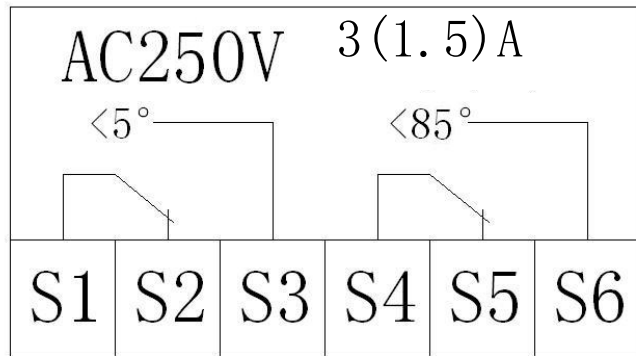


2-point

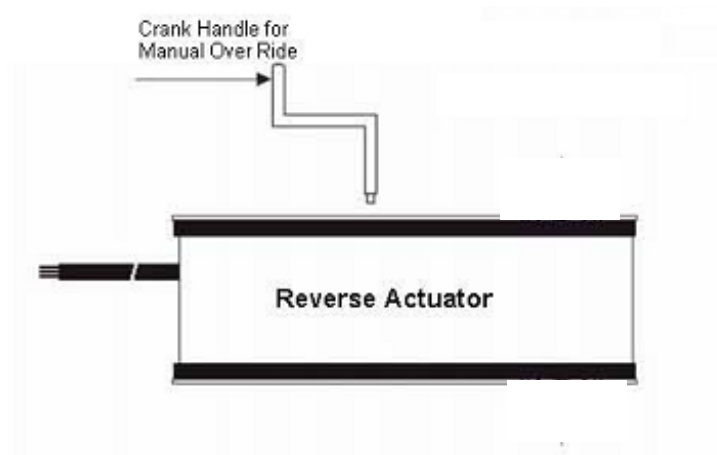
3-point



## Auxiliary Switches



## Manual Operation Instructions



Insert the handle into the inner hexagonal hole and crank the handle evenly and slowly in the clockwise (or counterclockwise) direction as shown on the product mask. The output shaft will rotate clockwise (or counterclockwise) at the same time, so that the output shaft will rotate to the desired position.



Installation must be carried out by personnel who have received relevant training or work experience. During the