

# JSE Series Spring Return Fail-Safe Electric Actuators



## Key Features

Torque outputs from 440 In-Lbs to 2650 In-Lbs Explosion Proof Design (CSA pending)
Fast open and closing cycle speeds
Compression Springs provide high cycle life
Available in 120VAC / 220VAC / 24VDC
ISO-5211 Mounting





Spring-return electric actuator, designed for valves or dampers to return to a safe position on power loss; mechanical spring-return design can ensure that the device to be controlled is fully open or fully closed without external power; under the normal power conditions, the actuator is opened by the motor and spring is compressed. When the system is powered off, the spring releases energy to drive the actuator to return the equipment and devices to a safety position (fully open or fully closed). Safe and stable.

The internal mechanical part of the spring-return electric actuator includes a drive unit, an spring unit and an energy lock unit. The three units are geared to form a complete fail-safe system.

In addition, the optional manual operation device allows users to manually operate the device to the appropriate position and press the lock button to lock. When electronically controlled without manual unlocking.



## **Product advantages**

#### **Product design**

Aluminum Compact structure

#### Safety maintenance

No periodic maintenance is required, and longterm trouble-free operation is possible.

Compression Spring efficiently drives 90 ° full stroke,

#### **Position detection**

The end of travel limit switch are simple to set and reliable

3D dome indicator can be viewed from multiple perspectives,

Optional analog modulating control.

#### **Operational safety**

This product provides the highest level of reliability with a mechanical solution when the valve is opened or closed safely in an emergency. According to requirements, the spring-return electric actuator can generate the required torque through the compression spring.

#### Safety integrity level

The spring-return electric actuator complies with the safety-related SIL2 / SIL 3 standards, is a maintenance-free product, and also provides explosion-proof protection.

#### Adjustable opening speed

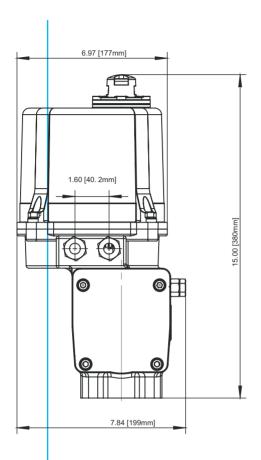
The opening speed of the spring return actuator is adjustable. The actuator can reduce the speed and drive the valve to the preset opening position, thereby avoiding a sudden increase in pressure in the pipeline and effectively protecting the valve and pipeline.

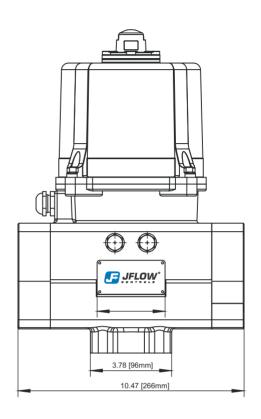
#### **Replaceable connection parts**

The flange and drive sleeve of the actuator are designed according to ISO-5211, and various designs can be used, which is convenient and flexible for direct mount configurations.

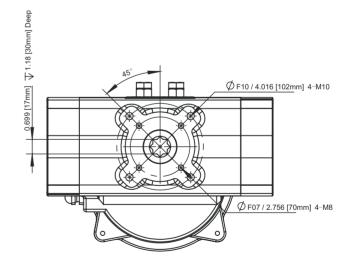
## **Dimensions**





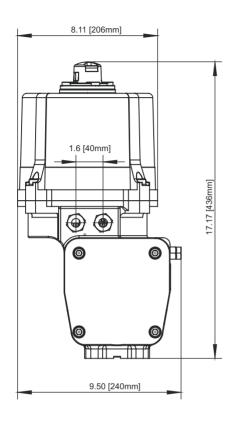


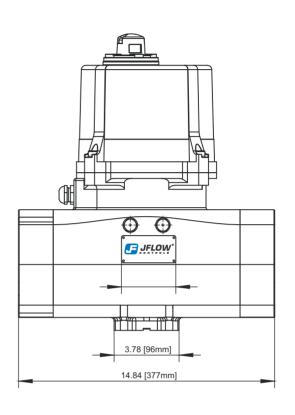




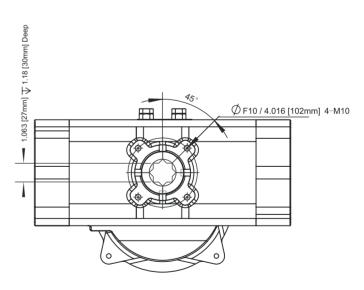
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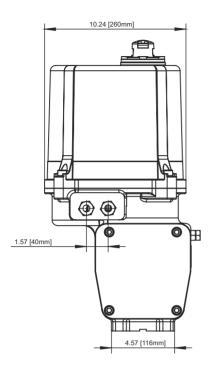


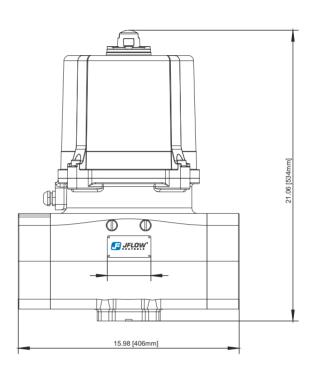


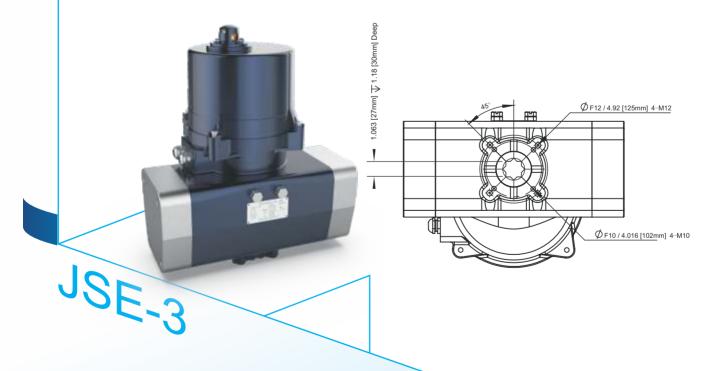


# **Dimensions**









## **Technical Parameters**



| Model                 | JSE-1   |         | JSE-2  | JSE-3   |         |
|-----------------------|---|---------|--------|---------|---------|
| Torque In-Lbs         | 440   | 620     | 1240   | 1770    | 2650    |
| Power (W)             | 60W   | 60W     | 120W   | 200W    | 200W    |
| Voltage (DC/AC)       | 110VAC/220VAC、 24VDC                              |         |        |         |         |
| Frequency (Hz)        | 50/60   |         |        |         |         |
| Duty Cycle            | S2-20Min  |         |        |         |         |
| open time (Sec)       | 8   | 8       | 10     | 12      | 12      |
| Spring return (Sec)   | ≤3  | ≤3      | ≤5     | ≤5      | ≤5      |
| Spring life (Cycles)  | 100000  | 100000  | 100000 | 100000  | 100000  |
| Flange (ISO5211)      | F07/F10   | F07/F10 | F10    | F10/F12 | F10/F12 |
| Temp                  | -13 F to 150 F ( -25~65℃)                         |         |        |         |         |
| Humidity              | 95%   |         |        |         |         |
| Rating                | Ip67, Type 4, 4x & 7C&D                           |         |        |         |         |
| Manual                | Available - consult factory                       |         |        |         |         |
| Manual operation      | power off(System power outage)                    |         |        |         |         |
| Failure direction     | CW Close or CCW Open - must specify when ordering |         |        |         |         |
| Stop halfway          | Electromagnetic brake control                     |         |        |         |         |
| Cable                 | 2* 1/2" NPT                                       |         |        |         |         |
| Lubricant             | Grease  |         |        |         |         |
| Limit mode            | 2open/2close limit switch                         |         |        |         |         |
| Switch signal         | Dry Aux limit switch feedback                     |         |        |         |         |
| Mechanical limit      | Full mechanical limit                             |         |        |         |         |
| Explosion-proof grade | Class 1, Div 1, Grps C &D, Ex d IIB(C)T4(6)       |         |        |         |         |
| Color                 | Blue  |         |        |         |         |



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