

NAFA 5Nm Spring Return Damper Actuator

2 Point Spring Return Control



NAFA series Spring Return actuators are developed for general air damper application, rotary valve and other devices which require a fail-safe function. During normal operation, the actuator motorized the device. In the event of power outage, the actuator springs back to its original position.

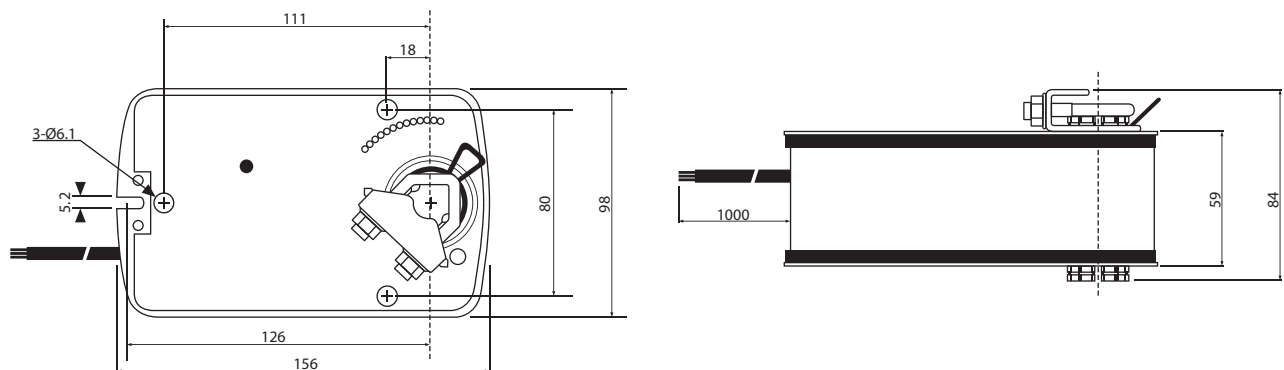
Features

- Torque 5 Nm
- Damper size 0.6 m² (Normal on-off application)
- Power supply AC/DC 24V and AC 230 V
- Shaft dimensions - 11 mm hexagonal
- Minimum Shaft Length 40 mm
- Adjustable angle of rotation
- Selectable direction of rotation of reversing actuator
- Actuator with 1 m cable connection
- Optional 1 Adjustable SPDT auxiliary switch

Model Selection Table

| MODEL / TYPE | TORQUE | POWER SUPPLY | RUNNING TIME | Model/Type |
|--------------|--------|------------------|--------------------------------------|--------------------------|
| NAFA 1-05 | 5 Nm | AC/DC 24 V ± 10% | 50...70 sec (Spring Back <20 sec) | - |
| NAFA 1-05S1 | 5 Nm | AC/DC 24 V ± 10% | 50...70 sec (Spring Back <20 sec) | 1 x SPDT (Adjustable) |
| NAFA 2-05 | 5 Nm | AC 230 V ± 10% | 50...70 sec (Spring Back <20 sec) | - |
| NAFA 2-05S1 | 5 Nm | AC 230 V ± 10% | 50...70 sec (Spring Back <20 sec) | 1 x SPDT (Adjustable) |

Model Selection Table



NAFA 5Nm

Spring Return Damper Actuator

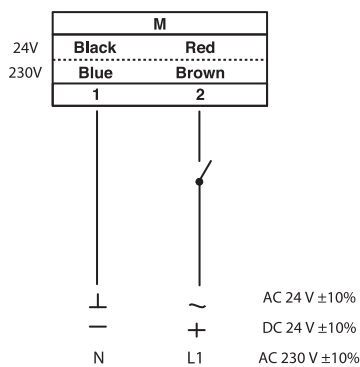
2 Point Spring Return Control

Technical Specification

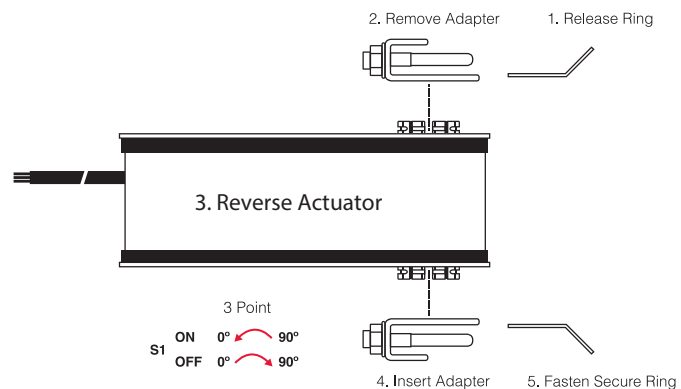
| | NAFA 1-05 (S1) | NAFA 2-05 (S1) |
|---------------------------|-----------------------------------|-----------------------------------|
| Torque | 5 Nm | |
| Damper size | 0.6 m ² | |
| Shaft dimensions | 11mm hexagonal | |
| Power supply | AC/DC 24 V ± 10% | AC 230 V ± 10% |
| Frequency | 50...60 Hz | |
| Control Signal | 2 point control | |
| POWER CONSUMPTION | | |
| - Operating | 7.2 W | 4.2 W |
| - End position | 2.5 W | 2.5 W |
| For wire sizing | 10.0 VA | |
| Electrical Connection | 1 m Cable | |
| Auxiliary Switches Rating | 3 (1.5) A, AC 250 V | |
| Protection Class | Class II <input type="checkbox"/> | Class II <input type="checkbox"/> |
| Angle of rotation | 90° (95° mechanical) | |
| Weight | 1.8 Kg | 1.8 Kg |
| Life cycle | 60,000 rotation | |
| Sound level | 45 dB | |
| IP protection | IP54 | |
| Operating Temperature | -20°...50° as per IEC 721-3-3 | |
| Non-Operating Temperature | -30°...+60° C / IEC 721-3-2 | |
| Ambient Humidity | 5%...95% rH non condensing / EN | |
| Maintenance | Maintenance Free | |
| Mode of Operation | Type I / EN 60730-1 | |
| EMC | CE & ISO 9000 EN / EEC | |

Wiring Diagram

WIRING DIAGRAM NAFA...05 (S1)
POWER SUPPLY AC/DC 24 V / AC 230V

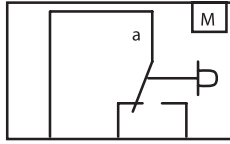


CHANGING DIRECTION OF ROTATION
NAFA...05 (S1)

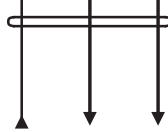


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WIRING DIAGRAM NAFA...05 (S1) AUXILIARY SWITCH



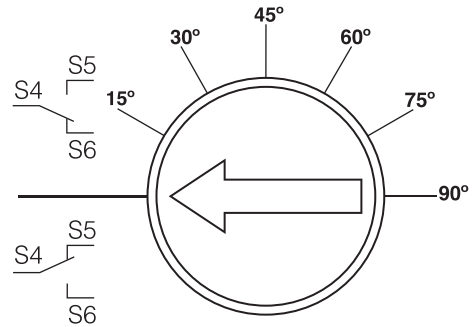
Yellow Green Blue
S1 S2 S3



3 (1.5) A, AC 250 V
Actuator at 0° position

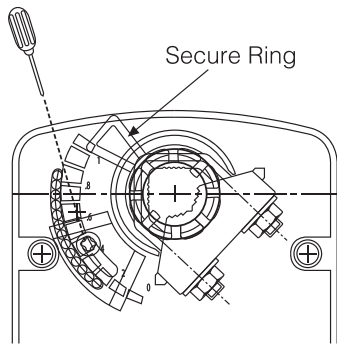
AUXILIARY SWITCH NAFA...05 (S1)

Built-in Micro Switch Adjustment.
Turn the screw from 0°...90° according to the scale.



Switch adjustable 0°...90°

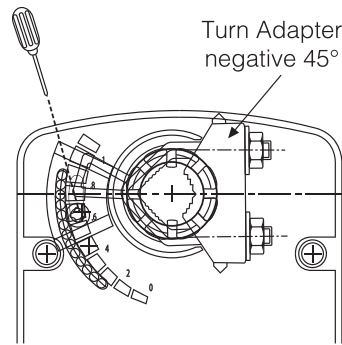
Angle Of Rotating Limiting 5°...85° Adjustment



For 5°...45° Adjustment
(Diagram 1)

For 5°...45° Adjustment (Diagram 1)

- ① Loosen screw of the mechanical limiter plate.
- ② Move the limiter plate to the appropriate position.
- ③ Tighten the screw.



For 45°...85° Adjustment
(Diagram 2)

Turn Adapter
negative 45°

For 45°...85° Adjustment (Diagram 2)

- ① Release the secure ring of the adapter.
- ② Remove the adapter and turn negative 45° as shown.
- ③ Insert adapter and secure the adapter.
- ④ Loosen screw of the mechanical limiter plate.
- ⑤ Move the limiter plate to the appropriate position.
- ⑥ Tighten the screw.

Angle Of Rotating Limiting 5°...85° Adjustment

