Fail Safe Actuator
On/Off Spring Return

RAR 5

Feb.12

RAR5

Technical Data

Power Supply	24Vac/dc +/-10% 50-60Hz	
	230Vac +/-10% 50-60Hz	
Power Consumption		
Operating	7,2W for 24V	4,2W for 230V
At the end stops	2,5W for 24V	2,5W for 230V
Wire sizing	10VA	
Angle of Rotation	90° (95° mechanical)	
Torque	5Nm	
Protection Class	IP54 and II	
Auxiliary Switch Rating	3A(1,5A)@/230Vac	
Angle Limiting	Mechanical end stops	
Direction of Rotation	Bidirectional (right/left)	
Angle of Rotation Lim.	-5°...+85° in 5° steps	
Shaft Dimension Dia	10-16mm round / 7-11mm square	
	40mm minimum shaft length	
Running Time	50-70sec	
	<20sec of spring back	
Noise Level	Below 45dB (A)	
Usage Life	Min. 60´000 open-close operations	
Position Indication	Mechanical	
Ambient Temperature:	-20…+ 50°C	
Ambient Humidity:	5…95%rH non-condensing	
Weight	1,8KG	
Maintenance	Maintenance free	
Standards	The actuators meet CE requirements	

Features

- **5Nm torque to regulate dampers up to approx. 1,0m2**
- **Auxiliary potential-free Switch, fixed**
- **Selectable direction of rotation by reversing actuator**
- **Anti-rotation bracket provided for stability**
- **Adjustable angle of rotation, mechanical endstops**
- **Simple Direct mounting by universal adapter**
- **Available with 1m cable connection**
- **Energy saving at end stops**

Short Description

By using the mounting clamp the actuators can be direct couple mounted over the damper shaft

The compact size allows for easy installation where space is limited.

Damper Size

When calculating the torque required to operate dampers, it is essential to take into account all the data supplied by the damper manufacturer concerning cross sectional area, design, mounting and air flow conditions.

The recommended damper size are guide values

Usage

The RAR5 spring return damper actuator series are designed specially for application, into the HVAC market.

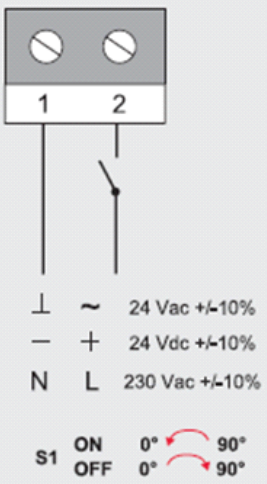
The RAR5 high quality spring return damper actuators designed for use air dampers, butterfly valve, characterized ball valve and other devices that required a fail safe function.

The actuator opens the damper loading the return-spring with is current cut-off the spring moves the damper in a safe position.

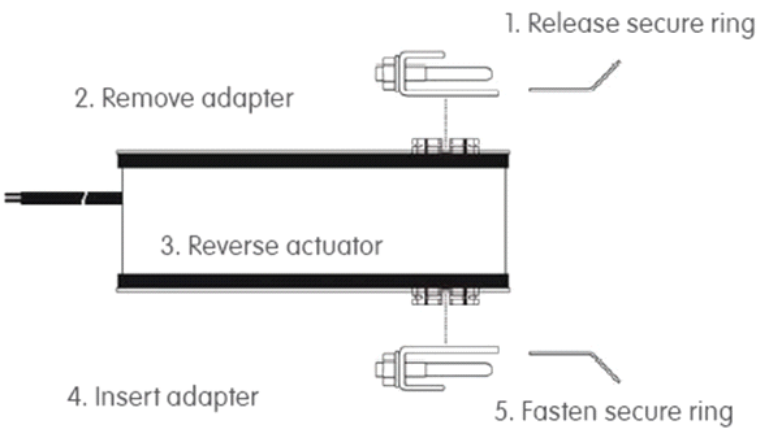
Ordering

RAR5 24D	Fail Safe Actuator	5Nm	24Vac/dc
RAR5 220D	Fail Safe Actuator	5Nm	230Vac
RAR5 24DS1	Fail Safe Actuator	5Nm	24Vac/dc aux.sw.
RAR5 220DS1	Fail Safe Actuator	5Nm	230Vac aux.sw

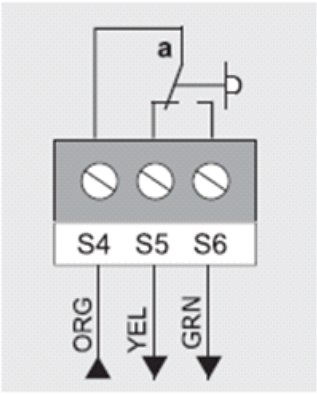
Electrical wiring



Direction of rotation setting

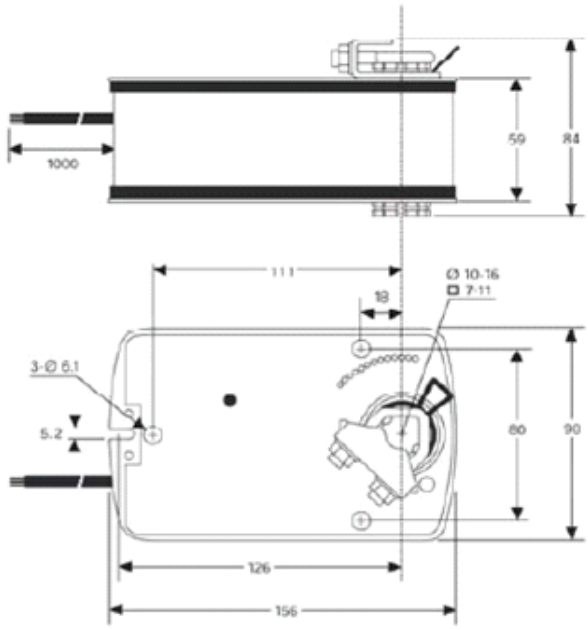


Auxiliary switch setting

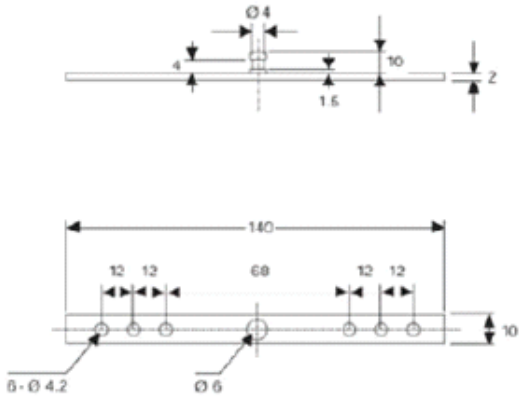


ORG - orange
YEL - yellow
GRN - green

DIMENSIONS (mm)



(round) 10 to 16 mm
(square) 7 to 11 mm



Limitation of rotation angle

For 5° to 45° (see fig. 1)

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

For 45° to 85° (see fig. 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 ring.
4. Loosen screw of the mechanical limiter plate.
5. Move the limiter plate to the appropriate position.
6. Tighten the screw.

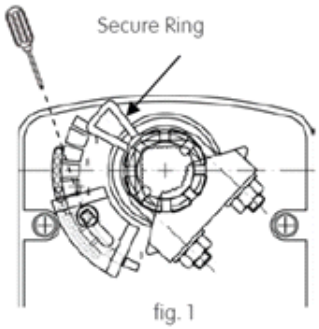


fig. 1

5° to 45° setting

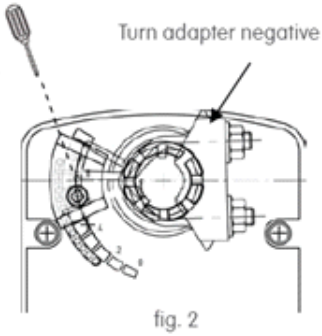


fig. 2

45° to 85° setting