

Rotary Damper Actuator 2 Points and 3 Points Control



■ NENUTEC is proud to offer the 08, 16 and 24 Nm damper actuator of the NACA... 08/16/24 (S) Series designed specifically applications into the HVAC market.

■ NENUTEC high quality damper actuators have been designed for use with air damper, butterfly valve, characterized ball valve and globe valve with the use of special adapter.

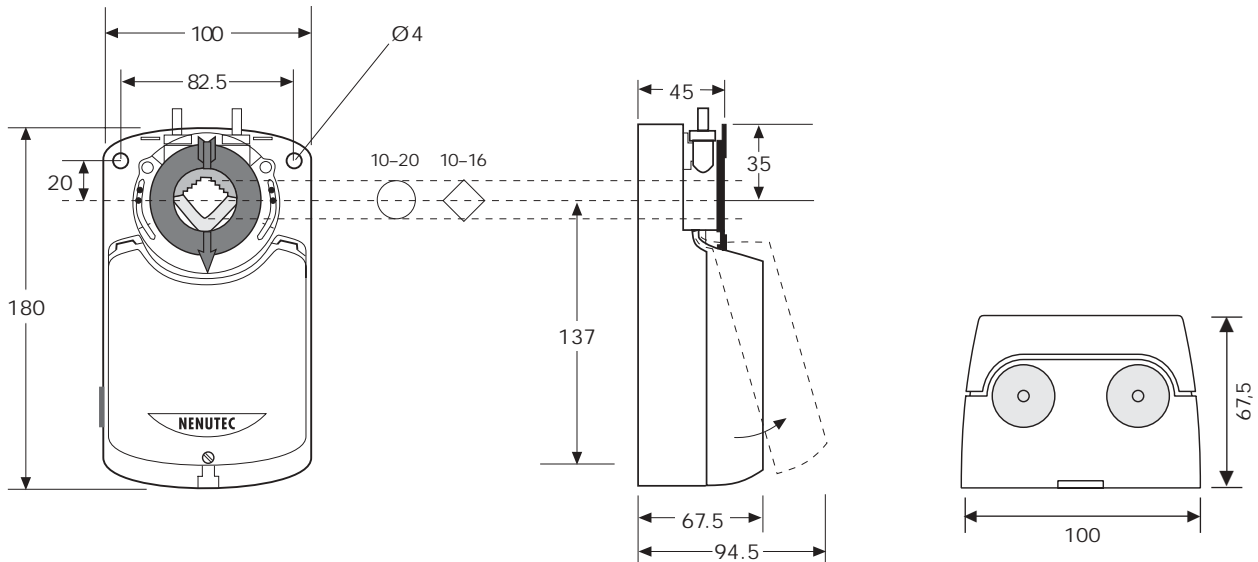
Product Features

- 2 points and 3 points control
- Universal Spindle Clamp for easy direct mounting
- Shaft dimension \varnothing 10...20 mm / 10...16 mm \square square
- Anti-rotation bracket provided for stability
- Manual over ride by push button when required
- Adjustable angle of rotation
- Selectable direction of rotation
- Parallel connection up to 5 actuators
- 2 adjustable SPDT auxiliary switches when requested
- Power saving at end stops
- Actuators available with 1 m cable on request
- Customised version available, on request

Model Selection Table

Torque	Running Time	Power Supply	Auxiliary Switches	Model/Type
8 Nm	35...45 sec	AC/DC 24 VAC/DC	No	NACA 1-08
			2 x SPDT	NACA 1-08S
			AC 230 V \pm 10%	No
16 Nm	80...110 sec	AC/DC 24 V	2 x SPDT	NACA 2-08S
			No	NACA 1-16
			AC 230 V \pm 10%	No
24 Nm	125...160 sec	AC/DC 24 V	2 x SPDT	NACA 2-16S
			No	NACA 1-24
			AC 230 V \pm 10%	No
			2 x SPDT	NACA 2-24S

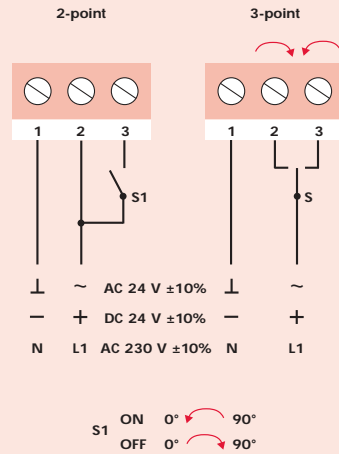
Actuator Dimensions (mm)



Technical Specification

	NACA1...(S)	NACA2...(S)
Torque	8 Nm / 16 Nm / 24 Nm	8 Nm / 16 Nm / 24 Nm
Damper Size	1.5 m ² / 3.0 m ² / 4.5 m ²	1.5 m ² / 3.0 m ² / 4.5 m ²
Power Supply	AC/DC 24 V	AC 230 V ±10%
Frequency	50-60 Hz	50-60 Hz
Power Consumption		
– Operating	3.9 W	4.8 W
– At the end stops	0.4 W	1.2 W
For wire sizing	6.5 VA	6.5 VA
Auxiliary switch rating	3(1.5) A / AC 230 V	3(1.5) A / AC 230 V
Protection class	II	II
Control Signals	2 point and 3 point	2 point and 3 point
Angle of Rotation	90° (93° mechanical)	90° (93° mechanical)
Angle Limiting	5°..85° in 5° step	5°..85° in 5° step
Weight	1.2 Kg	1.2 Kg
Life Cycle	60,000 rotation	60,000 rotation
Sound Level	Below 45 dB	Below 45 dB
IP Protection	IP54	IP54
Ambient Temperature	-20°...+50°C / IEC 721-3-3	-20°...+50°C / IEC 721-3-3
Inventory Temperature	-30°...+60°C / IEC 721-3-2	-30°...+60°C / IEC 721-3-2
Ambient Humidity	5...95% rH non condensing	5...95% rH non condensing
Maintenance	maintenance free	maintenance free
Impact	Typ I / EN 60730-1	Typ I / EN 60730-1
Standardize	89/336/CE	89/336/CE

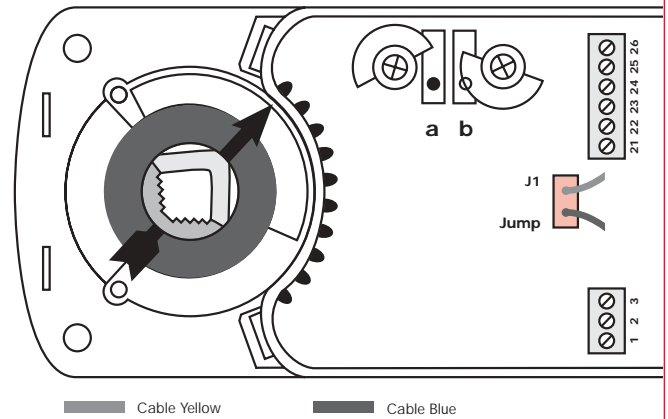
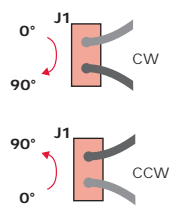
Wiring diagram



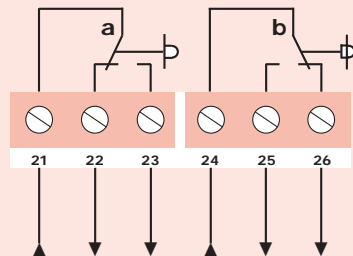
Changing direction of rotation NACA...(S)

The direction of rotation can be changed by reversing Jumper J1

Factory setting



Auxiliary switches (S)



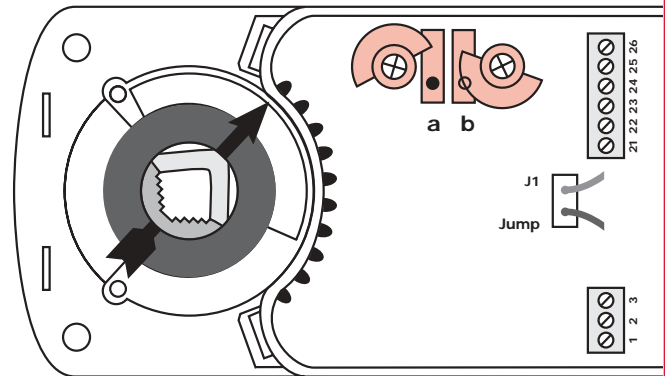
3 (1.5) Amp AC 230 V
Actuator at 0° position

Auxiliary switch adjustment NACA...(S)

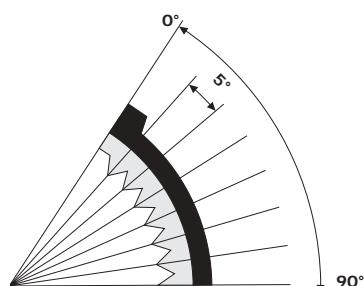
Factory setting

Switch **a** at 10°
Switch **b** at 80°

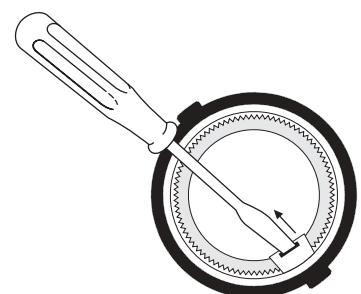
The switching position can be manually changed to any required position by turning the ratchet.



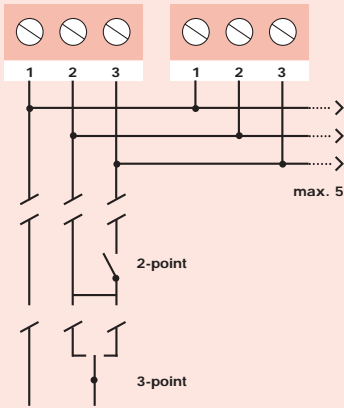
Angle-of-rotation limiting



Releasing the adapter



Parallel connection NACA...(S)



~ AC 24 V ±10% ~
 - + DC 24 V ±10% - +
 N L1 AC 230 V ±10% N L1

S1 ON 0° → 90°
 OFF 0° → 90°

Parallel connection

Parallel connection 2 points and 3 points control can be applicable up to 5 actuators.

Important Remark

The NENUTEC NACA/NACM...(S) actuator series can be equipped with a variety of NENUTEC products, Characterized Ball Valves the NVCB... series, the NMBV... Butterfly Valves series and Globe Valves.

Consult NENUTEC representatives or factory for the specific requirements and material selection for your intended application.

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