



The technical specifications might not be congruent.

- NESM24.1-03 series
- NENUTEC spring return damper actuators are especially designed and produced for applications in the HVAC systems.
- Our wide range of NENUTEC spring return damper actuators has been developed to operate and position air dampers of different sizes that perform safety functions. Angular positioning of modulating actuators can be controlled by the NPG-1 positioner.

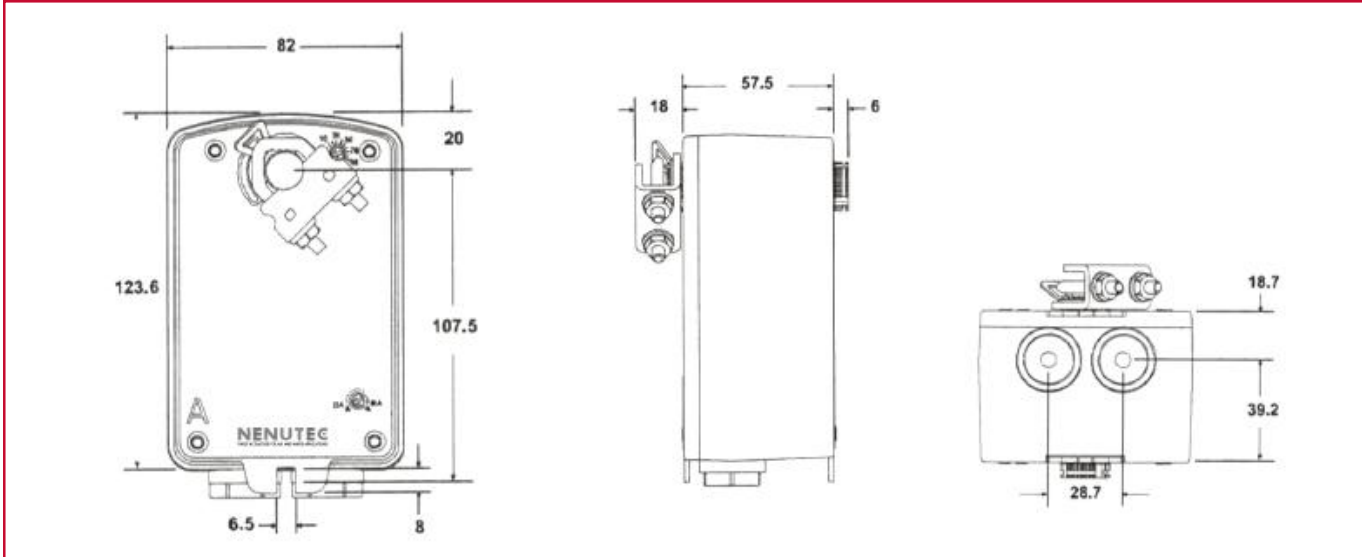
Product Features

- Torque 3 Nm
- Damper size 1.0 m²
- Power Supply AC/DC 24 V
- Control Modulating DC 0(2)...10 V
- Shaft dimensions
Ø 6 to 12 mm round / □ 6 to 8 mm diagonal
- Minimum shaft length 24 mm
- Selectable direction of rotation
- Adjustable angle of rotation
- Actuator with 1200 mm cable connection
- Customer version on request

Model Selection Table

Torque	Running Time	Power Supply	Auxiliary Switches	Model / Type
3 Nm	Ⓜ 150 sec / Ⓞ 16 sec	AC/DC 24 V ± 10%	No	NESM24.1-03

Actuator Dimensions (mm)

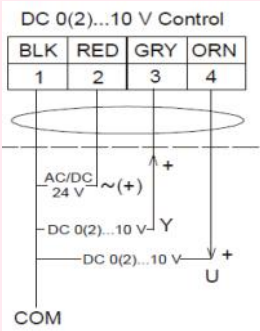


Technical Specifications

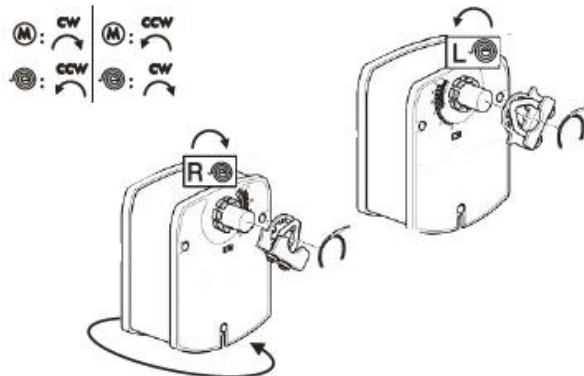
NESM24.1-03

Torque M	3 Nm
C	3 Nm
Damper Size	1.0 m ²
Shaft dimensions	Ø 6 to 12 mm round / □ $\sqrt{}$ to 8 mm diagonal
Power Supply	AC/DC 24 V \pm 10%
Frequency	50 - 60 Hz
Control Signal (Input)	DC 0 (2)...10 V
Operating Range	DC 0 (2)...10 V (at control signal Y)
Position Signal (Output)	DC 0 (2)...10 V
Power Consumption	
- Operating	4.7 VA / 24V
- End Position	2.7 VA / 24V
For Wire Sizing	6.0 VA / 24V
Protection Class	IP54 (NEMA 2)
Angle of Rotation	0°...90° (-5°...90° mechanical)
Angle of Limiting	35°...90° maximum position
Weight	0.9 kg
Life Cycle	60'000 rotation
Sound Level	37 dB (A)
IP Protection	IP 54 (dust protected & protected against splash water)
Operating Temperature	-30°...+60° C
Non-Operating Temperature	-40°...+85° C
Ambient Humidity	5%...90% nF non condensing / EN 60335-1
Maintenance	Maintenance free
Mode of Operation	CE low voltage directive 2006/95/EC
EMC	CE directive 2004 / 108 / EC

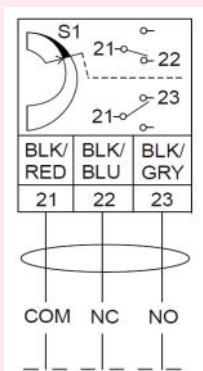
Wiring Diagram NESM24.1-03
Power Supply AC/DC 24 V



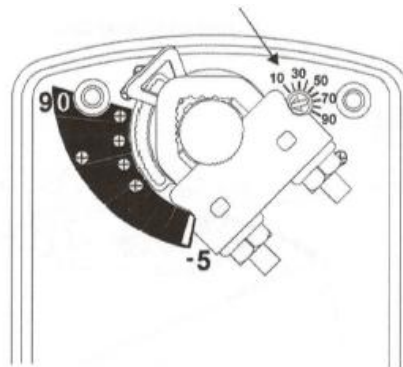
Changing Direction of Rotation NESM24.1-03



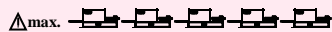
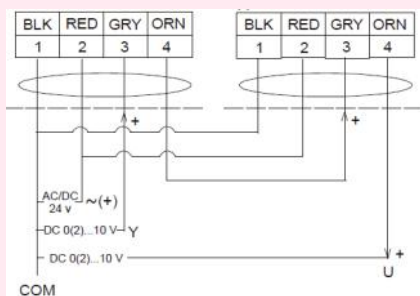
Auxiliary switches



Adjustment auxiliary switch



Wiring Diagram NESM24.1-03
Parallel Connection



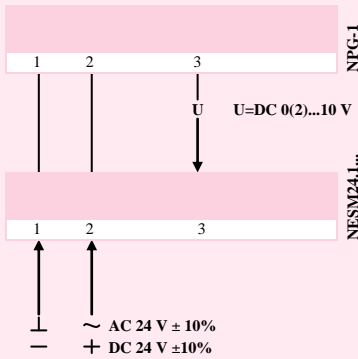
Remark

When NESM... actuators operate in parallel, the output signal U = DC 0 (2)...10 V (terminal 4) of the master actuator must be connected to terminal 3 of the next slave actuator.

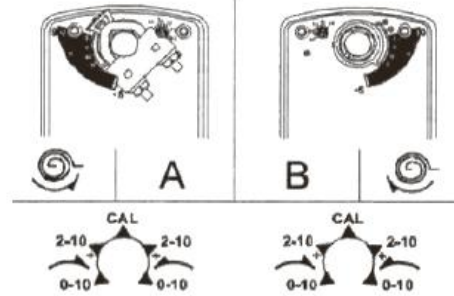
The power consumption must be observed.

Synchronisation Tolerance $\pm 5\%$

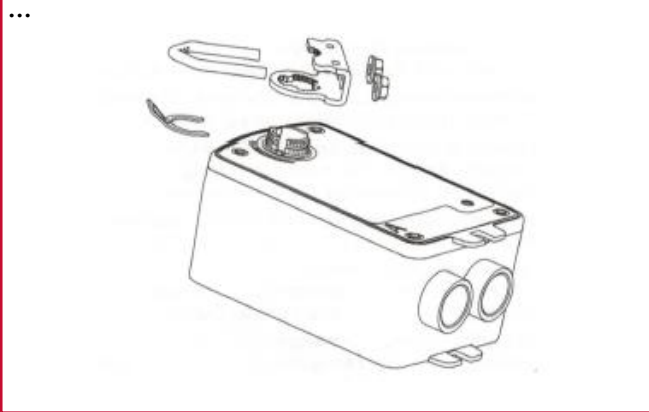
Wiring Diagram NESM24.1-03 NPG-1 Position Transmitter AC/DC 24 V



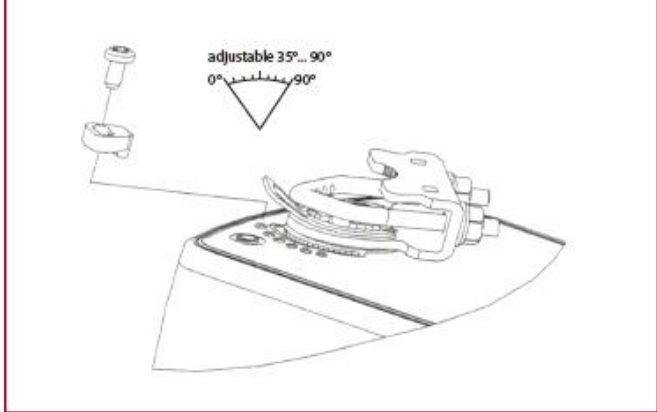
Input calibration (CAL)



Mounting adapter



Limiting angle of rotation NESM24.1-03



OEM Customised Version on Request

NENUTEC offers you actuators in customised versions, e.g. with your own brand name, with colour-coordinated applications and with your particular demand. Please contact us for further information.

Important Remark

Consult NENUTEC representatives for specific requirements and material selections for your intended application.



This actuator includes electrical and electronic components and may not be disposed as household garbage. Please consider the local valid legislation.



AC / DC 24 V: Connect via safety isolating transformer.

AC 230 V: To isolate from the main power supply, the system must incorporate a device which disconnects the phase conductor (with at least a 3 mm contact gap).