

**Electrical linear actuator, 24 VAC/DC
force 1000 N, stroke 100... 300 mm**

Type NOP-10...

**List 8.0
NORM-PLUS**

APPLICATION

NOP-10... Actuators with linear motion for industrial dampers, fan control etc. The actuator can be attached to a crank arm to change the linear motion into rotary of 90°. With a force of 1000 N and a stroke of 100 mm a torque of 50 Nm can be achieved, with 300 mm stroke a torque of 150 Nm. The actuators are 100 % overload protected and can be stopped in any position. The controller must be stable and should not pulse.

Application: For industrial plant.

TECHNICAL DATA

Type	NOP-1024-100	NOP-1024-300	NOP-1024-P-100	NOP-1024-P-300
Supply voltage	24 VAC/DC ± 10 %	24 VAC/DC ± 10 %	24 VAC/DC ± 10 %	24 VAC/DC ± 10 %
Power consumption	~20 VA	~20 VA	~20 VA	~20 VA
Starting current	capacitive load I _{START} >> I _{TYP}	capacitive load I _{START} >> I _{TYP}	capacitive load I _{START} >> I _{TYP}	capacitive load I _{START} >> I _{TYP}
Stroke	100 mm	300 mm	100 mm	300 mm
Force	1000 N	1000 N	1000 N	1000 N
Torque at 90°	50 Nm	150 Nm	50 Nm	150 Nm
Running time	~1 sec/mm	~1 sec/mm	~1 sec/mm	~1 sec/mm
Control mode	on-off 3 pos	on-off 3 pos	on-off 3 pos	on-off 3 pos
Feedback signal	-	-	1000 Ω	1000 Ω
Weight	~2 kg	~3,5 kg	~2 kg	~3,5 kg
Endswitches	no endswitches, actuators are overload protected			
Ambient temperature	0... 50 °C, non condensing			
Housing material	Aluminium baked varnish			
Rod material	Red brass			
Protection DIN 40050	IP65			
Operating mode	S3 80%ED EN60034-1 minimum run time of the actuator >1 sec. actuator with 1 m cable, mounting bracket, 2 linkages safe area			
Included	Type NOE-24 : on-off, 3-pos (only with option .../H80). Type NOE-Y24... : 2... 10 V or 4... 20 mA control mode can be achieved with an electronic module housed in a special terminal box. The module should be placed between panel and actuator. Type NOE-Y24/P10 : The actuators are delivered with a 10 kΩ potentiometer! Type NOE-Y24/P1 : The actuators are delivered with a 1 kΩ potentiometer!			
Electronic module	Type NOE-230 : 230 VAC Supply input, 24 V output, for on-off and 3 pos control signal. The electronics are mounted in a terminal box between panel and actuator.			

Actuators are not explosionproof!

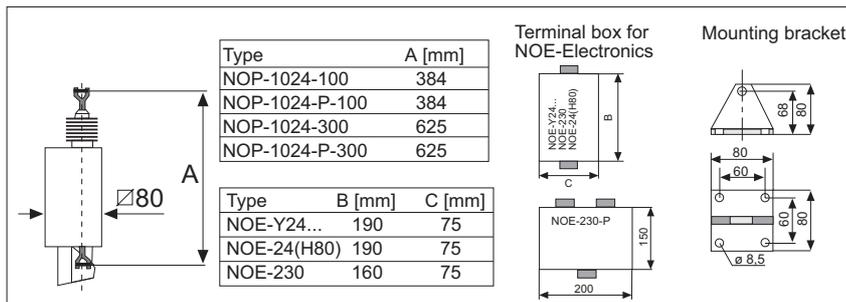


Terminal box only as electronic module NOE

ACCESSORIES

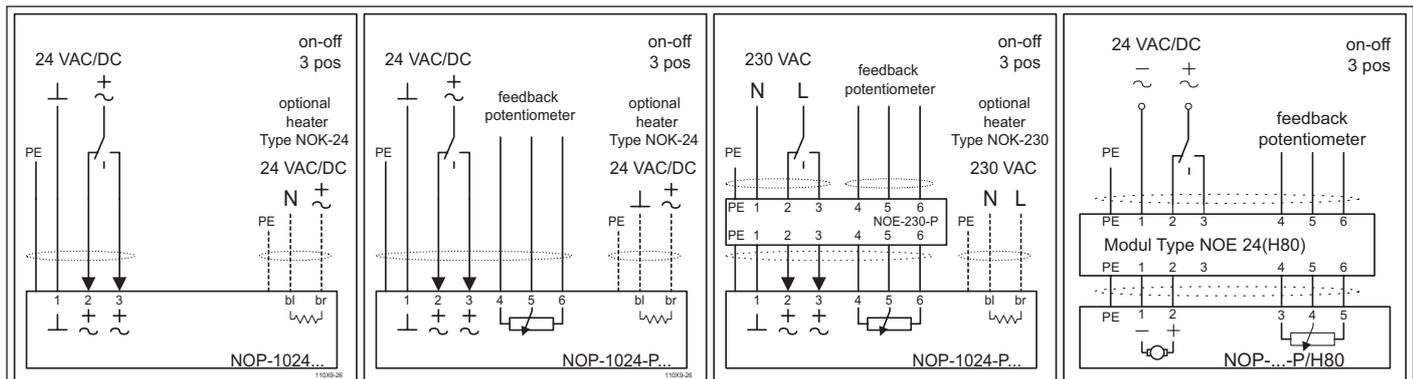
- NOP.../H80** Actuator for use up to 80°C.
- NOK-24** Additional heater for use at ambient temperatures to -40°C and/or at high humidity for reducing water condensation. Supply voltage 24 VAC/DC, add. power ~25 VA/W. The heater is automatic.
- NOK-230** As NOK-24, but for supply voltage 230 VAC, add. power ~25 W. The heater is automatic.
- MOL-NG 24** Battery power pack, standby unit.
- MOL-EH 1** Electronic aux. switch, connectable to electronic type NOE-Y24, panel mounting.

DIMENSIONS



ELECTRICAL CONNECTION

Attention: • Voltage at terminal 2: rod is extending.
• For NOE-Y24 please see reverse.



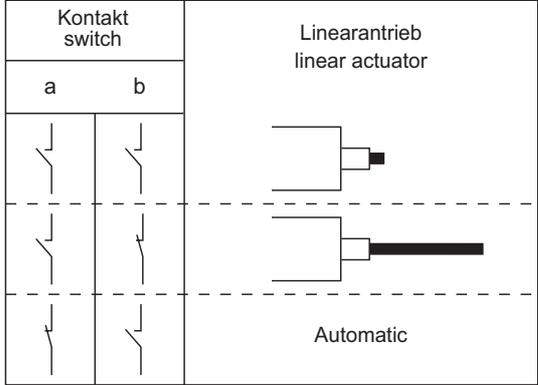
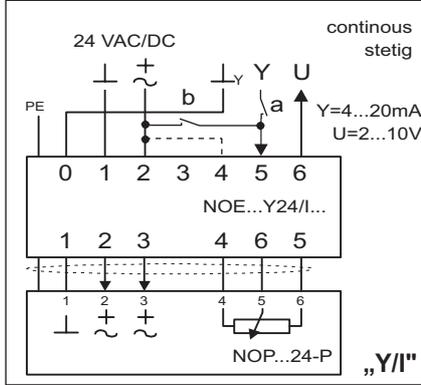
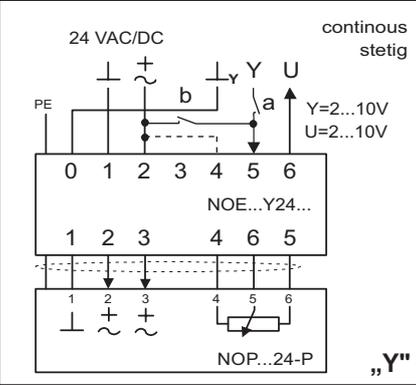
Linear Antriebe
Linear actuator

NOP...24-P-100 + NOE-Y24...
NOP...24-P-300 + NOE-Y24...
NOP...24-P-100 + NOE-Y24/I...
NOP...24-P-300 + NOE-Y24/I...

Elektrischer Anschluß "Y" oder "Y/I"
Electrical connection "Y" or "Y/I"

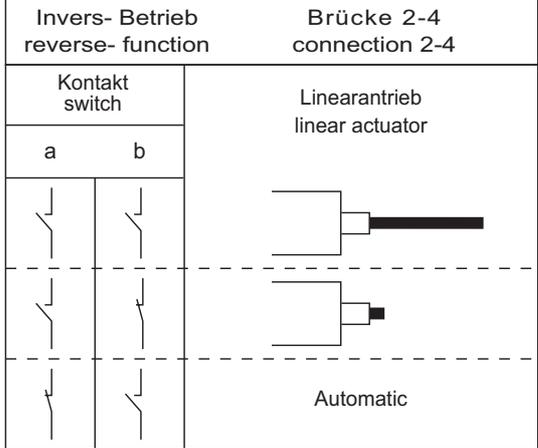
Elektrischer Anschluß
Electrical connection

Zwangssteuerungen
Compulsion control



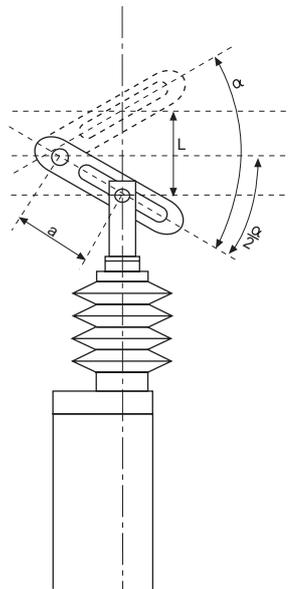
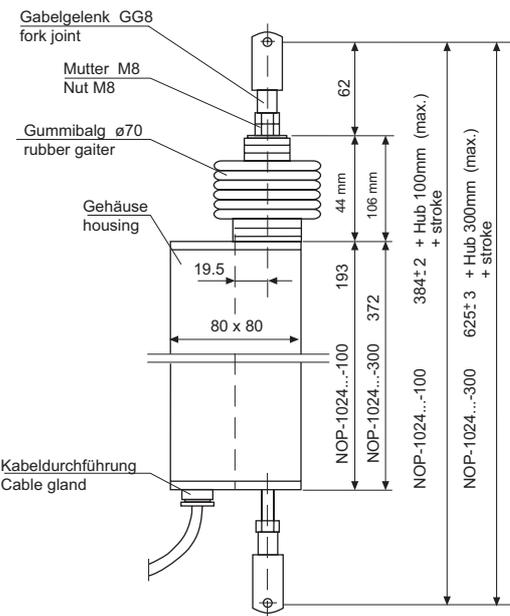
Achtung/Attention: „Y“
Für Ansteuerungen 0... 20 V Phasenschnitt (Staeefa Control System/Inel) empfehlen wir den Einsatz eines Trenntrafos versorgungsseitig.
Für Inversbetrieb, Brücke 2 - 4 erforderlich.
For continuous control with 0... 20 V Phasecut signal (Staeefa Control System/Inel) we recommend a transformer for the power supply.
Connection 2 - 4 for reverse function.
Masse/Ground
Die beiden Masseleitungen 0 und 1 müssen eine galvanische Verbindung haben. Diese Verbindung sollte sich an der Stromversorgung oder am Reglerausgang befinden.
The two ground lines 0 and 1 must have an electrical connection. This connection should be made at the power supply or the controller output.

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Abmessungen
Dimensions

Montage (am Klappenhebel)
Mounting (on damper lever)



Achtung/Attention

- Antriebe vom Typ NOP... sind nicht ex- geschützt
Actuators type NOP... are not explosion proof
- Abschaltung lastabhängig
Overload protected
- Einbaulage beliebig
Can be mounted in any position
- Nicht gegen Hubstange kontern!
(Interne Verdrehsicherung kann zerstört werden)
Do not counter against rod!
(if force applied internal damage will occur)

Hebellänge "a" und Stellweg "L" bei α Length "a" and travel "L" acc. to α			
α	Stellweg "L" travel "L"		
	100 Länge von Maß "a" / Length of "a"	200	300
90°	72	142	213
80°	79	142	234
70°	88	175	262
60°	100	200	300
55°	109	217	325
50°	119	238	355
45°	132	262	392
30°	194	387	580