

Electric Actuator Type AN

Non spring return actuator 4 Nm

ELODRIVE-Actuators are intended to be used for the operation of dampers, valves and other process control elements. The AN-Series of actuators remain in position in case of a power supply interruption. Furthermore, the AN Series combines 2 distinct models in one housing concept: **ANT model** with terminal connection and **AN model** with cable connection and a protection degree of IP55. All models of the AN Series are compatible to all similar competitors' products. Direct mounting of the actuators onto the damper shafts is achieved via the attached mounting clamp. The maximum rotation angle is 95°.

The following applies for all models of the product line A:

General Conception

- One size for all types
- Identical accessories for all models
- Identical control functionality for all models
- Homogeneous control and voltage variants for all models
- Universal wiring schematics

Adaptation possibilities

- Form fit adapters available

Motor and Gear Concept

- Brushless DC-Motor – no wear and tear
- Constant running time, independent of load
- Constant torque throughout the entire operating range
- Synchronized parallel operation
- Very quiet operating

Control Concept

- On/Off and floating point control combined in one system
- Wide supply voltage range (120/230V AC)
- Proportional model 2...10 V (Optional: 0...10 V)
- Automatic shutoff either when reaching programmed hard-stop or when reaching mechanical end-stop
- No return voltage

Housing Design

- Protection degree IP20 or IP55
- Direct mounting even in limited spaces

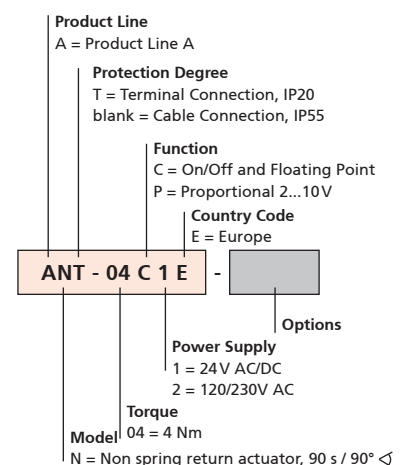
Operational Functionality

- Simple manual positioning via push button which disengages the gears
- Sense of direction changeable (not on all models)



Torque	Supply voltage	Supply connection	Protection Degree	Type / Order-No.	Power consumption	
					Operation	Stop
On/Off and Floating Point						
4 Nm	24V AC/DC	Terminal	IP20	E-ANT-04C1E	2,5 VA / 1,5 W	1,0 W
4 Nm	24V AC/DC	Cable	IP55	E-AN-04C1E	2,5 VA / 1,5 W	1,0 W
4 Nm	120/230V/AC	Terminal	IP20	E-ANT-04C2E	3,0 VA /	1,5 VA
4 Nm	120/230V/AC	Cable	IP55	E-AN-04C2E	3,0 VA /	1,5 VA
Proportional 2...10V						
4 Nm	24V AC/DC	Terminal	IP20	E-ANT-04P1E	2,5 VA / 1,5 W	1,0 W
4 Nm	24V AC/DC	Cable	IP55	E-AN-04P1E	2,5 VA / 1,5 W	1,0 W
4 Nm	120/230 V/AC	Terminal	IP20	E-ANT-04P2E	5,0 VA	2,0 VA
4 Nm	120/230 V/AC	Cable	IP55	E-AN-04P2E	5,0 VA	2,0 VA

Nomenclature



Scope of delivery

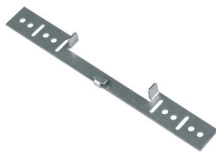
- clamping bracket
- anti rotation strap
- Operation manual

Available accessories

Form fit adapter

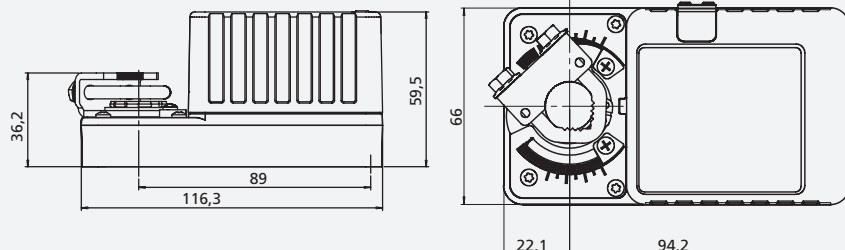


Anti rotation strap



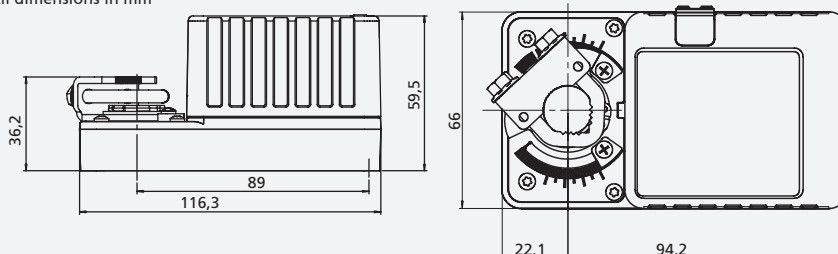
Technical Data Electric Actuator Type AN		
Characteristic	24V	
Nominal voltage	AC 24 V +/- 20%, 50/60 Hz, DC 24 to 36 V +/- 10%	
Protection class	III (SELV, safety extra-low voltage)	
Starting current	max. 3 A at impulse width 5 ms	
Actuator features at 24 V Connection voltage		
Synchronization	+/- 5%	
Rotation direction	Selectable via switch L/R (CCW/CW)(not on model ANT-04C2E)	
Angle of rotation	Max. 95°	
Manual adjustment	Push button for disengaging of gears	
Shaft mounting	⌀ 6 - 16 mm	
Running time	90 s (+/- 5%) für 90° \sphericalangle, independent of load	
Position indicator	Scale on actuator	
Noise emission level	< 35 dB (A)	
Ambient temperature	-30 to +50°C	
Storage temperature	-40 to +80°C	
Ambient humidity	5 to 95% rH	
Function	Type 1 (EN 60730-1)	
Norm Conformity	EN60730-1, EN60730-2, EN55022 Class B, EN55014, EN61000	
Weight	approx. 500 g (depending on version)	
Maintenance	maintenance free	
On/Off and Floating Point control	Standard	Option Potentiometer
Connection	1x3-fold Terminal Connection	2x3-fold Terminal Connection
Connection Cable	3x0,75 mm ² , 0,9 m length	2x3x0,75 mm ² , 0,9 m length
Wiring Schematics On/Off		
Wiring Schematics Floating Point		
Proportional 2...10 V	Standard	Without feedback
Working area	2...10V	
Input resistance	>100 kΩ	
Output signal	DC 2...10V für 0...100%	
Connection	2x3-fold Terminal Connection	1x3-fold Terminal Connection
Connection Cable	4x0,75 mm ² , 0,9 m length	3x0,75 mm ² , 0,9 m length
Wiring Schematics Proportional 2...10 V (0...10V, optional)		

All dimensions in mm



Technical Data Electric Actuator Type AN		
Characteristic	120/230 V	
Nominal voltage	AC 120/230 V +/- 20%, 50/60 Hz	
Protection class	II protective insulation (ANT: no protection against contact)	
Starting current	max. 3 A at impulse width 5 ms	
Actuator features at 120/230 V Connection voltage		
Synchronization	+/- 5%	
Rotation direction	Selectable via switch L/R (CCW/CW) (Except ANT-04C2E)	
Angle of rotation	Max. 95°	
Manual adjustment	Push button for disengaging of gears	
Shaft mounting	⌀ 6 - 16 mm	
Running time	90 s (+/- 5%) für 90° ∠, independent of load	
Position indicator	Scale on actuator	
Noise emission level	< 35 dB (A)	
Ambient temperature	-30 to +50°C	
Storage temperature	-40 to +80°C	
Ambient humidity	5 to 95% rH	
Function	Type 1 (EN 60730-1)	
Norm Conformity	EN60730-1, EN60730-2, EN55022 Class B, EN55014, EN61000	
Weight	approx. 500 g	
Maintenance	maintenance free	
On/Off and Floating Point control	Standard	Option Potentiometer
Connection	1x3-fold Terminal Connection	2x3-fold Terminal Connection
Connection Cable	3x0,75 mm ² , 0,9 m length	2x3x0,75 mm ² , 0,9 m length
Wiring Schematics On/Off		
Wiring Schematics Floating Point		
Proportional 2...10 V	Standard	
Working area	2...10V	
Input resistance	>100 kΩ	
Output signal	DC 2...10V für 0...100%	
Connection	2x3-fold Terminal Connection	
Connection Cable	4x0,75 mm ² , 0,9 m length	
Wiring Schematics Proportional 2...10 V (0...10V, optional)		

All dimensions in mm



Scope of delivery

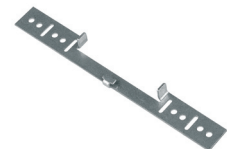
- clamping bracket
- anti rotation strap
- Operation manual

Available accessories

Form fit adapter



Anti rotation strap



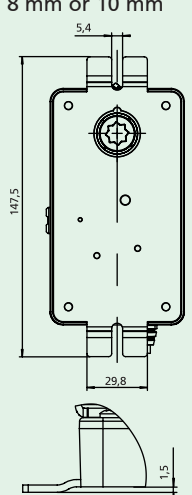
Options for product line A



■ Scope of delivery for product line A

Actuators of the product line A are delivered generally with:

- Clamp
- Anti rotation strap
- Installation instruction

Options for product line A		
Option	Order-No.	Technical Data
Interface 4...20 mA	A.. - ..P.. - I20	4...20 mA as an input signal Output signal as a voltage of 2...10 V
no feedback	AN. - ..P.. - OR	
Alternative working range	AN. - ..P.. - U0	0...10 V instead of 2...10 V
Integrated Potentiometer 5 kΩ	AN. - ..C .. - P5K	Position indication via integral potentiometer 5000 Ω, +/- 10 %, 0,5 W / 50 °C
Integrated Potentiometer 140 Ω	AN. - ..C.. - P140	Position indication via integral potentiometer 140 Ω, +/- 10 %, 0,5 W / 50 °C
Internal auxiliary switch	AN. - ..C .. - S1	Unit with adjustable auxiliary switch 1 x SPDT (3 A / 250 V)
Form fit adapter 8 mm or 10 mm 	AN. - - F08 AN. - - F10	<ul style="list-style-type: none"> ■ Form fit adapter 8 mm (instead of clamp adapter) ■ long mounting plate with fixing slots on both ends ■ no anti rotation straps
	ANT - - F08 ANT - - F10	<ul style="list-style-type: none"> ■ Form fit adapter 8 mm (instead of clamp adapter) ■ long mounting plate with fixing slots on both ends ■ no anti rotation straps

Special versions of product line A on request	
Reduced dead band	Proportional actuators with a reduced dead band for better response characteristics are available
Running time	Actuators with different running times are possible
Interface 5 V	The input and output of the proportional actuators can be operated with 0/1...5 volts