



Electromotive actuators
Electrical locking/unlocking,
space-saving, with micro-switch

PRODUCT FEATURES

- Compact, space-saving design
- Electrical resetting or automatic resetting (without current)
- Easy to fix thanks to snap-fit mounting
- Spray water protected
- With or without micro-switch
- Explosion report for tank modules

APPLICATION

This actuator's extremely compact design makes it particularly suitable for locking and unlocking applications in dry and wet areas (including via remote control, for example) where the available space is tight.

Examples include:

- Tank modules
- Service flaps
- Glove compartments etc.

FUNCTION

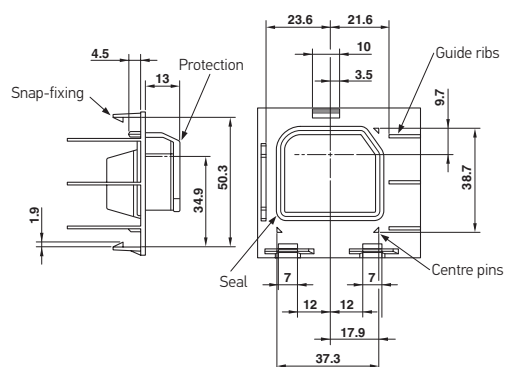
When a voltage is applied, the motor integrated in the electromotive actuator moves the locking lever attached to the motor shaft.

There are two product variants available in the product range. The first actuator variant with electrical locking and unlocking function is particularly suitable for classic applications where the locking lever locks a hinged arm within the closing system by applying a voltage, and unlocks it by reversing the voltage polarity. The stability of the open/closed locking positions is achieved by the motor being short-circuited after actuation.

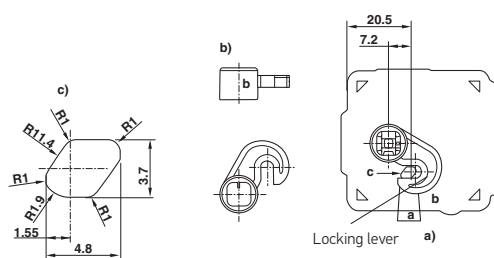
The second actuator variant has a reset spring and micro-switch integrated. The micro-switch is actuated by a slight movement of the locking lever, e.g. by pressing a service flap. This movement triggers current feed to the actuator via a control unit. This makes the actuator locking lever retract completely, leaving the closing system open and triggering the spring-loaded opening of the service flap. The actuator is then switched off and the locking lever is returned to the locking position by the integrated reset spring without current.

To lock the service flap, the flap is pushed closed when the hinged arm of the service flap snaps into the actuator's locking lever.

EXAMPLES OF THE MOUNTING INTERFACE



LOCKING INTERFACE (SECOND ACTUATOR VERSION)



VARIANT OVERVIEW

Function	Voltage	Actuating force	Manual adjustment	Protection level	Part number	Page reference
Forward and reverse rotation electrical						
	12 V	-	Yes	IP 5K4	6NW 011 122-017	60
With micro-switch	12 V	-	Yes	IP 5K4	6NW 011 122-027	62 – 63
Electrical forward rotation and reverse rotation via return spring, with soft touch button						
	12 V	-	Yes	IP 5K4	6NW 011 122-047	64



Electric motor actuators
electrical locking/unlocking, space-saving,
electrical forward and reverse rotation
Part number 6NW 011 122-017

TECHNICAL DATA

Resetting	None
Weight	60 g
Rated voltage	12 V
Voltage range	9 – 15.5 V
Maximum current consumption (blocking current)	3.2 A
Idling current	≤ 250 mA
Locking lever retention force	> 75 N (after design life > 50 N)
Locking lever breaking force	≥ 300 N
Functional angle	≤ 78°
Actuating time 78° over functional angle ¹⁾	max. 200 ms
Triggering time	0.2 s < t < 10 s
Thermal overload protection	not available
Operating temperature	- 40°C to + 85°C
Storage temperature	- 40°C to + 90°C
Design life ²⁾	100,000 cycles
Conducted interference	DIN ISO 7637, SAE J1113-42
Interference suppression CISPR 25, SAE J-1113-41	Intensity level 1 + 10 dB µV
Final position stability with motor short circuit	≤ 6°
Protection level	IP 5K4
Salt spray test according to DIN 50 021 SS	96 h
Vibration resistance according to IEC 68-2-64	2.7 g
Casing material	PP-GF30 black
Sealing ring	NBR 70 Shore A
Locking lever material	PAA GF60 black
Resistant to	Petrol, diesel, bio-diesel, ozone
Pin coating	tin-plated
Connector	Hirschmann, 3 pin
Mating connector ³⁾	3-pin MLK coupler ELA 872-858-541

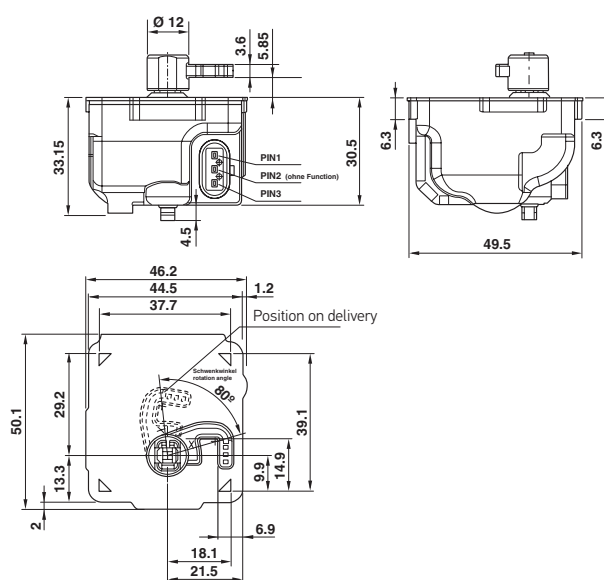
¹⁾ Over the operating voltage and temperature range.

²⁾ One switching cycle equals one forward and one reverse rotation.

³⁾ This accessory is not included.

It may be purchased from Hirschmann Automotive.

TECHNICAL DRAWING

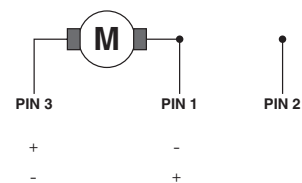


ELECTRICAL CONNECTION

Hirschmann, 3-pin MLK plug

Unlock central locking system

Lock central locking system





Electric motor actuators
electrical locking/unlocking, space-saving with micro-
switch, electrical forward and reverse rotation
Part number 6NW 011 122-027

TECHNICAL DATA

Function	Forward and reverse rotation electrical with micro-switch
Weight	60 g
Rated voltage	12 V
Voltage range	9 – 15.5 V
Maximum current consumption (blocking current)	3.2 A
Idling current	≤ 250 mA
Locking lever retention force	≥ 75 N
Locking lever breaking force	≥ 300 N
Functional angle	< 78°
Actuating time 78° over functional angle ¹⁾	40 ms < t < 200 ms
Triggering time	0.2 s < t < 10 s
Thermal overload protection	not available
Operating temperature	-40°C to +85°C
Storage temperature	-40°C to +90°C
Design life ²⁾	60,000 cycles
Conducted interference	Level 2
Interference suppression CISPR 25, SAE J-1113-41	≤ 18 mm Intensity level 1 + 10 dB µV
Micro-switch switching angle	8° to 18°
Final position stability with motor short-circuit	≤ 6°
Protection level	IP 5K4
Salt spray test according to DIN 50 021 SS	96 h
Vibration resistance according to IEC 68-2-64	2.7 g
Casing material	PP-GF30
Sealing ring	NBR 70 Shore A black
Locking lever material	PAA GF60 black
Resistant to	Petrol, diesel, bio-diesel, ozone
Pin coating	tin-plated
Connector	Hirschmann, 3 pin
Mating connector ³⁾	3-pin MLK coupler ELA 872-858-...KA

¹⁾ Over the operating voltage and temperature range.

²⁾ One switching cycle equals one forward and one reverse rotation.

³⁾ This accessory is not included.
It may be purchased from Hirschmann Automotive.

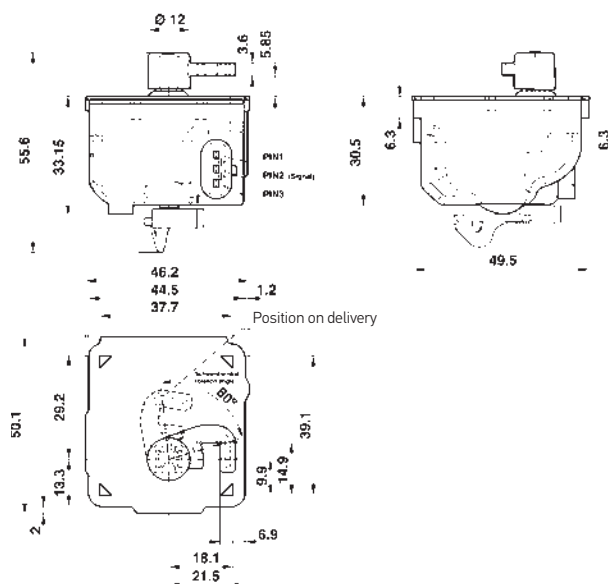
OTHER VARIANTS

On request: 6NW 011 122-031

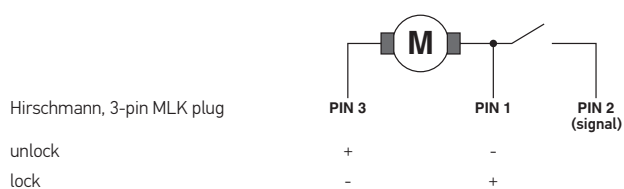
(same as version -021 but without operating and locking
elements)

On request: 6NW 011 122-051

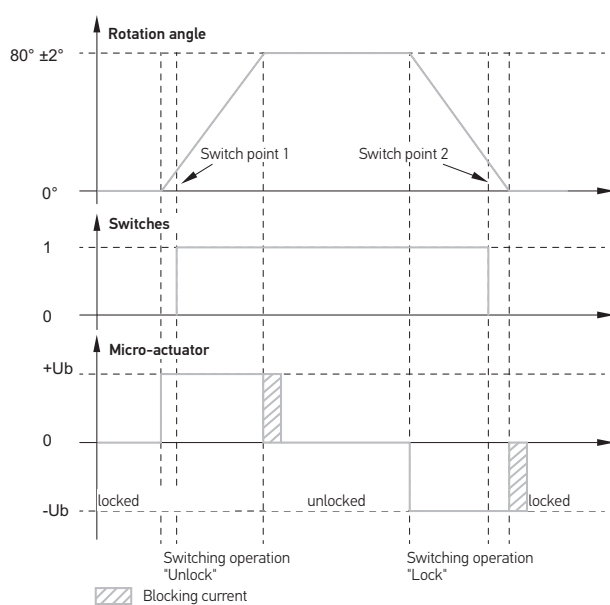
(without locking element, with operating element)

TECHNICAL DRAWING


ELECTRICAL CONNECTION



MICRO-SWITCH TRIGGER





Electromotive actuators

Electrical locking/unlocking, space-saving,
with micro-switch, electrical forward rotation,
reverse rotation via return spring, with soft touch
button

Part number 6NW 011 122-047

TECHNICAL DATA

Resetting	Mainspring
Weight	60 g
Rated voltage	12 V
Voltage range	9 – 15.5 V
Maximum current consumption (blocking current)	5.1 A
Idling current	≤ 700 mA
Locking lever retention force	75 N
Locking lever breaking force	300 N
Micro-switch triggering force	≤ 24 N
Functional angle	≤ 78°
Actuating time 78° over functional angle ¹⁾	max. 4 sec
Reset time	≤ 90 ms
Triggering time	max. 4 sec
Thermal overload protection	not available
Operating temperature	- 40°C to + 85°C
Storage temperature	- 40°C to + 90°C
Design life ²⁾	7,500 cycles
Conducted interference	DIN ISO 7637, SAE J1113-42
Interference suppression CISPR 25, SAE J-1113-41	Intensity level 1 + 10 dB µV
Micro-switch switching angle	8° – 18°
Final position stability with motor short-circuit	≤ 6°
Protection level	IP 5K4
Salt spray test according to DIN 50 021 SS	96 h
Vibration resistance according to IEC 68-2-64	2.7 g
Casing material	PP-GF30
Sealing ring	NBR 70 Shore A
Locking lever material	PAA GF60 black
Resistant to	Petrol, diesel, bio-diesel, ozone
Pin coating	CuSn 6 bronze plate
Connector	Hirschmann, 3 pin
Mating connector ³⁾	3-pin MLK coupler ELA 872-858-541

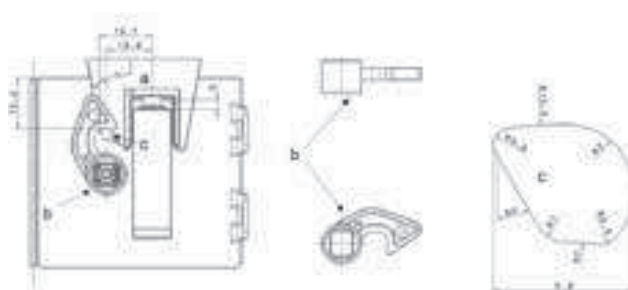
¹⁾ Over the operating voltage and temperature range.

²⁾ One switching cycle equals one forward and one reverse rotation.

3) This accessory is not included.

It may be purchased from Hirschmann Automotive.

TECHNICAL DRAWING



ELECTRICAL CONNECTION

