

90° Electric Actuators

Model 50840 Electric actuator 90° - IP66



Specifications

Available voltages:

100V to 240V AC and 100V to 350V DC
100V to 30V AC and 12 to 48V DC

Protection rating: IP66

Duty cycle: S4 50% (IEC34 standard)
150 starts/hour

Operating temperature: - 10°C to +55°C

Material: plastic housing

Product details

Visual position indicator	Customisable (handle for ER 10 & 20)
Control device	On-Off or 3 variable points
Voltage range	15V to 30V AC (50/60Hz) and 12V to 48V DC 100V to 240V AC (50/60Hz) and 100V to 350V DC
Duty cycle	Service S4 - 50% (IEC34 standard)
Torque limiting device	Computer software
Communication	RS485
Number of starts/hour	150
Information transfer relays	Safety mode (torque, temperature etc.)
Anti-condensation resistance	Self-adjusting
Drive	Star shape
Removable fixing plates (ISO 5211)	F03/F05 & F04 (ER10 & ER20 & ER35X) F05/F07 (ER359 & ER60 & ER100)
Number of limit switches	4 configurable switches (max. 5A)
Manual override	Clutch disengagement and protruding shaft
Mechanical end stops	90°
Electrical connection	1 DIN43650 connector 3 Poles + 1 Earth and 1 ISO M20 (3-position actuators: 2 ISO M20)
Temperature	-10°C to +55°C
Protection	IP66
Manufacturer guarantee	3 years or 50,000 movements

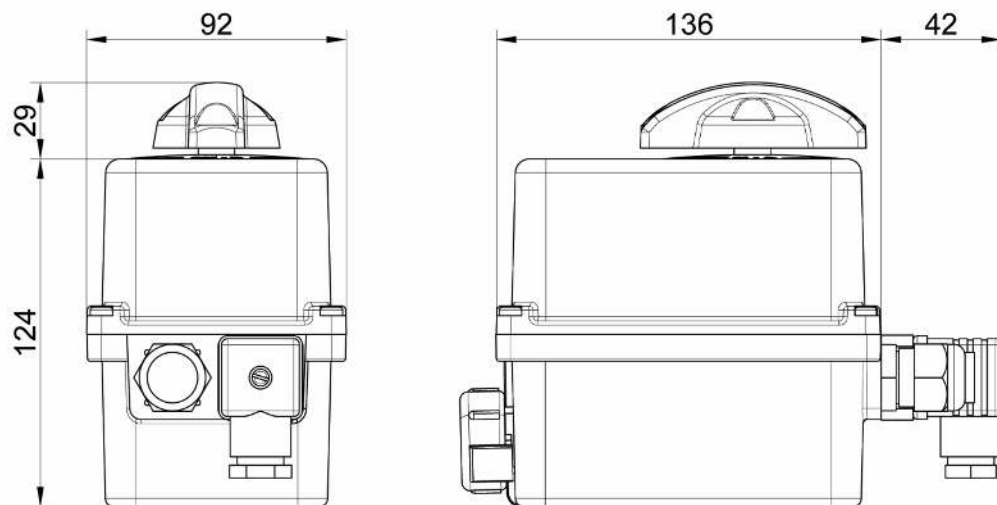
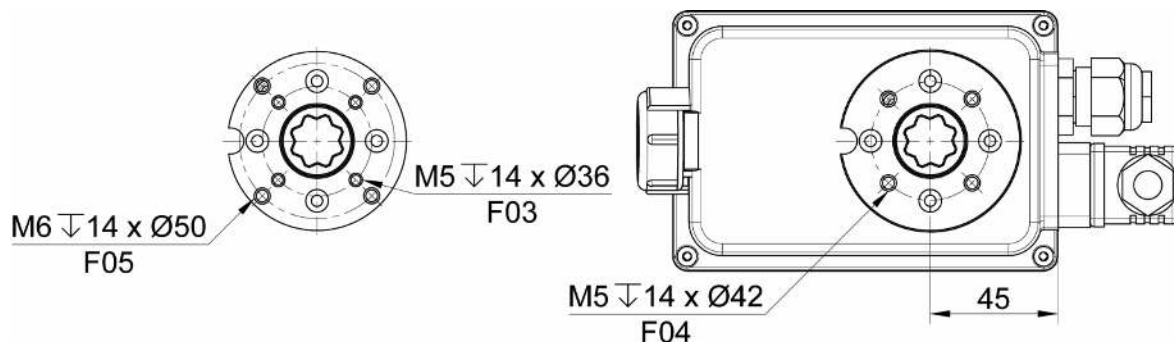
Options on request: 2nd DIN 43650 connector, 1 or 2 M12 3 Poles + 1 Earth connector(s), Bluetooth communication module

SAFETY INFORMATION



You must read this information before installing this product.

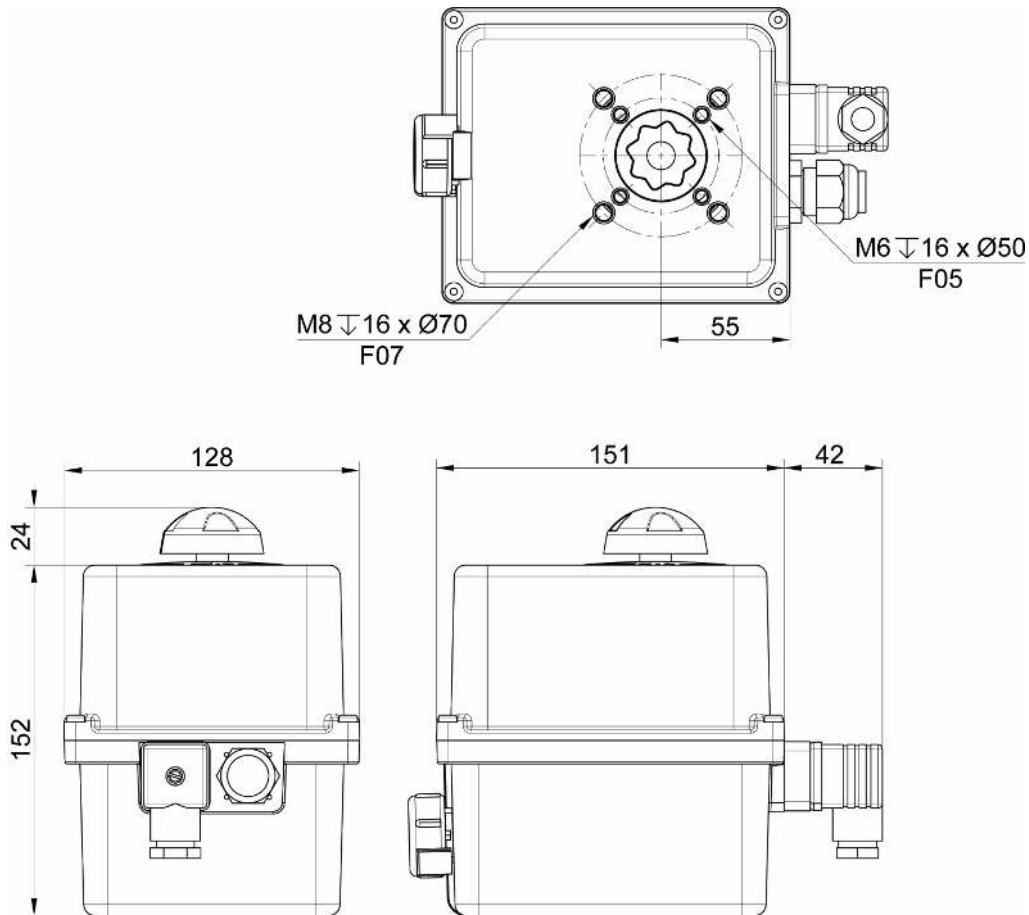
- You must turn off the electric power supply before you carry out any maintenance on the electric actuator (before you disassemble its cover or use the manual override).
- Any maintenance or removal/installation of the electric actuator must be carried out by a qualified electrician or a person who is fully trained in electrical engineering rules, safety rules and all other applicable regulations.
- You must respect the order of the steps for the electric actuator's connection and commissioning that are described in the user guide. If you do not do this we cannot guarantee that the actuator will work correctly. Check the indications on the actuator's identification label: your electrical power supply network must correspond to these requirements.
- Do not lift the actuator by its handle (ER10/ER20).
- Do not install the actuator "head down" as this could cause the following problems:
 - The clutch disengagement mechanism could stop working correctly
 - Grease could leak onto the electronic part of the actuator
- You must install the actuator at least 30cm away from any sources of electromagnetic interference.
- Make sure you position the actuator so that it is easy to operate the circuit breaker.



ER10 to ER35X

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ER359 to ER100

100V to 240V 50/60Hz and 100V to 350V DC

Part Name	Torque (N.m)	Power (W)	Opening/closing time (90°)	ISO Mounting plate	Drive (star) (mm)	Drive (depth) (mm)	Weight (kg)	Part number
ER10A	10	15	11	F03/F05+F04	14	16	1.20	950840-10A
ER20A	20	15	12	F03/F05+F04	14	16	1.20	950840-20A
ER35XA	35	15	26	F03/F05+F04	14	16	1.20	950840-35XA
ER359A	35	45	7	F05 / F07	22	24	2.30	950840-359A
ER60A	60	45	12	F05 / F07	22	24	2.30	950840-60A
ER100A	100	45	23	F05 / F07	22	24	2.30	950840-100A

15V to 30V 50/60Hz and 12V to 48V DC

Part Name	Torque (N.m)	Power (W)	Opening/closing time (90°)	ISO Mounting plate	Drive (star) (mm)	Drive (depth) (mm)	Weight (kg)	Part number
ER10B	10	15	11	F03/F05+F04	14	16	1.20	950840-10B
ER20B	20	15	12	F03/F05+F04	14	16	1.20	950840-20B
ER35XB	35	15	24	F03/F05+F04	14	16	1.20	950840-35XB
ER359B	35	45	7	F05 / F07	22	24	2.30	950840-359B
ER60B	60	45	12	F05 / F07	22	24	2.30	950840-60B
ER100B	100	45	22	F05 / F07	22	24	2.30	950840-100B

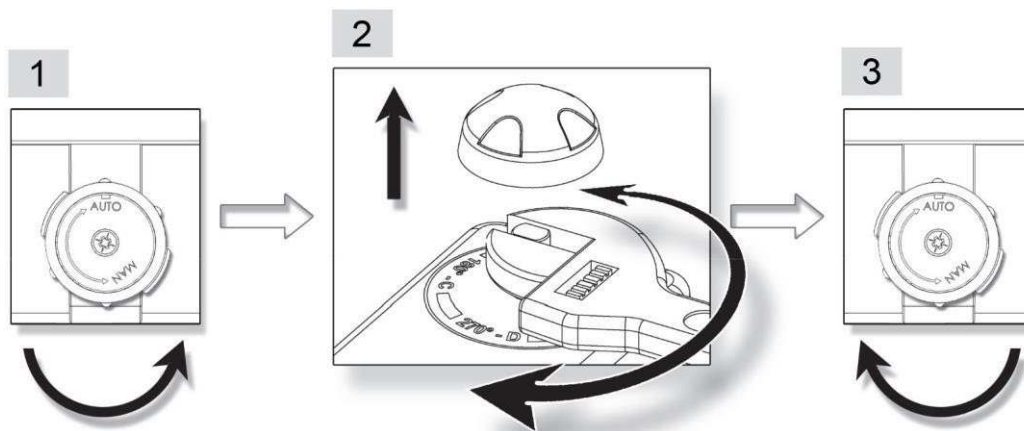
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Visual position indicator

Valve	0°	90°	180°
2-way: 0° = close 90° = open			
3-way (L):			
3-way (T): Ex : T1			

Manual override

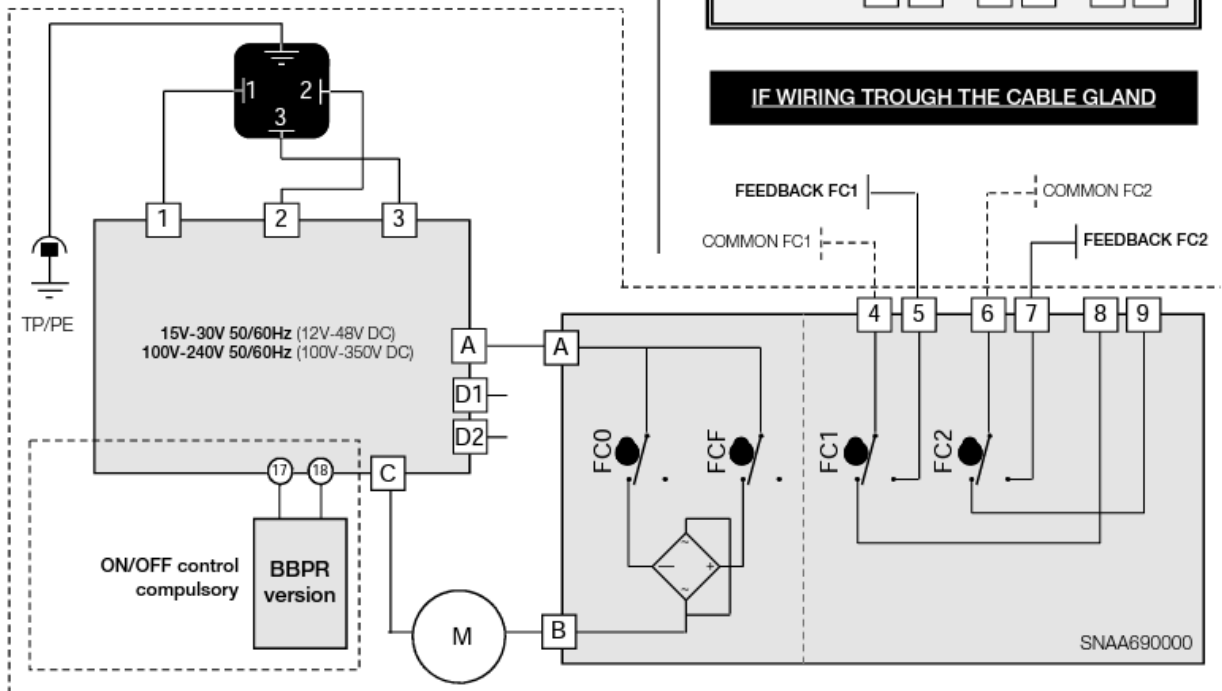
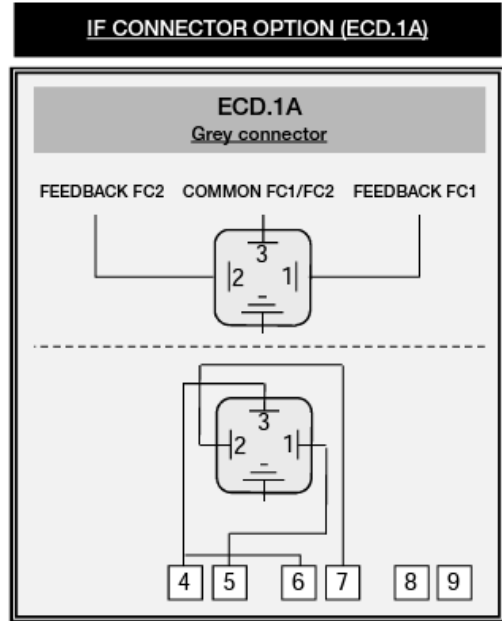
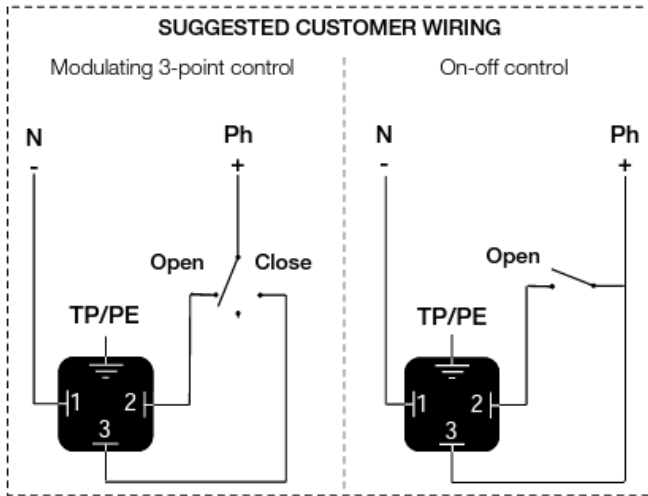


1. Turn the clutch disengagement button to the MAN position (in an anti-clockwise direction) and keep it in this position.
2. Turn the actuator's protruding shaft using a wrench.
3. You can return the actuator to automatic mode by releasing the clutch disengagement button, its spring return will turn it back to the AUTO position.

Electric circuit diagram

POWER SUPPLY : 3P+T DIN43650 CONNECTOR

FEEDBACK



N°	Part Name
FCO	Open limit switch
FC1	Auxiliary limit switch 1
FC2	Auxiliary limit switch 2
FCF	Close limit switch
D1 / D2	Failure report terminal strip (24V DC / max. 3A)

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Electrical connections

- You must connect an earth plug if the actuator is used with a voltage above 42V, according to the current standards.
- As the actuator is permanently connected to a power supply, it must be connected to a circuit-breaking device (e.g. a power switch, circuit breaker) which can turn off the power supply to the actuator. You should place this near to the actuator in a position that is easy to access and clearly mark it as the actuator's power-off switch.
- When actuators are connected to a power supply, an inrush current can flow. So you need to limit the number of devices connected to the supply or use an inrush current limiter at the circuit-breaker output.
- The terminal strip temperature can reach 90°C.
- If you want to use the device with long wires, you need to make sure that the induced current generated by the wires does not exceed 1mA.
- In order to optimise the installation's safety, you are strongly advised to connect the failure report strip (D1 and D2).
- You must use cable glands to connect the feedback switches (7mm and 12mm wiring) to ensure IP66 watertightness. If this is not the case, you must replace the cable gland with a ISO M20 IP66 cap.