

Tubular motor with built-in radio receiver with a return channel and overload detection function

Installation and operation manual

YYGL35PRIC-10/17 YYGL45PRIC-20/15

A tubular motor is an InelControl system device for automatic operation of roller blinds.

The tubular motor features an obstacle detection and automatic limit position setting functions.

The device includes a radio receiver with return channel. The data sent over the return channel provide full control of the device.

Use rigid links and stops in the bottom strip to ensure correct operation of the tubular motor. The stops must be installed as close to the guides as possible to ensure correct operation. A window sill must be installed and the roller blind curtain length must correspond to the length of the guides.

1 Safety guidelines

General guidelines

The tubular motor with overload detection is configured by default to guarantee safe installation and operation, provided that all guidelines and the relevant safety and accident prevention regulations are followed. Installation and repairs must be carried out by a trained and qualified professional. Do not modify or change the tubular motor in any way. All warranty repairs must be carried out by the manufacturer. Use genuine spare parts and accessories only. The operational safety of the tubular motor can only be guaranteed if the device is used as intended. The limit values provided in the specifications must not be exceeded under any circumstances.

Additional safety regulations

Follow the relevant safety and accident prevention regulations when installing, commissioning and maintaining the tubular motor. In particular, observe the following:

1. Fire safety regulations.
2. Accident prevention regulations.

General information on hazards and safety measures

The following are the general guidelines for use of INEL devices with other external devices. Follow the guidelines when installing and operating these devices.



Caution - Failure to take precautions may result in damage to the tubular motor, roller blind, roller blind box, facade etc.:

- Check if all screw connections are secure before installing the tubular motor with radio receiver and setting the limit positions.



Danger - Failure to take precautions may result in injury or death.

- Check if the local voltage supply parameters correspond to the device specification.
- Follow the relevant safety and accident prevention regulations.
- Use a circuit breaker for safe power supply disconnection (e.g. fuse cut-off switch) for all connections.
- Check the power wires and cables regularly for damaged insulation and continuity.
- Switch off the power supply before replacing damaged cables.

Warning

- Do not let children play with the control devices.
- Keep the control devices out of reach of children.
- Observe the roller blind in motion at all times and keep other people away until it is fully opened or closed;
- Provide training and instructions for the users on device operation and related risks. The operator is deemed to have been trained if the employer, administrator or owner of the device have instructed and authorised the operator to operate the device.

2 Installation manual

2.1 Safety

- The device must be installed by qualified personnel only.
- The weight of the roller blind must not exceed the maximum load carrying capacity of the tubular motor (see end of this Manual)
- Correct cable installation (loop facing down) will protect the tubular motor against water damage.
- Do not drill holes in the motor housing.
- Protect the motor against contact with liquids.
- Avoid shocks, impacts and damage to the motor.

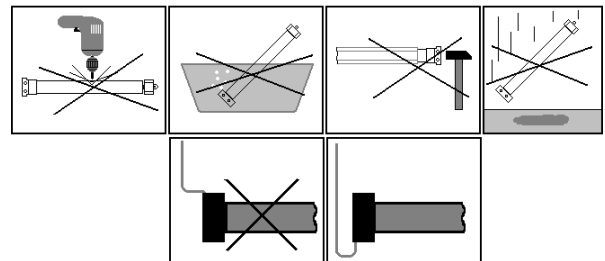


Fig. 1.

2.2 Installing the tubular motor

- Attach the bracket (A) to the side of the roller blind box, connect the adaptor (D) with the motor thrust ring.
- Connect the driver (E) to the motor axis and secure it with a cotter pin (F). Insert the motor assembly into the roller tube (G).
- The roller tube and the driver can be fixed with screws or rivets (H)

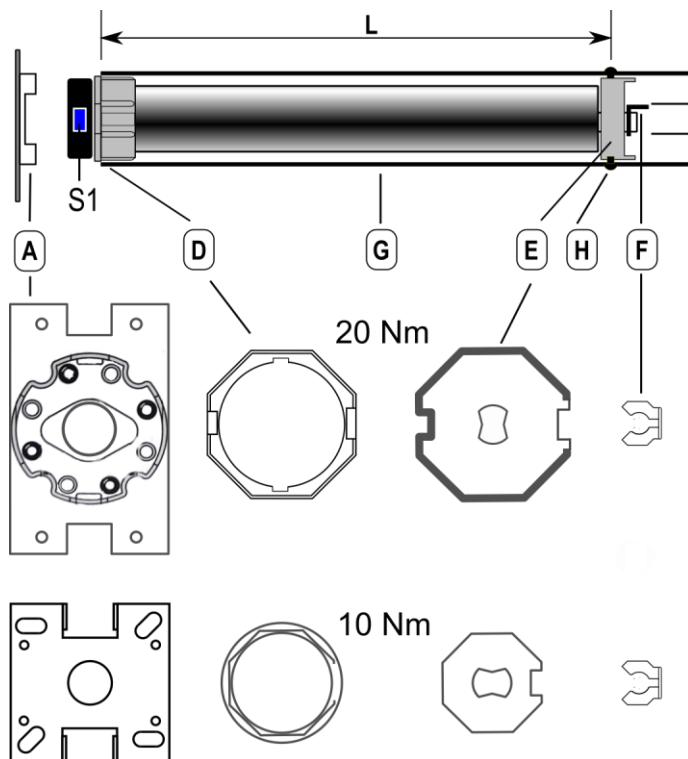


Fig. 2.

NOTE: The motor is fitted with an internal thermal breaker that allows the roller blind to work continuously for approx. 4 minutes, after which the temperature inside the motor will exceed the permissible value and trip the thermal breaker. The roller blind can be operated again after the motor cools down (up to 20 minutes.) The thermal protection guarantees long service life of the tubular motor.

2.3 Electrical connections

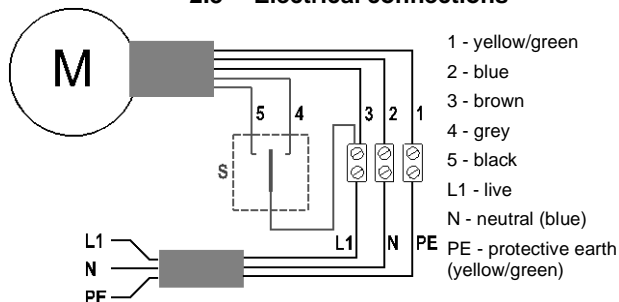


Fig. 3.

A monostable three-position (shutter blind switch) **S** can be connected to input 4 and 5 of the tubular motor. Press and release UP to raise the roller blind; press and release UP or DOWN to stop the roller blind.



TURN OFF THE POWER SUPPLY BEFORE MAKING ANY CONNECTIONS!



Incorrect installation may result in motor stopping unexpectedly.

Use rigid links and stops in the bottom strip to ensure correct operation of the motor. The roller blind curtain length must correspond to the length of the guides.

3 Starting and configuring the tubular motor in InelControl system

The tubular motor can be added to the system after power on.

For information about registering, configuring and operating the tubular motor, see "Control unit user manual" and "InelControl system configuration".

Before starting/programming the tubular motor, check the roller blind curtain, guide and roller blind box condition and make sure the window is fitted with a window sill.

The roller blind box and guides must be free from dirt and allow free movement of the roller blind curtain at its entire length. Dirty or tight guides may cause damage to the tubular motor and the roller blind that is not covered by the warranty.

4 Overload detection function

Type P tubular motor monitors the motor for overload (reduced speed) in the upward and downward direction. If the speed falls below a certain value (determined based on the position of the motor in the end position or outside of the end position), the motor will stop to prevent further movement in this direction. When the roller blind is stopped at the same point twice, the motor sets its limit position at this point. The motor will show higher sensitivity to overload at the distance within a quarter turn of the roller tube upwards and a quarter turn of the roller tube downwards from this point. The motor will gently stop at the bottom rigid link and at the stops in the top section of the window.

The tubular motor is factory set by the manufacturer. The tubular motor will adapt to the roller blind after making two stops in the upper and lower limit positions. The motor can also be set automatically in the app. The tubular motor is ready to use.

The motor detects low speed due to overload and prevents movement in the direction it was moving before stopping. To unlock the tubular motor, move it for at least 1 second in the opposite direction.

5 Troubleshooting

Problem:	<u>Motor is not responding.</u>
Cause:	Thermal protection triggered.
Solution:	Wait for 10 to 20 minutes.
Problem:	<u>Motor turns in the opposite direction to selected on the remote control.</u>
Solution:	Switch the motor direction in the app.
Problem:	<u>Motor stops automatically.</u>
Cause:	Roller blind curtain stuck in the guides.
Solution:	Check the roller blind curtain slats and guides.

6 Specifications

	YYGL35PR-10/17	YYGL45PR-20/15
Power supply	230 V 50Hz	230 V 50Hz
Torque	10 Nm	20 Nm
Power	131 W	161 W
Speed	17 rpm	15 rpm
Protection rating	IP 44	IP 44
Continuous operation time	4 min.	4 min.
Motor length	555 mm	530 mm
Weight	1.8 kg	2.5 kg

7 Motor selection table

		Roller blind height			
		1.5 m	2.0 m	2.5 m	3 m
Torque	Roller tube diameter	Permissible roller blind weight by height			
N-10 Nm	Φ = 40 mm	20 kg	19 kg	18 kg	17 kg
N-20 Nm	Φ = 60 mm	42 kg	40 kg	38 kg	36 kg

8 Disposal



Do not dispose of with household waste. Dispose of waste in accordance with the relevant legislation. Households play a key role in the recycling of waste electrical and electronic equipment. Waste sorting, including waste equipment and batteries, guarantees that the equipment is not disposed of with household waste but is handed over to a designated collection point for the recycling of waste electrical and electronic equipment.