



# **Installation instructions**

Spiral cable system for optical safety edge system (plug-in)



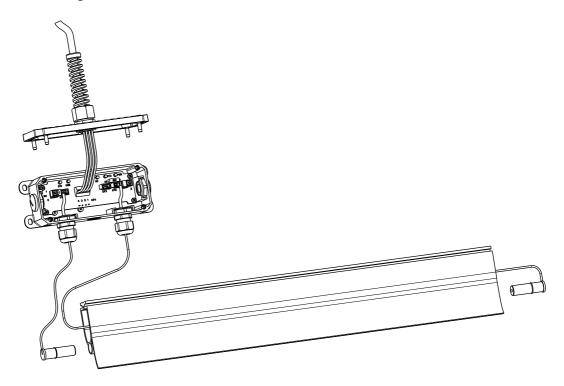
# **OPERATING INSTRUCTIONS**

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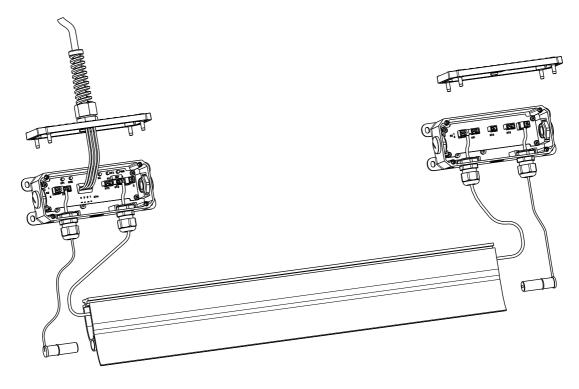
## **SYSTEM OVERVIEW**

The plug-in optical connecting block can be used to realise two systems depending on the requirements.

System 1 with a connecting box

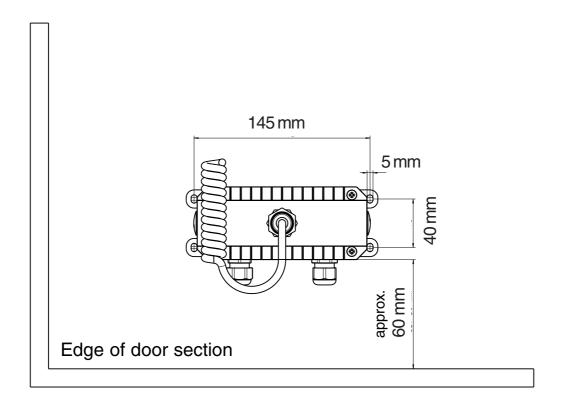


System 2 with a linked connecting and terminating box



#### **INSTALLATION**

If not specified otherwise by the door manufacturer we recommend installing the box as depicted in the following drawing. Installation is simplified when the cover with the inserted coiled cord is first removed.



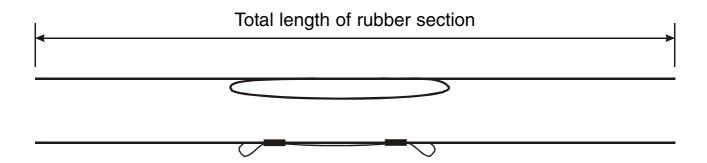


To guaranty water and dust protections the lid and the screws must be fitted and tightened properly.

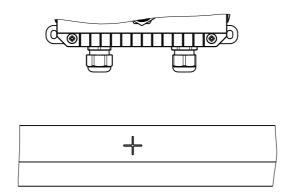
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#### LAYING CABLES IN THE DOOR SECTION

Before pulling the transmitter (System 1) or linking line (System 2) through the switch section, you should first adjust the length of the line by looping it. The ends of the loop are then secured with insulating tape or similar.



Before pulling through the lines you should first cut a cross of about 3 cm in the section's side wall using a sharp knife. You can now pull the line easily through the box using a suitable tool.



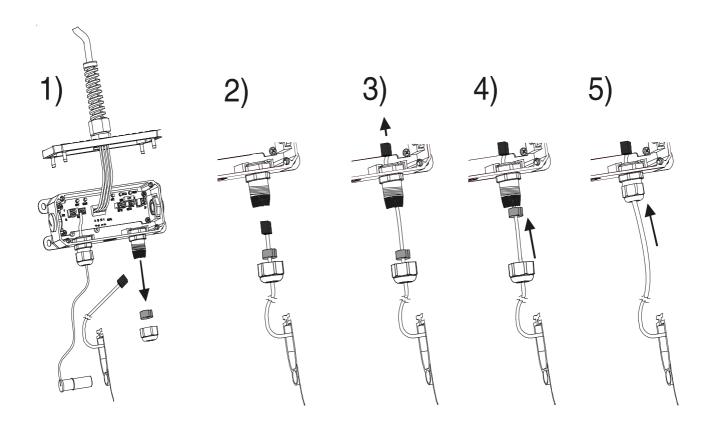
This pull-through tool should be secured about 8-10 cm from the plug.



#### **INSERTING THE CABLE**

Insert the prefabricated line ends with plug into the two bottom screw unions. To do so, proceed as follows.

- 1) Dismantle the enclosure lid.
- 2) Guide cable thru cable gland and fit rubber ring.
- 3) Guide plug with cable into the enclosure.
- 4) Connect plug into the socket and put rubber ring into the cable gland.
- 5) Turn and tighten cable gland.



### **INSTALLING THE PLUGS**

The connecting and terminating boxes house the socket contacts for receiving the inserted plugs. These three-pin plugs for the transmitter and receiver can be inserted into any one of the unassigned three-pin sockets.

# CONNECTING THE SLACK CABLE SWITCH AND / OR WICKET CONTACT

The connecting and terminating boxes are designed to receive two slack cable switches or wicket contacts. Before you can install one of these switches you will need an additional M16 x 1.5 cable screw union. This screw union must then replace the cover on the affected side.

Before you can lay the electrical wiring for the slack cable or wicket switch you must first replace the bridges installed in the two-pin clamp terminals with the lines connecting the switches.

The terminal's clamping range is 0.5–1.5 mm<sup>2</sup> with a stripped conductor length of 6.5–7 mm.

#### SAFETY EDGE FUNCTION INDICATED BY LED

Faultless function of the safety edge system will be signalised by the built-in LED's.

	Display	LED ON	LED OFF	LED FLASHING
OSE (green)	Signalises: Safety edge function	✓	Safety edge contacted     *T/R mal function     *T/R not alignet	partially contacted     *T/R mal aligned
ST1 (red) ST3 (red)	Signalises: *T/R	Approve plug connection	✓	
SC (red)	Signalises: 1. Short circuit 2. Over load	Approve cable and plug connection, eventually replacement of defect components	<b>√</b>	
PWR (green)	Supply voltage	<b>✓</b>	Approve plug connection at: 1. Control panel 2. Terminal box	

<sup>\*</sup> T/R = Transmitter/Receiver

