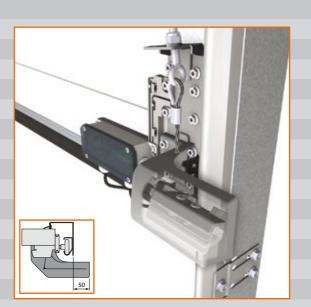




### Spring break safety device

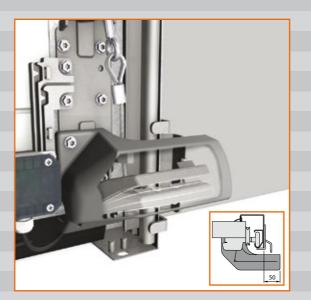
The European EN-13241-1 standard stipulates that a sectional door may never descend without being controlled. All manually operated sectional doors must therefore be fitted with a spring break safety device. This device blocks the spring shaft in the event of a spring breaking and prevents the door from crashing down. With motor driven sectional doors, instead of a spring break safety device there is a self-locking gearbox. This means a spring break safety device is unnecessary, as it is only required for a motor with a release system.



#### Cable break safety device

The TÜV sets out that the breaking load of both hoisting cables must be six times the weight of a balanced door panel. A cable break safety device is not required if the hoisting cables comply with this breaking load requirement.

If that safety margin cannot be guaranteed, then the door must be fitted with a cable break safety device. This device guides safety cables through a system to prevent the door from crashing down should the cable break. An extra 50 mm is required alongside the rail to install a cable break safety device.



# **Locking device**

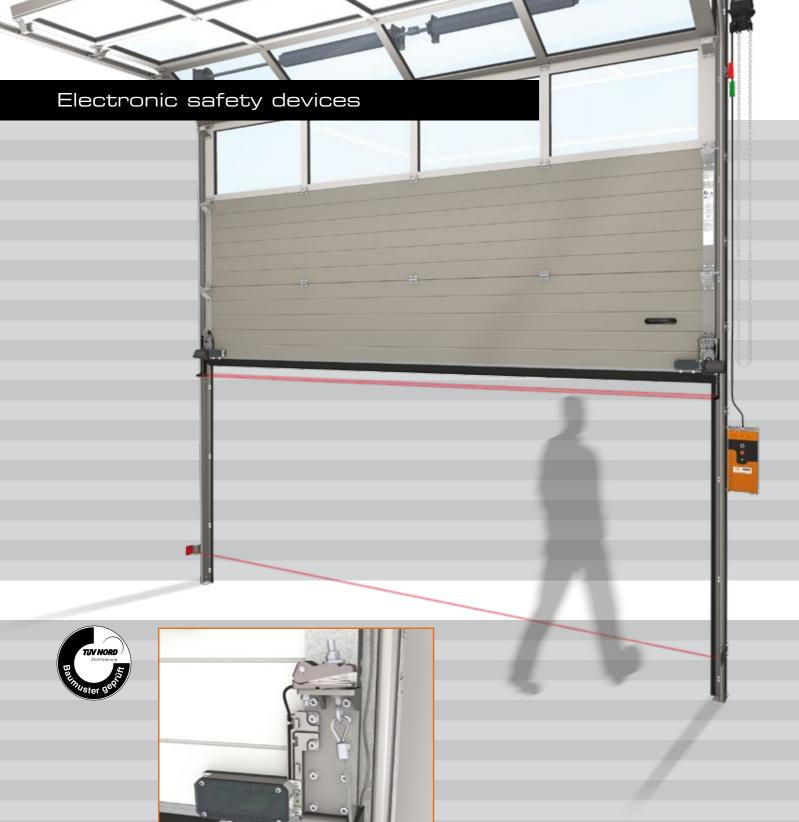
Sectional doors are suspended on flexible cables, making it possible to raise them when they are unlocked. Designed especially for light, electrically operated doors, the locking device prevents this, because without it sectional doors are more vulnerable to break-ins. Manually operated doors are fitted with

a spring-loaded mechanical slide lock as a standard.

An extra 50 mm is required alongside the rail to install the locking device.



2



# Slack cable device

This safety device is installed on both hoisting cables and immediately disconnects the motor if one of the cables breaks or becomes slack.



## Standard safety edge

The safety edge device is integrated together with a transmitter and receiver in the door's bottom rubber seal. If the signal is broken by an object or person, the door will stop and retract. The maximum contact pressure for the rubber seal is 40 kg. Choose the predictive obstacle safety edge if you have products that cannot withstand that level of pressure.



### **Predictive safety edge**

The predictive safety edge is located 8 cm ahead of the door. If the bottom of the door approaches an obstacle, a signal is immediately sent to the motor and the door stops and reopens. This means the safety edge works without coming into contact with people, goods or transport vehicles.



# Stationary photoelectric safety sensor

Motors with touch control must have a photoelectric safety sensor if the door opening is not visible to users while they are operating the door. There are two types: a model with a transmitter and reflector and a model with a transmitter and receiver. In both systems there is a transmitter attached to the rail on the control box side and a reflector or receiver attached to the opposite



rail. If the beam between the transmitter and the reflector/receiver is broken, a signal is sent to the motor to stop and reverse the movement. While the reflector system is sensitive to dust and moisture, this is not the case for the receiver model.