

# Power

## Operators

Alpha offers a variety of operators for powering sectional doors. A manual system is ideal for doors that are not used frequently, while an electrically powered system with touch control is best for doors that are in constant use. Depending on the door configuration and your requirements, there is always a mechanism to suit your needs. All our drive systems and operators meet the European EN-13241-1 standard.



### Pull cord – manually operated

If your door is smaller than 16 m<sup>2</sup> and you use it only sporadically, then your best option is the pull-cord mechanism. However, the system requires physical exertion (1:1 ratio) and there is a risk the door will not open sufficiently, which may result in damage.



### Chain hoist – manually operated

The chain hoist requires less physical exertion than a pull-cord (1:4 ratio). The system – suitable for sectional doors up to 30 m<sup>2</sup> – ensures that the door can be secured in the uppermost position.



### Dead man's switch – electric

This system is an excellent choice when a door is used infrequently. One push of the button is all that's needed to open the door, although you have to keep it depressed to close the door. This enables the person operating the controls to keep an eye out for any dangerous situations that may arise while the door is closing.



### Touch control – electric

If the doors are in constant use then go for a touch control. The door raises or lowers automatically to a set position, which can be electronically adjusted, without having to keep the button depressed. An obstacle detection system is built into the door's bottom seal.



### One touch with remote control

The touch control system is also perfect for remote operation and can save a lot of time, because it allows the forklift driver to remain seated while the door is opened or closed remotely. This option includes a stationary photoelectric safety sensor, which is fitted to the door.



### Touch control with remote control and high speed motor

If the doors are in constant use then go for a touch control. The door raises or lowers automatically to a set position, which can be electronically adjusted, without having to keep the button depressed. An obstacle detection system has been built into the door's bottom seal.

Alpha offers a wide range of top-quality controls for your sectional door that can be integrated into the door system's control box. Numerous elements can also be mounted on an interior or exterior wall, a pillar or anywhere else, including safety devices, switches, remote controls, warning lights and much more.



### Motor with emergency chain

All the drive systems have a mechanical back-up system fitted to the reduction gearbox of the electric motor, so that the sectional door can be opened if the power fails. It must be activated and deactivated manually using pull cords. The reduction gearbox can then be powered using the chain.



### Motor with release system

The motor can also be fitted with a release system. Cables are used to disconnect the reduction gearbox from the spring shaft, which means that the sectional door can be opened faster in the event of malfunctions. It goes without saying that sectional doors with a release system are fitted with a spring break safety device.



### Main switch with padlock

The main switch can be used to turn off the power so that the door system can be serviced. Securing this switch with a padlock prevents unauthorised people from accidentally turning the power on while the service is being carried out.



### Key switch

The key switch is used to disable the control box and prevent unauthorised people from operating the door. Only authorised people have a key to activate the door.



### Two setting switch

You can use this switch to configure two settings. For example, push the button once to raise the door to the height of a person and twice to open the door fully. This option is ideal if you want to save energy and don't always need to open the door completely.



### Emergency stop

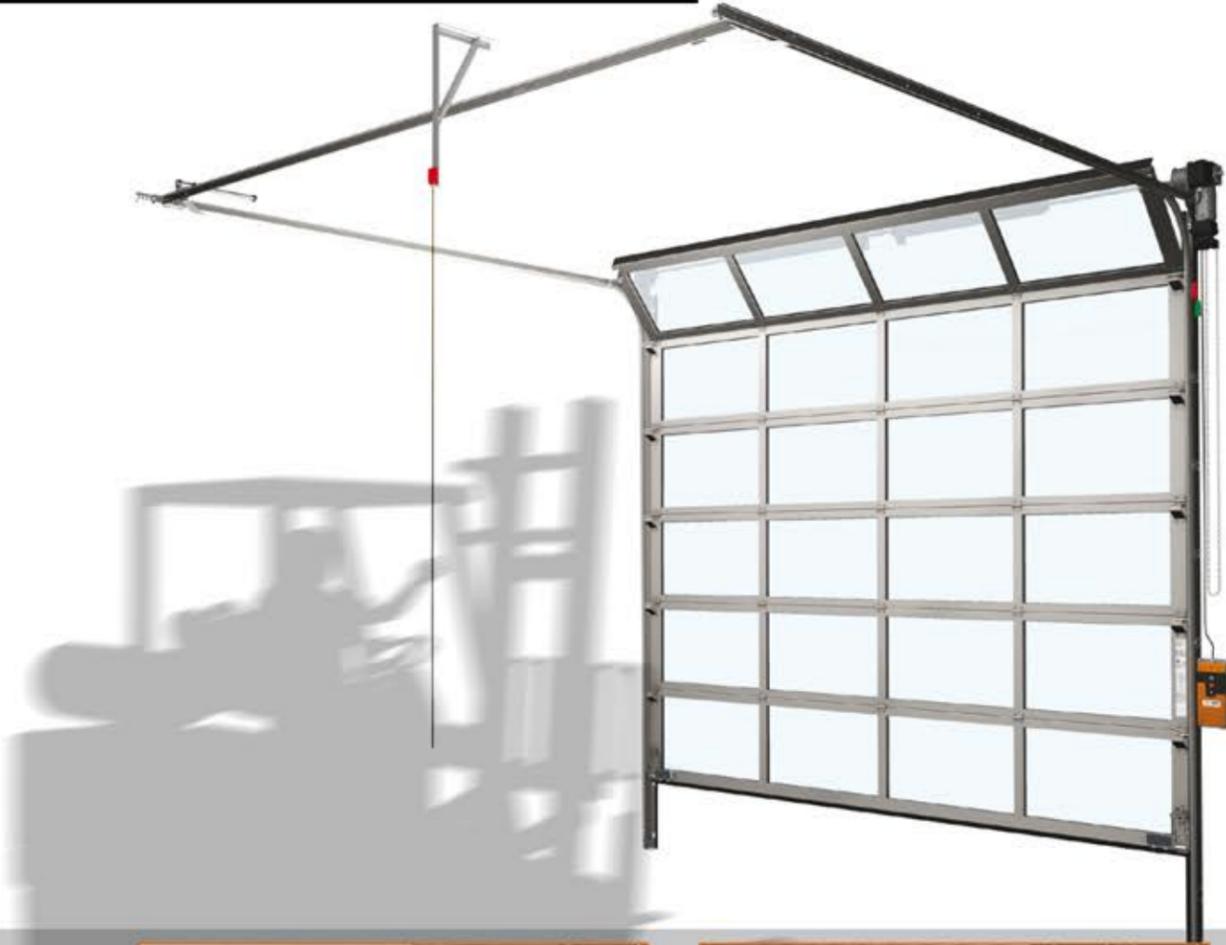
Alpha offers the option to have an emergency stop installed in the control box when local, national or international legislation stipulates that an electrically operated sectional door must have this safety feature.



### Wireless communication

Normally, the control box and the connection box on the door panel are connected by means of a spiral cord. But this cord can get in the way and be damaged. That's why Alpha supplies connection boxes that are fitted with a battery and can transmit signals, such as detection messages, wirelessly to the control box.

## Extra control features



### Extra control panel

An extra control panel is the ideal solution if a door needs to be operated from multiple places or remotely, such as from a guardhouse. This handy 'up-stop-down' box features all the buttons in the standard control box.



### Traffic lights and warning lights

Traffic lights and warning lights installed on either side of a door are an effective way of preventing injury to people and damage to the sectional doors and goods. Warning lights alert people and light up before a door opens, while traffic lights control the traffic and prevent damage to the doors.



### Key switch

The door can be operated using a separate key switch, which can be mounted on the exterior wall. There are two models: the built-in version, which is used a lot in new properties, and the mounted version, which can be installed during a renovation without having to break or dismantle anything.



### Electronic keypad

If access to a door is required 24/7, it can be fitted with an electronic keypad. This is particularly handy if transport and courier companies need to have round-the-clock access to secure collection or delivery points.



### Pull switch

The forklift driver can use the pull switch to operate the door while staying seated. This is the ideal solution if you have a lot of employees, but don't want to give all of them a hand transmitter for the door. The pull switch is often mounted on a frame a few metres in front of or behind the door.



### Remote control

Alpha has included a receiver in your door's control box, making it easy to upgrade the door system to a remote-controlled one. You can choose between one, two or four-channel transmitters, which can operate four different doors.



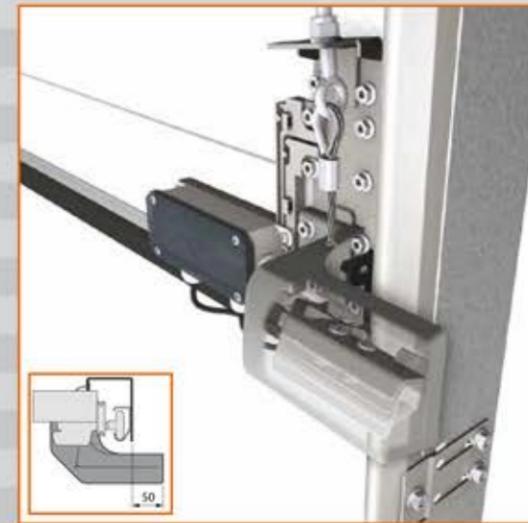


Safety is important when it comes to the frequently heavy vertical sectional doors, so Alpha offers mechanical and electric safety devices that prevent the door from coming into contact with people, vehicles and obstacles, and causing injury or damage to the doors and/or goods. Excessively safeguarding a sectional door is often unnecessary and could be disadvantageous, as it requires things like extra space for installation and use and could result in components obstructing or even damaging each other. That's why Alpha recommends you always observe the safety rules. We provide optimum safety systems that are certified by TÜV Nord and meet the very strictest requirements and standards.



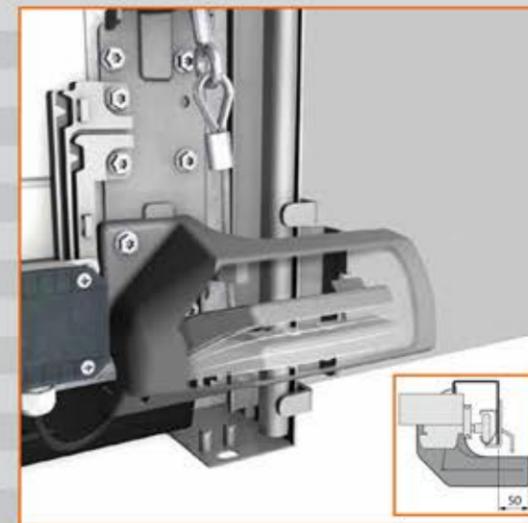
### Spring break safety device

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.

## Electronic safety devices



### 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.