

High-speed door 640NG FREEZ 1 & 2



The High-speed doors FREEZ 1 & 2 have been specially designed for use in cooling and freezer cells and are the most suitable high-speed door for your cooling and freezing cells which functions smoothly in the freezer. The high opening, closing speed and superior seal limit temperature fluctuations, reduce the entry of moisture into the freezer and optimise internal transport.

The insulated door leaf of the FREEZ 1 1 ($U=2.0 \text{ W/m}^2$) as well as the FREEZ 2 ($U=2.52 \text{ W/m}^2$) contribute to additional saving on your energy bill and reduce condensation and/or ice formation of the door leaf.

The flexible OVC door leaf without any hard elements does not cause any personal injury or damages when it accidentally hits a person or vehicle.

Anti-crash

Unique for the High-speed doors FREEZ 1 & 2 is that both doors are equipped with an anti-crash system, which functions across the full door height. When the door leaf is accidentally hit by a vehicle, it suffices to open and close the high-speed door and the door leaf will automatically return to the side guides. Therefore the High-speed doors FREEZ 1 & 2 are definitely safe.

Reduce ice formation and prevent downtime

The optional energy-saving electric heating cables in the side guides and the thermal interruption behind the side guides, reduce ice formation and prevent downtime of the high-speed door. Combined with the self-repairing door leaf this guarantees a long and trouble-free service life of the high-speed door

Door leaf

The door leaf of the High-speed door FREEZ 1 made of 2x polyester fabric 0.9 mm thick, between which the insulation material is applied.

The door leaf of the High-speed door FREEZ 2 has the same construction, however the distance between the

two door leaves is larger and provided with air as an insulator. Optional, the FREEZ 2 can be equipped with a dry air blower with which heated air is blown between the door leaves. This prevents condensation/ice formation. Besides the high insulation value, the FREEZ 2 has an excellent thermal insulation.

Materials

The solid frame of galvanised steel ensures that the High-speed doors FREEZ 1 & 2 are easy to install. Optional, the guides can be supplied in coated steel, in stainless steel AISI 441 (304) or in 316!

Door leaf FREEZ 1

The door leaf of the FREEZ 1 consists of double-walled 0.9 mm polyester fabric with insulating material in between and is available in 15 standard colours. A view panel is not possible in the insulated door leaf.

Colour	RAL 9010, 1015, 1003, 2004, 3002, 5002, 5010, 5012, 6018, 6026, 7035, 7037, 7042, 8014, 9005
Fire resistance	Self-extinguishing class 2 (DIN 4102)

Door leaf FREEZ 2

The door leaf of the FREEZ 2 consists of double-walled 0.9 mm polyester fabric with an air cavity in between and is available in 12 standard colours. A view panel is not possible in the insulated door leaf.

Colour	RAL 9010, 1015, 1003, 2004, 3002, 5002, 5012, 6026, 7035, 7037, 7042, 9005
Fire resistance	Self-extinguishing class 2 (DIN 4102)

The superior seal makes horizontal reinforcement profiles superfluous so that the door not only opens and closes much more quietly, but the High-speed doors FREEZ 1 & 2 are also much more hygienic at the same time and therefore perfectly suited to be used in the nutrition and food industry.

The quick opening and closing minimises the heat and energy loss. The energy loss can still be improved because the High-speed door FREEZ 2 can be optionally equipped with an insulated door leaf of 3 mm (3.9 W/m^2), 7 mm (3.3 W/m^2).

The High-speed doors FREEZ 1 & 2 are standard equipped with a roll-off sensor with a photocell in the side guide as a clear size safety device. From a clear size width of 3000 mm an integrated safety light frame is standard applied, that monitors the passage at a height of 2500 mm when the door is closed.

High-speed door 640NG FREEZ 1 & 2

Due to the lack of horizontal reinforcement profiles the High-speed doors FREEZ 1 & 2 have a self-repairing door leaf after a crash.

Conform European regulations the High-speed door 640 is standard equipped with an emergency hand crank to manually open the door in case of a power failure. This complies with European regulations, but this is a time-consuming operation.

Optional controls in case of a power failure:

- **Counterweight installation**
Counterweight in the side guide, which can be unlocked via a handle on the side guide. This releases the brake of the drive, the counterweight moves down and automatically opens the door leaf.
- **Emergency power supply via a battery**
The emergency power supply via a battery opens the door automatically in case of a power failure. The result can be compared with the use of the manual decoupling, but this automatic systems operates without the intervention of human action via a supplied battery. A full-automatic opening of the door leaf in case of a power failure, has the advantage the logistical flows are not disturbed and it provides extra safety, for example, in case of a fire. The emergency battery is integrated in the control box.

Dimensions

The dimensions of the High-speed doors FREEZ 1 & 2 are based on the clear size width and height, both dimensions are used in mm.

FREEZ 1

Maximum clear size width 4750 mm
Maximum clear size height 6000 mm

FREEZ 2

Maximum clear size width 4000 mm
Maximum clear size height 4000 mm

Control

The High-speed doors FREEZ 1 & 2 are supplied with a 400V frequency control system. The speed and position are constantly monitored with a digital encoder. When open the door is held by an electronic brake.

The high-speed door 640 is standard equipped with a plastic control box (IP65) or grey enamelled steel control box (IP54). Both are equipped with a control button for opening or closing, an emergency button and a main power switch. Optional the control box can be made from high quality stainless steel (IP65), or the control

box can be equipped with an integrated emergency power supply.

There are many options available for opening and closing the High-speed doors FREEZ 1 & 2. Examples are a movement and/or presence detector, a pull cord, a remote control, an induction loop, infrared sensors or push buttons. With this extensive package of options a suitable solution can be found for every situation.

Safety provisions

The High-speed doors FREEZ 1 & 2 have a CE marking, a quality and safety guarantee. The door complies with all relevant European standards for industrial doors.

Application

The High-speed door 640 is suitable for situations where vehicles and/or persons frequently come and go and this requires a compact high-speed door which is designed for intensive use.

By using the High-speed doors FREEZ 1 & 2 a balance is created between logistical movements and draft protection, resulting in an improvement of the working conditions, more constant temperatures and significant savings in energy costs.

For customer-specific solutions, there is a wide choice of finishes, controls and options that increase user-friendliness, improve the safety and enable the integration with other products or systems at the loading/unloading station.

Technical specifications

Standard.....	CE
Construction.....	Steel galvanised or enamelled in colour
Engine power.....	1.5kW
Connection.....	400 V, 50/ 60 Hz
Emergency opening.....	Standard emergency hand crank
Opening speed FREEZ 1.....	max 1.2 m/s
Opening speed FREEZ 2.....	max 1.8 m/s
Closing speed	0.6m/s
Door leaf material	0.9 mm polyester
View panel.....	not possible
Operating power	24 V dc
Protection class	IP 54/ IP 65
Sustainability EN 12604	1,000,000 cycles
Wind class	3000 x 3000 mm Class 1

High-speed door 640NG FREEZ 1 & 2

Options

- Stainless steel AISI 441 (304) or Stainless 316 construction,
- Door leaf in other RAL colour,
- Reinforced bottom profile for guaranteed closing at higher wind loads,
- Disconnection system with battery for automatic opening in case of power failure,
- Customer-specific logo on door leaf,
- Various door openers,
- Warning lights.