AUTOMATIC PEDESTRIAN ACCESS

GILGEN DOOR SYSTEMS

SWING DOOR DRIVE UNIT
FD 20

OPENS. CONNECTS. PROTECTS.

LET US
OPEN DOORS FOR YOU

The Gilgen FD 20 swing door drive unit makes doors significantly easier to operate. Contactless opening and closing also fulfils the most demanding hygiene requirements, while helping to ensure trouble-free entry and exit.

Flexible, functional applications
Wherever people work, living and are cared for or congregate, there are doors that tend to hinder their comings and goings. The automation of these doors offers smooth access with hygienic, obstacle-free entry and exit.

Possible configurations
- Single door leaf and bi-parting
- Emergency-exit function
- Fire-safety function
- Special solutions

Versatile application
Gilgen swing door drive units are ideal for new installations or building upgrades. Lightweight doors, external doors and even fire doors can be automated with ease.

Individual
Thanks to the wide range of options available, the user is sure to obtain a fully-customised, automatic door.

Smooth, quiet operation
The electromechanical drive unit ensures that the door operates quietly and smoothly.

Maximum reliability
The use of top-quality components guarantees reliability to match, plus a long service life and minimal maintenance.

Automatic hygiene
Contactless user-access helps eliminate the risk of germ contamination. This feature is of particular importance, and taken very seriously, in public places such as hospitals, care homes, clinics and toilets.

MANY POSSIBLE APPLICATIONS
WITH JUST ONE DRIVE MECHANISM

The Gilgen FD 20 swing door drive unit is highly consistent when it comes to performance, long service life and quiet running. From light internal doors to heavyweight external doors designed to withstand high winds – the Gilgen FD 20 is always the right choice!

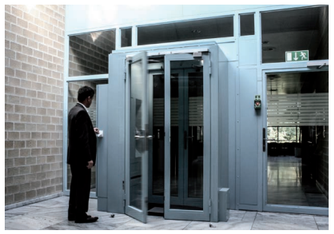
A reliable drive mechanism for virtually any application combined with the right accessories.
The smooth lines of the Gilgen FD 20 make it compatible with any architectural design. It adds value to the various applications in which it is used, thereby enhancing the overall aesthetic approach.

Escape-way / Emergency exit

Low-energy mode

Heavyweight external doors

Bi-parting installations



Interlock function

Adjustable functions

- Low-Energy / full-power
- Safety monitoring with automatic stop/reverse mechanism
- Wind-load regulation
- Control of opening and closing speed, hold-open time and motor power
- Push & Go Function
- Automatic closing sequence control for bi-parting configurations

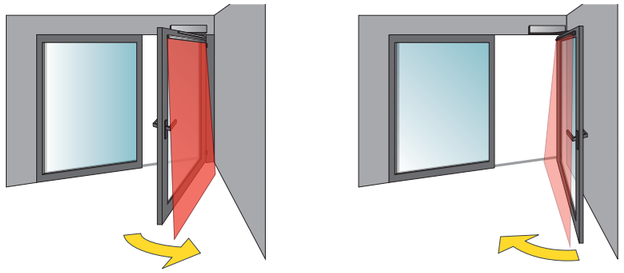
Optional / Extendable

- Reinforced closure (forced engagement of lock)
- Acoustic signal during movement of the door leaf
- Connection of electric locks / locking mechanism
- Remote-control systems
- Casing in stainless steel or aluminium
- Fully-enclosed housing
- Integrated opening end-stop
- Inverted drive configuration
- Operating-status display:
  - In the drive mechanism or on an external control unit
  - Acoustic: door opens/closes
  - Dry contact for transmission of data to the building's central control system

RELIABLE DAY-TO-DAY CONVENIENCE
GILGEN AUTOMATIC DOORS

Automatic doors used in the public sector have to conform to EN 16005. Various configurations are possible, depending on the application. The specialists at Gilgen Door Systems will be pleased to answer any questions that you might have.

Swing door drive units supplied by Gilgen Door Systems are fully certified, and designed to conform to the highest quality and safety specifications. The robust design of the Gilgen FD 20 makes it resistant to attack.



Safety sensors with “Reverse” and “Stop” functions offer additional protection for pinch points. The “blanking” function is configured via the drive unit to guarantee optimum performance.

Finger protection

Activ infrared safety sensor

Safety-tested

The TÜV-tested drive mechanism is designed to ensure smooth, automatic operation. A series of compatible safety elements ensures optimum protection.
If the Low-Energy function is configured, the system can even do without safety sensors.

Optional / extendable

- TÜV-tested sensor strip or light barriers
- Potential-free contact for “Door in Operation” indication signal
- Emergency OFF switch
- Finger protection
- Active infrared light detector

HIGHLY USER-FRIENDLY
BARRIER-FREE ACCESS

Hands-free access is provided by a movement sensor or other impulse elements. The operating modes of the Gilgen FD 20 are easy to configure using the corresponding illuminated program selector keys.

Control elements

- Radar
- Sensor
- Contactless detection sensor
- Remote radio control F9000
- Foot- or elbow-operated switch
- Key-operated (pivoting) switch for operating the locked door
- D-BEDIX external control unit
- etc.

Radar

Remode radio control F9000

Contactless detection sensor

Program selector keys
The buttons on the side of the drive mechanism are used to select the desired operating mode.
The selected button lights up to give an immediate indication of the active operating mode.
The buttons can be disabled, depending on the situation.
All settings can likewise be configured with the optional D-BEDIX control unit.

Integrated program selector keys

D-BEDIX (optional)

RELIABLE IN AN EMERGENCY
WITH EMERGENCY-EXIT, FIRE-PREVENTION AND SMOKE-PROTECTION DOORS

The fire rated Gilgen FD 20-F swing door drive unit is available with a number of additional safety features to ensure controlled operation in the event of an emergency.

Automatic emergency exits and fire-/smoke-proof doors offer convenience for everyday use, while fulfilling legal requirements, inclu-ding in the event of an incident. These additional func-tions also increase the range of possible applications.
Gilgen automatic doors meet the highest quality, safety and security specifications.

Emergency exit

Fire barrier

Panic exit

Reliable protection from smoke and fire and a safe emergency exit/rescue access.
If a fire alarm is activated, the door closes under full control from any position. The smoke and fire barrier can then be opened manually for use as an escape route/emergency exit.

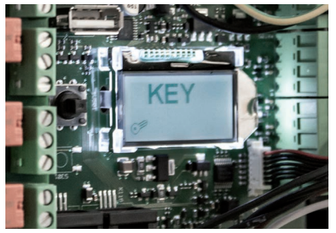
Drive mechanisms with the “Invert” function enabled are ideal for building smoke-extraction/ventilation purposes, and for escape routes/emergency exits. The doors are opened by spring pressure and closed again by motor.

This ensures, in the event of a power failure or fire emergency, that the door can be opened safely to allow heat and smoke to dissipate in a controlled manner. There is thus no need for an emergency power supply in this respect.

SIMPLE TO INSTALL
AND PUT INTO OPERATION

The compact, lightweight Gilgen FD 20 swing door drive unit is characterised not only by its advanced technology and functionality, but also by its fast installation and startup.

Guided initial startup
Once the Gilgen FD 20 has been installed, the integrated, user-friendly joystick and LC-Display can be used to set the relevant parameters (opening and closing time, safety monitoring, reinforced closure etc.).
The final step is to adjust the power of the return spring to the corresponding size of door.

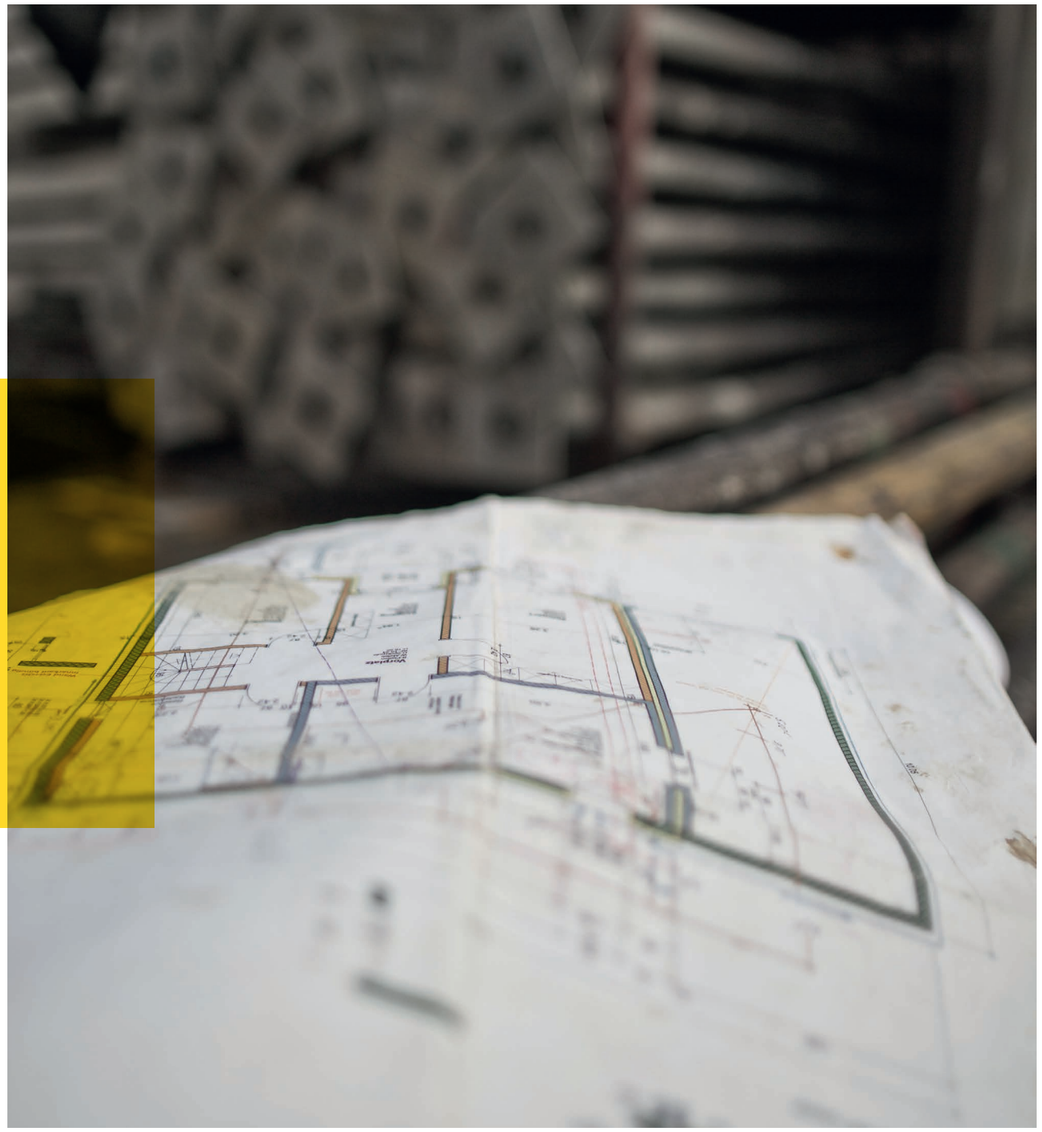


The LC-Display integrated into the drive mechanism provides the user with guidance for initial startup. No additional external devices are required.

The illuminated program selector keys and master switch (all-pole) are integrated into the side cover for intuitive operation.

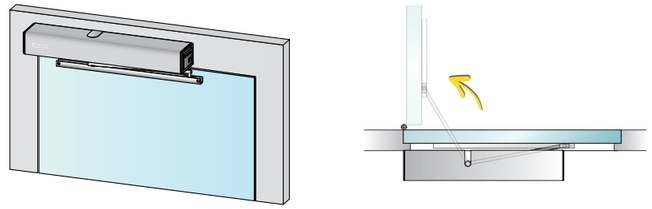
**The selectable Low-Energy function makes additional safety sensors unnecessary.
The changeover is carried out without any additional upgrade cards.**

SELECTION CRITERIA
FOR PLANNING PURPOSES

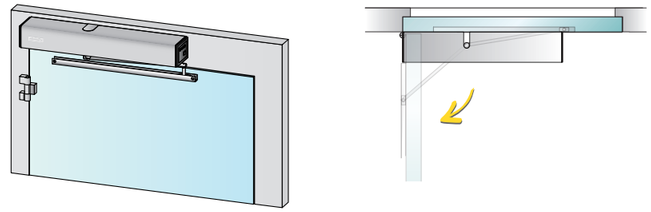


Various installation and configuration options are offered to match requirements.
Find out which variant is the best for you:

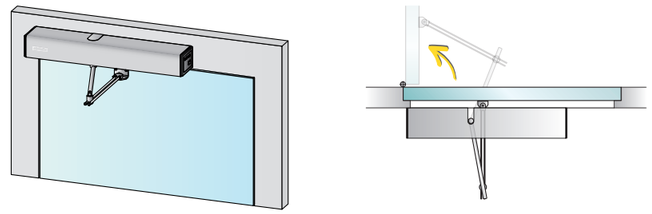
Lintel installation / sliding rod
pushing function
- aesthetic solution



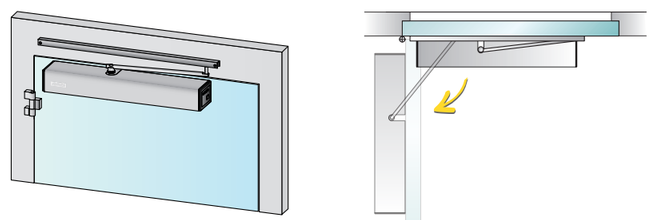
Lintel installation / sliding rods
pulling function
- aesthetic solution



Lintel installation / standard rods
pushing function
- unbeatable transformation of power



Installation on door leaf / sliding rods
pushing function
- appropriate for slight lintel heights

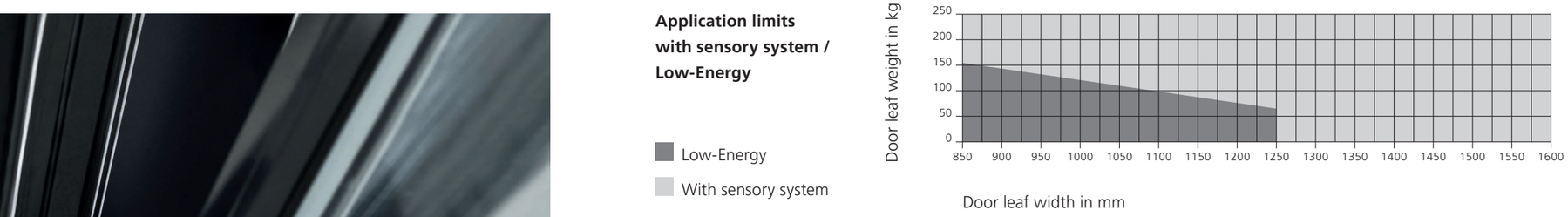


OUR TECHNOLOGY
IN DETAIL

Application limits

Max. leaf weight	250 kg
Door sizes EN 3-7	(850 – 1600 mm)
Door sizes fire doors EN 4-6	(950 – 1400 mm)
Max. opening angle	105°
Tested in accordance with	DIN 18650, EN 16005 / Fire-prevention version included in approval procedure

Application limits with sensory system / Low-Energy



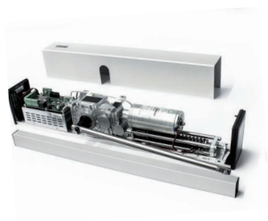
Technical specifications

Power transfer	Standard rods (pushing function) / Sliding rods (pushing and pulling function)
Dimensions of drive mechanism	height 95 mm, width 690 mm, depth 120 mm
Weight of drive mechanism	10,5 kg
Ambient temperature	-15 to +50 °C
Protection rating	IP 40
Operating voltage	230 VAC (+10/-15 %), 50 Hz, 10/13 A
Power consumption of drive mechanism	max. 560 W
Rated motor capacity	100 W
Power supply, external user	24 VDC (±10 %), 2 A
Output shaft torque	max. 80 Nm
Lintel depth standard rods	max. 250 mm
Lintel depth sliding rods	-30 / +140 mm
Opening speed	max. 40°/s
Closing speed	max. 40°/s
Relative humidity	max. 85 %

THE RIGHT TYPES OF ROD ASSEMBLY
FOR HIGH WIND-LOAD STRESSES

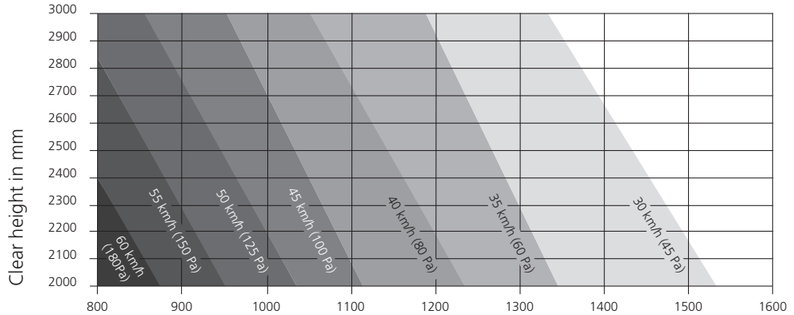
The data in the following tables correspond to fully-secured doors with safety-sensor systems. The presented application limits result from wind-load, door size and type of rods.

Sliding rods
Swing door drive units with sliding rods and pushing / pulling function are the most common and best looking, building solution.

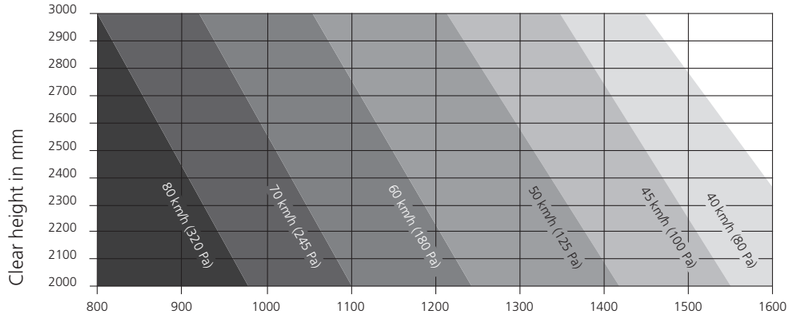


Standard rods
Our swing door drive units with standard rods and pushing function are the most efficient way to harness the force of the Gilgen FD 20 system.

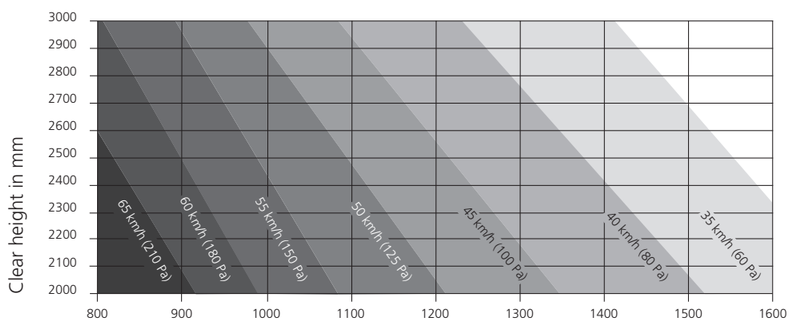
Sliding rods
pushing function
(outward-opening door)



Standard rods
pushing function
(outward-opening door)



Sliding rods
pulling function
(inward-opening door)



The Gilgen FD 20 drive unit for swing doors is capable of reliably opening and closing doors even if exposed to wind speeds of up to 80 km/h (320 Pa). For external doors, Gilgen Door Systems recommends to assume a wind pressure of at least 100 Pa (45km/h). Doors installed in certain exposed locations (e.g. near the sea, in mountainous regions, on observation platforms, et.) are often subject to higher wind loads.

GILGEN
DOOR SYSTEMS

AUB

AUB Limited
Unit A, 12/F, Hung Mou Industrial Building,
62 Hung To Road, Kwun Tong,
Kowloon, Hong Kong
Tel : +852 2375 6110
Fax : +852 2406 2602
Email : enquiry@aub.com.hk
www.aub.com.hk