Next Generation

High-speed spiral doors

EFAFLEX

safe high-speed doors

Next Generation spiral doors

EFAFLEX is the inventor of spiral door technology and is now pooling this wealth of experience in the Next Generation spiral doors. This is a uniform and symmetrical basic construction with four different door leaves. Weather maximum wind load, high insulation requirements or enormous durability - the Next Generation spiral doors from EFAFLEX solve every challenge. Here too, spiral door technology is at the heart of the system. The door leaf is not wound onto a shaft, but is held at a distance by the spiral guide to save space. Thanks to this mechanical principle, spiral doors from EFAFLEX are extremely quiet, virtually wear-free and exceptionally fast.

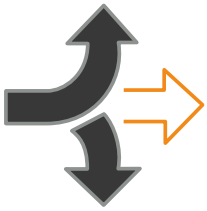
Your advantages at a glance.

HIGHEST SAFETY STANDARDS

The Premium and ECO door variants are equipped with our EFA-TLG® door light grid as standard, guaranteeing the maximum safety for man and machine that you have come to expect from EFAFLEX. Each door also has a broken spring detection in both door frames.

INCREASED PRODUCT QUALITY

The repeated use of identical parts increases the product quality and the durability. Our Premium door variant is designed for up to 400,000 load cycles per year and thus stands for sustainable use.



INDIVIDUAL SOLUTION FOR EVERY REQUIREMENT

The tailor-made equipment packages make the Next Generation spiral doors the ideal solution for a huge number of applications. In addition, each door can be individually configured and designed according to the modular principle; because of this we can also fulfil special requests such as a slanted end-shield.

HIGH-QUALITY CONSTRUCTION

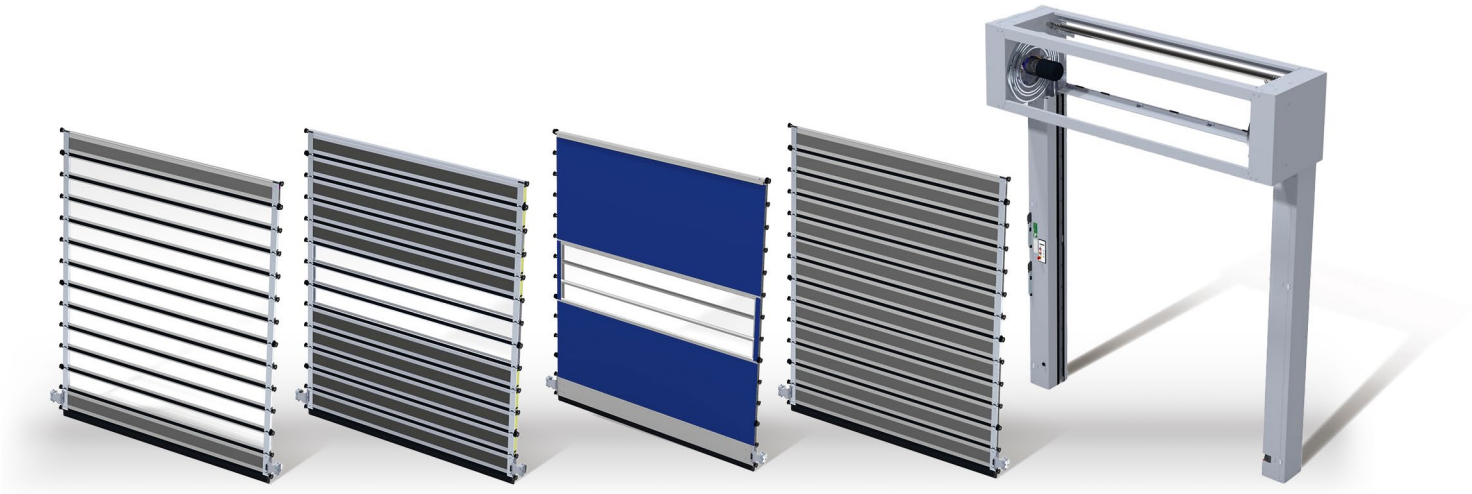
The symmetrical design features pivotable frame covers and a manual emergency opening lever. In addition, the control unit can be integrated in the spiral box in a space-saving manner.

MORE EFFECTIVE CUSTOMER SERVICE

A uniform working method for maintenance and repair as well as standardised spare parts increase quality and speed. The well thought-out construction with pivotable frame covers further simplifies maintenance. In combination with EFA-SmartAssist®, remote diagnosis is also possible at any time.

Individual combinations:
One door - four hangings

The „Next Generation“ includes four door types in three variants, all based on the same concept. Each door can be individually configured and designed according to the modular principle, so that there are a total of twelve different doors for a wide variety of needs and applications. Special requests can also be implemented quickly and easily.



Discover the variety of our doors:
Three variants for every need

1. PREMIUM

Our Premium version is specially designed for continuous industrial use and effortlessly handles up to 400,000 load cycles per year. This version offers maximum performance and a wide range of features. A particular highlight is the pivoting frame cover, which provides additional flexibility.

2. ECO

The ECO version impresses with its robust quality and the usual EFAFLEX reliability. It is designed for up to 200,000 movements per year, which is well above average. It also offers a high level of safety thanks to the integrated door line light grid.

3. BASIC

With up to 150,000 opening and closing operations per year, the Basic version is the ideal choice for beginners. Convince yourself of the high EFAFLEX quality and enjoy reliable performance at an attractive price.

EFA-SST® THERM AT A GLANCE:

- Max. thermal insulation with EFA-THERM® insulation laths
- Opening up to 2.5 m/s
- Closing up to 1.0 m/s
- Usable up to wind class 4
- EFA-TLG® as standard for Premium and ECO door variants
- U value: up to 1.4 W/m²K
- Premium version: up to 400,000 operating cycles p.a.
- Standard sizes up to w=5,000 mm, h=5,100 mm

The new edition of our original. EFA-SST® Therm

Better, faster, stronger – the next generation of our EFA-SST® Therm impresses with an extremely long service life and an excellent wind class. Brilliant U values also make the door a star in terms of sustainability.

EXCELLENT INSULATION

As the first manufacturer of industrial doors worldwide, EFAFLEX offers thermally separated EFA-THERM® insulation laths as a standard. As a result, the door achieves a very good U value of up to 1.4 W/m²K and thus minimises heat and cold losses.

The resilient classic.
EFA-SST® Alux

The EFA-SST® Alux high-speed spiral door is an extremely fast, safe and reliable closing door. Thanks to double-walled aluminium laths, it is very robust in its construction and can carry out up to 400,000 load cycles per year.

OUTSTANDING ROBUSTNESS

The EFA-SST® Alux is particularly stable and is characterised by the maximum wind class 5. The door opens and closes reliably and at any time, even under the highest wind load.

EFA-SST® ALUX AT A GLANCE:

- Double-wall aluminium laths
- Opening up to 2.5 m/s
- Closing up to 1.0 m/s
- Highest wind resistance at wind class 5
- EFA-TLG® as standard for Premium and ECO door variants
- Premium version: up to 400,000 operating cycles p.a.
- Standard sizes up to w=5,000 mm, h=5,100 mm

EFA-STT® CLEAR AT A GLANCE:

- The door leaf comprises of crystal clear acrylic glass
- Opening up to 3.2 m/s
- Closing up to 1.0 m/s
- Usable up to wind class 4
- EFA-TLG® as standard for Premium and ECO door variants
- Premium version: up to 400,000 operating cycles p.a.
- Standard sizes up to w=4,500 mm, h=5,100 mm

The door with maximum visibility. EFA-STT® Clear

The EFA-STT® Clear, our high-speed turbo door, impresses with a fast opening speed of 3.2 m/s. Thanks to our EFA-CLEAR® transparent laths, it combines robust construction with almost complete transparency in a globally unique way.

MAXIMUM TRANSPARENCY

The transparent laths of the EFA-STT® Clear provide sufficient light and brightness. This particularly makes work easier in air locks, such as those used in the automotive industry. In addition, transparent laths ensure an unobstructed view with open lines of sight between the rooms, for increased safety.

The door for all applications. EFA-STR® Flex

With its flexible curtain and the fast opening speed of up to 4.0 m/s, the EFA-STR® Flex enables efficient and fast logistics. The EFAFLEX spiral does not wind the door leaf onto a shaft, but keeps it at a distance to save space. This construction ensures maximum opening speeds, durability and effectiveness.

EXCELLENT DIMENSIONAL STABILITY

The EFA-STR® Flex combines the best of two worlds: the flexibility of the roll-up doors meets the stability of the spiral doors. The door leaf itself is made of PVC-coated polyester fabric. Aluminium profiles reinforce the individual segments at a distance of 225 millimetres and thus provide the necessary stability. Due to the unique combination of flexible door leaf, reinforcement by aluminium profiles and the EFAFLEX spiral technology, the EFA-STR® Flex achieves record speeds.

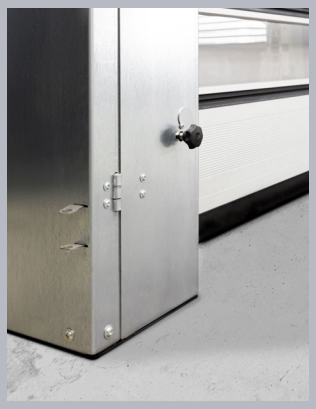
EFA-STR® FLEX AT A GLANCE:

- Opening up to 4.0 m/s
- Closing up to 1.0 m/s
- Usable up to wind class 4
- EFA-TLG® as standard for Premium and ECO door variants
- Premium version: up to 400,000 operating cycles p.a.
- Standard sizes up to w=4,500 mm, h=5,100 mm

Even more flexibility.
Intelligent additional equipment

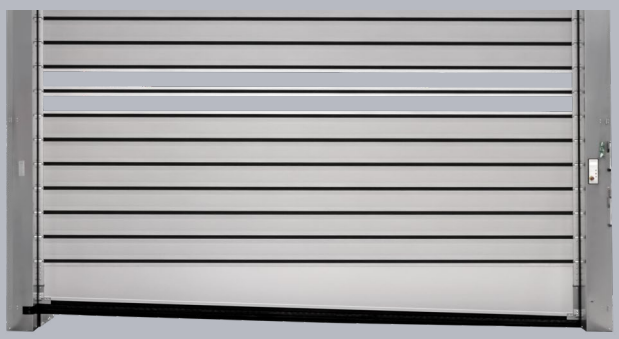
PIVOTABLE FRAME COVER

The pivotable frame covers facilitate maintenance and allow quick access if necessary. In combination with EFA-SmartAssist® easy remote diagnosis is also possible at any time. For the ECO and Basic versions, the additional equipment is available for an extra charge.



SAFETY FEATURES

The Premium and ECO versions of the door are equipped with our EFA-TLG® door light grid. It can be purchased for the Basic version for an additional charge. The broken spring detection increases safety and is integrated in both door frames. A bolt lock makes necessary maintenance significantly safer, since the bolt in the rail prevents unwanted movement of the door.



FLEXIBLY ADAPTABLE

In addition to the straight standard endshield, a slanted variant is also available. This enables a flush door closure on uneven floors and compensate for differences of up to 200 millimetres. Depending on requirements, there is a rigid metal or a flexible rubber version.

CONTROL

Different control arrangements for EFA-TRONIC® are possible for the Premium and ECO door variants: on the wall or integrated into the spiral box in a space-saving manner. With EFA-TRONIC® Light and EFA-TRONIC® Professional, we also offer suitable control solutions for every need.

FRAME EXTENSION

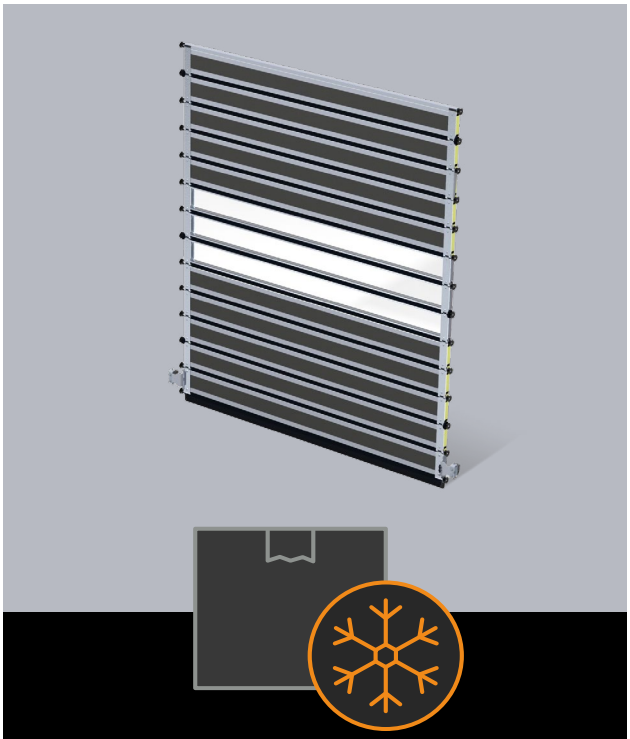
The frame extension is available for one or both sides. It compensates for different ground conditions and, in combination with the slanted end-shield, enables a flush end. In total, the door case can be extended up to 2.5 metres.

VARIETY OF LATHS

Depending on requirements, we offer different types of laths – a smooth, grooved and a transparent version. This means that our doors can also be adapted visually to individual requirements and blend seamlessly into any environment.

The appropriate solution for every need.
Our equipment packages

For special requirements, we offer various equipment packages in the Premium and ECO versions, which are individually tailored to your needs.

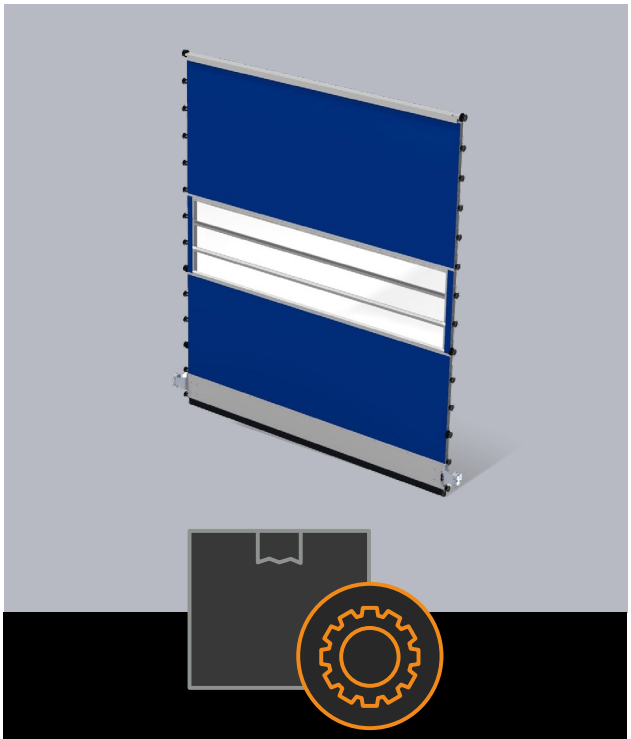


COOLING AREAS PACKAGE

Equipment for use in environments with temperature ranges from -1°C to -25°C on both sides of the door.

EQUIPMENT:

- Motor heating
- Control box heating
- Cold-resistant oils and fats
- EFA-TRONIC® Professional in the steel control box (600×600 mm)
- Cold-resistant door leaf tooth belts
- Optional: external, power-amplified light barrier

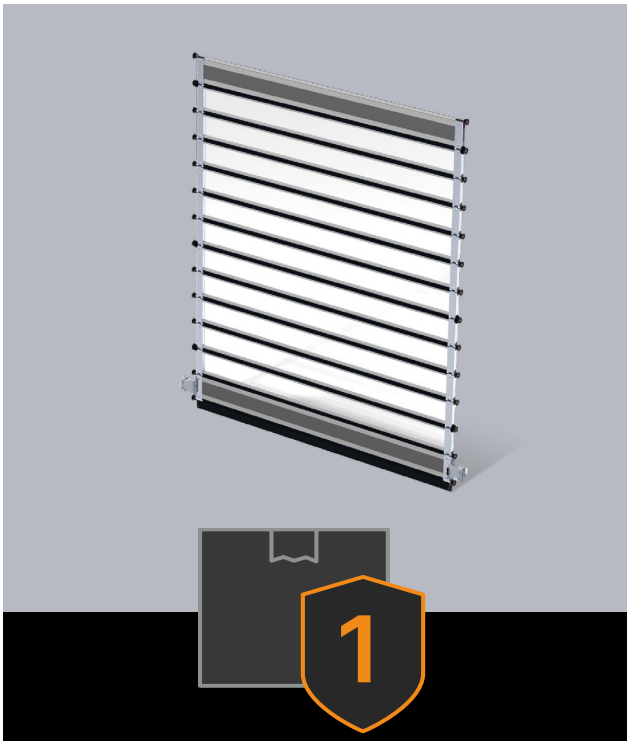


PROCESS PACKAGE

Suitable equipment for higher-level control, with and without special requirements according to Machinery Directive.

EQUIPMENT:

- Safety limit switch with performance level cat. 4 according to DIN EN ISO 13849-1
- EFA-TRONIC® Professional in steel control box with main switch as emergency stop
- Membrane keyboard on the inside
- Control enclosure, lockable
- Predefined I/O control interface
  - “Door open” / “Door closed”
  - “Door ready”

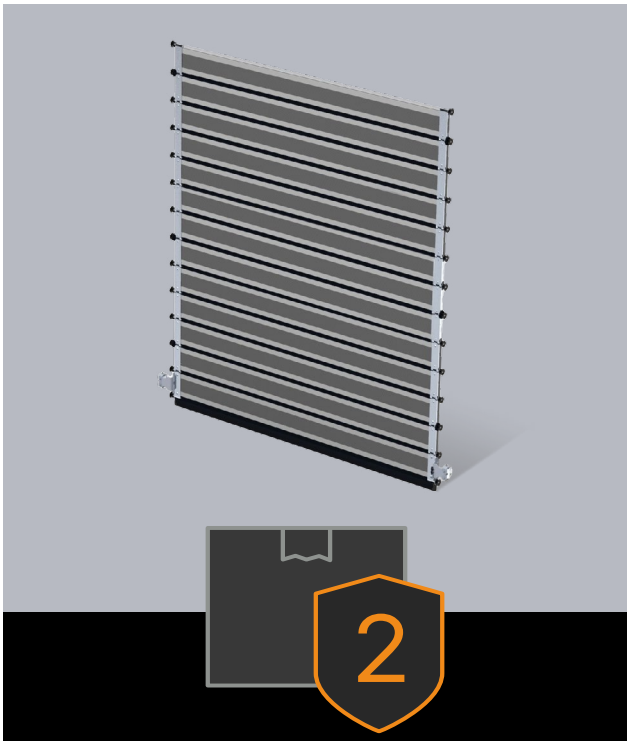


SECURITY 1

Suitable basic equipment for integrating the door system into an on-site alarm system. Available for the doors EFA-SST® Therm , EFA-SST® Alux and EFA-STT® Clear.

EQUIPMENT:

- Lockable, mechanical locking
- Burglary resistance according to resistance class RC2 after manual locking
- Different reed contacts can be selected according to customer requirements
  - LSN (Local Security Network)
  - DCLT (Direct Current Line Technology)



SECURITY 2

Suitable equipment for integrating the door system into an on-site alarm system. Available for the doors EFA-SST® Therm and EFA-SST® Alux.

EQUIPMENT:

- EFA-TRONIC® Professional
- Automatic locking
  (on one side, operator side)
- Burglary resistance according to resistance class RC2 after every closing operation
- Different reed contacts can be selected according to customer requirements
  - LSN (Local Security Network)
  - DCLT (Direct Current Line Technology)

Technical data
High-speed spiral doors

		S Series		
		EFA-SST® Therm		
		Premium	ECO	Basic
	Size	L	L	L
Application	Interior door	●	●	●
	Lock-up doors	●	●	●
Wind load, max.*	According to DIN EN 12424 class	2–4	2–4	2–4
Operating forces / safe closing	According to DIN EN 13241 class	fulfilled	fulfilled	fulfilled
Resistence against water ingress*	According to DIN EN 13241 class	3	3	3
Air permeability*	According to DIN EN 13241 class	3	3	3
Direct airborne sound insulation R_w*	in dB according to DIN EN 717-1	24	24	24
U value maximum*	in W/m²K according to DIN EN 13241	1.4	1.4	1.4
Door size (in mm)	Width W max.	5,000	5,000	5,000
	Height H max.	5,100	5,100	5,100
Maximum door leaf speed*	in m/s	2.5	1.5	0.7
Average speed, approx.*	Opening in m/s	2.0	1.1	0.6
	Closing in m/s	–	–	0.6
	Closing in m/s, with EFA-TLG® door light-line grid	1.0	1.0	–
Guide of door leaf	Round Spiral	●	●	●
Steel design	Galvanized sheet steel frame	●	●	●
	Stainless steel	o	o	o
	Powder coated in RAL colours	o	o	o
Door leaf	EFA-THERM® laths insulated/painted (with lining)	●	●	●
	EFA-THERM® laths insulated/painted (with smooth surface)	o	o	o
	Thermally separated, double-walled EFA-CLEAR® sight lath	o	o	o
	EFA-CLEAR® Vision laths single-walled	o	o	o
	EFA-VENT® ventilation laths	o	o	o
	Colour according to RAL (without vison panel)	o	o	o
Door frame	Pivotable frame cover	●	o	o
	Frame extension	o	o	o
	Flexible extension of the end-lath straight	o	o	o
	Flexible extension of the end-lath slanted	o	o	o
	Rigid extension of the end-lath straight	o	o	o
	Rigid extension of the end-lath slanted	o	o	o
Fire class	Building Material class DIN 4102	B2	B2	B2
Weight balancing by		Spring	Spring	Spring
Designed for approx ... operating cycles per year		400,000	200,000	150,000
Drive	UL electric motor with 24V brake	●	●	●
Control	EFA-TRONIC® on the wall	●	●	o
	EFA-TRONIC® integrated	o	o	–
	EFA-TRONIC® Light	–	–	●
	EFA-TRONIC® Professional	o	o	o
	Main switch and foil keypad	●	●	●
Lead	Electricity connection 230 V / 50 Hz	●	●	●
	Electricity connection 400 V / 50 Hz	o	o	o
	Circuit breaker	16 A (K)	16 A (K)	16 A (K)
Manual locking		●	●	●
Emergency operation	Automatic after manual activation	●	●	●
Safety Devices	EFA-TLG® door light grid in door closing line	●	●	o
	Contact edge	–	o	●
	Light barrier	–	o	●
	Approach area monitoring	o	o	o
	Light grid, external	o	o	o
	Broken spring detection	●	●	●
Safety system including activator	EFA-SCAN® / LZR®-WIDESCAN	o/o	o/o	o/o
Equipment package	Process	o	o	–
	Security 1	o	o	–
	Security 2	o	o	–
	Cooling Areas	o	o	–

● Standard, o upon request, – Not available,
*Depending on door leaf, guide of door leaf and door size, we reserve the right to make technical alterations!

		S Series		
		EFA-SST® Alux		
		Premium	ECO	Basic
	Size	L	L	L
Application	Interior door	●	●	●
	Lock-up doors	●	●	●
Wind load, max.*	According to DIN EN 12424 class	5	5	5
Operating forces / secure closing	According to DIN EN 13241 class	fulfilled	fulfilled	fulfilled
Resistence against water ingress*	According to DIN EN 13241 class	0	0	0
Air permeability*	According to DIN EN 13241 class	2	2	2
Direct airborne sound insulation R_w*	in dB according to DIN EN 717-1	25	25	25
U value maximum*	in W/m²K according to DIN EN 13241	5.7	5.7	5.7
Door size (in mm)	Width W max.	5,000	5,000	5,000
	Height H max.	5,100	5,100	5,100
Maximum door leaf speed*	in m/s	2.5	1.5	0.7
Average speed, approx.*	Opening in m/s	2.0	1.1	0.6
	Closing in m/s	–	–	0.6
	Closing in m/s, with EFA-TLG® door light-line grid	1.0	1.0	–
Guide of door leaf	Round Spiral	●	●	●
Steel design	Galvanized sheet steel frame	●	●	●
	Stainless steel	○	○	○
	Powder coated in RAL colours	○	○	○
Door leaf	EFA-ALUX® aluminium lath lined 225	●	●	●
	EFA-ALUX® aluminium lath smooth 151	○	○	○
	EFA-CLEAR® Vision laths single-walled	○	○	○
	EFA-VENT® ventilation lath	○	○	○
	Colour according to RAL (without vison panel)	○	○	○
Door frame	Pivotable frame cover	●	○	○
	Frame extension	○	○	○
	Flexible extension of the end-lath straight	○	○	○
	Flexible extension of the end-lath slanted	○	○	○
	Rigid extension of the end-lath straight	○	○	○
	Rigid extension of the end-lath slanted	○	○	○
Fire class	Building Material class DIN 4102	B2	B2	B2
Weight balancing by		Spring	Spring	Spring
Designed for approx ... operating cycles per year		400,000	200,000	150,000
Drive	UL electric motor with 24V brake	●	●	●
Control	EFA-TRONIC® on the wall	●	●	○
	EFA-TRONIC® integrated	○	○	–
	EFA-TRONIC® Light	–	–	●
	EFA-TRONIC® Professional	○	○	○
	Main switch and foil keypad	●	●	●
Lead	Electricity connection 230 V / 50 Hz	●	●	●
	Electricity connection 400 V / 50 Hz	○	○	○
	Circuit breaker	16 A (K)	16 A (K)	16 A (K)
Manual locking		●	●	●
Emergency operation	Automatic after manual activation	●	●	●
Safety Devices	EFA-TLG® door light grid in door closing line	●	●	○
	Contact edge	–	○	●
	Light barrier	–	○	●
	Approach area monitoring	○	○	○
	Light grid, external	○	○	○
	Broken spring detection	●	●	●
Safety system including activator	EFA-SCAN® / LZR®-WIDESCAN	○/○	○/○	○/○
Equipment package	Process	○	○	–
	Security 1	○	○	–
	Security 2	○	○	–
	Cooling Areas	○	○	–

● Standard, ○ upon request, – Not available,
*Depending on door leaf, guide of door leaf and door size, we reserve the right to make technical alterations!

Technical data
High-speed spiral doors

		S Series		
		EFA-STT® Clear		
		Premium	ECO	Basic
	Size	L	L	L
Application	Interior door	●	●	●
	Lock-up doors	●	●	●
Wind load, max.*	According to DIN EN 12424 class	2–4	2–4	2–4
Operating forces/secure closing	According to DIN EN 13241 class	fulfilled	fulfilled	fulfilled
Resistence against water ingress*	According to DIN EN 13241 class	0	0	0
Air permeability*	According to DIN EN 13241 class	2	2	2
Direct airborne sound insulation R_w*	in dB according to DIN EN 717-1	20	20	20
U value maximum*	in W/m²K according to DIN EN 13241	6.4	6.4	6.4
Door size (in mm)	Width W max.	4,500	4,500	4,500
	Height H max.	5,100	5,100	5,100
Maximum door leaf speed*	in m/s	3.2	1.5	0.7
Average speed, approx.*	Opening in m/s	3.0	1.1	0.6
	Closing in m/s	–	–	0.6
	Closing in m/s, with EFA-TLG® door light-line grid	1.0	1.0	–
Guide of door leaf	Round Spiral	●	●	●
Steel design	Galvanized sheet steel frame	●	●	●
	Stainless steel	o	o	o
	Powder coated in RAL colours	o	o	o
Door leaf	EFA-CLEAR® Vision laths single-walled	●	●	●
	EFA-VENT® ventilation lath	o	o	o
	Colour according to RAL (without vison panel)	o	o	o
Door frame	Pivotable frame cover	●	o	o
	Frame extension	o	o	o
	Flexible extension of the end-lath straight	o	o	o
	Flexible extension of the end-lath slanted	o	o	o
	Rigid extension of the end-lath straight	o	o	o
	Rigid extension of the end-lath slanted	o	o	o
Fire class	Building Material class DIN 4102	B2	B2	B2
Weight balancing by		Spring	Spring	Spring
Designed for approx ... operating cycles per year		400,000	200,000	150,000
Drive	UL electric motor with 24V brake	●	●	●
Control	EFA-TRONIC® on the wall	●	●	o
	EFA-TRONIC® integrated	o	o	–
	EFA-TRONIC® Light	–	–	●
	EFA-TRONIC® Professional	o	o	o
	Main switch and foil keypad	●	●	●
Lead	Electricity connection 230 V / 50 Hz	●	●	●
	Electricity connection 400 V / 50 Hz	o	o	o
	Circuit breaker	16 A (K)	16 A (K)	16 A (K)
Manual locking		●	●	●
Emergency operation	Automatic after manual activation	●	●	●
Safety Devices	EFA-TLG® door light grid in door closing line	●	●	o
	Contact edge	–	o	●
	Light barrier	–	o	●
	Approach area monitoring	o	o	o
	Light grid, external	o	o	o
	Broken spring detection	●	●	●
Safety system including activator	EFA-SCAN® / LZR®-WIDESCAN	o/o	o/o	o/o
Equipment package	Process	o	o	–
	Security 1	o	o	–
	Security 2	–	–	–
	Cooling Areas	o	o	–

● Standard, o upon request, – Not available,
*Depending on door leaf, guide of door leaf and door size, we reserve the right to make technical alterations!

		S Series		
		EFA-STR® Flex		
		Premium	ECO	Basic
	Size	L	L	L
Application	Interior door	●	●	●
	Lock-up doors	●	●	●
Wind load, max.*	According to DIN EN 12424 class	1–4	1–4	1–4
Operating forces / secure closing	According to DIN EN 13241 class	fulfilled	fulfilled	fulfilled
Resistence against water ingress*	According to DIN EN 13241 class	0	0	0
Air permeability*	According to DIN EN 13241 class	2	2	2
Direct airborne sound insulation R_w*	in dB according to DIN EN 717-1	25	25	25
U value maximum*	in W/m²K according to DIN EN 13241	6	6	6
Door size (in mm)	Width W max.	4,500	4,500	4,500
	Height H max.	5,100	5,100	5,100
Maximum door leaf speed*	in m/s	4.0	2.0	0.7
Average speed, approx.*	Opening in m/s	3.0	1.6	0.6
	Closing in m/s	–	–	0.6
	Closing in m/s, with EFA-TLG® door light-line grid	1.0	1.0	–
Guide of door leaf	Round Spiral	●	●	●
Steel design	Galvanized sheet steel frame	●	●	●
	Stainless steel	○	○	○
	Powder coated in RAL colours	○	○	○
Door leaf	Flexible fabric in different colours with/without viewing panel	○/●	○/●	○/●
Door frame	Pivotable frame cover	●	○	○
	Frame extension	○	○	○
	Flexible extension of the end-lath straight	○	○	○
	Flexible extension of the end-lath slanted	○	○	○
	Rigid extension of the end-lath straight	○	○	○
	Rigid extension of the end-lath slanted	○	○	○
Fire class	Building Material class DIN 4102	B2	B2	B2
Weight balancing by		Spring	Spring	Spring
Designed for approx ... operating cycles per year		400,000	200,000	150,000
Drive	UL electric motor with 24V brake	●	●	●
Control	EFA-TRONIC® on the wall	●	●	○
	EFA-TRONIC® integrated	○	○	–
	EFA-TRONIC® Light	–	–	●
	EFA-TRONIC® Professional	○	○	○
	Main switch and foil keypad	●	●	●
Lead	Electricity connection 230 V / 50 Hz	●	●	●
	Electricity connection 400 V / 50 Hz	○	○	○
	Circuit breaker	16 A (K)	16 A (K)	16 A (K)
Manual locking		●	●	●
Emergency operation	Automatic after manual activation	●	●	●
Safety Devices	EFA-TLG® door light grid in door closing line	●	●	○
	Contact edge	–	○	●
	Light barrier	–	○	●
	Approach area monitoring	○	○	○
	Light grid, external	○	○	○
	Broken spring detection	●	●	●
Safety system including activator	EFA-SCAN® / LZR®-WIDESCAN	○/○	○/○	○/○
Equipment package	Process	○	○	–
	Security 1	–	–	–
	Security 2	–	–	–
	Cooling Areas	○	○	–

● Standard, ○ upon request, – Not available,
*Depending on door leaf, guide of door leaf and door size, we reserve the right to make technical alterations!

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EFAFLEX
safe high-speed doors