Next Generation

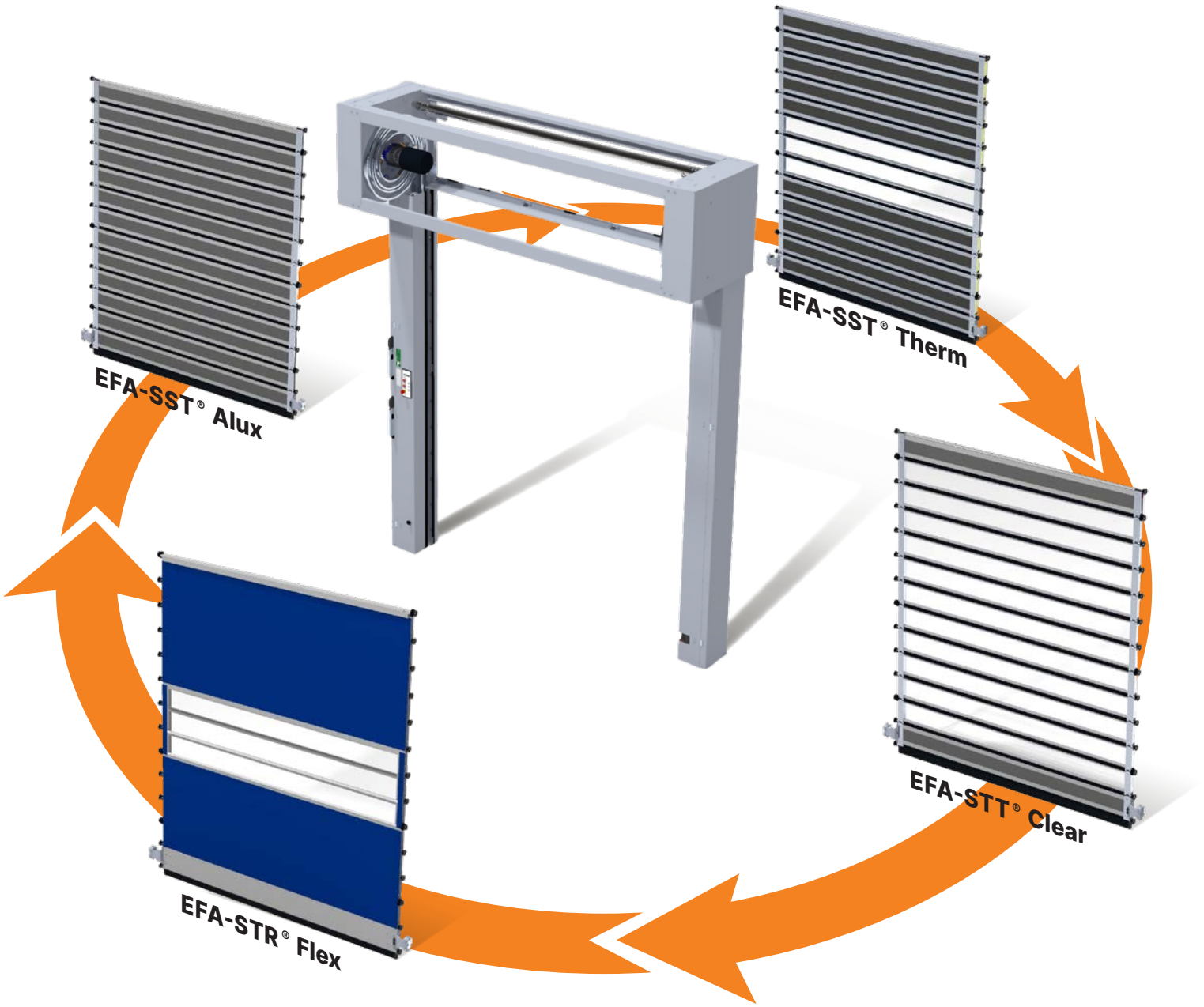
High-speed spiral doors

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. These doors have a uniform and symmetrical basic construction, which can be used with four different door leaves between the door cases. Whether the highest wind load, high insulation requirements or enormous durability – the Next Generation spiral doors from EFAFLEX solve every challenge, as at their core is the spiral door technology we invented, which remains unrivalled to this day. The door leaf is not wound on a shaft, but kept at a space-saving distance by the spiral-shaped guiding system. Thanks to this mechanical principle, the spiral doors from EFAFLEX operate exceptionally quietly, are almost wear-free, as well as being extremely fast. We are the world market leader in industrial doors. This is achieved thanks to innovative engineering that promises highest reliability, efficiency, durability and safety.



Your advantages
at a glance.

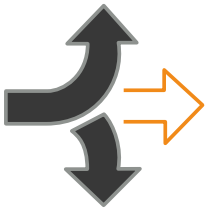
HIGHEST SAFETY STANDARDS

By default, each door variant is equipped with our EFA-TLG® door light grid as well as a broken spring detection in both door cases and thus guarantees the highest level of safety for man and machine that you have come to expect from EFAFLEX.

INCREASED PRODUCT QUALITY

The repeated use of identical parts increases the product quality and the durability. Each door 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; in this way, 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 curtain 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.

EFA-SST® THERM AT A GLANCE:

- Max. thermal insulation with EFA-THERM® insulation laths
- Opening up to 2.3 m/s
- Closing up to 1.0 m/s
- Usable up to wind class 4
- EFA-TLG® as standard
- U value: up to 1.4 W/m²K
- Up to 400,000 operating cycles p.a.
- Standard sizes up to w=5,000 mm x 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 2.3 m/s
- Closing up to 1.0 m/s
- Highest wind resistance at wind class 5
- EFA-TLG® as standard
- Up to 400,000 operating cycles p.a.
- Standard sizes up to w=5,000 mm x h=5,100 mm

EFA-STT® CLEAR AT A GLANCE:

- The door leaf comprises of crystal clear acrylic glass
- Opening up to 3.1 m/s
- Closing up to 1.0 m/s
- Usable up to wind class 4
- EFA-TLG® as standard
- Up to 400,000 operating cycles p.a.
- Standard sizes up to w=4,500 mm, h=5,100 mm

The turbo door with full visibility. EFA-STT® Clear

The EFA-STT® Clear, our high-speed turbo door, impresses with a fast opening speed of 3.1 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 robust turbo door. EFA-STR® Flex

With its flexible curtain and the fast opening speed of up to 3.7 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 EFA-SRT® meets the stability of the EFA-SST® Therm. 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 3.7 m/s
- Closing up to 1.0 m/s
- Wind resistance up to class 4
- EFA-TLG® as standard
- Up to 400,000 operating cycles p.a.
- Standard sizes up to w=4,500 mm, h=5,100 mm

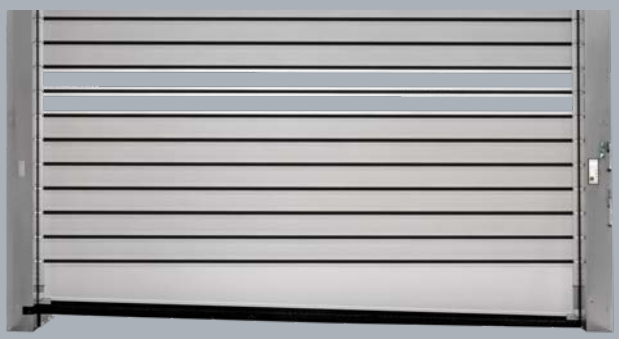
Even more flexibility.
Intelligent additional equipment

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.

SAFETY FEATURES

By default, the door is equipped with our TLG door light grid. The broken spring detection increases safety and is integrated in both door cases as standard. In addition, 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

Various control arrangements are possible: on the door case, on the wall or integrated into the curtain box in a space-saving manner. With EFA-TRONIC* and EFA-TRONIC* Professional, we also offer suitable control solutions for every need.

FRAME EXTENSION

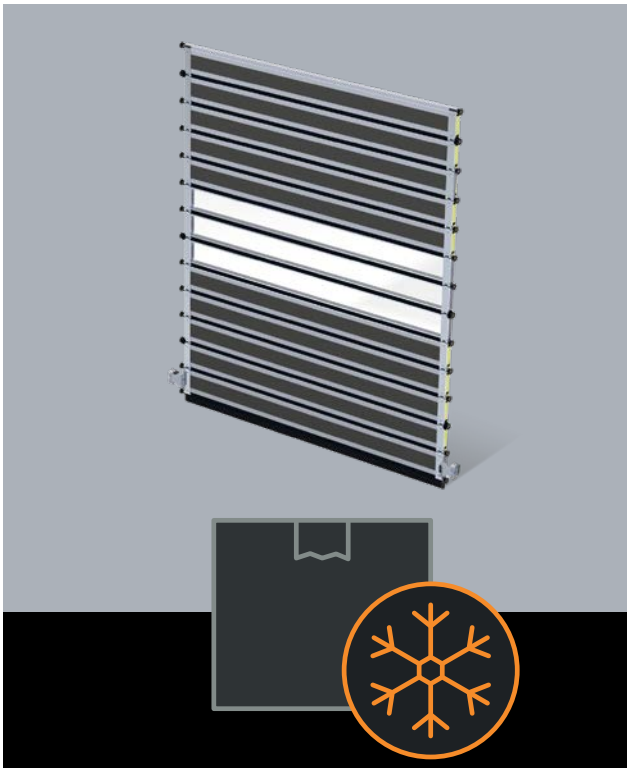
The frame extension is available for one or both sides. It compensates for different ground conditions and, in combination with the slanted end-shield, even enables a flush end. In total, the door case can be extended up to 2.5 metres.

SMOOTH / GROOVED LATH

Depending on requirements, we offer two different types of laths – a smooth and a grooved 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 optionally offer various equipment packages, which are individually tailored to your needs.

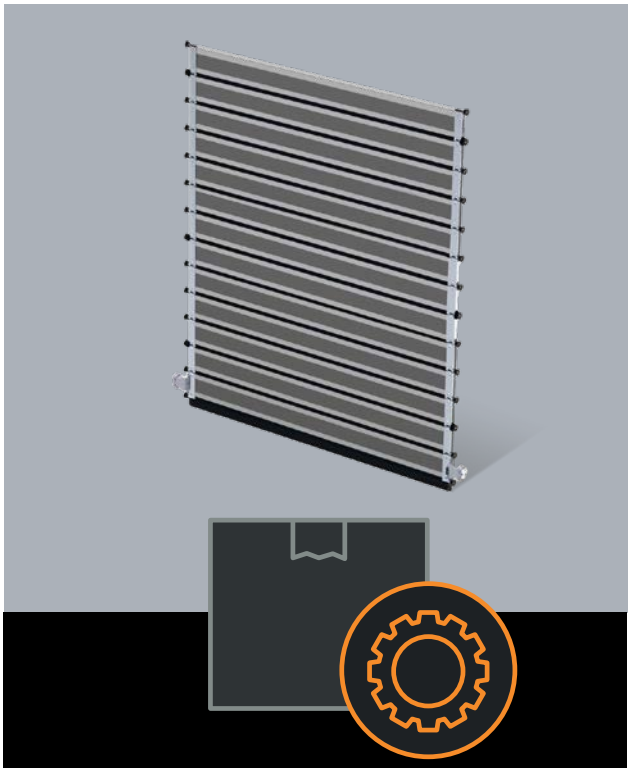


COLD WEATHER PACKAGE

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:

- Limit switch with performance level cat. 3
- Cold-resistant oils and fats
- 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

EQUIPMENT:

- Mechanical locking (locking lever on door case or on console, optionally also lockable)
- Burglary resistance according to resistance class RC2 after manual, mechanical locking
- Different reed contacts can be selected according to customer requirements

SECURITY 2

Suitable equipment for integrating the door system into an on-site alarm system

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

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 blade speed*	in m/s	2.3	1.3	0.7
Average speed, approx.*	Opening in m/s	2	1.1	0.6
	Closing in m/s	–	–	0.6
	Closing in m/s, with EFA-TLG® door light-line grid	1	1	–
Door blade guidance	Round Spiral	●	●	●
Steel design	Galvanized sheet steel frame	●	●	●
	Stainless steel	○	○	○
	Powder coated in RAL colours	○	○	○
Door blade	EFA-THERM® laths insulated/painted (with lining)	●	●	●
	EFA-THERM® laths insulated/painted (with smooth surface)	○	○	○
	Thermally separated, double-walled EFA-CLEAR® sight lath	○	○	○
	EFA-CLEAR® Vision laths single-walled	○	○	○
	EFA-VENT® ventilation laths	○	○	○
	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® frame/bollard	○/○	○/○	○/○
Equipment package	Process	○	○	–
	Security 1	○	○	–
	Security 2	○	○	–
	Cold weather	○	○	–

● Standard, ○ upon request, – Not available,
*Depending on door blade, door blade guidance 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 blade speed*	in m/s	2.3	1.3	0.7
Average speed, approx.*	Opening in m/s	2	1.1	0.6
	Closing in m/s	–	–	0.6
	Closing in m/s, with EFA-TLG® door light-line grid	1	1	–
Door blade guidance	Round Spiral	●	●	●
Steel design	Galvanized sheet steel frame	●	●	●
	Stainless steel	○	○	○
	Powder coated in RAL colours	○	○	○
Door blade	EFA-ALUX® aluminium lath lined 225	●	●	●
	EFA-ALUX® aluminium lath lined 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® frame/bollard	○/○	○/○	○/○
Equipment package	Process	○	○	–
	Security 1	○	○	–
	Security 2	○	○	–
	Cold weather	○	○	–

● Standard, ○ upon request, – Not available,
*Depending on door blade, door blade guidance 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 blade speed*	in m/s	3.1	1.3	0.7
Average speed, approx.*	Opening in m/s	3	1.1	0.6
	Closing in m/s	–	–	0.6
	Closing in m/s, with EFA-TLG® door light-line grid	1	1	–
Door blade guidance	Round Spiral	●	●	●
Steel design	Galvanized sheet steel frame	●	●	●
	Stainless steel	○	○	○
	Powder coated in RAL colours	○	○	○
Door blade	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® frame/bollard	○/○	○/○	○/○
Equipment package	Process	○	○	–
	Security 1	○	○	–
	Security 2	–	–	–
	Cold weather	○	○	–

● Standard, ○ upon request, – Not available,
*Depending on door blade, door blade guidance 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 blade speed*	in m/s	3.7	1.9	0.7
Average speed, approx.*	Opening in m/s	3	1.6	0.6
	Closing in m/s	–	–	0.6
	Closing in m/s, with EFA-TLG® door light-line grid	1	1	–
Door blade guidance	Round Spiral	●	●	●
Steel design	Galvanized sheet steel frame	●	●	●
	Stainless steel	○	○	○
	Powder coated in RAL colours	○	○	○
Door blade	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® frame/bollard	○/○	○/○	○/○
Equipment package	Process	○	○	–
	Security 1	–	–	–
	Security 2	–	–	–
	Cold weather	○	○	–

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

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EFAFLEX
safe high-speed doors