EFAFLEX

safe high-speed doors

MS Series

Machine protection doors

EFA-SRT® MS

A glance at the advantages of the EFA-SRT® MS high speed roll-up door:

- EC type-tested safety component according to Machinery Directive 2006/42/EG
- Suitable for use as a movable separating safety guard
- Functional safety performance level »d«
- Maximum speed up to 1.8 m/s
- Door curtain made from transparent flexible PVC
- Special curtains are available on request
- Up to 250,000 cycles per year
- Maximum of 7 cycles per minute
- Life cycle 12 years

For special applications: For welding booths, the EFA-SRT® MS can be equipped with a flame-resistant door curtain and an optional UV protective window.

Due to its space saving, compact design the EFA-SRT® MS high speed roll-up door satisfies the requirements for optimum integration into safety guard applications. The EFA-SRT® MS comes with a fully transparent door curtain equipped with warning stripes as standard; the hard wearing fabric is transversely stable and offered in a range of fabric colours finishes. Further fabric options are also available, including flame resistant materials and UV protective windows for welding applications. All fabric curtains are also suitable for locations where paint or adhesives are applied.

That's what it is all about:

The interaction of a high-performance frequency converter control unit together with a functionally adjusted drive allow for the high cycle rate necessary in manufacturing processes. The absence of a counter balance mechanism allows the side frames of the door to be kept very slim, and at the same time reduces maintenance and necessary components significantly.

Transparent fabrics ensure clear vision of the integrated safety end-limit switch of Cat.4/PI »e« in accordance with DIN EN ISO 13849-1.

Thanks to the optional floor supports the door can be installed as a stand-alone system, while uneven ground can be compensated for with adjusting screws.

Machine protection

Drive

Push-on gear unit with absolute encoder, for EFA-SRT® MS including gear unit failure protection.

Door control

The control unit which can be used worldwide operates at performance level PL »d« for safety-relevant control circuits and can be extended using the MS-AM connection module.

Weight counter-balance

The EFA-SST® MS operates by means of virtually maintenance-free tension spring assembly with electromechanical function monitoring.

Locking

Safety end-limit switches Cat. 4/PI »e« in allowance with DIN EN ISO 13849-1 fitted with transparent covering removable for adjustment and replacement.

Floor support

Optional supports in order to install the door system as a stand-alone system. Levelling of uneven ground possible by means of screws.

Safety

Safety contact strip in the main closing edge, in combination with an additional light barrier.

EFA-SST® MS

EFA-SRT® MS

EC type examination as safety component, movable separating safety guard according to Machinery Directive 2006/42/EC at IFA Institut für Arbeitssicherheit [an institute for research and testing of the German Social Accident Insurance in Germany].


IFA

EG-Baumusterprüfbescheinigung


IFA

EG-Baumusterprüfbescheinigung

EFA-SST® MS

A glance at the advantages of the EFA-SST® MS high-speed spiral door:

- EC type-tested safety component according to Machinery Directive 2006/42/EG
- Suitable for use as a movable separating safety guard
- Functional safety performance level »d«
- Maximum speed up to 2.7 m/s
- Door leaf constructed from high strength, compact extruded aluminium laths
- Permanent transparent sight laths
- Incorporated counter-balance with spring fracture detection
- Up to 250,000 cycles per year
- Maximum of 7 cycles per minute
- Life cycle 12 years

The ingenious construction principle of the EFAFLEX spiral, combined with slim double walled extruded aluminium laths, permits such a compact design. This harmonised design guarantees very smooth, safe use supported by high speed operation. The contactless operation of the door leaf prevents surfaces from being scratched, while the optional transparent vision laths remain transparent even after extensive use.

More special advantages

Used as a stand-alone separating safety guard, the EFA-SST® MS high-speed spiral door fulfils the requirements for a safe, modern machine protection door. Together with optional floor supports, the self-supporting simple design allows stand-alone installation. To ensure protection in low height situations, additional covers are available for the spiral unit.

Of course, the EFA-SST® MS is also equipped with a transparent covering providing a clear view of the integrated safety end-limit switch of Cat. 4/PI »e« in accordance with DIN EN ISO 13849-1.

EFA-SST® MS high-speed spiral door especially for industrial application as a functionally safe machine protection door.

Technical data:

MS series

		SRT-L MS	SRT-S MS	SST MS
Application as safety component	separating safety guard	●	●	●
Wind load, max.*	According to DIN EN 12424 in classes	0	0	4
Operating forces/safe opening	According to DIN EN 13241	fulfilled	fulfilled	fulfilled
Air permeability*	According to DIN EN 13241 in classes	0	0	0
Direct airborne sound insulation R_W*	in dB according to DIN EN 717-1	12	12	23
Door size (in mm)	Width W max.	3,000	6,000	3,000
	Height H max.	3,000	3,500	3,000
Maximum door blade speed*	in m/s	1.8	1.8	2.7
Average speed, approx*	Opening in m/s	1.3	1.3	2.2
	Closing in m/s	0.8	0.8	0.6
Door blade guidance	Round spiral	–	–	●
Steel design	Steel-sheet frame, galvanized	●	●	●
	Powder-coated according to RAL	○	○	○
Door blade	EFA-CLEAR® single walled/anodised	–	–	○
	Ventilation laths	–	–	○
	Colour according to RAL (without window panel)	–	–	○
	Door blade lath made of aluminium E6/EV1 anodised	–	–	●
	Door curtain flexible PVC, transparent with warning strips in different colours	●	●	–
	transversely stable material in different colours with/without window	○/○	○/○	–
Fire class	Building material DIN 4102	B2	B2	B2
Weight balancing by		–	–	Spring
Designed for approx. … load changes p.a.		250,000	250,000	250,000
Drive	Electric motor with frequency converter	●	●	●
Control	EFA-MS	●	●	●
	Frequency converter	●	●	●
	MS-AM connection module	○	○	○
	Main switch with foil key pad	●	●	●
Lead	Power supply connection 400 V/50 Hz	●	●	●
	Circuit breaker	16 A (K)	16 A (K)	16 A (K)
Manual locking		–	–	–
Electronic locking		●	●	●
Functional safety		PLd	PLd	PLd
Absolute position detection (PD)		●	●	●
Support for installing the door system as a stand-alone system		○	○	○
Emergency opening	Crank handle	●	●	–
	Lever (lockable)	–	–	○
Safety equipment	Contact edge	●	●	●
	Light barrier	○	○	○
	Approach area monitoring	○	○	○
	External light grid	○	○	○
Activator	Connection of all standard activators possible	●	●	●

● Standard, ○ on request, – not available, *depending on door blade, door blade guidance and door size, subject to technical changes!

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Technological advancement. Pioneering design.

For more than 40 years, EFAFLEX has developed and designed reliable and highly-efficient high-speed doors. With innovative technology and pioneering solutions for special requests, EFAFLEX continually provides the market with new stimuli. This leadership role through superior technology, the best quality and a maximum degree of security is part of EFAFLEX's identity. More than 1,000 employees guarantee competent consultation and excellent service. Worldwide and always near you.

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