



**EFAFLEX**   
*safe high-speed doors*

*F Series*



*High-speed folding doors*



ABEVA CONTROL





# F Series

With construction methods responding to increasing architectural demands and constantly developing technology expectations are changing. In response to just such applications EFAFLEX high-speed folding doors offer contemporary design, and first class durability. The basis of the design, our folding mechanism, has been matured beautifully to perfection ensuring the elegant, free-flowing door wings provide clear access to the opening immediately – no waiting, and remarkably without the need for unsightly floor channels.

The impressive properties of the EFA-SFT® THERM satisfies even the highest expectations for heat insulation, in temperature controlled environments or areas at risk of rapid heat exchange, making the door ideal for external facades.

Continuous development over many years of EFAFLEX's folding door range includes options suitable for almost any application or budget, from fully glazed providing amazing natural light permeability, now right through to fully insulated variants right up to in sizes up to 40 m<sup>2</sup>.



New: EFA-SFT® THERM  
First class in every respect



# Optimised insulation, unequalled operation and absolute reliability

## The highest demands become reality

Where there are no role models you only have yourself to surpass; and once again EFAFLEX achieved it with the new flagship to the folding door range.

Considered design minimising cold bridges with thermally separated door wings, using zinc plated roll-formed steel profiles incorporating a continuous isolator, integrated between the internal and external profiles, are capable of achieving a heat transfer coefficient of  $0.84 \text{ W/m}^2\text{K}$ .

The cleverly integrated EFA-THERM® infills, each thermally separated and providing 40mm of insulation, are configured to enhance both aesthetics while providing a functional heat transfer coefficient of approximately  $1.6 \text{ W/m}^2\text{K}$ .

There's even an option to include insulated glazing enabling the addition of transparent infills, optimising natural light and improving user safety. And the innovation doesn't stop there; the carefully considered modular construction of each door wing is intended for fast, economical repair or replacement.

## Consistent Performance: Control, drive and safety

The scrupulous approach to design applied to the EFA-SFT® THERM is continued through its control, operating and safety systems. The doors' near silent operation is choreographed by the EFA-TRONIC controller; seamlessly coordinating the integral frequency converter, providing power when needed to the 3-phase asynchronous motors and tailored bevel-helical gearing. Designed with automation in mind, the system is simply upgraded to incorporate your choice of activation, ensuring reaction times of milliseconds from input signals.

A combination of bi-metallic contact strips on the closing edge of the door and horizontal photocell between the lateral frames provides effective active and passive safety, enhanced further with a light curtain which can easily and simply be added for a small supplement.

Pre-destined to be used as an external door, the support frame and drive housing are supplied with a fully galvanised finish as standard ensuring the doors durability matches its design characteristics.

Together the new EFA-SFT® THERM is a fast, safe door that's capable of 150,000 operating cycles a year, while simultaneously providing excellent resistance to wind and weather. A first class alternative for the most demanding of applications.





# EFA-SFT®

## Power and reliability for your high speed folding doors.

As standard, F Series doors are equipped with a robust pneumatic drive. Developed to perfection the drive has proven itself many thousands of times, not only in operation but in extremes of climate and application conditions, effortlessly achieving one million operating cycles without concern. Should compressed air be unavailable an electric motor can simply be supplemented to provide the necessary power.



### EFAFLEX – Cardan joint technology

The wings of the high-speed folding doors are connected using a specially refined cardan joint, effectively dispersing any additional tensions that may arise across the opening. This simple but effective method ensures minimal wear, low maintenance and years of trouble free service.

## Closes at the push of a button

The EFA-SFT® can be equipped with remote locking, operated from the controller or a conveniently located key switch.



# EFA-SFT® The folding door for inside or outside.

## The advantages of EFA-SFT® at a glance:

- Powerful, low-maintenance external door
- Maximum speed up to 2.5 m/s
- Up to 200,000 operating cycles per year
- Wind load up to class 4
- Numerous equipment options

The EFA-SFT® perfectly combines functionality and aesthetics. Its patented modular structure requires little maintenance, and is simple to repair. The considered design requires no floor tracks, although large door openings are provided with supports, ensuring stability when the door is closed.

## Blending with the Façade

The EFA-SFT® is easily tailored to your requirements, with numerous options allowing the finished door to complement any façade. From countless available configurations for wing separation, mullion arrangements and infill options, complemented with a choice of anodised finishes from the Eloxal table or powder coated in any RAL colour.

*Perfect architectural adjustment to the existing façade: EFA-SFT®.*



No more waiting:  
The EFA-SFT® increases the speed

Even with large EFA-SFT® doors operating speeds of up to 2.5 m/s are possible, fitted internally it allows for effective operations, while externally mounted doors are not only effective, they help maintain ambient temperatures while reducing supplementary energy costs.



Intrinsic values count as well

The EFA-SFT® is carefully constructed from aluminium and steel, a considered combination of the highest quality materials coupled with proven design techniques from the industry experts.

The door leaf is anodised, corrosion free aluminium with options for single or double glazed vision panels to reflect your requirements, optimizing natural light and safety for those operating in the area.

Considered design and engineering techniques, proven control and operating systems make the EFA-SFT® a worthy alternative for any application.

*Fast, faster, EFAFLEX: Thanks to innovative door technology, the EFA-SFT® will accelerate the logistics in your company.*





## Technical data:

		Series F				
		EFA-SFT® THERM		EFA-SFT®		
		L	S	L	S	ÜS
Application	Inside door	○	○	○	○	○
	Closing door	●	●	●	●	●
Wind load, max.*	According to DIN EN 12424 in classes	2	2	4	3	2
Operating forces / secure opening	According to DIN EN 13241-1	Fulfilled	Fulfilled	Fulfilled	Fulfilled	Fulfilled
Resistance against penetrating water*	According to DIN EN 13241-1 in classes	0	0	0	0	0
Air permeability*	According to DIN EN 13241-1 in classes	0	0	0	0	0
Direct airborne sound insulation $R_{w,*}$	in dB according to DIN EN 717-1	21	21	21	21	21
Heat transfer coefficient (HTC) maximum*	in W/m <sup>2</sup> K according to DIN EN 13241-1	2.10	1.60	4.88	4.66	4.11
Door size (in mm)	Width W max.	3,000	5,250	3,750	5,250	8,000
	Height H max.	4,000	7,000	3,750	7,000	6,000
Maximum door leaf speed*	in m/s	1.2	1.4	2.5	2.0	1.5
Average speed, approx.*	Opening in m/s	1.0	0.8	2.0	1.8	1.0
	Closing in m/s	0.6	0.6	1.0	1.0	0.6
Steel design	Steel-sheet, galvanized	●	●	●	●	–
	Stainless steel	–	–	–	–	–
	Powder-coated according to RAL	○	○	○	○	●
Door leaf	Door leaf modules made of aluminium E6 / EV1 anodised	–	–	●	●	●
	Window single walled/ double walled	–	–	●/○	●/○	●/○
	ISO transparent glazing panel (3 x 2,5 mm)	○	○	–	–	–
	Non-transparent filling single walled / double walled	–	–	○/○	○/○	○/○
	Thermally separated door leaf modules made of painted (RAL 7042) steel profiles with fillings of double-walled, RAL 9006-coated and 40 mm thick EFA-THERM sandwich panels filled with foam, horizontally divided in a grid dimension of 225 mm.	●	●	–	–	–
Fire behaviour	DIN 4102 material class	B2	B2	B2	B2	B2
Designed for approx. ... load changes p.a.		150,000	150,000	200,000	200,000	200,000
Drive	Electric motor	●	●	○	○	–
	Pneumatic with electric control	–	–	●	●	●
Control	EFA-TRONIC® (with integrated)	●	●	●	●	–
	Frequency converter	●	●	●	●	–
	EFA-TRONIC® PROFESSIONAL (incl. FC)	○	○	○	○	–
	Main switch with membrane key pad	●	●	●	●	●
Lead	Power supply connection 230 V / 50 Hz	●	●	●	●	●
	Power supply connection 400 V / 50 Hz	–	–	–	–	–
	Circuit breaker	16 A (K)	16 A (K)	16 A (K)	16 A (K)	16 A (K)
	Compressed air connection (1/2")	–	–	○	○	●
Manual locking		–	–	○	○	○
Emergency opening	Manual activation	●	●	●	●	●
Safety Devices	Terminal strip	●	●	●	●	●
	Light barrier	○	○	○	○	○
	Approach area monitoring	○	○	○	○	○
	External light grid	○	○	○	○	○
Safety system including activator	EFA-SCAN® frame/bollard	–/○	–/○	–/○	–/○	–/○
Activators	Connection of all standard activators possible	●	●	●	●	●

● Standard, ○ on request, – not deliverable, \*dependent on door leaf, door leaf housing and door size, only in connection with inlet set, if applicable.  
Subject to technical changes!

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## Technological advancement. Pioneering design.

EFAFLEX® is a registered and legally protected trademark.

Subject to technical changes. Some diagrams depict special features.

Overall design:

www.creativconcept.de 12118

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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