

Architectural Ironmongery

Specification Guide

foris solutions
egress & access specialists



www.foris-solutions.co.uk

Why Foris Solutions

Since our inception in 2003 Foris Solutions has evolved to continually meet Construction Industry dynamics, providing Architects, Contractors and Building Owners with fully co-coordinated door opening solutions from a single source.

We assist designers and contractors in all aspects of integrating doorsets with relevant ironmongery. Our core business is the specification of ironmongery and we understand how electronic technologies, ironmongery and the doorset itself are combined to deliver robust and reliable functions at each opening.

Constantly evolving Foris Solutions offer Doorsets, Architectural Ironmongery, Access Control and Washroom solutions. Such products allow us to provide a seamless link through the construction process to ensure the end result complies with the clients requirement.

Each and every piece of the jigsaw!



Doorsets



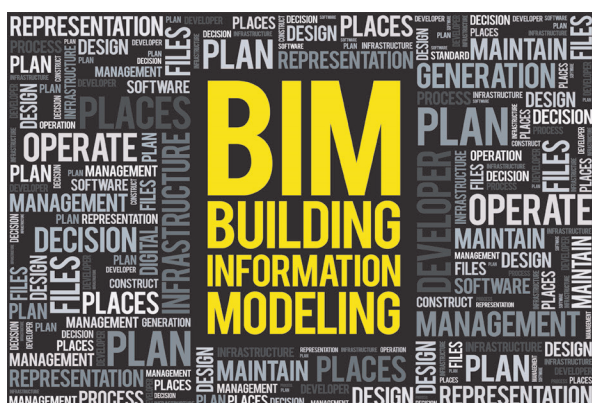
Architectural Ironmongery



Access Control



Cubicles + Washroom Accessories



'mIspec' BIM level 2 models available via our website
www.foris-solutions.co.uk

Intelligent parametrically connected BIM level 2 models with detailed COBie output. Confirming the doorset construction and relevant ironmongery.

PROJECT SPECIFIC BIM MODELS

If required we can produce bespoke project specific BIM models.

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Exceeding the highest industry standards



Products which are generically referred to as 'architectural ironmongery' are heavily regulated by European standards requiring mechanical, durability and corrosion testing, and by fire testing requirements. It provides the construction industry with fire safety and security products which have proven and reliable performance, with consistent manufacturing quality.

Foris products are designed and manufactured to meet, or in many cases, exceed these stringent requirements. Wherever applicable our products are CE marked, guaranteeing their performance and ensuring they are fit for purpose.



Many architectural ironmongery products are required to be CE marked in accordance with the Construction Products Directive, including panic and emergency exit hardware and door controls.

From July 2013 the introduction of mandatory CE marking under the Construction Products Regulation came into force. For any building product which is covered by a harmonised standard, it will be a legal requirement for that product to be CE marked.

A number of EN standards covering exterior and interior doorsets are at various stages of development. Consequently the mandatory CE marking of doorsets came into force from July 2013 (initially on exterior doors only). The only way to meet this requirement is for all parts of a doorset; the door, frame, any seals, glazing and all the associated ironmongery items required for the doorset to perform its designated function, to be supplied from the same source and be CE marked as a doorset.

This applies even if the individual components are themselves CE marked.

At Foris we work with major timber and steel door manufacturers to ensure our products can be integrated into fully compliant and CE marked doorset packages wherever applicable. All our CE marked products are available with a Declaration of Performance document which **can be downloaded from the Foris website**

Currently the only completed standard is that for external doors with no fire or smoke resistance. Several of the standards which cover doorsets including internal fire doors have been defined by the European Commission. Publication of the documents has been delayed. From the 1st September 2016 new fire resisting doorsets can be voluntarily CE marked. After September 2019, all fire resisting doorsets supplied in the EU (including the UK) must be CE marked in compliance with the standard.

Foris products are designed to satisfy a comprehensive array of performance requirements including fire testing on timber and steel door applications and durability testing, in some cases beyond 2 million test cycles.



Accessibility Issues

The concept of universal access is not new but it still provides a challenge for the construction industry. To meet obligations under the Equalities Act, Approved Document M of The Building Regulations and BS 8300 continue to be the yardsticks by which conformity is measured.

Foris is able to offer guidance and product solutions to cover the following areas:

- Low energy door controls
- Electromagnetic door controls
- High efficiency mechanical door controls to meet the conflicting requirements of BS 8300 and fire safety requirements of EN 1154
- Colour contrast in ironmongery for visual impairment
- Comprehensive fittings programme for washrooms, showers and WCs
- Ironmongery which conforms to the recommendations of BS 8300

Hinges

EN 1935

Single axis hinges, both fixed pin and lift off hinges, are covered by EN 1935. It provides details on product types by use, durability, fire resistance, corrosion resistance and a grading using an 8 digit classification code.



High performance stainless steel hinges for commercial applications

The first step in specifying hardware for any door is the method of hanging. Unless the door is to be fitted with a floor spring the door will be fitted with hinges, normally with 3 hinges per leaf (or more for larger or heavier doors, fitted in a pattern in accordance with BS EN 1935). The use of high quality hinges which are accurately fitted can have a significant bearing on the operating characteristics of the door which in turn will affect the efficiency of other hardware items, notably door closers and mortice locks.



Features & Benefits

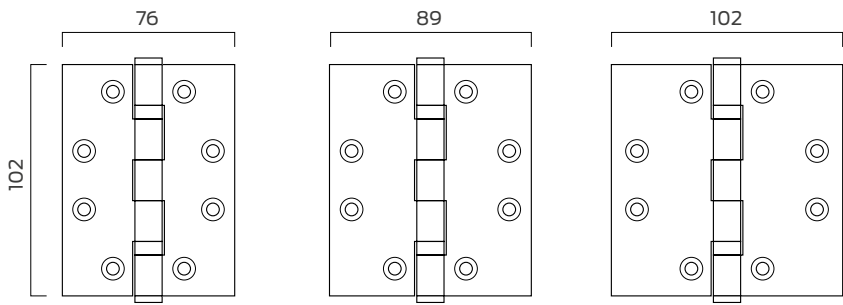
- Five knuckle ball bearing hinges.
- CE marked to EN 1935:2002 Grade 13.
- Suitable for timber and metal doors up to 120kgs.
- Template drilled for consistency and accuracy.
- Available in Grade 316 or Grade 304 stainless steel and in satin or polished finish.
- Also available with machine screws for use with metal doorsets.
- Options for security dog bolt.



FS 4800 Series - Hinges



Product ref.	Size	Dog bolt	Material Grade	Finish	CE Classification
FS.4801	102 x 76 x 3		304	.SS / .PS	4 7 6 1 1 4 0 1 3
FS.4802	102 x 89 x 3		304	.SS / .PS	4 7 6 1 1 4 0 1 3
FS.4803	102 x 102 x 3		304	.SS / .PS	4 7 6 1 1 4 0 1 3
FS.4801.316	102 x 76 x 3		316	.SS / .PS	4 7 6 1 1 4 0 1 3
FS.4802.316	102 x 89 x 3		316	.SS / .PS	4 7 6 1 1 4 0 1 3
FS.4803.316	102 x 102 x 3		316	.SS / .PS	4 7 6 1 1 4 0 1 3
FS.4811	102 x 76 x 3	■	304	.SS / .PS	4 7 6 1 1 4 0 1 3
FS.4812	102 x 89 x 3	■	304	.SS / .PS	4 7 6 1 1 4 0 1 3
FS.4813	102 x 102 x 3	■	304	.SS / .PS	4 7 6 1 1 4 0 1 3
FS.4811.316	102 x 76 x 3	■	316	.SS / .PS	4 7 6 1 1 4 0 1 3
FS.4812.316	102 x 89 x 3	■	316	.SS / .PS	4 7 6 1 1 4 0 1 3
FS.4813.316	102 x 102 x 3	■	316	.SS / .PS	4 7 6 1 1 4 0 1 3



all dimensions are in mm



FS.4811 dog bolt variant

FS33338-92 SSS Grade 304 Continuous linked hinge EN1935 Class14 (160kg) CE Marked

(Proposed for automated doorsets)

- Continuously fixed along entire length
- Anti-finger trapping protection
- Installation time reduced because no rebating required
- Maintenance free polymer bearings
- Intumescent kits available for fire rated doorsets

Door Controls



Door Controls – Legislation



CE Mark explained

Door closers are an important link in the control of fire and smoke and their usage can help save lives.

From July 2013 it became a legal requirement for all products which are covered by a harmonised EN standard to be CE marked before they can be placed on the market.

For door closing devices, EN 1154 and EN 1155 became harmonised standards across Europe and are now the standards required in order to attain CE marking. Validation of the CE mark requires the production of a Declaration of Performance (DoP) by the manufacturer.



Performance across the range

Compliance to EN 1154/EN 1155 and CE marking covers the majority of Foris door controls, from our budget range of fixed power closers through to our high efficiency cam action slide arm closers and heavy duty floor springs.

Door size chart - EN1154

EN Closer Size	Recommended Door Sizes	
	Maximum Door Width	Maximum Door Weight
1	750mm	20kg
2	850mm	40kg
3	950mm	60kg
4	1100mm	80kg
5	1250mm	100kg
6	1400mm	120kg
7	1600mm	160kg

Note:

For fire door applications, power size 3 is a minimum requirement.



EN 1154 & EN 1155

All forms of “Controlled Door Closing Devices” are covered by a harmonised European Standard, EN 1154. It provides details on product types by use, test cycles, door mass, corrosion resistance and product performance requirements using a 6 digit classification code.

EN 1155 specifies the requirements for devices which provide an electrically controlled hold-open or swing-free function on doors used for fire/smoke compartmentation. This includes separate electrically controlled hold-open devices which may be used in conjunction with a standard mechanical door closer.

Each standard prescribes the test methodology for randomly selected production line products. Compliance with the standards, supported by suitable evidence of audit testing of the certified product, and regular factory process control inspections, allows the application of the CE mark.

EN1154 EN1155			EN1154	EN1155
4 3 / 4	3 3	Category of use	Defines the angle from which the device will close the door in a controlled manner. Grade 3 - 105° Grade 4 - 180°	Only Grade 3 category of use is identified for electrically powered hold-open devices for use by the public and others with little incentive to take care - where there is some chance of misuse of the door
8 8	8 5 / 8		Test cycles	Prescribes a series of test cycles. Only one grade is identified. Grade 8 - 500,000 cycles
3 1 - 7	3 3 - 7	Door mass/size	Prescribes a series of test cycles. Only one grade is identified. Grade 8 - 500,000 cycles	Prescribes a series of test cycles. Grade 5 - 50,000 cycles for all electrically powered hold-open devices Grade 8 - 500,000 cycles for electrically controlled hold-open or swing-free closers that contain operating arms
1 0 / 1	1 1		Identifies the closer power size as defined by the door width and mass. Adjustable power closers are defined by their upper and lower power sizes. see table on page 27	Hold open power size is suitable for a range of power sizes. Both the max. and min. power sizes are defined. see table on page 27
1 1	1 1	Suitability for fire/smoke doors	Having successfully completed a fire test to EN1634. Grade 1 - suitable for use on fire/smoke door assemblies Grade 0 - not suitable for use on fire/smoke door assemblies	Having successfully completed a fire test to EN1634. Only Grade 1 is identified Grade 1 - suitable for use on fire/smoke door assemblies
3 0 - 4	3 0 - 4		Safety	All electrically powered devices are required to satisfy the requirement of safety in use. Only Grade 1 is identified
		Corrosion resistance	Level of corrosion resistance to EN 1670 Neutral Salt Spray test and operation of the product at extreme temperatures. Five grades are identified. Grade 0 - no identified resistance Grade 1 - mild resistance Grade 2 - moderate resistance Grade 3 - high resistance Grade 4 - very high resistance (240 hrs)	

Door Controls – Legislation

The Equalities Act - disability legislation

For some building users a self-closing fire door can become a barrier – or at least an obstacle which hampers their movement into and within the building.

Legislation aimed at providing universal accessibility of buildings requires service providers to make *"reasonable adjustments to the physical features of their premises to overcome barriers to access"*.

To meet obligations under the Equalities Act, Approved Document M (ADM) of The Building Regulations and BS 8300 continue to be the yardsticks by which conformity is measured.

ADM and BS 8300 provide guidance in establishing recommended maximum opening forces for door controls to assist less able users.

Opening v Closing Forces

For accessibility, Approved Document M and BS8300 are concerned with overcoming the resistance to opening which a door closer imparts. Both documents stipulate maximum "opening force" whereas for fire safety, EN 1154 is concerned with ensuring the door closes fully in order to maintain the door's fire integrity and is measured as "closing moment" (a combination of the door's mass and width). The two forces are not directly comparable.

Doors which need to be fire resisting and accessible must satisfy both the requirements of the maximum opening force for accessibility and minimum closing moment for fire safety. Non fire resisting doors only need to satisfy the maximum opening force requirements of BS8300.

BS8300 Incorporating Amendment No.1 – 7.3.1 states:

"For disabled people to have independent access through single or double swing doors, the opening force, when measured at the leading edge of the door, should not be more than 30N from 0° (door in the closed position) to 30° open, and not more than 22.5N from 30° to 60° of the opening cycle."

"The ability of a controlled door closing device to close effectively while keeping within the opening force limits depends on its efficiency and the resistances from edge seals, hinge friction, latch resistance and differential air pressure. The opening force should be checked using a plunger type force measuring instrument."

Accessibility guidance

Foris is able to offer guidance and product solutions to cover the following areas:

Low energy door controls

Electromagnetic door controls

High efficiency mechanical door controls to meet the conflicting requirements of BS 8300 and fire safety requirements of EN 1154

Door closers which are capable of meeting these demands and disability legislation are identified by this symbol.



Fire Safety & Approved Document B

Fire Safety Order

The Regulatory Reform (Fire Safety) Order covers general fire safety in England and Wales.

Proof of compliance rests with the building owner or other reasonable person and policing of this is done through spot checks by the Fire Service. Failure to comply can result in a fine or prison sentence and would invalidate any insurance cover.

Approved Document B

In England and Wales, Approved Document B of Building Regulations requires third party fire testing to ensure that door controls and other life safety products are fit for purpose.

All Foris door controls which are used for fire and smoke door assemblies are third party fire tested and approved by Certifire.

Certifire approval is a means of providing reassurance to specifiers and authorities that all aspects of the product's testing, assessment and manufacturing have been checked and verified to ensure:

- They have been included in successful fire door tests
- They have been tested and comply with the relevant EN or BS standards
- They are manufactured in quality assured facilities under ISO 9000 certification

Certification documentation for all Briton door controls is readily available on request.



Recommendation

High efficiency Foris closers which are capable of meeting the required levels of opening and closing forces are marked with the "Wheelchair Symbol" but accurate installation, hinge friction, door seals and variable air pressure can all have a bearing on the opening resistance of the doorset.

For doors which must also meet the stringent closing force requirements for fire door applications, it may be more appropriate to use an electromagnetic hold-open or swing-free closer or a powered opening solution.



Fixing Applications Guide

Door control options

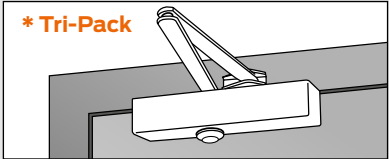
There are fundamentally 2 types of door control, door closers which are mounted on the door or frame and floor springs which are concealed within the floor.



Regular fixing *

Closers are door mounted on the pull or opening face of the door.

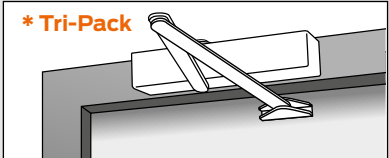
* Tri-Pack



Transom fixing *

Closers are transom mounted on the push or closing face of the door.

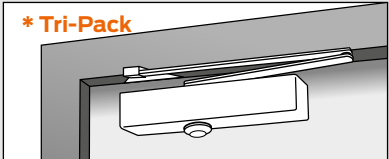
* Tri-Pack



Parallel fixing *

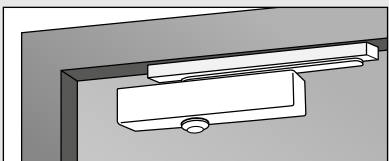
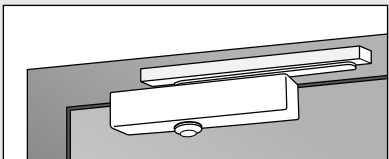
Closers are door mounted on the push or closing face of the door.

* Tri-Pack



Slide track fixing

Closers with slide arm and track can also be door or transom mounted on the pull or push side of the door. Tracks can be mounted on the face or underside of the transom when mounted on the push side of the door.



Concealed closer mounting

Closers for concealed mounting offer the ultimate aesthetic option. The closer is discreetly concealed within the door leaf (or the head frame) and a single arm operates within a slide track mounted in the underside of the head frame (or top of the door leaf).

Unlike surface mounted closers, the concealed option usually has limitations on its fire performance and requires a certain minimum door thickness.

* Tri-Pack

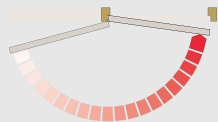
Most Foris door closers are “Tri-packed” meaning that they contain the necessary arm, bracket and fixings to enable them to be fitted in any of these applications.

Refer to certification or DOP to ensure the application is approved for fire doors.

Closer Adjustments

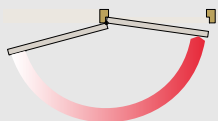
Adjustable closing power

PowerAdjust mechanism provides a visual guide on the EN power level at which the closer has been adjusted.



Adjustable closing speed

Adjustable from 180° opening through to the final 15°.



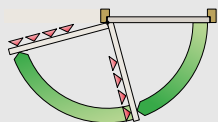
Adjustable latch action

The speed of closing in the last 15° can be adjusted to overcome seals and latches.



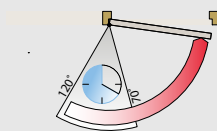
Adjustable backcheck

To prevent damage to the door, hardware and adjacent walls caused by the door being flung open or caught by a gust of wind. Angle at which the backcheck is activated is usually adjustable.



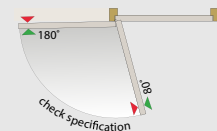
Adjustable delayed action

The closer can be set to close more slowly to give people extra time to pass through the doorway. Adjustable timing between 70° and 120°.

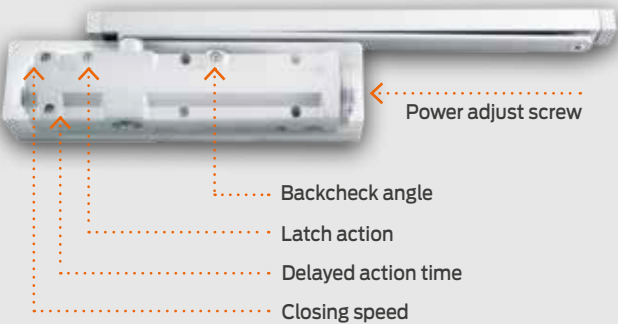


Adjustable hold-open

Mechanical and electro-magnetic hold-open variants are available to hold the door in the open position.



Adjustment screws will vary from model to model (FS2700 shown)



Mechanical hold-open unit

Mechanical hold-open is achieved by substituting the standard armset with a hold-open armset (or a component concealed within the slide track). It enables doors to be securely held in the open position at a pre-set angle (adjustable on installation depending on model and the mounting application).

The hold-open facility can be easily overridden and the force required to release the hold-open action can be adjusted to suit the weight of door.

Please note, mechanical hold-open is not permitted on fire door applications.



Electromagnetic hold-open or swing-free

Electromagnetic hold-open or swing-free closers allow a door to be held open (or free to swing) in normal use but close under spring power in the event of a fire or power failure. This can be achieved using a closer which has an electromagnetic function integrated into the closer mechanism, or by using a separate electromagnetic holder in conjunction with a standard door closer.

Please note, electromagnetic hold-open or swing-free is permitted on fire door applications when connected into the building fire alarm or smoke detection system.

FS2700 Series - Cam Action Door Closers (Level 5)

The Foris FS2700 Series is a precision manufactured cam-action, slide channel door closer, in a compact, surface fixed unit. It provides exceptional ease of use by reducing the resistance encountered when opening the door. The Foris FS2700 Series bridges the gap between the requirements for fire and smoke control and ease of operation required for accessibility.



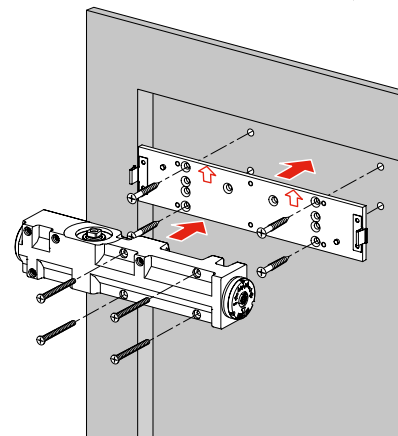
FS2720 with A line cover and with softline cover



Adjustments: **1** - Closing power; **2** - Closing speed; **3** - Latch action; **4** - Backcheck; **5** - Delayed action (120° - 70°)

Installation made quick and easy

The efficiency and durability of an overhead door control is greatly improved by accurate installation. The Briton FS2700 Series has a number of features aimed at simplifying the installation process, including self adhesive Accufit template and mounting bracket. With the addition of the 'FAST' power adjustment dial and snap-on covers the process is quick and easy too.



Easy opening, reliable closing

Principal Features & Benefits

- A Cast iron body with a naturally high graphite content is self lubricating, providing high levels of durability and long life performance.
- B High performance cam action technology is extremely efficient, providing reliable closing but easy to open.
- C Full complement bearings provide increased bearing load for efficient operation and improved reliability.
- D **FAST** PowerAdjust dial feature indicates the current power setting.
- E Silicon chrome alloy steel springs for superior strength and reliability.
- F High quality hydraulic fluid with built-in temperature compensation ensures reliable performance without the need for seasonal adjustment.
- G Unique self-adhesive 'Accufit' installation template and mounting plate with dowel fixings to position the closer body ensures a quick, simple and accurate installation.
- H A line and Softline cover options have a 'push and click' fit for quick installation
- J Co-ordinated track design with concealed fixings

Also available with electromagnetic hold-open in the slide track.

Foris FS2700 Series door closers are packed complete, reducing the possibility of lost or missing parts.

Testing & Certification

CE marked to EN1154 (AD0264)

CE marked to EN1155 for electromagnetic variants

Fire tested to EN1634 on timber doors to achieve a 2 hour fire rating, and 1 hour for metal doors.

Certifire Approved CF738

What's in the box?

- Closer Body
- Body Cover
- Armset and Track
- Fixing Pack
- Accufit template and backplate
- Installation Instructions



(AD0264)



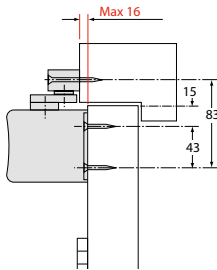
FS2700 Series – Quick Selector

Product features	Product references			
	FS2720BD.T	FS2721BD.T	FS2720BD.TE	FS2721BD.TE
Pull side door / Push side transom mounting	■		door mount only	
Push side door / Pull side transom mounting		■	door mount only	
Variable closing power EN size	2 - 5*	2 - 5	3 - 5	3 - 5
FAST power adjust dial	■	■	■	■
Easy Fit template & mounting plate	■	■	■	■
Maximum angle of opening (pull side)	180°	180°	120°	120°
Separate closing speed & latch action adjustment	■	■	■	■
Adjustable backcheck	■	■	■	■
Adjustable delayed action (between 70°-120°)	■	■	■	■
In-built temperature compensation	■	■	■	■
Mechanical hold-open facility (80°-120°)	□	□		
Electromagnetic hold-open facility (80°-120°)			■	■
Matching slide channel, arm & cover finish	■	■	■	■
Cover options	Slimline/Softline	Slimline/Softline	Slimline/Softline	Slimline/Softline
Dimensions (Body L x D x H mm)	289 x 57 x 70mm	289 x 57 x 70mm	289 x 57 x 70mm	289 x 57 x 70mm
Channel/slide arm	443 x 20mm	443 x 20mm	575 x 26mm	575 x 26mm
Finishes available (see page 74)	SSS; PSS; PBS; SES (for both cover options and matching track)			
Warranty period	10yrs	10yrs	10yrs mechanical / 2yrs electrical	
CE Classification	4 8 2-5 1 1 3		3 8 3-5 1 1 3	

■ Feature as standard □ Available as an option

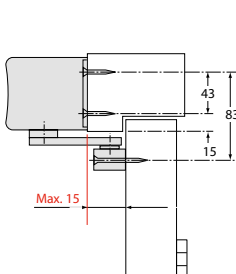
* Certifire Approval covers EN 2 - 5 for closers door mounted/pull side and EN 2- 4 for closers transom mounted/push side.

Foris FS2720BD.T - door mounted pull side



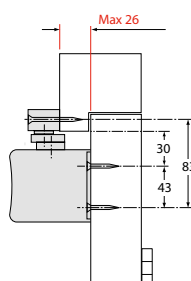
Max. opening angle - 180°

Foris FS2720BD.T - transom mounted push side



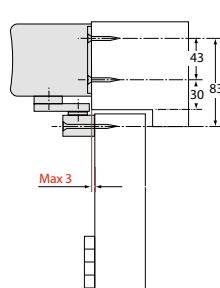
Max. opening angle - 120°

Foris FS2721BD.T - door mounted push side



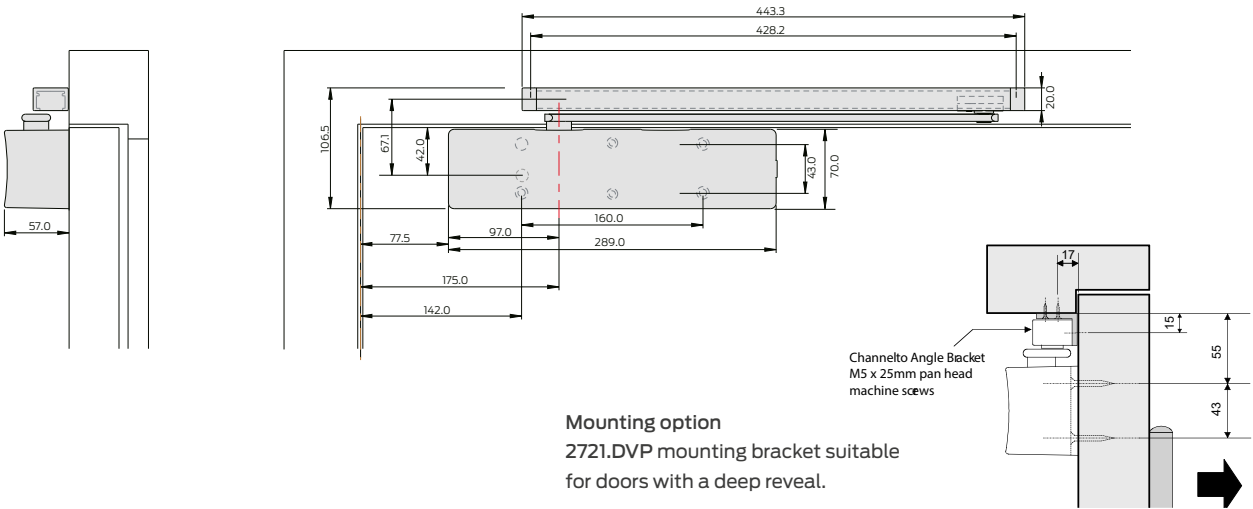
Max. opening angle - 120°

Foris FS2721BD.T - transom mounted pull side

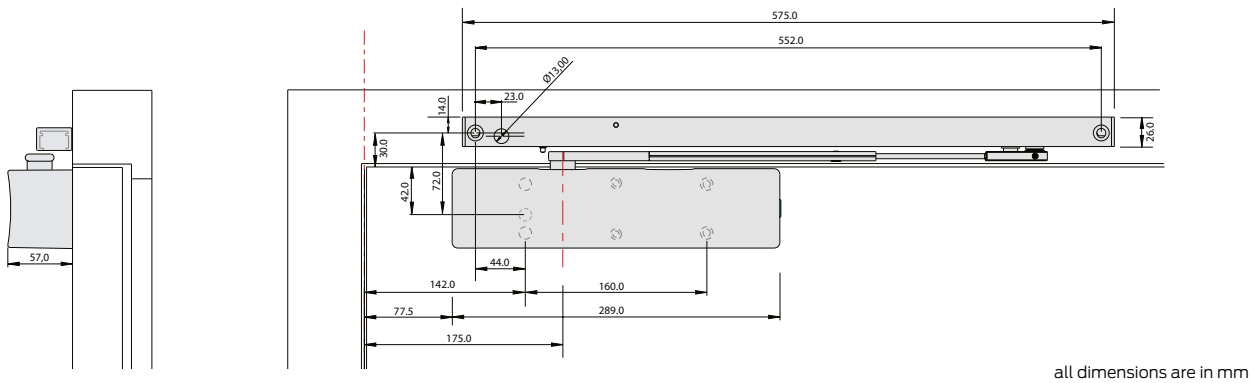


Max. opening angle - 180°

Standard closers with/without mechanical hold open (door mounted - pull side shown).



Closers with electromagnetic hold open track (door mounted - pull side shown).



Product Ref:	Description	Mounting Position	Finishes
FS2720B D.T.A	Closer with Slimline cover - adjustable power EN size 2 - 5	Door mount pull side, transom mount push side	SES; SSS;
FS2721BD.T.A	Closer with Slimline cover - adjustable power EN size 2 - 5	Door mount push side, transom mount pull side	PSS; PBS
FS2720B D.T.S	Closer with Softline cover - adjustable power EN size 2 - 5	Door mount pull side, transom mount push side	SES; SSS
FS2721BD.T.S	Closer with Softline cover - adjustable power EN size 2 - 5	Door mount push side, transom mount pull side	SES; SSS
FS2720B D.TE.A	Closer with Slimline cover - adjustable power EN size 2 - 5 and Electromagnetic hold-open	Door mount pull side	SES; SSS;
FS2721BD.TE.A	Closer with Slimline cover - adjustable power EN size 2 - 5 and Electromagnetic hold-open	Door mount push side	PSS; PBS

FS2300 Series – Cam Action Door Closers (Level 5)

The Foris FS 2300 Series is offered as a simplified version of the Foris FS 2700 providing the same ease of use by reducing the resistance encountered when initialising the opening of the door. The FS2300 Series is available with either a slide in trimplate or with a curved 'Softline' all-over cover.



FS2320 with slide in trimplate and with softline cover



Adjustments: **1** - Closing power; **2** - Closing speed; **3** - Latch action; **4** - Backcheck

Installation made quick and easy

The efficiency and durability of an overhead door control is greatly improved by accurate installation. The Foris FS 2300 Series is supplied with the Accufit self adhesive template which not only speeds up the installation process but provides a means of accurately aligning the closer and track on the door and frame.



Foris FS2320 with Softline cover in SSS finish, shown in "Push Side Transom Mount" option.

Compact, modern slimline design

Principal Features & Benefits

- A Foris FS 2300 Series has an extruded aluminium body.
- B High performance cam action technology is extremely efficient, providing reliable closing but easy to open
- C Full complement bearings provide increased bearing load for efficient operation and improved reliability.
- D Power adjustment allows installers to adjust the spring power to suit the size and location of the door.
- E Silicon chrome alloy steel springs for superior strength and reliability.
- F High quality hydraulic fluid with built-in temperature compensation ensures reliable performance without the need for seasonal adjustment.
- G A radiused slide in trimplate and spindle cap is available to conceal the main door closer fixings and adjustment screws.
- H An alternative 'all-over' cover is also available, secured by simple unobtrusive spring clips and providing a smooth, contemporary look.
- J Co-ordinated track design with concealed fixings
- K Unique self-adhesive 'Accufit' template, together with easy-to-read instructions assist quick and easy installation.

Foris FS 2300 Series door closers are packed complete, reducing the possibility of lost or missing parts.

Testing & Certification

CE marked to EN1154 (AD5118)

Fire tested to EN1634 on timber doors to achieve a 2 hour fire rating.

Certifire Approved CF5291

Full Declaration of Performance available from our website at:

www.britondops.co.uk



What's in the box?

- Closer Body
- Body Cover
- Armset and Track
- Fixing Pack
- Accufit template and backplate
- Installation Instructions

FS2300Series - Quick Selector

Product features		Product references	
EN Closer size	max. door size [width - weight]	FS2320B.T	FS2321B.T
1	750mm - 20kg		
2	850mm - 40kg	■	■
3	950mm - 60kg	■	■
4	1100mm - 80kg	■	■
5	1250mm - 100kg		
6	1400mm - 120kg		
Pull side door / Push side transom mounting		■	
Push side door / Pull side transom mounting			■
Variable closing power EN size		2 - 4	2 - 4
Accufit template and Accufit mounting plate		■	■
Maximum angle of opening*		180°	180°
Separate closing speed & latch action adjustment		■	■
Adjustable backcheck		■	■
In-built temperature compensation		■	■
Mechanical hold-open		□	□
Matching slide channel, arm & cover finish		■	■
All over metal cover		□	□
Dimensions (with trimplate L x D x H mm)		240 x 56 x 49	240 x 56 x 49
Dimensions (with cover L x D x H mm)		270 x 68 x 63	270 x 68 x 63
Finishes available		SSS; PSS; PBS; SES	
Warranty period		10yrs	10yrs
CE Classification		4 8 2-4 1 1 3	

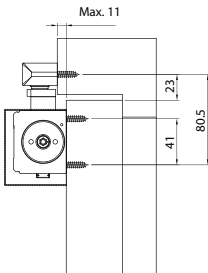
■ Standard

□ Optional

* When door mounted.

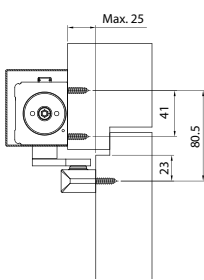
Transom mounted closers are restricted to 120° opening.

FS2320B.T - door mounted pull side



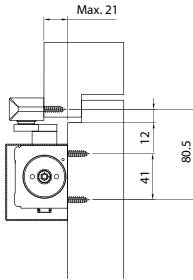
Max. opening angle - 180°

FS2320B.T - transom mounted push side



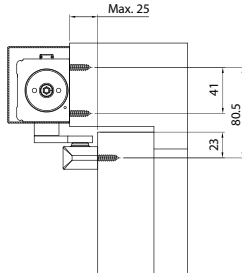
Max. opening angle - 120°

FS2321B.T - door mounted push side



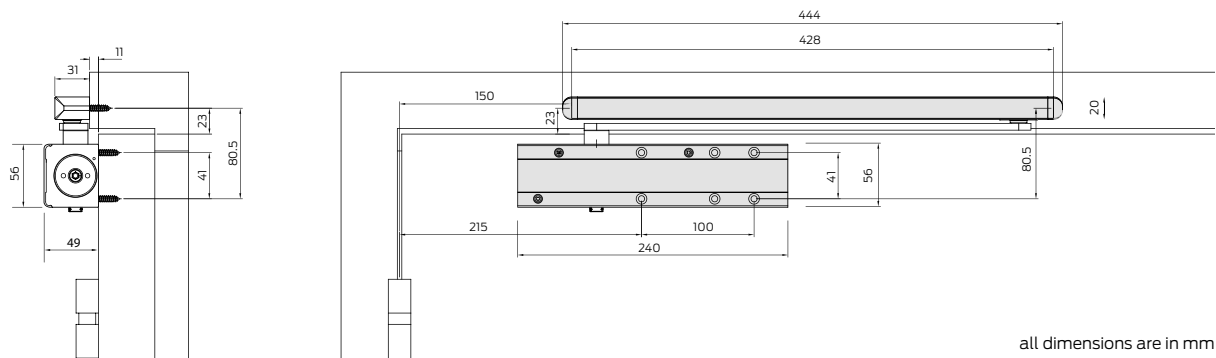
Max. opening angle - 120°

FS2321B.T - transom mounted pull side

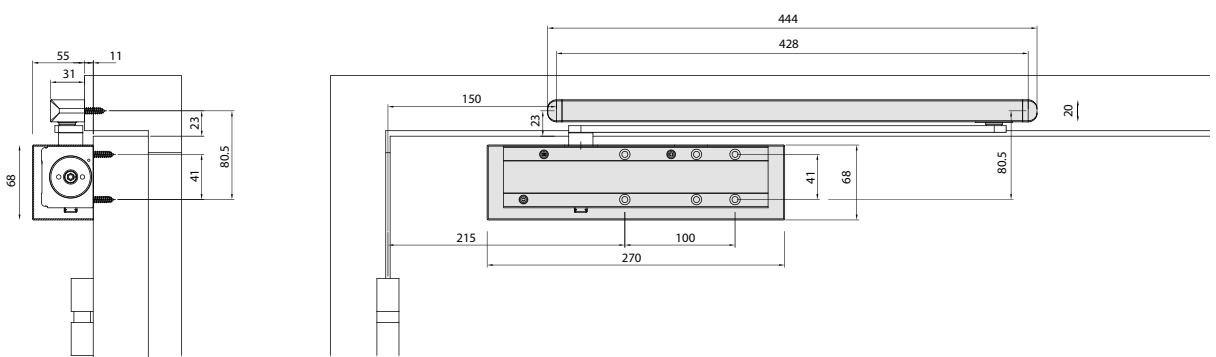


Max. opening angle - 180°

Closers with slide in trimplate



Closers with all over cover



Product Ref:	Description	Mounting Position	Finishes
FS2320B.T	Closer with trimplate - adjustable power EN size 2 - 4	Door mount pull side, transom mount push side	SES
FS2321B.T	Closer with trimplate - adjustable power EN size 2 - 4	Door mount push side, transom mount pull side	
FS2320B.T.S	Closer with Softline cover - adjustable power EN size 2 - 4	Door mount pull side, transom mount push side	SES; SSS;
FS2321B.T.S	Closer with Softline cover - adjustable power EN size 2 - 4	Door mount push side, transom mount pull side	PSS

FS2300 & FS2700 Series - Accessories

Double door co-ordinator

Mounted in conjunction with cam action door closers, FS2320 or FS2720. The door co-ordinator controls the closing sequence of rebated double doors.

The unit is suitable for double doors with a combined leaf width of 1350mm to 2500mm (hinge centre to hinge centre).

Features & Functions

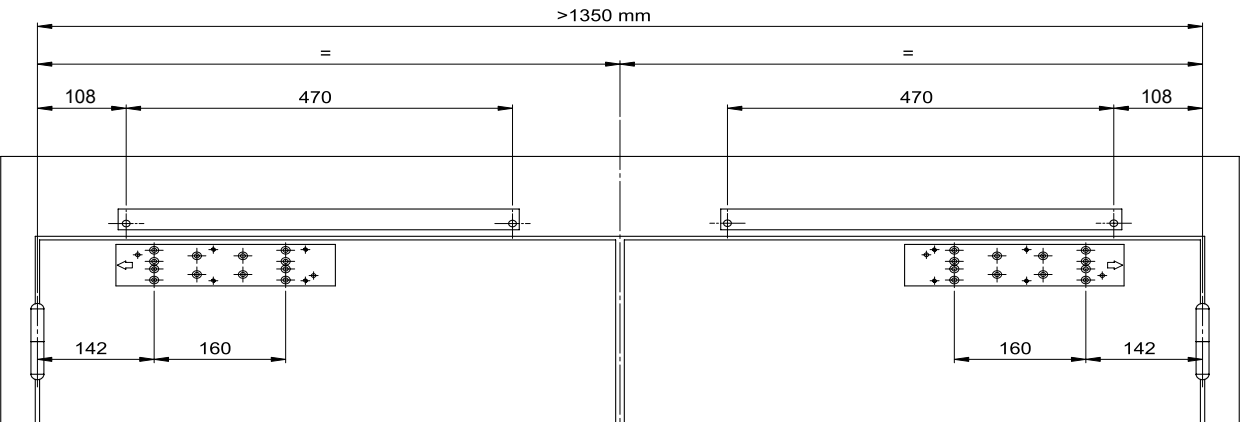
- For use on door mounted pull side applications only
- Suitable for left and right hand doors
- Suitable for closers with EN power sizes 3 - 5
- Allows full 180° opening angle
- Site adjustable
- Cover caps conceal joints of the co-ordinator track
- Available in SE and SS finishes
- Supplied complete with carry bar

FS 6100999

Surface mounted double door co-ordinator
available in SE or SS finish



NOTE: Carry bar must be fitted to ensure the correct closing sequence and to maintain certification



Certification

CE marked to EN 1158 (AF5003)

Fire tested to EN 1634 for use on timber fire doors up to 2 hour rating



Additional features

Cushion stop

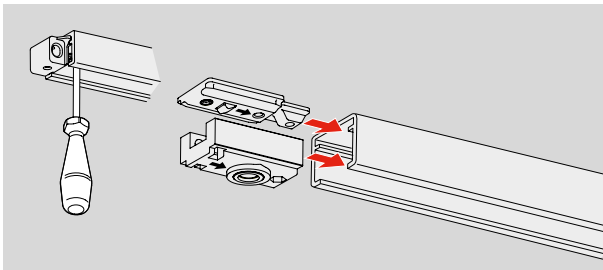
Optional cushion stop (ref: FS2327.CS) helps prevent doors from coming into contact with adjacent walls. It is installed within the slide track (note: this is not a backcheck function).



Mechanical hold-open

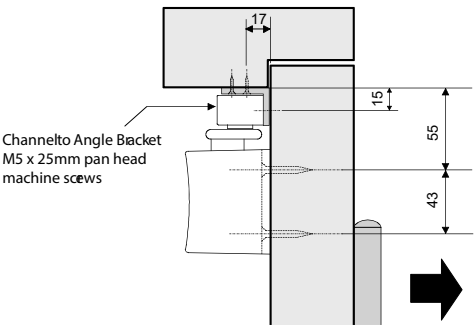
Optional mechanical hold-open unit can be retrofitted into the slide track in place of the standard pivot block. Hold-open angle can be adjusted from 80 ° to 120 ° and allows the door to be manually released from the hold-open position. The force required to release the hold-open action can be adjusted to suit the door weight.

Mechanical hold-open must not be used on fire and smoke doors.



Angle bracket

An optional mounting bracket FS2721.DVP can be used to attach the slide track to the underside of the transom on doors with deep reveals.



Accessories and parts for FS2700 Series

Product Ref:	Accessories & Parts
FS2720.B.D.T.M	Door closer mechanism for Briton 2720
FS2720.CPA	A line Cover pack
FS2720.ECP	Track end caps & bracket pack
FS2720.FP	Fixing pack
FS2720.HP	Hold-open conversion pack
FS2720.NS	Nylon track slider
FS2720.T.AP	Track arm pack
FS2721.DVP	Track mounting bracket for frames with deep reveals
FS6100999	Double door co-ordinator 1350-2500 x 32.5 x 32mm
FS2327.CS	Cushion stop mounted in track

Accessories and parts for FS2300 Series

Product Ref:	Accessories & Parts
FS2300.AP	Arm pack (available in SE; SS; PS finishes)
FS2300.CPS	Softline cover pack (available in SE; SS; PS finishes)
FS2300.F.PLT	Fixing plate (available in black, white or SE finishes)
FS2300.FPCT	Fixing pack - Closer and track arm
FS2300.FPT	Fixing pack - Track arm only
FS2320.HP	Hold-open conversion pack
FS2320.NS	Nylon track slider
FS2320.RI	Rubber inserts
FS1502097.SE	6mm mounting fixing plate for extra body projection
FS6100999	Double door co-ordinator 1350-2500 x 32.5 x 32mm
FS2327.CS	Cushion stop mounted in track

FS2400 Series - Cam Action Door Closers (Level 5)

The Foris FS2400 Series is a precision manufactured cam-action, slide channel door closer, in a compact concealed unit. With the closer body mounted within the top of the door and the slide track within the head frame, the FS2400 Series offers high resistance to abuse and offers a highly aesthetic solution being fully concealed when the door is closed. Suitable for doors 44mm thick and above.

Providing exceptional ease of use by reducing the resistance encountered when opening the door, the Foris FS2400 Series bridges the gap between the requirements for fire and smoke control and ease of operation required for accessibility.



Adjustments: 1 - Closing power; 2 - Closing speed; 3 - Latch action; 4 - Backcheck



Track is discreetly concealed in the underside of the head frame.

Highly efficient, compact and concealed

Principal Features & Benefits

- A Compact extruded aluminium body which requires minimal removal of material from the door and frame.
- B High performance cam action technology is extremely efficient, providing reliable closing but easy to open
- C Needle roller bearings provide increased bearing load for efficient operation and improved reliability.
- D Power adjustment allows installers to adjust the spring power to suit the size and location of the door
- E Silicon chrome alloy steel springs for superior strength and reliability.
- F High quality hydraulic fluid with built-in temperature compensation ensures reliable performance without the need for seasonal adjustment.
- G Aluminium slide track 23mm wide with nylon runner
- H Powder coated steel track arm
- J Optional cushion stop helps to prevent doors from opening beyond the limit of the door closer - please note, this is not a backcheck facility

Factory preparation is recommended to ensure the minimum amount of door and frame material is removed and to ensure an accurate installation.

Foris 2400 Series door closers are packed complete, reducing the possibility of lost or missing parts.

Testing & Certification

CE marked to EN1154 (AD5114)

Fire tested to EN1634 on timber doors to achieve up to 90 minute fire rating when used in conjunction with the intumescent pack FS2420.IP

FD30 - Min. door thickness 44mm

FD60 - Min. door thickness 54mm

FD90 - Min. door thickness 58mm

What's in the box?

- Closer Body
- Armset and Track
- Fixing Pack
- Installation Instructions



FS2400 Series – Cam Action Door Closers

Product features		Product references
EN Closer size	max. door size [width - weight]	FS2420T
1	750mm - 20kg	
2	850mm - 40kg	■
3	950mm - 60kg	■
4	1100mm - 80kg	■
5	1250mm - 100kg	
6	1400mm - 120kg	
CE marked and EN 1154 compliant		■
Variable closing power EN size		2 - 4
Min. door thickness for FD60 doors		54mm
Max. angle of opening		120°
Separate closing speed & latch action adjustment		■
Adjustable backcheck		
In-built temperature compensation		■
Cushion stop		□
Hold open facility		□
Arm & track finish		Silver, SS or PS
Dimensions (L x D x H mm)		242 x 42 x 32
Channel/slide arm		440 x 17
Finishes (arm)		SS; PS; SE
Warranty period		10yrs
CE Classification		3 8 2-4 1 1 3

■ Feature as standard □ Available as an option

Door Mounted

Closer body mounted in the top of the door leaf and the slide track in the underside of the head frame.



Transom Mounted

Closer body mounted in the underside of the transom and the slide track in the top of the door.



Intumescent gasket set (FS2420.IP)

A significant amount of fire resisting doorset material is removed when concealed closers are mortised into the door leaf. The intumescent gasket set will provide the additional performance that is required to protect the door from integrity failure during fire conditions.

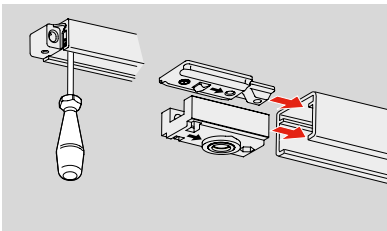
It is particularly important with these closers to check that the details of the fire test certification are relevant to your intended door application.

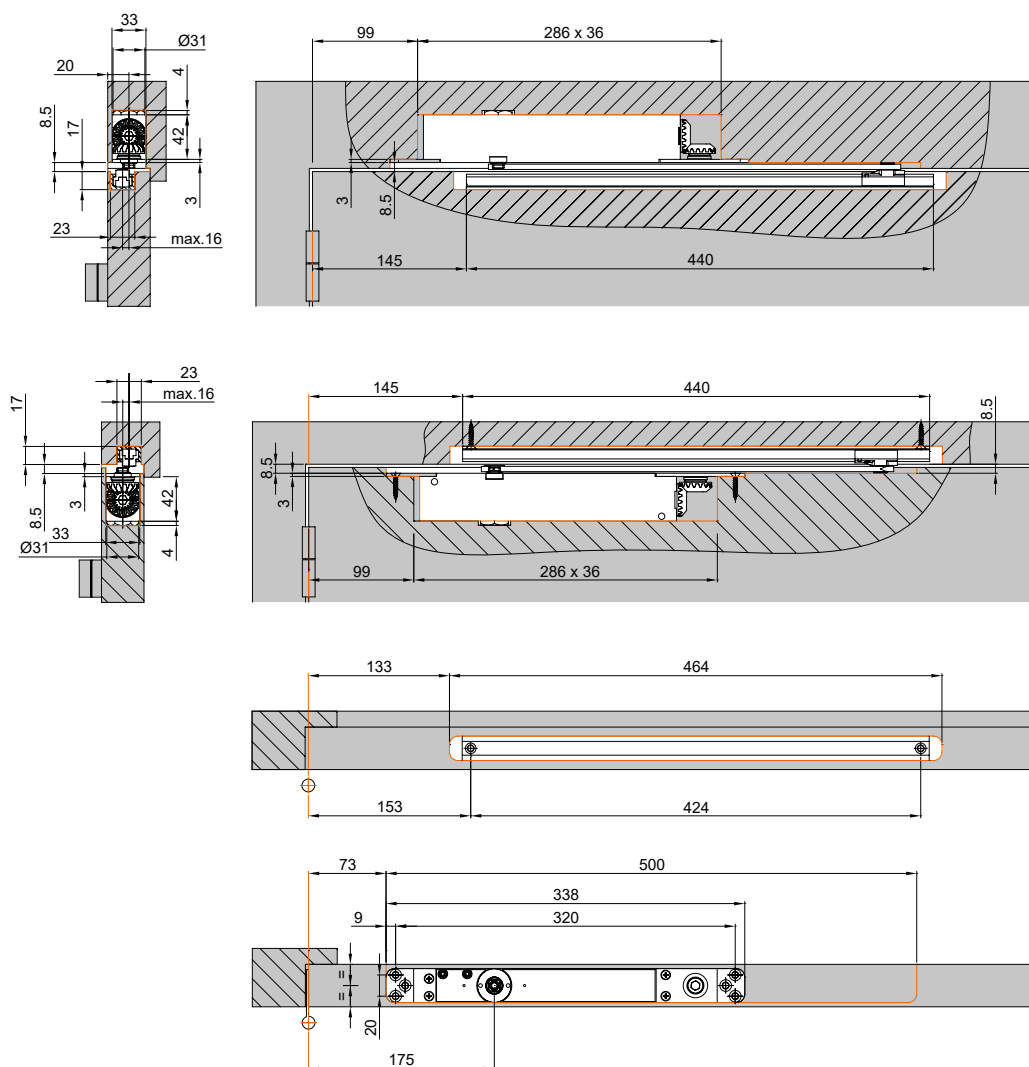
Additional features

Optional cushion stop (ref: FS2420.CS) helps prevent doors from coming into contact with adjacent walls (note: this is not a backcheck function).

Optional mechanical hold-open unit can be retrofitted into the slide track. Hold-open angle can be adjusted from 80° to 120° and allows the door to be manually released from the hold-open position.

Mechanical hold-open must not be used on fire and smoke doors.





all dimensions are in mm

Product Ref:	Description	Mounting Position	Finishes
FS2420 T	Closer with backcheck, slide in trimplate - adjustable power EN size 2 - 4	Door mounted or transom mounted	SE; SS; PS

Product Ref:	Accessories & Parts	Mounting Position	Finishes
FS2400.A P.PS	Arm pack	-	PS
FS2400.A P.SE	Arm pack	-	SE
FS2400.A P.SS	Arm pack	-	SS
FS2420.C S	Optional cushion stop	Mounted in the slide track	N/A
FS2420.H P	Optional mechanical hold-open kit	Mounted in the slide track	N/A
FS2420.IP	2mm thick Intumescent pack - required for fire door applications		N/A
Please note; Cushion stop and mechanical hold-open cannot be used together			

FS2100 Series – Severe Duty Closers (Level 5-3)

The FS2100 Series of door controls has been created to offer a comprehensive package of solutions to suit any door closing application.

This combination of engineering quality and good looks creates a truly versatile architectural solution for any severe or heavy duty application.

A large number of options are available within the FS2100 Series including projecting arm, slide track and electromagnetic hold-open versions, all of which are available with 3 all-over cover options in a range of finishes.

Foris FS2130B closer with 'S' cover in SE finish



Adjustments: **1** - Closing power; **2** - Closing speed; **3** - Latch action; **4** - Backcheck

Installation made quick and easy

The efficiency and durability of an overhead door control is greatly improved by accurate installation. The FS2100 Series is supplied with the Accufit self adhesive template which not only speeds up the installation process but provides a means of accurately aligning the closer and track on the door and frame.



Available with 3 cover options - showing 'C' cover in silver finish, 'L' cover in polished stainless steel and 'S' cover in satin stainless steel.

FS2000 Series – Heavy/Medium Duty Closers (Level 3-2)

The FS2000 Series offers adjustable and fixed strength power sizes providing a comprehensive package of solutions to suit most door closing applications.

When the situation of use and the door size and weight is known, fixed strength closers provide an economic solution. With little on-site adjustment needed, installation is quick and trouble-free.

The adjustable power 2003V provides the flexibility to ‘fine tune’ the closing power of the door control in order to achieve the low ‘opening forces’ necessary to satisfy the requirements of Approved Document M of The Building Regulations and the guidance of BS 8300 in relation to The Equality Act (2010).



Adjustments: 1 - Closing power; 2 - Closing speed; 3 - Latch action; 4 - Backcheck

FS1100 Series – Quick Selector

Product features		Product references					
EN Closer size	max. door size [width - weight]	FS1110	FS1120B	FS1130B	FS1110.T	FS1130B.T	FS1130B.TE
1	750mm - 20kg						
2	850mm - 40kg	■	■	■		■	
3	950mm - 60kg	■	■	■	■	■	■
4	1100mm - 80kg	■	■	■		■	■
5	1250mm - 100kg			■			
6	1400mm - 120kg			■*			
CE marked		■	■	■	■		■
Fixed closing power EN size					3		
Adjustable closing power EN size		2 - 4	2 - 4	2 - 6*		2 - 4	3 - 4
Maximum angle of opening (controlled closing)		105°	180°	180°	180°	180°	105°
Adjustable closing speed & latch action		■	■	■	■	■	■
Adjustable backcheck			■	■		■	■
Tri-pack armset (projecting arm closers)		■	■	■			
Mechanical hold-open facility		□	□	□		□	
Electro-magnetic hold-open							■
Slide channel and arm					■	■	■
Trimplate cover option		■	■	■	■	■	■
All over cover variants available		all variants available with C (classic) / S (softline) cover options					
Finishes		SE; SES; GES (trimplate variants) - SES; GES; SSS; PSS; PBS (all covered variants)					
Guarantee period		10yrs	10yrs	10yrs	10yrs	10yrs	10yrs
CE Classification		3 8 2-4 113	4 8 2-4 113	4 8 2-6 113	4 8 3 113	4 8 2-4 113	3 8 3-4 113

■ Feature as standard □ Available as an option

FS1110.SES closer with standard trimplate in SES finish



FS1120B.C.SSS closer with Classic cover in Satin stainless steel with matching arms.



FS1120B.S.SSS closer with Softline cover in Satin stainless steel with matching arms.



A wide choice of cover and finish options



Product Ref:	Description	Cover Option	Finishes
FS111 O	Projecting arm closer - template adjustable EN 2 - 4	Trimplate	SE; SES; GES
FS111 O.C	Projecting arm closer - template adjustable EN 2 - 4	C cover	SES; GES; SSS;
FS111 O.S	Projecting arm closer - template adjustable EN 2 - 4	S cover	PSS; PBS
FS111 O.T	Slide track closer - fixed power EN3	Trimplate	SES; GES
FS111 O.T.C	Slide track closer - fixed power EN3	C cover	SES; SSS; PSS;
FS111 O.T.S	Slide track closer - fixed power EN3	S cover	PBS
FS11 20B	Projecting arm closer - spring adjustable EN 2 - 4 - with backcheck	Trimplate	SES; GES
FS11 20B.C	Projecting arm closer - spring adjustable EN 2 - 4 - with backcheck	C cover	SES; SSS; PSS;
FS11 20B.S	Projecting arm closer - spring adjustable EN 2 - 4 - with backcheck	S cover	PBS
FS11 30B	Projecting arm closer - spring adjustable EN 2 - 6 - with backcheck	Trimplate	SES; GES
FS11 30B.C	Projecting arm closer - spring adjustable EN 2 - 6 - with backcheck	C cover	SES; SSS; PSS;
FS11 30B.S	Projecting arm closer - spring adjustable EN 2 - 6 - with backcheck	S cover	PBS
FS11 30B.TE	Track arm electromag hold-open closer - spring adjustable EN 3- 4 - with backcheck	Trimplate	SES; GES
FS11 30B.TE.S	Track arm electromag hold-open closer - spring adjustable EN 3- 4 - with backcheck	S cover	SES; SSS

Product Ref:	Accessories & Parts	Finishes
FS111 O.AP	Arm pack (screwthread) for 1110 & 1120B trimplate closers	SE
FS111 O.APF	Flatarm arm pack	SE; SS; PS; PB
FS111 O.APH	Hold-open arm pack for projecting arm closers	BM; GE; SE
FS111 O.T.AP	Track arm pack	SE; SS; PS; PB
FS111 O.BRK66	Fig. 66 bracket pack	SE
FS111 O.FP.ZP	Fixing pack	SE
FS11 30.AP	Arm pack (screwthread) for 1130B trimplate closers	SE
FS11 30.APF	Flatarm arm pack for 1130B	SE; SS; PS; PB
FS11 30.APH	Hold-open arm pack for projecting arm closers	BM; GE; SE
FS11 30.F.PLT	Fixing plate	BM; SE; WHS
FS11 30.HP	Hold-open conversion kit for slide track closers	N/A
FS11 30.TPB	Trimplate	SE

FS2100 Series – Electromagnetic Hold-open



The electromechanical FS2130B.TE closer houses an electromagnet in the slide track that is designed to hold the door open during normal use and is connected to the building fire alarm system. On sounding the fire alarm, or in the event of power failure, the electromagnet is deactivated and releases the door closer mechanism to close the door in the normal controlled manner.

It is particularly suited for use in areas where a standard door closer could be inconvenient or would impede the flow of people in medium or high traffic applications such as a cinema foyer or hospital corridor. The use of electromagnetic hold-open door controls is recommended in applications which are designed to meet the levels of accessibility called for in Approved Document M Access to and use of buildings.

Power requirements

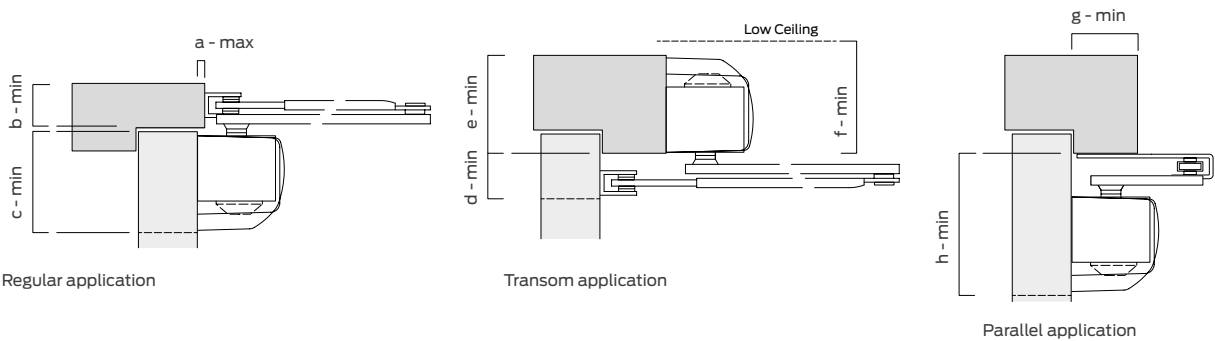
The closer power requirements are 24V DC, 90mA nominal. Transformers and relay interfaced to the fire alarm system can also be supplied to link the electricity supply and the fire alarm system.

Features of the FS2130B.TE closer

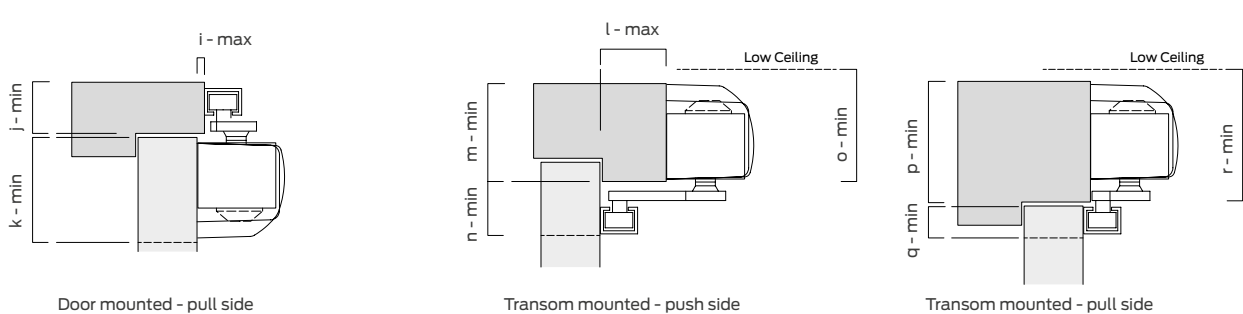
- Fully compliant with EN 1155.
- Satisfies the requirements of Approved Document M Access to and use of buildings
- Fail safe electronics guarantee door release in the event of a fire or power failure.
- Track mounted 24v DC electromagnet with an effective and reliable holding force.
- Manual override allows the door to be pulled closed at any time.
- On-board test switch simulates fire condition to check operation.
- Fully adjustable hold-open angle from 85° to 110°.
- 24v transformer/rectifier available.

FS2100 Series Installation Parameters

Closers with projecting arms (all cover options shown)



Closers with track arms (all cover options shown)



all dimensions are in mm

closer ref.	body cover								
		a	b	c	d	e	f	g	h
FS2110	L	10	26(39)	62	28(39)	52	62	44	99(112)
FS2120	S	10	26(39)	74	28(39)	52	74	44	112(124)
	C	7	28(41)	55	28(42)	50	68	44	94(107)
FS2130B	L	7	28(41)	78	30(43)	55	78	44	117(130)
FS2130BD	S	7	28(41)	78	30(43)	55	78	44	117(130)

Figures in brackets refer to dimensions when used with mechanical hold-open armsets

closer ref.	body cover										
		i	j	k	l	m	n	o	p	q	r
	C	12	41	78	76	55	45	78	75	22	95
FS2130B.T	L	12	41	78	76	55	45	78	75	22	95
FS2130B.TE	S	12	41	78	76	55	45	78	75	22	95



Mechanical hold-open armset option (FS2110 & FS2120)

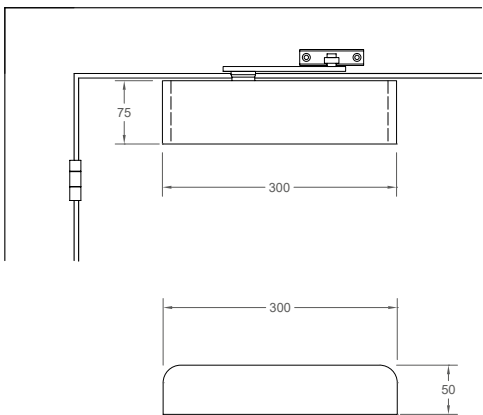
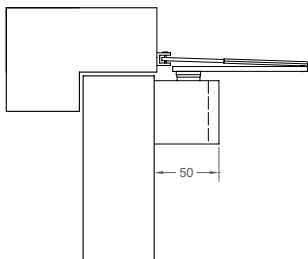


Mechanical hold-open armset option (FS2130)

FS3934 – Electromagnetic Hold-open or Swing-free (Level 5)

Typically used on fire rated doors where the hold-open or swing-free feature is required either in high traffic areas for convenience or in situations where it would be difficult to satisfy the maximum opening force requirements of Part M of The Building Regulations.

Each unit can be set to either ‘hold-open’ or ‘swing-free’ operation. In either case the spring closing function of the closer can be temporarily disabled to allow free passage. When de-activated via a connection to the building fire alarm or smoke detection system, the electromagnet disengages and the door closer closes the door in the normal manner to maintain fire safety.



Smart, reliable and fire safe

Features & Benefits

- Template adjustable power Size EN 3-4 (see table)
- Stainless steel grade 304 softline cover available in silver and satin steel finishes to suite with FS2300 and FS2700 closers with softline covers to complement a variety of door hardware ranges.
- Designed for use on low voltage circuits 24V DC linked to a fire alarm
- Solution offering hold-open and free swing
- Easy Installation
- Attractive compact design
- Test switch simulates fire condition of check operation
- When the fire alarm is activated, the door will close automatically from any position to help prevent the spread of fire

Mounting	Power size	Max. door opening	EN Classification
Door mounted	3	180°	3 8 3-4 1 1 3
	4	110°	
Transom mounted	3	180°	3 8 3-4 1 1 3
	4	110°	
Parallel mounted	3	170°	3 8 3 1 1 3

Product Ref:	Description	Mounting Option	Finishes
FS39 34	Electromagnetic hold-open/swing-free closer - Template adjustable EN 3-4	Regular and Transom mount	SSS

Testing & Certification

- CE marked to EN1154 - AE5012
- CE marked to EN1155 for electromagnetic hold-open variants
- Fire tested to EN1634 on timber doors to achieve a 2 hour fire rating.
- Certifire Approved CF5598

What's in the box?

- Closer Body
- Body Cover
- Appropriate Arm and Bracket
- Armoured Loop
- Fixing Pack
- Installation Instructions



FS500 Series – Electromagnetic Door Holders

When used in conjunction with a suitable door closing device, fire alarm and detection system, the Foris electromagnetic hold open devices permit fire doors to be held open during normal operation. In the event of a fire or smoke detection, the units are automatically de-activated and the doors will close under the normal action of the door closer.



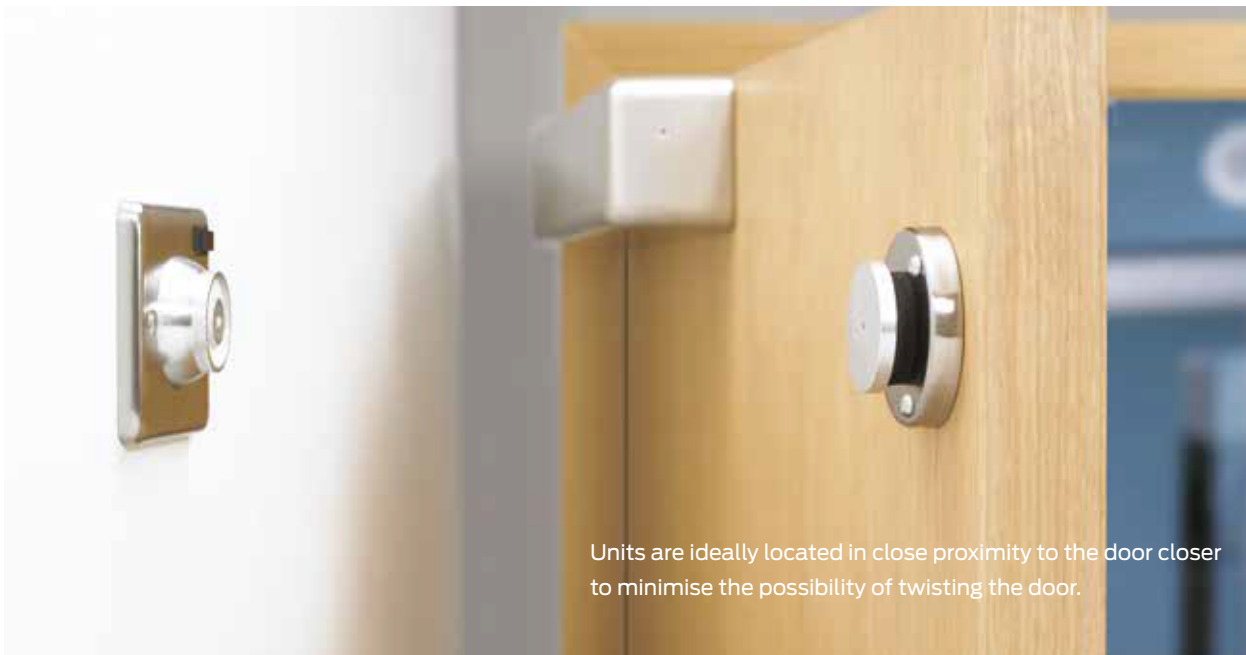
FS503

- Contract electromagnetic hold-open unit
- Surface mounted
- White plastic housing
- Built-in release/test button



FS533

- Specification electromagnetic hold-open unit
- Flush or surface mounted
- Metal housing available in a range of metallic and powder coated finishes
- Built-in release/test button



Units are ideally located in close proximity to the door closer to minimise the possibility of twisting the door.

FS500 Series – Door Holders & Accessories

A series of accessories is available for use with Briton electromagnetic hold-open devices, including Briton electromagnetic hold-open door closers.



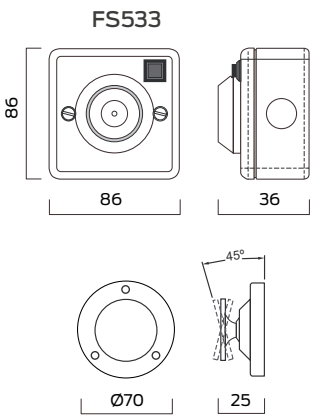
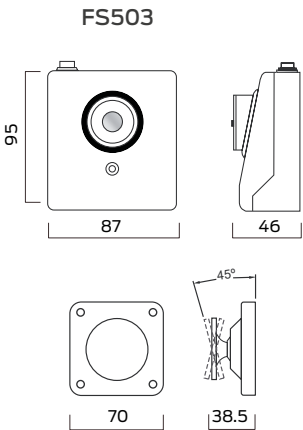
533FMB



.C

Product Ref:	Description	Finishes
FS503	Contact wall magnet - surface mounted	WHS
FS533	Specification wall magnet - c/w flush mount back box	SE; SS

Product Ref:	Accessories	Finishes
FS533FMB	Floor mounting bracket suitable for FS503 & FS533 magnets	WHS; SE; SS
FS533.C	Cover to convert FS533 magnet for surface mounting	SE; SS



Testing & Certification

CE marked to EN1155 - AE0009 (Foris FS503)
- AE0010 (Foris FS533)
Fire tested to EN1634 on timber doors to achieve a 2 hour fire rating.

What's in the box?

- Wall mounted magnet
- Back box
- Fixing Pack
- Installation Instructions



Universal application, individual functions and assured quality

Whether standard, narrow or wide, whether LH, RH, or single or double action – Foris FS027080.05 and FS027075.05 V door springs are designed for all types of door. A comprehensive program of accessories ensures that they can be used successfully with a wide variety of door constructions and floor coverings. Thanks to a wide range of functions, which can be individually selected to suit different requirements, Foris FS027080.05 and FS027075.05 floor springs offer maximum reliability and quality. Certified to ISO 9001.

Benefits

For the trade

- Reduced stock requirements because of separate, interchangeable spindles.
- Slim product range offering all key functions.

For the installer

- Suitable for installation with LH or RH single and double action doors.
- Interchangeable spindles enable easy adaptation to structural conditions-even when retrofitted.

For the architect/specifier

- Concealed installation for maximum visual elegance.
- All essential functions provided.
- Proven, robust design capable of withstanding leaf weights of up to 300 kg (FS027080.05)

For the user

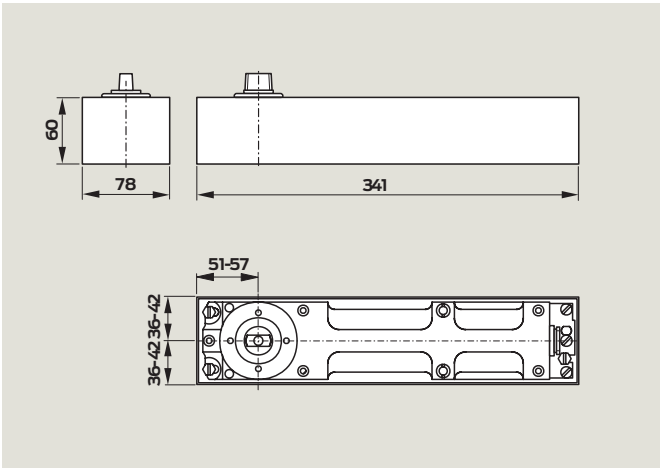
- Constant, temperature-independant closing cycle.
- Highly efficient mechanism gives maximum user convenience.

Data and features		BTS 80		BTS 75 V	
Spring strength (EN)		3	4	6	1–4
Spring strength adjustment		–	–	–	☒
Standard and external doors	≤ 950 mm	☒	–	–	–
	≤ 1100 mm	–	☒	–	☒
	≤ 1400 mm	–	–	☒	–
Fire and smoke check doors		–	–	–	☒
Max. leaf weight (kg)		300		120	
Non-handed, suitable for single and double action doors		☒		☒	
Closing speed adjustable by valve	175° – 0°	☒		–	
	175° – 15°	–		☒	
	15° – 0°	–		☒	
Backcheck, mechanical		☒		☒	
Delayed action adjustable by valve (selectable alternative to the hold-open feature)		☒		–	
Hold-open	Adjustable	☒		–	
	Fixed 90°	–		☒	
	Fixed 105°	–		☒	
Coverplate secure to	cement box	–		–	
	floor spring	☒		☒	
Weight in kg		7,1		3,0	
Dimensions in mm	Length	341		285	
	Width	78		82	
	Height	60		50	
Floor spring tested to EN 1154		☒		☒	
CE-mark for building products (products with factory-fitted hold-open do not carry a CE mark)		–		☒	

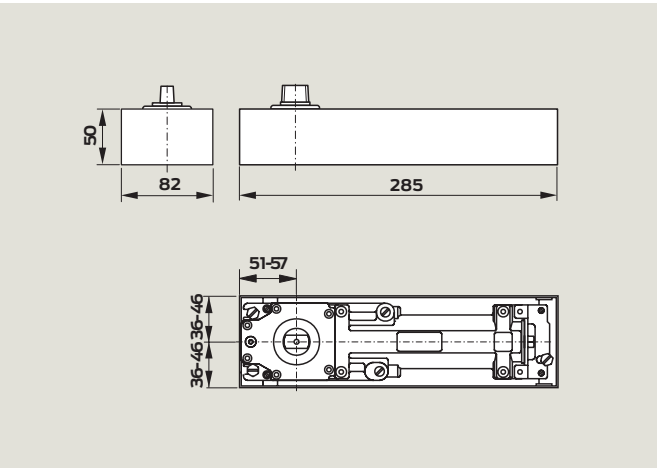
☒ yes – no

¹⁾ For particularly heavy doors and doors which have to close against wind resistance, we recommend the dormakaba BTS80.

FS027080.05

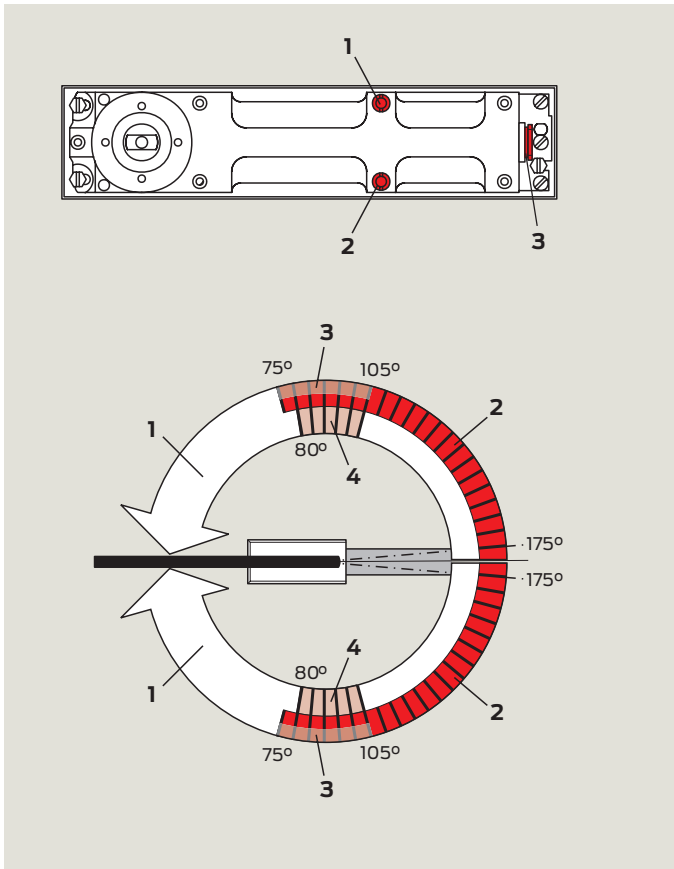


FS027075.05



Standard and optional functions of the FS027080.05

FS027080.05



- 1 Adjustable closing speed
- 2 Hold-open range or delayed action range
- 3 Adjustment range – point at which hold-open begins, or end of delayed action range (approx. 75° to 105°).
- 4 Mechanical backcheck (from approx. 80°)

Hydraulic hold-open

The integrated hold-open function allows the door to be held open at any angle between 75° and 175°. The angle at which the holdopen function begins can be adjusted in the range of 75° to 105°.

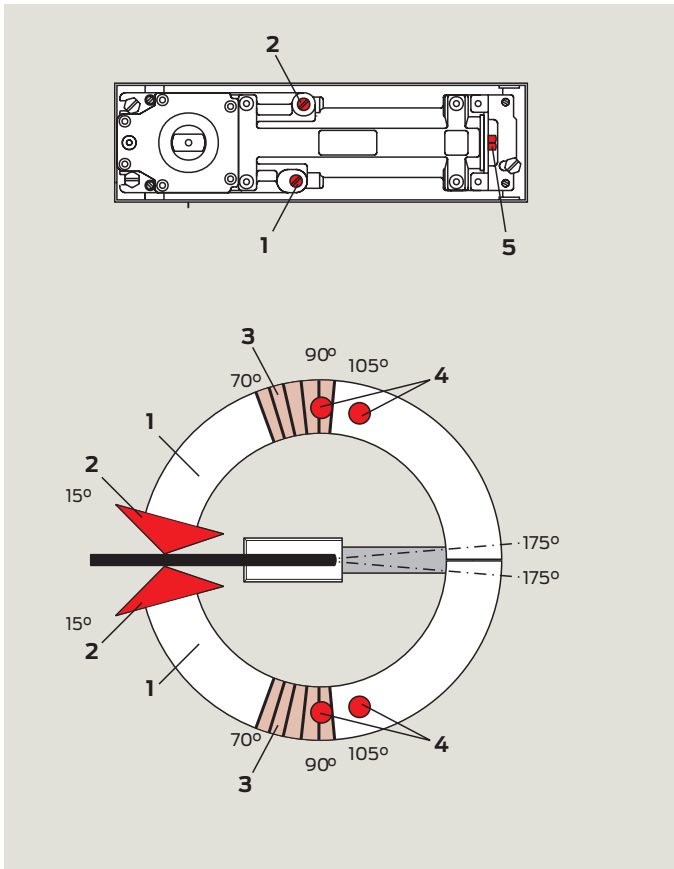
Backcheck

The integrated mechanical backcheck function protects the wall and door from damage caused by excessively vigorous opening.

Delayed action

The delayed action function slows the door closing speed, thereby allowing disabled persons, mothers with pushchairs, staff with trolleys or hospital gurneys etc. to pass through the door without problem.

FS027075.05



- 1 Adjustable closing speed in the range 175° – 15°.
- 2 Adjustable closing speed in the range 15° – 0°.
- 3 Mechanical backcheck (from approx. 70°).
- 4 Fixed hold-open at 90° or 105° (option).
- 5 Adjustable spring strength (EN 1–4).

Closing speed

With two independently adjustable closing ranges (175° – 15° and 15° – 0°) the dormakaba FS027075.05 is ideally adaptable to different structural conditions.

Backcheck

The integrated mechanical backcheck function protects the wall and door from damage caused by excessively vigorous opening.

Fixed hold-open (option)

With the fixed hold-open function the door can be held open at an angle of 90° or 105°, depending on model.
Not suitable for use on Fire doors.

Wide range of functions, concealed assembly, assured quality

Just as the requirements of preventive fire protection, the desire for barrier-free usage convenience and specific functions, like electrohydraulic hold-open and free-swing, is fulfilled. Long-term engineering experience and a manufacture certified according to ISO 9001 give the certainty of an assured and high quality.

Plus points

For the trade

- Complete range for every application.
- Simple stock holding thanks to identical accessories being used throughout the dormakaba BTS range.

For the installer

- Easy to install.
- Interchangeable spindle inserts, available to suit site conditions.
- For doors up to 300 kg in weight.

For the architect/specifier

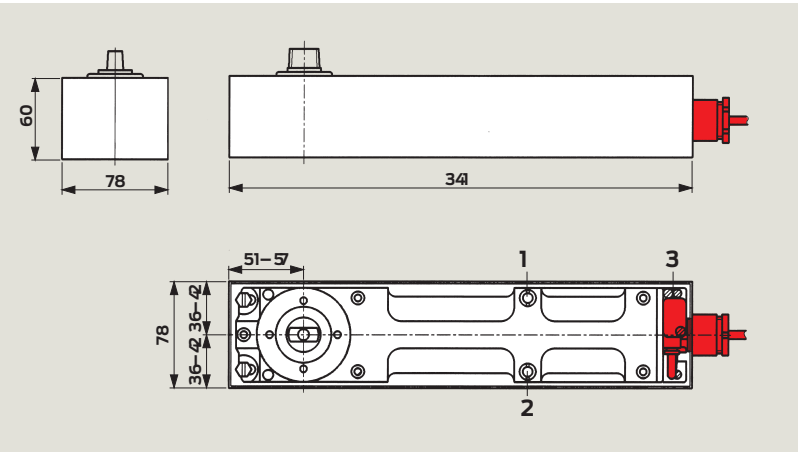
- Concealed installation.
- Range of functions to suit all applications.
- Proven, robust unit – for doors weighing up to 300 kg.
- All models tested and quality assured, and approved by the Institute for Building Technology, Berlin. For CERTIFIRE approvals see certificate no. CF127 (BTS 80 F, EMB).

For the user

- Reliable and fail safe.
- Closing speed unaffected by changes in temperature.
- Easy door operation thanks to high mechanical efficiency.

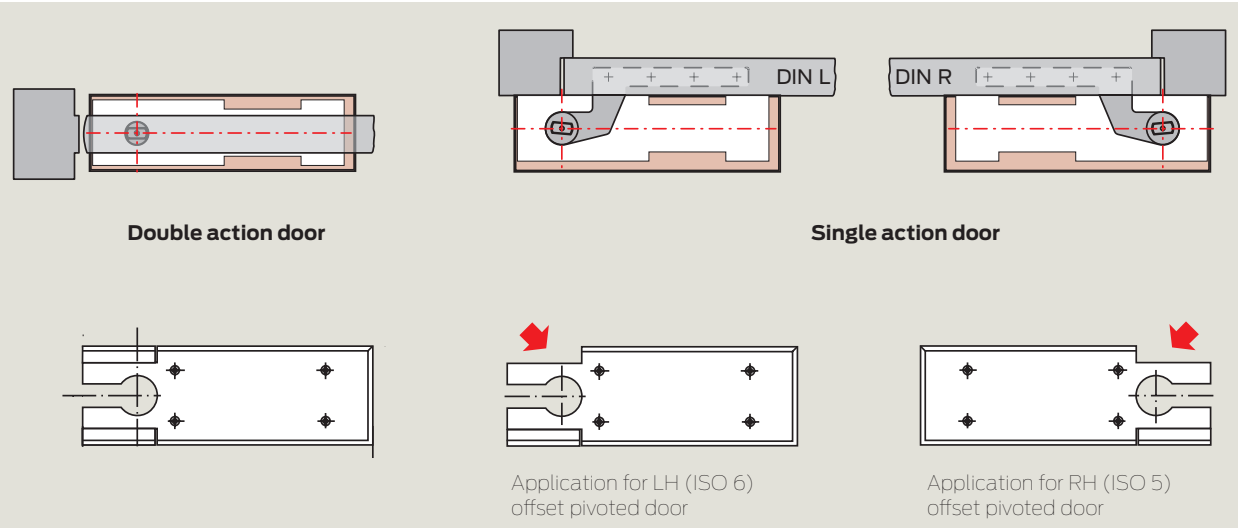
Technical data		FS02 7280 .05	FS02 7680 .05	FS027 180 .05
Closing force Size Standard doors	≤ 1100 mm	EN 4	EN 4	EN 4
	≤ 1250 mm	EN 5	EN 5	EN 5
	≤ 1400 mm	EN 6	EN 6	EN 6
Closing force Size Fire and smoke check doors	≤ 1100 mm	EN 4	EN 4	EN 4
	≤ 1250 mm	EN 5	EN 5	EN 5
	≤ 1400 mm	EN 6	EN 6	EN 6
Handed model	LH (ISO 6)			
	RH (ISO 5)			
	Universal			–
Closing speed variable by valve adjustment				
Latching action variable by valve adjustment				
Backcheck, mechanical				
Delayed action		–	–	–
Hold-open, electro-magnetic, Hold-open point selectable between 75 and 180°		–		–
Free swing 0–180°		–	–	
Weight in kg		7,1	7,7	7,7
Dimensions in mm	Length	341	341	341
	Overall depth	78	78	78
	Height	60	60	60
Power input in W		–	2,3	2,3
Operating voltage in vDC ffl 15%, residual ripple max. 30%		–	24	24
Rated for continuous duty		–	100	100
Door closer tested to EN 1154				
Hold-open devices tested to EN 1155		–		
CE-marking for building products				

Yes – No Option

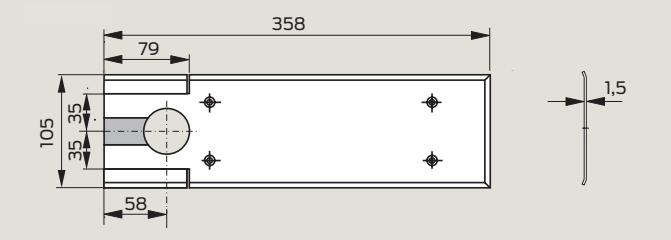


- 1 Closing speed adjustment valve
- 2 Latching speed adjustment valve (not available with the BTS 80 FLB)
- 3 Plug connector with cable for EMB and FLB power supply

Application and Installation

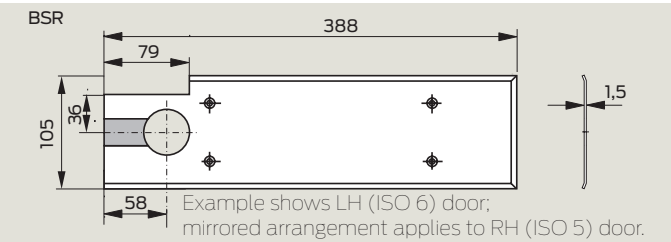


Accessories



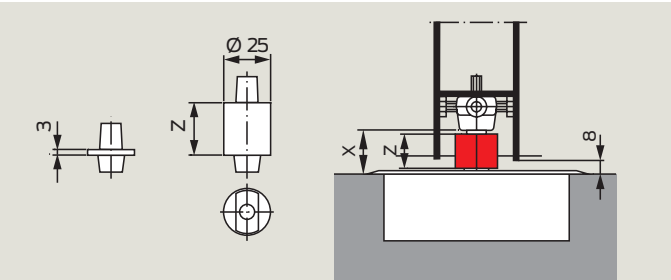
Universal cover plate

Adaptable to right or left hand single action applications by simply snapping off the appropriate pre-blanked corner sections. For double action doors, the corner sections remain in place. The universal cover plate is available in stainless steel or satin brass (material thickness 1.5 mm).



Cover plate BSR

The cover plate in the version for LH- or RH-doors is available in stainless steel or satin brass (material thickness 1.5 mm).



Spindles

A range of interchangeable spindles is available to provide greater floor clearance if required (e.g. doors with thresholds, carpeted floors etc). Special spindles available on application: e.g. with flat face profile and 3° offset or square section; spindles for non dormakaba-specific accessories are also available.

Calculating the necessary length of spindle extension:
 Extension = X – Floor clearance (normally 8 mm)
 Collar height Z of the extended spindle inserts = Spindle extension length + 3 mm (collar height of the standard spindle insert)

TRANSOM CONCEALED DOOR CLOSERS

Foris transom mounted door closers offer the ideal solution for double action and single action doors where floorsprings cannot be considered. With concealed fittings these units also offer ideal solutions for situations where reduced ligature is a requirement.

The FS028087.05 Transom Closer is a power adjustable unit size EN1 to EN4 that allows fine on site tuning of the closing force to ensure full and correct closure of the door whilst ensuring opening forces are kept to a minimum allowing compliance with Approved Document M and BS8300. With positive Centering through its Cam Mechanism fine adjustment of the neutral position can also be made with the drive arm fitted within the door leaf ensuring correct door alignment and performance.

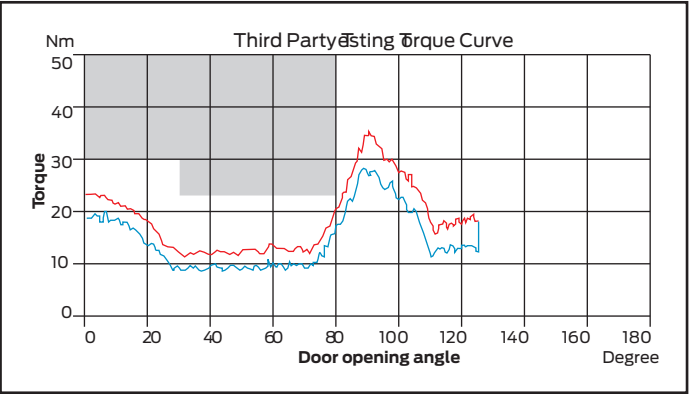
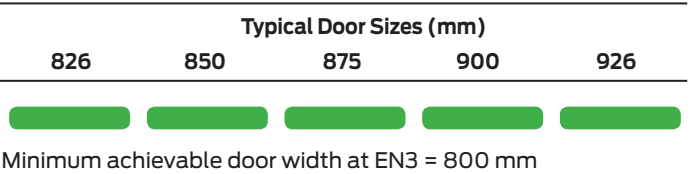
The FS028587.05 is exactly as the FS028087.05 but with speed control valves operating between 175 degrees to 70 degrees and 70 degrees to 0 degrees. The 175 -70 degree adjustment allows the unit to be adjusted over the initial closing when door is opened beyond 70 degrees, this feature is suitable in high traffic areas where the doors cannot be held open and need to remain closed when not in use. A reduced closing speed from the initial opening angle down to 70 degrees allows more time for traffic to pass through the door before the door reaches 70 degrees where the second adjustable valve will control the closing speed.

The FS028087.05 is CE Marked to BS EN1154 and Certifire Approved for use on 1 hour fire doors. Please check Certifire Certificate for suitable Door Thickness, (this ensures the most up to date test evidence can be considered).

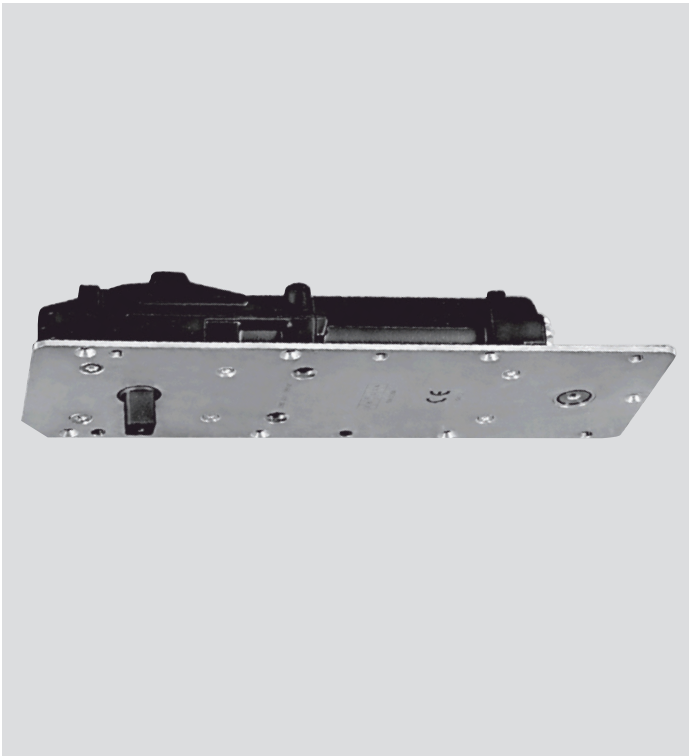


Certifire Approved CF127 for timber fire doors for 1 Hour.

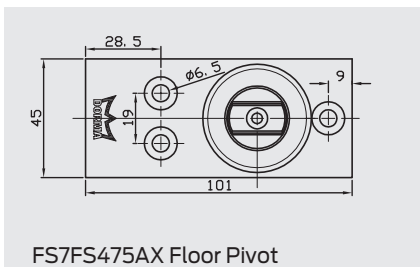
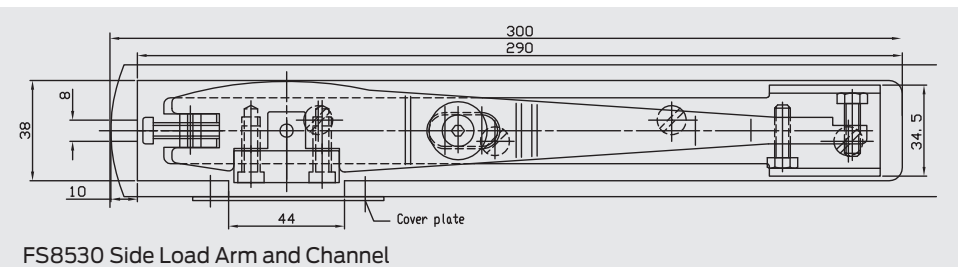
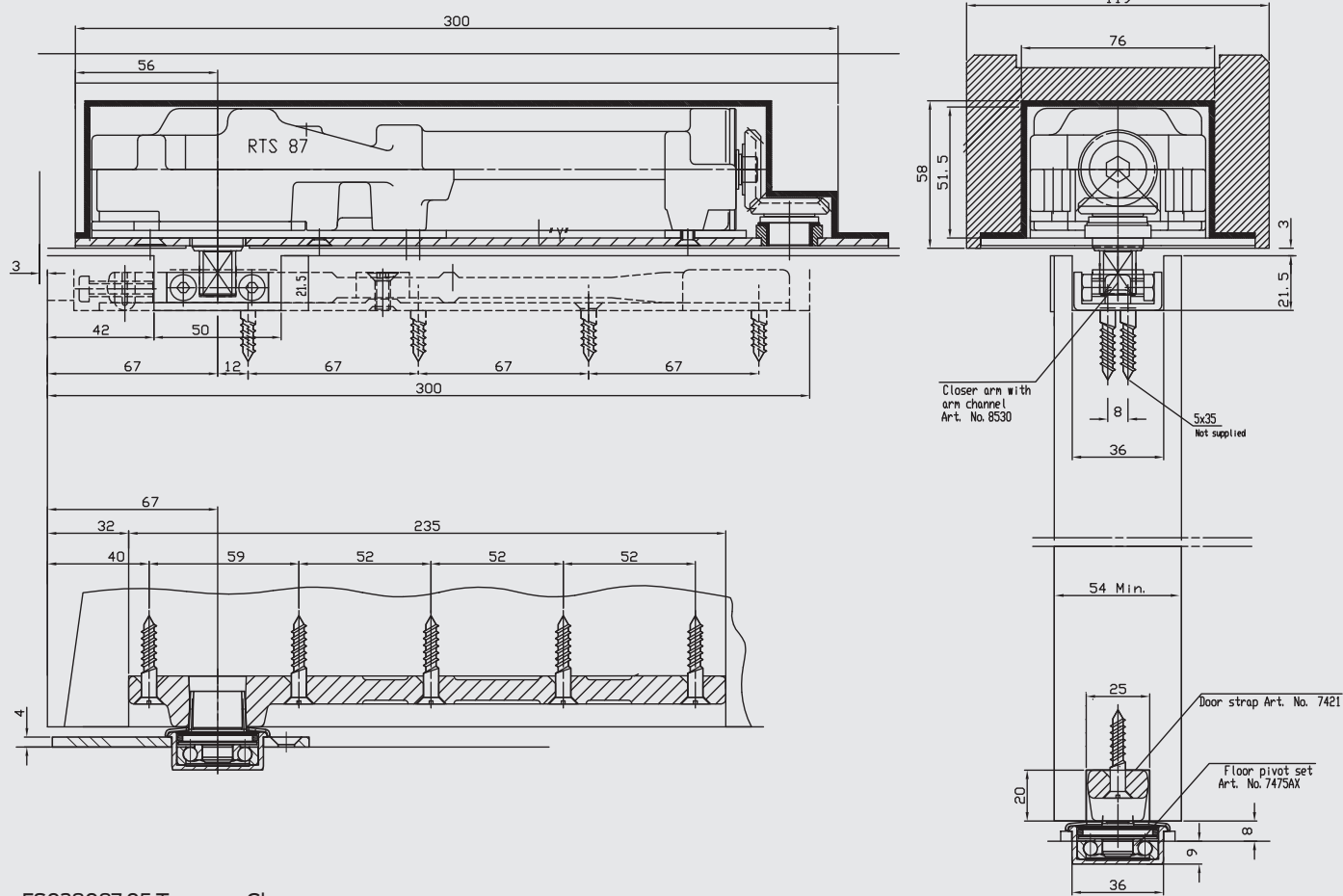
FS028087.05 Opening Forces adjusted to EN3 (minimum for fire door)



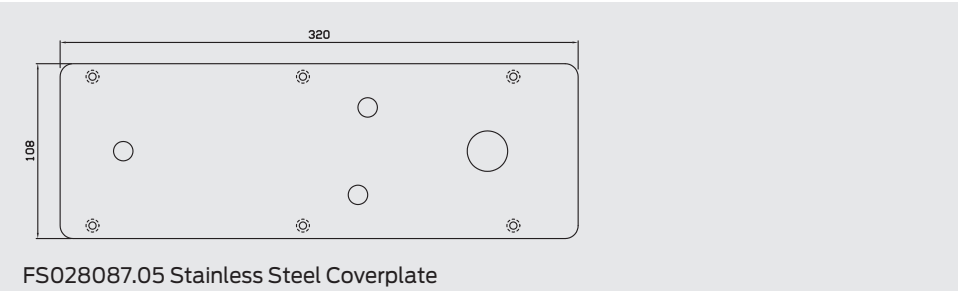
Technical Data		
EN Power Size	EN 1-4	EN 1-4
Maximum Door width	≤ 1100 mm	≤ 1100 mm
Adjustable Power Size	▪	▪
Independent Valve Adjustable Closing Speed 175º - 15º	▪	
Independent Valve Adjustable Latch Speed 15º - 0º	▪	
Independent Valve Adjustable Closing Speed 175º - 70º		▪
Independent Valve Adjustable Latch Speed 70º - 0º		▪
Mechanical Backcheck	▪	▪
Double Action and Single Action Doors	▪	▪
Universal Non Handed Unit	▪	▪
Minimum door width where unit will exert 30N opening force when adjusted to EN3 (min. for fire doors)	800 mm	800 mm
Fixing plate dimensions (& body) in mm	Length	321 (300)
	Width	108 (72)
	Height	55
Weight in kg	5.2	5.2
Door Closer tested to BS EN1154	▪	▪
CE Marked	▪	▪
Certifire Approved	▪	▪



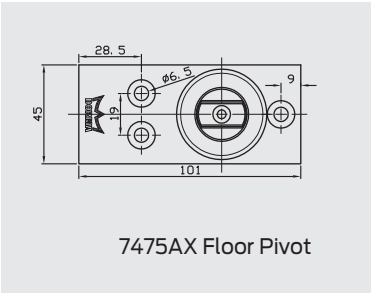
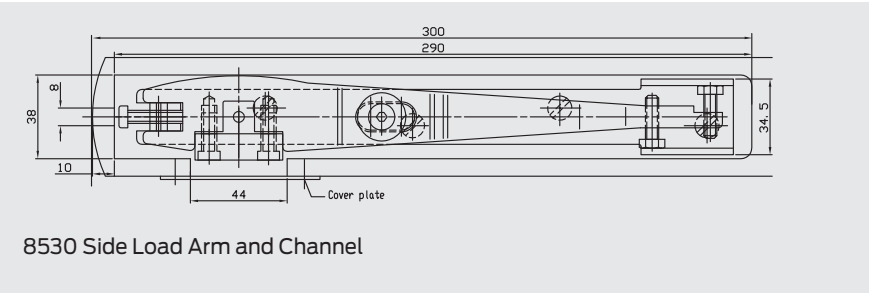
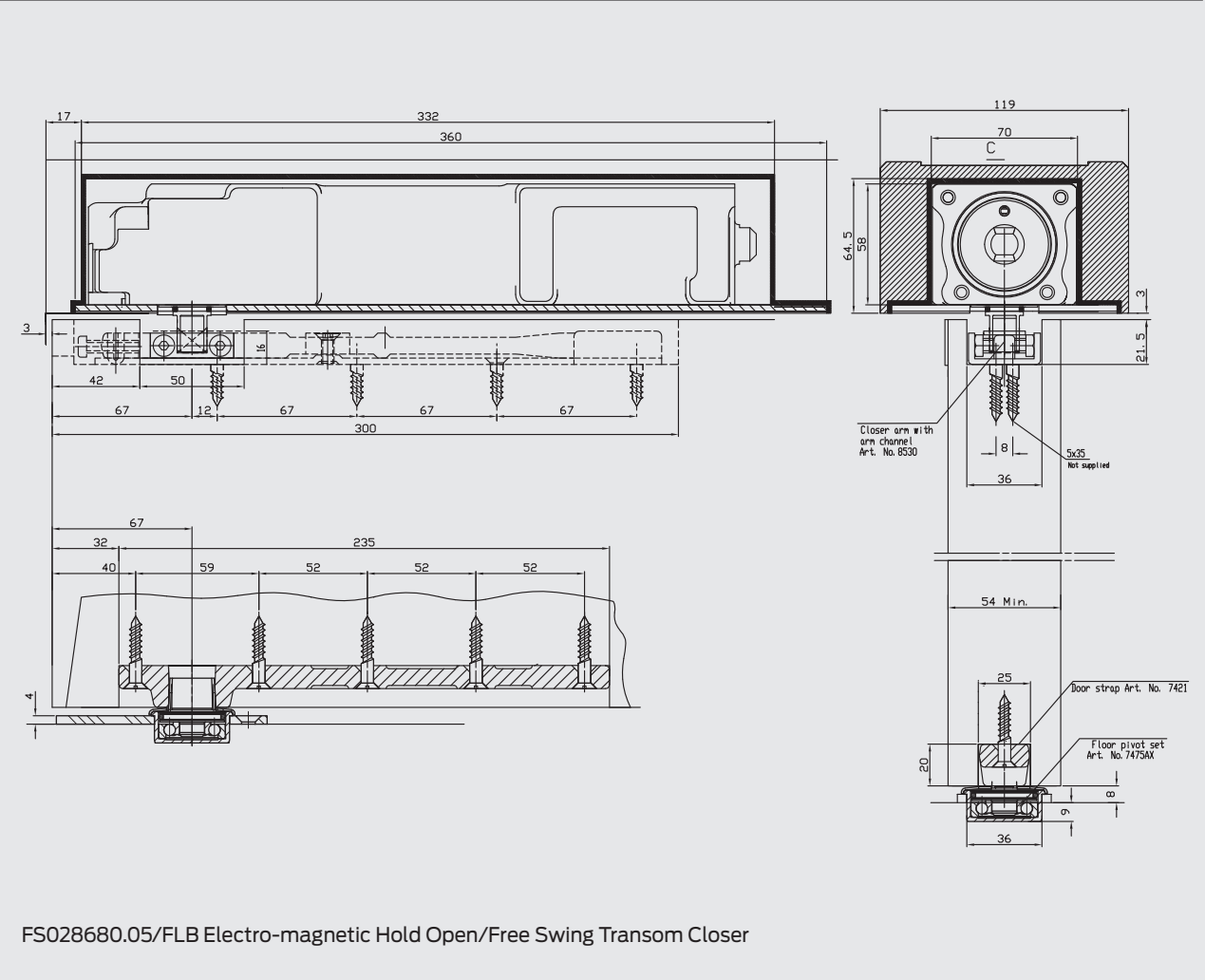
Typical applications



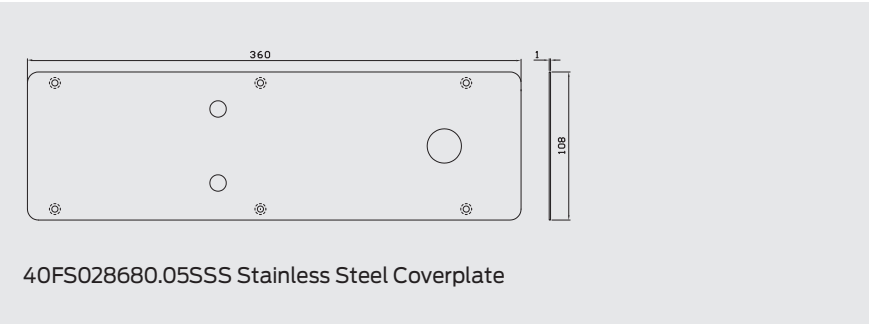
For use on Timber Fire Doors use FS40FD6087RTS FS028680.05 Intumescent Pack (includes intumescent for Closer Body, Top Arm and Bottom Strap)



Typical applications



For use on Timber Fire Doors use 40FD6080EMB FS028680.05 Intumescent Pack (includes intumescent for Closer Body, Top Arm and Bottom Strap)



FS028680.05

FS028180.05

The FS028680.05 is an electro-magnetic multi-point hold open unit available in sizes EN4 and EN5. Hold open is available from approximately 75 degrees.

The FS028180.05 is an electro-magnetic free swing unit available in EN4. Free swing is activated once door is initially opened irrespective of opening angle.

With positive Centering through its Cam Mechanism, fine adjustment of the neutral position can also be made with the drive arm fitted within the door leaf ensuring correct door alignment and performance.

Both units are CE Marked to BS EN1155 and Certifire Approved for use on 1 hour fire doors.



Certifire Approved CF127 for timber fire doors for 1 Hour.



Technical Data

EN Power Size	4 EN	5 EN	4 EN
Maximum Door width	≤ 1100 mm	≤ 1250 mm	≤ 1100 mm
Independent Valve Adjustable Closing Speed 175º - 7º	▪	▪	▪
Independent Valve Adjustable Latching Speed 7º - 0º	▪	▪	▪
Mechanical Backcheck	▪	▪	▪
Double Action and Single Action Doors	▪	▪	▪
Universal Non Handed Unit	▪	▪	▪
Electro-magnetic Hold Open between 75º and 175º	▪	▪	
Electro-magnetic Free Swing between 0º and 175º			▪
Fixing plate dimensions (& body) in mm	Length 360 (335) Width 108 (70) Height 61	360 (335) 108 (70) 61	360 (335) 108 (70) 61
Weight in kg	8.2	8.2	8.2
Operating voltage in DC +/-15%, residual ripple max. 30%	24 V DC	24 V DC	24 V DC
Power input in Watts	2.3	2.3	2.3
Door Closer tested to BS EN1154	▪	▪	▪
Hold Open / Free Swing between Devices tested to BS EN1155	▪	▪	▪
CE Marked	▪	▪	▪
Certifire Approved	▪	▪	▪



Sliding doors

Sleek, elegant, space-saving sliding doors are the choice for a modern, contemporary look for today's technology driven buildings. Perfect for coping with heavy traffic areas and providing flexibility through sliding, telescopic or circular systems, automatic sliding doors are the ideal solution to the demands of many building types. GEZE offer a range of automatic sliding door system suitable for all applications from a single leaf sliding door fixed to a metal frame to the Slimdrive SL NT that can be bolted to an all-glass façade. A sliding telescopic version is also available that enables designers to create an entrance that provides the maximum opening.



Swing door

Swing doors are the choice when an easy to use entrance is required or there is a restricted opening. Easily installed, swing doors can be used throughout a building with the added advantage that they can easily be retro-fitted when required.

Swing doors can also be used to provide an alternative access point to complement a more prestigious entrance such as a revolving automatic door system to comply with the requirements of the Equality Act.



Folding doors

Sometimes the choice of an automatic door is dictated by the space available in an existing building. This is where automatic folding doors come into their own as they are perfect for retro-fitting and can be installed into very small entrance spaces

As folding doors operate in a very limited space they enable automatic doors to be installed where other types may not be an option.



Revolving doors

When a strong focal point is required, few types of automatic doors are as attractive and eye-catching as an automatic revolving door especially when the all-glass option is chosen.

Stylish and smart automatic revolving doors complement almost any building but with the current demand for glass façades, revolving doors add that something extra. Revolving doors are not only beautiful but functional as they provide an energy efficient entrance that limits heat loss.

Automatic Doors

Intelligent automatic entrance systems provide a safe, efficient and convenient means of access and egress to a building.

Automatic door systems are perfect for busy entrances from an office complex to retail centres, from sports stadia to hospitals, from hotels to airports, from government buildings to schools and colleges, the front entrance is the welcoming face of the building that sets the tone of what to expect inside.

Our automatic doors are also regularly used throughout a building; swing doors are perfect for corridors or offices, folding doors are perfect where space is limited and bi-part sliding doors are frequently used in lobbies.

Automatic door entrances are supported by a wide range of safety systems and activation devices from a simple push switch to a sophisticated building management system. Each system is tailored to the customer's requirements to ensure it meets the needs of the building and those using it.

Automatic entrance systems are not only attractive but functional as well:

- Maintaining an even temperature
- Providing access for all
- Enabling compliance with the Equality Act
- Offering security

The introduction of the Disability Discrimination Act of 1995 and the subsequent Equality Act 2010, along with BS 8300 and Approved Document M of the Building Regulations is welcomed.

Anything designed to improve accessibility for all can only be good but it does present contractors and specifiers with additional demands to consider when designing a building.

Sustainability is a major concern in modern construction and Automatic products help save energy by ensuring that doors are shut efficiently, safely and securely. This is part of the reason why our tried and tested systems are frequently specified for lobbies, entrances and doorways of temperature controlled environments.

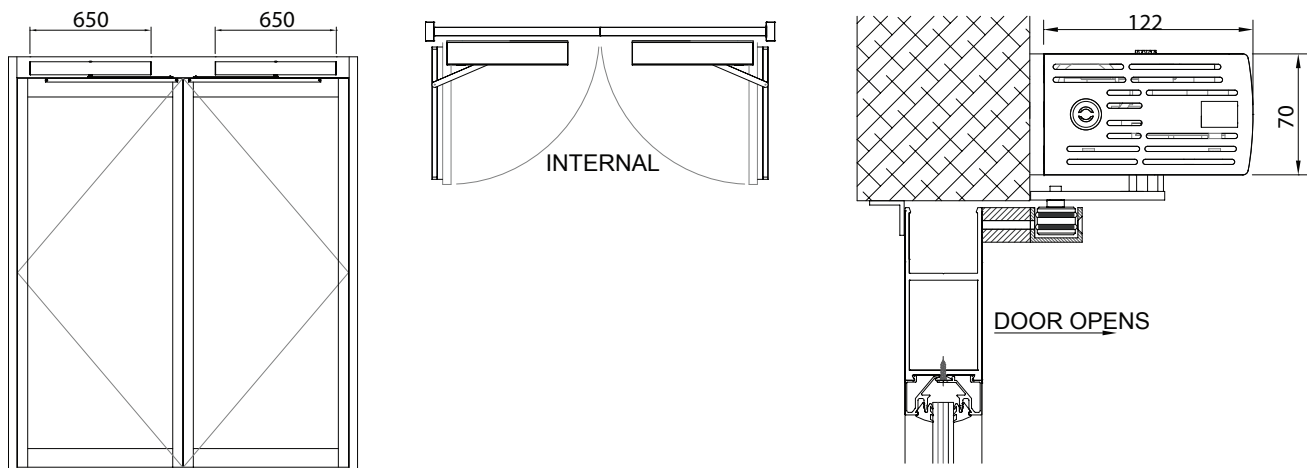
Whatever the demands of your project GEZE UK can help with a range of automatic operators, advice and support to provide a customers specific solution.

Machinery Directive 2006/42/EC

The Machinery Directive is an Act and therefore a legal requirement. It states that if your product is a machine then it falls under this directive which outlines the legal requirements and obligations for safeguarding users; it defines only the essential health and safety requirements. It states products have to conform and be fit for purpose and safe to use. An automatic door is a machine and so must conform with the Directive.

The European standard EN 16005 is the code of practice for safety in the use of automatic doors for pedestrian use, and is derived from The Machinery Directive.



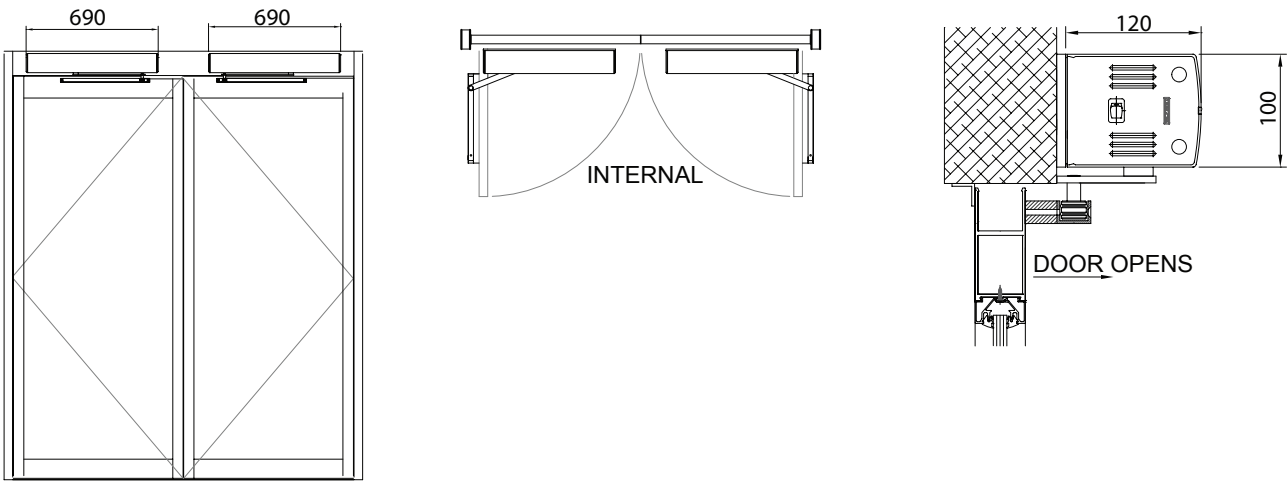


The Slimdrive EMD-F is an electro-mechanical drive system for swing doors that is particularly suitable for installation on narrow profiles and in situations where space is at a premium



Part of the Slimdrive 7cm range the Slimdrive EMD-F is a highly compact operator; it will move large and heavy internal and external doors easily and with virtually no noise. The quiet operation is achieved by using a low-noise direct current motor and gears with direct power transmission

to the door leaf with a V arm or guide rail. Reliable operation of the drive is achieved with a maintenance free high performance motor with low wear characteristics and state-of-the-art control technology.



An excellent workhorse the TSA 160 NT is suitable for use on internal and external doors and is ideal for areas of heavy usage and particularly suitable for the retail environment.



The new TSA 160 NT builds on the versatility and reliability of the previous TSA 160 but delivers even greater functionality. Additional functions are available through the optional Display Programme Switch (DPS) which provides settings for winter and summer mode, access mode, exit only mode and dynamic hold open time mode.

The TSA 160 NT offers maximum convenience and safety and is ideal for use in a wide range of applications

including hospitals, schools, homes for the elderly or those requiring assistance, as well as airports, railway stations, shops and offices

The TSA 160 NT ensures doors are shut efficiently, safely and securely providing reliable, trouble free operation thereby ensuring entrances are accessible to all. The TSA 160 NT offers the perfect solution.

Lockcases



Lockcases – Legislation



CE Mark explained

Mechanical locks and latches intended for use on fire/smoke control doors are covered by the harmonised standard EN 12209 which sets out the requirements for testing and classifying locks suitable for CE marking in accordance with the Construction Products Regulation. We recommend the use of a CE marked lockcase is the best way of ensuring the product you are using is fit for purpose and meets all legal requirements, particularly when used on fire doors.

Locks on escape routes

Locks fitted to doors which are on a defined emergency escape route must also be tested in accordance with **EN 179** and CE marked. The 9 digit code produced by assessment and testing defines the type of operation and the performance of each lock.

For more information on **EN 179** please refer to page 152.

The Equalities Act - disability legislation

Legislation aimed at providing universal accessibility of buildings requires service providers to make "reasonable adjustments to the physical features of their premises to overcome barriers to access".

To meet obligations under the Equalities Act, Approved Document M (ADM) of The Building Regulations and BS 8300 the following guidance relating to lock and latch cases is provided:

- The minimum distance from the door edge to the centre of the keyway (backset) – BS 8300 states a minimum of 54mm
- The distance between the handle follower and the centre of the keyway (lock centres) – BS 8300 states a minimum of 72mm
- 'Lever handles should be used wherever possible in conjunction with an upright mortice lock/latch' (BS 8300)

Lockcases which comply with the recommendations for accessibility can be identified with this symbol.



BS 3621:1980
Licence KM6662

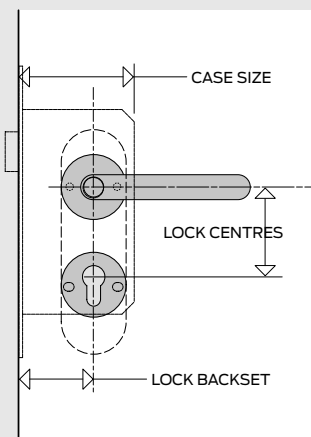
Kitemark

BS3621 remains the most popular standard for domestic lockcases and has been adopted by most insurance companies as the benchmark for security. Locks tested and approved to the standard may carry the famous kitemark to attest that the lockcase has successfully undergone tests against the most common forms of attack such as drilling.

Our Recommendation

For commercial buildings we recommend the use of European style lockcases which have 72mm centres and a minimum of 60mm backset in line with the guidance of BS 8300. The Briton 5600, 5500 and 5400 Series euro profile cylinder mortice lockcases have been designed specifically to meet the requirements of the European standard EN 12209 and are CE marked where appropriate. Look out for locks with the CE symbol.

For residential applications, we recommend the use of BS 5 lever lockcases for all external doors.



Replacing an Existing Lockcase

If you are replacing an existing mortice lockcase you can find out the size you require by:

1. Simply measuring from the centre of the keyhole to the forend of the lock. - this gives you the backset measurement..
2. Measure the distance from the cylinder aperture to the lever follower - this gives you the lock centres measurement.

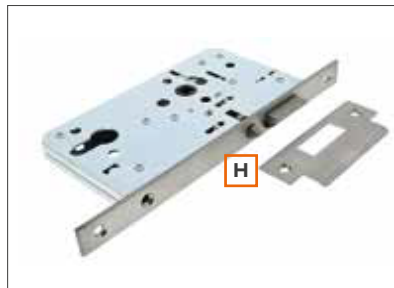
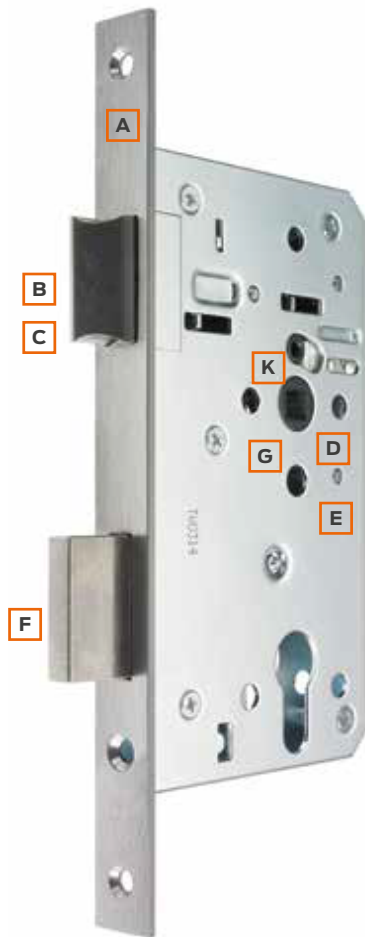
EN 12209 & EN 179

Physical characteristics of type, operation and performance of lockcases is tested/assessed in accordance with EN 12209 (and EN 179 for locks on escape routes). This produces an 11 digit (EN 12209) and 9 digit (EN 179) classification code which allows comparison between different locks that conform to the standard. See examples below.

For guidance on EN 179 please refer to our Emergency Exit Solutions on page 152.

EN 12209		Scope	Grades
3 1-3	Category of use	Defines frequency of use	Grade 3 - High frequency of use by public or others with little incentive to take care and with a high chance of misuse - eg. public doors
X A-X	Durability	Performance testing of the product through various cycle tests. Durability and load on latchbolt are identified	Grade X - 200,000 test cycles with 120N side load on latch bolt
8 1-9	Door mass & closing force	The mass of the door that the product can suitably be used on	Grade 8 - Up to 200kg door mass, 15N max. closing force.
1 1	Fire resistance	Suitability for use on fire/ smoke door assemblies having successfully completed a fire test to EN 1634.	Grade 1 - Suitable for use on fire/smoke resisting assemblies subject to satisfactory fire testing or assessment
0 0	Safety	Safety category for the product type	Grade 0 - No safety requirement
G 0-G	Corrosion resistance	Level of corrosion resistance to EN 1670 Neutral Salt Spray test and operation of the product at extreme temperatures	Grade F - High resistance -20 °C to +80 °C Grade G - Very high resistance 240 hours salt spray at -20 °C to +80 °C
4 1-7	Security	Security and drill resistance levels are identified	Grade 4 - High security with no drill resistance
B A-T	Field of door application	Defines the application the product is suitable for	Category A - Mortice type with unrestricted application Category B - Hinged doors in a mortice application without forend support
A 0-H	Type of key operation	Defines the type of key operation and locking type	Grade 0 - Not applicable Grade A - Cylinder lock or latch, manual locking
2 0-4	Type of spindle operation	Method of operation and compatible door furniture	Type 2 - Lock or latch for unsprung lever handle operation
0 0	Key identification requirement	Number of detaining elements and effective differs	Category 0 - No requirement for key identification

FS5600 Series – Euro Profile Mortice Lockcases (Level 5-4)



Nightlatch - FS5650.R & FS5650.S

Nightlatch operated by a half set of levers to retract the latchbolt from inside.

Single cylinder on the outside operates the latchbolt with a single key turn.

Latchbolt is automatically locked by the anti-thrust latch.



Escape Lock - FS5660.R & FS5660.S

Escape lock with split follower

Latchbolt withdrawn by lever from both sides.

Split follower function enables deadbolt & latchbolt to be withdrawn simultaneously by inside lever handle.

Easily reversible escape mechanism.



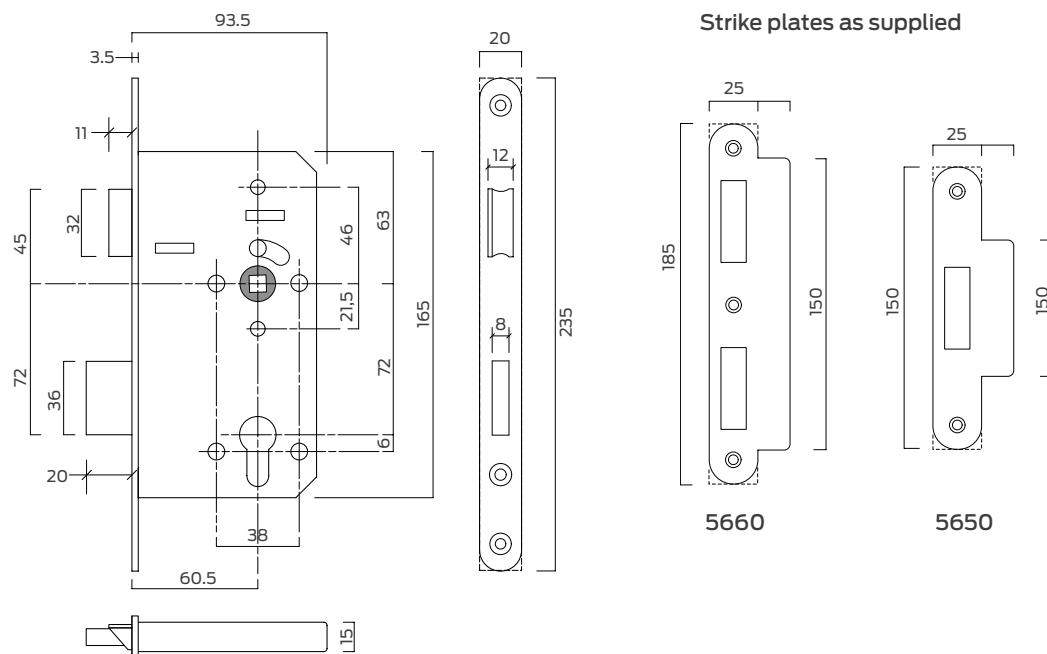
The Foris FS5600 Series is a high quality euro profile mortice lockcase offering Nightlatch and Escape Sashlock functions.

The range is dimensionally compatible with the Foris FS5500 and FS5400 Series.

Performance Level 5 & 4.

Features & Benefits

- A Grade 316 stainless steel single piece forend
- B Quick reversible latch without the need to dismantle the lockcase
- C Stainless steel profile latch provides a smooth, quiet operation
- D Sintered steel 8mm follower with 30° rotation
- E Follower springing suitable for unsprung lever furniture and high frequency applications.
- F Stainless steel deadbolt with 20mm throw on a single turn of the cylinder
- G Bolt through fixing holes to DIN 18251 at 38mm centres making the lock compatible with most European hardware ranges
- H Nightlatch has anti-thrust latch to prevent forced latch retraction when the door is closed.
- J Escape mechanism of 5660 escape sashlock can be easily reversed on site to suit all handing options.
- K 5660 escape lock has split follower function



all dimensions are in mm

Product Ref:	Function/description	CE Classification
FS5650.R	Nightlatch function operated by a half set of levers and single cylinder. Radiused forend	3X810F1BB20
FS5650.S	Nightlatch function operated by a half set of levers and single cylinder. Square forend	
FS5660.R	Escape lock with split follower function. Radiused forend	3X810F3BA20 (EN 12209)
FS5660.S	Escape lock with split follower function. Square forend	376B1442AB/D (EN179)
Add suffix .R or .S to product code for Radiused or Square forend and strike plate		
FS5500IP	Intumescent pack suitable for all 5600 Series lockcases	

Options

Radiused and square forends are available. Add suffix .R or .S to the product code.

Supplied with matching strike plate.

Finishes

Satin stainless steel.

Accessories

A full range of box strikes and full length strike plates is available. Refer to page 92 for details.

Testing & Certification

CE marked to EN 12209

Escape lock approved to EN 179 for emergency exit doors

Fire tested to EN 1634 on timber doors to achieve a 90 minute fire rating, and 4 hour for steel doors.

Please note, when installing this product to a fire resisting timber door the lock must be fitted in conjunction with the intumescent protection to ensure the integrity of the door is maintained in a fire situation.

For EN 179 compliance, the lock must be fitted with compatible lever furniture (Contact Allegion for further details).

96 hour corrosion resistance.

Full Declaration of Performance available from our website at:

www.britondops.co.uk



FS5500 Series – Euro Profile Mortice Lockcases (Level 5-4)



The FS5500 Series is a high quality, heavy duty euro profile cylinder mortice lockcase offering a comprehensive range of functions.

The range is dimensionally compatible with the FS5 600 and FS5400 Series.

Performance Level 5 & 4.

Features & Benefits

- A Grade 316 stainless steel single piece forend and strike.
- B 60mm backset and 72mm centres [78mm bathroom centres]
- C Quick reversible latch without the need to dismantle the lockcase.
- D Chrome plated steel profile latch provides a smooth, quiet operation
- E Cast follower with phosphor bronze bushes reduces wear of follower during extended use.
- F Follower has 30° rotation.
- G Follower springing suitable for unsprung lever furniture and high frequency applications.
- H Drill resistant heavy duty hardened deadbolt with 22mm throw on a single turn of the cylinder.
- J Bolt through fixing holes to DIN 18251 at 38mm centres making the lock compatible with most European hardware ranges.
- K Sleeved fixing holes assist in bolt location, provide added strength to the lockcase and help prevent mechanical failure due to ingress of foreign objects.



Deadlock - FS5510.R & FS5510.S

- ☒ Euro profile cylinder deadlock.
- ☒ For use on doors without lever furniture.
- ☒ 22mm single throw deadbolt*.



Sashlock - FS5520.R & FS5520.S

- ☒ Euro profile cylinder sashlock.
- ☒ For lockable doors with lever handles to retract latch.
- ☒ 22mm single throw deadbolt*.
- ☒ Cylinder to latch function will retract the deadbolt and latch.



Bathroom Lock - FS5530.R & FS5530.S

- ☒ Bathroom sashlock.
- ☒ For use on bathroom doors and those requiring a privacy function.
- ☒ Latch retracted by lever handles
- ☒ 10mm throw deadbolt thrown by thumbturn & emergency release (8mm turn follower).



* Deadbolt can be withdrawn from one side or both sides depending on the type of cylinder selected.

Options

Radiused and square forends are available. Add suffix .R or .S to the product code.
Supplied with matching strike plate

Finishes

Satin stainless steel, polished stainless steel and polished brass.

Testing & Certification

CE marked to EN 12209

CE marked to EN 179 (Briton 5560 escape sashlock only)

Fire tested to EN 1634 on timber doors to achieve a 2 hour fire rating, and 4 hour for steel doors.

Please note, when installing this product to a fire resisting timber door the lock must be fitted in conjunction with the intumescent protection to ensure the integrity of the door is maintained in a fire situation.

96 hour corrosion resistance.

Full Declaration of Performance available from our website at:

www.britondops.co.uk



FS5500 Series – Euro Profile Mortice Lockcases (Level 5-4)



Bathroom Deadlock - FS5535.R & FS5535.S

Bathroom deadlock.

10mm throw deadbolt thrown and retracted by thumbturn & emergency release (8mm turn follower).



Nightlatch - FS5550.R & FS5550.S

Cylinder nightlatch with hold-back function.

Lever operation from inside to withdraw latchbolt.

Cylinder operation from outside to withdraw latchbolt. Snib on forend operates hold-back function.



Escape Sashlock - FS5560.R & FS5560.S

Escape sashlock to EN179.

Lever operation of latchbolt

Cylinder operation of 22mm single throw deadbolt.

Inside lever withdraws the latchbolt and deadbolt simultaneously for immediate escape.

Cylinder to latch function withdraws deadbolt on first turn of the key and latchbolt on the second turn.

This is not a split follower lock and must not be used with a thumbturn cylinder or outside lever handle.



Latch - FS5540.R & FS5540.S

Mortice latch.

Suitable for doors which do not require locking function.

Lever operation of latchbolt only.



Nightlatch - FS5555.R & FS5555.S

Cylinder nightlatch without hold-back function.

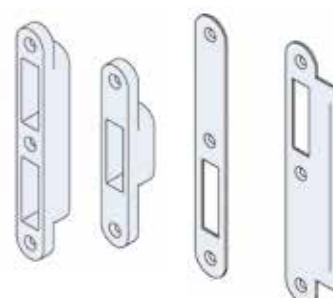
Lever operation from inside to withdraw latchbolt.

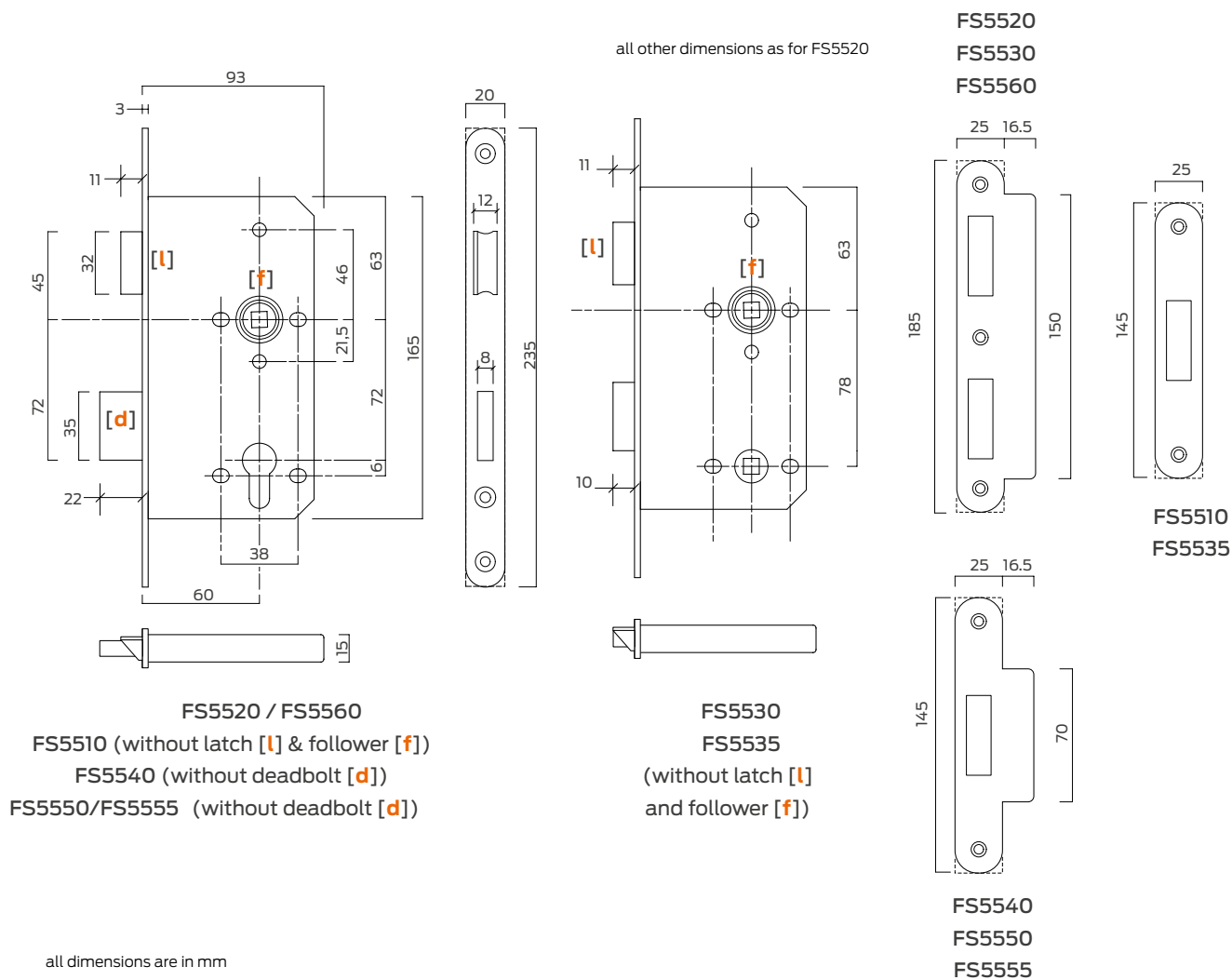
Single key turn by cylinder operation from outside to withdraw latchbolt.



Accessories

A full range of accessories, including box strikes, and full length strike plates is available to replace the standard strike supplied with the lockcase. Please refer to page 92 for further details.



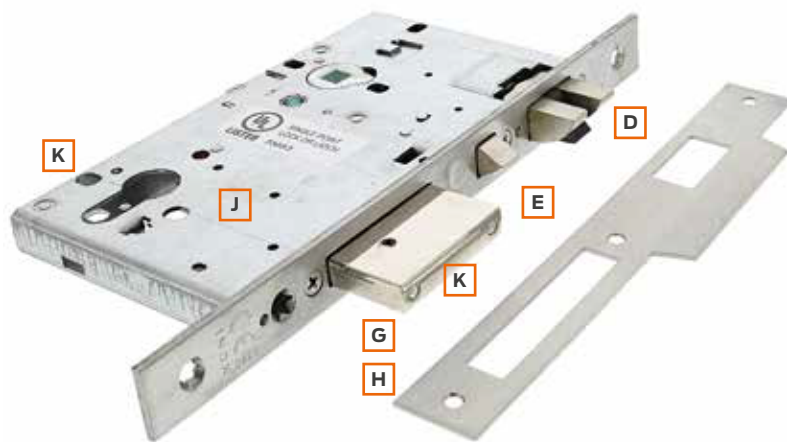


Product Ref:	Function/description	CE Classification
FS5510	Euro profile cylinder deadlock	3X810G4BA00
FS5520	Euro profile cylinder sashlock	3X810G4BA20
FS5530	Bathroom lock - 8mm bathroom turn follower	3X810G-B020
FS5535	Bathroom deadbolt - 8mm bathroom turn follower	3X810G-B000
FS5540	Latch	3X810G-B020
FS5550	Nightlatch - with hold-back function.	not CE marked
FS5555	Nightlatch - without hold-back function.	3X810G-B020
FS5560	Escape sashlock (Note: this lock must not be used with an external lever handle or with an internal cylinder thumbturn)	3X810G4BA20 (EN 12209) 376B1442AB/D (EN179)
Add suffix .R or .S to product code for Radiused or Square forend and strike plate		
FS5500IP	Intumescent pack for use with all 5500 Series lockcases	

FS52000 Series – Heavy Duty Mortice Lockcases (Level 5-4)



FS52844.80 - Sashlock



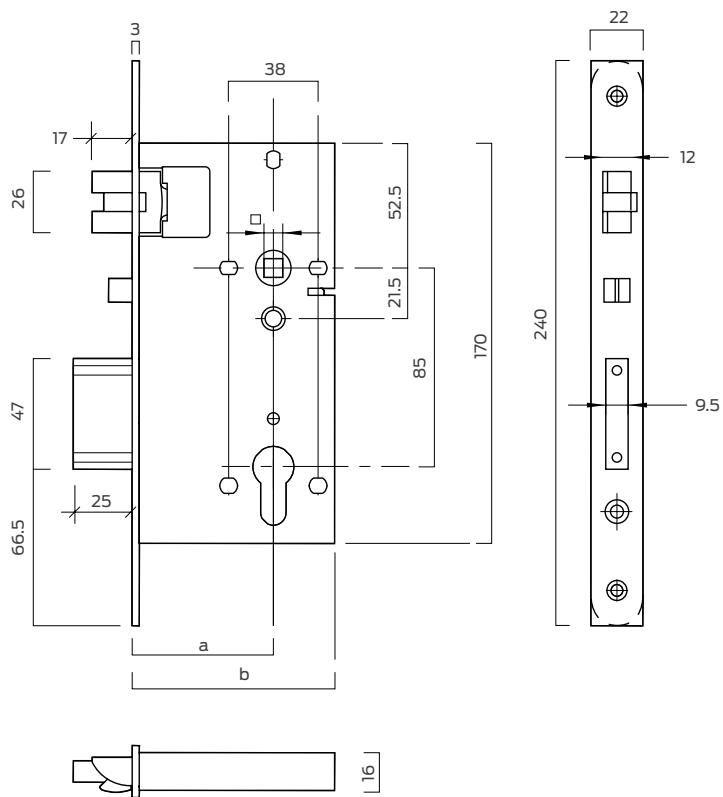
FS52760.60 - Nightlatch

The Foris FS52000 Series is a range of euro profile cylinder mortice lockcases offering a wide range of functions within the same case dimensions. Suitable for heavy duty applications.

Performance Level 4.

Features & Benefits

- A Single piece removable forend and strike available in brass or stainless steel
- B Zinc plated steel lock case
- C Available in 60mm, 70mm and 80mm backset
- D Anti-friction reversible latch - nickel plated
- E Anti-thrust latch deadlocks the latch when the door is closed
- F Fully galvanised internal components for corrosion resistance
- G Heavy duty deadbolt with hardened steel drill resistant pins with 25mm throw on a single turn of the cylinder
- H Automatic throw deadbolt (52840)
- J Panic function option supplied with split follower
- K Bolt through fixing holes to DIN 18251 at 38mm centres, making the lock compatible with most European hardware ranges



all dimensions are in mm

Options

Multiple backset options in 60mm, 70mm and 80mm.

Forend and strike finish.

Finishes

Satin stainless steel and polished brass.

Testing & Certification

CE marked to EN12209

Fire tested to American Underwriters Laboratories standard and UL listed R 14945 (N). Please note, this applies to lockcases with stainless steel forend and strike only.

Full Declaration of Performance available from our website at:

www.britondops.co.uk



FS52000 Series – Heavy Duty Mortice Lockcases (Level 5-4)



Sashlock - FS52710

Euro profile cylinder sashlock.
For lockable doors with lever handles to retract latch
25mm deadbolt is thrown with a single turn of the cylinder.
Available in multiple backsets



Latch - FS52750

Suitable for doors which do not require locking
Latch operated by lever handles from both sides



Nightlatch - FS52755

Euro profile cylinder nightlatch.
Lever operation from inside to withdraw latchbolt.
Cylinder operation from outside to withdraw latchbolt.
Latch is deadlocked when the door is closed



Panic Nightlatch with Classroom Function - FS52760

Euro profile cylinder nightlatch.
Lever operation from either side to withdraw latchbolt
Outside lever handle can be locked or unlocked by cylinder
Inside handle is always free to escape



Deadlock - FS52780

Euro profile cylinder deadlock.
For use on doors without lever furniture
25mm deadbolt is thrown by a single turn of the cylinder



Panic Automatic Sashlock - FS52840

Deadbolt is thrown automatically when the door closes
Lever handles operate the latchbolt and deadbolt simultaneously from both sides
Outside handle can be locked and unlocked by cylinder
Split follower panic function means inside handle is always free to escape



Panic Escape Sashlock - FS52842

Escape lock with split follower
 Split follower function enables deadbolt & latchbolt to be withdrawn simultaneously by lever handle from either side.
 Outside lever is locked/unlocked by cylinder.
 Easily reversible escape mechanism.



Side Escape Sashlock - FS52844

Escape lock split follower
 Split follower function enables deadbolt & latchbolt to be withdrawn simultaneously by lever handle from inside.
 Deadbolt can be thrown or withdrawn by cylinder from both sides



Panic Function Deadlock - FS52871

Deadlock operated by lever handles from both sides
 Escape lock function allows inside handle to withdraw the deadbolt at all times
 Outside handle is locked/unlocked by cylinder



Function/description	Product Ref:		
	60mm backset	70mm backset	80mm backset
Euro profile sashlock - square forend/strike	FS52710.60	FS52710.70	FS52710.80
Latch function - square forend/strike	FS52750.60	FS52750.70	FS52750.80
Nightlatch - no hold-back - square forend/strike	FS52755.60	FS52755.70	FS52755.80
Panic nightlatch with classroom escape function - square forend/strike	FS52760.60	FS52760.70	FS52760.80
Deadlock - square forend/strike	FS52780.60	FS52780.70	FS52780.80
Panic sashlock with automatic deadbolt activation - square forend/strike	FS52840.60	FS52840.70	FS52840.80
Panic escape sashlock - square forend/strike	FS52842.60	FS52842.70	FS52842.80
Side escape sashlock - square forend/strike	FS52844.60	FS52844.70	FS52844.80
Panic escape deadlock - square forend/strike	FS52871.60	FS52871.70	FS52871.80
Finishes - for satin stainless steel add suffix .20			
Finishes - for polished brassl add suffix .66			

FS9160, FS9260 & FS9360 - Digital locks



Push button digital lock - FS9160
With tubular mortice latch.



Push button digital lock - FS9260
With tubular mortice latch.



Electronic digital code lock - FS9360
With tubular mortice latch.



FS9160 - Mechanical digital lock

- Push button code lock
- Operates using a single PIN code
- Suitable for light duty internal use only
- Spindle can be cut on site to suit doors 35 - 60mm thick
- Supplied c/w tubular mortice latch and internal turn knob
- Hold-open facility by snib on the internal turn knob unit
- Available in silver finish or polished brass

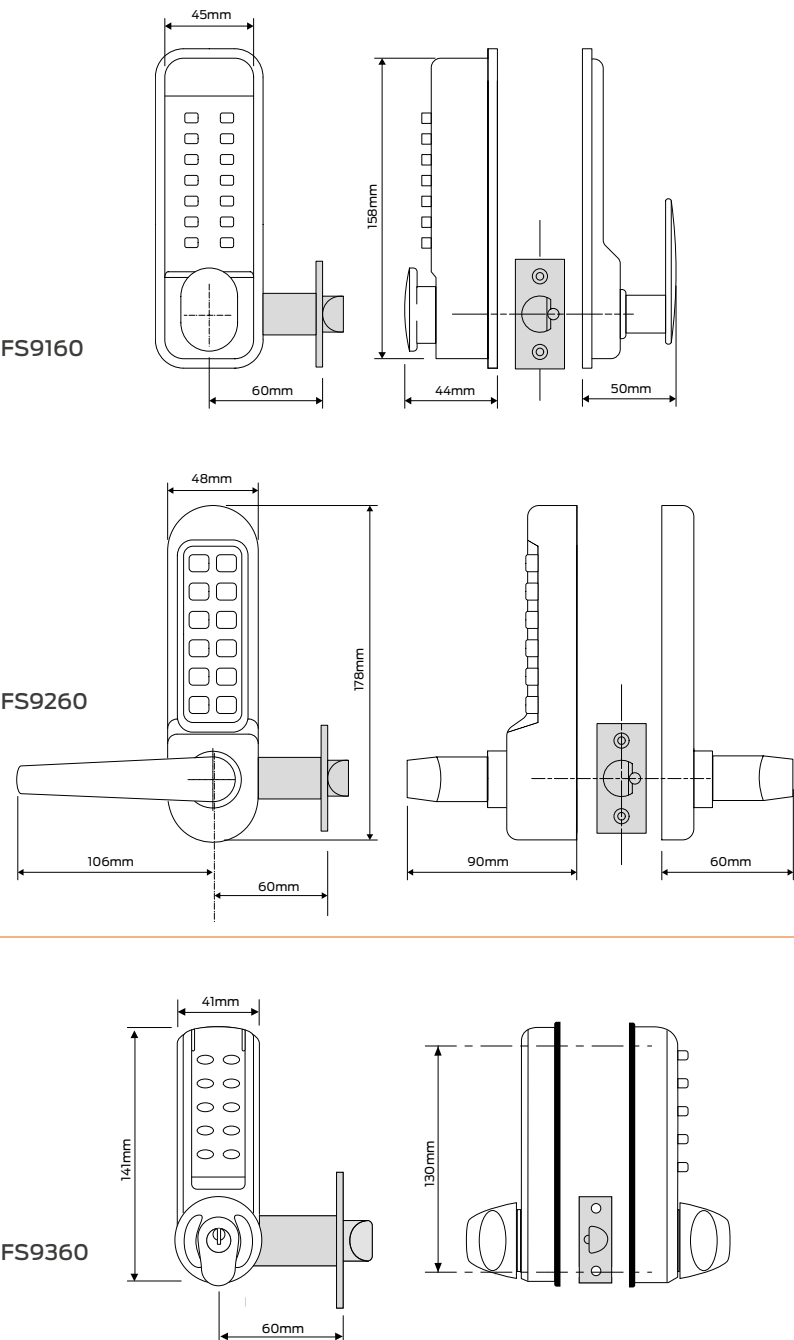
FS9260 - Digital code lock

- Digital code lock with over 2047 non sequential code options
- Available with extra long spindles for use with Briton exit devices
- Reversible lever operation for left or right hand applications
- Code changed by removing the unit from the door
- Available in satin stainless steel, polished stainless steel or polished brass

FS9360 - Digital code lock

- Simple and quick replacement or upgrade to mechanical code locks (common fixing holes)
- Code change without removing the unit
- Up to 80 user codes of 4 - 6 digits
- Up to 10 "One Time" codes
- Over 80,000 operations from 2 x AA batteries
- External battery override contacts
- Key override as standard
- Non handed
- PVD- brushed steel finish

Simplicity of installation combined with the convenience of keyless security



Product Ref:	Function/description	Finishes
FS9160	Mechanical digital lock c/w hold-back function and tubular mortice latch	SV; PB
FS9260	Lever operated mechanical code lock c/w tubular mortice latch	SS; PS; PB
FS9360	Electronic digital code lock c/w tubular mortice latch	PVD-BS

Comprehensive cylinder ranges for all applications

Cylinder lockcases

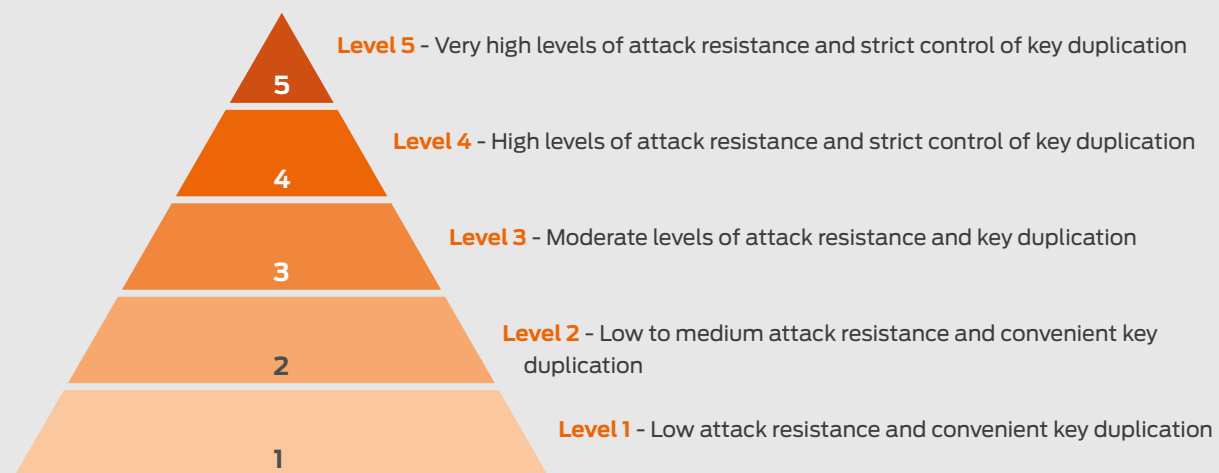
Cylinder locks are a very flexible and sophisticated means of providing security on most doors. The two part assembly uses a lockcase, which is usually morticed into the door, and a locking cylinder which is used to lock and unlock the lockcase. The cylinder lock has a number of advantages over other methods of door locking.

- Ability to select the most appropriate combination of lockcase and cylinder function
- Match the level of security to the precise needs of each door in the building
- Upgrade security as the needs of the building or its occupants change
- Enable sophisticated masterkeying and key control capabilities where access to multiple doors can be allowed or restricted to varying personnel



Performance Levels

Our multi-level approach to cylinder security ensures there is a solution for all projects, door applications and budgets.





Combining cylinders with lockcases

The operating characteristics of each lockcase can be adapted by the selection of the cylinder.

A single cylinder will, for example, provide key operation only from one side of the door. Whilst this might be suitable for a small store room in conjunction with a deadlock, it could result in a person being locked in. A cylinder with thumbturn however would provide a means of unlocking or locking a door from inside for convenience and privacy. In some cases, in a secure facility for example, such a feature may not be advantageous. When selecting the locking solution therefore it is important to consider the combined effect of the lock case and the cylinder.

Locking Cylinders – Standards

Measuring Security

The security of any door application is a combination of many factors, including the door construction and physical environment surrounding the door.

However, the cylinder, is probably the most vulnerable element in the assembly and is therefore subject to severe requirements of resistance to physical attack and other aspects of security such as key control.

EN 1303:2005 is the European Standard which establishes assessment and test criteria for each cylinder to quantify its durability, key security and resistance to physical attack.



Kitemark in Practice

The BSI Kitemark is one of the most respected and trusted product certification marks throughout the world as it represents a symbol of quality and safety. To achieve Kitemark certification, a manufacturer is required to have a comprehensive quality management system combined with initial product type testing and regular audit testing.

Although the scheme is voluntary, Allegion is very supportive, believing that the Kitemark is a show of commitment to safety and quality and offers peace of mind to the customer.



TS007:2012
Licence KM532990

ICIM Certified cylinder conforming to EN1303

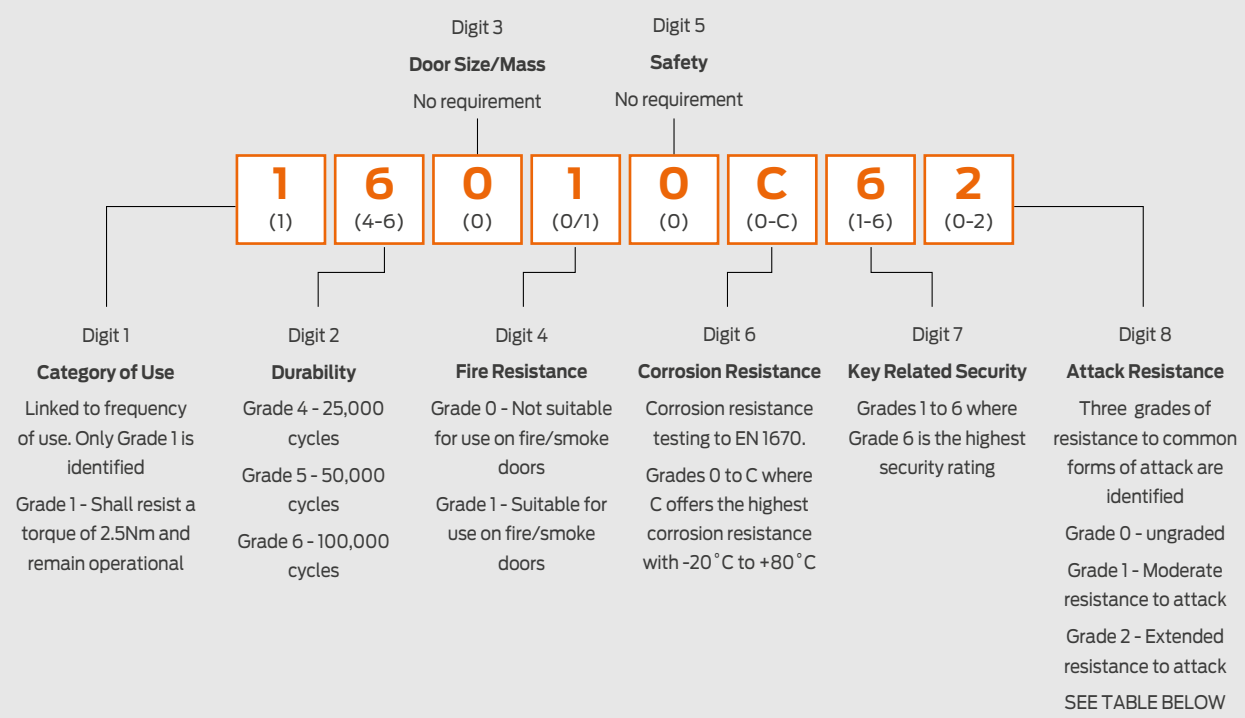
In July 2003, CISA became the very first company in Italy to obtain EN1303 based ICIM certification. Certification guarantees cylinder performance ascertained through documental checks of the technical specifications, in-company inspections to control production process, taking of samples to test either in the company or on the market and, most importantly, annual inspections.

This is so much more than a simple test report which determines the performance of only a few cylinders at one specific time.



BS EN 1303:2005

EN 1303:2005 classifies cylinders for locks using an 8 digit coding system. Features assessed include durability, fire resistance, key related security and attack resistance. The resulting 8 digit code can be used to directly compare the performance of one cylinder range against another.



Attack Resistance to EN1303

Type of attack	Digit 8 - Attack Resistance		
	Grade 0	Grade 1	Grade 2
Resistance to drilling (nett drilling time)	-	3 mins	5 mins
Resistance to chisel attack (number of defined blows)	-	30	40
Resistance to twisting attack (number of defined twists)	-	20	30
Resistance to plug/cylinder extraction (pull load)	-	15kN	15kN
Torque resistance of plug/cylinder	-	20Nm	30Nm

Guide – Selecting the right cylinder in the right place

Selecting the right cylinder system

In selecting the most appropriate cylinder system for any given application, a few simple factors should be considered:

- The need for physical security from forced entry.
- The balance between the convenience of getting duplicate keys cut and the security of strict key control whereby keys can only be obtained from the manufacturer under a letter of authority.
- The size of the system and the need for complex masterkeying capabilities.



Addressing physical security

An intruder seeking to break open a door will in most cases choose to “attack” the lock cylinder using the tools of the trade: drills, pliers, lock picks and other lock-forcing tools.

Methods of protecting against forced entry are ‘defensive’ features of passive security.

1 - Push resistance

A projecting cam on the cylinder can prevent it from being forced out of the lockcase by a hammer blow.

2 - Drill resistance

The incorporation of steel pins within the cylinder are designed to resist or delay attacks from drilling.

3 - Pick resistance

Special pin configurations can resist the manipulation of the pins in an attempt to simulate the key.

4 - Snap resistance

The inclusion of hardened steel laminates within the body of the cylinder can prevent violent twisting and snapping of the cylinder.

5 - Bump resistance

Bumping of cylinders is becoming more of an issue throughout Europe, particularly as there is no sign of forcible entry for homeowners to claim on insurance.

Anti-barricade function

In some circumstances, such as secure institutions, care homes and psychiatric facilities it is desirable to prevent the inside thumbturn being used to forcibly hold the deadbolt in the locked position. A clutch mechanism within the cylinder isolates the thumbturn from the keyway so that in an emergency the key will override the thumbturn if it is being held.

Classroom function

If a teacher needs to leave a room full of pupils for a short while, they can lock the door from the outside to prevent unauthorised personnel from entering whilst being reassured the door can always be opened from the inside, even when locked. The cylinder can never be locked by the thumbturn from the inside.

Construction Keying

During the construction process, keys can easily become lost or stolen which can lead to loss of security. If Construction Keying is specified the building contractor will be issued with specific contractors keys for each of the cylinders. At the point of 'hand-over' the building owner/occupier inserts the proper 'system' keys into each cylinder and in the process renders the contractors keys inoperative.

Masterkeying

Masterkeying is the organisation of a keyed locking system where a hierarchy of access is produced. As the level of authority rises, so the ability to access cylinders in the system increases until access to all the cylinders in a system is available to a single Grand Masterkey.



Patent protection

Since copyright protection on keys was abolished in 1999, it is now possible for anybody to produce and sell most types of keys. The only systems that can truly protect against illegal keyblank duplications are patented key systems. Manufacturers are able to take legal action against any authorized third parties who distribute copies of patented keys without permission.

Security Card

Offers a high level of service personalisation, giving further protection to the end user. The CISA authorised duplication system is the perfect solution for ensuring that keys can only be duplicated with the owner's consent on production of the security card. Supplied only with CISA standard differ products.

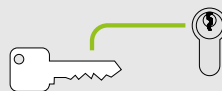


Locking Cylinders – Keying & Sizing

Keying – What keying arrangement do you need?

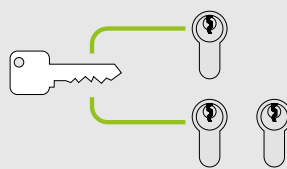
Keyed to Differ (KD)

All our cylinders are supplied “Keyed to Differ” as standard. This means each cylinder is operated by its own individual key (or keys) and no other keys will pass it.



Keyed Alike (KA)

A number of cylinders can be “Keyed Alike” so that the same key can be used to operate all locks, reducing the number of keys required to access different doors. Keyed Alike cylinders are ideal for areas where minimal key control is required.

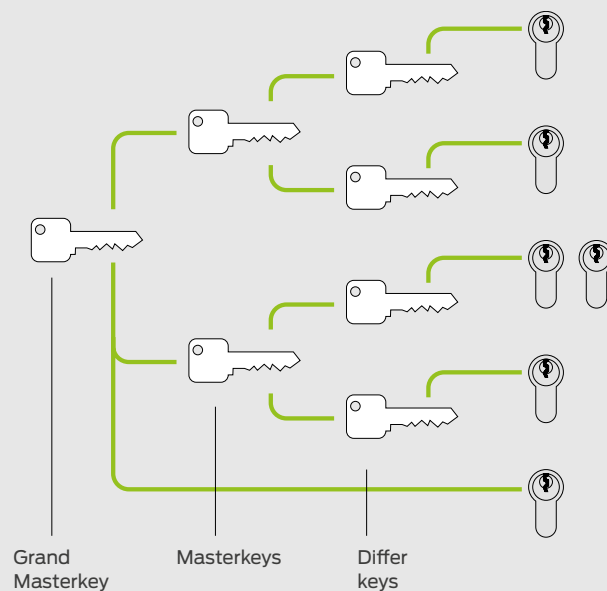


Masterkeying (MK)

The term “Masterkeying” is used generally to identify any system of cylinders in which a hierarchy of access has been established. In such a system certain keys will operate more than one cylinder.

In many larger buildings or groups of buildings such as a university campus, school or hospital it would be impractical to provide a different cylinder for each and every door. Even within a single department, authorised users could become the custodian of hundreds of keys.

By the careful design and organisation of cylinder pinning and key profiles, a hierarchy of keys can be developed which allows access to individual doors, groups of doors, all the doors on one floor or ultimately all the doors in the building using just one key.

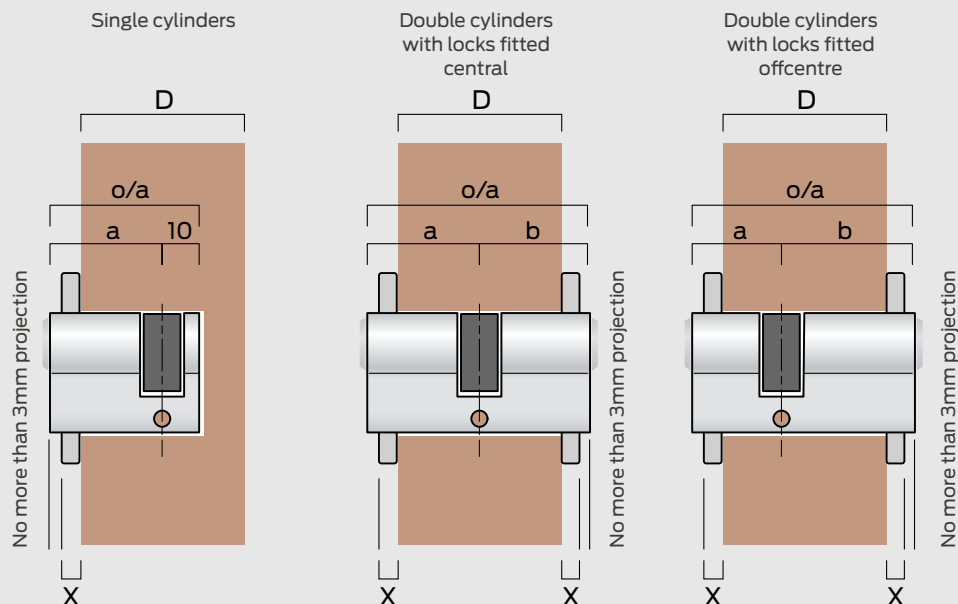


Sizing - Choosing the right cylinder length

The right length

Selecting the right length of cylinder is important not only for aesthetic reasons but also:

- To limit the amount of cylinder that projects from the face of the door hardware in order to protect it from attack by twisting and snapping
- To avoid the risk of hitting the cylinder with the hand when using lever handles



How to calculate

Crucial factors in establishing the correct length of cylinder are:

- Door thickness (D)
- Hardware thickness (X)
- Lock position in the door

For single cylinders

When ordering a single cylinder calculate the length from the lock centreline to the outer face of the hardware. This will be dimension 'a'

For double cylinders

When ordering a double cylinder or cylinder with turn, calculate the length from the lock centreline to the outer face of the hardware on both sides. Remember, for locks which are fitted offcentre, dimensions a and b will differ.

In all cases you must select a cylinder which has the nearest dimensions to ensure that the cylinder lies flush or up to 3mm (max.) proud of the hardware.

Patented Locking Systems



Product description

Conventional profile cylinder key system with trademark protected key section for industrial buildings

- Conforming to DIN 18252/2006 class = 80 (with anti-drilling and anti-pulling protection: class = 82)
- Key-related security grade = 6 (according to DIN EN 1303/2005)
- Attack resistance grade = 0 (according to DIN EN 1303/2005) (with anti-drilling and anti-pulling protection: grade = 2)
- Fire protection rating according to MPA materials testing institute certificate no. 120002883 = 1
- Suitable for master key and general/grand master key systems according to VdS guideline 2386/2007 class BZ under approval no. M103370
- Indefinite trademark protection, German trademark DE 398 28 612, German trademark DE 301 73 480, international trademark IR 707 697
- 6 spring-loaded pin tumblers, driver pins with protection against break-open tools on each cylinder side
- Basic anti-drilling protection by 6 hardened steel key pins and at least 1 hardened driver pin
- Brass cylinder body and brass plug, oil impregnated sintered cam, nickel-silver key according to DIN 12163
- Plug head with guiding groove for positive transfer of the key torque
- Satin nickel-plated brass surface
- Fastening with M5 x 80 fixing screw

Options

- Double cylinder, turn cylinder, single cylinder, padlock, furniture cylinder, cam cylinder, turn cylinder with classroom function, turn cylinder with anti-barricade other profiles upon request
- Modular design
- Emergency function, freewheel function for gearbox-operated multipoint locks
- Anti-drilling and anti-pulling protection
- Bump proof design
- Wear resistant version
- Special finishes upon request
- Compatibility with CESTronics product lines



Manufacturer's Declaration

Protection of the CES profile cylinder KM against unauthorized duplication of keys

The KM system is subject to an indefinite trademark protection (as opposed to a patent protection that has a maximum term of twenty years). This means:

The key section is protected by industrial property rights under the registered CES trademark. Cylinders and keys of this key section system show the trademark as a negative and positive shape, respectively.

CES has registered the "Carl-Eduard-Schulte" (= CES) company logo, created more than 150 years ago, as a combined mark with the German Patent Office and a large number of foreign patent offices. This registered trademark appears in the cross section of the keys for master key systems.

For the user, this means an indefinite protection against unauthorized duplication of the original key, superior protection of the investment, and maximum security of the locking system.

CES will never supply original key blanks to the trade. Combined with the statutory trademark protection, this fact makes it impossible for any manufacturer to legally produce blanks and finished keys.

Most of the locking system key sections currently on the market are subject to patent protection. For some of these key sections, this protection has already expired and for the others it will terminate sooner or later. After the expiry of the patent period, it is no longer illegal to produce key blanks and duplicate keys.

While trademark protection is legally equivalent to patent protection, it offers a number of benefits as outlined above.



Anti-barricade function

In some circumstances, such as secure institutions, care homes and psychiatric facilities it is desirable to prevent the inside thumbturn being used to forcibly hold the deadbolt in the locked position. A clutch mechanism within the cylinder isolates the thumbturn from the keyway so that in an emergency the key will override the thumbturn if it is being held.

Classroom function

If a teacher needs to leave a room full of pupils for a short while, they can lock the door from the outside to prevent unauthorised personnel from entering whilst being reassured the door can always be opened from the inside, even when locked. The cylinder can never be locked by the thumbturn from the inside.

Construction Keying

During the construction process, keys can easily become lost or stolen which can lead to loss of security. If Construction Keying is specified the building contractor will be issued with specific contractors keys for each of the cylinders. At the point of 'hand-over' the building owner/occupier inserts the proper 'system' keys into each cylinder and in the process renders the contractors keys inoperative.

Masterkeying

Masterkeying is the organisation of a keyed locking system where a hierarchy of access is produced. As the level of authority rises, so the ability to access cylinders in the system increases until access to all the cylinders in a system is available to a single Grand Masterkey.

Door Furniture



Door Furniture – Introduction

Quality starts with performance and durability

The first point of contact for anyone entering and moving around a building is the door hardware, whether that is a pull handle or a lever handle. In addition to having the right look, the hardware you select must have the right feel and finish and be backed up by a level of performance which will ensure the hardware is suited to the application and the amount of use it will have to endure.

Specifying Allegion furniture

The ranges of door furniture available from Allegion enable specifiers to select items across the full hardware requirement of the door and beyond from the same range. This ensures full compatibility of the fittings, producing a unified appearance in all cases.

Whether your choice is for satin stainless steel or solid nylon, all the components within the range are produced to a high standard of

finish and with a level of certified performance suitable for the majority of applications.

Briton, Randi and Normbau lever furniture is fully compatible across the entire range of Briton and CISA lockcases. However, only specific lever handles are certified for use on escape route doors which have been fitted with escape sashlocks. These are identified in the following pages but we recommend you

consult our Technical Department for further information.

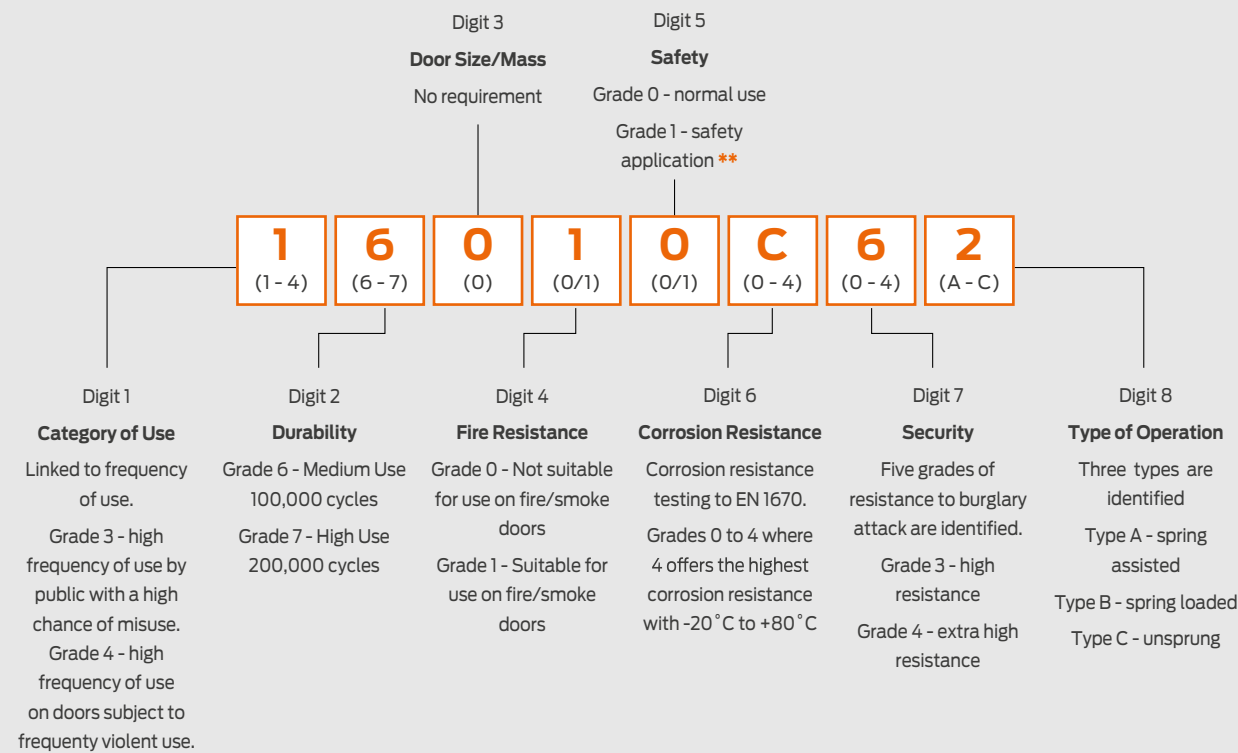
Performance Levels

Our multi-level approach to door furniture ensures there is a solution for all projects, applications and budgets.



EN1906

All forms of lever and knob door operating furnitures are covered by EN1906. It provides details on product types by use, durability testing, fire resistance, corrosion resistance and safety using an 8 digit classification code.



** to qualify for Grade 1 Safety, handles must have high strength lever to plate/rose fixing, high strength plate/rose to door fixing and high strength lever to spindle fixing, such that they would withstand a person grabbing the lever in order to prevent falling.

It is recommended that only Safety Grade 1 furniture is used on doors at the top of a staircase for example.

Door Furniture – Legislation

The Equality Act - disability legislation

The concept of universal access is not new but it still provides a challenge for the construction industry.

Legislation aimed at providing universal accessibility of buildings requires service providers to make *"reasonable adjustments to the physical features of their premises to overcome barriers to access"*.

To meet obligations under the Equality Act, Approved Document M (ADM) of The Building Regulations and BS 8300 continue to be the yardsticks by which conformity is measured.

Products in this category which conform to the recommendations of BS 8300 and ADM are shown with this symbol.



BS 8300 & ADM

Approved Document M of The Building Regulations stipulates that operating hardware "... can be operated with one hand using a closed fist, e.g. a lever handle."

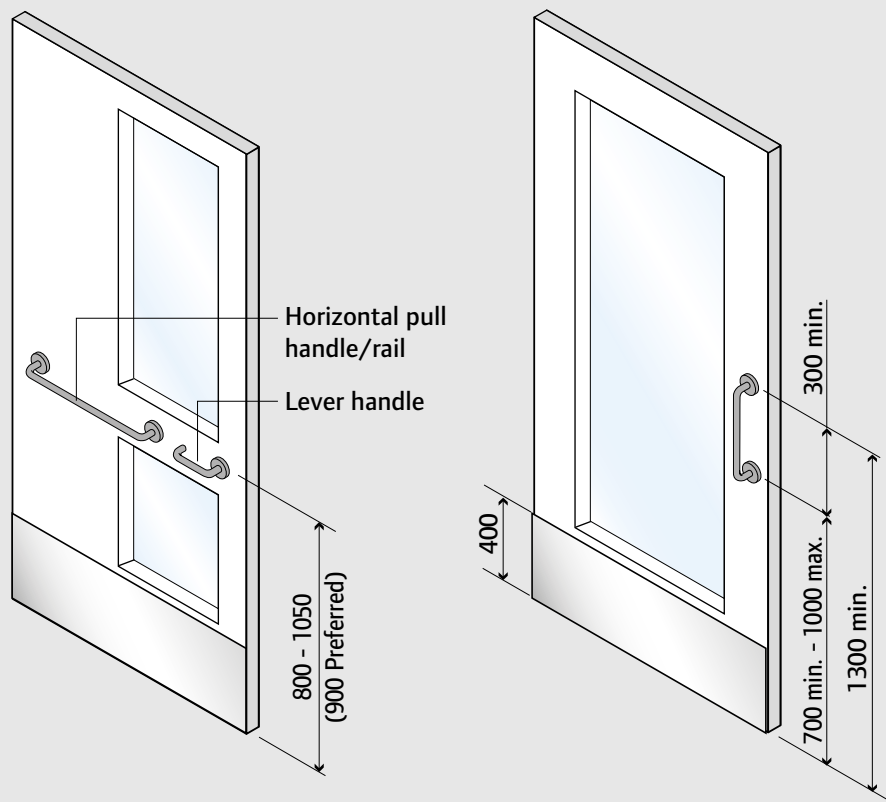
BS 8300 however is more specific and sets out both dimensional recommendations and mounting positions which are shown opposite.

To assist people with a visual impairment, BS 8300 also includes a recommendation for visual contrast between the door and

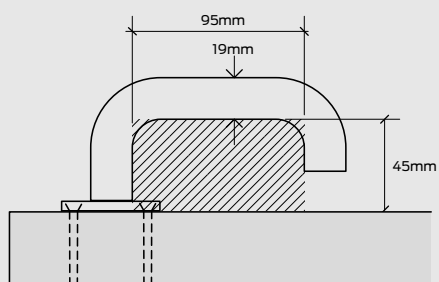
its operating hardware measured as the difference in their light reflective value (LRV). Whilst there is no definitive answer, research has shown that a minimum of 30 points of difference in LRV is recommended although 20 points may also be considered to be acceptable.

Allegion can provide LRV measurements where necessary.

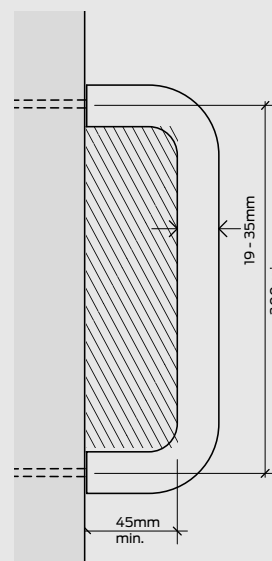
BS 8300 - Dimensional guidance



Lever handle dimensions



Pull handle dimensions



Grade 4 category of use guarantees a high performance and durability

Features & Benefits

- A Precision manufactured levers in stainless steel Grade 304
- B Back to back fixing bolts and threaded bushes on lever furniture provide a strong bolt through fixing. Supplied as standard to suit doors 44 - 54mm thick (alternative fixing pack available to suit 55 - 65mm)
- C Spindle is fixed to the inside and the outside lever handle by “break thru” grub screws providing greater security and durability.
- D All lever handles achieve EN 1906 Grade 4, the highest grade of use within the standard*.
- E Grub screw fixings on levers concealed from view on the underside.
- F Slimline roses only 4mm thick.
- G Precision engineered levers are prefixed to the rose or plate inner by hi-tensile circlip.
- H Unique ‘ClickFit’ system provides a positive snap fit for pressed rose and escutcheon covers.
- I Torx head fixings supplied with all leversets and plate mounted levers provide a high quality look and minimise tampering.

Lever fixing

Lever furniture features a unique fixing method which provides a firm, positive and highly durable installation. Levers are prefixed to roses, roses are fixed with bolt through fixings and break thru spindle and grub screws which positively connect the inside and outside handles.

Testing & Certification

Tested to EN 1906 with Grade 4 Category of Use
Tested to EN 1673 with Grade 3 Corrosion Resistance
Fire tested to EN1634 on timber doors to achieve a 90 minute fire rating, and 4 hour for metal doors.

What’s in the box?

- Pair of levers on roses
- Push on rose covers
- 8mm spindle & bolt through fixings for 35 - 54mm doors
- Hexagon wrench
- Installation instructions



Quality starts with performance and durability

The first point of contact for anyone entering and moving around a building is the door hardware, whether that is a pull handle or a lever handle. In addition to having the right look, the hardware you select must have the right feel and finish and be backed up by a level of performance which will ensure the hardware is suited to the application and the amount of use it will have to endure.



To support the performance characteristics, Foris Specification hardware has the following features:

- Back to back fixing bolts and threaded bushes on lever furniture provide a strong through fixing.
- Spindle is fixed to the inside and the outside lever handle by "break thru" grub screws providing greater security and durability.
- All lever handles achieve EN 1906 Grade 4, the highest grade of use within the standard ¹.
- Grub screw fixings on levers concealed from view on the underside.
- Precision engineered levers are prefixed to the rose of plate inner by hi-tensile circlip
- Comprehensively tested to EN 1634 for use in timber fire doors up to 90 minutes and steel doors up to 4 hours (see fire test certificate for further details)
- All stainless steel construction Grade 304 with Grade 4 corrosion resistant to EN 1670
- Single bolt through fixings to suit doors upto 56mm wide
- Spring assisted to provide positive return to the horizontal position.
- EN 1906 specification 4 7 - B 1 4 0 A (stainless steel lever handles)

¹ Grade 4 category of use is defined as suitable for high frequency use on doors which are subject to frequent violent use, e.g football stadiums, oil rigs, barracks, public toilets.



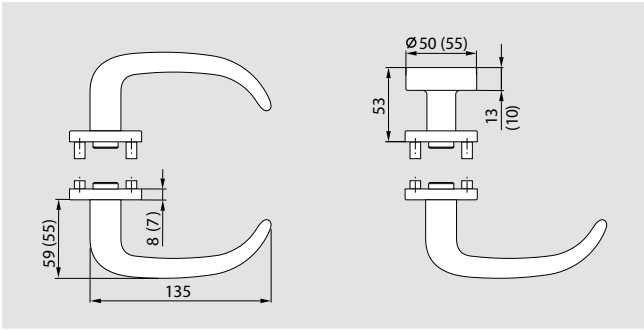
applicable
products only



Foris

Door Furniture

FS33338 Series Lever Furniture



Ref:	FS33338 - FS181
Type:	Return to door, round bar lever Mounted on 52mm dia. concealed fix roses with bolt through fixings
Dimensions:	Ø20 x 135mm EN 1906 Grade 4 EN 1670 Grade 3
Certification:	EN 1634 Up to 90 minutes (timber)
Other:	Approved for use with escape locks to EN 179 for emergency exit applications Supplied as a pair with 8mm spindle and bolt through fixings for 44 - 54mm doors*

* Alternative fixing pack for 55 - 65mm doors (FS4701.55-65.FS)

FS4700 Series - Lever Furniture

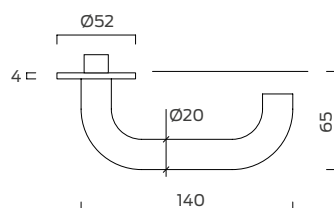


Return to Door - FS4701.20.140

Ø20mm round bar lever handle on rose with bolt through fixings at 38mm centres.

Approved for use with escape locks to EN 179.

Conforms to dimensional recommendations of BS 8300.

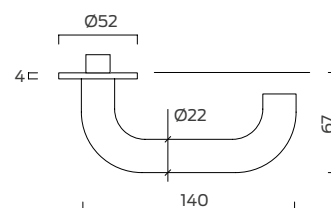


Return to Door - FS4701.22.140

Ø22mm round bar lever handle on rose with bolt through fixings at 38mm centres.

Approved for use with escape locks to EN 179.

Conforms to dimensional recommendations of BS 8300.



all dimensions are in mm

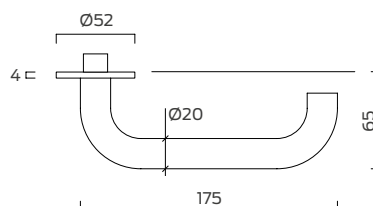


Extended Return to Door - FS4701.20.175

Ø20mm round bar lever handle on rose with bolt through fixings at 38mm centres.

Approved for use with escape locks to EN 179.

Conforms to dimensional recommendations of BS 8300.

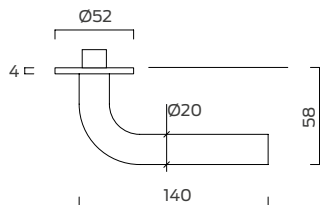


The full hardware requirement from a single source



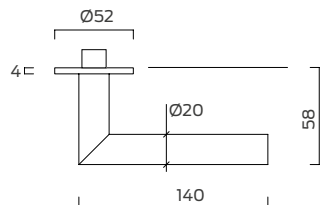
Straight - FS4703.20.140

Ø20mm round bar lever handle on rose with bolt through fixings at 38mm centres.



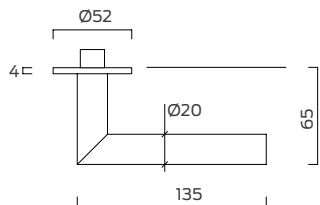
Straight Mitred - FS4704

Ø20mm round bar lever handle on rose with bolt through fixings at 38mm centres.



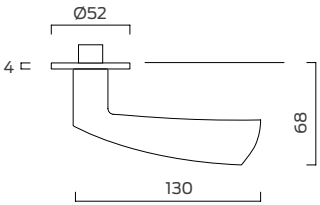
Curved Mitred - FS4705.20.140

Ø20mm round bar lever handle on rose with bolt through fixings at 38mm centres.



Wing Design - FS4706

Formed lever handle on rose with bolt through fixings at 38mm centres.

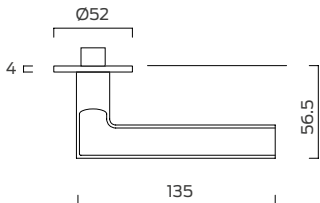


FS4700 Series - Lever Furniture



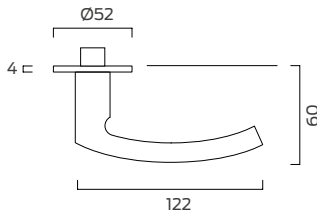
Hollow Cut Away - FS4707

Lever handle on rose with bolt through fixings at 38mm centres.



Hollow Curve - FS4708

Lever handle on rose with bolt through fixings at 38mm centres.



all dimensions are in mm

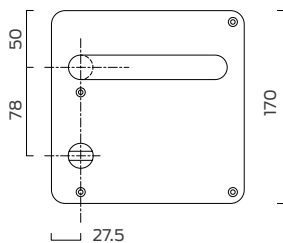
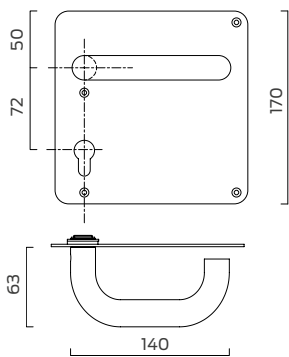


Product Ref:	Description	Finish
FS4701.20.140	Return to door lever on rose - Ø20mm	SS
FS4701.22.140	Return to door lever on rose - Ø22mm	SS
FS4701.20.175	Extended return to door lever on rose - Ø20mm	SS
FS4703.20.140	Straight lever on rose - Ø20mm	SS
FS4704	Straight mitred lever on rose - Ø20mm	SS
FS4705.20.140	Curved mitred lever on rose - Ø20mm	SS
FS4706	Wing design lever on rose	SS
FS4707	Hollow cut away lever on rose	SS
FS4708	Hollow curved lever on rose	SS
FS4701.55-65.FS	Alternative fixing pack for doors 55 - 65mm	n/a

Accessories to suit all mortice lock applications



Product Ref:	FS4702BP.B.22.140	FS4702BP.EC.22.140	FS4702BP.WC
Description:	Plate mounted Ø22mm lever handle Blank plate for use with latches	Plate mounted Ø22mm lever handle Backplate with cutout for euro profile cylinders for use with sashlocks	Plate mounted lever handle Ø22 Backplate with bathroom function turn with outside indicator and emergency release. Handed assembly - see below.
Dimensions:	170 x 170 x 2mm	170 x 170 x 2mm	170 x 170 x 2mm
Fixings:	Supplied as a pair with bolt through fixings and 8mm spindle suitable for doors 44 - 54mm *		Supplied as a pair with bolt through fixings and 8mm spindle suitable for doors 44 - 54mm*
Finish:	All items are available in Satin Stainless Steel		



Left hand
FS4702BP.WC.22.140.SS.L



Right hand
FS4702BP.WC.22.140.SS.R

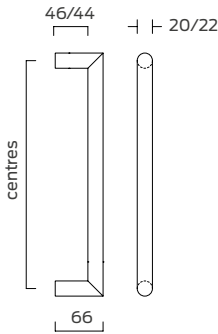
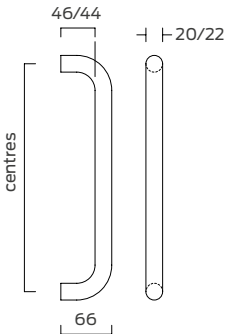


Product Ref:	FS4713.4	FS4714.4	FS4715.4
Function:	Euro profile cylinder escutcheon	Lever key escutcheon	Blank escutcheon
Description:	Ø52 x 4mm with snap on cover. Supplied as pairs as standard. Bolt through fixings supplied as standard suitable for doors 44mm-54mm. Alternative fixings available.		
Finish:	All items are available in Satin Stainless Steel		



Product Ref:	FS4710	FS4711
Function:	Bathroom turn & indicator	Bathroom extended turn & indicator
Description:	Ø52 x 4mm with 8mm spindle and bolt through fixings for doors 38 - 44mm For doors 44 - 54mm thick please specify FS4710.XSP (for FS4710) or FS4711.XSP (for FS4711)	
Finish:	All items are available in Satin Stainless Steel	

FS4700 Series - Pull Handles



all dimensions are in mm

Description:	D pull handle - Round bar section							
Product Ref:	FS4721.20.200	FS4721.22.200	FS4721.20.300	FS4721.22.300	FS4721.20.400	FS4721.22.400	FS4721.20.600	FS4721.22.600
Diameter: mm	20	22	20	22	20	22	20	22
Centres:	200		300		400		600	

Description:	Mitred handle - Round bar section							
Product Ref:	FS4722.20.200	FS4722.22.200	FS4722.20.300	FS4722.22.300	FS4722.20.400	FS4722.22.400	FS4722.20.600	FS4722.22.600
Diameter: mm	20	22	20	22	20	22	20	22
Centres:	200		300		400		600	



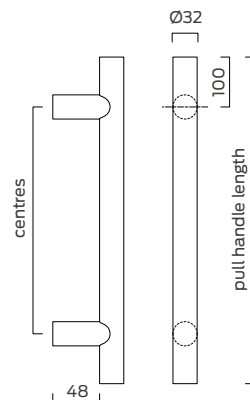
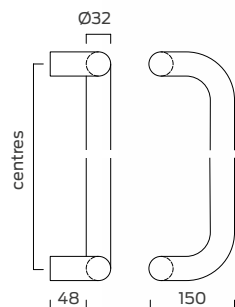
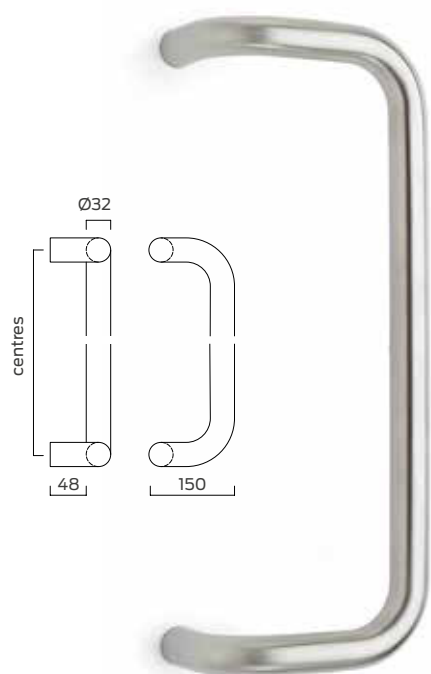
Pull handle fixings

All Foris FS4700 Series pull handles can be ordered individually and must be ordered together with a standard fixing pack which contains all the components required to mount the pull handle in any of the 4 applications shown opposite.

For back to back assembly simply order two individual pull handles plus two standard fixing packs.

Product Ref:	Description
FS4726	Standard fixing pack for timber, metal or glass doors (order 2 packs for back to back assemblies)

Pull handles available as single or back to back

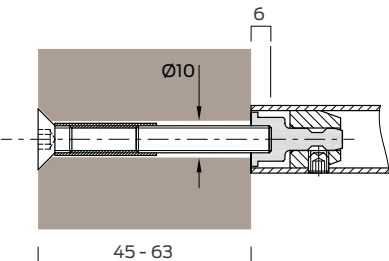


all dimensions are in mm

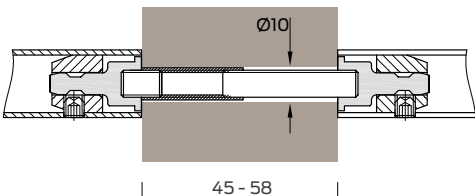
Description:	Cranked pull handle - Round bar section	
Product Ref:	FS4723.32.400	FS4723.32.600
Diameter:	32mm	32mm
Centres:	400	600

Description:	Pillar pull handle - Round bar section	
Product Ref:	FS4724.32.400	FS4724.32.600
Diameter:	32mm	32mm
Centres:	200	400

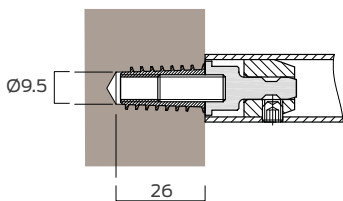
Pull handle fixing options (included in Standard fixing pack)



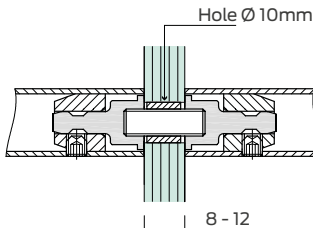
Bolt through - single pull handle



Back to back pair on timber door



Secret fix - single pull handle



Back to back pair on glass door

FS4700 Series - Pull Handles & Push Plates

Rose mount fixings

FS4721 and FS4722 pull handles can be ordered with an optional face fixed rose. Roses are supplied with stainless steel face fixing screws. Snap fit push on covers conceal all fixings.



Push plates

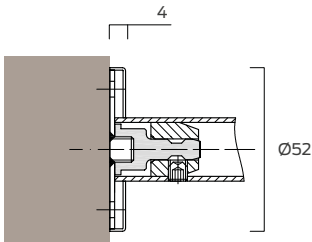
A range of push plates with radiused corners designed for use on the reverse of a pull handle with bolt through fixing. Each plate should be chosen to cover the pull handle fixing bolts.



Rose mount fixings

One fixing pack is required for each pull handle and they must be ordered according to the pull handle diameter (20 or 22mm).

Product Ref:	Description
FS4725.20	Face fixed rose mounting kit for 20mm diameter pull handles.
FS4725.22	Face fixed rose mounting kit for 22mm diameter pull handles.



Product Ref:	Description	
FS4730.75.375	75mm x 375mm	Plain
FS4730.75.475	75mm x 475mm	Plain
FS4730.75.675	75mm x 675mm	Plain
FS4731.75.375	75mm x 375mm	Engraved 'PUSH'
FS4731.75.475	75mm x 475mm	Engraved 'PUSH'
FS4731.75.675	75mm x 675mm	Engraved 'PUSH'
FS4732.75.375	75mm x 375mm	Engraved 'PULL'
FS4732.75.475	75mm x 475mm	Engraved 'PULL'
FS4732.75.675	75mm x 675mm	Engraved 'PULL'

FS4700 Series – Accessories

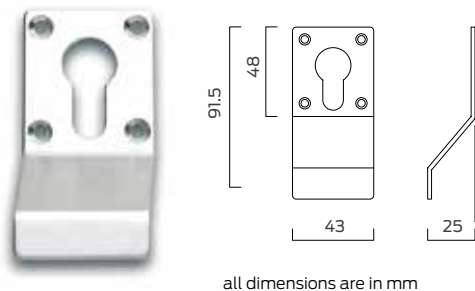
Symbols & signage

A range of 76mm dia. x 1.5mm face fixed stainless steel signs and symbols are available. Supplied with stainless steel woodscrew fixings.



Cylinder pull

Formed stainless steel cylinder pull for euro profile cylinder supplied with stainless steel face fixing screws. Ideally suited to use with mortice nightlatches.



Product Ref:	Description
FS4733	Cylinder pull with aperture for euro profile cylinder.

Product Ref:	Description
FS4750.01	Unisex symbol
FS4750.02	Male symbol
FS4750.03	Female symbol
FS4750.04	Disabled symbol
FS4750.05	WC sign
FS4750.06	Shower symbol
FS4750.07	Baby Change symbol
FS4750.08	Push
FS4750.09	Pull
FS4750.10	Fire door keep shut
FS4750.11	Fire door keep locked
FS4750.12	Automatic fire door keep clear



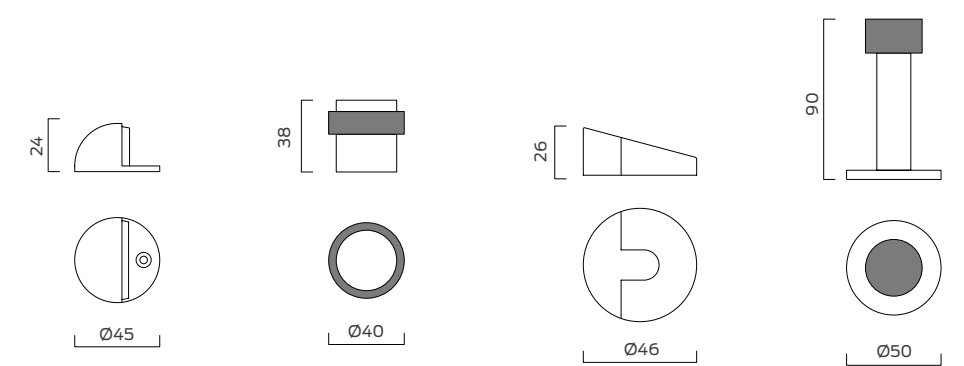
FS4700 Series - Accessories

Door stops

A series of wall and floor mounted door stops. Supplied with stainless steel fixings.



Ref:	FS4740	FS4741	FS4742	FS4743
Description:	Domed floor mounted door stop	Floor mounted door stop	Wedge shaped floor mounted door stop	Wall or skirting mounted door stop
Dimensions:	Ø45 x 24mm	Ø40 x 38mm	Ø46 x 26mm	Ø50 x 90mm



Kick plates

Kick plates are available in Grade 304 stainless steel in heights and widths to order. Plates have square corners as standard but are also available with radiused corners (5mmR or 10mmR).

Supplied with face fixings as standard (self adhesive option also available).

Other options and materials are available - please ask for details.

Plates are priced per square metre.



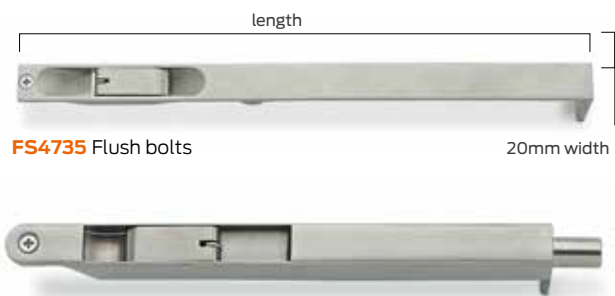
Ref:	Description
FS4760.304	Kick plate 1.2mm thick. Satin stainless steel Grade 304. Square corners with face fixing screws.
FS4761.304	Kick plate 1.5mm thick. Satin stainless steel Grade 304. Square corners with face fixing screws.

FS4700 Series - Accessories

Flush bolts

A range of stainless steel lever action flush bolts used to secure the inactive leaf of a pair of doors. Available with square or radiused ends and in various lengths to suit door height.

Tested to EN 12051:1999 and Graded **4 3 - 0131**



FS4739 Fully enclosed flush bolt version

Please note:

When used on a fire door, flush bolts must be installed in conjunction intumescent materials in line with fire test evidence of the doors they are being fitted to held by the door provider/producer (2mm thickness of interdens intumescent).

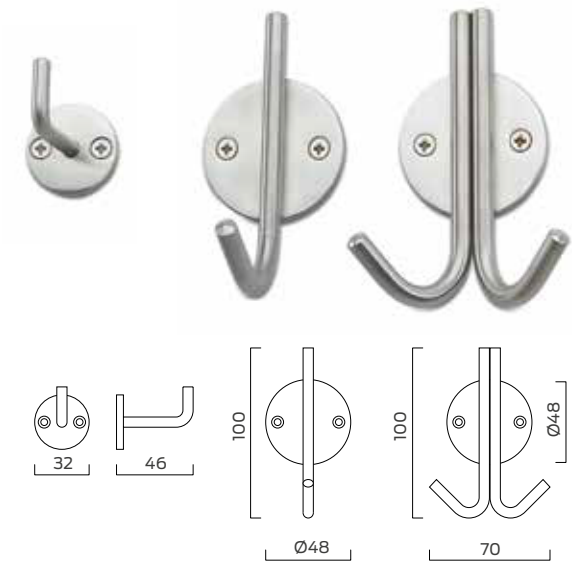
Ref:	Size	End Type
FS4735.R.20.202	202mm x 20mm	Radiused
FS4735.R.20.300	300mm x 20mm	Radiused
FS4735.R.20.450	450mm x 20mm	Radiused
FS4735.R.20.600	600mm x 20mm	Radiused
FS4735.R.20.914	914mm x 20mm	Radiused
FS4735.S.20.202	202mm x 20mm	Square
FS4735.S.20.300	300mm x 20mm	Square
FS4735.S.20.450	450mm x 20mm	Square
FS4735.S.20.600	600mm x 20mm	Square
FS4735.S.20.914	914mm x 20mm	Square
FS4739.R.18.225	225mm x 18mm	Radiused
FS4739.S.18.225	225mm x 18mm	Square



Ref:	Description
FS4736	Plunger type dust excluding floor socket for use with flush bolts - concealed fixing
FS4737	Easy clean floor socket for use with flush bolts - face fixing

Hooks

A series of face fixed single and double hooks. Supplied with stainless steel face fixings.



Ref:	Description
FS4744	Single hook - small, face fixed
FS4745.1	Single hook - large, face fixed
FS4745.2	Double hook - large, face fixed

Colour co-ordinated hardware in solid nylon

Normbau solid nylon hardware is in constant use in public and commercial buildings throughout the world and has a proven track record of durability and performance. Normbau nylon is coloured throughout and will not fade or chip making it an ideal choice for areas of heavy usage such as schools, hospitals and leisure centres.



Tough, hygienic and warm to the touch

Standards and performance

Normbau nylon lever and pull handles are inherently warm to the touch which makes the Normbau range an ideal solution for applications which must satisfy the requirements of BS 8300 for disabled access. The choice of colour can be done for aesthetic or practical reasons in order to maximise colour contrast with the door face to assist users with impaired vision.

Normbau products have been approved by PSA to MOB H3PS high duty performance standards and lever sets conform to EN 1906:1999

Critical products in the Normbau range have either been included in fire tests or have been assessed to BS 476 Part 22:1987. For further information on fire certification please contact the Allegion Customer Care Team.

Normbau nylon products are precision manufactured from high strength polyamide nylon that is:

- Scratch resistant
- Hygienic
- Cadmium free
- Anti-static
- Highly resistant to weather, fading and ageing

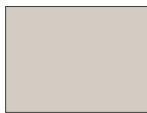
All products are available as standard in 10 distinctive colours. Other colours to match corporate environments can be achieved at additional cost.

For the purpose of colour co-ordination with other building elements we have provided the nearest RAL-DS colour reference.

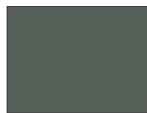
They are also resistant to conventional domestic cleaners, disinfectants, dilute acids and alkalis.



White 19 - NWH
RAL-DS 000 95 00



Manhattan 67 - NMG
RAL-DS 080 70 05



Dk Grey 18 - NDG
RAL-DS 000 35 00



Black 16 - NBL
RAL-DS 000 15 00



Slate Blue 63 - NSB
RAL-DS 240 50 15



Blue 11 - NBU
RAL-DS 270 30 40



Dk Blue 37 - NDB
RAL-DS 270 20 25



Green 13 - NGR
RAL-DS 160 30 38



Red 12 - NRE
RAL-DS 030 30 45



Yellow 22 - NYE
RAL-DS 080 80 90

Normbau nylon hardware - Leversets



Normbau levers are available in solid nylon or with a steel core for additional strength.

They are available in a variety of rose or plate mounted options. All variants feature:

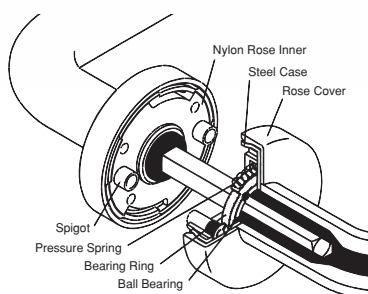
- Bolt through fixings at lever and escutcheon positions to suit Briton mortice lock cases.
- Concealed fixings with snap on rose/plate covers.
- Supplied complete with all fixings and appropriate spindles for specified door thickness.

Normbau leversets are available in three mounting and construction options. The fittings are not interchangeable and must be ordered as complete assemblies.

Ball bearing mounting

Levers are supplied with backplates or roses which incorporate a ball bearing race which retains the lever for a quick and maintenance free assembly.

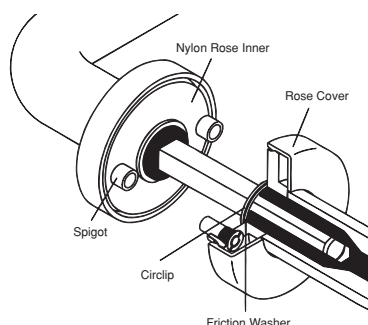
One lever is supplied with a floating spindle.



Fixed roses and backplates

Levers are supplied pre-assembled to the rose or plate inner with a friction washer and circlip fixing ensuring a durable performance.

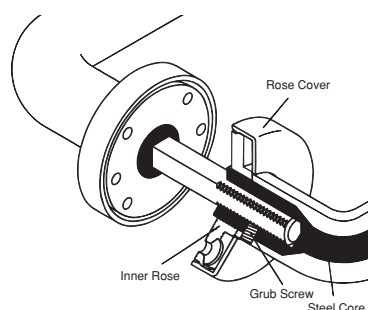
One lever is supplied with a floating spindle.



Spindle fixed

Levers are supplied with loose roses or backplates.

One lever is supplied with a floating spindle with threaded section. The opposite lever contains a cup point socket grub screw which positively engages with the threaded spindle to firmly connect the levers together.



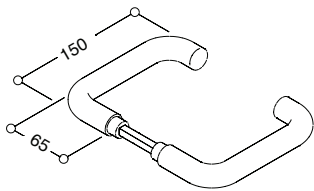
Normbau nylon hardware - Ball bearing leversets



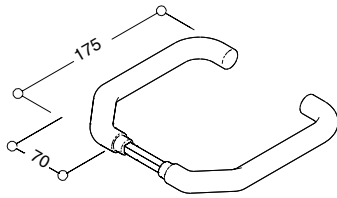
Ball bearing mounting

For rose mounted versions please specify the rose and appropriate escutcheon required for the lock type being used.

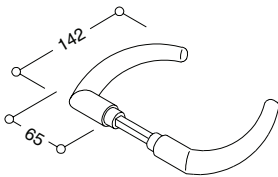
For plate mounted versions specify the plate according to the lock type being used.



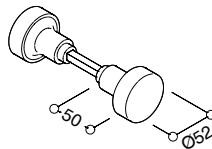
Ref:	23mm Ø - Steel cored
FS0389 01	pair c/w spindle -
FS0389 41	1/2 set c/w 1/2 spindle
FS0389 03	1/2 set without spindle



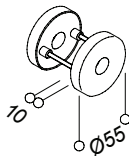
Ref:	23mm Ø - Steel cored
FS0388 01	pair c/w spindle -
FS0388 41	1/2 set c/w 1/2 spindle
FS0388 03	1/2 set without spindle



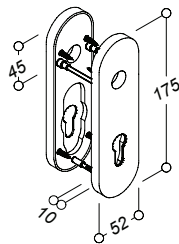
Ref:	23mm Ø - Coupe lever steel cored
FS0282 01	pair c/w spindle -
FS0282 41	1/2 set c/w 1/2 spindle
FS0282 03	1/2 set without spindle



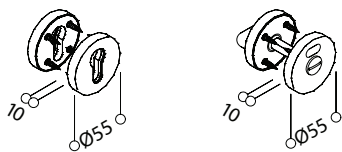
Ref:	52mm Ø - Knob
FS0387 01	pair c/w spindle -
-	-
FS0387 05	1/2 set without spindle



Ref:	Ball bearing rose
FS0390 03	Pair - suitable for all levers and knob



Ref:	Ball bearing plate
FS0405 05	Latch only
FS0405 02	Euro profile cylinder @ 72mm c-c
FS0405 03	Bathroom function @ 78mm c-c



Ref:	Escutcheons
FS0396 26	Blind -
FS0396 29	Lever key escutcheon for lever locks
FS0396 30	Euro profile cylinder - any centres
FS0397 40	Bathroom function - any centres

** Bathroom functions supplied with 8mm spindle

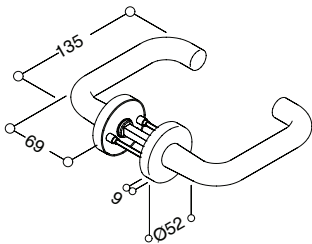
Normbau nylon hardware - Fixed roses and backplates



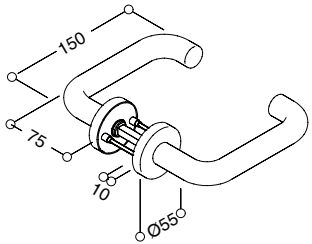
Fixed roses and backplates

Levers are supplied pre-fixed to the rose or plate inner. Cover plates are snap fit to conceal all fixings.

Rose mounted versions may require the use of escutcheons to suit the lock case being used.



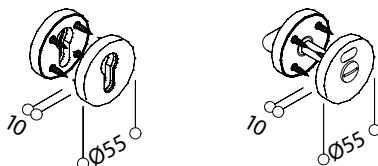
Ref:	20mm Ø - Steel cored
FS0516 01	pair c/w spindle -



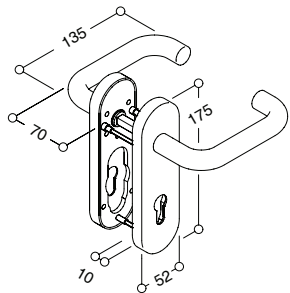
Ref:	23mm Ø - Steel cored
FS0516 03	pair c/w spindle -



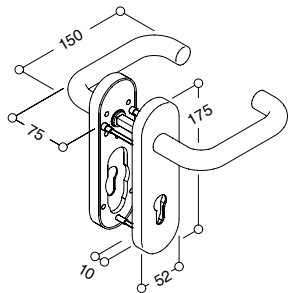
Ref:	Escutcheons 52mm Ø
FS0247 26	Blind escutcheon
FS0247 31	Lever key escutcheon
FS0247 32	Euro profile cylinder escutcheon
FS0247 90	Oval profile cylinder escutcheon
FS0358 34*	Bathroom turn and indicator
FS0840 44**	Bathroom turn - large, and indicator



Ref:	Escutcheons 55mm Ø
FS0396 26	Blind escutcheon
FS0396 31	Lever key escutcheon
FS0396 32	Euro profile cylinder escutcheon
FS0396 47	Oval profile cylinder escutcheon
FS0397 40**	Bathroom turn and indicator



Ref:	20mm Ø lever - Plate mounted
FS0623 20	Latch only
FS0623 73	Lever key @ 57mm c-c
FS0623 74	Euro profile cylinder @ 57mm c-c
FS0623 17	Euro profile cylinder @ 72mm c-c
FS0623 75	Oval profile cylinder @ 57mm c-c
FS0623 76	Oval profile cylinder @ 72mm c-c
FS0623 77*	Bathroom function @ 57mm c-c
FS0623 18**	Bathroom function @78mm c-c



Ref:	23mm Ø lever - Plate mounted
FS0434 20	Latch only
FS0434 73	Lever key @ 57mm c-c
FS0434 74	Euro profile cylinder @ 57mm c-c
FS0434 17	Euro profile cylinder @ 72mm c-c
FS0434 75	Oval profile cylinder @ 57mm c-c
FS0434 76	Oval profile cylinder @ 72mm c-c
FS0434 77*	Bathroom function @ 57mm c-c
FS0434 18**	Bathroom function @78mm c-c

* Bathroom functions supplied with 5mm spindle ** Bathroom functions supplied with 8mm spindle

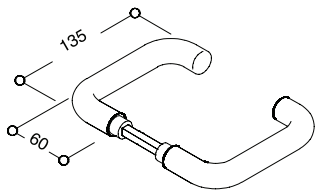
Normbau nylon hardware - Spindle fixed levers



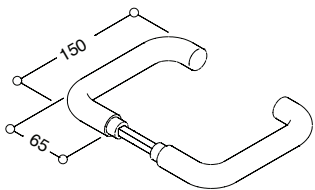
Spindle fixed levers

Levers and roses or backplate are supplied separately. Roses are available with springing to suit lightly sprung latches.

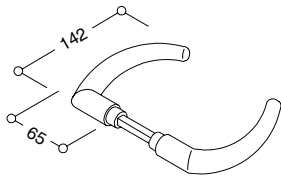
Levers are available in solid nylon or steel cored for extra strength and fire door applications. Steel cored levers must be ordered to suit the door thickness.



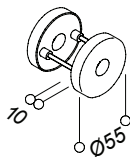
Ref:	20mm Ø lever
FS0246 08	Solid nylon
FS0570 15	Steel cored - for doors 23-37mm thick
FS0570 08	Steel cored - for doors 38-52mm thick
FS0570 14	Steel cored - for doors 53-63mm thick



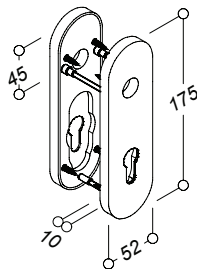
Ref:	23mm Ø lever
FS0246 18	Solid nylon
FS0571 15	Steel cored - for doors 23-37mm thick
FS0571 08	Steel cored - for doors 38-52mm thick
FS0571 14	Steel cored - for doors 53-63mm thick



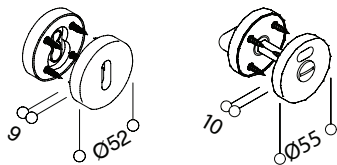
Ref:	23mm Ø Coupe lever
FS0577 01	Steel cored - for doors 23-37mm thick
FS0577 02	Steel cored - for doors 38-52mm thick
FS0577 03	Steel cored - for doors 53-63mm thick



Ref:	Roses for spindle fixed levers
FS0247 10	Rose 52mm Ø
FS0247 39	Sprung inner to suit 52mm Ø rose
FS0396 02	Rose 55mm Ø



Ref:	Backplates for spindle fixed levers
FS0525 10	Latch only
FS0525 08	Lever key @ 57mm c-c
FS0525 09	Euro profile cylinder @ 57mm c-c
FS0523 22	Euro profile cylinder @ 72mm c-c
FS0525 13	Oval profile cylinder @ 48.5mm c-c
FS0525 14	Oval profile cylinder @ 56mm c-c
FS0525 12	Oval profile cylinder @ 57mm c-c
FS0525 11*	Bathroom function @ 57mm c-c
FS0524 28**	Bathroom function @ 78mm c-c



Ref:	Escutcheons 52 & 55mm Ø
FS0247 26	52mm Ø - Blind
FS0247 31	52mm Ø - Lever key
FS0247 32	52mm Ø - Euro profile cylinder
FS0247 90	52mm Ø - Oval profile cylinder
FS0358 34*	52mm Ø - Bathroom function
FS0840 44**	52mm Ø - Bathroom function, large turn
FS0396 26	55mm Ø - Blind
FS0396 29	55mm Ø - Lever key
FS0396 30	55mm Ø - Euro profile cylinder
FS0396 47	55mm Ø - Oval profile cylinder
FS0397 40**	55mm Ø - Bathroom function

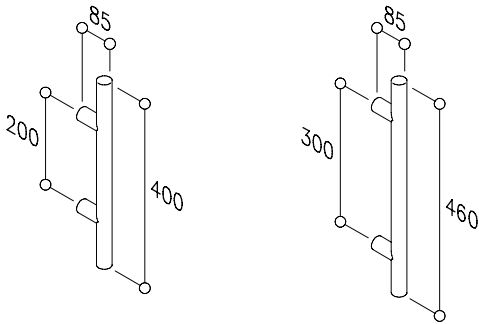
* Bathroom functions supplied with 5mm spindle ** Bathroom functions supplied with 8mm spindle

Normbau nylon hardware - Pull handles

The in-built strength of Normbau pull handles provides both durable fixing and lasting aesthetics. Available in either solid nylon or with a steel core for added strength, the pulls can be fitted singly or back to back in pairs using a variety of fixing types.

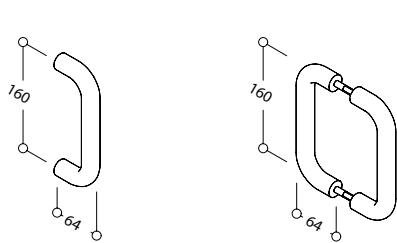
Each Normbau pull handle design is available as a 'thread side' or 'pin side' pull handle and should be specified according to the required fixing type. For example, a back to back pair requires one 'thread side' and one 'pin side' pull together with fixing pack FS0471.

[Note: the smaller 23mm Ø pulls are the only exception and are supplied as dedicated single bolt through, back to back or face fixed assemblies].

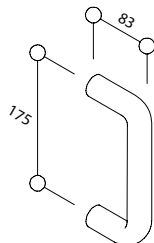


Ref:	34mm Ø solid nylon
FS0441 01	200mm c-c - Thread side pull handle
FS0441 11	200mm c-c - Pin side pull handle
FS0445 01	300mm c-c - Thread side pull handle
FS0445 11	300mm c-c - Pin side pull handle

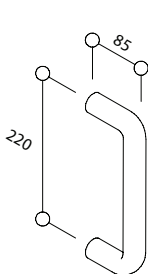
Normbau nylon hardware - Pull handles



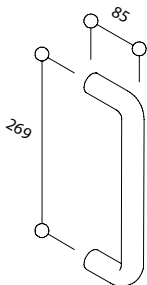
Ref:	23mm Ø solid nylon
FS0309 17	Single bolt through fixing - supplied without screw fixings
FS0309 19	Back to back pair
FS0309 20	Single face fixing on 55mm Ø roses



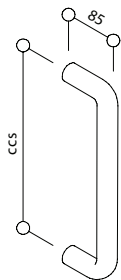
Ref:	31mm Ø solid nylon
FS0363 04	Thread side pull handle
FS0363 14	Pin side pull handle



Ref:	34mm Ø solid nylon
FS0363 01	Thread side pull handle
FS0363 11	Pin side pull handle



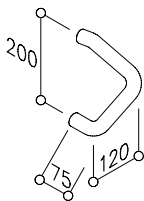
Ref:	34mm Ø solid nylon
FS0364 01	Thread side pull handle
FS0364 11	Pin side pull handle



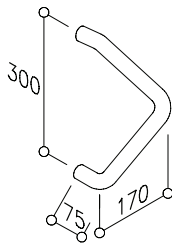
34mm Ø steel cored					
	200mm centres	300mm centres	400mm centres	500mm centres	600mm centres
Thread side pull	FS0439 01	FS0444 01	FS0363 19	FS0363 18	FS0363 17
Pin side pull	FS0439 11	FS0444 06	FS0363 29	FS0363 28	FS0363 27

Please Note:

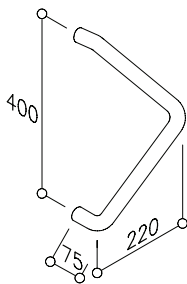
Check whether a 'thread side' or 'pin side' pull handle is required according to the required fixing type. A back to back pair requires one 'thread side' and one 'pin side' pull.



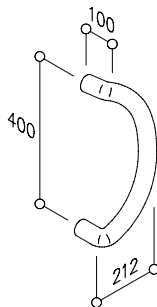
Ref:	34mm Ø solid nylon
FS0440 09	Thread side pull handle
FS0440 39	Pin side pull handle



Ref:	34mm Ø solid nylon
FS0440 11	Thread side pull handle
FS0440 41	Pin side pull handle

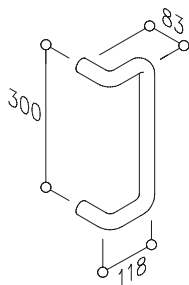


Ref:	34mm Ø solid nylon
FS0440 13	Thread side pull handle
FS0440 43	Pin side pull handle

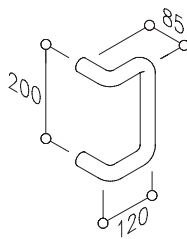


Ref:	40mm Ø steel cored
FS0440 10	Thread side pull handle
FS0440 40	Pin side pull handle

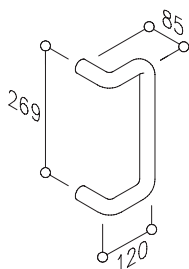
Normbau nylon hardware - Pull handles



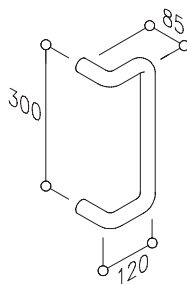
Ref:	31mm Ø solid nylon
FS0443 12	Thread side pull handle
FS0443 22	Pin side pull handle



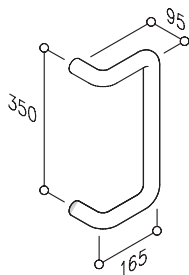
Ref:	34mm Ø solid nylon
FS0438 02	Thread side pull handle
FS0438 12	Pin side pull handle



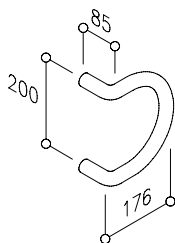
Ref:	34mm Ø solid nylon
FS0303 06	Thread side pull handle
FS0303 16	Pin side pull handle



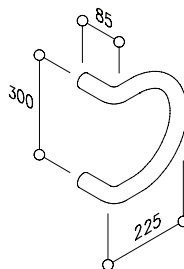
Ref:	34mm Ø solid nylon
FS0443 02	Thread side pull handle
FS0443 32	Pin side pull handle



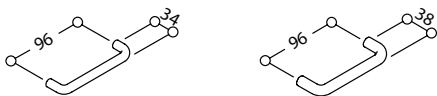
Ref:	40mm Ø solid nylon
FS0303 07	Thread side pull handle
FS0303 17	Pin side pull handle



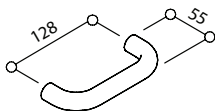
Ref:	34mm Ø solid nylon
FS0440 01	Thread side pull handle
FS0440 31	Pin side pull handle



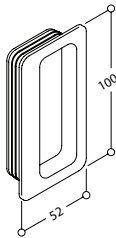
Ref:	34mm Ø steel cored
FS0440 06	Thread side pull handle
FS0440 36	Pin side pull handle



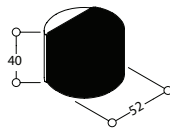
Ref:	Cabinet pulls
FS0503 01	10mm Ø x 96 x 34 - without screws
FS0307 21	12mm Ø x 96 x 38 - without screws
FS0307 22	12mm Ø x 96 x 38 - with 4mm screws



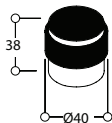
Ref:	Cabinet pulls
FS0309 01	20mm Ø x 128 x 55 - without screws



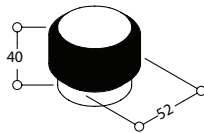
Ref:	Flush pull
FS0342 01	Flush pull 100 x 52mm



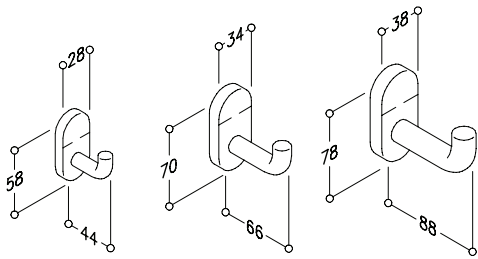
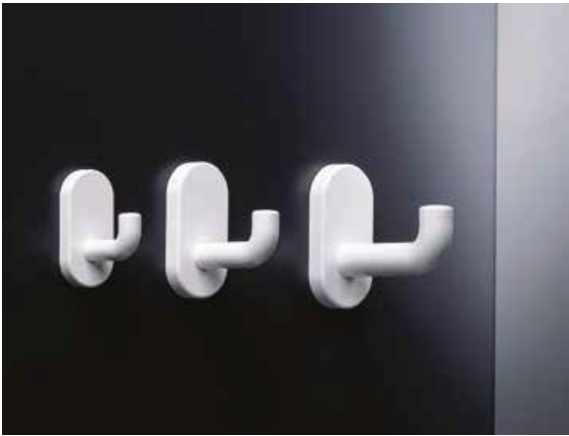
Ref:	Door stop
FS0842 01	Floor mounted with soft buffer



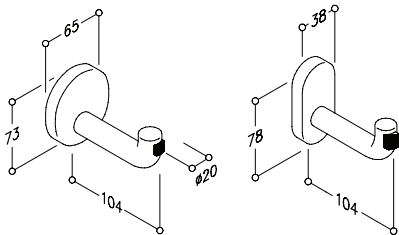
Ref:	Door stop
FS0842 03	Floor mounted with soft buffer



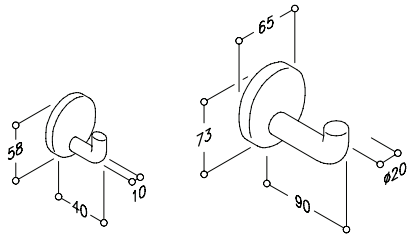
Ref:	Door stop
FS0346 01	Floor mounted with soft buffer



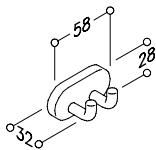
Ref:	Coat hook
FS0583 10	Coat hook - 44mm projection
FS0583 11	Coat hook - 66mm projection
FS0583 12	Coat hook - 88mm projection



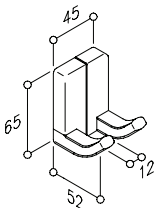
Ref:	Coat hook with buffer
FS0340 01	Coat hook with buffer - circular plate
FS0583 15	Coat hook with buffer - oblong plate



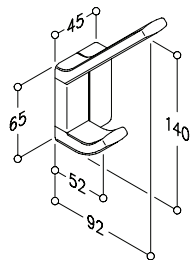
Ref:	Coat hook
FS0305 01	Coat hook - 10mm Ø
FS0339 01	Coat hook - 20mm Ø



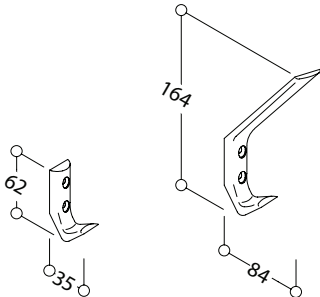
Ref:	Doublecoat hook
FS` 0583 20	Coat hook - 10mm Ø



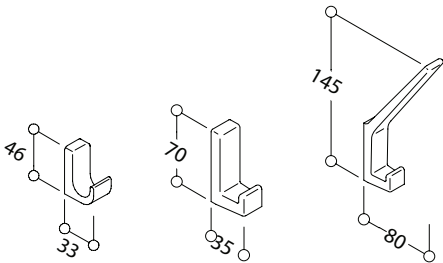
Ref:	Doublecoat hook
FS0584 05	Double coat hook



Ref:	Coat hook
FS0584 01	Hat & coat hook



Ref:	Coat hook
FS016001	Coat hook 62 x 35mm
FS016002	Hat & coat hook 164 x 84mm



Ref:	Coat hook
FS052201	Coat hook 46 x 33mm
FS018004	Coat hook 70 x 35mm
FS018005	Hat & coat hook 145 x 80mm


FSB at Foris

Inner (added) value. Behind the beautiful facade of our fittings you will find thought-through technology, commonly categorised with the term 'bearing'. This does not really do justice to it. Read some more about how our precision engineered masterpieces ensure convenience, a long service life and sustainability.




Lever handles

Product Chart

1001 




1003 



1004 



1005 



1012 



1015 



1016 



1020 




1021 



1023 




1025 




1027 




1028 



1034 




1035 



1045 




1051 




1057 



1058 



1070 



Lever handles

Product Chart

1075 



1076 



1077 



1078 



1093 



1102 



1106 



1107 



1108 



1119 



1135 



1144 



1146 



1147 



1159 



1160 



1163 



1171 



1173 



1176 



1183



1185



1186



1188



1222



1226



1230



1232



1233



1241



1242



1244



1246



1250



1251



1254



1257



1259



XXL and Ergo lever handles



Roses and backplates

Product Chart

12...013

12...041

12...001

12...021

12...007

12...027



14 1402

14 1407

14 1401

14 1415

14 1418

14 1458

14 1459

14 1486

14 1433

171790|171795

17 1791|17 1796

17 1733

17 1734

17 1736

17 1737

72 8..

76 8..

79 8..

Finger plates, kicking plates

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111

Knob handles, door knobs and knob backplates

Product Chart

● New items

08 0802

08 0803

08 0804

08 0828

08 0829

08 0844

23 0802



23 0803

23 0804

23 0809

23 0811

23 0812

23 0828



23 0829

23 0844

23 0846

23 0854

23 0857

23 0859



23 0873

23 0880

19 1923

12....009

19 1927

12....029

19 1966

12....003

















































































19 1970

12....023



Window handles

Product Chart

34 1001 	34 1003 	34 1004   	34 1005 	34 1012 	34 1015   
					
34 1021 	34 1023   	34 1025 	34 1035 	34 1058  	34 1070 
					
34 1075 	34 1076   	34 1077 	34 1078 	34 1093 	34 1102    
					
34 1106    	34 1107 	34 1108 	34 1135   	34 1144 	34 1146   
					
34 1147 	34 1159 	34 1160 	34 1163  	34 1171 	34 1173 
					

34 1176 ■■



34 1183 ■■



34 1185 ■●



34 1186 ■



34 1188 ■●



34 1222 ■



34 1226 ■●



34 1229 ■



34 1232 ■●



34 1233 ■●



34 1241 ■■■●



34 1242 ■■●



34 1244 ■■■●



34 1246 ■●



34 1250 ■■●



34 1251 ■■■●



34 1254 ■■●



34 1257 ■●



34 1259 ■●



3409034 ●



3409036 ●



34 3401 ■



34 3402 ■



34 3403 ■■
34 3499 ■



34 3404 ■■



34 3410 ■■■●



34 3453 ■■



34 3455 ■



34 3480 ■■



34 3784 ■■



Window handles
Product Chart

New items

34 1023



34 1023



34 1076



34 3499



34 3499



34 3481



34 3488



34 3491



34 3495



34 3496



17 175



17 178



34 3407



34 3416



34 3460



34 3471



34 1004
34 1242



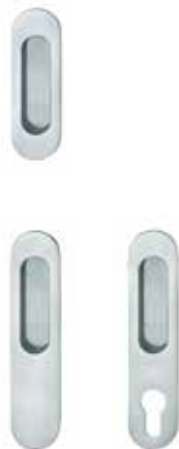
34 1016
34 1076



34 1102
34 1146



42 4215



Flush pulls Product Chart

42 4211



42 4212



42 4250



42 4251



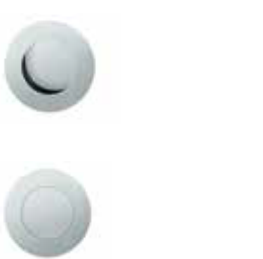
42 4252



42 4253



42 4254



42 4255



42 4255



Pull handles and recessed lever handles

Product Chart

● New items

36 3601



36 3604



36 3617



36 3699



66 6628



66 6629
51 5325



42 4203 | 42 4204



42 4205



77 7947



77 7948



77 7949



77 7950 | 77 7951
77 7954



Door stops, engravings and pictograms

Product Chart

● New items

38 3816



38 3817



38 3819



38 3878



38 3881



38 3884



38 3888



38 3880
38 3880



38 3895



38 3896



36 3646



36 3650



36 3632



36 3654



36 3656 | 36 3657



36 3679



36 3689



36 3691



36 4001



36 9865



36 4059



Engravings



Push/pull pad handles and pull handles

Product Chart

61 6108



61 6112



61 6181



61 6184



61 6186



61 6187|61 6188



61 6190



61 6191



61 6192|61 6193



61 6254



61 6268



66 6506



66 6507



66 6514



66 6519



66 6520



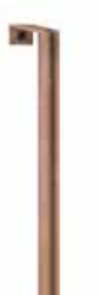
66 6522



66 6523



66 6524 ■■■



66 6526 ■■■



66 6527 ■■■



66 6533 ■■■



66 6534 ■■■



66 6535 ■■■



66 6536 ■■■



66 6537 ■■■



66 6538 ■■■



66 6540 ■■■



66 6541 ■■■



66 6542 ■■■



66 6546 ■■■



66 6548 ■■■



66 6602 ■■■■



66 6610 ■■■



66 6611 ■■■



66 6612 ■■■



66 6613 ■■■



66 6615 ■■■



66 6616 ■■■



66 6630 ■■■



66 6635 ■■■



66 6642 ■■■



Push/pull pad handles and door pulls angled | oval | round

Product Chart

66 6643



66 6650



66 6652



66 6653



66 6655



66 6662



66 6669



66 6674



66 6675



66 6679



66 6681



66 6683



66 6715| 66 6716



66 6717| 66 6718



66 6735| 66 6736



66 6737| 66 6738



66 6801



66 6802




03 0418
03 0418




Security fittings Product Chart


● New items

73 7374 




73 7375 




73 7376 



73 7377 




73 7378 



73 7379 



73 7381 



73 7382 



73 7383 



73 7384 




73 7385 




73 7386 




73 7330 




73 7331 




73 7360 




73 3244 



73 3249 



73 7391 | 73 7392 | 73 7393 




73 7395 



73 7396 



73 7397 



Letter plates, bell-push plates, numbers and letters

Product Chart

38 3801 | 38 3804



38 3808



38 3826



38 3826
38 3829



38 3845



38 3810



38 3863



38 3864



38 4005



Inscriptions



Panic Hardware – Introduction

Designed to provide immediate escape, first time, every time.

When lives may depend on an exit device we feel we have a responsibility to design and test our products to exceed all current performance and safety standards, ensuring they will operate first time, every time.

The Foris FS560, FS570, FS580 Series has been designed to offer modular solutions to panic exit applications which require multi-point latching with a superior and refined aesthetic, designed and manufactured in Italy.

The Foris 376 Series is designed to provide immediate escape and still incorporates all the features and benefits expected from an exit device that is branded Foris .

Our Robust exit devices provide solutions for very heavy duty applications. The robust construction not only satisfies the requirements of EN 1125 for CE marking but has passed the stringent testing necessary for approval to ANSI A156.3 and UL listing.

The Foris and Von Duprin ranges, comprising the following variants, are fully compliant with EN 1125 or EN 179, are CE marked to the latest standards and come complete with a 5 year guarantee:

- Vertical panic bolts
- Reversible rim panic latches
- Mortice panic nightlatches
- Push pad vertical bolts
- Reversible push pad rim panic latches
- Push pad mortice nightlatches
- Motorised touch bar panic exit solutions

Performance levels

Our multi-level approach to panic and emergency hardware ensures there is a solution for all projects, door applications and budgets.





Panic Hardware – Introduction

Types of exit hardware

Whilst there are several forms of exit device permitted, the basic premise remains the same in that the device must provide immediate escape with a single operation and not require a key.

- A** Touch bar device
- B** Push bar device
- C** Touch bar device used to operate a mortice nightlatch
- D** Push bar device with multi point latching
- E** Touch bar device with multi point latching
- F** Push pad device with vertical bolts
- G** Push pad device with rim latch
- H** Emergency exit solutions may also be achieved using escape locks and lever furniture. Please see the lockcase section of this catalogue for further information.



Which system to choose

Having first determined whether the application requires a panic or emergency exit solution there are a number of additional considerations which will determine the most appropriate product.

These could include:

- Aesthetic considerations - push bar or touch bar (see opposite)
- Designed to satisfy EN standards
- Single point or multi-point latching for security (see below)
- Frequency of use may require a heavy duty solution
- Additional features such as hold-back or alarm connection
- Optional outside access device for external entry

Single or multi-point security

Both panic and emergency exit solutions are available as rim devices providing a single central latch point or with latching points at the top and bottom of the door. The modular nature of the Foris FS560 - FS570 Series allows you to build a solution which is tailored specifically to the needs of your door providing up to 4 latching points on a single door.



Panic Hardware – Legislation

Panic or Emergency?

It is mandatory for all exit devices to comply with the latest revisions of EN 1125 or EN 179 and CE marking.

All Foris FS560, 570, 580 and 376 Series exit devices have been tested and certified to prove compliance with the latest standards EN 1125 & EN 179 which govern the application of panic and emergency exit hardware, but which standard applies to which application, and what determines which one I need?

Panic Applications - Conforming to EN 1125

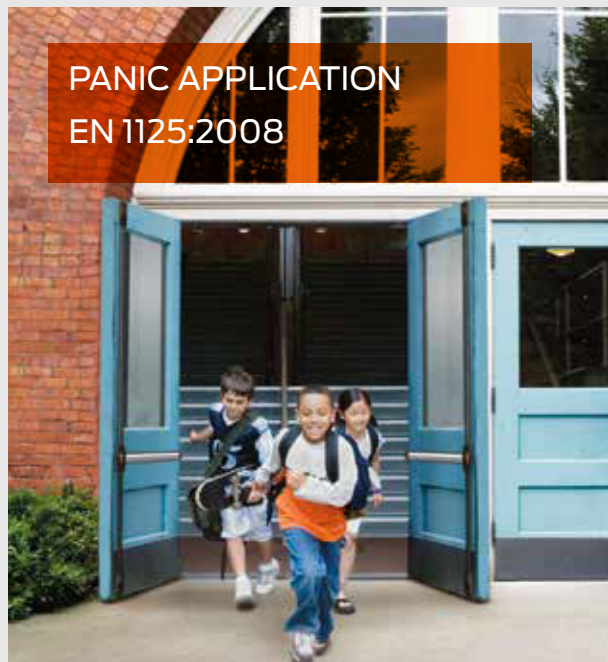
A 'panic' application is where the exit door is used by members of the public and must provide “safe and effective escape through the doorway with minimum effort and without prior knowledge of operation”.

Typical applications include:

- Shops
- Schools
- Hospitals
- Theatres and Cinemas

According to EN1125 the length of the panic exit device should be as near as possible the effective width of the opening and not less than 60% of the width of the opening.

PANIC APPLICATION EN 1125:2008



Emergency Applications - Conforming to EN 179

An 'emergency' application is where the exit door is in a low occupancy environment and will only be used by trained personnel, such as in a place of work never accessed by the public or people unfamiliar with the escape drill.

Typical applications include:

- Offices
- Private Flats & Apartments
- Store Rooms & Boiler Rooms

Products used in emergency applications require only a single point of operation e.g. pushpads or levers.

EMERGENCY APPLICATION EN 179:2008



EN 1125 & EN 179

Physical characteristics of type, operation and performance of hardware for use on panic and emergency exit doors is tested/assessed in accordance with EN 1125 and EN 179. This produces a 10 digit classification code which allows comparison between different products that conform to the standard. The testing and assessment criteria are the same for both standards, with the exception of digit 9 which identifies different types of operation between the 2 standards. This is shown in the example below.

	Scope	Grades
3 3	Category of use Defines frequency of use	Grade 3 - High frequency of use by public or others with little incentive to take care and with a high chance of misuse - eg. public doors
7 6-7	Durability Performance testing of the product through various cycle tests.	Grade 6 - 100,00 test cycles Grade 7 - 200,00 test cycles
6 5-7	Door mass & closing force The mass of the door that the product can suitably be used on	Grade 5 - Doors up to 100kg Grade 6 - Doors up to 200kg Grade 7 - Doors over 200kg
B 0/A/B	Suitability for fire/smoke doors Suitability for use on fire/ smoke door assemblies having successfully completed a fire test to EN 1634.	Grade 0 - Not suitable for fire/smoke door assemblies Grade A- Suitable for smoke door assemblies Grade B - Suitable for fire/smoke door assemblies
1 1	Safety Safety category for the product type	Grade 1 - All panic and emergency exit devices have a critical safety function. Only Grade 1 is identified.
3 3-4	Corrosion resistance Level of corrosion resistance to EN 1670 Neutral Salt Spray test and operation of the product at extreme temperatures	Grade 3 - High resistance 96 hour salt spray at -20 °C to +80 °C Grade 4 - Very high resistance 240 hours salt spray at -20 °C to +80 °C
2 2-5	Security Tests the ability to release under side load	Grade 2 - Up to 1000N (EN 1125 & EN 179) Grade 3 - Up to 2000N (EN 179 only) Grade 4 - Up to 3000N (EN 179 only) Grade 5 - Up to 5000N (EN 179 only)
2 1-2	Projection of device Classifies how far the operating mechanism projects from the door face	Class 1 - Projection up to 150mm Class 2 - Projection up to 100mm
A A/B	Type of operation Defines the type of operation Note; EN 1125 and EN 179 have specific operating types	EN 1125 Type A - 'push bar' operation Type B - 'touch bar' operation EN 179 Type A - 'lever handle' operation Type B - 'push pad' operation
A A-C	Field of door application Configuration of doors which the unit will satisfy	Class A - Single/double door, active or inactive leaf Class B - Single door only Class C - Double door only, inactive leaf only Class D - Single door, inward opening (EN 179 only)

Panic Hardware – Testing



It is mandatory for manufacturers to mark all panic and emergency exit devices with the new CE classification to prove compliance with the latest standards.

To be sure exit hardware meets the CE mark criteria it should meet all of the requirements listed below:

1. - CE certificates are readily available for inspection.
2. - Products are regularly tested within an accredited testing facility as part of an ongoing audit test programme.
3. - Products are manufactured on a production line that has been inspected and accredited under FPC (Factory Process Control) conditions, a further requirement of the CE marking process. This ensures that correctly specified materials and manufacturing methods are consistently employed.
4. A Declaration of Performance is available providing information on the performance of the product.



Testing and CE Marking

Rigorous testing is continually being carried out on the Foris range of exit hardware providing peace of mind for specifiers, distributors, installers and users.

Low operating force

Repeatedly tested to operate at 50% lower than the standard requirement, ensuring that the door can be operated with minimum force, for example by small children, the elderly and people with special needs.

Two tests are undertaken. The first is to operate the door with a maximum force of 80 Newtons.

The second test simulates a panic situation whereby the door is put under 1000 Newton pressure to simulate a group of people pushing against the door.

The operating force on the device with this weight should not exceed 220 Newtons.

Abusing the push bar

The push bar is attacked with a force equivalent to a 16 stone man (1000 Newtons) pulling/pushing it in all directions and standing on it, after which the bar must still operate.

Cycle testing

All Foris panic devices exceed the highest requirement of 200,000 cycles, ensuring durability for everyday use.

The finger trap test

To reduce the risk of trapping fingers and/or the blocking of the panic device, any gap shall not trap a test rod of 10mm dia. at any position of the bar travel during the operation of the panic device.

Abusing the bolt

Testing the bolt strength involves the equivalent of the combined strength of 4 people trying to pull the bolt away from the door.

An attempted break-in is simulated to test the security of the bolt, force is applied to the anti-thrust device as if the bolt were being 'jimmied' out of its socket.

Corrosion resistance

A test which measures how suitable the exit device is for varying environmental conditions. All Foris exit hardware has been tested to EN 1670 Building Corrosion Requirements and has achieved at least grade 3 (high resistance) and the Foris FS560-570 Series grade 4 (very high resistance). This ensures the product will function correctly in wet, polluted and exterior environments. Note, EN 1670 test does not relate to the finish.

FS570 Series – Modular Panic Exit Solutions

FS570 panic exit devices have been designed to offer modular solutions for mid to high end specification, providing a combination of style, safety and optimum security. The low projection touch bar device can be used independently to provide single point latching or with additional optional modular locking elements to provide multi-point latching. The FS570 Series is a technologically advanced system and with proven performance and reliability it is suitable for all heavy traffic applications.



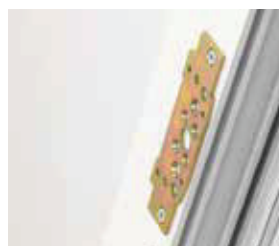
Primary options

The modular nature of the FS570 Series requires a number of options to be selected. Options include:

- Select optional pullman latch kits for top/bottom/side and intermediate latch positions for multi-point latching
- FS571.EL unit available with electric latch retraction for use with access control for external access
- FS570 also available to operate mortice nightlatch
- Available in a range of finishes
- Optional hold-back and alarm functions

Principal Features & Benefits

- Robust construction
- Suitable for doors with a minimum clear opening width down to 500mm. This can be reduced to 350mm where side latches are not required.
- Unique assembly which reduces installation time by as much as 50%
- Easy-to-use self adhesive Accufit templates and backplates for panic devices and pullman latches
- Units can be cut down on-site to suit door width
- Patented Fast-Fix cable system replaces conventional vertical rods connecting operating units and pullman latches
- Fine adjustments of the cable system are possible in-situ for maximum accuracy during installation
- Quick and simple snap on covers



Touch bar

At the heart of the system is the low projection Touch Bar activation device. Each device can be used on its own to provide single point latching or with the addition of universal pullman latches for multi-point latching.

Pullman latch kits

Pullman latches provide a smooth and quiet closing action, ideal for interconnecting doors in highly populated areas.

Available as top/bottom or side acting latches where installation of the striker to the floor is not practical.

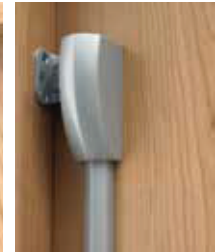
In all cases the pullman latch is connected to the Touch bar activation device using a stainless steel cable which is fully concealed beneath extruded cover channels.



Additional side pullman latches (right) can be added to the system. These can be used at any position above or below the activation device to produce 4 point latching on a single door.



A - Top Pullman



B - Upper Side Pullman



C - Bottom Pullman



D - Lower Side Pullman

Security

The anti-thrust device in the latch and pullmans prevents unauthorised retraction of the latches. This provides a high level of security from outside particularly when combined with multi-point latching.

Testing & Certification

CE marked to EN1125 (AAA1588)

Fire tested to EN1634 on timber doors to achieve a 2 hour fire rating.



What's in the box?

- Touch bar panic operator
- Accufit template and mounting backplate
- Standard strike plate for single rim latch
- Fixing pack
- Installation instructions

** Pullman latch kits are to be ordered separately

Foris

Exit Hardware

FS570 Series – Modular Touch Bar Exit Solutions



FS571.1 and FS571.2
One Point Latching



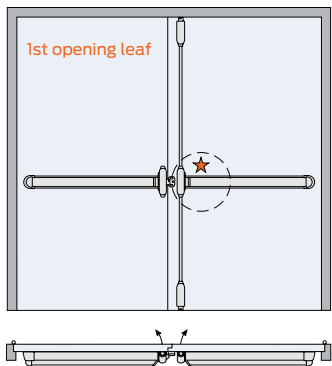
FS571 + FS574.V
Two*/Three Point Latching
* central latch can be disabled during installation



FS571 + FS574.S
Two*/Three Point Latching
* central latch can be disabled during installation

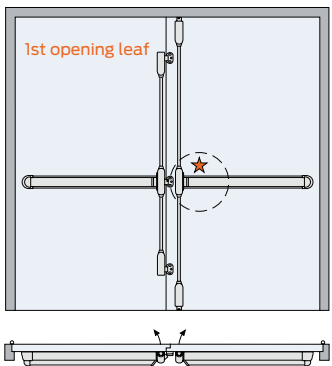
Foris FS570 Series - Double door applications

3 point latching - rebated doors



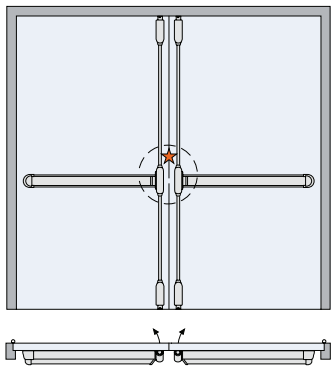
Part No.	Part No.
Foris FS571*	Foris FS571*
	Foris FS574.V

5 point latching - rebated doors



Part No.	Part No.
Foris FS571*	Foris FS571*
Foris FS574.S	Foris FS574.V

4 point latching - non rebated doors



Part No.	Part No.
Foris FS571*	Foris FS571*
Foris FS574.V	Foris FS574.V



FS571 + FS574.VS.R(handed)

Two*/Three Point Latching

* central latch can be disabled during installation



Foris FS574.AS additional side pullman latches can be added to any of the systems to provide an additional latching point.



A range of components is available to provide additional functionality to the Foris FS570 Series.

Finishes

Foris FS570 exit hardware is available in a choice of finishes with options for the push bar and optional pullman latch kits.



Outside Access

A series of outside access devices is available for use with any of the Foris FS570 Series exit devices. They provide a simple means of accessing the door from the outside by cylinder or digital push button code lock.



FS573.N - Touch Bar Exit Solution with Mortice Nightlatch



Foris FS573.N is a touch bar panic exit operator designed specifically for use with the mortice nightlatch supplied.

Features & Benefits

- Fully compliant with EN 1125 and CE marked
- Supplied with cylinder mortice nightlatch with anti-thrust feature to prevent manipulation of the latch when the door is closed
- Nightlatch accepts euro profile or oval profile cylinders (not supplied)
- Complete with steel box striker
- Alarm micro switch option available
- Reversible on site for left or right hand doors
- Touch bar and vertical cable covers can be cut on site to suit door width and height
- Grip function on touch bar to allow the door to be pulled closed
- Touch bar device is available in 2 lengths to suit doors up to 840mm and 1200mm wide
- Suitable for doors with a minimum clear opening width down to 500mm. This can be reduced to 350mm where side latches are not required

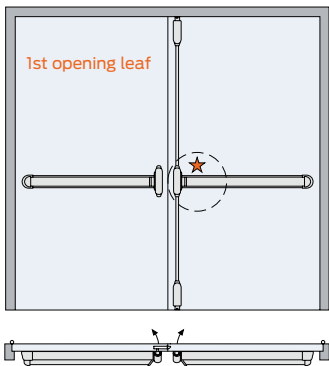
FS573.N.1 and FS573.N.2

Mortice Nightlatch



Foris FS573.N - Double door applications

Two point latching



■ The latch must be disabled when used as part of this double door configuration.

Part No.	Part No.
Foris FS573.N.1 or FS573.N.2	Foris FS571.1 or FS571.2
	Foris FS574.V

Specify FS573.N.1 for 1200mm wide or FS573.N.2 for 840mm wide doors

FS571.EL – Electromechanical Exit Device

The Foris FS571 EL electronic panic exit device combines the mechanical features and benefits of the standard FS570 Series touch bar panic exit hardware with electronic motorised control.

It presents innovative methods for opening doors, selecting access rights, providing open control, freedom and flexibility, including hierarchical authority and timings.



Features & Benefits

- Fully compliant with EN 1125 and CE marked
- Non handed
- Suitable for doors from 1200 mm to 600 mm (with the same device)
- Suitable for use also with existing access control system
- Warning buzzer
- Timed latch withdrawal after opening, adjustable from 3 to 30 second
- Electronic dogging possible
- Protective anti-bacterial coating applied

The Foris FS571EL electronic panic exit device can be integrated with a wide range of electronic access control systems including the SimonsVoss and CISA access control options. This provides convenient and controlled access from the outside by pin code or contactless proximity reader, transforming emergency exit doors into effective "smart" entrances.

It is ideal for high footfall buildings such as schools, offices and hospitals, where many employee and staff entrances will also be one of the fire exits the building.

Technical Features

- Low power usage
- Power supply AC 12-20V (50/60 Hz), DC 12-24V
- Absorbed current (max) 1.5 A (12Vdc)
- Absorbed current (stand by, OUT1-OUT2 not connected) 5mA (12Vdc)
- Length of connecting cable 4 m
- Degree of protection IP20
- Operating temperature: -10 - +50°C
- Recommended power supply equal to or above 15 VA (not provided)



FS570 Series – Modular Push Bar Exit Solutions

Device Type	FS571.1 & FS571.2	FS573.N.1 FS573.N.2	FS571.EL	FS574.V	FS574.S	FS574.VS.L	FS574.VS.R	FS574.AS
Panic exit device to EN 1125	■	■	■					
Suitable for use with pullman latch kits	■		■					
Single point latching	■	■	■					
Min./Max. door width (mm)	500 1300	500 1300	500 1300	n/a	n/a	n/a	n/a	n/a
Max. door height (mm)	n/a	n/a	n/a	2500	n/a	2500	2500	n/a
Pullman latch kit top/bottom				■				
Pullman latch kit side acting					■			■
Pullman latch kit - combination top/side						■	■	
Features								
Motorised latch retraction			■					
Mortice nightlatch operation		■						
Touch bar/push bar cut on-site	■	■	■					
Fast-Fix cable system				■	■	■	■	■
Vertical cable cover cut on-site				■	■	■	■	■
Self handed	■	■	■	■	■			■
Handed - specify when ordering						■	■	
Alarmed (accessory)	□		□					
Dogged hold-open facility (accessory)	□		□					
CE Classification								
377B1422BA	■	■	■					

Construction

The main and end casings are steel components, mounted on a steel chassis and covered by a precision zinc die-cast cover.

The steel latch is activated by an extruded aluminium touch bar enclosed in an extruded aluminium channel.

Locking kits (FS574.V/FS574.S/FS574.VS/FS574.AS)

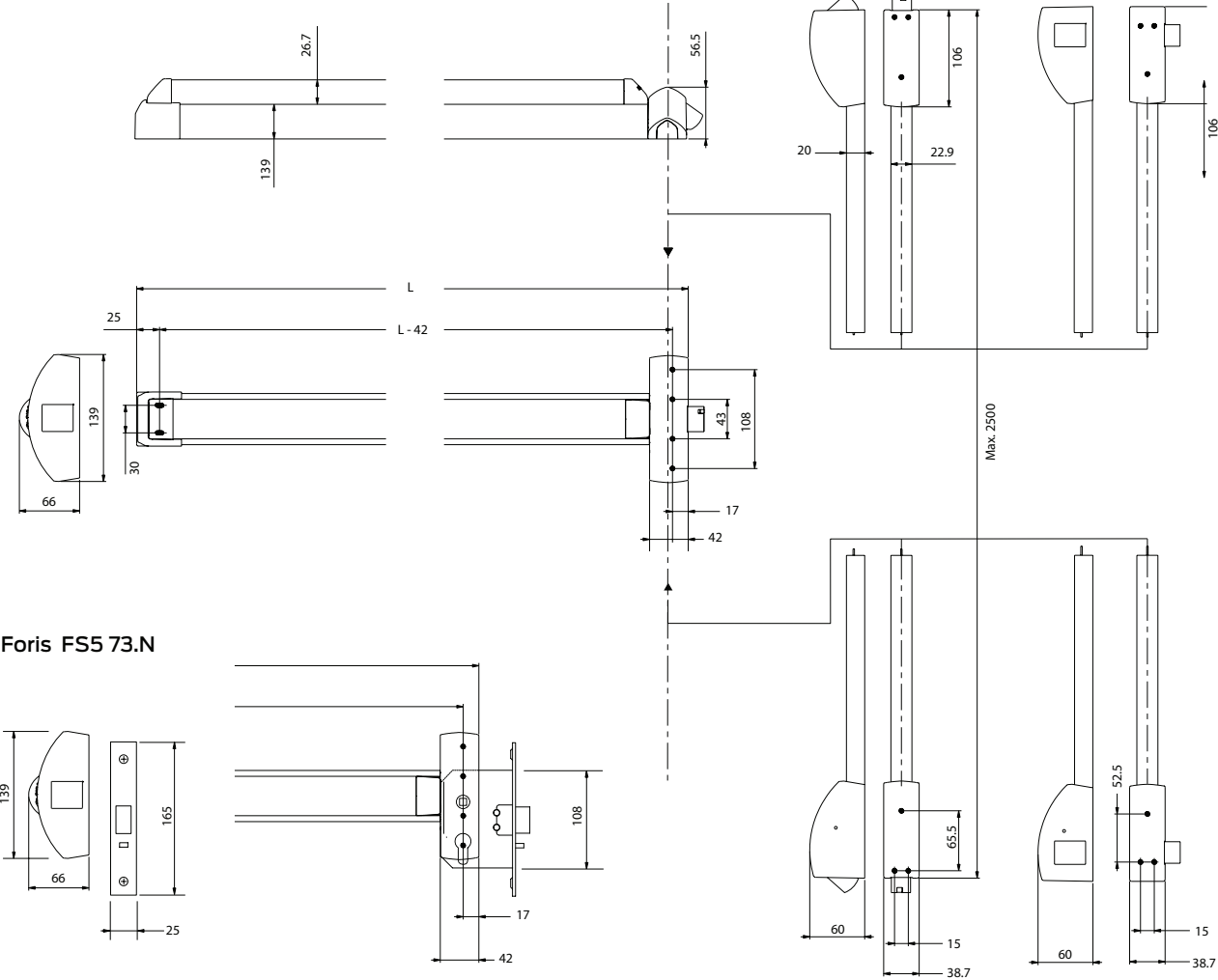
The locking points are constructed of steel components mounted on a steel chassis incorporating a steel latch. Connection to the push bar or touch bar device is via an adjustable stainless steel cable concealed by an extruded aluminium cover.

Fixing/installation

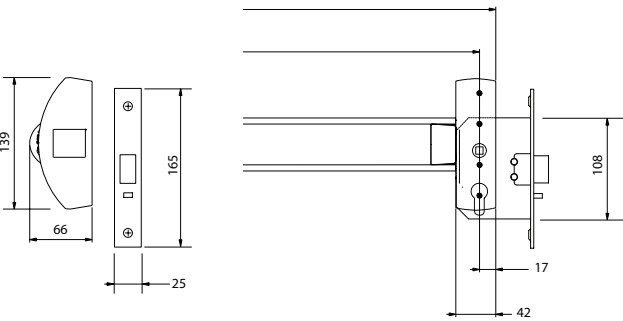
These surface mounted devices come complete with easy to follow pictorial fixing instructions. Self adhesive Accufit templates ensure accurate installation of backplates for mounting the operating mechanism and pullman latches. Mechanisms are clamped onto the backplates. Flexible steel cables connecting the operating mechanism to the pullman latches require no measuring and adjustment screws in the main unit allow for fine adjustments. Clip on covers to the main unit and pullmans complete the installation.

The devices are supplied with adjustable strikers with packers to ensure continued optimum performance. Fixing and maintenance instructions must be passed on to the user upon completion of installation.

Foris FS571 and FS571EL



Foris FS573.N



all dimensions are in mm

Product Ref:	Description	Finishes
FS571.1	Touch bar exit device for doors from 840 to 1200mm wide	
FS571.2	Touch bar exit device for doors from 500 to 840mm wide	
FS573.N.1	Touch bar exit device with mortice nightlatch - for doors from 840 to 1200mm wide	SE; SES; SS; SSS; PS;
FS573.N.2	Touch bar exit device with mortice nightlatch - for doors from 500 to 840mm wide	PB;
FS571.EL.1	Touch bar exit device with motorised latch retraction for doors from 840 to 1200mm wide	
FS571.EL.2	Touch bar exit device with motorised latch retraction for doors from 500 to 840mm wide	
FS574.S	Pullman latch kit with upper and lower side acting latches - suit left and right hand doors	
FS574.VS.L	Pullman latch kit with one top and one lower side acting latch - left hand	
FS574.VS.R	Pullman latch kit with one top and one lower side acting latch - right hand	SE; BM; SS
FS574.V	Pullman latch kit with upper and lower vertical acting latches - suit left and right hand doors	
FS574.AS	Additional side acting pullman latch kit - can be inserted above or below the exit device	

FS570 Series – Accessories

Access Control Accessories - For Foris FS571.EL only

The Foris FS571 EL can be used in conjunction with CISA and SimonsVoss access control systems with the PinCode keypad, transponder or card reader as the electronic key.

FSS V.MK.TRA.PINCODE

Foris Pin Code Keypad



FSSV.MK.SREL2.ZK.G2.W

Foris Digital SmartRelay



FS 06525-75-0

Foris Access Control Keypad



FSSV.MK.TRA2.G2

Transponder



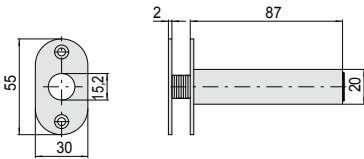
FSSV.MK.CD.STARTER.G2

Foris USB programming device



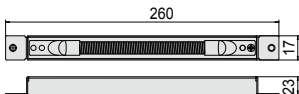
FS06515-00-0

Foris Concealed Door Spring



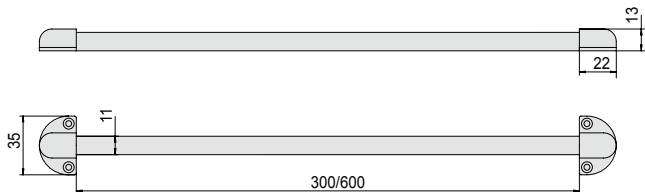
FS06515-15-0

Foris Concealed Door Loop - 260mm



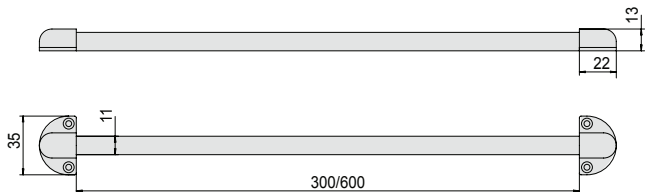
FS06515-20-0

Foris Door Loop - 300mm



FS06515-21-0

Foris Door Loop - 600mm



Foris FS576.RE

The top rod extension kit is designed for use on doors that require the push bar to be in a lower position e.g schools. It can also be used on doors up to 3350mm high, however doors over 2500mm high are outside the scope of EN 1125.

Finish: silver or matt black



Alarm switch kits

Allow standard models to be connected to electronic audio/visual alarm or door control systems giving immediate notification when the panic device is operated.

The switch is mounted in the end box of the standard panic operator.



FS576.AK

Alarm switch kit for all Briton 570 Series devices

Dogging device (hold-open) kits

These units allow standard models to be upgraded to permit free access when required.

The manual hold-open function is operated by a key and holds all latches in the withdrawn position.



FS576.DK

Dogging device kit (not suitable for Briton 573.N)



Foris FS574.STE

Easy clean socket for use with lower pullman



Foris FS574.STP

Adjustable strike for use with top or side pullmans fitted to PVCu frames with a projection of 14 - 24mm.

FS

Product Ref:	Accessories	Finishes
FS576.RE	Extension for top pullman to suit doors up to 3350mm (not covered by CE) - for all FS570 Series	SE: BM; SSS-PVD
FS576.AK	Alarm kit for Foris FS570 touch bar device - for all FS570 Series	n/a
FS576.DK	Dogging kit to hold the latch(es) in the retracted position - not suitable for FS573.N	SE: BM
FS574.STE	Easy clean floor socket for bottom pullman - for all FS570 Series	BM
FS574.STP	Strike for use with PVCu frames - suits top or side pullan latches - for all FS570 Series	BM
FSSV.MK.CD.STARTER.G2	MobileKey USB programming - For use with Foris FS571.EL units only	
FSSV.MK.TRA.PINCODE	MobileKey PinCode keypad - For use with Foris FS571.EL units only	
FSSV.MK.TRA2.G2	MobileKey transponder - For use with Foris FS571.EL units only	
FSSV.MK.SREL2.ZK.G2.W	MobileKey Digital SmartRelay - For use with Foris FS571.EL units only	
FS06515-00-0	Access control keypad - For use with Foris FS571.EL units only	
FS06515-15-0	Concealed door spring	
FS06515-20-0	Concealed door loop to transfer power cable from FS571.EL to door frame	
FS06515-21-0	Surface door loop (300mm) to transfer power cable from FS571.EL to door frame	
FS06525-75-0	Surface door loop (600mm) to transfer power cable from FS571.EL to door frame	

FS560 Series – Modular Panic Exit Solutions

FS560 panic exit devices have been designed to offer modular solutions for mid to high end specification, providing a combination of style, safety and optimum security. The push bar device can be used independently to provide single point latching or with additional optional modular locking elements to provide multi-point latching. The FS560 Series is a technologically advanced system and with proven performance and reliability it is suitable for all heavy traffic applications.



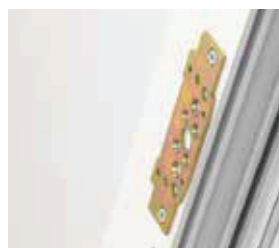
Primary options

The modular nature of the FS560 Series requires a number of options to be selected. Options include:

- Select optional pullman latch kits for top/bottom/side and intermediate latch positions for multi-point latching
- End covers, operating arms and push bars are available in a range of finishes
- Optional hold-back and alarm functions

Features & Benefits

- Robust construction
- Suitable for doors with a minimum clear opening width down to 500mm. This can be reduced to 350mm where side latches are not required.
- Unique assembly which reduces installation time by as much as 50%
- Easy-to-use self adhesive Accufit templates and backplates for panic devices and pullman latches
- Units can be cut down on-site to suit door width
- Patented Fast-Fix cable system replaces conventional vertical rods connecting operating units and pullman latches
- Fine adjustments of the cable system are possible in-situ for maximum accuracy during installation
- Quick and simple snap on covers



Touch bar

At the heart of the system is the Push Bar activation device. Each device can be used on its own to provide single point latching or with the addition of universal pullman latches for multi-point latching.

Pullman latch kits

Pullman latches provide a smooth and quiet closing action, ideal for interconnecting doors in highly populated areas.

Available as top/bottom or side acting latches where installation of the striker to the floor is not practical.

In all cases the pullman latch is connected to the push bar activation device using a stainless steel cable which is fully concealed beneath extruded cover channels.



Additional side pullman latches (right) can be added to the system. These can be used at any position above or below the activation device to produce 4 point latching on a single door.



A - Top Pullman



B - Upper Side Pullman



C - Bottom Pullman



D - Lower Side Pullman

Security

The anti-thrust device in the latch and pullmans prevents unauthorised retraction of the latches. This provides a high level of security from outside particularly when combined with multi-point latching.

Testing & Certification

CE marked to EN1125 (AAA1589)

Fire tested to EN1634 on timber doors to achieve a 2 hour fire rating.



What's in the box?

- Push bar panic operator
- Accufit template and mounting backplate
- Standard strike plate for single rim latch
- Fixing pack
- Installation instructions

** Pullman latch kits are to be ordered separately

FS581 Series – Modular Push Pad Exit Solutions

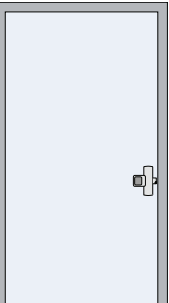
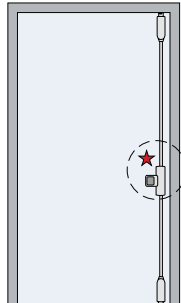
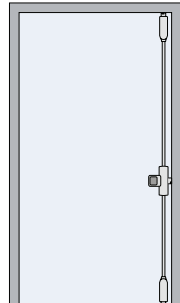
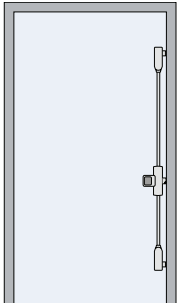
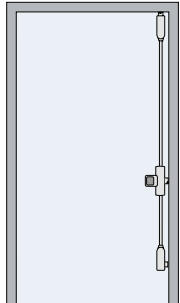





For use in areas which will only be used by trained personnel

Principal Features & Benefits

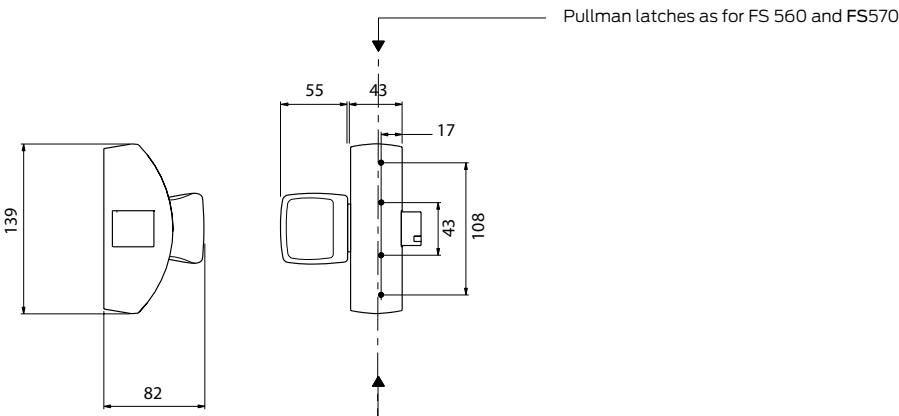
- Fully compliant with EN 179 for emergency exit applications only
- Non handed
- Suitable for single doors and in combination on double doors
- Can be used as a single rim latch device or in conjunction with pullman latch kits for multi-point latching
- Very high corrosion resistance
- Security Grade 5 - 5000N side load



FS 581 - Single door applications

Single latch	2 point latching	3 point latching	3 point latching	3 point latching															
																			
																			
<table><tr><th>Part No.</th></tr><tr><td>FS581</td></tr><tr><td></td></tr></table>	Part No.	FS581		<table><tr><th>Part No.</th></tr><tr><td>FS581</td></tr><tr><td>FS574.V</td></tr></table>	Part No.	FS581	FS574.V	<table><tr><th>Part No.</th></tr><tr><td>FS 518</td></tr><tr><td>FS 574.V</td></tr></table>	Part No.	FS 518	FS 574.V	<table><tr><th>Part No.</th></tr><tr><td>FS 581</td></tr><tr><td>FS 574.S</td></tr></table>	Part No.	FS 581	FS 574.S	<table><tr><th>Part No.</th></tr><tr><td>FS 581</td></tr><tr><td>FS 574.VS.L</td></tr></table>	Part No.	FS 581	FS 574.VS.L
Part No.																			
FS581																			
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FS574.V																			
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FS 574.V																			
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FS 581																			
FS 574.VS.L																			

Modular emergency exit solutions offering multi-point latching

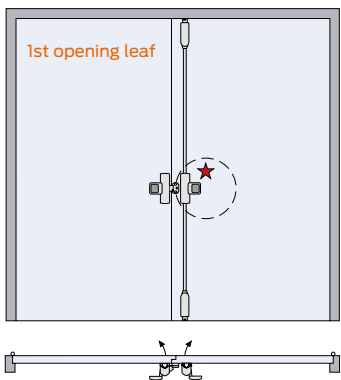


all dimensions are in mm

Product Ref:	Description	Finishes
FS581	Push pad emergency exit device to EN 179	SE; BM
FS574.S	Pullman latch kit with upper and lower side acting latches - suit left and right hand doors	
FS574.VS.L	Pullman latch kit with one top and one lower side acting latch - left hand	
FS574.VS.R	Pullman latch kit with one top and one lower side acting latch - right hand	SE; BM; SS
FS574.V	Pullman latch kit with upper and lower vertical acting latches - suit left and right hand doors	
FS574.AS	Additional side acting pullman latch kit - can be inserted above or below the exit device	

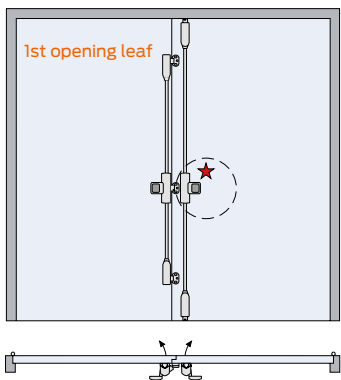
FS 581 - Double door applications

3 point latching - rebated doors



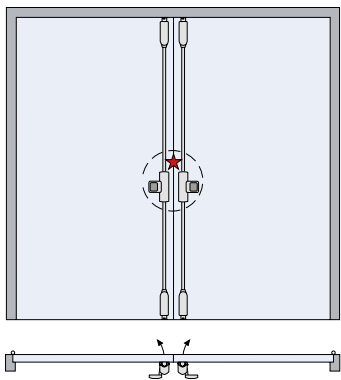
Part No.	Part No.
FS 5 81	FS 5 81
	FS 574.V

5 point latching - rebated doors



Part No.	Part No.
FS 5 81	FS 5 81
FS 574.S	FS 574.V

4 point latching - non rebated doors



Part No.	Part No.
FS 5 81	FS 5 81
FS 574.V	FS 574.V

Foris FS560, FS570 & FS581 – Outside Access

A series of outside access devices which can be used with the Foris FS560, FS570 and FS581 Series panic and emergency exit devices. They provide a simple means of accessing the door from the outside.

- Designed to suite with all Foris CE compliant exit devices
- Suitable for doors 40mm to 70mm thick
- Fixings suitable for timber & metal doorsets
- Powder coated for additional durability – silver, gold and brown bronze
- Choice of plated finishes – satin stainless steel, polished stainless steel and polished brass
- Illustrated instructions and template enabling accurate installation



Foris FS1413.KE – knob variant

- Ergonomic design providing improved grip in wet conditions.
- Supplied with euro-profile standard differ cylinder
- Keyed-alike or master-keyed cylinder options available
- Optional key retention
- Non-handed
Note: not recommended for high use areas

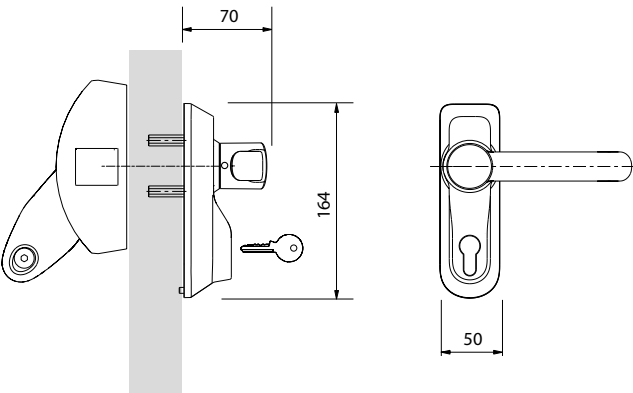
Foris FS1413.LE – lever variant

- Anti vandal design with clutch mechanism allows the lever to rotate when the unit is locked
- Site reversible lever provides good grip and easy action
- Easy retrofit on existing Foris FS1413E models
- Supplied with euro-profile standard differ cylinder
- Keyed-alike or master-keyed cylinder options available
- Cylinders can be incorporated into existing masterkey systems
- BS 8300 compliant lever
Optional key retention

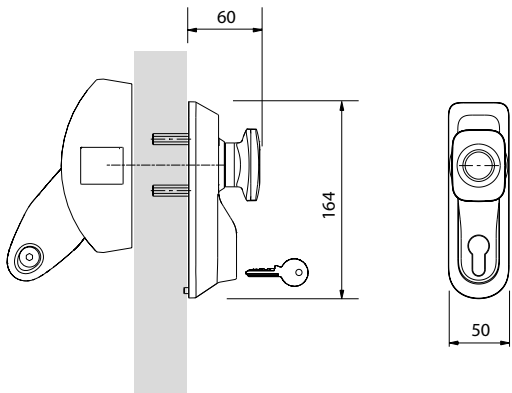
Foris FS9260 digital code lock

- Digital code lock option has over 2047 non sequential code options
- Supplied with extra long spindles for use with Briton exit devices
- Reversible lever operation for left or right hand applications
- Code changed by removing the unit from the door
- Not suitable for use with 389.N

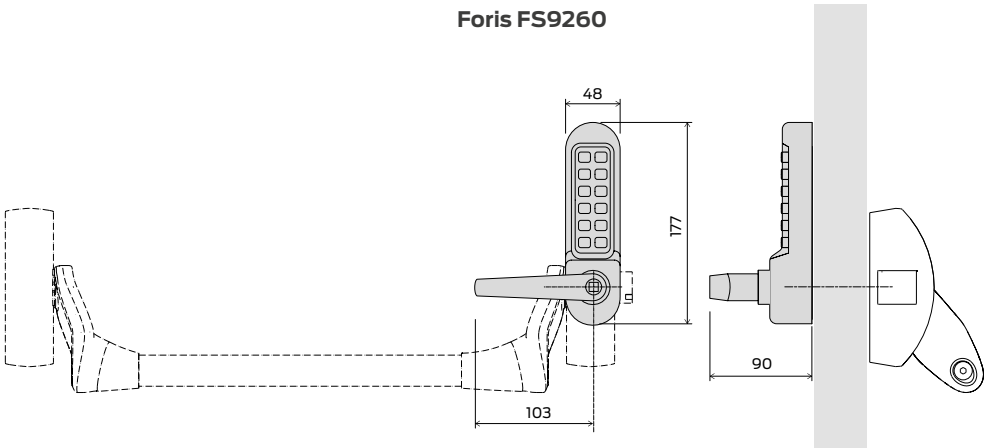
Foris FS1413.LE



Foris FS1413.KE



Foris FS9260



all dimensions are in mm

Device Type	FS561	FS571	FS571.EL	FS573.N	FS581
Foris FS1413.KE	■	■		■	■
Foris FS1413.LE	■	■		■	■
Foris FS9260	■	■		■	■
Electronic access control*			■		

* A series of SimonsVoss and CISA access control is available for use with the Foris FS571.EL motorised panic exit device.

Access Control – Introduction

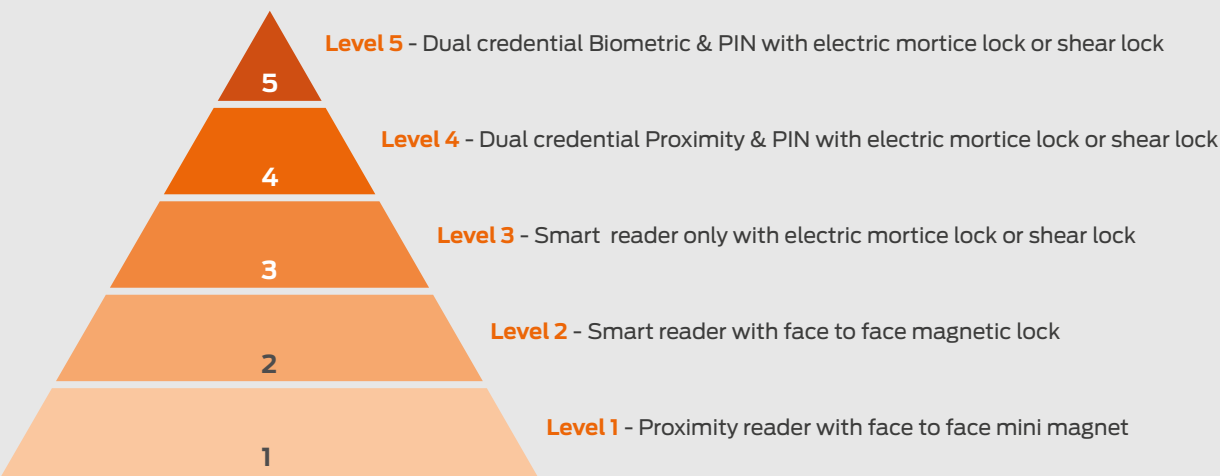
Combining electronic validation and electric door locking

Take security to the next level

From schools and hospitals, to government facilities, offices and a host of other commercial buildings, our electronic security solutions deliver innovative, yet practical solutions ranging from programmable electronic locks to wireless access control devices, biometrics and smartcard solutions. Our electronic solutions are designed to grow with you, providing exactly the level of security you need wherever you need it and can be integrated into virtually any access control or other software system on the market today.

Performance Levels

Multiple security levels are possible to suit all types of application and budget.



Features & Benefits

- Extruded aluminium housing with adjustable mounting bracket for quick and simple installation
- Holding forces of 270kg and 545kg per leaf
- Suitable for single swing doors
- All units are “fail unlocked” providing safe exit in the event of power failure or an emergency when interfaced to a fire alarm output
- Monitored and unmonitored versions where indicated
- Door status monitor (DSM) indicates when a door is open or closed when monitored remotely
- Steel armature is fixed through the door for a secure mounting
- Mortice version is designed for installation into architectural housings, either horizontal or vertical

Specification

- Voltage - 12v or 24v DC (all models)
- Current draw
9501/9502/9551/9552
500mA @ 12v DC
250mA @ 24v DC
- Current draw 9560
480mA @ 12v DC
240mA @ 24v DC



Face to face magnet for use on double doors

Testing & Certification

CE marked to EN61000 for Electromagnetic compatibility Directive 2014/30/EU



What's in the box?

- Electromagnetic lock
- Armature plate
- Lock mounting screws and armature mounting bolts
- Installation instructions

FS9500 Series – Electromagnetic Locks



FS9501

Single face to face magnet
Holding force 544kg
Unmonitored
Dimensions (H x L x D) 73 x 266 x 40



FS9502

Double face to face magnet
Holding force 544kg per leaf
Unmonitored
Dimensions (H x L x D) 73 x 532 x 40

FS9501.M

Single magnet
Holding force 544kg
Door Sense Monitor indicates when door is open or closed
Dimensions (H x L x D) 73 x 266 x 40

FS9502.M

Double magnet
Holding force 544kg per leaf
Door Sense Monitor indicates when door is open or closed
Dimensions (H x L x D) 73 x 532 x 40



FS9551

Single face to face 'mini' magnet - unmonitored
Holding force 227kg
Dimensions (H x L x D) 42 x 250 x 25



FS9552

Double face to face 'mini' magnet - unmonitored
Holding force 227kg per leaf
Dimensions (H x L x D) 42 x 500 x 25

FS9551.M

Single face to face 'mini' magnet - monitored
Holding force 544kg
Door Sense Monitor indicates when door is open or closed
Dimensions (H x L x D) 42 x 250 x 25

FS9552.M

Double face to face 'mini' magnet - monitored
Holding force 544kg per leaf
Door Sense Monitor indicates when door is open or closed
Dimensions (H x L x D) 42 x 500 x 25



FS9560

Mortice mounted face to face magnet

Holding force 270kg

Unmonitored

Dimensions (H x L x D)

Magnet 37.5 x 228 x 26

Armature 37.5 x 186 x 12



FS9501.ZL and FS9551.ZL

A series of Z and L brackets for use with surface mounted magnets.

Technical specification	Product ref:		
	FS9501/FS9501M	FS9551/FS9551M	FS9560
	FS9502/FS9502M	FS9552/FS9552M	
Holding force	544kg per leaf	227kg per leaf	270kg
Voltage	12 or 24V DC	12 or 24V DC	12 or 24V DC
Current draw	500mA @ 12V DC	500mA @ 12V DC	480mA @ 12V DC
	250mA @ 24V DC	250mA @ 24V DC	240mA @ 24V DC

Product ref.	Function/description	Finish
FS9501	Standard single face to face magnet - unmonitored	.SV
FS9501M	Standard single face to face magnet - monitored	.SV
FS9502	Standard double face to face magnet - unmonitored	.SV
FS9502M	Standard double face to face magnet - unmonitored	.SV
FS9551	Single face to face 'Mini' magnet - unmonitored	.SV
FS9551M	Double face to face 'Mini' magnet - monitored	.SV
FS9552	Single face to face 'Mini' magnet - unmonitored	.SV
FS9552M	Double face to face 'Mini' magnet - monitored	.SV
FS9560	Mortice mounted face to face magnet - unmonitored	.SV
FS9560MBS	Mortice mounted face to face magnet - monitored	.SV

Product ref.	Accessories	Finish
FS9501.L	L bracket for use with FS9501/FS9502 magnets	.SV
FS9501.ZL	Z and L bracket set for use with FS9501/FS9502 magnets for use on inward opening doors	.SV
FS9551.L	L bracket for use with FS9551/FS9552 magnets	.SV
FS9551.ZL	Z and L bracket set for use with FS9551/FS9552 magnets for use on inward opening doors	.SV

FS9200 series

A range of surface applied, push face installed, electro-magnetic locks with various holding forces integral within a continuous aluminium housing channel. For single or pairs of doors installed horizontally or vertically.



Channel housing profile – 300kg = 32 x 45mm / 600kg = 40 x 73mm

FS9231 – Single leaf 300kg holding force with 1M channel for site modification

FS9232 – Double leaf 300kg (each) holding force with 2M channel for site modification

FS9261 – Single leaf 600kg holding force with 1M channel for site modification

FS9262 – Double leaf 600kg (each) holding force with 2M channel for site modification

(suffix M to reference for locked or unlocked monitor)

Features and benefits

Push face installation or pull face installation when frame fixed.

Channel housing is cut to suit opening width on site.

12Vdc at 250mA or 24Vdc at 500mA

Monitored or unmonitored options – locked or unlocked

RAL colour coat finishes available to order

Various mounting brackets available

FS9300 series

A versatile fail-safe non-handed mortice electro mechanical lock suitable for 180 degree swing door leafs that will release under-side load pressure and so can be installed on emergency exits with significant holding force.
Integral function to only lock when the door is in the closed position.



FS9300 Mortice electro mechanical lock EN1634/EN1363 fail safe

Features and benefits:

Non handed and suitable for 180 degree swing door leafs, vertical or horizontal installation

Lock and door status monitoring

650kg Holding force

225kg Release under side load pressure

BSEN1634-1 2014/BSEN1363-1 2012 FD60 and CE Marked, ROHS & WEE

12Vdc = 280mA current

24Vdc = 140mA (24Vdc available to order)

Dimensions – 200 x 25 x 41mm

FS9400 SOLIDUS

A high security mortice electro mechanical lock solution suitable for frame or door leaf installation, fire rated to FD60 and with mechanical cylinder key override. Fail locked or unlocked variants in various backset dimensions suitable for single or 180degree swing door leaves.



FS9401 – Solidus fail locked 30mm backset mortice electro mechanical lock

FS9421 – Solidus fail unlocked 30mm backset mortice electro mechanical lock

Features and benefits:-

- Non handed suitable for 180 degree swing door leaves
- Various backsets to suit narrow stiles -25/30/50mm
- Frame or door leaf installation
- Mechanical key override
- Fail secure (locked) and fail safe (unlocked) options
- Adjustable lock keep
- 20mm Throw of locking symmetrical bolt
- Monitored bolt and door leaf position

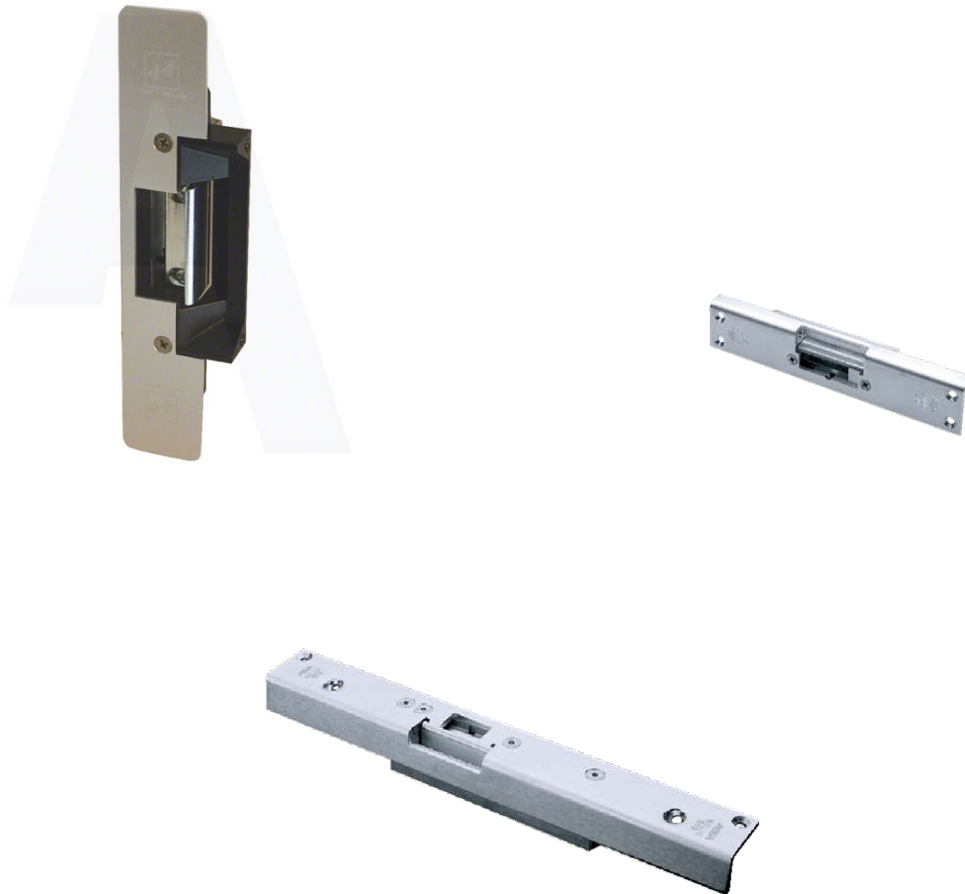
- Tested to achieve 1,000,000 operation cycles
- Resistance to 25,000 N lateral pressure
- Resistance to 15,000 N retraction force
- DIN18251 – part 1 class 5 (Highest level)
- DINEN12209 – class 7 (Highest level)

- 24Vdc stabilised, +/- 5%
- 2,0amp activation current (0.2sec)
- 130mA operating current

NOTE – manufacturer PSU and cables must be used to power this unit.

FS9100 Electronic lock strike plates

A range of electronic lock strike plates provide fail locked and fail unlocked options in various levels of security and with faceplate designs to suit various latch bolt sizes and frame details.



FS9131- Fail locked with frame wrap face plate

FS9132- Fail locked with 48mm wide jaw frame wrap face plate

FS9135 – Fail unlocked with frame wrap face plate

FS9136 – Fail unlocked with 48mm wide jaw frame wrap face plate

Features and benefits:-

Tested to 1,000,000 cycles

1500kg Holding force

FD30 EN14846 rated

Non handed

12Vdc at 300mA Fail locked / 24Vdc at 490mA Fail unlocked continuously rated

24Vdc at 160mA Fail locked / 24Vdc at 230mA fail unlocked continuously rated

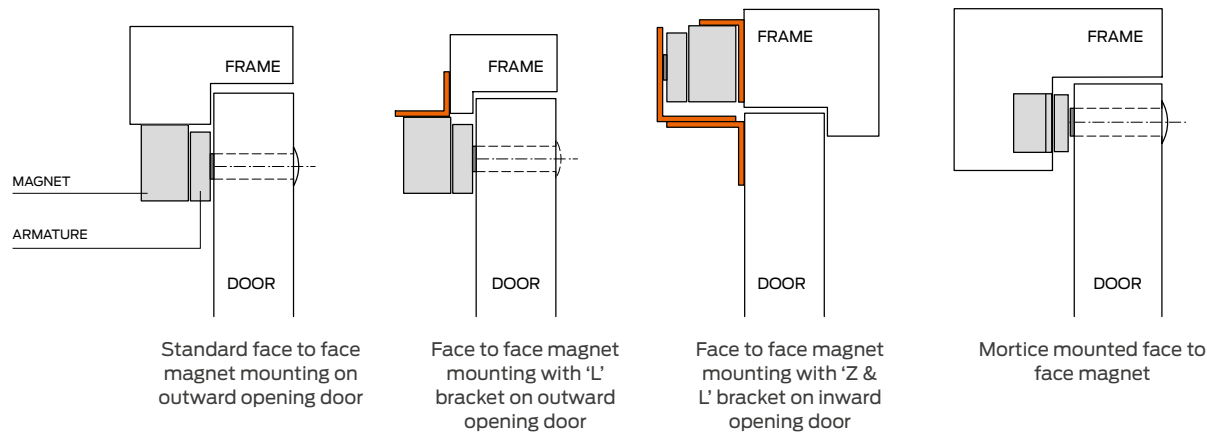
FS9500 Series – Electromagnetic Locks

The Foris FS9500 Series is a high quality range of ‘face to face’ locking devices offering up to 545kg holding force. The range includes small footprint ‘mini-mags’ for lower security applications and a mortice mounted version for use with custom made architectural housings for single or double door applications.

As standard, FS9500 Series electromagnets are suitable for outswing doors but can be converted for use on inswing doors using a series of Z and L brackets.



Installation options





Proximity Reader



Smart Reader



Multi-technology
Reader



Multi-technology
Reader



Multi-technology
Reader with
Keypad

SYSTEM 3060

DISCOVER OUR KEYLESS WORLD.



Simons Voss

Simons  Voss

Award winning electronic locking solutions

Access control gives you the power to decide who has access into and around your building. Conventional lock and key systems are a very basic form of access control and offer little protection if a key is copied, lost or stolen. Changing locks and replacing keys can be a very costly ongoing issue, which makes these systems very difficult to manage. Electronic access control simply replaces mechanical locks and keys with a fully managed secure system, eliminating the mentioned risks.

If a person's access card or transponder is lost, stolen or simply no longer required, it can easily be deleted from use without compromising any other people's access rights.

Foris develops and produces award winning electronic locking solutions that seamlessly integrate into new and existing building infrastructures.

Product Features & Benefits

- Easy installation
- Enhanced security; products operating in conjunction with the physical door lock, the most secure part of the door
- Battery operated; wireless and extremely efficient with very low maintenance
- Simple programming; in order to replace a lost or stolen card or transponder
- Audit Trail and Time Zone Management of all products
- Discreet and sympathetic design; in order to blend into any environment
- Modular and scaleable, products can be upgraded at any time
- Wireless technology; all products are capable of being managed in an IT based wireless managed system



SYSTEM3060

MANAGE ACCESS AUTHORISATIONS

SECURELY ON AN INDIVIDUAL BASIS.

Systematic protection

Hospitals, clinics and rehabilitation centres are often spread over numerous buildings with different uses. However, System 3060 can be managed from a control centre to regulate and manage which particular users may be in a particular place on different sites at any given time.

Access rules are often not fixed, but are changed on a continuous basis.

No problem for System 3060. It combines keyless locking with the functions of a modern access control system. All users are given a digital ID medium, on which their personal authorisation profile is stored. A smart card, a PinCode keypad or a special MobileKey app for smart phones is used for access. These digital media communicate with digital locking cylinders, fittings or the System 3060 SmartRelays via a wireless link. If authorisations change, the new rights are automatically transmitted to locking media by WaveNet wireless communication.

Digital Locking and Access Control System 3060 – Overview of advantages

- ⌘ World-leading solution based on state-of-the-art technology
- ⌘ Highly future-proof investment and excellent cost effectiveness
- ⌘ Robust & low maintenance
- ⌘ Easy to use
- ⌘ Retrofit additions possible while system is in operation
- ⌘ Flexible key administration:
 - add, modify or withdraw rights at any time
- ⌘ Restrict user rights in terms of place and time
- ⌘ Lost transponders or smart cards are deactivated at the click of a mouse`
- ⌘ Existing smart cards, such as employee IDs, can be used as 'digital keys.'

Digital Locking and Access Control
System 3060 shows its strengths to very good effect in the health care system.

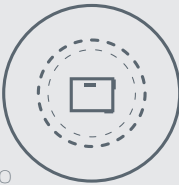
LIFTS

You can determine which floors can be accessed by lift. Is there a floor where only operating theatres are located? If so, access to the floor in question can only be activated using an authorised ID medium.



TRANSPONDER TERMINAL OUTDOORS

Obtain new or modified access authorisations from special terminals. The system administrator and users do not need to waste time contacting one another to make such changes.



MAIN ENTRANCE

Programme your system to ensure that the main entrance is automatically open for everyone during visiting hours. It can only be opened using an authorised ID medium at any other time.



ENTRANCE HALLWAYS WITH PROTECTION FUNCTION

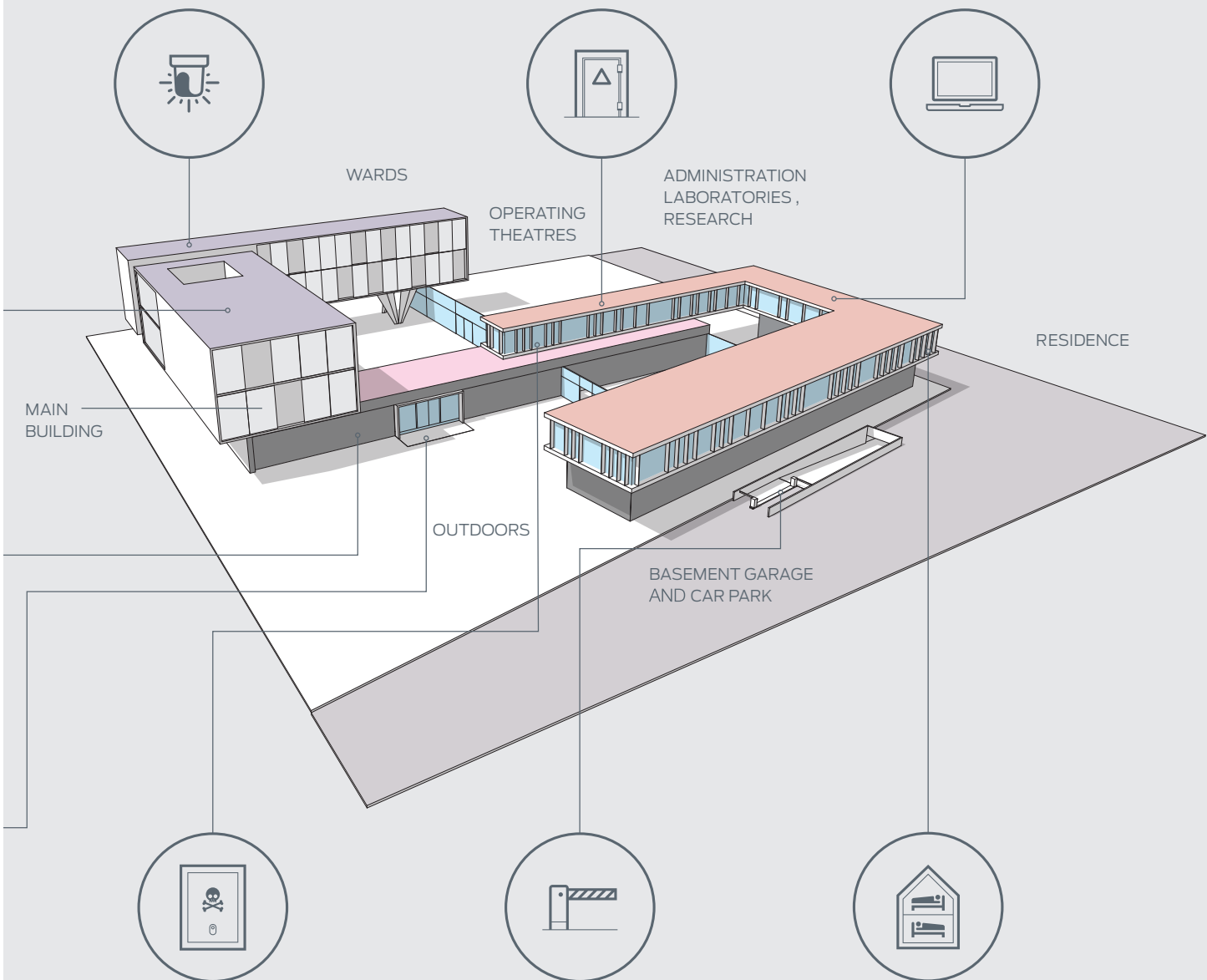
You can lock or open all doors at the press of a button in an emergency such as an attack or fire situation.

DOOR WITH DOOR MONITORING

Use locking cylinders 3061 with wireless integrated door monitoring in sensitive areas. This solution will not only indicate when a door is open for too long, but also if the door is locked and how often it is locked.

FACILITY MANAGEMENT

The Locking System Management software application allows operators to set up, operate and manage all System 3060 components. The software is available in different editions, from the basic Starter version through to LSM Professional.



HIGH AND LOW DEPENDANCY DRUG CABINETS AND LOCKERS

Fit a digital half cylinder to drug cabinets and staff and patient lockers, so that they can only be opened with an authorised ID medium. All locking transactions are fully logged.

BARRIERS

Control vehicle access authorisations to car parks and garages with a click of your mouse. You can also combine System 3060 with parking fee ticket systems for public areas.

NURSES AND DOCTORS RESIDENCES

Add access authorisations for residences to the same ID media used for the hospital.



Digital Smart Handle - 3062.SC

The Foris digital door fitting combines intelligent access control with elegant and ergonomic design. Behind its slim, flat exterior lines highly innovative technology.

- Can be used with existing Mifare SmartCards
- Battery life up to 130,000 actuations or 10 years on stand-by
- Up to 64,000 SmartCards per Smart Handle
- NFC compatible and networkable



Digital Smart Relay - 3063

The digital Smart Relay can serve as an access control reader or key switch for electrically actuated doors, gates, barriers and lifts for example.

- Winner of the Red Dot design award 2010
- NFC compatible and networkable



PIN Code Terminal - 3068

Battery operated Pin Code Terminal, integrated wirelessly in the 3060 System.

- 500 PINs
- Dual verification for use in conjunction with SmartHandle, SmartRelay or Digital Cylinder
- Time zoned PINs
- Typical read range up to 40cm (SmartHandle) or 120cm (SmartRelay)



Digital Locking Cylinder - 3061.SC

Digital locking cylinder with integrated RFID reader.

- Can be used with existing Mifare SmartCards
- Up to 64,000 SmartCards or transponders per cylinder
- Can be used with any Euro profile cylinder lock
- NFC compatible and networkable



Smart Card

Mifare Classic and Mifare DESFire standard cards.

- ISO 7816 format

Transponder 3064

Used for identification purposes in the 3060 System.

- IP65 with bonded housing IP66
- Push button activation
- Battery life of 400,000 actuations



Digital Padlocks - 3061.SC

Digital padlock with cylinder thumbturn.

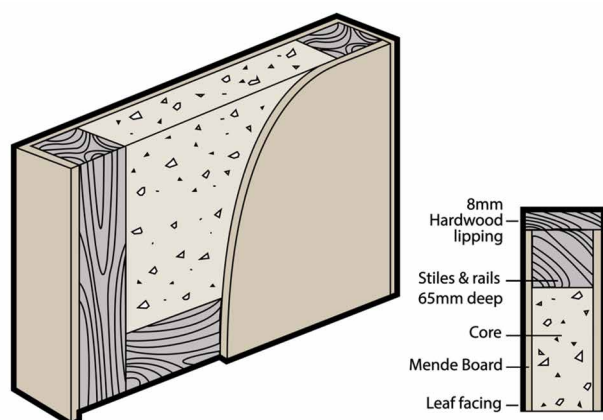
- Shackle diameter 11mm
- Self-locking and Non self-locking options
- Battery life up to 65,000 operations
- Operating temp; -25°C to +55°C
- Up to 64,000 Smart Cards per padlock
- Network ready with integrated Lock Node

SALUS Doorsets

SALUS doorsets from Foris Solutions offer a range of door openings solutions built on a robust door leaf construction and solid rebated softwood and hardwood frames - **We do not use MDF in frames or architraves.**



A SALUS door leaf is constructed from relevant FLAXCORE fire rated cores, 44mm for NFR and FD30S and 54mm thick for FD60S with client selected final finishes. The door leaf includes a perimeter softwood frame that is 65mm deep ensuring ironmongery components fixed to the edge of the leaf are installed to a positive and robust base material.

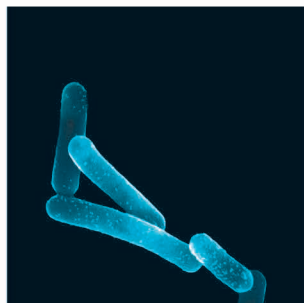
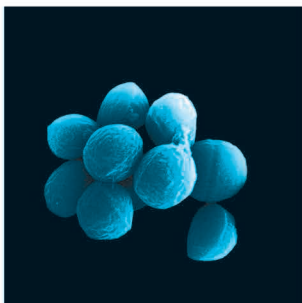
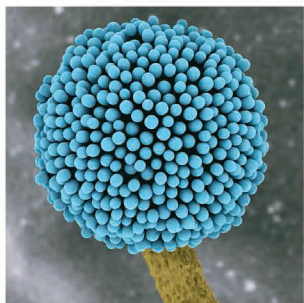


SALUS doorsets are available in various veneered finishes, high impact facings or 100% encapsulated in the high impact PVC for maximum hygiene and practical day to day maintenance in areas that require frequent and intensive cleaning.



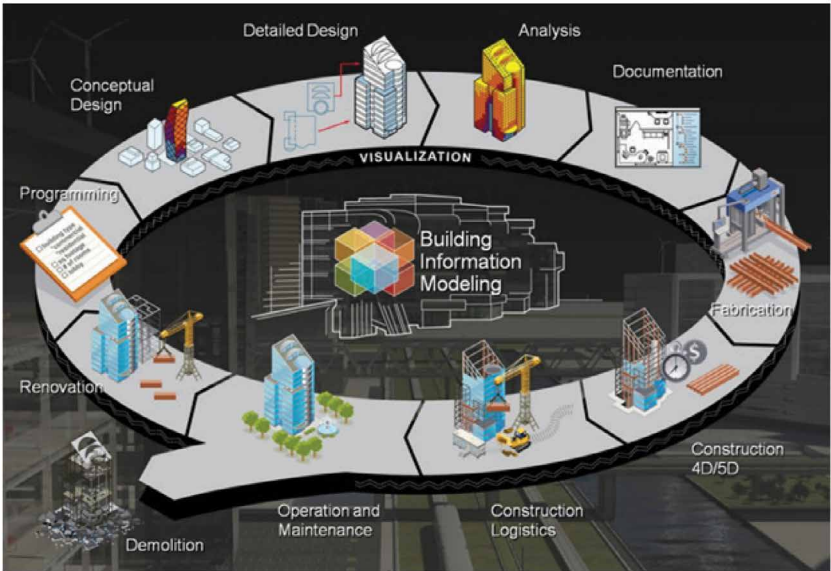
SALUS doorset finishes all include antimicrobial protection to reduce the risk of cross contamination when touched.

Veneers and paint grade doors include Hygienilac protection in the lacquer and primed paint finish. Hygienilac is an element added to the high impact resistant PVC material used to protect the face of doors or when moulded to encapsulate the door leaf, frame and architrave.



BIM Models

To compete for government centrally funded projects we've developed a range of BIM models for our prehung doorsets complete with ironmongery which can be edited in Revit by designers at any stage of the design and construction process.



'mIspec' parametrically connected data attached to each drawing can be edited in Revit – for example if a structural opening is changed then automatically the software will amend the frame and leaf size and even the kicking plate size. Our drawings will detail the push and pull face of the doorset and also includes a 3D image that can be viewed in software.

Rev By

Date

Description Of Revision

Rev No.

Drawing Title: Equal 3 Hinge Door

Contract: TBC

Scale: NTS

Requested By:

Drawn By: IS

Initial Drawing:

Revision: 0

Drawing No. TBC

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egress & access specialists

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01

3D External View

02

Pull Face

1 : 25

03

Push Face

1 : 25

04

Head Detail

1 : 5

05

Undercut Detail

1 : 5

06

Meeting Stile Detail

1 : 5

07

Jamb Detail

1 : 5

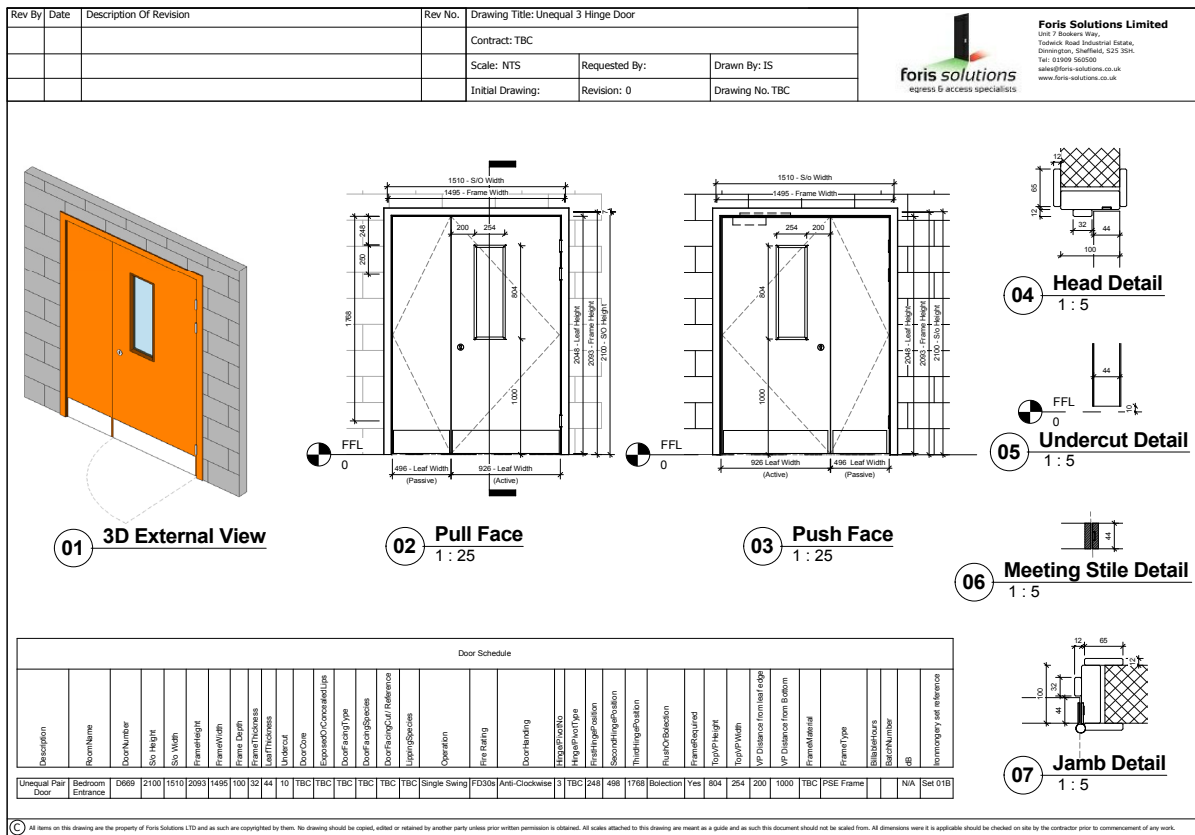
Door Schedule																			
Description	RoomName	DoorNumber	S/o Height	S/o Width	FrameHeight	FrameWidth	FrameDepth	FrameThickness	LeafThickness	Undercut	DoorCore	ExposedOrConcealedType	DoorFittingType	DoorFittingSpecies	DoorFittingReference	DoorFittingSpecies	DoorFittingReference	DoorFittingSpecies	DoorFittingReference
Equal Pair Door	TBC	D384	2100	1810	2093	1796	100	32	54	10	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC

© All items on this drawing are the property of Foris Solutions LTD and as such are copyrighted by them. No drawing should be copied, edited or retained by another party unless prior written permission is obtained. All scales attached to this drawing are meant as a guide and as such this document should not be scaled from. All dimensions were it is applicable should be checked on site by the contractor prior to commencement of any work.

BIM Models

Attached to each MODEL is a COBie output which is a detailed record (essentially an excel spreadsheet) of what was installed in a particular door opening.

This information will ensure any remedial repair in the future is completed using a like for like product to maintain the original design performance and certification.



We are able to offer a PROJECT SPECIFIC service. From floor plans and a design briefing we will provide a detailed ironmongery specification, a door schedule, L20 and P21 information and 'mIspec' BIM models for each door opening.

The designer merely populated the Revit model with the 'mIspec' BIM model for each relevant opening.



Foris 'mIspec' BIM Models
available through our website
www.foris-solutions.co.uk

Foris Washroom Solutions

In partnership with ASI Group, Foris Solutions have handpicked an encompassing range of Washroom products, integrating both cubicles and accessories to enable the seamless specification of washroom areas.

Our unique flush profile cubicles ensure complete privacy. Manufactured in Solid Grade Laminate they provide a durable water and scratch resistant solution to any cubicle needs.

Whilst our comprehensive range of stainless steel Washroom Accessories including Hand Dryers, Combination Units, Baby Changing Stations, Dispensers and Waste Bins allow you to enhance the washroom experience.

Foris Solutions
Solid Grade Laminate
Lockers

**Wide Selection Of
Mirrors**

**Award Winning Hand
Dryers**

**Recessed Washroom
Accessories**

Foris Solutions
Solid Grade Laminate
Vanity Units - Can be
supplied with Corian
Tops

Cutting Edge
Soap Dispensers +
Matching Taps



**A Wide Variety Of Baby
Change Solutions**
Tested up to 350lbs load
capacity, the highest in the
industry

From Towel Dispensers
To Hand Dryers
and much more



A wide selection of
shower seats

Foris Solutions
Solid Grade Laminate
Benches

Foris Solutions
Ultimate Privacy
Cubicle Collections
Manufactured in 13mm
Solid Grade Laminate

Foris can also supply and install a range of lockers to match the finish of our cubicles and IPS panels.

Lockers can be built in any configuration matrix with multiple base options, tiers and styles to choose from. Door features include concealed self-closing hinges and cushioned bumpers to prolong operation and with multiple lock options end users can choose to lock using key or combination locking devices.

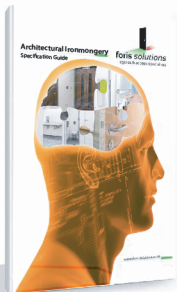
Within our Washroom range we can also provide benches to complement the locker room design. All benches are available with or without clothes hooks and shoe and hat shelves and can be applied to the wall.



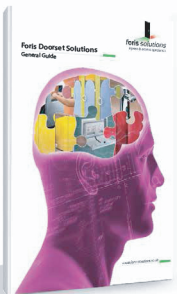
Core to our business is the specification and supply of door ironmongery, but we continue to evolve and develop complimentary skillsets and product solutions.

We now offer high performance pre-hung internal timber doorsets, external steel security doorsets, electronic security systems and washroom solutions including cubicles, lockers, hand driers and accessories.

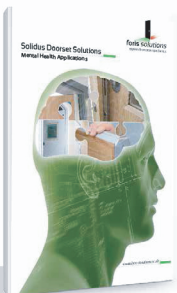
At every stage of the build process Foris Solutions can assist architects, contractors and building owners to deliver safe egress and controlled access through any door opening.



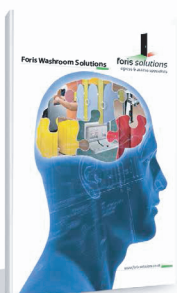
Architectural Ironmongery Specification Guide



Foris Doorset Solutions General Guide



Solidus Doorset Solutions Mental Health Applications



Foris Washroom Solutions

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