

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



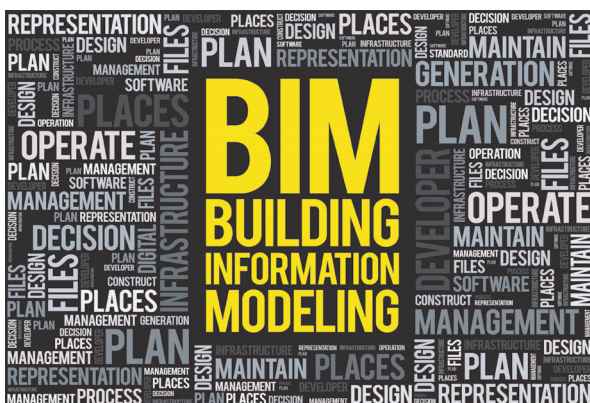
Architectural Ironmongery



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 **Foris products are designed and manufactured to meet, or in many cases, exceed these stringent** Allegion 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



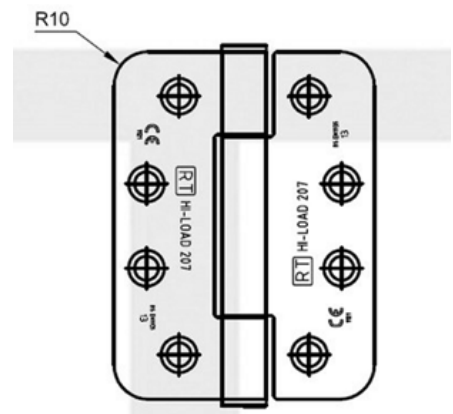
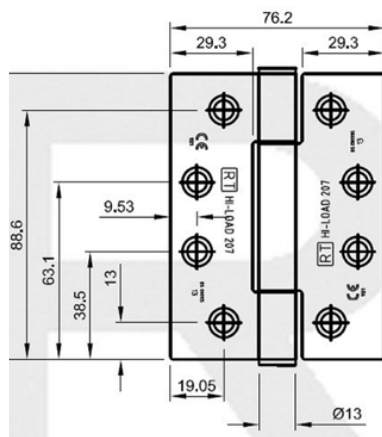
High performance stainless steel hinges for commercial applications

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.

33338 - 199 SSS Grade 14




33338 - 100



Features & Benefits

- Three 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.
- Maintenance free
- Certifire approved CF215





33338-92 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

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.

Our proposal for Nuffield in most areas of the hospital is to supply contemporary design satin stainless steel lever and pull handles designs but, in theatre areas, we propose to provide an extra level of hygiene and have offered contact products (levers/pull handles) in an anti microbial finish.

'Cavere' products have antibacterial protection built in, the Microban microbial finish inhibits the growth of harmful micro-organisms.

All products that we propose meet the requirements of BS8300 and have robust methods of installation.

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

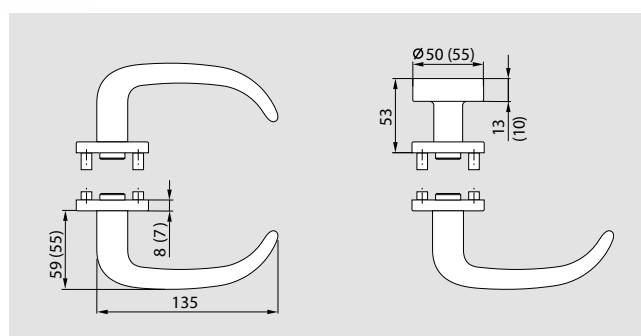
- Back to back fixing bolts and threaded bushes on lever furniture provide a strong through fixing.
- Spindle is fixed to the inside and the outside lever handle by "break thru" grub screws providing greater security and durability.
- All lever handles achieve EN 1906 Grade 4, the highest grade of use 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)



applicable products only



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.



Ref:	33338 - 181
Type:	Return to door, round bar lever Mounted on 52mm dia. concealed fix roses with bolt through fixings
Dimensions:	Ø20 x 135mm
Certification:	EN 1906 Grade 4 EN 1670 Grade 3 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*

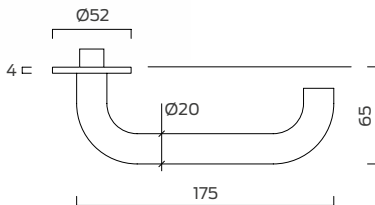
* Alternative fixing pack for 55 - 65mm doors (4701.55-65.FS)

Briton

Classically contemporary style



Ref:	4701.20.175
Type:	Extended return to door, round bar lever Mounted on 52mm dia. concealed fix roses with bolt through fixings
Dimensions:	Ø20 x 175mm
Certification:	EN 1906 Grade 4 EN 1670 Grade 3 EN 1634 Up to 90 minutes (timber) EN 1634 Up to 4 hr (steel)
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*

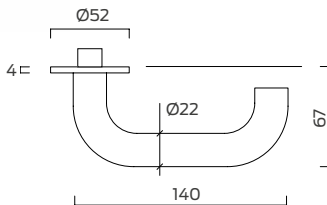


all dimensions are in mm

* Alternative fixing pack for 55 - 65mm doors (4701.55-65.FS)



Ref:	4701.22.140
Type:	Return to door, round bar lever Mounted on 52mm dia. concealed fix roses with bolt through fixings
Dimensions:	Ø22 x 140mm
Certification:	EN 1906 Grade 4 EN 1670 Grade 3 EN 1634 Up to 90 minutes (timber) EN 1634 Up to 4 hr (steel)
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*



all dimensions are in mm

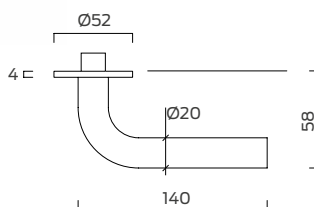
* Alternative fixing pack for 55 - 65mm doors (4701.55-65.FS)



Briton 4700 Series specification door hardware - Lever furniture



Ref:	4703.20.140
Type:	Straight, round bar lever Mounted on 52mm dia. concealed fix roses with bolt through fixings
Dimensions:	Ø20 x 140mm
Certification:	EN 1906 Grade 4 EN 1670 Grade 3 EN 1634 Up to 90 minutes (timber) EN 1634 Up to 4 hr (steel)
Other:	Supplied as a pair with 8mm spindle and bolt through fixings for 44 - 54mm doors*



all dimensions are in mm

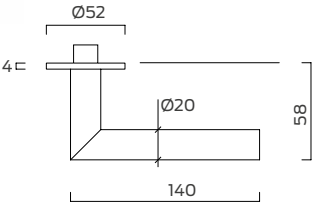
* Alternative fixing pack for 55 - 65mm doors (4701.55-65.FS)



Briton



Ref:	4704
Type:	Straight mitred round bar lever Mounted on 52mm dia. concealed fix roses with bolt through fixings
Dimensions:	Ø20 x 140mm
Certification:	EN 1906 Grade 4 EN 1670 Grade 3 EN 1634 Up to 90 minutes (timber) EN 1634 Up to 4 hr (steel)
Other:	Supplied as a pair with 8mm spindle and bolt through fixings for 44 - 54mm doors*

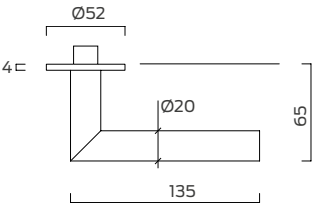


all dimensions are in mm

* Alternative fixing pack for 55 - 65mm doors (4701.55-65.FS)



Ref:	4705.20.140
Type:	Curved mitred round bar lever Mounted on 52mm dia. concealed fix roses with bolt through fixings
Dimensions:	Ø20 x 135mm
Certification:	EN 1906 Grade 4 EN 1670 Grade 3 EN 1634 Up to 90 minutes (timber) EN 1634 Up to 4 hr (steel)
Other:	Supplied as a pair with 8mm spindle and bolt through fixings for 44 - 54mm doors*



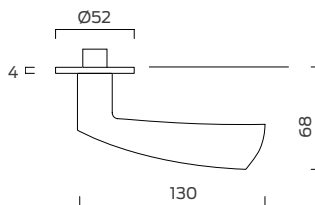
all dimensions are in mm

* Alternative fixing pack for 55 - 65mm doors (4701.55-65.FS)

Briton 4700 Series specification door hardware - Lever furniture



Ref:	4706
Type:	Wing design formed lever Mounted on 52mm dia. concealed fix roses with bolt through fixings
Dimensions:	68 x 130mm
Certification:	EN 1906 Grade 4
	EN 1670 Grade 3
	EN 1634 Up to 90 minutes (timber) EN 1634 Up to 4 hr (steel)
Other:	Supplied as a pair with 8mm spindle and bolt through fixings for 44 - 54mm doors*



all dimensions are in mm

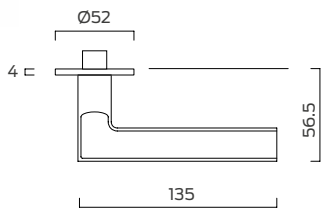
* Alternative fixing pack for 55 - 65mm doors (4701.55-65.FS)



Briton



Ref:	4707
Type:	Hollow cut away flat lever Mounted on 52mm dia. concealed fix roses with bolt through fixings
Dimensions:	56.5 x 135mm
Certification:	EN 1906 Grade 4 EN 1670 Grade 3 EN 1634 Up to 90 minutes (timber) EN 1634 Up to 4 hr (steel)
Other:	Supplied as a pair with 8mm spindle and bolt through fixings for 44 - 54mm doors*



all dimensions are in mm

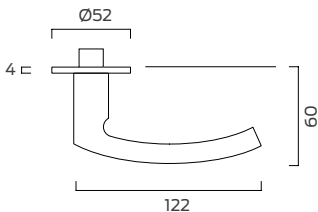
* Alternative fixing pack for 55 - 65mm doors (4701.55-65.FS)



Ref:	4708
Type:	Hollow curve form lever Mounted on 50mm dia. concealed fix roses with bolt through fixings
Dimensions:	60 x 122mm
Certification:	EN 1906 Grade 4 EN 1670 Grade 3 EN 1634 Up to 90 minutes (timber) EN 1634 Up to 4 hr (steel)
Other:	Supplied as a pair with 8mm spindle and bolt through fixings for 44 - 54mm doors*

all dimensions are in mm

* Alternative fixing pack for 55 - 65mm doors (4701.55-65.FS)





Ref:	33338 - 177	33338 - 220	33338 - 139
Description:	Euro profile cylinder escutcheon	Lever key escutcheon	Blank escutcheon
Dimensions:	Ø52 x 8mm	Ø52 x 8mm	Ø52 x 8mm
Other:	Concealed fixings with snap on cover. Supplied as pairs as standard. Bolt through fixings supplied as standard suitable for doors 44mm-54mm		

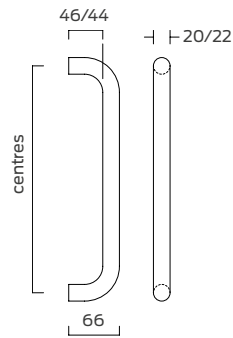


Ref:	33338 - 178	33338 - 179
Description:	Bathroom turn & indicator	Bathroom extended turn & indicator
Dimensions:	Ø52 x 8mm	Ø52 x 8mm
Other:	Supplied with 8mm spindle. Bolt through fixings supplied as standard suitable for doors 38 - 44mm For doors 44 - 54mm thick please specify 4710.XSP (for 4710) or 4711.XSP (for 4711)	



33338 - 137

SSS Grade 316



all dimensions are in mm

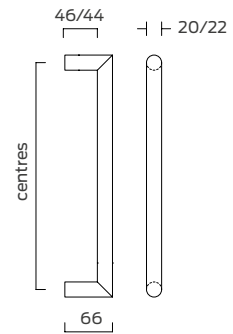
Description: D pull handle - Round bar section - Solid

Diameter: mm		20	20
Centres:	200	300	400

33338 - 302

Please note:

Fixing packs for all pull handles must be ordered separately (see page 25)



Description: Mitred handle - Round bar section

Diameter: mm		20	20
Centres:	200	300	400



Foris - Entrance pull handle options

Bespoke design available



Description:	Cranked pull handle - Round bar section	
Diameter: mm	32	32
Centres:	400	600

Description:	Pillar pull handle - Round bar section	
Diameter: mm	32	32
Centres:	200	400

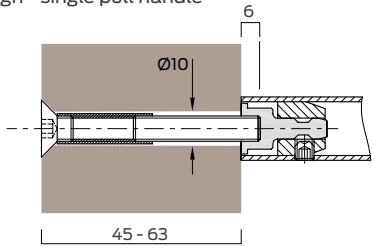


Pull handle fixings

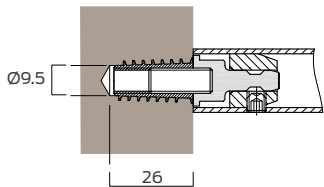
All Foris pull handles can be ordered individually and must be ordered together with a standard fixing pack which contains all the components required to mount the pull handle in any of the 4 applications shown below.

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

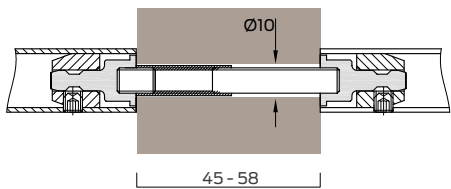
Bolt through - single pull handle



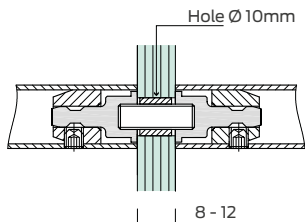
Secret fix - single pull handle



Back to back pair on timber door



Back to back pair on glass door



all dimensions are in mm

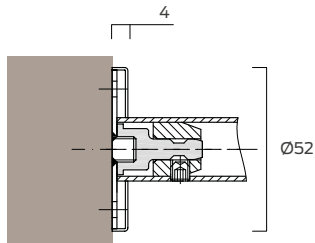
Ref:	Description
	Standard fixing pack for timber, metal or glass doors



Rose mount fixings

Foris pull handles can be ordered with an optional face fixed rose. One fixing pack is required for each pull handle and they must be ordered according to the pull handle diameter (20 or 22mm).

Roses are supplied with stainless steel face fixing screws. Snap fit push on covers conceal all fixings.



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

A range of accessories completes the integrated door hardware package



Accessories

Foris offer a range of accessories that are required to complete a door hardware specification. Generally, we endeavour to match major product finishes which at Nuffield will be satin stainless steel.



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.

Description:	Push and Pull plates for use with bolt through pull handles	
Options:	Plain or engraved. Radiused corners with face fixing screws. Supplied singly.	
33338 - 151	500 x 100 x 1.5mm	Satin stainless Steel 304 Grade

Ref:	Description
33338 - 182	Kick plate 1.5mm thick. Satin stainless steel Grade 304. Square corners with face fixing screws.



Ref:	Description
33338 - 155	Recessed flush pull 90mm diameter

Symbols & signage

A range of 76mm dia. face fixed stainless steel signs and symbols are available.

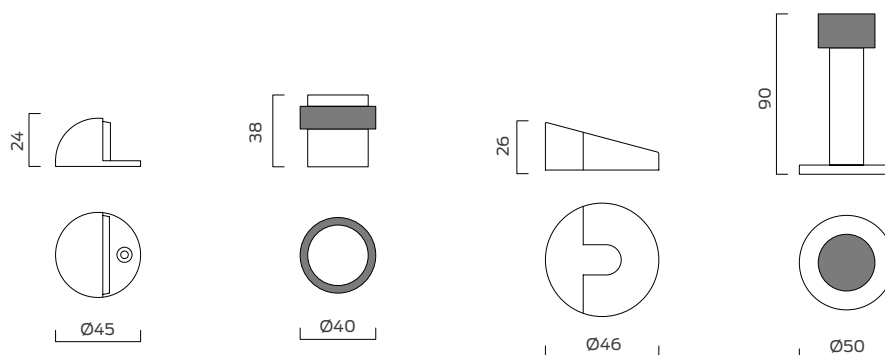


Description:	Signs & symbols
Options:	A range of face fixed signs and symbols. All 76mm Ø x 1.5mm stainless steel. Supplied singly complete with wood screw fixings.
Ref:	Description
33338 - 59	Unisex symbol
33338 - 147	Male symbol
33338 - 130	Female symbol
33338 - 193	Disabled symbol
	WC sign
33338 - 195	Shower symbol
33338 - 194	Baby Change symbol
33338 - 129	Fire door keep shut
33338 - 128	Fire door keep locked
33338 - 185	Automatic fire door keep clear





Ref:	33338 - 142		33338 - 141
Description:	Domed floor mounted door stop	Floor mounted door stop	Wedge shaped floor mounted door stop
Dimensions:	Ø45 x 24mm	Ø40 x 38mm	Ø46 x 26mm
Other:	Supplied with stainless steel fixings		



all dimensions are in mm



Ref:	Description
33338 - 186	Surface mounted knob Slide bolt 202mm

Briton door controls



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”*.

Approved Doc M of the Building Regulations and BS 8300 both provide guidance in establishing recommended maximum opening forces for door controls to assist less able users.

High efficiency Briton 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 final doorset.

For doors which must also meet the stringent closing force requirements of EN 1154 for fire door applications, it may be more appropriate to use electromagnetic hold open or swing free closers or a powered opening solution. These must be CE marked in accordance with the requirements of EN 1155. All these options are available within the Allegion product portfolio.



An essential element in safeguarding lives and property



The principal objective of a door closer is to close a door and in the case of unlatched fire doors in a corridor, to keep the doors closed in the event of a fire. Most applications where the specification of a door closing device is mandatory, must use a product which conforms to the requirements of European Standard EN 1154 (or EN 1155 for electrically controlled units) and be CE marked accordingly.

The standard applies to all surface mounted or concealed overhead door closers, transom mounted closers and floor springs.

A guide to specifying door closers

Easy opening, reliable closing

In contrast to a conventional rack and pinion door closer in a slide channel application, the linear cam action principle of the Briton Cam Action Series of door closers is extremely efficient. The initial opening force decreases very rapidly as the door opens allowing children and the elderly to overcome the closing power without any problem.



During testing, the Briton cam action closers produced opening forces well within the requirements of Approved Doc M and BS 8300.

Selecting the right closer

In most cases selecting the most appropriate door control will be dependent on a number of factors and the priority of each. These will include:

- Frequency of use
- Type of application (e.g school, library, factory)
- User profile - The Equality Act consideration
- Door situation/size/weight/fire resistance
- Budget
- Aesthetics
- Operating characteristics and other features



Series	Briton 2700	Briton 2300
Description	High performance easy opening cam action overhead door closer	Commercial easy opening cam action overhead door closer
Accessibility		
Easy opening cam action	■	■
Slide arm for slimline appearance and to minimise abuse	■	■
Concealed closer for optimum aesthetics and abuse resistance		
Suitable for fire doors to EN 1634	2hr timber/1hr steel	2hr timber
Frequency of use	High	Medium
Electromagnetic hold-open	□	
Cover options	A-line/Softline	Trimplate/Softline
Finish options	SES/SSS/PSS/PBS	SES/SSS/PSS
Budget comparison	££££	£££
Typical applications	High end commercial specifications, leisure centres, care homes, hospitals, schools, nurseries	Internal doors in primary schools, nurseries, care homes, hotels, commercial offices

■ Standard □ Available as an option/variant

Mounting positions and closer power



Slide arm -
Door mounted pull side



Slide arm -
Door mounted push side



Slide arm -
Transom mounted pull side



Slide arm -
Transom mounted push side



Projecting arm -
Regular fixing (door mounted
pull side)



Projecting arm -
Transom fixing (transom
mounted push side)



Projecting arm -
Parallel fixing (door mounted
push side)

Where closer power is stated it will usually apply to a closer fitted either in Regular fixing applications (in the case of projecting arm closers) or in Door mounted pull side applications (for slide arm closers).

The closer power may vary for other mounting applications and consequently we recommend you check with your Allegion Specification Consultant or technical team.

EN Closer power settings

Within EN 1154 seven closer power ratings are identified according to the maximum door leaf weight and width.

These are theoretical figures and the final closing power of any door closing device will be subject to any number of variables such as:

- Accuracy of closer installation
- Accuracy of door installation
- Friction in hinges
- Negative or positive air pressure

Because of such variables, the specification of an adjustable door closer is recommended to allow for site variables.

EN Size	Max. door weight (kg)	Max. door width (mm)
1	20	750
2	40	850
3	60	950
4	80	1100
5	100	1250
6	120	1400
7	160	1600

Briton 2700 Series – offering the benefits of easy opening and reliable closing

The Briton 2700 Series is a precision manufactured cam-action, slide channel door closer, in a compact, overhead, surface fixed unit. Providing exceptional ease of use by reducing the resistance encountered when opening the door, the Briton 2700 Series bridges the gap between the requirements for fire and smoke control and ease of operation required for accessibility.



Features & Benefits

- Cast iron body with a naturally high graphite content is self lubricating, providing high levels of durability and long life performance.
- High performance cam action technology allows reliable closer power setting for fire door applications yet still be easy to open.
- Full complement bearings provide increased bearing load for efficient operation and improved reliability.
- FAST PowerAdjust dial feature allows installers to see the current power setting.
- Silicon chrome alloy steel springs for superior strength and reliability.
- High quality hydraulic fluid with built-in temperature compensation.
- Unique 'Accufit' installation template and mounting plate ensures a quick, simple and accurate installation.
- All-over 'A-line' metal cover in a smooth, contemporary design; secured by simple, unobtrusive spring-clips to conceal the main door closer fixings (A-line cover only).
- Optional 'Softline' cover design to suite with most other Foris closers.
- Co-ordinated track design with concealed fixings.
- A wide range of adjustable functions for easy adaptation to specific door applications - see specification table.
- Optional mechanical hold-open facility (Not to be used on fire door applications) or electromagnetic hold-open option available.

The Briton 2700 Series is CE marked to EN1154 (EN1155 for electronic variants) and fire tested to EN1634 on timber doors to achieve a 2 hour fire rating, and 1 hour for metal doors.

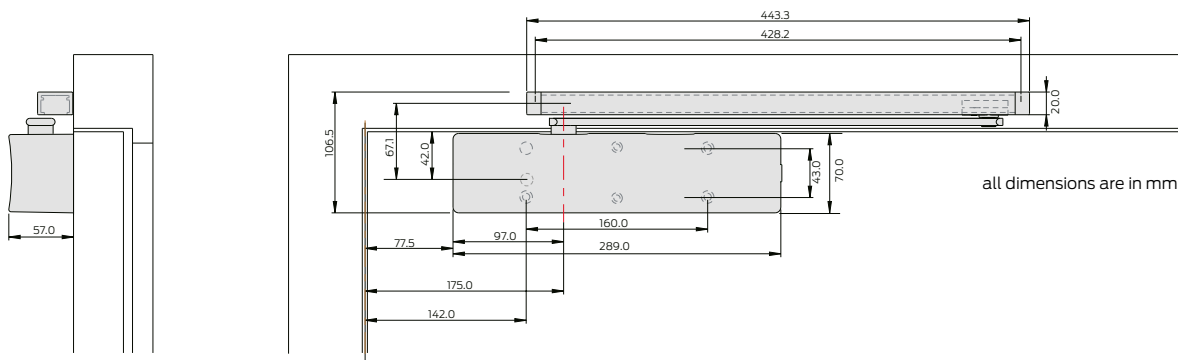




Briton 2700 with standard A-Line cover with matching silver arm and track



Briton 2700 with Softline cover in satin stainless steel with matching arm and slide track



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

Product features	Product references			
	33338 - 120	33338 - 118	33338 - 119	
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	■	■	■	■
Accufit template & Accufit mounting plate	■	■	■	■
Maximum angle of opening (pull side)	180°	180°	120°	120°
Separate closing speed & latch action adjustment	■	■	■	■
Adjustable backcheck	■	■	■	■
Adjustable delayed action	■	■	■	■
In-built temperature compensation	■	■	■	■
Mechanical hold-open facility	□	□		
Electromagnetic hold-open facility			■	■
Matching slide channel, arm & cover finish	■	■	■	■
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	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	

■ Standard □ Available as an option/variant

* EN 2 - 4 when push-side transom mounted

Briton 2300 Series – Easy opening cam action technology in a simple, slimline package



Features & Benefits

The Briton 2300 Series incorporates the same high efficiency cam action as the Foris 2700 Series, providing the same exceptional ease of use by reducing the resistance encountered when initialising the opening of the door.

The Briton 2300 Series is offered as a simplified version of the Foris 2700 and is available with either a slide in trimplate or with a curved 'Softline' all-over cover which will suite with other Briton overhead door controls.

Easy Opening, Reliable Closing

In contrast to a conventional rack and pinion door closer in a slide channel application, the linear cam action principle of the Foris 2300 Series is extremely efficient. The initial opening force decreases very rapidly as the door opens allowing, in particular, children and the elderly to overcome the closing power without any problem.

The Briton 2300 Series is CE marked to EN1154 and fire tested to EN1634 on timber doors to achieve a 2 hour fire rating.

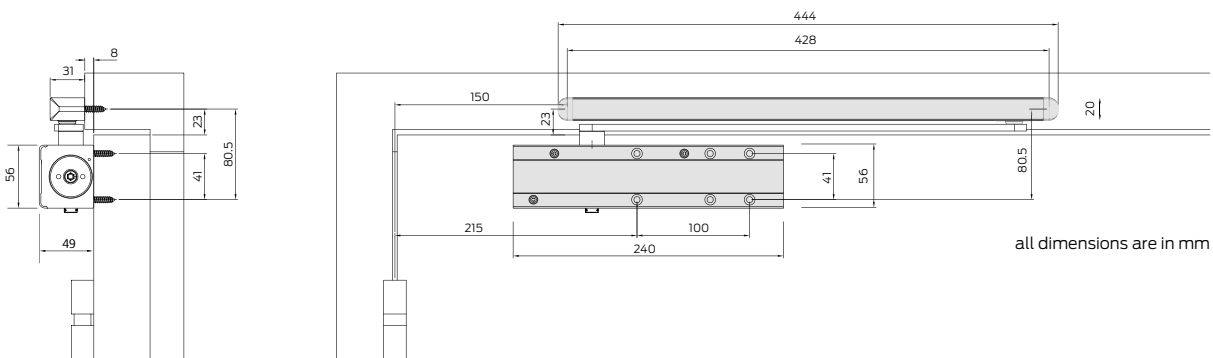
- Extruded aluminium body.
- High performance cam action technology allows reliable closer power setting for fire door applications yet remains easy to open.
- Full complement bearings provide increased bearing load for efficient operation and improved reliability.
- Adjustable power, EN 2-4.
- Silicon chrome alloy steel springs for superior strength and reliability.
- High quality hydraulic fluid with built-in temperature compensation.
- Radiused slide in cover and spindle cap conceals the main door closer fixings and adjustment screws.
- Alternative 'Softline' cover, secured by simple unobtrusive spring clips.
- Co-ordinated track design with concealed fixings.
- Accufit template provides quick and easy installation.
- Optional mechanical hold-open facility (**Not to be used on fire door applications**).





Briton 2300 closer options showing the radiused slide in trimplate which covers all the fixings and adjustment screws or the optional all-over 'Softline' cover which is available in a range of finishes.

This option provides an opportunity to suite the Foris 2300 closer with other Foris closers.



Closers with slide in trimplate

Product features	Product references	
	33338 - 116	33338 - 117
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	■	■
Maximum angle of opening*	180°	180°
Separate closing speed & latch action adjustment	■	■
Adjustable backcheck	■	■
Adjustable delayed action		
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 49mm	240 x 56 x 49mm
Dimensions (with cover L x D x H mm)	270 x 68 x 63mm	270 x 68 x 63mm
Channel/slide arm	444 x 20mm	444 x 20mm
Warranty period	10yrs	10yrs
CE Classification		
4 8 2-4 1 1 3		

■ Standard

□ Available as an option

* When door mounted.

Transom mounted closers are restricted to 120° opening.

Flexibility and simplicity offered by mortice cylinder locks

For most doors, particularly internal doors, a Foris mechanical lock case represents the most effective and direct means of providing privacy and security for commercial applications.

Foris lock cases have Grade 3 category of use and can be used on internal and external doors.

- Modular dimensions across a range of functions allows for factory preparation of doors and frames
- Allows simple replacement of the cylinder if keys are lost or stolen to quickly reinstate security
- Cylinders available in various functions to fine tune the operating characteristics of the lock
- Cylinders available allow sophisticated multi-level masterkeying for access control
- Modular dimensions allow for lock interchangeability to upgrade security

Escape functions

Where locks are incorporated in doors which are on an escape route in an office suite for example, lock cases should be certified to EN 179 for emergency exit use. Such locks can be operated by a single action on the lever in the direction of the escape route which will withdraw the latchbolt and the deadbolt simultaneously to give immediate escape.



CE marked to EN 12209

Physical characteristics of type, operation and performance of lock cases is tested/assessed in accordance with EN 12209. This produces an 11 digit classification code which describes its type and grading according to various test criteria. The table below gives an outline of the classification and the performance of a typical example.

		Example
3 1-3	Digit 1 - Category of use Three grades are identified Grades 1 - 3	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	Digit 2 - Durability Twelve grades are identified Grades A - X	Grade X - 200,00 test cycles with 120N side load on latch bolt
8 1-7	Digit 3 - Door mass and closing force Nine grades are identified Grades 1 - 9	Grade 8 - Up to 200kg door mass, 15N maximum closing force.
1 0/1	Digit 4 - Suitability for fire/smoke doors Two grades are identified Grades 0 - 1	Grade 1 - Suitable for use on fire/smoke resisting assemblies subject to satisfactory fire testing or assessment
0 0	Digit 5 - Safety Only Grade 0 is identified	Grade 0 - No safety requirement
G 0-G	Digit 6 - Corrosion resistance Eight grades are identified to EN 1670 Grades 0 - G	Grade G - Very high corrosion resistance 240 hours salt spray at -20 °C to +80 °C
4 1-7	Digit 7 - Security and drill resistance Seven grades are identified Grades 1 - 7	Grade 4 - High security and no drill resistance
B A-R	Digit 8 - Field of door application Eight categories are identified to EN 1670 Grades 0 - G	Category A - Mortice type with unrestricted application
A A-R	Digit 9 - Type of key operation Nine types are identified Type 0 - H	Type A - Cylinder lock or latch, manual locking
2 0-4	Digit 10 - Type of spindle operation Five types are identified Grades 0 - 4	Type 2 - Lock or latch for unsprung lever handle operation
0 0-H	Digit 11 - Key identification requirement Nine categories are identified Grades 0 - H	Category 0 - No requirement for key identification

High performance euro profile lockcase series suitable for all high end specifications

Features & Benefits

- 96 hour corrosion resistance.
- Modular design allowing simplified door preparation and lock interchangeability.
- Grade 316 stainless steel single piece forend. Optional square ended forend is also available.
- Quick reversible latch allows quick and trouble free on-site handing without the need to dismantle the lockcase.
- Profiled latch and forend provides very positive location and a smooth, quiet operation.
- Chrome plated steel latch for corrosion resistance.
- Cast follower with phosphor bronze bushes reduces wear of follower during extended use.
- 8mm follower is designed to grip the spindle to eliminate unwanted tolerance between components.
- 30° follower action with springing suitable for high frequency applications.
- Positive follower angle (1°) reduces the effect of wear which can lead to lever droop.
- Drill resistant heavy duty hardened deadbolt with 22mm throw on a single turn of the cylinder.
- Chrome plated steel bolt for corrosion resistance.
- Bolt through fixing holes to DIN 18251 making the lock compatible with most European hardware ranges.
- Sleeved fixing holes assist in bolt location, provide added strength to the lockcase and help prevent mechanical failure due to ingress of foreign objects.

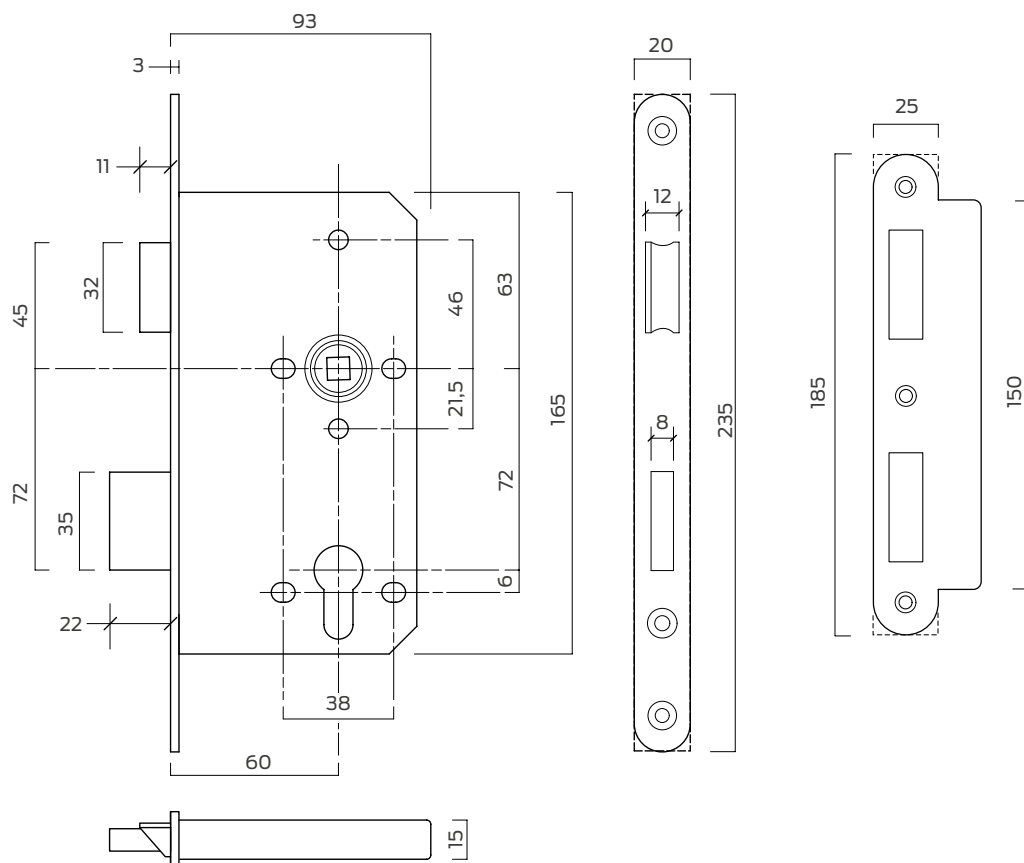


Conforms to European Standards
EN 12209 and EN 179 and carries
the CE mark. Tested to EN 1634.



Product ref.	Function/description	Centres	CE Classification
33338 - 122	Deadlock - cylinder operates deadbolt only	72mm	3X810G4BA00
33338 - 125	Sashlock - lever operation of latchbolt, cylinder operation of deadbolt. Cylinder to latch function.	72mm	3X810G4BA20
33338 - 126	Bathroom lock - lever operation of latchbolt, 8mm bathroom turn follower to operate deadbolt	78mm	3X810G-B020
33338 - 189	Bathroom deadbolt - 8mm bathroom turn follower to operate deadbolt only	n/a	3X810G-B000
33338 - 127	Latch - lever operation of latchbolt only	n/a	3X810G-B020
33338 - 197	Nightlatch - lever operation from inside to withdraw the latchbolt, cylinder from outside. No hold-back function.	72mm	3X8100G-B020

Radiused and square forends are available with matching strikes. Add suffix .R or .S to product code:



all dimensions are in mm

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 c 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.

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:

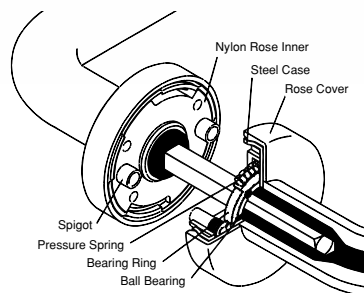
- Bolt through fixings at lever and escutcheon positions to suit Briton mortice lock cases.
- Concealed fixings with snap on rose/plate covers.
- Supplied complete with all fixings and appropriate spindles for specified door thickness.

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.

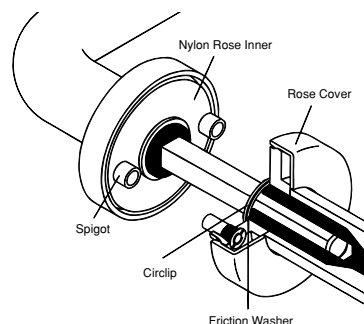
One lever is supplied with a floating spindle.



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.

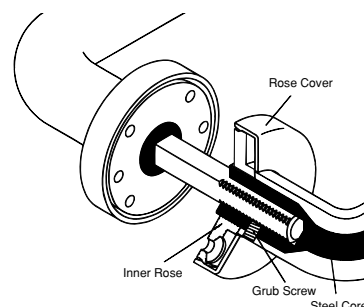
One lever is supplied with a floating spindle.



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.



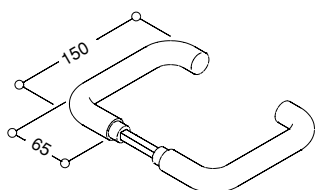
Normbau nylon hardware - Ball bearing leversets



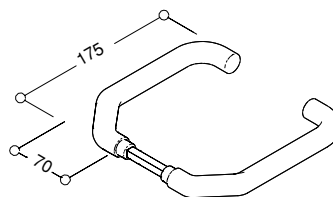
Ball bearing mounting

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

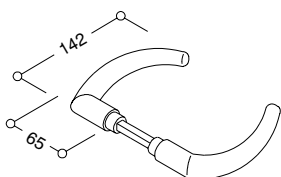
For plate mounted versions specify the plate according to the lock type being used.



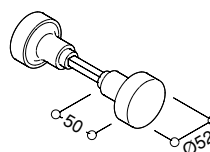
Ref:	23mm Ø - Steel cored
0389 01	pair c/w spindle -
0389 41	1/2 set c/w 1/2 spindle
0389 03	1/2 set without spindle



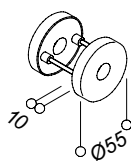
Ref:	23mm Ø - Steel cored
0388 01	pair c/w spindle -
0388 41	1/2 set c/w 1/2 spindle
0388 03	1/2 set without spindle



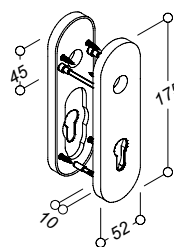
Ref:	23mm Ø - Coupe lever steel cored
0282 01	pair c/w spindle -
0282 41	1/2 set c/w 1/2 spindle
0282 03	1/2 set without spindle



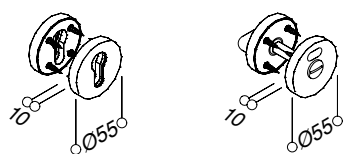
Ref:	52mm Ø - Knob
0387 01	pair c/w spindle -
-	
0387 05	1/2 set without spindle



Ref:	Ball bearing rose
0390 03	Pair - suitable for all levers and knob



Ref:	Ball bearing plate
0405 05	Latch only
0405 02	Euro profile cylinder @ 72mm c-c
0405 03**	Bathroom function @ 78mm c-c



Ref:	Escutcheons
0396 26	Blind -
0396 29	Lever key escutcheon for lever locks
0396 30	Euro profile cylinder - any centres
0397 40**	Bathroom function - any centres

** Bathroom functions supplied with 8mm spindle

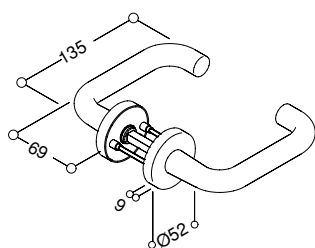
Normbau nylon hardware - Fixed roses and backplates



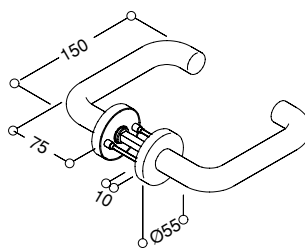
Fixed roses and backplates

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.



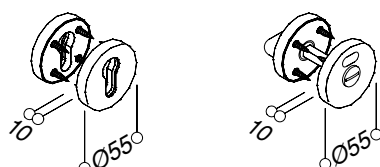
Ref:	20mm Ø - Steel cored
0516 01	pair c/w spindle -



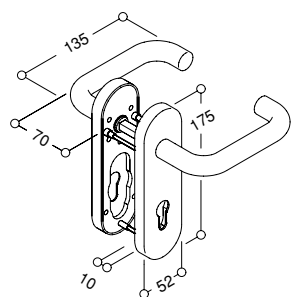
Ref:	23mm Ø - Steel cored
0516 03	pair c/w spindle -



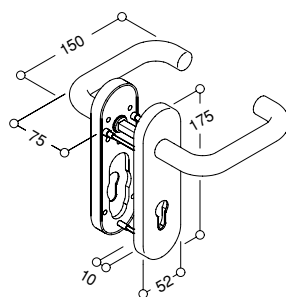
Ref:	Escutcheons 52mm Ø
0247 26	Blind escutcheon
0247 31	Lever key escutcheon
0247 32	Euro profile cylinder escutcheon
0247 90	Oval profile cylinder escutcheon
0358 34*	Bathroom turn and indicator
0840 44**	Bathroom turn - large, and indicator



Ref:	Escutcheons 55mm Ø
0396 26	Blind escutcheon
0396 31	Lever key escutcheon
0396 32	Euro profile cylinder escutcheon
0396 47	Oval profile cylinder escutcheon
0397 40**	Bathroom turn and indicator



Ref:	20mm Ø lever - Plate mounted
0623 20	Latch only
0623 73	Lever key @ 57mm c-c
0623 74	Euro profile cylinder @ 57mm c-c
0623 17	Euro profile cylinder @ 72mm c-c
0623 75	Oval profile cylinder @ 57mm c-c
0623 76	Oval profile cylinder @ 72mm c-c
0623 77*	Bathroom function @ 57mm c-c
0623 18**	Bathroom function @ 78mm c-c



Ref:	23mm Ø lever - Plate mounted
0434 20	Latch only
0434 73	Lever key @ 57mm c-c
0434 74	Euro profile cylinder @ 57mm c-c
0434 17	Euro profile cylinder @ 72mm c-c
0434 75	Oval profile cylinder @ 57mm c-c
0434 76	Oval profile cylinder @ 72mm c-c
0434 77*	Bathroom function @ 57mm c-c
0434 18**	Bathroom function @ 78mm c-c

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

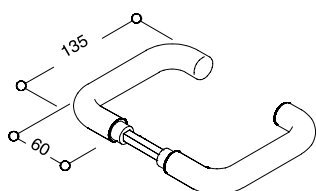


Spindle fixed levers

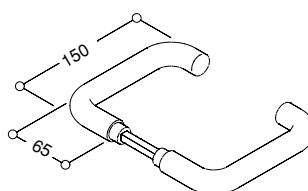
Levers and roses or backplate are supplied separately.

Roses are available with springing to suit lightly sprung latches.

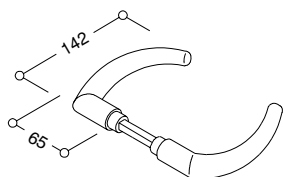
Levers are available in solid nylon or steel cored for extra strength and fire door applications. Steel cored levers must be ordered to suit the door thickness.



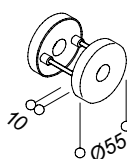
Ref:	20mm Ø lever
0246 08	Solid nylon
0570 15	Steel cored - for doors 23-37mm thick
0570 08	Steel cored - for doors 38-52mm thick
0570 14	Steel cored - for doors 53-63mm thick



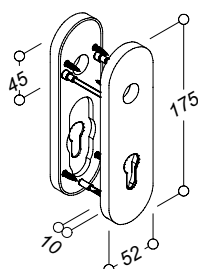
Ref:	23mm Ø lever
0246 18	Solid nylon
0571 15	Steel cored - for doors 23-37mm thick
0571 08	Steel cored - for doors 38-52mm thick
0571 14	Steel cored - for doors 53-63mm thick



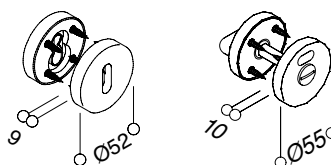
Ref:	23mm Ø Coupe lever
0577 01	Steel cored - for doors 23-37mm thick
0577 02	Steel cored - for doors 38-52mm thick
0577 03	Steel cored - for doors 53-63mm thick



Ref:	Roses for spindle fixed levers
0247 10	Rose 52mm Ø
0247 39	Sprung inner to suit 52mm Ø rose
0396 02	Rose 55mm Ø



Ref:	Backplates for spindle fixed levers
0525 10	Latch only
0525 08	Lever key @ 57mm c-c
0525 09	Euro profile cylinder @ 57mm c-c
0523 22	Euro profile cylinder @ 72mm c-c
0525 13	Oval profile cylinder @ 48.5mm c-c
0525 14	Oval profile cylinder @ 56mm c-c
0525 12	Oval profile cylinder @ 57mm c-c
0525 11*	Bathroom function @ 57mm c-c
0524 28**	Bathroom function @ 78mm c-c



Ref:	Escutcheons 52 & 55mm Ø
0247 26	52mm Ø - Blind
0247 31	52mm Ø - Lever key
0247 32	52mm Ø - Euro profile cylinder
0247 90	52mm Ø - Oval profile cylinder
0358 34*	52mm Ø - Bathroom function
0840 44**	52mm Ø - Bathroom function, large turn
0396 26	55mm Ø - Blind
0396 29	55mm Ø - Lever key
0396 30	55mm Ø - Euro profile cylinder
0396 47	55mm Ø - Oval profile cylinder
0397 40**	55mm Ø - Bathroom function

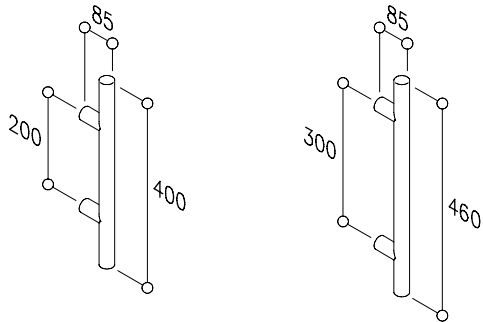
* Bathroom functions supplied with 5mm spindle ** Bathroom functions supplied with 8mm spindle

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.

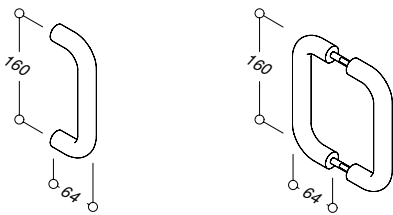
Each Normbau pull handle design is available as a 'thread side' or 'pin side' pull handle and should be specified according to the required fixing type. For example, a back to back pair requires one 'thread side' and one 'pin side' pull together with fixing pack 0471.

[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].

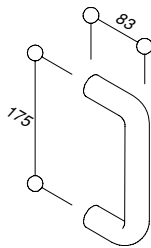


Ref:	34mm Ø solid nylon
0441 01	200mm c-c - Thread side pull handle
0441 11	200mm c-c - Pin side pull handle
0445 01	300mm c-c - Thread side pull handle
0445 11	300mm c-c - Pin side pull handle

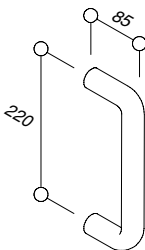
Normbau nylon hardware - Pull handles



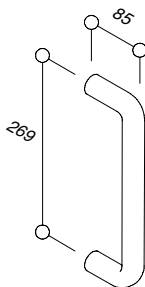
Ref:	23mm Ø solid nylon
0309 17	Single bolt through fixing - supplied with-out screw fixings
0309 19	Back to back pair
0309 20	Single face fixing on 55mm Ø roses



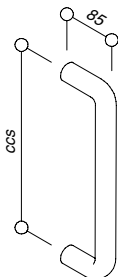
Ref:	31mm Ø solid nylon
0363 04	Thread side pull handle
0363 14	Pin side pull handle



Ref:	34mm Ø solid nylon
0363 01	Thread side pull handle
0363 11	Pin side pull handle



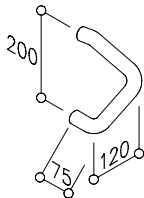
Ref:	34mm Ø solid nylon
0364 01	Thread side pull handle
0364 11	Pin side pull handle



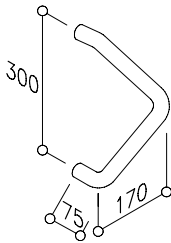
34mm Ø steel cored					
	200mm centres	300mm centres	400mm centres	500mm centres	600mm centres
Thread side pull	0439 01	0444 01	0363 19	0363 18	0363 17
Pin side pull	0439 11	0444 06	0363 29	0363 28	0363 27

Please Note:

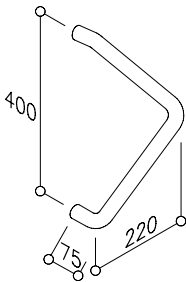
Check whether a 'thread side' or 'pin side' pull handle is required according to the required fixing type. A back to back pair requires one 'thread side' and one 'pin side' pull. See page 30 for more information.



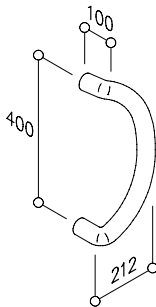
Ref:	34mm Ø solid nylon
0440 09	Thread side pull handle
0440 39	Pin side pull handle



Ref:	34mm Ø solid nylon
0440 11	Thread side pull handle
0440 41	Pin side pull handle

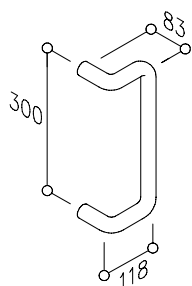


Ref:	34mm Ø solid nylon
0440 13	Thread side pull handle
0440 43	Pin side pull handle

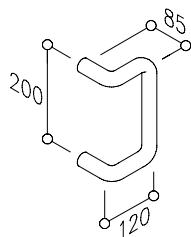


Ref:	40mm Ø steel cored
0440 10	Thread side pull handle
0440 40	Pin side pull handle

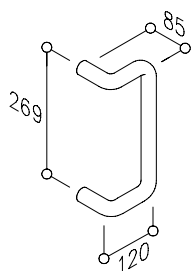
Normbau nylon hardware - Pull handles



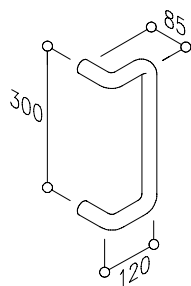
Ref:	31mm Ø solid nylon
0443 12	Thread side pull handle
0443 22	Pin side pull handle



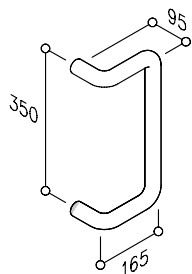
Ref:	34mm Ø solid nylon
0438 02	Thread side pull handle
0438 12	Pin side pull handle



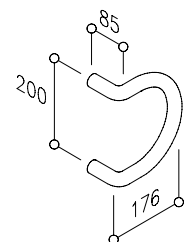
Ref:	34mm Ø solid nylon
0303 06	Thread side pull handle
0303 16	Pin side pull handle



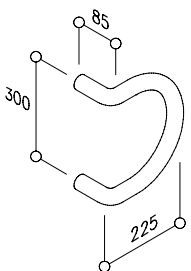
Ref:	34mm Ø solid nylon
0443 02	Thread side pull handle
0443 32	Pin side pull handle



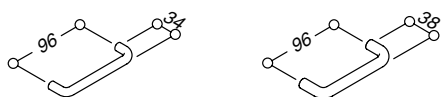
Ref:	40mm Ø solid nylon
0303 07	Thread side pull handle
0303 17	Pin side pull handle



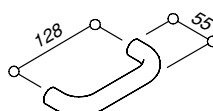
Ref:	34mm Ø solid nylon
0440 01	Thread side pull handle
0440 31	Pin side pull handle



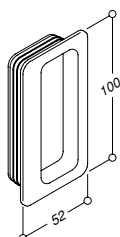
Ref:	34mm Ø steel cored
0440 06	Thread side pull handle
0440 36	Pin side pull handle



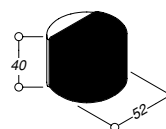
Ref:	Cabinet pulls
0503 01	10mm Ø x 96 x 34 - without screws
0307 21	12mm Ø x 96 x 38 - without screws
0307 22	12mm Ø x 96 x 38 - with 4mm screws



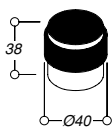
Ref:	Cabinet pulls
0309 01	20mm Ø x 128 x 55 - without screws



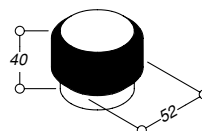
Ref:	Flush pull
0342 01	Flush pull 100 x 52mm



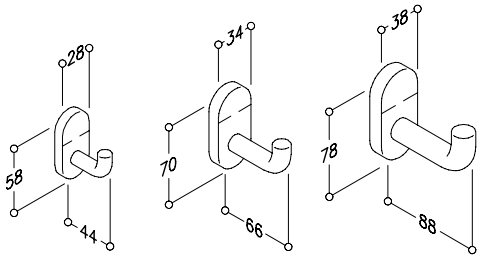
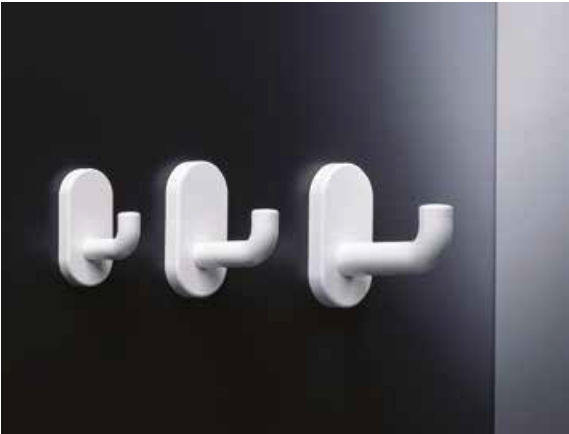
Ref:	Door stop
0842 01	Floor mounted with soft buffer



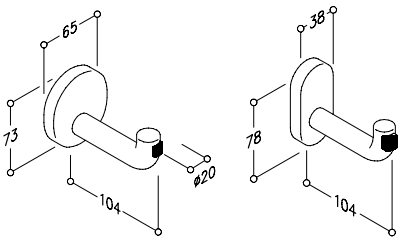
Ref:	Door stop
0842 03	Floor mounted with soft buffer



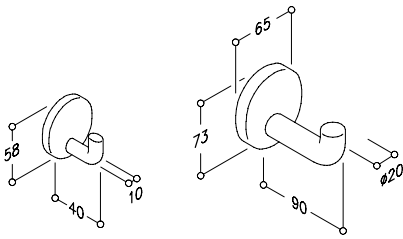
Ref:	Door stop
0346 01	Floor mounted with soft buffer



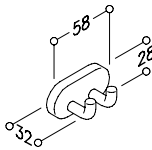
Ref:	Coat hook
0583 10	Coat hook - 44mm projection
0583 11	Coat hook - 66mm projection
0583 12	Coat hook - 88mm projection



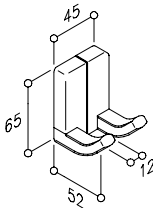
Ref:	Coat hook with buffer
0340 01	Coat hook with buffer - circular plate
0583 15	Coat hook with buffer - oblong plate



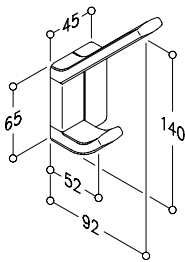
Ref:	Coat hook
0305 01	Coat hook - 10mm Ø
0339 01	Coat hook - 20mm Ø



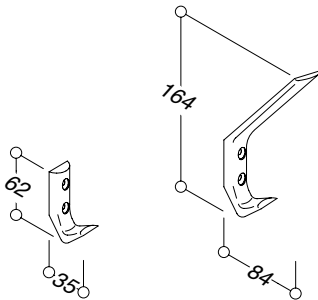
Ref:	Double coat hook
0583 20	Coat hook - 10mm Ø



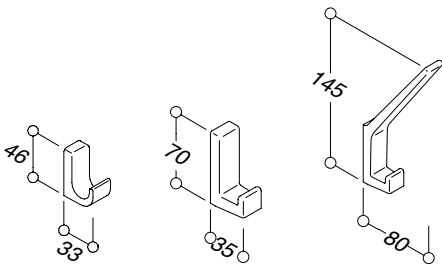
Ref:	Double coat hook
0584 05	Double coat hook



Ref:	Coat hook
0584 01	Hat & coat hook



Ref:	Coat hook
0160 01	Coat hook 62 x 35mm
0160 02	Hat & coat hook 164 x 84mm



Ref:	Coat hook
0522 01	Coat hook 46 x 33mm
0180 04	Coat hook 70 x 35mm
0180 05	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

<div>1001</div> <div> </div>	<div>1003</div> <div> </div>	<div>1004</div> <div> </div>	<div>1005</div> <div> </div>	<div>1012</div> <div> </div>
<div>1015</div> <div> </div>	<div>1016</div> <div> </div>	<div>1020</div> <div> </div>	<div>1021</div> <div> </div>	<div>1023</div> <div> </div>
<div>1025</div> <div> </div>	<div>1027</div> <div> </div>	<div>1028</div> <div> </div>	<div>1034</div> <div> </div>	<div>1035</div> <div> </div>
<div>1045</div> <div> </div>	<div>1051</div> <div> </div>	<div>1057</div> <div> </div>	<div>1058</div> <div> </div>	<div>1070</div> <div> </div>

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



17 173



72 8..



76 8..



79 8..



























Finger plates, kicking plates



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 
					


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



SYSTEM 3060

DISCOVER OUR KEYLESS WORLD.



Simons  Voss
technologies

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.

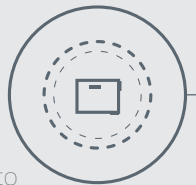
LIFTS

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 float 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

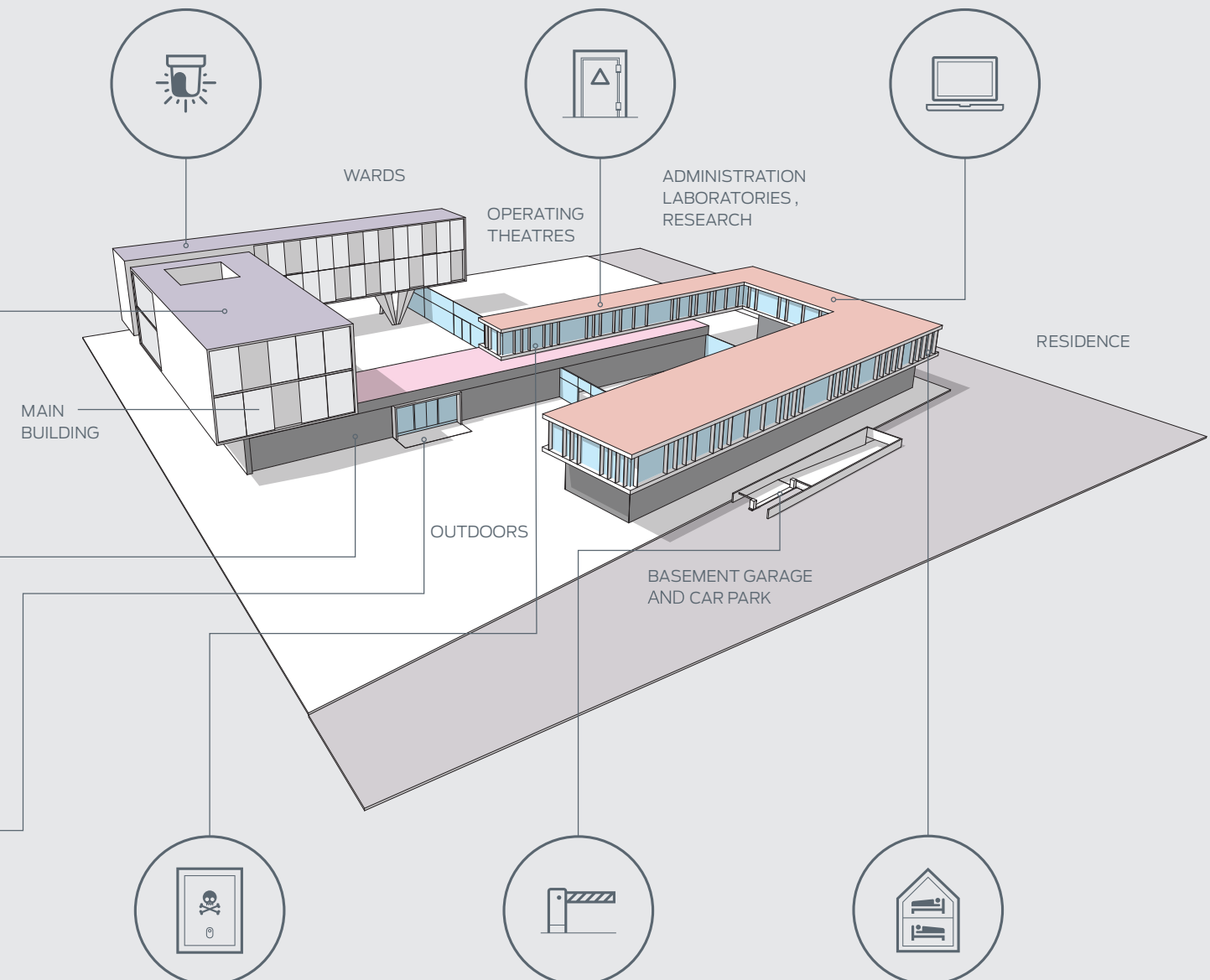
You can lock or open all doors at the press of a button in an emergency such as an attack or fire situation.

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

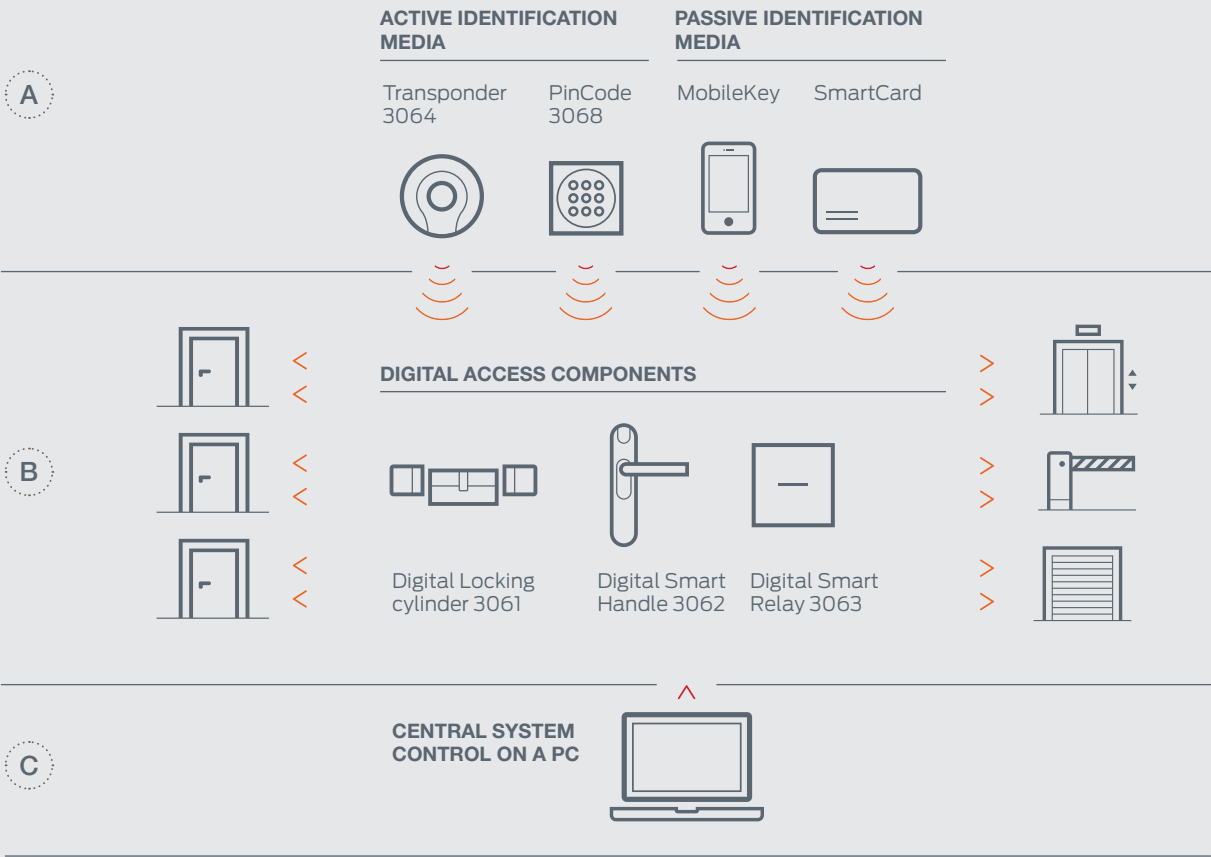
DISCOVER THE KEYLESS WORLD OF SIMONS VOSS.

SYSTEM 3060:
FLEXIBLE. EXTENDIBLE IN MODULES.
Digital locking and Access Control Systems 3060 offers customised access, protocol, control and monitoring functions which meet the needs of hospitals and rehabilitation centres perfectly. Existing employee IDs can be used for access control, for example.

KEYLESS LOCKING AND UNLOCKING
Instead of conventional keys, users receive a digital ID medium, such as a transponder or a smart card (A), on which personal access authorisations are stored

IN FULLCONTROL
The authorised ID medium opens doors, entrance ways, lifts, turnstiles and barriers. (B) The fully network-ready system captures and logs each access event fully automatically and manages everything with an easy-to-use software application (C). All building doors can be opened or closed centrally in life-threatening situations.

SYSTEM 3060



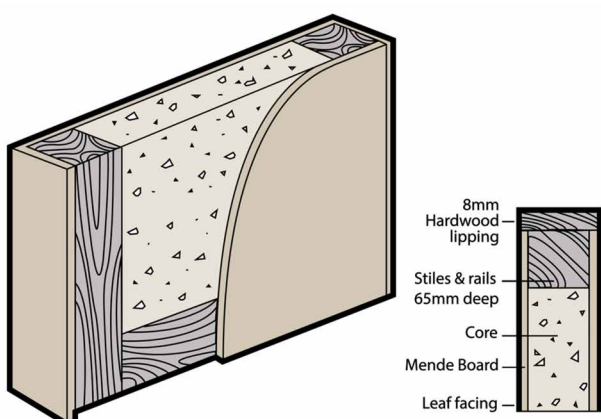
Interaction between the identification medium (A), intelligent locking cylinder or relay circuits (B) and the Locking System Management software (C) for systems configuration provides optimum access management for hospitals, rehabilitation centres and similar institutions.

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.

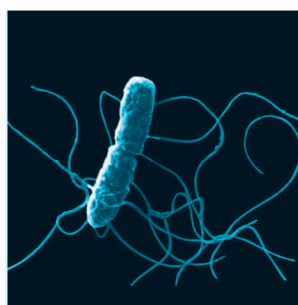
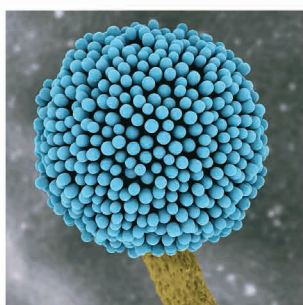


SALUS doorsets are available in various veneered finishes, high impact facings or 100% encapsulated in the high impact PVC for maximum hygiene and practical day to day maintenance in areas that require frequent and intensive cleaning.



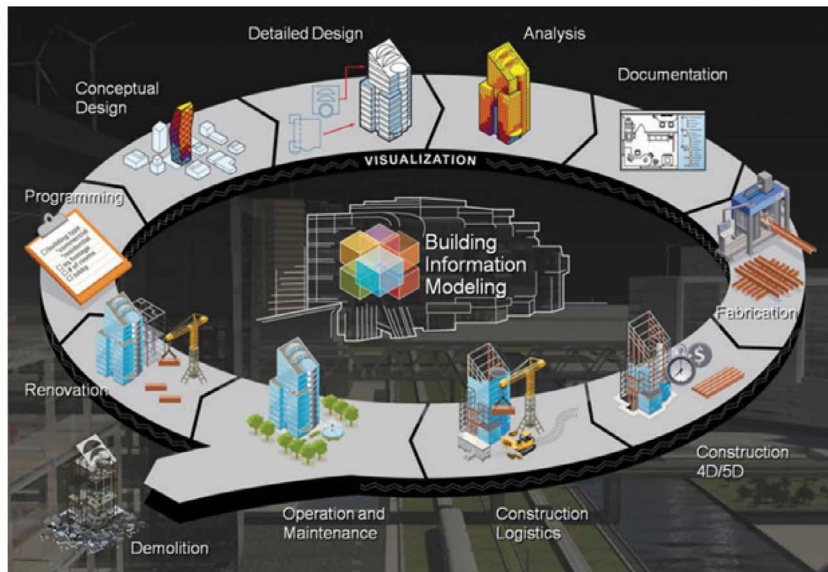
SALUS doorset finishes all include antimicrobial protection to reduce the risk of cross contamination when touched.

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.

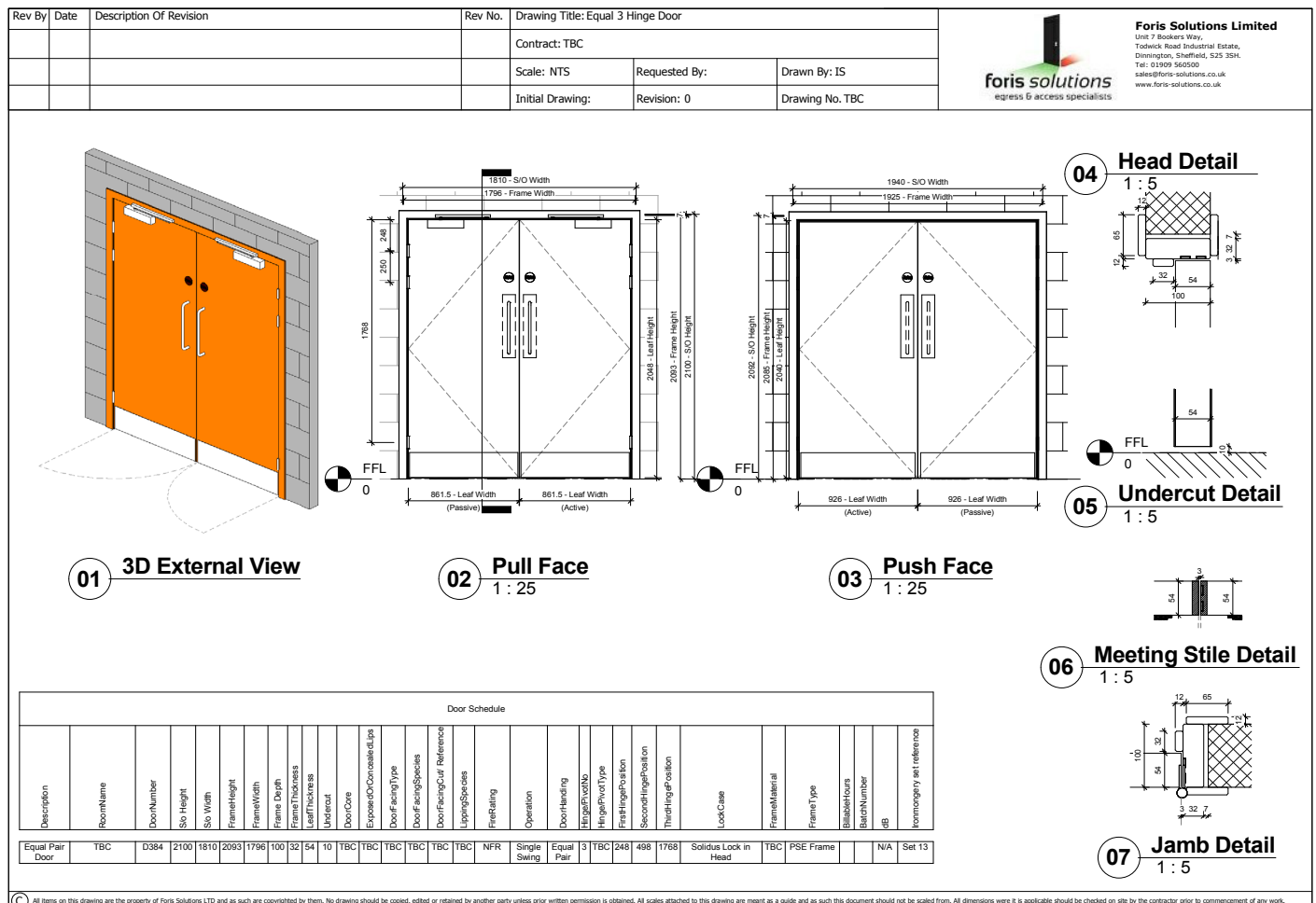


BIM Models

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.



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.

[illegible]

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.

Salus fully encapsulated doorset with GEZE automation.

No contact activation buttons to operate doorset

Continuous geared hinge

'Lockdown' interface with concealed electronic locking

Flush or standard bevel beading
EN16005 Compliance advice must be taken



Our preferred partner to automate doors is Geze UK Ltd. Our offer includes for geze engineers to install and commission automation where scheduled.



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.

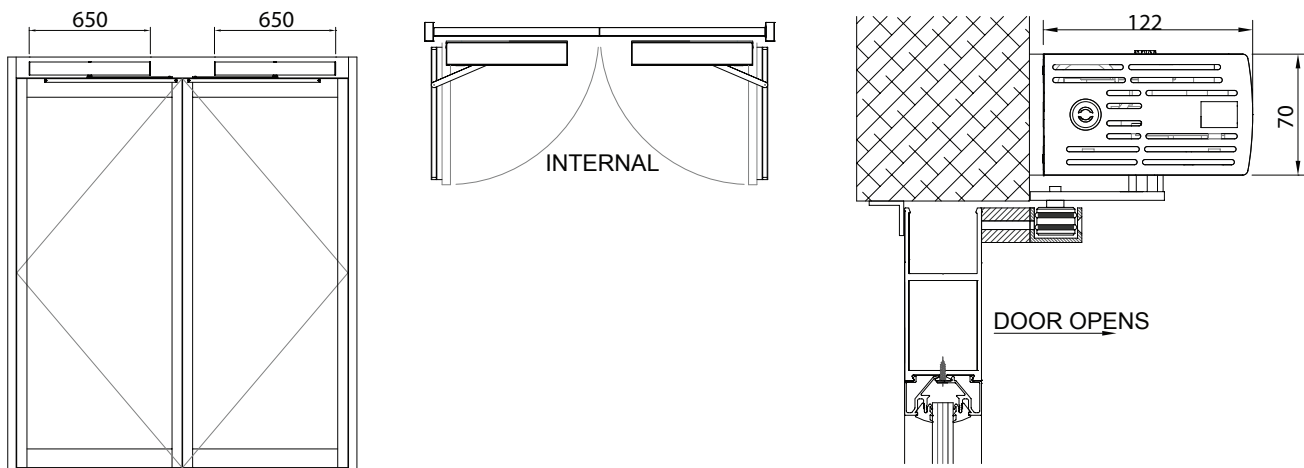
Whatever the demands of your project GEZE UK can help with a range of automatic operators, advice and support to provide a customers specific solution.

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.





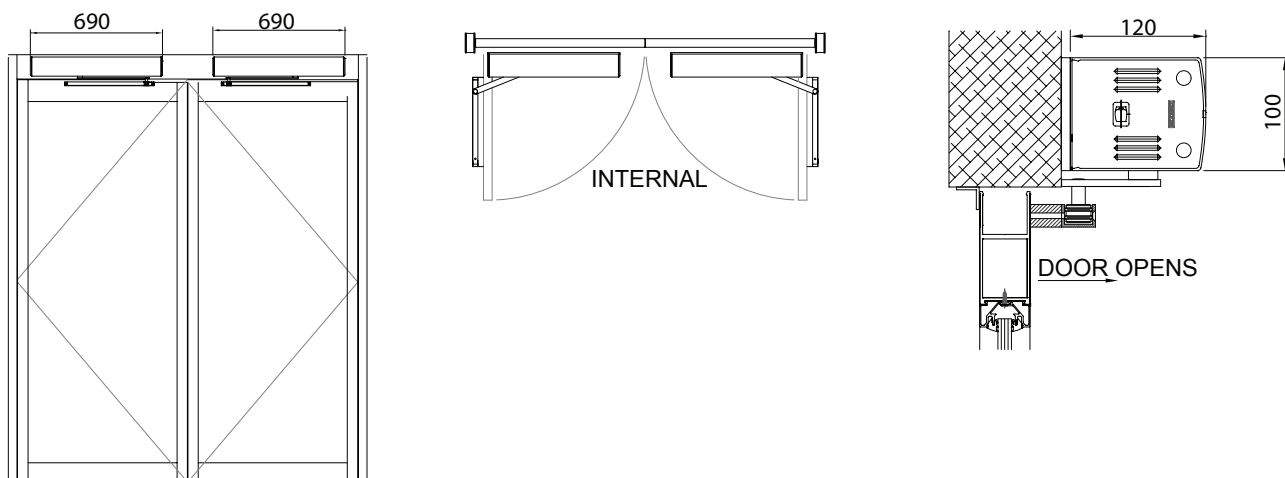
The Slimdrive EMD-F is an electro-mechanical drive system for swing doors that is particularly suitable for installation on narrow profiles and in situations where space is at a premium



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.

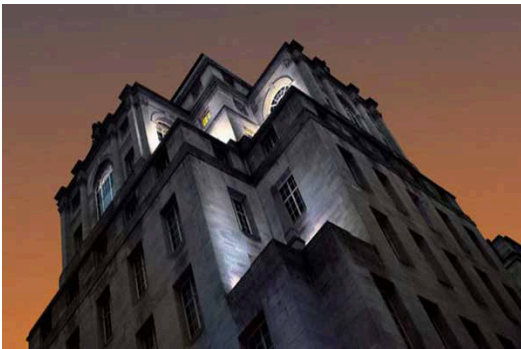
Recent Projects



National College for
High Speed Rail



Haven Court at South
Tyneside Hospital



Hotel Gotham



New York Stadium RUFC



Sheffield Hallam
University



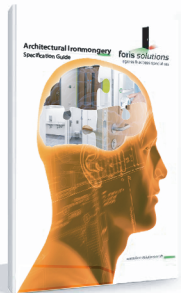
Langwith College
University of York



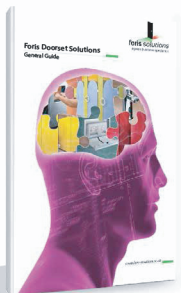
Core to our business is the specification and supply of door ironmongery, but we continue to evolve and develop complimentary skillsets and product solutions.

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.

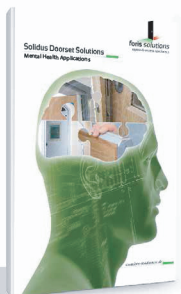
At every stage of the build process Foris Solutions can assist architects, contractors and building owners to deliver safe egress and controlled access through any door opening.



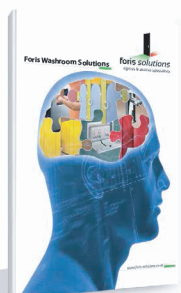
Architectural Ironmongery Specification Guide



Foris Doorset Solutions General Guide



Solidus Doorset Solutions Mental Health Applications



Foris Washroom Solutions

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