



Fen-Bay Services



TURN KEY SOLUTIONS

LOADING BAYS - SCISSOR LIFTS - INDUSTRIAL DOORS - GATES & BARRIERS



Providing Complete Loading Bay Solutions



Fen-Bay Services have been providing Loading Bay solutions since 1992.

Initially a small, family-run business, our reputation for providing high quality, cost-effective products has allowed us to grow significantly, along with the list of satisfied customers.

Our in-house design and fabrication department utilises the latest CAD technology, which enables us to provide bespoke solutions for your specific requirements.

We can also provide many 'off-the-shelf' products for more straightforward loading bay needs.

Our comprehensive range of accessories, from lighting and warning signs to wheel guides and bumpers, means that we can provide a 'one-stop-shop' for our customers.



24 HOUR EMERGENCY CALL-OUT SERVICES

We understand that your business needs to be operational at all times, and any down-time can affect your performance and profit.

We offer a nationwide, 24/7 emergency call out service, 365 days a year, giving you the piece of mind that you can access our fully trained, professional engineers who can get you back up and running as quickly as possible.



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WHY CHOOSE FBS PRODUCTS

All FBS automatic products are 100% rated, to provide reliable operation even in high traffic locations.

We will not compromise on quality and use only the best components rather than the cheapest.

Our design led philosophy results in an attractive, contemporary appearance, which presents the right image for your site entrance.

All barriers, gates and turnstiles are constructed from fully welded heavy duty steel components for maximum rigidity and durability.

Barriers, turnstiles and smaller gates are fully powder coated whilst larger gates are finished in our proprietary epoxy prime and two pack paint system which was developed in conjunction with major paint manufacturers to allow us to finish the gates to an extremely high standard with a lifespan to equal traditional galvanised and painted finishes.

The client is able to choose from any standard RAL colour or a combination of colours at no extra cost for the majority of our products. More specialised finishes may be specified as part of our bespoke products programme.

We can further personalise your products with water jet cut logos and backlighting where specified and this allows your corporate look to extend all the way to your site entrance.

The FBS Range of Rising Barriers



MANUALLY OPERATED BARRIERS

The FBS1500 manually operated barrier is an ideal choice to protect unattended or low traffic sites, with minimal investment.

FBS1500 barriers are available to suit road widths up to 6m with a standard 76mm diameter boom, and up to 9m with our heavy duty 100mm diameter boom.

As standard, the FBS1500 comes complete with preset counterweights, an adjustable tip support and expanding anchor bolts.

Installation is quick and simple - the barrier can easily be installed by one person, and is simply bolted down to a suitable concrete base.

Operation is just as simple, the counterweights allow effortless boom movement, and a latch is provided to lock the barrier in either the up or down position with a facility to allow you to fit a padlock.



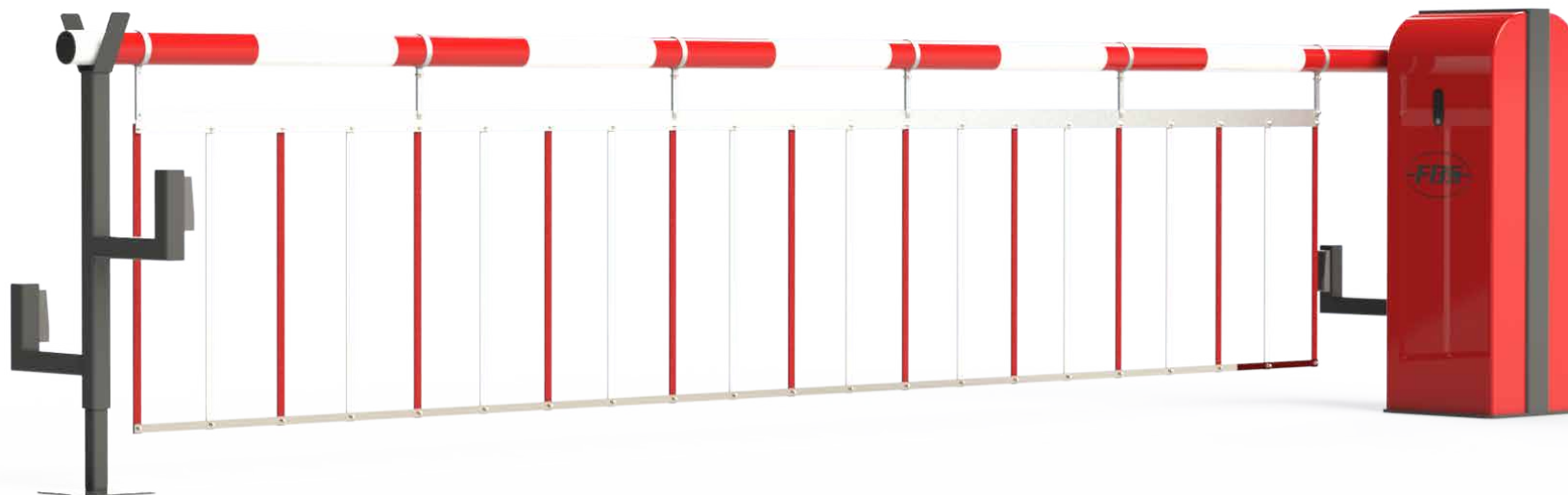
AUTOMATIC BARRIERS

The FBS3250 automatic barrier has been the most popular barrier in our range since its introduction due to its smart appearance and ease of set up. The barrier is available to cover carriageways of up to 7m with a plain boom or 5m with a full hi-bar upper and lower skirt.

The FBS3250 can be fitted with lower skirts or hi-bar skirts to deter pedestrians from bypassing the barrier and LED boom lights combined with STOP signs add to the visibility of the barrier to drivers in all weather conditions.

Fully 100% rated, our FBS3250 barrier is suited to the most demanding applications with the highest levels of traffic flow.

A complete safety system can be configured, with safety edges to the bottom of plain booms, photocell protection and induction loop vehicle detection combining to ensure that your barriers are fully compliant with the latest safety guidelines.



HEAVY DUTY AUTOMATIC BARRIERS

Our newly redesigned FBS3850 heavy duty barrier extends the capability of its smaller brother the FBS3250. With a fresh new look designed to reflect the contemporary appearance of the standard barrier, the FBS3850 can protect road widths of up to 9m.

The redesign utilises an enhanced motor and gearbox assembly which has eliminated the need for counterweights. Obviously this also removes the trapping hazards associated with traditional counterweighted barriers, and reduces the space required for installation.

As with all our barriers, a complete safety system can be configured, with safety edges to the bottom of plain booms, photocell protection and induction loop vehicle detection.

Lower skirts, or hi-bar skirts can be fitted and we offer a complete customisation service with colour combinations and logos available to match your corporate look.

FBS 1500 *Manual Barrier*



SPECIFICATION

MAXIMUM SPAN:

Standard Version: 7.0M, Heavy Duty Version: 9.0m

BOOM DIAMETER:

Standard Version: 76mm, Heavy Duty Version: 100mm

HEIGHT:

1m from base plate to centre of boom. Total barrier height: 1150mm

DIMENSIONS:

Stanchion: 250mm square box section, 400 x 400mm Base Plate

FINISH:

Polyester Powder Coated in red and white as standard



TIP REST

An adjustable bolt down boom tip rest is supplied at no additional cost, whilst a folding "pogo" type tip rest is optionally available.



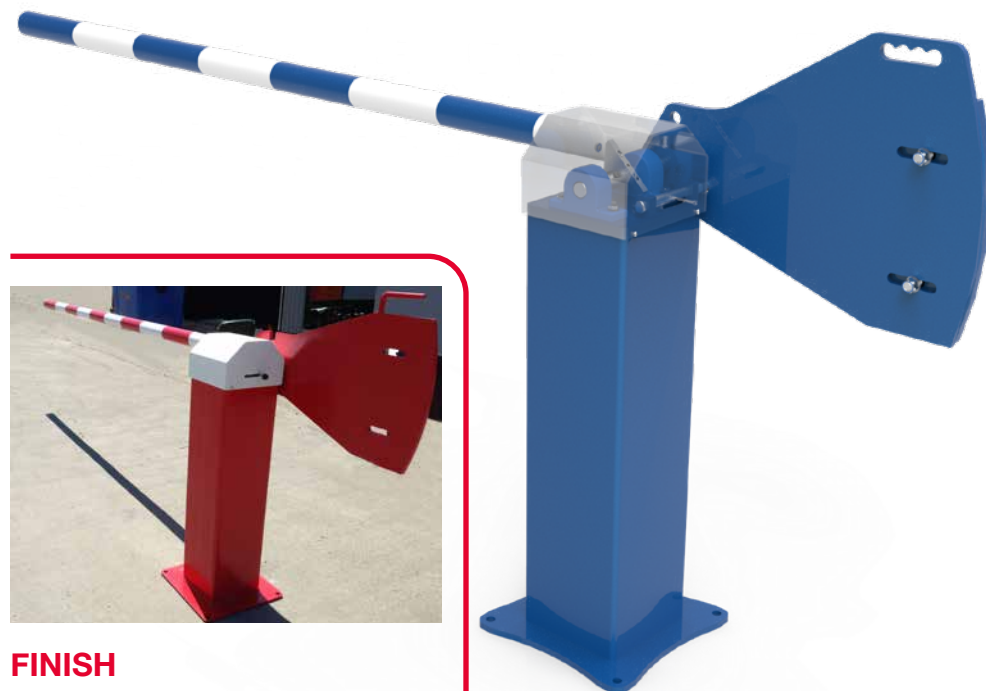
OPTIONAL ITEMS

A lower skirt can be fitted to the barrier at additional cost, and high visibility STOP or NO ENTRY signs may be specified to the boom.



LOCKING

A slide latch is fitted to allow the barrier to be latched in the closed or raised position. A facility to fit a padlock in either position is also provided (padlock not supplied).



FINISH

Barriers are powder coated in red and white or black and yellow as standard, however, other standard RAL colours may be specified at no additional cost. Booms are vinyl striped in red and white with a limited choice of other vinyl colours.

BARRIER DESIGN

The stanchion has a clean contemporary appearance with an enclosed bearing for maximum longevity. Counterweights balance the boom and minimise the effort needed to operate the barrier.



FBS3250 Automatic



SPECIFICATION

MAXIMUM SPAN:

7.0m with a plain boom, 6.0m with a bottom skirt, 5.0m with a hi-bar upper and lower skirt

BOOM DIAMETER:

76mm

DIMENSIONS:

405mm x 420mm x 1140mm

OPENING/CLOSING TIMES:

1.2 to 6 seconds (adjustable)

DRIVE UNIT:

Inverter driven 3 phase motor and wormed gearbox

POWER SUPPLY:

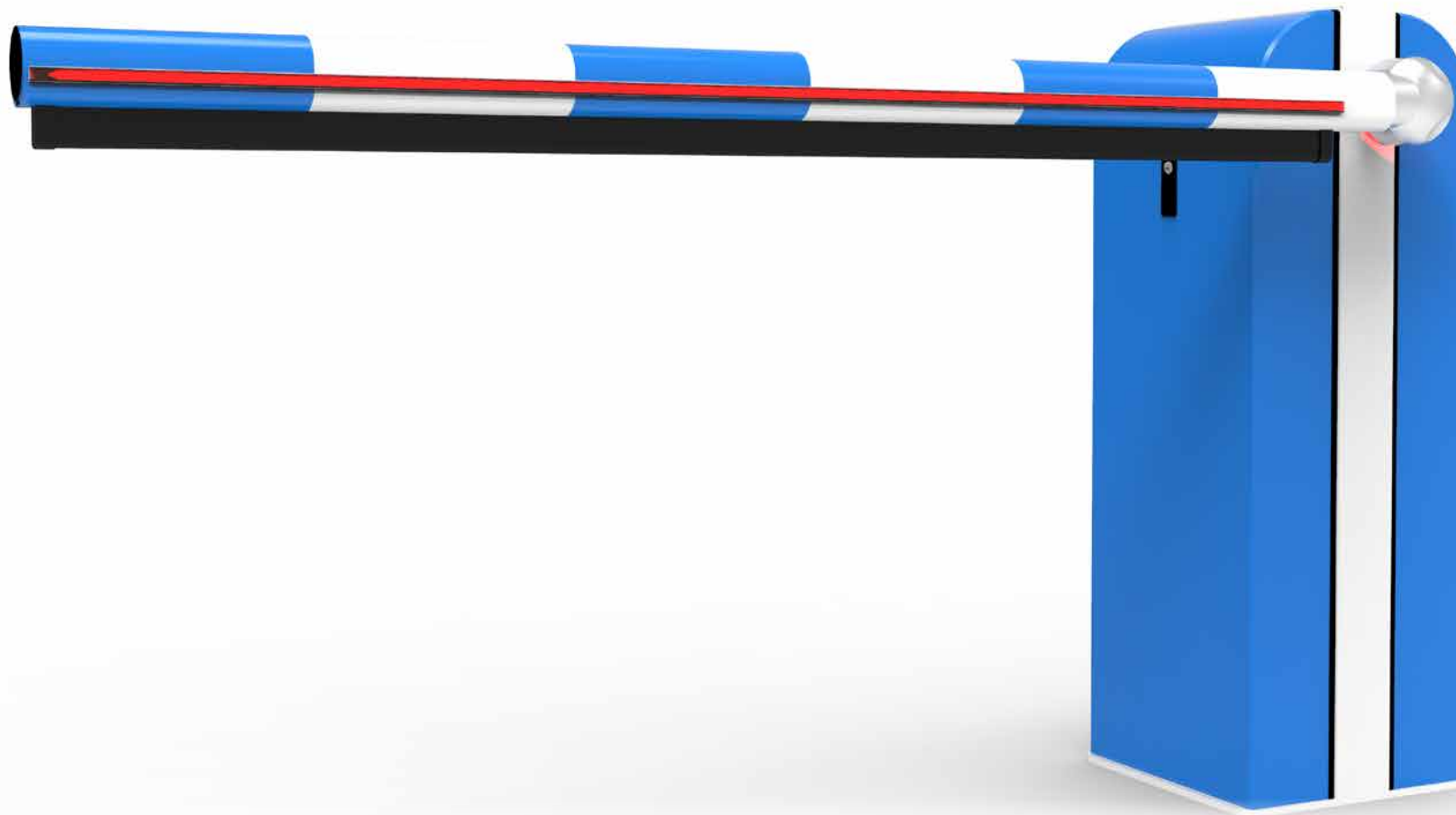
230VAC, 50Hz 5 Amps

CYCLES:

100% continuous duty rating

FINISH:

Polyester Powder Coated in red and white as standard



PLC

D3250 barriers are fitted with a Schneider PLC unit with a graphic display to simplify commissioning and maintenance. There are many adjustable parameters including speed adjustment, with a slow down feature, and a standard time clock function.



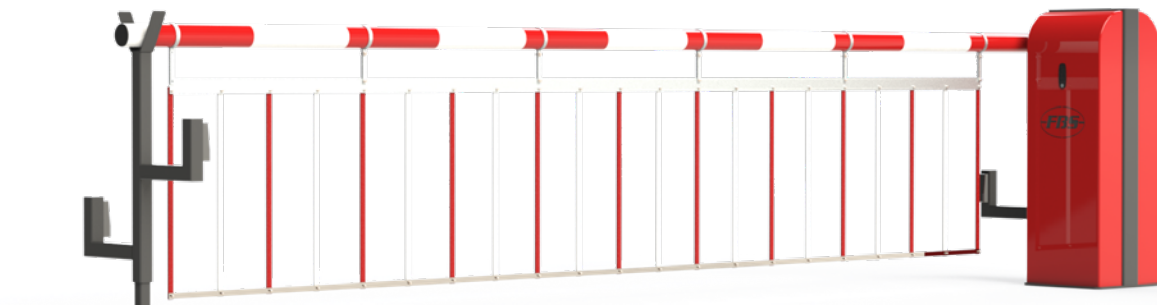
SKIRT

A lower skirt or hi-bar upper and lower version can be fitted to the barrier at additional cost, and high visibility STOP or NO ENTRY signs and LED boom lights may be specified to the boom.



FINISH

Barriers are powder coated in red and white or black and yellow as standard, however, other standard RAL colours may be specified at no additional cost. Booms are vinyl striped in red and white with a limited choice of other vinyl colours.



BARRIER DESIGN

The cabinet has a clean contemporary appearance with fully removable clamshell covers to both sides to allow complete access to all internal components.

LOGO

To enhance your site entrance we are able to produce LED backlit logos into the barrier cabinet. These are designed on CAD and cut into the sheet steel with our water jet cutter.



FBS3850 Heavy Duty Automatic Barrier



SPECIFICATION

MAXIMUM SPAN

9.0m with a plain boom, 8.0m with a bottom skirt, 6.5m with a hi-bar upper and lower skirt

BOOM DIAMETER

100mm

DIMENSIONS

770mm wide x 520mm deep x 1230mm high

OPENING/CLOSING TIMES

4 to 9 seconds (adjustable)

DRIVE UNIT

Inverter driven 3 phase motor and wormed gearbox

POWER SUPPLY

230VAC, 50Hz 5 Amps

CYCLES

100% continuous duty rating

FINISH

Polyester Powder Coated in red and white as standard



PLC

D3850 barriers are fitted with a Schneider PLC unit with a graphic display to simplify commissioning and maintenance. There are many adjustable parameters including speed adjustment, with a slow down feature, and a standard time clock function.



SKIRT

A lower skirt or hi-bar upper and lower version can be fitted to the barrier at additional cost, and high visibility STOP or NO ENTRY signs and LED boom lights may be specified to the boom.



FINISH

Barriers are powder coated in red and white or black and yellow as standard, however, other standard RAL colours may be specified at no additional cost. Booms are vinyl striped in red and white with a limited choice of other vinyl colours.



BARRIER DESIGN

The cabinet has a clean contemporary appearance with fully removable clamshell covers to both sides to allow complete access to all internal components. Unlike many heavy duty barriers there are no counterweights which removes a potential trapping hazard and reduces the required installation space..

LOGO

To enhance your site entrance we are able to produce LED backlit logos into the barrier cabinet. These are designed on CAD and cut into the sheet steel with our water jet cutter.



The FBS Range of **Gates**



TRACKED SLIDING GATES - PAGE 14

Tracked sliding gates are typically used in locations where limited space in the gate backrun area precludes the use of cantilevered gates. The use of the track eliminates the need for the triangulated cantilever element of our non-tracked gates so saving in the region of 25 to 30% of the overall gate length.

Identical in specification to our cantilevered gates, the FBS5000 are fully safety compliant as standard and are available with the same wide range of infill materials and colour choices.



CANTILEVER SLIDING GATES - PAGE 16

Our FBS5600 range of cantilever sliding gates are designed to provide robust and reliable security at busy vehicle entrances. They are manufactured from high strength steel, which provides a more robust product than aluminium and ensures a much longer service life. These gates are custom manufactured to the client's individual requirements and are available in any size up to 6m clear width by 3.5m height.

Both manually operated and automatic versions are available. They have an attractive appearance, which may be enhanced with a choice of infill options ranging from vertical bar, palisade, weldmesh or timber. Automatic gates are powered by a three phase, inverter driven motor/gearbox, and safety systems which fully comply with all current and evolving safety legislation and best practice.



HEAVY DUTY CANTILEVER SLIDING GATES - PAGE 18

FBS5800 gates are a heavy duty version of our popular FBS5600 cantilevered automatic gates, and provide the optimum solution for vehicle entrance control at high security locations or facilities which experience a high level of vehicle movements.

Gates are manufactured to suit customer's individual requirements and sizes up to 12m width and 3.5m height are available as fully automated or manually operated types. The infill design of gates can be modified to reflect the needs of individual projects,

Fully compliant safety systems are fitted as standard, including Cat. 3 safety edges and twin photocells to maintain compliance with evolving legislation.



PEDESTRIAN GATES - PAGE 22

Our pedestrian gate is produced in a wide variety of formats, from simple padlockable gates to fully DDA compliant automated pedestrian access points. Typical applications include fire escapes with push to exit hardware, DDA compliant gates along with simple site security gates. A range of infill options exist, from vertical bar, weldmesh, timber cladding or decorative steel designs.

Automated pedestrian gates are fitted with hydraulic rams or underground drives, and are fitted as standard with fully compliant safety systems. Manual gates are usually supplied with slip latches for padlocking, or magnetic locks.



SWING GATES - PAGE 20

FBS produce a wide range of security swing gates. Produced from fully welded mild steel, gates are available in either single or double leaf versions, and in any size up to 14m clear width and 3m in height.

Our swing gates can be manufactured with a variety of infill options, from standard vertical bar, solid steel or timber, and decorative steel designs. We are able to design a gate to your exact requirements or match an existing fence or gate type.

All our automatic gates are equipped with Category 3 safety edges and dual Photocells as standard to ensure compliance with all current safety legislation.



BI-FOLDING GATES - PAGE 24

Bi-folding speed-gates provide the perfect solution for security in confined locations, or where speed of opening is important.

The design incorporates two mechanically connected leaves per side, which swing open together thus providing a greater speed of operation than other automated gate systems.

The small swing arc needed by the dual gate leaf system allows these gates to be located in situations which would rule out the installation of conventional gates. They are engineered to allow bolt down fixing to suitable concrete pads, and are compatible with all current access control systems.



BESPOKE GATE PROGRAMME

Our wide range of gate types and infills will suit the vast majority of applications. Sometimes however, there are instances where a more distinctive or unique gate design is required by your client.

To cater for these individual projects, FBS have developed our bespoke gate programme. An FBS product designer will work with you or your client to translate your design ideas into a one off product. This programme allows you to specify decorative infills, scrolls, timber infills, and bowed gate tops to name but a few options.

Please contact our sales department for further information.

FBS5000 Gate



SPECIFICATION

MAXIMUM SPAN

14.0M

MAXIMUM HEIGHT

5.0m depending upon span

OPENING/CLOSING TIME

4 seconds per metre (adjustable)

DRIVE UNIT

3 Phase motor and wormed gearbox with rack and pinion final drive

SAFETY

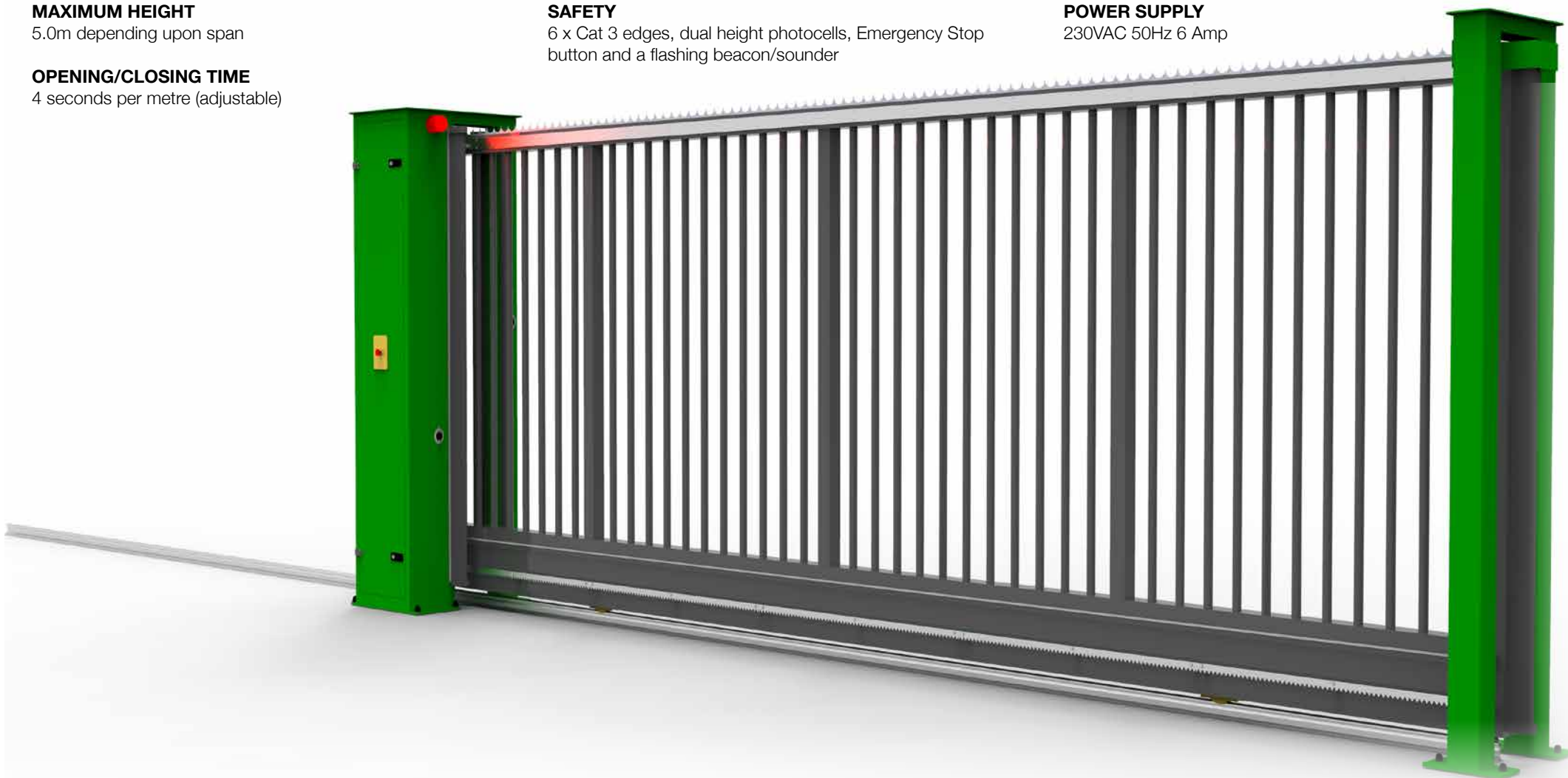
6 x Cat 3 edges, dual height photocells, Emergency Stop button and a flashing beacon/sounder

CYCLES

100% Duty Cycle

POWER SUPPLY

230VAC 50Hz 6 Amp



PLC

Plug and Play! All FBS gates feature a Schneider PLC control system with inverter, all pre wired and factory tested ready for connection to your mains power supply.



OPTIONAL TOUCH SCREEN

Our state of the art graphic display provides quick, intuitive touch screen programming and fault finding with integrated product manuals and wiring diagrams. We can also customise the display with your logo.

GATE DRIVE

Reliable and almost silent in operation. FBS5000 gates are powered via an inverter driven motor and gearbox, providing 3 phase controllability with single phase economy.



SAFETY SYSTEMS

Safety first. All our powered gates are equipped with class leading safety systems as standard. For the FBS5000, this includes 6 x Cat. 3 safety edges, twin photocells at different heights, a cabinet mounted Emergency Stop button and a flashing beacon/sounder. Working with our unique control software this provides the quickest response to a safety event in the industry.



GATE DESIGN

A wide range of gate infills are available, from our standard vertical tube, to weldmesh, palisade and timber cladding. We can even provide sheet steel with your logo cut out by water jet as shown. Also, if you specify vertical bar or sheet infill in a standard RAL reference, we don't charge for non-standard colours!



FB55600 *Cantilever Sliding Gate*



SPECIFICATION

MAXIMUM SPAN:

6.0M

MAXIMUM HEIGHT:

3.5m

OPENING/CLOSING TIME:

5 seconds per metre (adjustable)

DRIVE UNIT:

3 Phase motor and wormed gearbox with rack and pinion final drive

SAFETY:

6 x Cat 3 edges, dual height photocells, Emergency Stop button and a flashing beacon/sounder

CYCLES:

100% Duty Cycle

POWER SUPPLY:

230VAC 50Hz 6 Amp



PLC

Plug and Play! All FBS gates feature a Schneider PLC control system with inverter, all pre wired and factory tested ready for connection to your mains power supply.

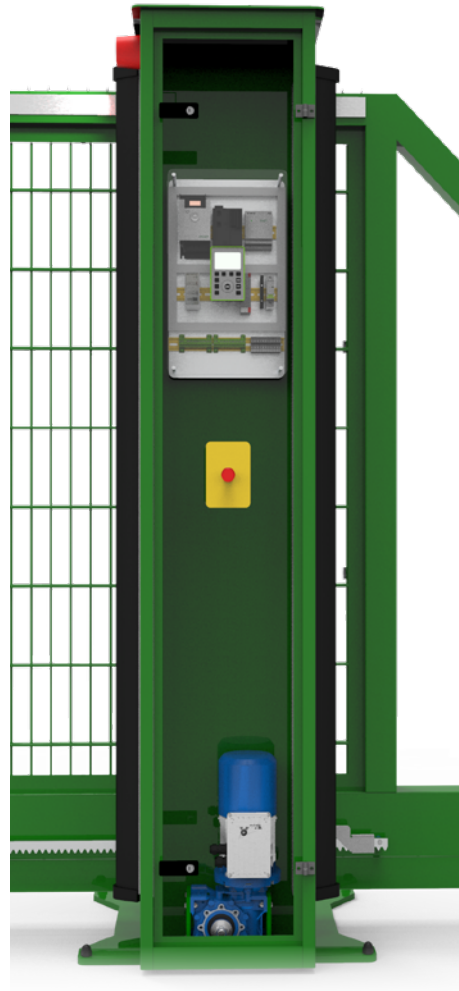


OPTIONAL TOUCH SCREEN

Our state of the art graphic display provides quick, intuitive touch screen programming and fault finding with integrated product manuals and wiring diagrams. We can also customise the display with your logo.

GATE DRIVE

Reliable and almost silent in operation. FBS5600 gates are powered via an inverter driven motor and gearbox, providing 3 phase controllability with single phase economy.



SAFETY SYSTEMS

Safety first. All our powered gates are equipped with class leading safety systems as standard. For the FBS5600, this includes 6 x Cat. 3 safety edges, twin photocells at different heights, a cabinet mounted Emergency Stop button and a flashing beacon/sounder. Working with our unique control software this provides the quickest response to a safety event in the industry. The FBS5600 also has flush fitted limit detectors and canted in safety edges at the drive post to minimise trapping hazards. You won't find a safer gate.



GATE DESIGN

Designed for you. A wide range of gate infills are available, from our standard vertical tube, to weldmesh, palisade and timber cladding. We can even provide sheet steel with your logo cut out by water jet as shown. Also, if you specify vertical bar or sheet infill in a standard RAL reference, we don't charge for non-standard colours!



FB55800 *Cantilever Sliding Gate*



SPECIFICATION

MAXIMUM SPAN

13.0M

MAXIMUM HEIGHT

3.5m

OPENING/CLOSING TIME

5 seconds per metre (adjustable)

DRIVE UNIT

3 Phase motor and wormed gearbox with rack and pinion final drive

SAFETY

6 x Cat 3 edges, dual height photocells, Emergency Stop button and a flashing beacon/sounder

CYCLES

100% Duty Cycle

POWER SUPPLY

230VAC 50Hz 6 Amp



PLC

Plug and Play! All FBS gates feature a Schneider PLC control system with inverter, all pre wired and factory tested ready for connection to your mains power supply.



OPTIONAL TOUCH SCREEN

Our state of the art graphic display provides quick, intuitive touch screen programming and fault finding with integrated product manuals and wiring diagrams. We can also customise the display with your logo.

GATE DRIVE

Reliable and almost silent in operation. FBS5800 gates are powered via an inverter driven motor and gearbox, providing 3 phase controllability with single phase economy.



SAFETY SYSTEMS

Safety first. All our powered gates are equipped with class leading safety systems as standard. For the FBS5800, this includes 6 x Cat. 3 safety edges, twin photocells at different heights, a cabinet mounted Emergency Stop button and a flashing beacon/sounder. Working with our unique control software this provides the quickest response to a safety event in the industry. The FBS5800 also has flush fitted limit detectors and canted in safety edges at the drive post to minimise trapping hazards. You won't find a safer gate.



GATE DESIGN

Designed for you. A wide range of gate infills are available, from our standard vertical tube, to weldmesh, palisade and timber cladding. We can even provide sheet steel with your logo cut out by water jet as shown. Also, if you specify vertical bar or sheet infill in a standard RAL reference, we don't charge for non-standard colours!



FBS6000 *Swing Gates*



SPECIFICATION

MAXIMUM SPAN

14M (7m per leaf)

MAXIMUM HEIGHT

5.0m (Depending on span)

CONSTRUCTION

Up to 4.0m leaf - 80 x 80 Box section, Up to 7.0m leaf - 100 x 100 Box section

POSTS

From 120mm to 250mm box section, depending on gate leaf dimensions

OPENING/CLOSING TIME

6 - 20 seconds (Adjustable)

DRIVE CHOICES

D350v Underground drives for leaves up to 5.0m
D380HD Above ground drives for leaves up to 6.0m
Hydraulic rams for leaves up to 4.5m

SAFETY

Cat 3 Edges as standard with Dual Photocells and a flashing beacon/sounder

CYCLES

100 % Duty Cycle

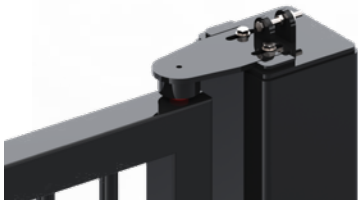
POWER SUPPLY

230vac 50hz 6Amp



HEAVY DUTY BEARING HINGES

High load bearing equipped hinges are fitted which rotate on the pivot point to minimise closing up of the gate leaf to the post, and so enhancing safety.



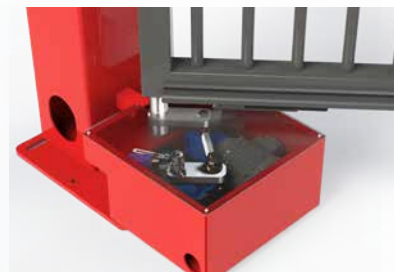
FIXING OPTIONS

Gates can be supplied with dig-in or bolt down posts.



AUTOMATION OPTIONS

A range of drive options is available including hydraulic rams, underground drives and heavy duty above ground drive units.



FINISH

Swing gates are powder coated in any standard RAL colour at no additional charge.

TWIN PHOTOCELLS

Safety first. All our powered gates are equipped with class leading safety systems as standard. For the FBS6000, this includes 6 x Cat. 3 safety edges, twin photocells at different heights, a cabinet mounted Emergency Stop button and a flashing beacon/sounder. Working with our unique control software this provides the quickest response to a safety event in the industry.



FBS6100 *Swing Gates*



SPECIFICATION

MAXIMUM SPAN

2.0M

MAXIMUM HEIGHT

3.5m

CONSTRUCTION

100mm x 100mm box section frame (posts)

50mm x 50mm box section frame (leaf)

POSTS

100mm x 100mm (if separate)

OPENING/CLOSING TIME

10 to 18 seconds depending upon operator type

DRIVES

Hydraulic ram or underground motor and gearbox

SAFETY

Cat 3 Edges as standard with Dual Photocells and a flashing beacon/sounder

CYCLES

High intensity use

POWER SUPPLY

230vac 50hz 6Amp



WRAP AROUND HINGES

Our hinge solution minimises closing up of the gate leaf towards the gate post to mitigate against trapping hazards. As shown our integrated gate closer can also be specified, which is a neater solution than typical gas strut mechanisms.



GATE INFILL

Vertical tube is standard although palisade, weldmesh and composite wood infills are also available.



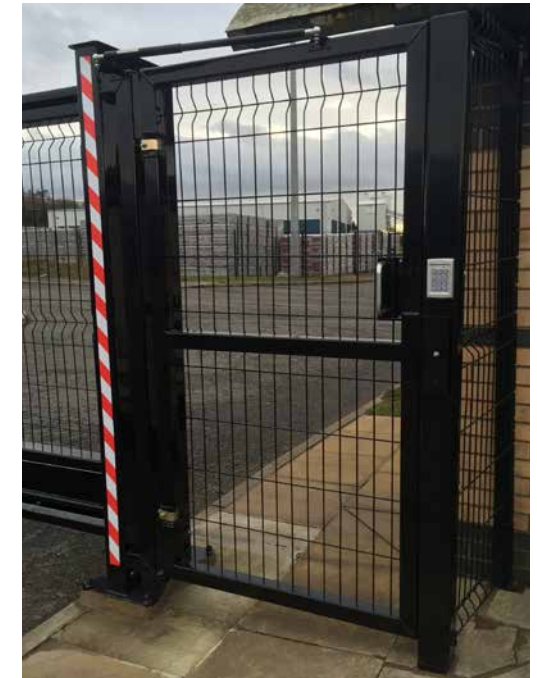
SAFETY

All automated pedestrian gates are fitted with 3 self monitoring safety edges and twin photocells as standard. A flashing beacon with sounder capabilities can also be added.



LOCKS

Manually operated gates are supplied as standard with a slip latch for padlocking, but a magnetic lock and self-closer can also be supplied. Alternatively a range of panic hardware can also be installed.



D6500 *Bi-Folding Gate*



SPECIFICATION

MAXIMUM SPAN

8.0M

MAXIMUM HEIGHT

3.5m (dependent upon span)

OPENING/CLOSING TIME

105 seconds

DRIVE SYSTEM

3 phase (inverter driven) motor and wormed gearbox mounted at ground level or high level as required.

SAFETY

4 x Cat 8 edges, dual height photocells, Emergency Stop button and a flashing beacon/sounder

POWER SUPPLY

230VAC 50Hz 6 Amp



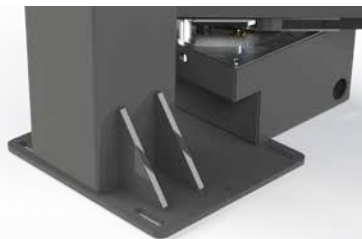
PLC

Bi-folding gates feature a Schneider PLC control system with inverter, all fitted within the gate post.



GATE DRIVE

Reliable and almost silent in operation, our 3 phase motor and wormed gearbox drive is usually positioned at ground level, although we are able to locate drives at high level if required.



BI-FOLDING LINKAGE

The linkage allows the smooth folding of both gate leaves, and provides the speed of operation that our bi-folding gates are known for. Leaves retract fully behind the gate post for maximum vehicle clearance.



SAFETY SYSTEMS

All our powered gates are equipped with class leading safety systems as standard. For the FBS6500, this includes 4 x Cat. 8 safety edges, twin photocells at different heights, a gate post mounted Emergency Stop button and a flashing beacon/sounder. Working with our unique control software this provides the quickest response to a safety event in the industry.



GATE DESIGN

Designed for you. A wide range of gate infills are available, from our standard vertical tube, to weldmesh, palisade and timber cladding. We can even provide sheet steel with your logo cut out by water jet as shown. Also, if you specify vertical bar or sheet infill in a standard RAL reference, we don't charge for non-standard colours!



D6600 *Bi-Folding Gate*



SPECIFICATION

MAXIMUM SPAN

8.0M

MAXIMUM HEIGHT

3.5m (dependent upon span)

OPENING/CLOSING TIM

105 seconds

GUIDE MECHANISM

Silent rollers within an overhead steel guide channel

DRIVE SYSTEM

3 phase (inverter driven) motor and wormed gearbox mounted at ground level or high level as required.

SAFETY

4 x Cat 3 edges, dual height photocells, Emergency Stop button and a flashing beacon/sounder

POWER SUPPLY

230VAC 50Hz 6 Amp



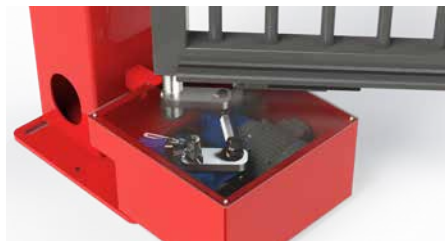
PLC

Bi-folding gates feature a Schneider PLC control system with inverter, all fitted within the gate post.



GATE DRIVE

Reliable and almost silent in operation, our 3 phase motor and wormed gearbox drive is usually positioned at ground level, although we are able to locate drives at high level if required.



BI-FOLDING GUIDE

The overhead channel and roller mechanism provides an ultra smooth and silent operation of the gate with no bounce of the gate leaves in any weather.



SAFETY SYSTEMS

All our powered gates are equipped with class leading safety systems as standard. For the FBS6600, this includes 4 x Cat. 3 safety edges, twin photocells at different heights, a gate post mounted Emergency Stop button and a flashing beacon/sounder. Working with our unique control software this provides the quickest response to a safety event in the industry.



GATE DESIGN

Designed for you. A wide range of gate infills are available, from our standard vertical tube, to weldmesh, palisade and timber cladding. We can even provide sheet steel with your logo cut out by water jet as shown. Also, if you specify vertical bar or sheet infill in a standard RAL reference, we don't charge for non-standard colours!



The FBS Range of Automatic Gate Drives



UNDERGROUND SWING GATE DRIVES

The FBS350 is a high performance underground gate drive which is suitable for the automation of swing gates up to 6m leaf width and with an overall weight of 800kg. The drive features a locking mechanism, and is available as a single leaf or double leaf kit. The unit is powered by a 3 phase motor, driven by a 240V single phase supply via an inverter for smooth reliable operation. A plc control system is supplied which enables full programming of movement and safety parameters and allows connection to any access control system.

SPECIFICATION

MAX GATE WEIGHT: 800KG

MOTOR SIZE: 0.37kw (3 phase)

LIMITS: Mech Roller type

SPEED: 8 -12 sec (adjustable)

AUX SUPPLY: 24vdc 1 AMP

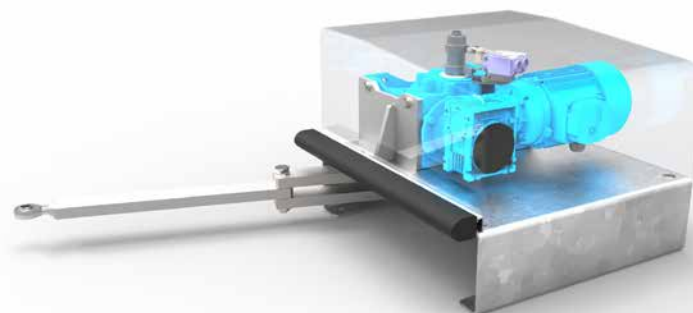
MAX LEAF WIDTH: 6.0m

CONTROL PANEL: PLC and inverter driven

LOCKING: Mechanical

SLOWDOWN: Yes (adjustable)

VOLTAGE: 230v



HEAVY DUTY SWING GATE DRIVES

A surface mounted drive unit the FBS380 is our most powerful drive system. Designed to operate gate leaves up to 8m and 1500kg. Supplied in a steel bolt down enclosure with pre-fitted drive arms, the unit is powered by a 3 phase motor, driven by a 240V single phase supply via an inverter for smooth reliable operation. A plc control system is supplied which enables full programming of movement and safety parameters and allows connection to any access control system.

SPECIFICATION

MAX GATE WEIGHT: 1.5 tonne

MOTOR SIZE: 0.37kw (3 phase)

LIMITS: Mech Roller type

SPEED: 8 -12 sec (adjustable)

AUX SUPPLY: 24vdc 1 AMP

MAX LEAF WIDTH: 8.0m

CONTROL PANEL: PLC and inverter driven

LOCKING: Mechanical

SLOWDOWN: Yes (adjustable)

VOLTAGE: 230v



SLIDING GATE DRIVES

The FBS650 is a self-contained drive system suitable for the automation of tracked and cantilevered sliding gates. Supplied in a steel enclosure, the unit is powered by a 3 phase motor, driven by a 240V single phase supply via an inverter for smooth reliable operation. A plc control system is supplied which enables full programming of movement and safety parameters and allows connection to any access control system.

SPECIFICATION

MAX GATE WEIGHT: 3.5 tonne

MOTOR SIZE: 0.37kw (3 phase)

LIMITS: M30 Proximity

SPEED: 4 secs per metre (adjustable)

AUX SUPPLY: 24vdc 1 AMP

CONTROL PANEL: PLC and inverter driven

LOCKING: Mechanical

SLOWDOWN: Yes (adjustable)

VOLTAGE: 230v



CONTROL AND SAFETY

Our gate drive kits are supplied with a full PLC control system fitted within a lockable steel enclosure. This system features our graphical interface unit which greatly simplifies the setup and configuration of your drive units. See page 54 of this brochure for further details of this system.

To complete your automation project you will need to add a fully compliant safety system to the gate, and again, the PLC system is pre configured to allow you to connect your safety edges, photocells, flashing beacons and induction loops. FBS are able to supply a kit of safety components if needed, and we can produce safety edges to any size, and supply brackets for mounting photocells etc to any gate type.

Please contact our sales or service teams for full details.

FBS Technology



CONTROL TECHNOLOGY

FBS have a policy of continual improvement which allows us to offer state of the art control and safety systems, and keeps us one step ahead of the competition. The PLC software was developed in house by FBS engineers to simplify installation and maintenance procedures. Our standard control system for barriers, gates and road blockers provides installers and end users with the ability to simply adjust operational parameters to suit their particular application. Featuring a graphic display and simple iPod type controls, the user can adjust time clocks, timers and even drive speeds within seconds.

If the system develops a fault, the screen glows red to alert the engineer, and the fault history can easily be displayed to allow instant diagnosis. As an example, the system will detect when a safety loop or edge has latched on and record this information. When an engineer accesses the PLC he will be presented with the fault information, therefore saving time and cost at site.

The Schneider programmer ensures that accessing parameters from the graphic display is both intuitive and user friendly. The user can simply scroll through the parameters and turn them on or off as desired. Speeds are set in a similar way to suit site requirements.

The drive is networked to the control system and provides functions from the graphical display to control speeds and slowdowns. This has allowed us to achieve the quickest emergency stop and back-off times in the industry, ensuring that our gates easily pass force tests without compromising their final speeds.

The system also has a built in time-clock function, allowing gates or barriers to be opened and closed to suit site requirements such as shift changes or holidays.

SCREEN DETAIL

D5600 MAIN MENU			
Parameters			
Time Clocks			
Timers			
Drive Settings			
Motor Settings			
Select	Alarm	Close	Open

Parameters			
No Pass Timer OFF			
Safety Reverse ON			
Loop/Photocell Close ON			
Traffic Light OFF			
Master Gate Outputs OFF			
ON	OFF		Alarm

Gate Timers			
Traffic Light Delay			
Close Delay			
No Pass Delay			
Pedestrian Open			
Pedestrian Close			
Select	Alarm		

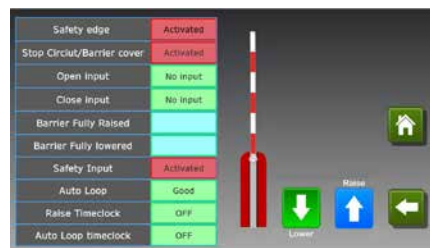
Alarm			
Opening Safety Edge Fault			
Safety Loop Latched 1min			
History			



The home page menu which can be customised to display your company logo.



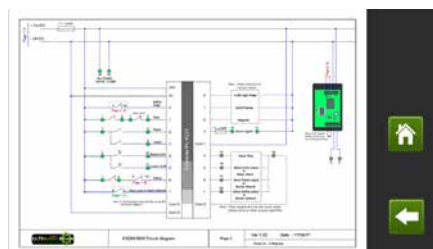
Gate and barrier speeds and slow down settings are on one page for simplicity.



Status page, at a glance confirmation of the status of the barrier/gate and safety systems.



The gate or barrier can be operated from the screen to test the programmed settings.



The unit even stores the O&M manual and wiring diagrams to make your life simpler.



The built in timeclock function is accessed from this page and can be configured in seconds.

Our new optional touch screen display extends the capabilities of our control system and allows you to set up and configure the system in a matter of minutes.

The software which was developed in house by FBS provides all you need to set up and troubleshoot the device, and you are even able to access the O&M manual and circuit diagrams from the screen.

A selection of the many pages available are shown here...

OUR SAFETY PHILOSOPHY

At the heart of every FBS design is the overriding concern for the safety of the end user and members of the public. As a bare minimum, FBS products are all supplied with safety systems which comply with current safety guidelines, and it is company policy to continually evolve systems which place us ahead of emerging legislation and guidelines. This allows us to offer products which are amongst the safest in the world. The requirements of the Machinery Directive are paramount, and we constantly monitor legislation for changes that may impact our product range. We also take advice from Gatesafe, the DHF and other trade bodies who specialise in safety matters.

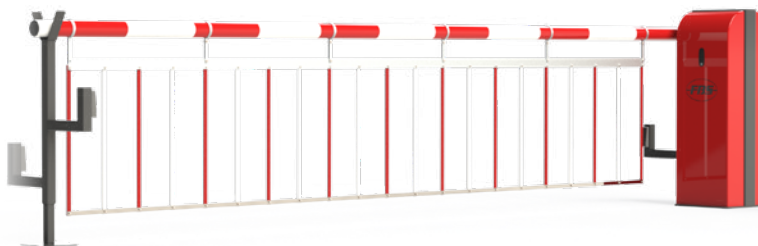
INDUCTION LOOPS

It is common practice to fit induction loops under the road surface to provide added protection to vehicles. As an example, if a vehicle with a trailer stops part way through the barrier, the photocells may see between the vehicle and trailer, and allow the barrier to operate. The addition of an induction loop will act as a second level of safety, and prevent movement until the vehicle has cleared the barrier.

ADDITIONAL SAFETY FEATURES

To enhance the standard safety system, clients can add secondary safety items such as a flashing beacon with sounder capabilities, LED boom lights and STOP signs.

If a desktop push button system is chosen, this will also have an integrated emergency stop function, and a deadman keyswitch is also available.



SAFETY EDGES

For plain booms, we can fit a protective rubber safety edge to the underside of the boom. This rubber edge is a Category 3 self monitoring system and will cause the boom to immediately stop movement and return to the raised position if it encounters an obstruction whilst closing. Our PLC system allows us to adjust the response time for this safety system to provide almost instantaneous response to a safety issue.

SAFETY PHOTOCELLS

For barriers with a plain boom, we fit a pair of photocells which protect the roadway directly under the boom. The photocells are fitted to the barrier cabinet and to the tip rest. Wired photocells are usually supplied, but we can also supply wireless units if it is not possible to cable across the road.

For barriers with a lower skirt, or hi-bar upper and lower skirt, two pairs of photocells are fitted. These are mounted on stand off brackets either side of the boom at different heights to provide maximum protection.



GATE SAFETY

SAFETY EDGES

Sliding Gates are fitted with 6 safety edges to protect all potential trapping or shearing points. These Category 3 self monitoring edges are fitted to the leading edge of the gate leaf, both sides of the drive stanchion on both the entry and exit sides (4 in total), and one to the rear of the gate leaf.

Swing Gates are fitted with Category 3 self monitoring safety edges as follows. Each gate leaf has an edge to both sides of the lower horizontal rail of the frame, and one edge vertically to the leading edge of the leaf.

If any of these devices encounter an obstruction whilst the gate is in motion the gate will immediately stop and then slowly move in the opposite direction to its original motion to clear the obstacle. The standard PLC system allows us to adjust the response time for this safety system to provide almost instantaneous response to a safety issue.

SAFETY PHOTOCELLS

Sliding Gates feature 2 pairs of photocells, one on either side of the gate leaf. Fitted at different heights to offer maximum protection, they are flush mounted in the gate drive stanchion and the closing post.

Swing Gates have two pairs of photocells at different heights on the outside of the gate posts. In addition, if required we can supply two free standing posts with a pair of photocells which are mounted clear of the swing arc of the gate inside site.

INDUCTION LOOPS

It is common practice to fit induction loops under the road surface to provide added protection to vehicles. As an example, if a vehicle with a trailer stops part way through the gate, the photocells may see between the vehicle and trailer, and allow the gate to operate. The addition of induction loops will act as a second level of safety, and prevent movement until the vehicle has cleared the area. Both sliding and swing gates should have induction loops to both sides of the moving leaf, with double leaf swing gates having a diamond shaped loop in between the swing arc of the leaves.

ADDITIONAL SAFETY FEATURES

Automated gates are all fitted with an emergency stop button to the stanchion or gate post, along with a flashing beacon/sounder. Swing gates feature non reducing gap type hinges so that there is no increased risk of trapping between the posts and leaves.

To enhance the standard safety system, clients can add additional safety items such as LED lights and STOP signs to the gate leaves. If a desktop push button system is chosen, this will also have an integrated emergency stop function, and a deadman keyswitch is also available. Rubber finger guards can also be chosen between the gate posts and leaves.





TECHNICAL SUPPORT

From initial product specification all the way to end of service life disposal, FBS offers a full technical backup service to all of our customers.

We are happy to survey your site and advise on the correct product and installation requirements at the start of your projects.

We can advise on the practicality of custom designs. Access control systems and integration with any existing systems you may have at site.

When your product is installed, we offer telephone technical assistance throughout the lifespan of your equipment in addition to the other site based services outlined elsewhere on these pages.



CUSTOMER TRAINING

Trade clients who regularly supply FBS products to their clients can add value to their services by taking advantage of our free product training.

Held at our factory in Welbourn, the one day course covers the skills necessary to install our full range of products and correctly configure the PLC control and safety systems. Also included is training on fault finding and repairs/maintenance procedures.

After training, delegates will be tested on their knowledge of our products, and upon passing this test, they will be presented with a certificate of completion and "Qualified Installer" logos for your company vans.

If you are interested in enrolling your engineers on one of our courses, please contact our sales or service departments.



PRODUCT WARRANTIES

Products purchased on a supply only basis will be covered by a 12 month warranty against faults due to defective raw materials or manufacturing processes.

All products supplied and installed by FBS shall be provided with a 12 month warranty against faults due to defective raw materials or manufacturing processes and any installation works carried out by FBS. The warranty will commence on the date of completion of the installation by FBS, and will cover the attendance of an engineer to site and replacement materials where a qualifying defect is found.

It is a condition of all warranties that the products shall be subject to a programme of regular preventative maintenance by a qualified engineer throughout the warranty period.



INSTALLATION SUPPORT

There are a number of ways in which FBS can support you in the installation of your new security products.

For those clients who intend to carry out their own installation, we will provide foundation and ducting drawings along with an O&M manual containing full set up instructions. In addition, we are pleased to offer telephone support if you run into an uncertainty at site. If preferred, we can allow for a qualified engineer to attend site to oversee your installation and offer on the spot advice and supervision.

If you would prefer your product to be installed by the manufacturer, we offer a full in house installation service to our trade and end user clients. Our fully trained engineers will take delivery of the equipment and install and configure, including some access control systems. Where needed, we will work with your access control and fire alarm contractors to ensure full integration of the products into your existing or new systems.



MAINTENANCE SUPPORT

It is a requirement of the Machinery Directive that all automated products shall be subject to a regime of regular preventative maintenance services. It is also important to follow such a regime during the warranty period, as failure to correctly maintain your product will invalidate the factory warranty. Over and above that, however, a programme of maintenance ensures that your products operate reliably and continuously throughout their service life, and therefore maximise the benefits of your investment.

We would be pleased to offer a maintenance contract proposal for your products, or offer to train your own engineers in the correct procedures.



SPARES SUPPORT


FBS provide complete spare parts support for all our products. With sufficient stock levels to support our increasing production levels, we are able to offer a same day despatch service on most spare parts.


In addition to FBS products, we are also able to supply compatible spares for most other leading brands.

We also stock a wide range of accessories from full safety upgrade kits, access control components, desktop push buttons and safety signs.

For non account holders, payment may be made by credit card if required.



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