ALLEGION™

Briton

Overhead door closers & floor springs

Product overview



A portfolio of door control solutions from the UK's most trusted brand

The Briton overhead door closer range provides a multi-level approach to door closing solutions to suit all projects, door applications and budgets. From the simplicity of a mechanical non-fire door closer for basic functionality, to a microprocessor controlled low energy operator for special applications e.g. for doors required to satisfy Part M of the Building Regulations, there are Briton products to meet your needs.

Specifying a Briton door control

When specifying a Briton door closer you can be assured that an uncompromising attention to detail has been given to every stage of its design and manufacture. This ensures that its products and systems meet the highest possible quality and conformity certifications and exceed the requirements of all applicable European Standards.

A global leader in every sense of the word, Allegion has an unrivalled track record in satisfying the demands of architects, designers, specifiers and building contractors throughout the world.

Allegion (UK) Ltd manufactures a portfolio of market leading products, including Briton, the UK's number one brand of door controls. Briton is the UK's number one brand of door closer and is a name synonymous with high quality design, reliability and durability. Allegion is at the forefront of supplying products that meet the new European CPR requirements, such as one of the first ranges of CE marked fire exit hardware and door controls.

See also our ranges of high performance surface mounted and concealed cam action door closers.



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 provide guidance in establishing recommended 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 for fire door applications, it may be more appropriate to use electro-magnetic hold open or swing free closers or a powered opening solution.

Further information on CE marking and Certifire certificates can be found on our website at:

www.allegion.co.uk/downloads and click on Test Certificates.

For Declaration of Performance please go to:
www.britondops.co.uk

A model to suit all applications and budgets



Heavy duty The Briton 2130 is a high performance, adjustable power overhead closer with various design options including slide track and electro-magnetic hold-open. Available in a choice of covers and finishes.



Medium duty The Briton 2100 and 2000 Series of classic medium duty closers offer fixed and adjustable power closers with a choice of covers and finishes.



Medium duty The Briton 1100 Series medium duty closer range offers multiple design options which can be co-ordinated across a broad range of performance requirements including electro-magnetic hold-open.



Medium duty The Briton 996 Series is a dedicated electro-magnetic hold-open/swing-free fixed power door closer range.



Medium duty The Briton 2800 Series floor spring provides fixed power solutions for high traffic single or double action applications or where a surface mounted closer may be subject to abuse.



Light duty The Briton 121CE is a light duty budget closer option, providing basic operational characteristics in a compliant closer.

Briton 2100 Series - offering the highest quality of performance and design choice

The Briton 2100 Series of door controls has been created to offer a comprehensive package of solutions to suit any door closing application.

Developed in conjunction with installers, the 2100 Series builds on the engineering excellence of previous Briton door controls by incorporating one of the simplest, quickest and most accurate installation systems available.

This combination of engineering quality and good looks - with three body cover options and a variety of finishes - creates a truly versatile architectural solution for any heavy to medium duty application.

The highly versatile 2100 Series was developed with installers to combat the practical and economic concerns with conventional door closer installation. As a result, the Briton 2100 Series can demonstrate an average 30 - 35% labour saving on installation.

But the benefits are much deeper than this. The increased degree of accuracy achieved when installing a Briton 2100 Series closer dramatically improves its efficiency and longevity.

The Briton 2100 Series is CE marked to EN 1154 (additional EN 1155 for electronic variants), fire tested to EN 1634 and Certifire Approved for use on timber doors to achieve a 2 hour fire rating, and up to 4 hour for steel doors.



certifire
CF111
[except 2130BD]

CE

2hr TIMBER
4hr STEEL

GUARANTEE 10 TEN YEARS

Features & Benefits

A Cast aluminium body (2110/2120) or cast iron body (2130) giving rugged durability.

B Hardened steel rack and pinion mechanism with needle roller bearings for exceptionally smooth and efficient operation and high levels of durability.

C Coil springs manufactured in silicon chrome alloy steel for superior strength and reliability.

D High quality hydraulic fluid with in-built temperature compensation ensures reliable operation in temperatures from -15˚C to +40˚C.

E Pre-assembled arm and bracket simplifies assembly, increasing speed and accuracy.

F Quick release arm assembly allows the closer to be disconnected and reconnected quickly without the need to alter the arm arrangement. This speeds up the installation process and enables the closer body and bracket to be fixed independently allowing for much greater accuracy.

G All-over cover conceals all fixings and adjustment screws to prevent tampering.

H Choice of cover options in a range of architectural finishes with matching arms.

Unique Accufit backplate system reduces installation time and dramatically improves accuracy of fitting.

Spring power adjustable depending on model from EN 1 - 6 (see table on page 13) avoids the need to predetermine the door details at the point of specification and allows for site variations.

Also available as a slide track closer.

0 Wind through power adjustment.

1 Adjustable closing speed and ...

2 Adjustable latch action provides total control of the full closing cycle.*

3 Adjustable backcheck (except 2110) minimises the risk of personal injury and damage to adjacent walls, door, frame and other door hardware.*

4 Adjustable delayed action (2130BD only) delays the closing cycle to allow slow moving pedestrians to pass through unhindered by the closing door.**

5 Optional hold-open armset is adjustable from 80˚ to 180˚ opening angle (except for 2130 fitted in regular application which has an opening angle of 80˚ - 130˚).

Not to be used on fire door applications.

* Please note, the location of adjustment screws differs on some closers.

** Not suitable for fire doors.


cast iron body variant


cast iron body variant



The location of adjustment screws differs from the aluminium and cast iron body variants.

Mechanical hold-open unit

Mechanical hold-open is achieved by substituting the standard armset with a hold-open armset. It enables doors to be securely held in the open position at the required pre-set angle (adjustable on installation between 80˚and 180˚ depending on model and the mounting application).

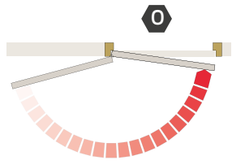
The hold-open facility can be easily overridden and the force required to release the hold-open action can be adjusted to suit the weight of door.

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

Closer adjustments

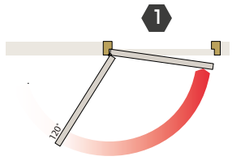
Adjustable closing power

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



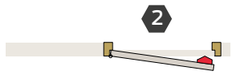
Adjustable closing speed

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



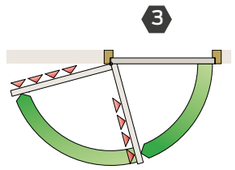
Adjustable latch action

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



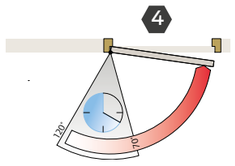
Adjustable backcheck

To prevent damage to the door, hardware and adjacent walls, caused by the door being flung open or caught by a gust of wind.



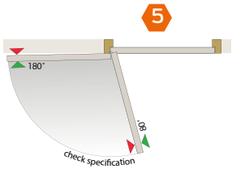
Adjustable delayed action

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



Adjustable hold-open

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

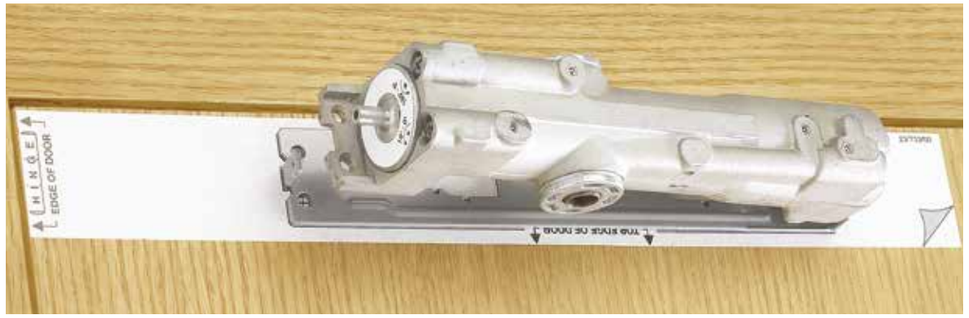


Mechanical hold-open - 80˚ - 180˚

Electro-magnetic hold-open:

85˚ - 110˚ available in door mount pull applications.

75˚ - 100˚ available in door mount push applications.



Accufit by name, Accufit by nature

The cost associated with inaccurate fixing of a door closer can be of significant proportions, particularly when it has a 'knock-on' effect on the other hardware on the door, the door itself and the surrounding structure.

At Allegion we identified that 95% of all problems associated with door closers were due to incorrect installation rather than a fault in the closer itself.

The Accufit System was designed to address this deficiency and provides real term benefits far beyond the simple savings in installation time.

The life of the product is greatly enhanced by being fitted accurately and has a beneficial effect on the operation of the whole door.



The Briton Accufit system in action

The essence of the **Accufit** System is to allow quick and accurate installation and uses:

- A unique low-tac self adhesive template which is stuck to the door and frame and allows all the fixing points to be pre-drilled.
- A mounting backplate which is fixed to the door, avoiding the need to support the weight of the closer body when fitting.
- Pre-assembled arm and bracket which speed up the assembly procedure.
- Quick release armset allows the primary arm to be connected to the closer and the secondary arm and bracket to be mounted without having to preload the closer spring.

Combining high performance with a variety of design options to suit all applications

Within the Briton 2100 Series there are a number of options to choose from to suit your application. These include:

- Projecting arm or slide track options which provide a neat architectural look and reduce the chances of misuse.
- Three cover options available, the rounded L cover and the gently curved S cover which are available on all 2100 closers and the Classic Briton cover which is available on 2130 variants only.
- Covers are available in a number of finishes with matching arms and bracket or track (see page 39 for a full list of available finishes).
- Electro-magnetic slide track hold-open option.



Above: Briton 2120B with L cover in polished stainless steel
Below: Briton 2120B with S cover in satin stainless steel

The Briton 2130B.T and its electro-magnetic hold-open variant the Briton 2130B.TE (overleaf) are slide track closers. The single arm arrangement utilises a shallow slide track which avoids the need for projecting arms. With the closer fixed to the door and the track fitted to the head frame they are particularly suited to narrow transoms.

The exclusion of projecting arms makes slide track closers particularly appropriate in applications which may be susceptible to vandalism and misuse and they are often specified for higher quality installations because of the improved aesthetics provided by the neat, uncomplicated track.







Top: Briton 2130B.T slide track variant with S cover in satin stainless steel

Centre: Briton 2130B.T with Classic cover in satin stainless steel

Bottom: Briton 2130B with Classic cover in SES sprayed silver finish with matching arms and bracket

For fire door applications which are required to be held open, or for applications requiring ease of access, the Briton 2130B.TE electro-magnetic hold-open closer is ideal.



Briton 2130B.TE with L cover in satin stainless steel

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

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

Features of the Briton 2130B.TE closer

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

Integrated design

When compared to the use of a standard closer and separate electomagnetic door holder the integrated Briton 2130B.TE has the following benefits:

- Reduced installation time and cost.
- Less susceptible to malicious damage.
- Ensures twisting forces on the door leaf are eliminated.
- Aesthetically superior as it avoids intrusive bracketry and other components on the door.
- Can be used where there is no reveal wall.

Power requirements

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

FSR transformer/rectifier

For use with fire/smoke check electro-magnetic door control units where 24V DC is not available for the continuous rating required. A socket is provided to accept a plug-in relay.

Briton 2100 Series closers are supplied as standard with a tri-pack containing arms and brackets suitable for mounting in regular, transom and parallel applications as shown below (illustrated with L cover and scissor arm).

The door and frame size parameters are shown below. Please note the variation when used in conjunction with the optional hold-open armset.



Regular application

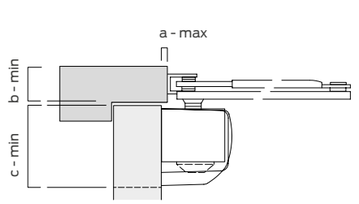


Transom application

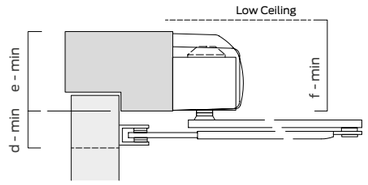


Parallel application

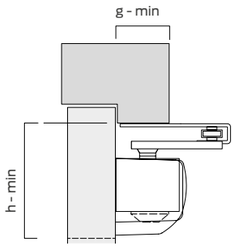
Closers with scissor arms (all cover options shown)



Regular application

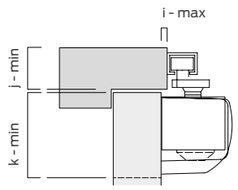


Transom application

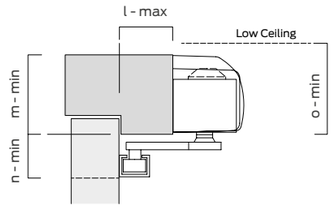


Parallel application

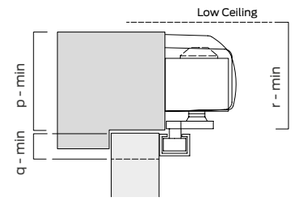
Closers with track arms (all cover options shown)



Door mounted - pull side



Transom mounted - push side



Transom mounted - pull side

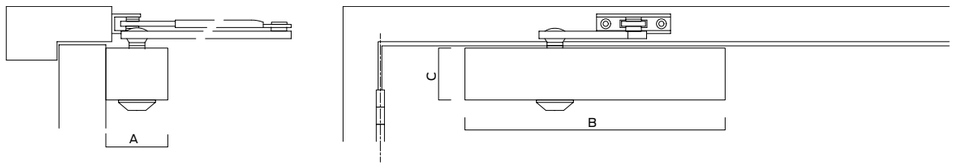
closer ref.	body cover	a	b	c	d	e	f	g	h
2110 2120	L	10	26(39)	62	28(39)	52	62	44	99(112)
	S	10	26(39)	74	28(39)	52	74	44	112(124)
2130B 2130BD	C	7	28(41)	78	28(42)	50	68	44	94(107)
	L	7	28(41)	78	30(43)	55	78	44	117(130)
	S	7	28(41)	78	30(43)	55	78	44	117(130)

closer ref.	body cover	i	j	k	l	m	n	o	p	q	r
2130B.T 2130B.TE	C	12	41	78	76	55	45	78	75	22	95
	L	12	41	78	76	55	45	78	75	22	95
	S	12	41	78	76	55	45	78	75	22	95

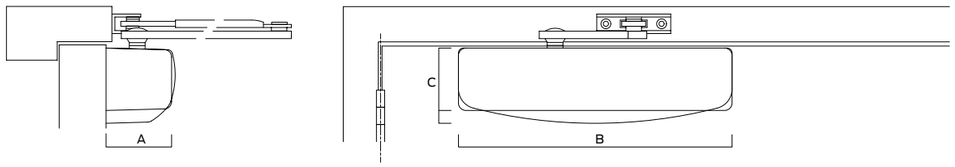
please note; the figures in brackets refer to dimensions when used with mechanical hold-open armsets

Briton 2100 Series - Closer dimensions

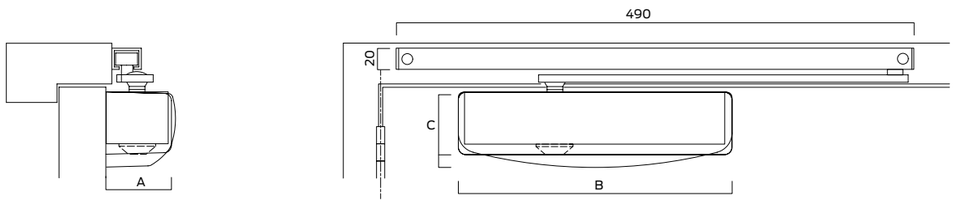
Closer with scissor arm & Classic cover



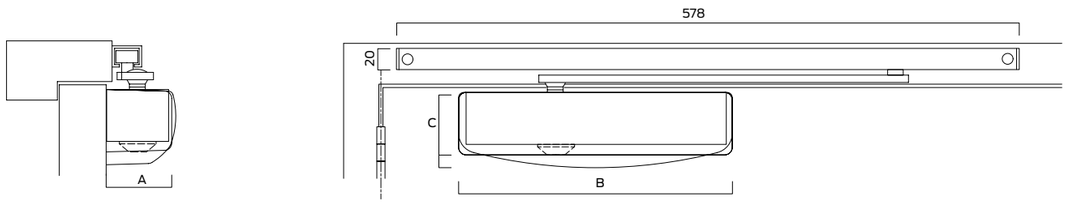
Closer with scissor arm & L or S cover



Closer with track arm and L, S or Classic cover



Closer with electro-magnetic track arm and L, S or Classic cover



closer ref.	body cover	A	B	C
2110 2120B	L	62	258	59
	S	65	258	71
2130B 2130BD 2130B.T 2130B.TE	C	66	310	55
	L	62	318	74
	S	71	318	76

Briton 2100 Series - Specifications

Specification

The Briton 2100 Series is CE marked to EN 1154 (see table) and certified to EN 1634 (fire) and EN 1155 (electro-mechanical hold-open variant).

- Adjustable EN power sizes up to EN 6.
- Certifire Approved (CF111) for use on timber fire doors up to 2hr and steel doors up to 4hr (except 2130BD and all 2130 closers with Classic cover).
- Die cast aluminium or cast iron mechanism body with hardened rack and pinion mechanism.
- Accufit Installation self-adhesive template and first fix mounting plate for easy installation.
- Backcheck and delayed action.
- Optional mechanical and electro-magnetic hold-open facility.
- Projecting arm and slide track configurations available.
- 10 year performance guarantee for reassurance. 2 year electrical guarantee.

RS 863-7745

Product features		Product references					
EN Closer size	max. door size [width - weight]	2110	2120B	2130B	2130BD	2130B.T	2130B.TE
1	750mm - 20kg		■				
2	850mm - 40kg	■	■	■	■	■	
3	950mm - 60kg	■	■	■	■	■	■
4	1100mm - 80kg	■	■	■	■	■	■
5	1250mm - 100kg			■	■		
6	1400mm - 120kg			■	■		
CE marked		■	■	■	*	■	■
Variable closing power EN size		2 - 4	1 - 4	2 - 6	2 - 6	2 - 4	3 - 4
Power adjustment by spring or template		template	spring	spring	spring	spring	spring
Accufit template & Accufit mounting plate		■	■	■	■	■	■
Max. angle of opening (controlled closing)		180˚	180˚	180˚	180˚	180˚	110˚
Adjustable closing speed & latch action		■	■	■	■	■	■
Adjustable backcheck			■	■	■	■	■
Adjustable delayed action					■		
Tri-pack armset (see page 11)		■	■	■	■		
Mechanical hold-open facility		□	□	□	□		
Electro-magnetic hold-open facility							■
Projecting arm closer		■	■	■	■		
Slide channel and arm						■	■
Cover variants available (C; L; S)		L/S	L/S	C/L/S	C/L/S	C/L/S	C/L/S
Guarantee period		10yrs	10yrs	10yrs	10yrs	10yrs	10yrs/2yrs
CE Classification		482-4113	481-4113	482-6113	482-6013	482-4113	383-4113

■ Standard □ Optional

CE

The Briton 2100 Series is type tested and independently certified for conformity to all the requirements of EN 1154 and EN 1155 where applicable. They are CE marked and classified as shown in the table above.

* PLEASE NOTE: The Briton 2130BD is not CE marked and therefore not suitable for fire doors.

For Declaration of Performance please go to:
www.britondops.co.uk

For full details on CE and Certifire please go to:
www.allegion.co.uk/downloads and click on Test Certificates

Briton 2000 Series – a compact series of closers designed for the most common door sizes

The Briton 2000 Series of closers includes the UK's No.1 door closing product, the Briton 2003. It is a compact range of small bodied, fixed strength closers in sizes 3 and 4 and a variable power closer in sizes 1 to 4.

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

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

The Briton 2000 Series is CE marked to EN 1154, fire tested to EN 1634 and CertifireApproved for use on timber doors to achieve a 2 hour fire rating, and 4 hour for steel doors.

certifire CF111



Features & Benefits

A Cast aluminium body.

B Steel rack and pinion mechanism is heat treated for strength and durability.

C Forged, heat treated and ground steel piston for rugged durability.

D High quality hydraulic fluid with in-built temperature compensation ensuring reliable operation in temperatures from -15˚C to +40˚C.

E Stylish flatform arm in finish to match door closer cover.

F The mechanism is safety valve protected to prolong the life of the closer against abuse and misuse.

G Precision needle roller bearings for optimum performance and efficiency.

H Classic fabricated cover conceals fixings and adjustment screws, reducing the risk of vandalism. Available in a range of architectural finishes with matching arms or track to complement a variety of door hardware ranges.

Briton badge of authenticity.

Accufit template increases the accuracy of installation and helps to reduce installation time (see page 7 for further information).

0 Wind through power adjustment (2003V only).

1 Adjustable closing speed and ...

2 Adjustable latch action provides total accuracy of adjustment of the full closing cycle.

3 Adjustable backcheck available (2003V only).

5 Optional hold-open armset with sturdy cam action knuckle allows the door to be held in the open position for convenience.

Not to be used on fire door applications.







Briton 2003V

In addition to the fixed power closers, the 2003V variable power unit can be adjusted between power sizes 1 - 4 and is designed specifically to meet the requirements of Approved Document M of the Building Regulations.

- High efficiency closer capable of meeting the closing force requirements of EN 1154 for fire door applications and the maximum opening force requirements for easy access applications.
- Fully adjustable down to power size 1 to minimise opening force requirements on non-fire rated doors.
- Will directly retrofit existing 2003 units, utilising the unique Accufit method of installation.

Note: actual opening and closing forces measured on a door are subject to many external influences including hinge friction, smoke and draught seals, lock latches and differential air pressure. Whilst the closing device will meet the required figures, compliance with the standard will depend on each application.

Mechanical hold-open unit

Mechanical hold-open is achieved by substituting the standard armset with a hold-open armset. It enables doors to be securely held in the open position at the required pre-set angle (adjustable on installation between 80˚and 180˚ depending on the mounting application).

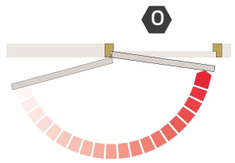
The hold-open facility can be easily overridden and the force required to release the hold-open action can be adjusted to suit the weight of door.

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

Closer adjustments

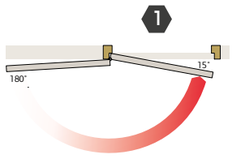
Adjustable closing power

The Briton 2003V has adjustable power EN 1 - 4.



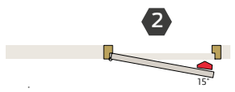
Adjustable closing speed

Adjustable from 180˚ opening through to the final 15˚



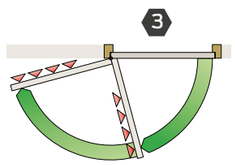
Adjustable latch action

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



Adjustable backcheck

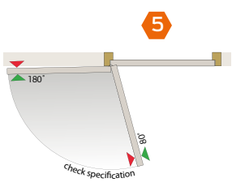
To prevent damage to the door, hardware and adjacent walls, caused by the door being flung open or caught by a gust of wind.



Adjustable hold-open

Mechanical hold-open armeset option available to hold the door in the open position.

Adjustable between 80˚ and 180˚



Compatibility with the Briton 2130 closers with the Classic cover option offers the possibility of mixing and matching closers according to the application.

A neat, slimline appearance produced by the Briton 2003T slide track option.



The Briton 2000 Series can be fully suited with the heavy duty adjustable closers of the Briton 2130 closers with classic covers, making it a truly comprehensive and integrated package of door controls.

The Briton 2000 Series and 2100 Series are available in the same high quality finishes. Supplied with matching arms and brackets, both are available in satin stainless steel, polished stainless steel, polished brass and a range of powder coated finishes to match Normbau Nylon hardware. See page 39 for further information.

