



Door Closers Technical Information

ASSA ABLOY

ASSA ABLOY, the global leader
in door opening solutions



Unlock your life.

ASSA ABLOY

ASSA ABLOY is the global leader in door opening solutions, dedicated to satisfying end-user needs for security, safety and convenience.

In the UK the company develops, produces and markets high-quality products and a wide range of architectural hardware solutions for the commercial and public sector under ASSA ABLOY Security Solutions.

ASSA ABLOY is considered a highly competent and reliable partner by its clients due to its comprehensive know-how, state-of-the-art technology, creative ideas and innovative production processes.

Besides comprehensive architectural hardware solutions, ASSA ABLOY Security Solutions also offers its customers a whole range of services, expert guidance and solution concepts for individual requirements and special applications.

Come closer! Door closers from ASSA ABLOY



For diverse applications

ASSA ABLOY door closers are suitable for a wide range of applications from private to commercial and public sectors, and for doors light and heavy. Their modular configuration simplifies planning, whilst the simple assembly features and intelligent adjustments make for easy installation. This series of door closers is a collective development by the ASSA ABLOY Group and offers a coordinated design across a broad product range including rack and pinion, CAM-motion and electro hydraulic door closer solutions. The uniform design gives rooms and buildings a consistent aesthetic appeal, and is available in a wide range of RAL colours.

Door closers from ASSA ABLOY – an overview of the benefits

- Consistent aesthetic design throughout the range
- Fully concealed mounting plate options for all models
- CAM-motion technology available, offering easy opening forces for improved accessibility across all installation applications
- Height-adjustable pinion system
- Height-adjustable guide rail option
- Adjustable backcheck facility
- Thermodynamic hydraulic fluid for consistent closing speeds in the event of extreme temperature fluctuations
- Adjustable electromechanical hold open facility options
- Integral smoke detector option, concealed within the guide rail
- Wide range of accessories available to suite frame / door application.

One for all, all in one.

Every ASSA ABLOY door closer can be mounted on the hinge or non-hinge side of the door making them suitable for any door application, thereby considerably reducing effort in planning and procurement. The fixing application therefore need not be factored into the scheduling process as it can quickly be changed on the door at short notice, facilitating flexible planning.



Guide rail door closers Modular and stylish



ASSA ABLOY CAM-motion door closers are highly flexible and offer a high degree of convenience.

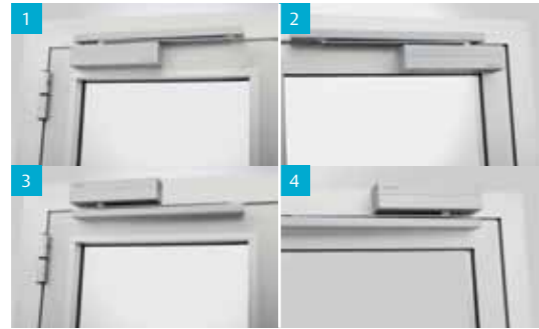


Guide rail door closers

ASSA ABLOY's modular system enables CAM-motion door closers to be combined with various guide rails for virtually any application. Guide rail door closers harmonise with the door's appearance and offer a wide range of possibilities to planners and architects. Additionally guide rail door closers have less projection and are close-fitting to the door and frame reducing the risk of abuse or misuse. With ASSA ABLOY, low opening forces and guide rail door closers do not conflict. CAM-motion technology reduces counter-pressure when opening the door, making it considerably easier to handle in comparison with conventional guide rail door closers.

ASSA ABLOY's door closers and their benefits at a glance

- 1 Standard installation on hinge side
- 2 Standard installation non hinge side
- 3 Frame mounting on hinge side
- 4 Frame mounting non hinge side



Optional concealed mounting plate



Height adjustable pinion



Guide rail height adjustable



Adjustable backcheck



Installation and adjustments made easy

Installation tolerances can be compensated for without special components thanks to the height adjustable pinion system. Height compensation of up to 14mm covers most construction situations permitting the arm height to be adjusted quickly and easily. Precise closing functions can then be set up.

A door is also exposed to varying stresses and strains on a daily basis: operation by its users, temperature fluctuations, air humidity etc, all have an impact. As a result, the hinge can sometimes wear causing the door to drop slightly which can impact on the doors performance. Door closers from ASSA ABLOY can easily be adjusted to compensate for this and other changes to the door after initial installation.

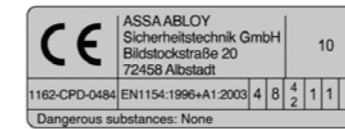
Safety and comfort guaranteed

With ASSA ABLOY door closers, accessibility and fire door requirements need not conflict. CAM-motion door closers are suitable for use on internal and external doors with the DC700 being particularly suited for doors exposed to heavy use or high wind pressure. They are appropriate for use in buildings housing elderly, young or disabled people because of the ultra-low opening forces they provide. When fitted to suitable doorsets, the door closers, due to the ease of accessibility, will assist in fulfilling duties required under the Equality Act (EA), specifically BS 8300 and Approved Document M (ADM) of the Building Regulations. ASSA ABLOY door closers make high frequency doors comfortable and easy to pass through, in schools, hospitals, retirement homes, public buildings and offices.

Safety in case of emergency

Smoke and fire protection doors may only be equipped with door closer systems which have been approved to EN 1154, EN 1155 and/or EN 1158 and CE marked accordingly. You'll be safe with ASSA ABLOY, as our door closers meet national and international regulatory standards.

DC200A Rack & Pinion Technical attributes



Technical attributes	
Variable adjustable closing force	EN 2 - 4
Door widths up to	1100 mm
Fire and smoke protection	Yes
Door swing direction	Left / Right hand door
Closing speed	Variable between 180° - 0°
Latching speed	Variable between 15° - 0°
Backcheck	Variable above 75°
Hold-open mode (with hold open link arm L191)	Adjustable 75°-150°, can be enabled and disabled
Weight	2.2 kg
Height	60 mm
Depth	47 mm
Length	223 mm
Certified in compliance with	EN 1154
CE marking for building products	Yes

The advantages at a glance

Customer segment	Advantages
Architects & Specifiers	<ul style="list-style-type: none"> - Extensive range of uses: Fire and smoke protection doors as well as standard doors - Modern design - Compact design - Same dimensions and design with and without mounting plate
Builders & Installers	<ul style="list-style-type: none"> - One drilling template overall - Adjustable to nearly all door and frame types - Quick and easy installation - Quickly and easily adjustable - Suitable for Left and Right hand doors, in both door and frame mounted applications
Trade	<ul style="list-style-type: none"> - Reduced inventory costs due to modular product range - One single product suitable for all fitting applications - Complementary accessories available for the whole product range
User	<ul style="list-style-type: none"> - Largely unaffected by temperature fluctuations thanks to thermodynamic valves - Backcheck feature offers optimum protection for doors and walls

You can find the full specifications on the internet at: www.assaabloy.co.uk

Specification for DC200A

ASSA ABLOY Door Closer DC200A featuring rack and pinion technology in compliance with EN 1154

- Supplied with link arm L190 and parallel arm bracket 154
- Closing power adjustable, EN size 2 - 4, for doors up to 1100 mm wide
- Closing speed, latch speed and backcheck adjustable from front facing regulator valves
- Available with integrated concealed mounting plate
- CE marked
- 14 mm height adjustable arm system for ease of fitting
- Suitable for Left and Right hand doors

Accessories:

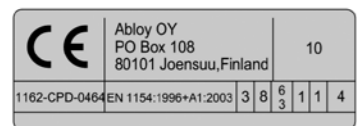
- Hold open link arm L191
- Mounting plate A120
- Angle bracket A122

Colour:

- Silver
- White, similar to RAL9016
- Brown, similar to RAL8014
- Black, similar to RAL9005
- Custom finishes available

DC300A

Technical attributes



Technical attributes	
Variable adjustable closing force	EN 3 - 6
Door widths up to	1400 mm
Fire and smoke protection	Yes
Standard and frame installation	Yes
Closing speed	Variable between 180° - 0°
Latching speed	Variable between 15° - 0°
Backcheck	Variable above 75°
Opening angle	Up to 180°
Weight	2.4 kg
Height	60 mm
Depth	47 mm
Length	260 mm
Certified in compliance with	EN 1154
CE marking for building products	Yes

The advantages at a glance

Customer segment	Advantages
Architects & Specifiers	<ul style="list-style-type: none"> - Extensive range of uses: Fire and smoke protection doors as well as standard doors - Modern design - Compact design - Same dimensions and design with and without mounting plate - Comprehensive functions, standard and optional
Builders & Installers	<ul style="list-style-type: none"> - One drilling template overall - Adjustable to nearly all door and frame types - Quick and easy installation - Quickly and easily adjustable - Suitable for Left and Right hand doors in both door and frame mounted applications
Trade	<ul style="list-style-type: none"> - Reduced inventory costs due to modular product range - One single product suitable for all fitting applications - Complementary accessories available for the whole product range
User	<ul style="list-style-type: none"> - Easier door opening and improved accessibility due to CAM-motion Technology - Backcheck feature offers optimum protection for doors and walls - Largely unaffected by temperature fluctuations thanks to thermodynamic valves - Delayed action function allows easier access through the door for example with bulky goods

Specification for DC300A Rack and Pinion

ASSA ABLOY Door Closer DC300A featuring rack and pinion technology in compliance with EN 1154

- Supplied with link arm L190 and parallel arm bracket A154 closing power adjustable, EN size 3 - 6, for doors up to 1400 mm wide
- Closing speed, latch speed and backcheck adjustable from front facing regulator valves
- Available with integrated concealed mounting plate
- CE marked
- 14 mm height adjustable arm system for ease of fitting
- Suitable for Left and Right hand doors

Accessories:

- Hold open link arm L191
- Mounting plate A120
- Angle bracket A122

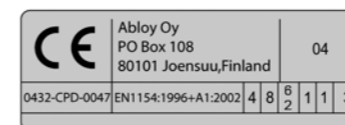
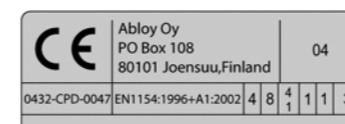
Colour:

- Silver
- White, similar to RAL9016
- Brown, similar to RAL8014
- Black, similar to RAL9005
- Custom finishes available

You can find the full specifications on the internet at: www.assaabloy.co.uk

DC340A Rack & Pinion

Technical attributes



Technical attributes	
Variable adjustable closing force	EN 2 - 6 / EN 1 - 4
Door widths up to	1400mm / 1100 mm
Fire and smoke protection	Yes
Door swing direction	Left / Right hand door
Closing speed	Variable between 180° - 0°
Latching speed	Variable between 15° - 0°
Backcheck	Variable above 75°
Weight	2.1 kg
Height	69 mm
Depth	63 mm
Length	308 mm
Certified in compliance with	EN 1154
CE marking for building products	Yes

The advantages at a glance

Customer segment	Advantages
Architects & Specifiers	<ul style="list-style-type: none"> - Extensive range of uses: Fire and smoke protection doors as well as standard doors - Modern design - Compact design - Same dimensions and design with and without mounting plate - Comprehensive functions
Builders & Installers	<ul style="list-style-type: none"> - Adjustable to nearly all door and frame types - Quick and easy installation - Quickly and easily adjustable - Suitable for Left and Right hand doors, in both door and frame mounted applications
Trade	<ul style="list-style-type: none"> - One single product suitable for all fitting applications - Complementary accessories available for the whole product range
User	<ul style="list-style-type: none"> - Largely unaffected by temperature fluctuations thanks to thermodynamic valves - Backcheck feature offers optimum protection for doors and walls

Specification for DC340A

ASSA ABLOY Door Closer DC340A featuring rack and pinion technology in compliance with EN 1154

- With link arm L190 closing power adjustable, EN size 2 - 6, for doors up to 1400mm
- G193 / G195 height adjustable guide rail and closing power adjustable, EN size 1 - 4, for doors up to 1100 mm wide
- Closing speed, latching speed and backcheck adjustable from front facing regulator valves
- Can be used with integrated concealed mounting plate
- CE marked
- 14 mm height adjustable arm system for ease of fitting
- Suitable for Left and Right hand doors

Accessories:

- Hold open link arm L191
 - Standard guide rail G193
 - Height-adjustable guide rail G195
 - Mounting plate A126
 - Angle bracket A107
 - Mounting plate A130 for guide rail G193 and G195
 - Angle bracket A104 for guide rail G193
 - Mechanical opening damper A153
 - Mechanical hold open device A152 (not for fire and smoke protection doors)
- Colour:
- Silver
 - White, similar to RAL9016
 - Brown, similar to RAL8014
 - Black, similar to RAL9005
 - Custom finishes available

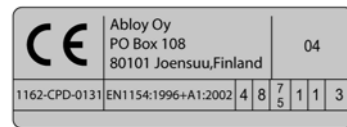
You can find the full specifications on the internet at: www.assaabloy.co.uk

DC347A Rack & Pinion

Technical attributes



Technical attributes	
Variable adjustable closing force	EN 5 - 7
Door widths up to	1600 mm
Fire and smoke protection	Yes
Closing speed	Variable between 180° - 0°
Latching speed	Variable between 15° - 0°
Backcheck	Variable above 75°
Weight	2.2 kg
Height	69 mm
Depth	63 mm
Length	308 mm
Certified in compliance with	EN 1154
CE marking for building products	Yes



The advantages at a glance

Customer segment	Advantages
Architects & Specifiers	<ul style="list-style-type: none"> - For heavy doors, fire and smoke protection doors as well as standard doors - Modern design - Compact design - Same dimensions and design with and without mounting plate
Builders & Installers	<ul style="list-style-type: none"> - Quick and easy installation - Quickly and easily adjustable - Suitable for Left and Right hand doors, in both door and frame mounted applications
Trade	<ul style="list-style-type: none"> - One single product suitable for all fitting applications - Complimentary accessories available
User	<ul style="list-style-type: none"> - Largely unaffected by temperature fluctuations thanks to thermodynamic valves - Enough closing force for all type of heavy doors - Backcheck feature offers optimum protection for doors and walls

You can find the full specifications on the internet at: www.assaabloy.co.uk

Specification for DC347A

ASSA ABLOY Door Closer DC347A featuring rack and pinion technology in compliance with EN 1154

- With extra strong link arm L197 closing power variable adjustable, EN size 5 - 7, for doors up to 1600 mm wide
- Closing speed, latch speed and backcheck adjustable from front facing regulator valves
- Can be used with integrated concealed mounting plate
- CE marked
- 14 mm height adjustable arm system for ease of fitting
- Suitable for Left and Right hand doors

Accessories:

- Mounting plate A126
- Angle bracket A107

Colour:

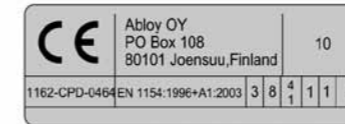
- Silver
- White, similar to RAL9016
- Brown, similar to RAL8014
- Black, similar to RAL9005
- Custom finishes available

DC500A CAM-motion

Technical attributes



Technical attributes	
Variable adjustable closing force	EN 1 - 4
Door widths up to	1100 mm
Fire and smoke protection	Yes
Standard and frame installation	Yes
Closing speed	Variable between 170° - 0°
Latching speed	Variable between 15° - 0°
Opening angle hinge side	Ca. 170°
Opening angle non-hinge side	Ca. 120°
Weight	2.7 kg
Height	64 mm
Depth	57 mm
Width	270 mm
Certified in compliance with	EN 1154
CE marking for building products	Yes



The advantages at a glance

Customer segment	Advantages
Architects & Specifiers	<ul style="list-style-type: none"> - Extensive range of uses: Fire and smoke protection doors as well as standard doors - Modern design - Compact design - Fulfils barrier-free building requirements (Equality Act) - Same dimensions and design with and without mounting plate
Builders & Installers	<ul style="list-style-type: none"> - One drilling template overall - Adjustable to nearly all door and frame types - Quick and easy installation - Quickly and easily adjustable - Suitable for Left and Right hand doors for standard and frame fitting on hinge and non-hinge sides
Trade	<ul style="list-style-type: none"> - Reduced inventory costs due to modular product range - One single product suitable for all fitting applications - Complimentary accessories available for the whole product range
User	<ul style="list-style-type: none"> - Easier door opening and improved accessibility due to CAM-motion Technology - Largely unaffected by temperature fluctuations thanks to thermodynamic valves

You can find the full specifications on the internet at: www.assaabloy.co.uk

Specification for DC500A

ASSA ABLOY Door Closer DC500A with CAM-motion Technology and guide rail in compliance with EN 1154

- With height adjustable guide rail G195 closing power continuously adjustable, EN size 1 - 4, for doors up to 1100 mm wide
- Closing speed and latching speed continuously adjustable from front facing regulator valves
- Can be used with integrated concealed mounting plate
- CE marked
- 14 mm height adjustable arm system for ease of fitting
- Standard installation on hinge and non-hinge sides of the door
- Suitable for Left and Right hand doors

Accessories:

- Standard guide rail G193
- Mounting plate A120
- Mounting plate A130 for Guide Rail G193 and G195
- Angle bracket A104 for Guide Rail G193
- Mechanical opening damper A153
- Mechanical hold open device A152 (not for fire and smoke protection doors)

Colour:

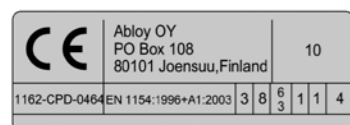
- Silver
- White, similar to RAL9016
- Brown, similar to RAL8014
- Black, similar to RAL9005
- Custom finishes available

DC700A CAM-motion

Technical attributes



Technical attributes	
Variable adjustable closing force	EN 3 - 6
Door widths up to	1400 mm
Fire and smoke protection	Yes
Standard and frame installation	Yes
Closing speed	Variable between 170° - 0°
Latching speed	Variable between 15° - 0°
Backcheck	Variable above 75°
Opening angle hinge side	Ca. 170°
Opening angle non-hinge side	Ca. 120°
Weight	2.7 kg
Height	64 mm
Depth	57 mm
Length	270 mm
Certified in compliance with	EN 1154
CE marking for building products	Yes



The advantages at a glance

Customer segment	Advantages
Architects & Specifiers	<ul style="list-style-type: none"> - Extensive range of uses: Fire and smoke protection doors as well as standard doors - Modern design - Compact design - Same dimensions and design with and without mounting plate - Comprehensive functions, standard and optional
Builders & Installers	<ul style="list-style-type: none"> - One drilling template overall - Adjustable to nearly all door and frame types - Quick and easy installation - Quickly and easily adjustable - Suitable for Left and Right hand doors for standard and frame fitting on hinge and non-hinge sides
Trade	<ul style="list-style-type: none"> - Reduced inventory costs due to modular product range - One single product suitable for all fitting applications - Complementary accessories available for the whole product range
User	<ul style="list-style-type: none"> - Easier door opening and improved accessibility due to CAM-motion Technology - Backcheck feature offers optimum protection for doors and walls - Largely unaffected by temperature fluctuations thanks to thermodynamic valves

Specification for DC700A

ASSA ABLOY Door Closer DC700A with CAM-motion Technology and guide rail in compliance with EN 1154

- With height adjustable guide rail G195 closing power adjustable, EN size 3 - 6, for doors up to 1400 mm wide
- Closing speed, latch speed and backcheck adjustable from front facing regulator valves
- Can be used with integrated concealed mounting plate
- CE marked
- 14 mm height adjustable arm system for ease of fitting
- Standard installation on hinge and non-hinge sides of the door
- Suitable for Left and Right hand doors

Accessories:

- Standard guide rail G193
- Mounting plate A120
- Mounting plate A130 for Guide Rail G193 and G195
- Angle bracket A104 for Guide Rail G193
- Mechanical opening damper A153
- Mechanical hold open device A152 (not for fire and smoke protection doors)

Colour:

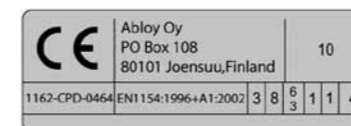
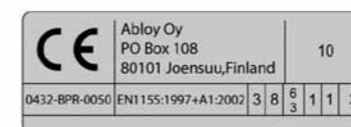
- Silver
- White, similar to RAL9016
- Brown, similar to RAL8014
- Black, similar to RAL9005
- Custom finishes available

You can find the full specifications on the internet at: www.assaabloy.co.uk

DC700 CAM-motion with G460

electro-mechanical hold open device

Technical attributes



Technical attributes (G460)	
Voltage supply	24 V DC
Max. consumption	60 mA
Door widths up to	1400 mm
Hold open angle	70° - 130°
Weight	1,2 kg
Height	31 mm
Depth	33 mm
Length	545 mm
Certified in compliance with	EN 1155
CE mark for building products	Yes

Technical attributes for the ASSA ABLOY G460 guide rail with electro-mechanical hold open. Use the G460 in conjunction with the DC700 door closer body - supplied separately.

The advantages at a glance

Customer segment	Advantages
Architects & Specifiers	<ul style="list-style-type: none"> - Extensive range of uses: Fire and smoke protection doors - Modern design - Compact design
Builders & Installers	<ul style="list-style-type: none"> - Adjustable to nearly any door and frame types - Quick and easy installation - Quickly and easily adjustable - Suitable for Left and Right hand doors for standard installation in hinge and non-hinge side
Trade	<ul style="list-style-type: none"> - Reduced inventory costs due to modular product range - One single product suitable for all fitting applications - A single model for all hinge and non-hinge sides
User	<ul style="list-style-type: none"> - Easier door opening and improved accessibility due to CAM-motion Technology - Backcheck feature offers optimum protection for doors and walls - Largely unaffected by temperature fluctuations thanks to thermodynamic valves

Specification for G460

ASSA ABLOY guide rail G460 with electro-mechanical hold open device used with DC700 CAM-motion closer body

- Power supply 24 V DC
- Hold open force continuously adjustable, EN size 3 - 6
- Hold open angle adjustable between 70° - 130°
- Can be used for Left and Right hand doors
- Standard installation types on the hinge side and non-hinge side
- Guide rail height adjustable of 14 mm
- Large range of applications
- Technical approval for different smoke detection systems
- CE marked

Accessories:

- Mounting plate A115
- Angle bracket A116
- Power supply
- Smoke protection detector
- Flush mounted or surface mounted release button

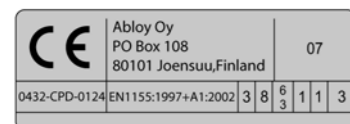
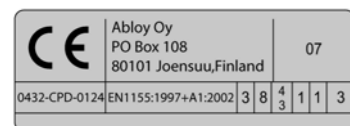
Colour:

- Silver
- White, similar to RAL9016
- Brown, similar to RAL8015
- Black, similar to RAL9005
- Custom finishes available

You can find the full specifications on the internet at: www.assaabloy.co.uk

DC640 and DC640T Rack & Pinion Free Swing

Technical attributes



Technical attributes	
Continuously adjustable closing force with guide rail free swing / link arm free swing	EN 3 - 4 / EN 3 - 6
Door widths up to	1100 mm / 1400 mm
Fire and smoke protection	Yes
Closing speed	Variable 180° - 0°
Latching speed	Variable 15° - 0°
Backcheck	Variable above 75°
Weight	4.0 kg
Height	71 mm
Depth	63 mm
Length	400 mm
Certified in compliance with	EN 1155
CE marking for building products	Yes

The advantages at a glance

Customer segment	Advantages
Architects & Specifiers	<ul style="list-style-type: none"> - Free swing function - CE certified with link arm and guide rail - Modern design - Standard functions built-in
Builders & Installers	<ul style="list-style-type: none"> - Adjustable to nearly all door and frame types - Quick and easy installation - Quickly and easily adjustable - Suitable for Left and Right hand doors, in both door and frame mounted applications
Trade	<ul style="list-style-type: none"> - One single product suitable for all fitting applications - Complimentary accessories available for the whole product range
User	<ul style="list-style-type: none"> - After first opening door can be opened without any resistance (free swing) - Largely unaffected by temperature fluctuations thanks to thermodynamic valves - Backcheck feature offers optimum protection for doors and walls

Specifications for DC640A and DC640T

ASSA ABLOY Door Closer DC640 featuring free swing technology in compliance with EN 1155

- DC640A with L690 free swing link arm
- Closing power adjustable, EN size 3 - 6, for doors up to 1400 mm wide
- DC640T with G694 free swing guide rail
- Closing power adjustable, EN size 3 - 4, for doors up to 1100 mm wide
- Closing speed, latching speed and backcheck adjustable from front facing regulator valves
- Can be used with integrated concealed mounting plate
- CE marked
- 14 mm height adjustable arm system for ease of fitting
- Suitable for Left and Right hand doors

Accessories:

- Connection box A140 for door leaf installations
- Mounting plate A130 for guide rail G694
- Angle bracket A104 for guide rail G694

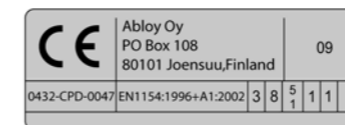
Colour:

- Silver
- White, similar to RAL9016
- Brown, similar to RAL8014
- Black, similar to RAL9005
- Custom finishes available

You can find the full specifications on the internet at: www.assaabloy.co.uk

DC840A Concealed CAM-motion

Technical attributes



Technical attributes	
Variable adjustable closing force	EN 1 - 4
Door widths up to	1100 mm
Fire and smoke protection	Yes
Door swing direction	Left / Right hand door
Closing speed	Variable 120° - 0°
Latching speed	Variable 7° - 0°
Backcheck	Fixed about 80°
Opening angle	Ca. 120°
Weight	2.3 kg
Height	51 mm
Width	40 mm
Length	290 mm
Certified in compliance with	EN 1154
CE mark for building products	Yes

The advantages at a glance

Customer segment	Advantages
Architects & Specifiers	<ul style="list-style-type: none"> - Extensive range of uses: Fire and smoke protection doors as well as standard doors - Concealed door closer and guide rail with only the arm visible - Standard functions built-in - Fulfills barrier-free building requirements (Equality Act) - Possibility to use with concealed fire door closing system - Modern and compact design
Builders & Installers	<ul style="list-style-type: none"> - Quick and easy installation - Quickly and easily adjustable - Suitable for Left and Right hand doors - Modular design allowing change of closer without changing the mounting plate
Trade	<ul style="list-style-type: none"> - Low stock keeping costs thanks non-handed design in closer and arm system - One single product suitable for all fitting applications - Complimentary accessories available
User	<ul style="list-style-type: none"> - Door easy to use thanks to the greatly reduced torque - Largely unaffected by temperature fluctuations thanks to thermodynamic valves - The G893 standard concealed slide arm is available with mechanical hold open device and opening damper to prevent wall damage - Concealed facility offers preferable aesthetic advantages

Specifications for DC840A

ASSA ABLOY Concealed Door Closer DC840A with CAM-motion Technology and DC892 small concealed guide rail in compliance with EN1154.

- Closing power continuously adjustable, EN size 1 - 4
- Closing speed, latching speed and closing force continuously adjustable from top
- CE marked
- 4 mm and 8 mm spindle extensions available
- Suitable for Left and Right hand doors
- Suitable for 44/45mm thick doors given its 32mm width dimension
- For single action doors up to 1100mm wide
- Built in backcheck as standard

Accessories:

- Standard concealed guide rail DC893
- Mechanical hold open device A152 (not for fire and smoke protection doors)
- Mechanical opening damper A153
- Fixing plate 812775

Colour:

- Silver

You can find the full specifications on the internet at: www.assaabloy.co.uk

DC860A Concealed CAM-motion

Technical attributes



Technical attributes	
Variable adjustable closing force	EN 1 – 5
Door widths up to	1250 mm
Fire and smoke protection (Please check the usability according your local regulations)	Yes
Closing speed	Variable 120° – 0°
Latching speed	Variable 7° – 0°
Backcheck	Fixed about 80°
Opening angle	Ca. 120°
Weight	2.3 kg
Height	51 mm
Width	40 mm
Length	290 mm
Certified in compliance with	EN 1154
CE mark for building products	Yes



CE	Abloy Oy PO Box 108 80101 Joensuu, Finland	09
	0432-CPD-0047 EN1154:1996+A1:2002 3 8 5 1 1 2	

The advantages at a glance

Customer segment	Advantages
Architects & Specifiers	<ul style="list-style-type: none"> - Extensive range of uses: Fire and smoke protection doors as well as standard doors - Concealed door closer and guide rail with only the arm visible - Standard functions built-in - Fulfils barrier-free building requirements (Equality Act) - Possibility to use with concealed fire door closing system
Builders & Installers	<ul style="list-style-type: none"> - Quick and easy installation - Quickly and easily adjustable - Suitable for Left and Right hand doors
Trade	<ul style="list-style-type: none"> - Low stock keeping costs thanks non-handed design in closer and arm system - One single product suitable for all fitting applications - Complimentary accessories available
User	<ul style="list-style-type: none"> - Door easy to use thanks to the greatly reduced torque - Largely unaffected by temperature fluctuations thanks to thermodynamic valves - Protection for door and wall thanks to built-in backcheck and pressure relief valve

Specifications for DC860A

ASSA ABLOY Concealed Door Closer DC860A with CAM-motion Technology and DC892 small concealed guide rail in compliance with EN 1154

- Closing power continuously adjustable, EN size 1 - 5
- Closing speed, latching speed and closing force continuously adjustable from top
- CE marked
- 4 mm and 8 mm spindle extensions available
- Suitable for Left and Right hand doors
- For single action doors up to 1250mm wide

Accessories:

- Standard concealed guide rail DC893
- Mechanical hold open device A152 (not for fire and smoke protection doors)
- Mechanical opening damper A153
- Fixing plate 812775

Colour:

- Silver
- Custom finishes available

You can find the full specifications on the internet at: www.assaabloy.co.uk

DC860 CAM-motion with G880

electro-mechanical hold open device

Technical attributes



Technical attributes	
Voltage supply	24 V DC
Max. consumption	60 mA
Door widths up to	1400 mm
Weight	0,9 kg
Height	30 mm
Depth	26 mm
Length	493 mm
Certified in compliance with	EN 1155
CE mark for building products	Yes



CE	Abloy Oy PO Box 108 80101 Joensuu, Finland	10
	0432-BPR-0050 EN1155:1997+A1:2002 3 8 6 1 1 0	

CE	Abloy Oy PO Box 108 80101 Joensuu, Finland	09
	0432-CPD-0047 EN1154:1996+A1:2002 3 8 5 1 1 2	

Technical attributes for the ASSA ABLOY G880 concealed guide rail with electro-mechanical hold open. Use in conjunction with the DC860 concealed closer body (supplied separately), see DC860 details.

The advantages at a glance

Customer segment	Advantages
Architects & Specifiers	<ul style="list-style-type: none"> - Concealed door closer products have aesthetic advantages for many solutions - Extensive range of uses: Fire and smoke protection doors as well as standard doors - Compact design, small size - Suitable for steel, wooden and aluminium profile doors
Builders & Installers	<ul style="list-style-type: none"> - Quick and easy installation - Quickly and easily adjustable - Suitable for Left and Right hand doors
Trade	<ul style="list-style-type: none"> - Reduced inventory costs due to modular product range - One single product suitable for all fitting applications - A single model for all single door concealed installation
User	<ul style="list-style-type: none"> - Adjustable operating force, to meet door construction requirements and end user needs

Specification for G880

ASSA ABLOY concealed guide rail G880 with electro-mechanical hold open device used with DC860 concealed CAM-motion door closer body

- Power supply 24 V DC
- Hold open force continuously adjustable, EN size 3 - 6
- Hold open angle adjustable between 80° - 120°
- Can be used for Left and Right hand doors
- Large range of applications
- With technical approval for different smoke detection systems
- CE marked

Accessories:

- Power supply
- Smoke protection detector
- Flush mounted or surface mounted release button

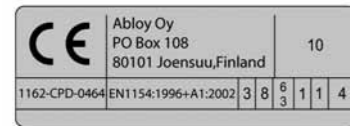
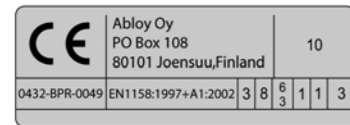
Colour:

- Silver
- Custom finishes available

You can find the full specifications on the internet at: www.assaabloy.co.uk

DC700 CAM-motion with G461 integrated mechanical co-ordinator

Technical attributes



Technical attributes	
Hinge distance	1250 - 2800 mm
Fire and smoke protection	Yes
Max. opening angle of active leaf (hinge side / non-hinge side)	150° / 120°
Max. opening angle of inactive leaf (hinge side / non-hinge side)	170° / 120°
Weight	2,6 kg
Height	31 mm
Depth	33 mm
Length	Depends on hinge distance
Certified in compliance with	EN 1158
CE mark for building products	Yes

Technical attributes for the ASSA ABLOY G461 guide rail with mechanical coordinator.
Use in conjunction with the DC700 closer bodies (supplied separately), see DC700 details.

The advantages at a glance

Customer segment	Advantages
Architects & Specifiers	- Extensive range of uses: Fire and smoke protection doors as well as standard doors - Modern design - Compact design
Builders & Installers	- Adjustable to nearly any door and frame types - Quick and easy installation - Quickly and easily adjustable - Suitable for hinge and non-hinge side installations
Trade	- Reduced inventory costs due to modular product range - One single product suitable for all fitting applications - A single model for all hinge and non-hinge sides
User	- Correct closing sequence guaranteed in every situation

Specification for G461

ASSA ABLOY guide rail G461 with mechanical coordinator for double doors used with DC700 CAM-motion closer bodies

- Hinge distance 1250 - 2800 mm
- Active leaf could stay open in any selected angle up to 150° when inactive leaf is opened
- Standard installation types on the hinge side and non-hinge side
- Non-hinge side installation needs hook arm G120
- Guide rail height adjustable of 14 mm
- Large range of applications
- CE marked

Accessories:

- Mounting plate A115
- Angle bracket A116
- Angle bracket A117
- Hook arm G120 for non-hinge side installations
- Carry bar

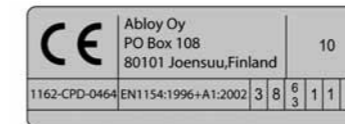
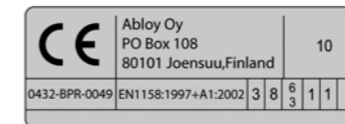
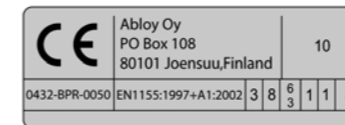
Colour:

- Silver
- White, similar to RAL9016
- Brown, similar to RAL8015
- Black, similar to RAL9005
- Custom finishes available

You can find the full specifications on the internet at:
www.assaabloy.co.uk

DC700 CAM-motion with G462 co-ordinator and two electro-mechanical hold open devices

Technical attributes



Technical attributes	
Voltage supply	24 V DC
Max. consumption	120 mA
Hinge distance	1250 - 2800 mm
Fire and smoke protection	Yes
Hold open angle hinge side installation	70° - 130°
Hold open angle non-hinge side installation	70° - 120°
Weight	3,1 kg
Height	31 mm
Depth	33 mm
Length	Depends on hinge distance
Certified in compliance with	EN 1155 and EN 1158
CE mark for building products	Yes

Technical attributes for the ASSA ABLOY G462 guide rail with 2 electro-mechanical hold open devices. Use in conjunction with the DC700 door closer bodies (supplied separately), see DC700 details.

The advantages at a glance

Customer segment	Advantages
Architects & Specifiers	- Extensive range of uses: Fire and smoke protection doors - Modern design - Compact design - Applications where active door leaf or both door leaves need to keep open
Builders & Installers	- Adjustable to nearly any door and frame types - Quick and easy installation - Quickly and easily adjustable - Suitable for hinge and non-hinge side installations
Trade	- Reduced inventory costs due to modular product range - One single product suitable for all fitting applications - A single model for all hinge and non-hinge sides
User	- Correct closing sequence guaranteed in every situation - Adjustable operating force, to meet door construction requirements and end user needs

Specification for G462

ASSA ABLOY guide rail G462 with mechanical coordinator and two electro-mechanical hold open devices for double doors used with DC700 CAM-motion closer bodies

- Hinge distance 1250 - 2800 mm
- Possible to keep active leaf or both door leaves open
- Hold open angle adjustable between 70°-130°
- Continuously adjustable hold open force
- Correct closing sequence guaranteed because inactive leaf must be very near to closed position before active leaf starts to close
- Standard installation types on the hinge side and non-hinge side
- Non-hinge side installation requires hook arm G120
- Guide rail height adjustable of 14 mm
- CE marked

Accessories:

- Mounting plate A115
- Angle bracket A116
- Angle bracket A117
- Hook arm G120 for non-hinge side installations
- Carry bar
- Power supply
- Smoke protection detector
- Flush mounted or surface mounted release button

Colour:

- Silver
- White, similar to RAL9016
- Brown, similar to RAL8015
- Black, similar to RAL9005
- Custom finishes available

You can find the full specifications on the internet at:
www.assaabloy.co.uk

DC700 CAM-motion with G464 co-ordinator and electro-mechanical hold open device for double doors

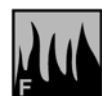
Technical attributes



CE	Abloy Oy PO Box 108 80101 Joensuu, Finland	10
0432-BPR-0050	EN1155:1997+A1:2002	3 8 6 1 1 3

CE	Abloy Oy PO Box 108 80101 Joensuu, Finland	10
0432-BPR-0049	EN1158:1997+A1:2002	3 8 6 1 1 3

CE	Abloy Oy PO Box 108 80101 Joensuu, Finland	10
1162-CPD-0464	EN1154:1996+A1:2002	3 8 6 1 1 4



Technical attributes	
Voltage supply	24 V DC
Max. consumption	60 mA
Hinge distance	1250 - 2800 mm
Fire and smoke protection	Yes
Max. opening angle of active leaf (hinge side / non-hinge side)	150° / 120°
Hold open angle of inactive leaf (hinge side / non-hinge side)	70° - 130° / 70° - 120°
Weight	2,9 kg
Height	31 mm
Depth	33 mm
Length	Depends on hinge distance
Certified in compliance with	EN 1155 and EN 1158
CE mark for building products	Yes

Technical attributes for the ASSA ABLOY G464 guide rail with mechanical co-ordinator and electro-mechanical hold open. Use in conjunction with the DC700 closer bodies (supplied separately), see DC700 details.

The advantages at a glance

Customer segment	Advantages
Architects & Specifiers	<ul style="list-style-type: none"> - Extensive range of uses: Fire and smoke protection doors - Modern design - Compact design - Applications where both door leaves need to keep open
Builders & Installers	<ul style="list-style-type: none"> - Adjustable to nearly any door and frame types - Quick and easy installation - Quickly and easily adjustable - Suitable for hinge and non-hinge side installations
Trade	<ul style="list-style-type: none"> - Reduced inventory costs due to modular product range - One single product suitable for all fitting applications - A single model for all hinge and non-hinge sides
User	<ul style="list-style-type: none"> - Correct closing sequence guaranteed in every situation - Adjustable operating force, to meet door construction requirements and end user needs

Specification for G464

ASSA ABLOY guide rail G464 with mechanical co-ordinator and electro-mechanical hold open device for double doors used with DC700 CAM-motion door closer bodies

- Hinge distance 1250 - 2800 mm
- Possible to keep both door leaves open
- Hold open angle of inactive leaf adjustable between 70° - 130°
- Continuously adjustable hold open force
- Active door leaf could stay open in any selected angle up to 150° when inactive leaf is opened
- Correct closing sequence guaranteed because inactive leaf must be very near to closed position before active leaf starts to close
- Standard installation types on the hinge side and non-hinge side
- Non-hinge side installation needs hook arm G120
- Guide rail height adjustable of 14 mm
- Large range of applications
- CE marked

Accessories:

- Mounting plate A115
- Angle bracket A116
- Angle bracket A117
- Hook arm G120 for non-hinge side installations
- Carry bar
- Power supply
- Smoke protection detector
- Flush mounted or surface mounted release button

Colour:

- Silver
- White, similar to RAL9016
- Brown, similar to RAL8015
- Black, similar to RAL9005
- Custom finishes available

You can find the full specifications on the internet at: www.assaabloy.co.uk

DC860 Concealed CAM-motion with G881 concealed guide rail and integrated co-ordinator

Technical attributes



CE	Abloy Oy PO Box 108 80101 Joensuu, Finland	10
0432-BPR-0050	EN1155:1997+A1:2002	3 8 6 1 1 3

CE	Abloy Oy PO Box 108 80101 Joensuu, Finland	10
0432-BPR-0049	EN1158:1997+A1:2002	3 8 6 1 1 3

CE	Abloy Oy PO Box 108 80101 Joensuu, Finland	10
1162-CPD-0464	EN1154:1996+A1:2002	3 8 6 1 1 4



Technical attributes	
Hinge distance	1350 - 2800 mm
Fire and smoke protection	Yes
Max. opening angle of active leaf	120°
Max. opening angle of inactive leaf	120°
Weight	2,0 kg
Height	30 mm
Depth	26 mm
Length	Depends on hinge distance
Certified in compliance with	EN 1158
CE mark for building products	Yes

Technical attributes for the ASSA ABLOY G881 concealed guide rail with mechanical co-ordinator. Use in conjunction with the DC860 concealed closer bodies (supplied separately), see DC860 details.

The advantages at a glance

Customer segment	Advantages
Architects & Specifiers	<ul style="list-style-type: none"> - Concealed door closer products have aesthetic advantages for many solutions - Extensive range of uses: Fire and smoke protection doors as well as standard doors - Compact design, small size - Suitable for steel, wooden and aluminium profile doors
Builders & Installers	<ul style="list-style-type: none"> - Quick and easy installation - Quickly and easily adjustable
Trade	<ul style="list-style-type: none"> - Reduced inventory costs due to modular product range - One single product suitable for all fitting applications - A single model for all concealed double door solutions
User	<ul style="list-style-type: none"> - Correct closing sequence guaranteed in every situation

Specification for G881

ASSA ABLOY concealed guide rail G881 with mechanical coordinator for double doors used with DC860 concealed CAM-motion closer bodies

- Hinge distance 1350 - 2800 mm
- Correct closing sequence guaranteed because inactive leaf must be very near to closed position before active leaf starts to close
- Active leaf could stay open in any selected angle up to 120° when inactive leaf is opened
- Large range of applications
- CE marked

Accessories:

- Carry bar

Colour:

- Silver
- Custom finishes available

You can find the full specifications on the internet at: www.assaabloy.co.uk

DC860 Concealed CAM-motion with G882 co-ordinator and two electro-mechanical hold open devices

Technical attributes



CE	Abloy Oy PO Box 108 80101 Joensuu, Finland	10
0432-BPR-0050	EN1155:1997+A1:2002	3 8 6 1 1 3

CE	Abloy Oy PO Box 108 80101 Joensuu, Finland	10
0432-BPR-0049	EN1158:1997+A1:2002	3 8 6 1 1 3

CE	Abloy Oy PO Box 108 80101 Joensuu, Finland	10
1162-CPD-0046	EN1154:1996+A1:2002	3 8 6 1 1 4

Technical attributes	
Voltage supply	24 V DC
Max. consumption	120 mA
Hinge distance	1350 - 2800 mm
Fire and smoke protection	Yes
Hold open angle of active leaf	70° - 120°
Hold open angle of inactive leaf	70° - 120°
Weight	2,2 kg
Height	30 mm
Depth	26 mm
Length	Depends on hinge distance
Certified in compliance with	EN 1155 and EN 1158
CE mark for building products	Yes

Technical attributes for the ASSA ABLOY G882 concealed guide rail with mechanical co-ordinator and 2 electro-mechanical hold opens. Use in conjunction with the DC860 concealed door closer bodies (supplied separately), see DC860 details.

The advantages at a glance

Customer segment	Advantages
Architects & Specifiers	<ul style="list-style-type: none"> - Concealed door closer products have aesthetic advantages for many solutions - Extensive range of uses: Fire and smoke protection doors as well as standard doors - Compact design, small size - Suitable for steel, wooden and aluminium profile doors
Builders & Installers	<ul style="list-style-type: none"> - Quick and easy installation - Quickly and easily adjustable
Trade	<ul style="list-style-type: none"> - Reduced inventory costs due to modular product range - One single product suitable for all fitting applications - A single model for all concealed double door solutions
User	<ul style="list-style-type: none"> - Correct closing sequence guaranteed in every situation - Adjustable operating force, to meet door construction requirements and end user needs

Specification for G882

ASSA ABLOY concealed guide rail G882 with mechanical coordinator and two electro-mechanical hold open devices for double doors used with DC860 concealed CAM-motion closer bodies

- Hinge distance 1350 - 2800 mm
- Possible to keep active leaf or both door leaves open
- Hold open angle adjustable between 70° - 120°
- Continuously adjustable hold open force
- Correct closing sequence guaranteed because inactive leaf must be very near to closed position before active leaf starts to close
- Large range of applications
- CE marked

Accessories:

- Carry bar
- Power supply
- Smoke protection detector
- Flush mounted or surface mounted release button

Colour:

- Silver
- Custom finishes available

You can find the full specifications on the internet at: www.assaabloy.co.uk

DC860 Concealed CAM-motion with G884 co-ordinator and electro-mechanical hold open for double doors

Technical attributes



CE	Abloy Oy PO Box 108 80101 Joensuu, Finland	10
0432-BPR-0050	EN1155:1997+A1:2002	3 8 6 1 1 0

CE	Abloy Oy PO Box 108 80101 Joensuu, Finland	10
0432-BPR-0049	EN1158:1997+A1:2002	3 8 6 1 1 0

CE	Abloy Oy PO Box 108 80101 Joensuu, Finland	09
0432-CPD-0047	EN1154:1996+A1:2002	3 8 6 1 1 2

Technical attributes	
Voltage supply	24 V DC
Max. consumption	60 mA
Hinge distance	1350 - 2800 mm
Fire and smoke protection	Yes
Opening angle on active leaf	up to 120°
Hold open angle of inactive leaf	70° - 120°
Weight	2,1 kg
Height	30 mm
Depth	26 mm
Length	Depends on hinge distance
Certified in compliance with	EN 1155 and EN 1158
CE mark for building products	Yes

Technical attributes for the ASSA ABLOY G884 concealed guide rail with mechanical co-ordinator and electro-mechanical hold open. Use in conjunction with the DC860 concealed door closer bodies (supplied separately), see DC860 details.

The advantages at a glance

Customer segment	Advantages
Architects & Specifiers	<ul style="list-style-type: none"> - Concealed door closer products have aesthetic advantages for many solutions - Extensive range of uses: Fire and smoke protection doors as well as standard doors - Compact design, small size - Suitable for steel, wooden and aluminium profile doors
Builders & Installers	<ul style="list-style-type: none"> - Quick and easy installation - Quickly and easily adjustable
Trade	<ul style="list-style-type: none"> - Reduced inventory costs due to modular product range - One single product suitable for all fitting applications - A single model for all concealed double door solutions
User	<ul style="list-style-type: none"> - Correct closing sequence guaranteed in every situation - Adjustable operating force, to meet door construction requirements and end user needs

Specification for G884

ASSA ABLOY concealed guide rail G884 with mechanical co-ordinator and electro-mechanical hold open device for double doors used with DC860 concealed CAM-motion closer bodies

- Hinge distance 1350 - 2800 mm
- Possible to keep both door leaves open
- Hold open angle of inactive leaf adjustable between 70° - 120°
- Continuously adjustable hold open force
- Active leaf could stay open in any selected angle up to 120° when inactive leaf is opened
- Correct closing sequence guaranteed because inactive leaf must be very near to closed position before active leaf starts to close
- Large range of applications
- CE marked

Accessories:

- Carry bar
- Power supply
- Smoke protection detector
- Flush mounted or surface mounted release button

Colour:

- Silver
- Custom finishes available

You can find the full specifications on the internet at: www.assaabloy.co.uk

CAM-motion Torque Curve Performance

The independent third party generated graphs opposite demonstrate the torque curve capabilities of the ASSA ABLOY CAM-motion door closers. An example of the original graph provided by MPA is shown below. Each door closer was set to power size 3 and the opening and closing torque recorded during the opening and closing cycles.

As can be seen, the opening force decreases rapidly as the door opens enabling children, the elderly and people with disabilities, to more easily overcome the closing moment of the door, and improve accessibility.

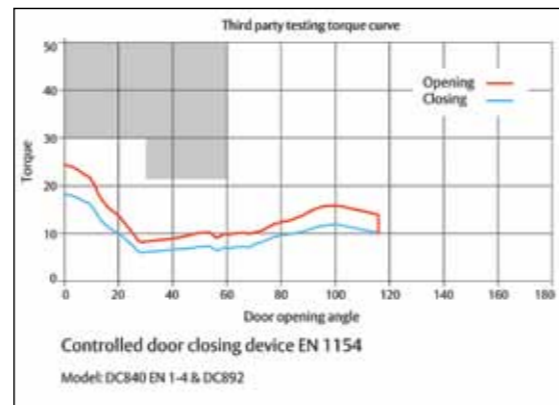
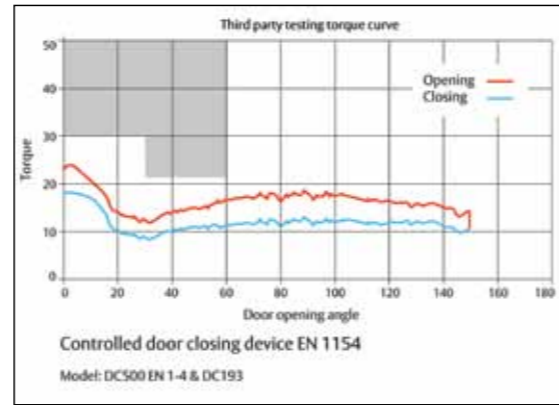
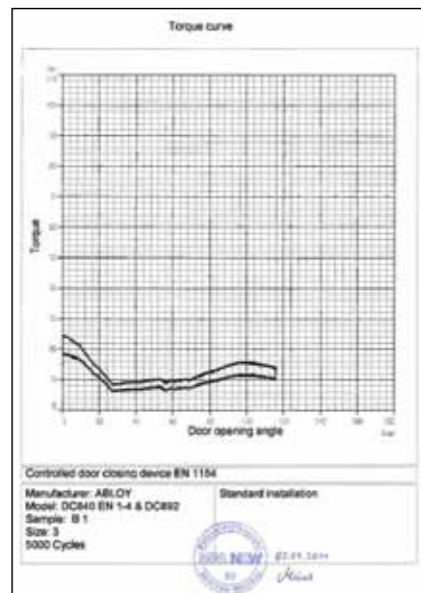
To further emphasise this, the shaded portion of the graph indicates the maximum opening force recommended under BS8300.

"... A door closer must produce an opening force of below 30N between 0° and 30° and below 22.5N between 30° and 60° ..."

Hence, specifiers and building owner's responsibilities are met, and end user experience of the building environment is enhanced.

However, this may be only half the story. If the door is a fire door, then according to BS EN 1154 the minimum door closer power setting must be 3, and the minimum closing torque requirement is 18Nm. Again, as can be seen, the ASSA ABLOY Cam-motion door closers comply with this requirement, ensuring that the door sits firmly in the frame preventing the spread of fire and smoke.

It is the superior design and engineering excellence of ASSA ABLOY's high efficiency CAM-motion door closers that permit the co-existence of improved door opening for accessibility, whilst retaining reliable door closing for fire and smoke control.



Accessories

Bodies for fire door systems	
DC700 CAM-motion closer body	870012 000 00
DC840 Concealed CAM-motion closer body 1-4	840010 500 00
DC860 Concealed CAM-motion closer body 1-5	860010 500 00

Arms	
L190 Link arm for use with DC200, DC300, DC340	819000 000 00
L191 Hold open link arm for use with DC200, DC300, DC340	819100 000 00
G193 Standard guide rail for use with DC340, DC500, DC700	819300 000 00
G195 Height-adjustable rail for use with DC340, DC500, DC700	819500 000 00
L197 Extra strong link for use with DC347	819700 000 00
L690 Link arm free swing for use with DC640	869000 000 00
G694 Guide rail free swing for use with DC640	869400 000 00
DC892 Small concealed guide rail for use with DC840 and DC860	892100 500 00
DC893 Large concealed guide rail for use with DC840 and DC860	893100 500 00

Angle and Parallel Brackets	
A154 Parallel bracket for use with DC200, DC300, DC340	815400 000 00
A122 for use with DC200	812200 000 00
A104 for guide rails G193 and G694	810400 000 00
A107 for use with DC200, DC340, DC347	810710 005 00
A116 for use with G460 fire door system	811600 000 00
A117 for use with G461 fire door system	811700 000 00

Mounting Plates	
A120 for use with DC200, DC300, DC340	812040 000 00
A126 for use with DC200, DC300, DC340, DC347	812600 050 00
A130 for use with guide rails G193, G195 and G694	813000 000 00
A115 for use with G460 - G464 fire door systems	811500 000 00

Mechanical Devices for use in the G193, G195, DC892, DC 893 Guide Rails (Slide Arms)	
A152 Hold open device (not for fire doors)	152000 000 0A
A153 Opening damper	153000 000 0A

Other	
A140 Connection box for DC640	814000 000 00
812775 Fixing plate for use with DC860	812775 000 00
G120 Hook arm for use with G461 fire door system for double doors non-hinge side installation	812000 000 00
Carry bar for use with G461 - G464 fire door systems	810000 000 00

How to Order

To specify ASSA ABLOY Door Closers Rack and Pinion		
DC200 with standard link arm and parallel bracket	Order DC200A	820000 000 0A
DC300 with standard link arm and parallel bracket	Order DC300A	830000 000 0A
DC340 with standard link arm and parallel bracket	Order DC340A	830000 000 0A
DC340 with height-adjustable guide rail G195	Order DC340AT5	840120 050 T5
DC340 with standard guide rail G193	Order DC340AT3	840120 050 T3
To specify ASSA ABLOY Door Closer Heavy Duty Rack and Pinion		
DC347 with standard link arm and parallel bracket	Order DC347A	834712 050 00
To specify ASSA ABLOY Door Closer CAM-motion		
DC500 with height-adjustable guide rail	Order DC500A	850011 000 0A
DC700 with height-adjustable guide rail	Order DC700A	870012 000 0A
To specify ASSA ABLOY Concealed CAM-motion		
DC840A with G892 guide rail (20mm)	Order DC840A	840010 500 0A
DC860A with G892 guide rail (20mm)	Order DC860A	860010 500 0A

ASSA ABLOY is the
global leader in door
opening solutions,
dedicated to satisfying
end-user needs for
security, safety and
convenience.

ASSA ABLOY