

ABLOY® DOOR CLOSERS

Excatly the right choice

ABLOY® DOOR CLOSERS



Superior performance and reliability

ABLOY[®] high security products are known and facilities. Our long experience and extensive expertise combined with customer-oriented research

Every item in our wide product range represents top quality and superior performance.

ABLOY[®] door closers protect door constructions by controlling the opening and closing actions of the door. Reliable performance over a wide operational temperature range guarantees that energy will be saved and security increased.

Production of **ABLOY**[®] door closers started in the 1930s. Today, we exploit the high quality and advanced technology in our purpose-built production

facilities. Our long experience and extensive expertise combined with customer-oriented research and development mean that we have a wide range of solutions for the varying demands of different door environments.

Our global network of sales offices and distributors will help you to choose right products to increase security and convenience in your specific application. The functions, features, and wide variety of installation alternatives offered by **ABLOY**[®] door closers give you convenient operation, simplified installation and ease of adjustment and maintenance.



ABLOY® DOOR CLOSERS



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COLOURS AVAILABLE

PLASTIC COVERS

White (RAL 9010)	•
Silver (RAL 9006)	
Brass	
Brown (RAL 8014)	
Black (RAL 9005)	



METAL COVERS

Stainless steel Bright brass



Note: **ABLOY**[®] DC270 is available only with metal cover. Colours white, brass, silver and stainless steel.

OPERATION OF DOOR CLOSERS

OPERATION

Operation is based on a hydraulically controlled rack and pinion or CAM-action mechanism (DC330, DC250). Within the closer there is oil to control the closing and latching speeds and delayed closing and back check features. The adjustable valves enable the adjustment of the speeds and features.

Opening a door, the spring inside the closer is becoming tense. When door is released the potential of the spring push the piston back and door closes. Pressure relief valves are standard feature (excluding DC210 and DC215) to protect the door from abuse and ensure reliable operation in demanding conditions.

ADJUSTMENT (C- AND L-VALVE)

Closing speed (Valve C): The closing speed can be adjusted 180 - 15 degrees (DC330 and DC250 170 - 7 degrees).

Latching speed (Valve L): The latching speed can be adjusted 15 - 0 degrees (DC330 and DC250 7-0 degrees).

BACK CHECK (BC)

A brake affects door movement from 70°-80° to fully open (180°) and protects the door by preventing it from being pulled open by the wind. This feature can be adjusted by selecting the desired arm position. Adjustment by using valve B. Recommended for use with external doors.

DELAYED CLOSING (DC)

Delayed closing slows down the movement of the door from fully open (180°) to approximately 70°, after passing this point the door closes at normal speed. The starting angle can be adjusted by selecting desired arm position. Closing speed can be adjusted by adjustable valve D. Adjustable valve enables the adjustment of closing speed. Recommended for internal doors.

ADJUSTABLE CLOSING FORCE

ABLOY[®] DC334, DC335, DC240, DC247, DC250, DC330, DC270 door closers are equipped with adjustable spring power which ensures the presetting of spring.

Due to adjustable spring power, the same door closer can be used in various applications.



FUNCTION OF TEMPERATURE

CLOSING TIME AS A FUNCTION OF TEMPERATURE

Changes in temperature have only a minimal effect on the performance of **ABLOY**[®] door closers. **ABLOY**[®] DC240 guarantee constant closing speed in every situation. High quality hydraulic oil and patented valve systems have already earned this product a legendary reputation.



Changes in temperature have only a minimal effect on the performance of **ABLOY**[®] door closers and adjusted features. **ABLOY**[®] door closer exceeds standards demands for temperature area.

The EN1154 standard specifies the following:

- A A standard closing time of 5 seconds at +20 °C
- B A minimum closing time of 3 seconds at +40 °C (check point only)
- C A maximum closing time of 25 seconds at -15 °C (check point only)

DOOR OPENING FORCE WITH SLIDING ARM



ABLOY® DC210 DOOR CLOSER



ABLOY® DC210

Interior doors with a maximum weight 60 kg and door leaf width 950 mm.

FEATURES

- Adjustable closing force size EN 2 or 3 according EN1154
- Separate adusting valves for closing and latching speed
- Die-cast aluminium body
- Arm is included in the package
- Three colours: silver, white and brown



INSTALLATION

OPENING SIDE



Maximum opening angle 180°

CLOSING SIDE



Maximum opening angle 180°

DIMENSIONS







ABLOY® DC215 DOOR CLOSER



ABLOY® DC215

Suitable for external and internal doors. The maximum door weight 80 kg and door leaf width 1100 mm.

FEATURES

- CE certified
- Closing force size EN 2, 3 or 4 according EN1154
- Separate adjusting valves for closing and latching speed
- Die-cast aluminium body
- Arm is included in the package
- Three colours: silver, white and brown

INSTALLATION

OPENING SIDE



Maximum opening angle 180°

CLOSING SIDE



Maximum opening angle 180°



DIMENSIONS



No height adjustment between arm and door closer.



ABLOY® DC334 AND DC335 DOOR CLOSER



ABLOY® DC334 AND DC335

DIMENSIONS

ABLOY[®] DC334 Maximum door weight 80 kg and door leaf width 1100 mm with a standard arm installation.

FEATURES

• Adjustable closing force size EN 1-4 with the standard arm according EN1154

ABLOY® DC335 is suitable for external and internal doors. Maximum door weight 100 kg and door leaf width 1250 mm with a standard arm installation.

FEATURES

- Adjustable closing force size EN 3-5 with the standard arm according EN1154
- Back check (BC) as a standard feature
- Delayed closing (DC) as an option

COMMMON FEATURES

- CE certified with a standard arm
- Separate adjusting valves for closing and latching speed
- Back check (BC) as a standard feature
- Wide operating temperature range: -35°C... +45°C
- Adjustable latching and back check starting angle by grooved spindle
- Easy adjustment of arm height (14 mm)
- Two pressure relief valves to protect against abuse
- Die-cast aluminium body manufactured from high performance silicon alloy



ADJUSTMENT

In DC335 Back check (BC) as a standard feature and delayed closing (DC) as an adjustable optional feature



ABLOY® DC334 AND DC335 INSTALLATION

DC335 INSTALLATION WITH SLIDING ARM DC193, DC194

OPENING SIDE





CLOSING SIDE

Max opening angle 120° 518 86

DC334 AND DC335 INSTALLATION WITH ARMS DC190, DC191, DC199

OPENING SIDE



CLOSING SIDE Max 100 (DC190, DC199) Max 70 (DC191)

DC335 INSTALLATION WITH PARALLEL ARM



ABLOY® DC240 DOOR CLOSER



ABLOY® DC240

Suitable for external doors, large doors and internal doors exposed to conditions of pressure and heavy use. The maximum door weight 120 kg, and door leaf width 1400 mm with a standard arm installation. When installed with a sliding arm maximum door weight is 80 kg and door leaf width is 1100 mm.

FEATURES

- CE certified with standard and sliding arms
- Adjustable closing force size EN 2-6 with the standard arm and EN1-4 with the sliding arm according EN1154
- Separate adjusting valves for closing and latching speed
- Back check (BC) as a standard feature
- Delayed closing (DC) as an option
- Wide operating temperature range: -35°C...+45°C
- Adjustable latching and back check starting angle by grooved spindle
- Easy adjustment of arm height (14 mm)
- Two pressure relief valves to protect against abuse
- Die-cast aluminium body manufactured from high performance silicon alloy

When ordering, please specify

- Door closer model and colour e.g. DC240 (silver)
- Quantity
- Arm type and colour e.g. DC190 silver
- The arm is not included in the delivery or price of the door closer.
- Mounting plate e.g. DC106.



ADJUSTMENT

DIMENSIONS

Back check (BC) as a standard feature and delayed closing (DC) is an adjustable optional feature.



ABLOY® DC240 INSTALLATION

INSTALLATION WITH ARMS DC190, DC191 AND DC199

OPENING SIDE

CLOSING SIDE



INSTALLATION WITH SLIDING ARMS DC193, DC194







ABLOY® DC247 DOOR CLOSER



DIMENSIONS

ABLOY® DC247

Suitable for use on internal and external doors but ideal solution for extremely heavy doors. The maximum door weight 160 kg and door leaf width 1600 mm with a standard arm installation.

FEATURES

- CE certified with arm DC197
- Adjustable closing force size EN 5-7 according EN1154
- Separate adjusting valves for closing and latching speed
- Back Check (BC) as a standard feature
- Wide operating temperature range: -35°C...+45°C
- Adjustable latching and back check starting angle by grooved spindle
- Easy adjustment of arm height (14 mm)
- Two pressure relief valves to protect against abuse
- Die-cast aluminium body manufactured from high performance silicon alloy



ADJUSTMENT



When ordering, please specify

- Door closer model and colour e.g. DC247 (silver)
- Quantity
- Arm type and colour e.g. DC197 silver
- The arm is not included in the delivery or price of the door closer.
- Mounting plate e.g. DC106.

ABLOY® DC247 INSTALLATION



INSTALLATION WITH ARM DC197



CLOSING SIDE

ABLOY® DC330 DOOR CLOSER



DIMENSIONS

ABLOY® DC330

Non-handed cam action door closer. Thanks to CAM it is light to open but still strong enough to close the door in every situation. **ABLOY®** DC330 can be adjusted to meet the requirements of the light opening resistance, for example the DDA (Disability Discrimination Act) in UK. Suitable for external and internal doors. The Maximum door weight 80 kg and door leaf width 1100 mm with a sliding arm installation.

FEATURES

- CE certified with the sliding arm
- Adjustable closing force size EN 1-4 with the sliding arm according EN1154
- Separate adjusting valves for closing and latching speed
- Wide operating temperature range: -15°C...+45°C
- Adjustable latching starting angle by grooved spindle
- Easy adjustment of arm height (14 mm)
- Pressure relief valve to protect against abuse
- Die-cast aluminium body manufactured from high performance silicon alloy



ADJUSTMENT



When ordering, please specify

- Door closer model and colour e.g. DC330 (silver)
- Quantity
- Arm type and colour e.g. DC193 silver
- The arm is not included in the delivery or price of the door closer.
- Mounting plate e.g. DC130.

ABLOY® DC330 INSTALLATION



INSTALLATION WITH SLIDING ARM DC193, DC194

OPENING SIDE





CLOSING SIDE





ABLOY® DC250 DOOR CLOSER



DIMENSIONS

ABLOY® DC250

ABLOY[®] DC250 is non handed cam action door closer and therefore very easy to install. Thanks to the cam construction it is extremely light to open, yet in terms of closing force strong enough for heavy duty applications. Suitable for external and internal doors. For use with **ABLOY**[®] FD460 series fire door closing systems. Maximum door weight 120 kg and door leaf width 1400 mm with sliding arm installation.

FEATURES

- CE certified with sliding arm
- Adjustable closing force size EN 1-6 with sliding arm according EN1154
- Separate adjusting valves for closing and latcing speed
- Back check (BC) as a standard feature
- Delayed closing (DC) as an option
- Wide operating temperature range: -15°C...+45°C
- Adjustable latching and back check starting angle by grooved spindle
- Easy adjustment of arm height (14 mm)
- Two pressure relief valves to protect against abuse
- Die-cast aluminium body manufactured from high performance silicon alloy

When ordering, please specify

- Door closer model and colour e.g. DC250 (silver)
- Quantity
- Arm type and colour e.g. DC193 silver
- The arm is not included in the delivery or price of the door closer.
- Mounting plate e.g. DC106.



ADJUSTMENT



ABLOY® DC250 INSTALLATION



INSTALLATION WITH SLIDING ARMS DC193, DC194



ABLOY® DC270 DOOR CLOSER

ABLOY® DC270

This closer is designed especially for ships and extremely heavy doors with sliding arm. It is double closer model where DC247 and DC250 are installed to the same mounting plate under same metal cover.

FEATURES

- Adjustable closing force size EN 6-7 with sliding arm according EN1154
- Separate adjustment for closing and latching speed using only adjusting valves of DC247
- Back check (BC) as a standard feature
- Wide operating temperature range: -15°C...+45°C
- Adjustable latching and back check starting angle by grooved spindle
- Die-cast aluminium body manufactured from high performance silicon alloy
- Fulfill shipbuilders requirements when door is tilted even 3,5 degrees

INSTALLATION

OPENING SIDE



ADJUSTMENT

DIMENSIONS





CLOSING SIDE



Installation on frame

STANDARDS AND FEATURES

CLASSIFICATION OF **ABLOY®** DOOR CLOSERS ACCORDING TO EUROPEAN STANDARD EN1154

	DC210	DC215	DC334	DC335	DC240	DC247	DC330	DC250	DC270
EN1			•				٠		
EN2	•	•	•		•		•	•	
EN3		•	•	•	•		•	•	
EN4		•	•	•	•		•	•	
EN5					•	•		•	
EN6					•	•		•	•
EN7						•			•

When using sliding arm with door closer DC335 and DC240, the closing strength of the closer reduces by two classes.(e.g. DC240 and DC194 = EN1-4).

FEATURES

	DC210	DC215	DC334	DC335	DC240	DC247	DC330	DC250	DC270
BC			•	•	٠			•	
DC				•	•			•	

• Option • Standard

RECOMMENDED DOOR SIZES ACCORDING EN1154

Door Closer Size	Recommended max. door leaf width mm	Door leaf mass Kg	
EN1	750	20	
EN2	850	40	
EN3	950	60	
EN4	1100	80	
EN5	1250	100	
EN6	1400	120	
EN7	1600	160	

ABLOY® DOOR CLOSER ARMS



The starting angle for back check, delayed closing and latching speed can be adjusted by selecting the desired arm position in relation to the grooved spindle. Each groove represents an angle of 11 degrees.



The arm height can be adjusted (max 14 mm) by moving the grooved spindle in a vertical direction.

ARMS



Standard arm DC190 (removable joint) Standard arm DC199 (locked joint) Standard arm DC197 (hardened joint)

Sliding arm DC194

the second s



Hold-open arm DC191

• Sliding arm DC193



Parallel arm bracket for DC190, DC199

410178 Silver 410179 Brass 410181 White

	DC210	DC215	DC334	DC335	DC240	DC247	DC330	DC250	DC270
DC190			•	•	•				
DC191			•	•	•				
DC199			•	•	•				
DC193				•	•		•	•	
DC194				•	•		•	•	•
DC197						•			

ABLOY® DOOR CLOSER ACCESSORIES

HOLD-OPEN DEVICE AND OPENING DAMPER



Hold-open device DC152 • Adjustable hold-open force • Max. hold-open angle ~120°



- Opening damper DC153
- Max. damping angle ~ 110°
- Designed to brake the door before hitting the door stopper
- Does not replace the mechanical door stopper

MOUNTING PLATES FOR SLIDING ARMS



Straight mounting plate DC115

MOUNTING PLATES FOR DOOR CLOSERS DC335, DC330



Mounting plate for profiledoors DC102



Angle mounting plate DC113



Mounting plate DC130

DC240, DC247, DC250



Mounting plate DC106



ABLOY® FD440 AND FD460

ABLOY® FD440 FREESWING SOLUTION FOR SINGLE DOOR

ABLOY[®] FD440 is particularly useful for applications where the door is in frequent use and the opening resistance of a standard door closer may be too heavy, such applications are kindergartens, schools, retirement homes and day centres.

ABLOY® FD440incorporate adjustable closing force sizes EN3-6 with standard arm FD499. When installed with FD499 arm, the maximum door weight is 120 kg and door width 1400 mm. Adjustable closing force size EN3-4 with sliding free swing arm FD494. When installed with FD494 arm, the maximum door weight is 80 kg and door width 1100 mm.

FUNCTION

When freeswing arms are used and power is on the first door opening, the opening resistance is like with a normal door closer. The door is opened tot the desired angle to determine the opening angle for later use (min. approx. 70°). After the first opening, the freeswing function enables the door to be opened and closed freely, without any resistance. When the power is switched off, i.e. when the smoke detectors react to smoke, the FD440 closes the door regardless of the door position. Current consumption 90 mA (24 VDC).



ABLOY® FD460 ELECTROMECHANICAL HOLD OPEN DEVICE FOR SINGLE DOOR

ABLOY[®] FD460 is a small and aesthetic electromechanical hold open device system with a sliding arm. It is applicable for places, where fire doors are constantly kept open. The door is kept open at a selected angle. If fire breaks out, the door is closed, preventing smoke and flames from spreading. Applications for FD460 are hotels, office buildings and other fire doors where hold open function is needed.

The aximum door leaf width is 1400 mm and the maximum door weight 120 kg. **ABLOY®** FD460 is recommended to be used with CAM closers. FD460 is CE certified according EN 1155.

FUNCTION

The door is held open by hold open device in the selected angle. When power is switched off, e.g. when smoke detectors react to smoke, the door closes. Hold open angle can be adjusted from 70° up to 130°. Hold open device has adjustable hold open force. Current consumption 60 mA (24 VDC).



ABLOY® FD461

ABLOY® FD461 MECHANICAL COORDINATOR FOR DOUBLE DOORS

ABLOY[®] FD461 is a stylish and small mechanical coordinator for double doors. FD461 is useful in applications where doors are normally kept closed. The coordinator is integrated inside the covered sliding rails which protects the coordinator from abuse e.g. in schools. Suitable for all kinds of double doors e.g. entrance halls in office and commercial buildings.

ABLOY® FD461 is suitable for double doors with hinge distance 1250-2800 mm and the maximum door leaf weight of 120 kg. FD461 is recommended to be used with CAM closers. FD461 is CE certified according EN1158.

FUNCTION

FD461 mechanical coordinator keeps the active door open when inactive door is open. Active door starts to close when the inactive door is almost closed. After the active door is closed it latches the inactive door. FD120 must be used with closing side insallations.



ABLOY® FD462 AND FD464

ABLOY® FD462 COORDINATOR AND TWO ELECTROMECHANICAL HOLD OPEN DEVICES

ABLOY® FD462 is a small, aesthetic fire door closing system with a sliding arm, a built-in coordinator and two electromechanical hold open devices for double doors. **ABLOY®** FD462 has been designed for places that requires flexible use. Two electromechanical hold open devices provide possibility to keep either only the active door or both door leafs open. FD462 is designed for double doors with hinge distance 1250-2800 mm and door maximum door leaf weight 120 kg. FD462 is recommended to be used with CAM closers. FD464 is CE certified according EN1155 and EN1158.

FUNCTION

With FD462 the normal day use is convenient, because both door leafs can be used independently. Only the active door or both door leafs can be kept open. The mechanical coordinator keeps the active door open when inactive door is open. When the power is switched off, i.e. when the smoke detectors react to smoke, the inactive door closes first and when it is almost closed, the active door starts to close. After the active door is closed it latches the inactive door. The hold open angle for both doors can be adjusted from 70 to 130 degrees. Hold open devices include adjustable hold open force. Current consumption 120 mA (24 VDC). FD120 must be used with closing side installation of FD462.



ABLOY® FD464 COORDINATOR WITH ONE ELECTROMECHANICAL HOLD OPEN DEVICE

ABLOY[®] FD464 is a small, aesthetic fire door closing system with a sliding arm, one hold open device and the built-in coordinator for double doors. The applications for FD464 are for example hotels and hospital corridors, where both doorleafs are usually kept open.

ABLOY[®] FD464 is designed for double doors with hinge distance 1250-2800 mm and the maximum door leaf weight 120 kg. FD464 is recommended to be used with CAM closers. FD464 is CE certified according EN1155 and EN1158.

FUNCTION

In normal day use both doors are open. The hold open angle for inactive door can be adjusted 70-130 degrees. The hold open device keeps the inactive door open whereas the coordinator keeps the active door open. The maximum hold angle for the active door is 150°. When the power is switched off, i.e. when the smoke detectors react to smoke, the inactive door closes first and when it is almost closed, the active door starts to close. Hold open device includes adjustable hold open force. Current consumption 60mA (24 VDC). FD120 must be used with closing side installations of FD464.



ABLOY® FD440 DIMENSIONS

ABLOY® FD440





FD440 + FD499 / DC199 + FD140



CLOSING SIDE



FD440 + FD494 / DC199



ABLOY® FD460 - FD464 INSTALLATION

ABLOY® FD460 OPENING SIDE



CLOSING SIDE



Max 18

ABLOY® FD461-FD464



ABLOY® FD ACCESSORIES



ABLOY® FD120 ACCESSORY SET FOR CLOSING SIDE INSTALLATION

FD120 accessory set is needed when coordinator FD461 and electromechanical hold open devices FD462 / FD464 are installed on the closing side of the door. In the closing side installation the sliding piece in the arm moves back and forth before the door closes. When the inactive door is almost closed, FD120 releases the coordinator and the active door leaf closes. FD120 is also suitable for exit door solutions.





ABLOY[®] is a registered trademark of Abloy Oy, one of the leading manufacturers of locks, locking systems and architectural hardware and the world's leading developer of products in the field of electromechanical lock technology.

The unique **ABLOY**[®] detainer disc cylinder mechanism has several advantages over conventional locking mechanisms. Ever since its invention in 1907, it has been a symbol of high security and superior performance.

Our range consists of electromechanical locks, cam locks, padlocks, office furniture locks, rim locks, lock cases, cylinders for different types of mortice locks, door closers, door automatics and architectural hardware. **ABLOY®** locking solutions for every application are available from our world-wide network of distributors.

Customer-oriented development, combined with our long experience and extensive security expertise, mean that **ABLOY**[®] security solutions employ the very latest technology to meet your needs.



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ASSA ABLOY

Abloy Oy is one of the leading manufacturers of locks, locking systems and architectural hardware and the world's leading developer of products in the field of electromechanical locking technology.

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

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