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ABLOY® DOOR CLOSERS

Exactly the right choice

ABLOY® DOOR CLOSERS



Superior performance and reliability

ABLOY high security products are known and highly respected all over the world.

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 customeroriented 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 9016) Silver (EV1 Anosilver) Painted Brass Brown (RAL 8014) Black (RAL 9005)

METAL COVERS



Stainless steel

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 DC120) 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° - 10° (DC330 and DC250 160° - 10°).

Latching speed (Valve L): The latching speed can be adjusted $10^{\circ} - 0^{\circ}$.

BACK CHECK (BC)

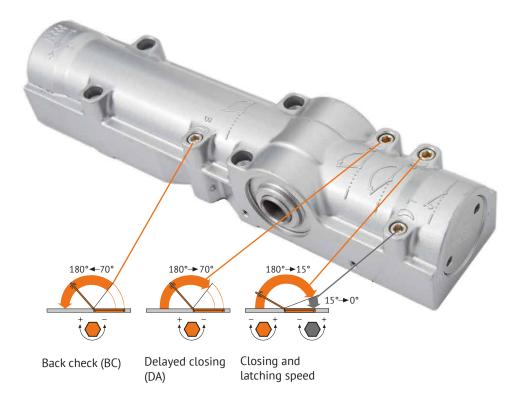
A brake affects door movement from 70° - 80° to fully open (180°) and protects the door by preventing it from being pulled open by the wind. Starting angle can be adjusted by selecting the desired arm position. Adjustment by using valve B. Recommended for use with external doors.

DELAYED CLOSING (DA)

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 ending 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

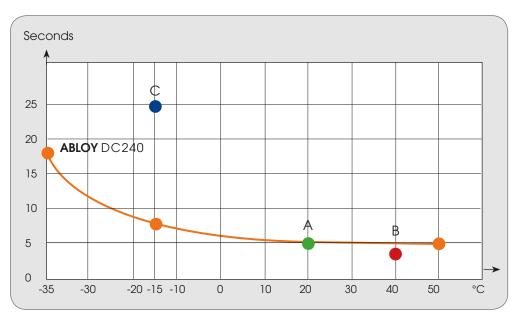
ABLOY DC335, DC240, DC247, DC250, DC330, DC270 door closers are equipped with adjustable spring power which ensures the presetting of spring. Due to adjustable spring power, the same door closer can be used in various applications.



CLOSING TIME RELATED TO OPERATING TEMPERATURE

Changes in temperature have only a minimal effect on the performance of 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.



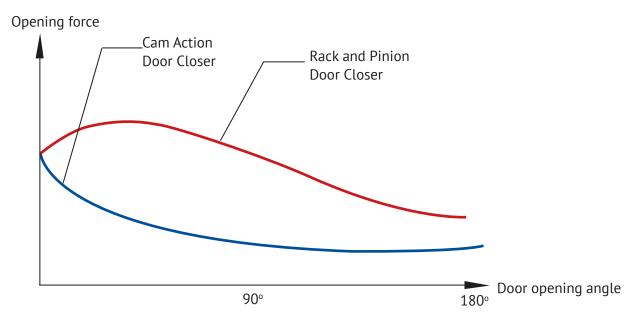
Door closer exceeds standards demands for temperature area.

The EN1154 standard specifies the following:

A B C

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

DOOR OPENING FORCE WITH SLIDING ARM



ABLOY® DOOR CLOSER RANGE



ABLOY® DC120 DOOR CLOSER



ABLOY® DC120

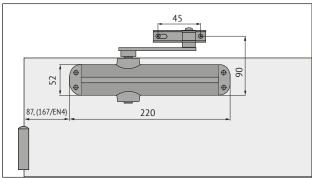
Interior light-weight doors with a maximum weight 80 kg and door leaf width 1100 mm.

FEATURES

- Closing force EN 2/3/4 according to EN1154
- Separate adjusting valves for closing and latching speed
- Can be installed on door or on frame
- Back check (BC) as standard
- Arm is included in the package
- Silver colour

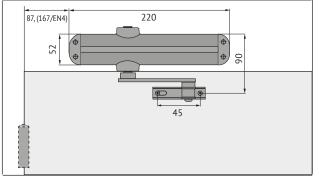
INSTALLATION

OPENING SIDE



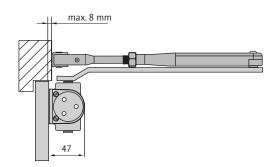
Max. opening angle 180°, in EN4 class 105°.

CLOSING SIDE

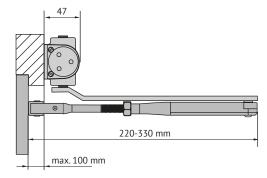




DIMENSIONS



No height adjustment between arm and door closer



ABLOY® DC335 DOOR CLOSER



ABLOY® DC335

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

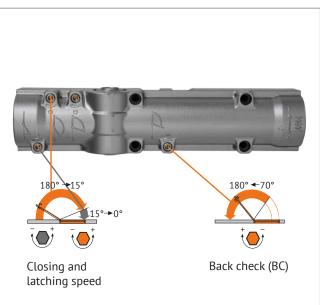
FEATURES

- Adjustable closing force size EN 3-5 with the standard arm according EN1154
- Separate adjusting valves for closing and latching speed
- Back check (BC) as a standard feature
- Comprehensive operating temperature range: -35°C... +45°C
- Adjustable latching and back check starting angle because of the 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

DIMENSIONS

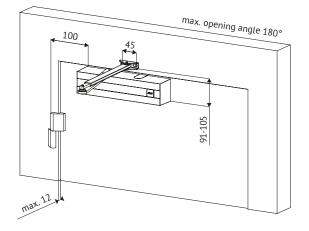


When ordering, please specify

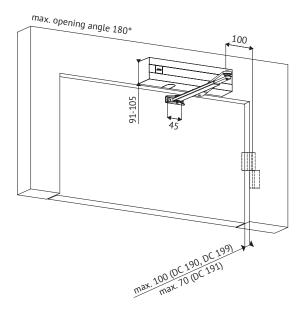
- Door closer model and colour e.g. DC335 (silver)
- Quantity
- Arm type and colour e.g. DC190 silver
- The arm is not included in the delivery or price of the door closer.
- Mounting plate e.g. DC130

INSTALLATION WITH ARMS DC190, DC199, DC191 (EN3-5)

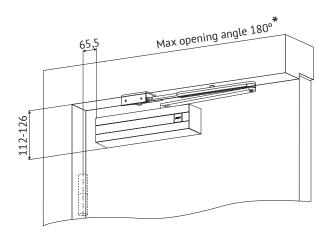
OPENING SIDE



CLOSING SIDE



INSTALLATION WITH PARALLEL ARM



* Depending on door thickness and hinge offset(max. 80mm)

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 EN 1-4 with the sliding arm according EN1154
- Separate adjusting valves for closing and latching speed
- Back check (BC) as a standard feature
- Delayed closing (DA) as an option
- Comprehensive operating temperature range: -35°C...+45°C
- Adjustable latching and back check starting angle because of the 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

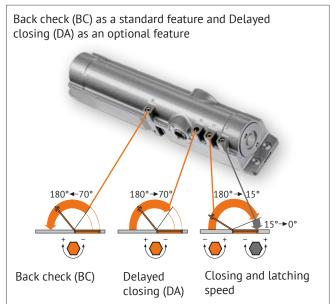
When ordering, please specify

- 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. DC126



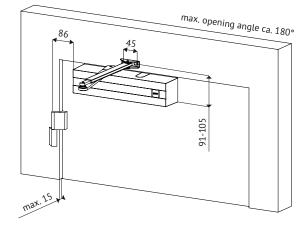
ADJUSTMENT

DIMENSIONS

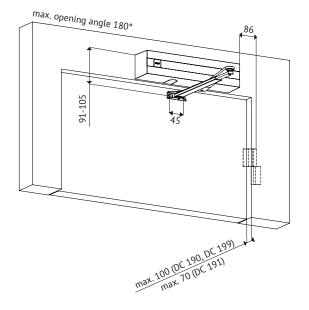


INSTALLATION WITH ARMS DC190, DC191 JA DC199 (EN 2-6)

OPENING SIDE

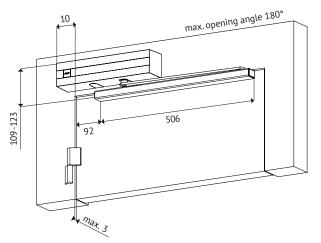


CLOSING SIDE

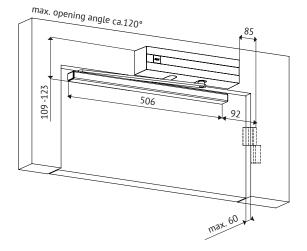


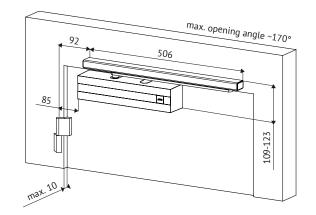
INSTALLATION WITH SLIDING ARM DC194 (EN 1-4)

OPENING SIDE

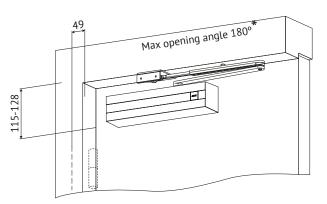


CLOSING SIDE





INSTALLATION WITH PARALLEL ARM



* Depending on door thickness and hinge offset(max. 80mm)

ABLOY® DC247 DOOR CLOSER



ABLOY® DC247

DIMENSIONS

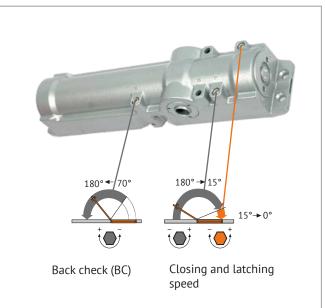
Suitable for use on internal and external doors but ideal solution for extremely heavy doors. The maximum door weight 160 kg and door leaf width 1600 mm with a standard arm installation.

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
- Comprehensive operating temperature range: -35°C...+45°C
- Adjustable latching and back check starting angle because of the 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

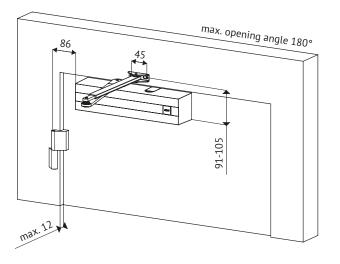
- Door closer model and colour e.g. DC247 (silver)
- Quantity
- Arm type and colour e.g. DC197 silver
- The arm is not included in the delivery or price of the door closer.
- Mounting plate e.g. DC126

ABLOY® DC247 INSTALLATION

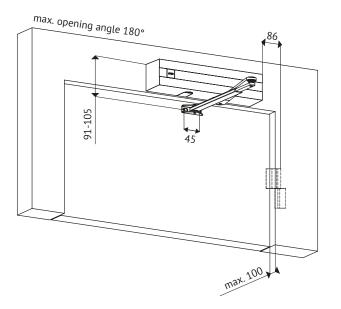


INSTALLATION WITH ARM DC197

OPENING SIDE



CLOSING SIDE



ABLOY® DC330 DOOR CLOSER



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. DC330 can be adjusted to meet the requirements of the light opening resistance, for example the EA (Equality 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.

DIMENSIONS



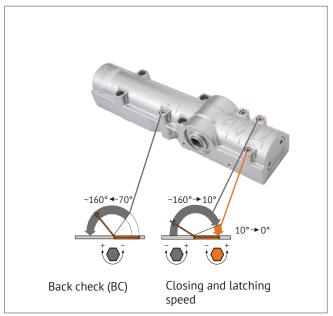
FEATURES

- 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
- Back check (BC) as a standard feature
- Wide operating temperature range: -15°C...+45°C
- Adjustable latching starting angle because of the 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

When ordering, please specify

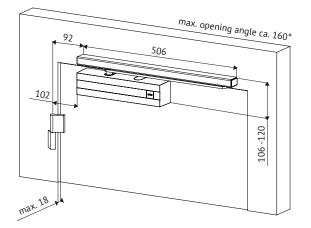
- Door closer model and colour e.g. DC330 (silver)
- Quantity
- Arm type and colour e.g. DC194 silver
- The arm is not included in the delivery or price of the door closer.
- Mounting plate e.g. DC130

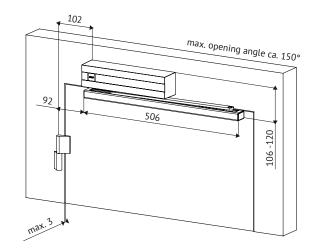
ADJUSTMENT



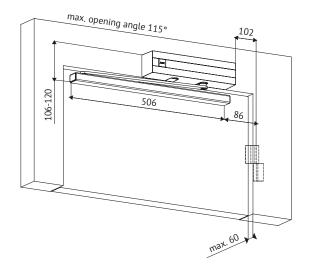
INSTALLATION WITH SLIDING ARM DC194

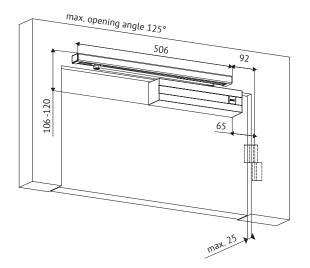
OPENING SIDE





CLOSING SIDE





ABLOY® DC250 DOOR CLOSER



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. Compatible with ABLOY FD460 series fire door closing systems. Maximum door weight 120 kg and door leaf width 1400 mm with sliding arm installation.

DIMENSIONS

FEATURES

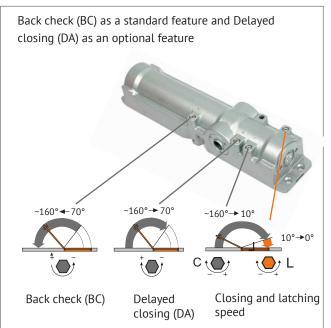
- CE certified with sliding arm
- Adjustable closing force size EN 1-6 with sliding arm according EN1154
- Separate adjusting valves for closing and latching speed
- Back check (BC) as a standard feature
- Delayed closing (DA) as an option
- Wide operating temperature range: -15°C...+45°C
- Adjustable latching and back check starting angle because of the 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. DC194 silver
- The arm is not included in the delivery or price of the door closer.
- Mounting plate e.g. DC126

71 mm 71 mm 66 mm

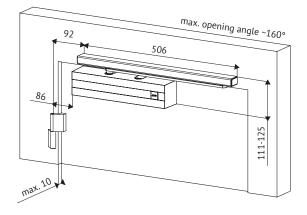
ADJUSTMENT

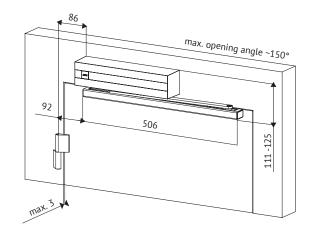


ABLOY® DC250 INSTALLATION

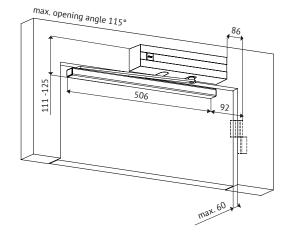
INSTALLATION WITH SLIDING ARM DC194

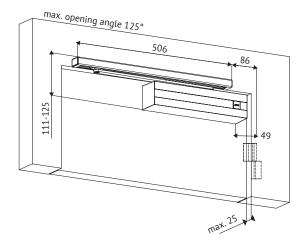
OPENING SIDE





CLOSING SIDE





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.

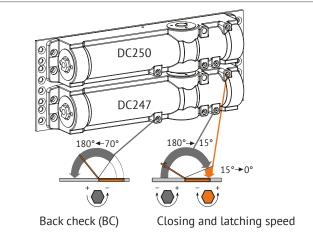
FEATURES

- 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 because of the grooved spindle
- Die-cast aluminium body manufactured from high performance silicon alloy
- Meets shipbuilders requirements even when the door is tilted 3,5°.

DIMENSIONS

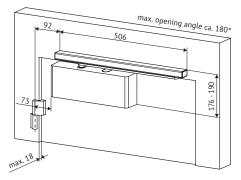


ADJUSTMENT



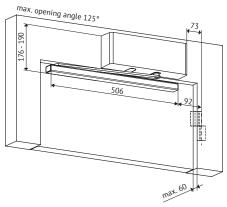
INSTALLATION

OPENING SIDE

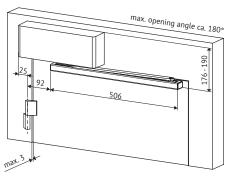


Installation on door

CLOSING SIDE



Installation on frame



Installation on frame

ABLOY® DOOR CLOSERS WITH FREE-SWING FUNCTION

Door closers with free-swing function are light and easy to open and are therefore an excellent choice for applications, where the doors are in frequent use and the opening resistance of the standard door closer may be considered too heavy. Typical applications would be e.g. elderly homes, daycare centers, kindergartens and schools.



ABLOY® FD740

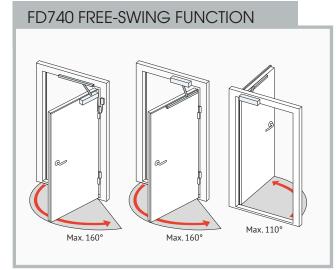
ABLOY FD740 free-swing closer with adjustable closing force is suitable for EN3-6 grade doors with sliding arm FD495. It can be used in door with maximum door width of 1400mm and 120 kg door weight.

Cam-motion technology enables both the easy opening as well as reliable closing of the door. FD740 fulfills barrier-free building requirements (EA/ CEN TR 15894).

PRODUCTS

• ABLOY FD740

- Free-motion sliding arm FD495 If needed:
- Power supply EA701 or control unit 7400
- Door release button 7463
- Optical smoke detector FD600 2 pcs
- FD145 connection box for door leaf installation



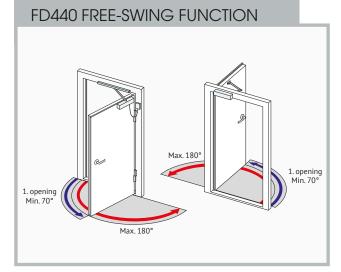
ABLOY® FD440

ABLOY FD440 incorporate adjustable closing force sizes EN 2-6 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.

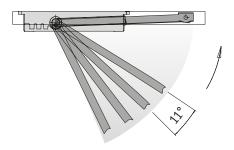
FD440 can be used as an electromechanical hold-open device when installed with sliding arm DC194 or standard arm DC199. The door closes when the current is cut, e.g. when the smoke detectors give alarm.

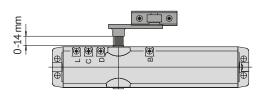
PRODUCTS

- ABLOY FD440
- Arm FD494 or FD499
- If needed:
- Power supply EA701 or control unit 7400
- Door release button 7463
- Optical smoke detector FD600 2 pcs
- FD140 connection box for door leaf installation



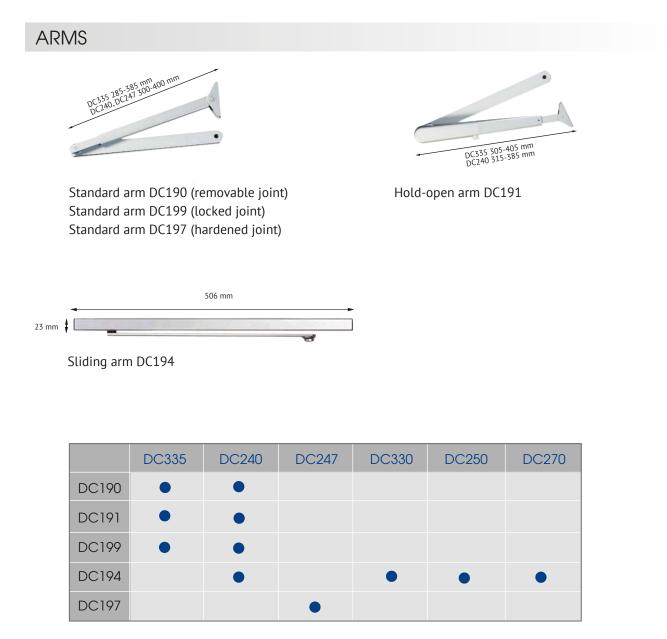
ABLOY® DOOR CLOSER ARMS





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.



HOLD-OPEN DEVICE AND OPENING DAMPER

Hold-open device DC152

- Adjustable hold-open force
- Max. hold-open angle ~120°



Opening damper DC153

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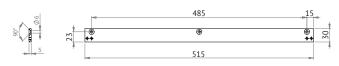
- Max. damping angle ~ 110°
- Designed to brake the door before hitting the door stopper
- Does not replace the mechanical door stopper



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MOUNTING PLATES FOR SLIDING ARMS



Straight mounting plate DC115

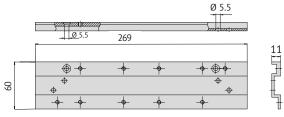
MOUNTING PLATES FOR DOOR CLOSERS DC335, DC330

DC240, DC247, DC250

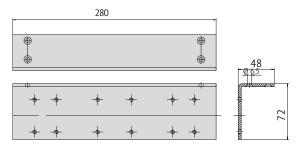
Angle mounting plate DC104

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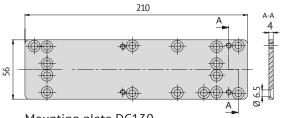
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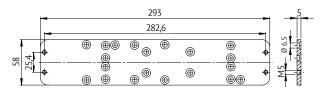
Mounting plate DC102



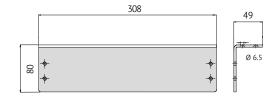
Angle mounting plate DC113



Mounting plate DC130



Mounting plate DC126



Angle mounting plate DC107

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

	DC120	DC335	DC240	DC247	DC330	DC250	DC270
EN1					٠	٠	
EN2	•		•		•	•	
EN3	•	•	•		•	•	
EN4	•	•	•		•	•	
EN5		•	•	•		•	
EN6			•	•		•	•
EN7				•			•

When using DC240 with DC194 sliding arm, the closing strength of the closer reduces by two classes (EN1-4)

FEATURES

	DC120	DC335	DC240	DC247	DC330	DC250	DC270
BC	•	•	•	•	•	•	•
DA			•			•	
Option Standard							

Recommended door sizes according to 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 FOR EVERY APPLICATION

ABLOY® DOOR CLOSERS	EN CLASS	APPLICATION
ABLOY® DC120	EN2/EN3/EN4 (by changing the installation position)	Light interior doors. Maximum door weight 80 kg and max. door width 1100 mm.
ABLOY® DC335 (BC)	3 - 5	Exterior and interior doors. Maximum door weight 100 kg and max. door width 1250 mm. Adjustable closing force.
ABLOY® DC240 (BC or BC and DA)	2 – 6 (with sliding arm 1 – 4)	Heavy exterior and interior doors with frequent use. Maximum door weight 120 kg and max. door width 1400 mm. When used with a sliding arm: maximum door weight 80 kg and max. door width 1100 mm. Adjustable closing force.
ABLOY® DC247 (BC)	5 - 7	Extremely heavy exterior and interior doors. Maximum door weight 160 kg and max. door width 1600 mm. Adjustable closing force.
ABLOY® DC330 (BC)	1 - 4	With sliding arm in interior doors to enable easy and effortless opening. Maximum door weight 80 kg and max. door width 1100 mm. Adjustable closing force.
ABLOY® DC250 (BC or BC and DA)	1-6	With sliding arm in exterior and interior doors to enable easy opening without compromising the reliable closing of even heavy doors. Recommended with FD460-serie systems in fire doors. Maximum door weight 120 kg and max. door width 1400 mm. Adjustable closing force.
ABLOY® DC270 (BC)	6 - 7	With sliding arm in extremely heavy exterior and interior doors. Maximum door weight 160 kg and max. door width 1600 mm.



ABLOY secures people, property, and business operations on land, at sea, and in the air – in all circumstances.

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

MANUFACTURER:

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