

ABLOY® DOOR CLOSERS

Exactly the right choice



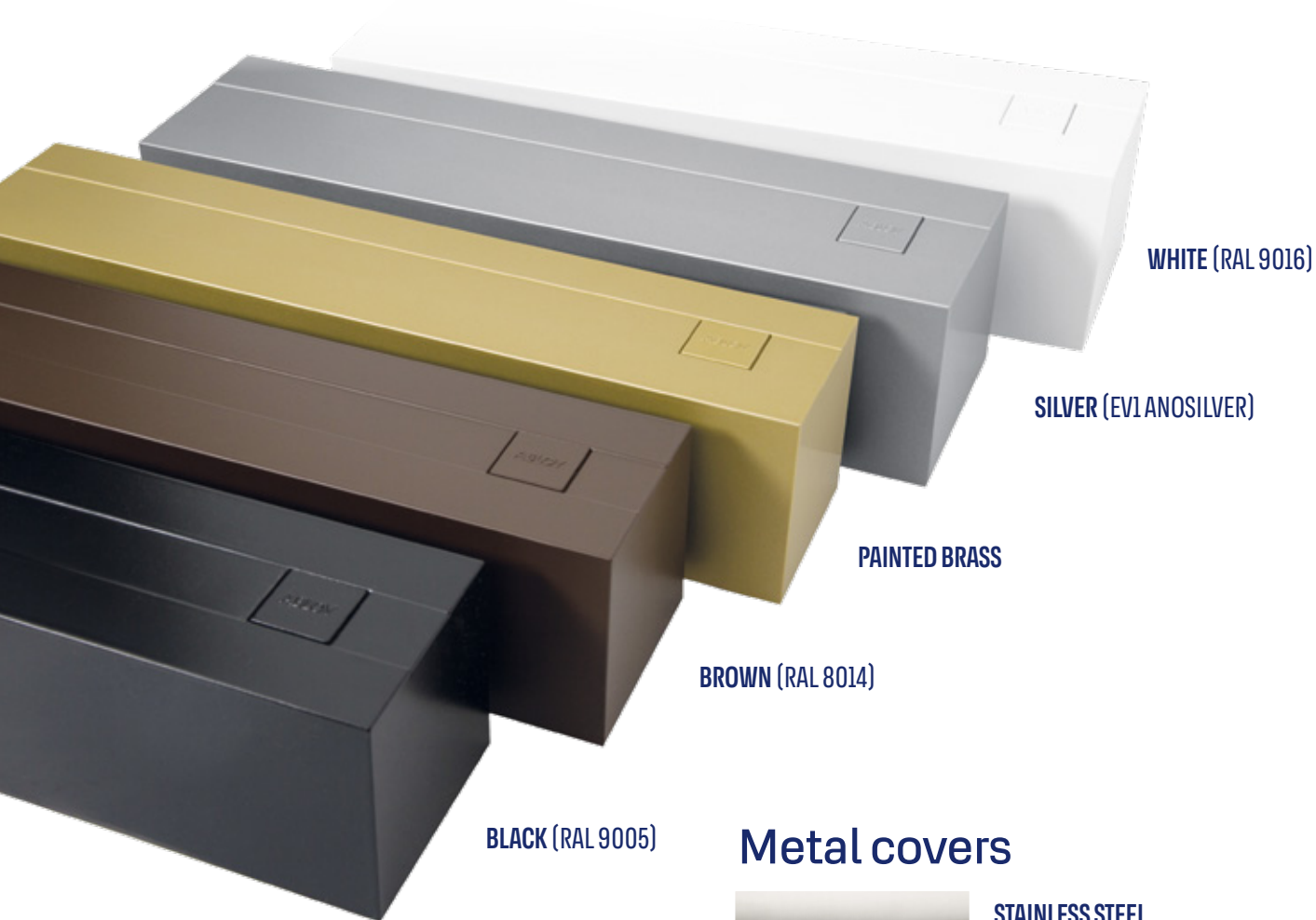
ABLOY

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Colours available

Plastic covers



WHITE (RAL 9016)

SILVER (EVIANOSILVER)

PAINTED BRASS

BROWN (RAL 8014)

BLACK (RAL 9005)

Metal covers



STAINLESS STEEL

Dimensions

DC335, DC330: width 273 mm, height 66 mm, depth 59 mm

DC250, DC247, DC240: width 305 mm, height 71 mm, depth 66 mm

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 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.



Operation of door closers

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°- 0°.

Back check (BC)

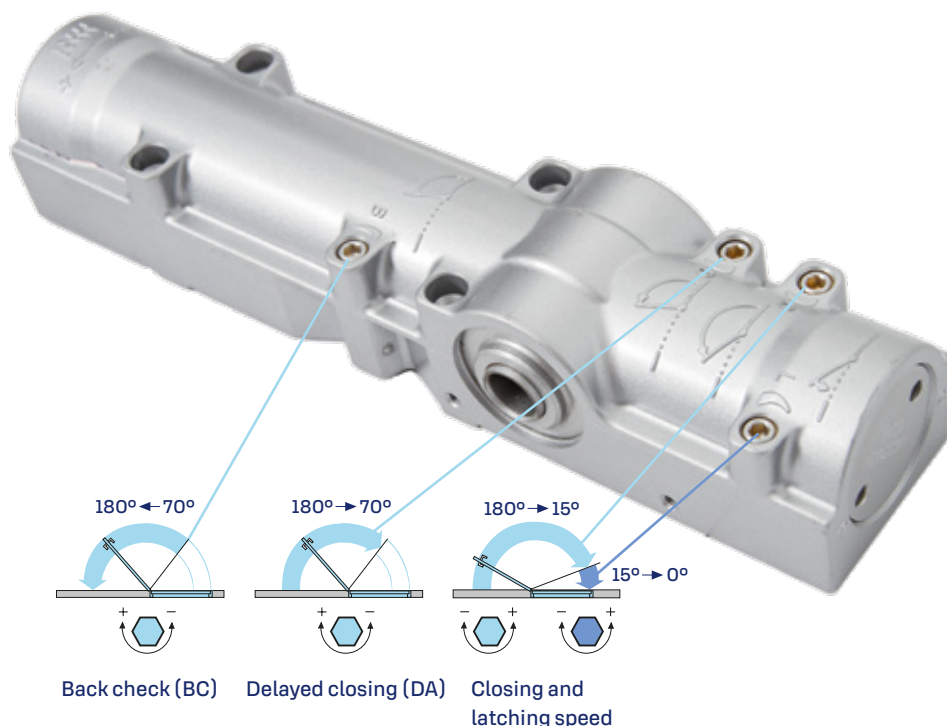
A brake affects door movement from 70° - 80° to fully open (180°) and protects the door by preventing it from being pulled open by the wind. Starting angle can be adjusted by selecting the desired arm position. Adjustment by using valve B. Recommended for use with external doors.

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.





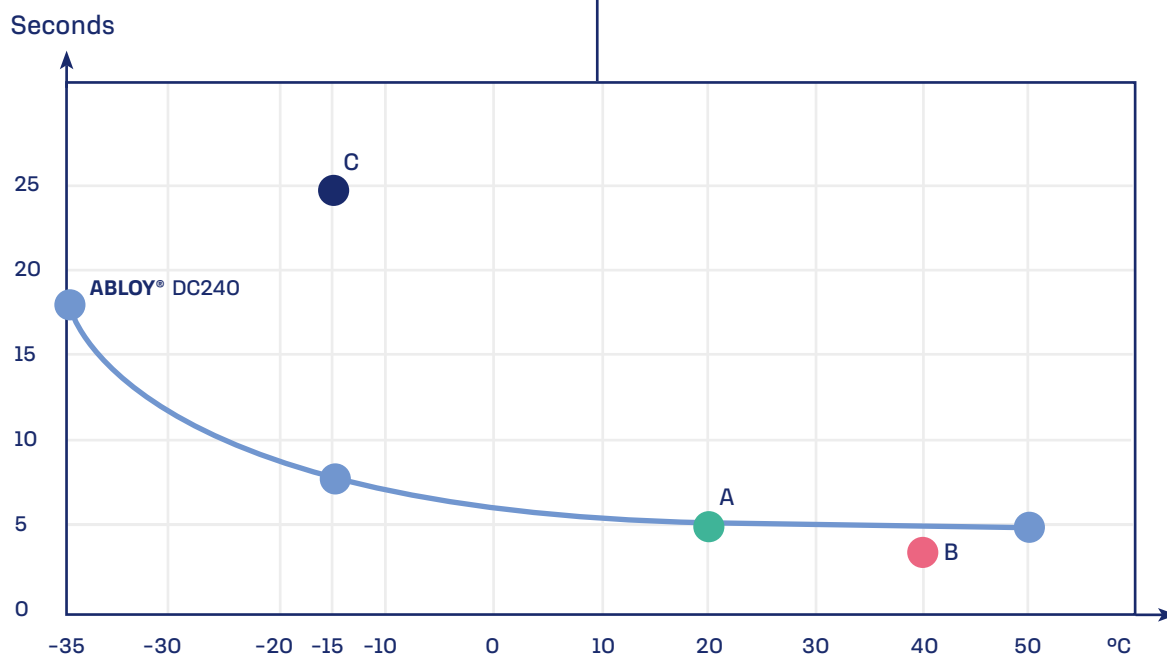
Closing time related to operating temperature

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.

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)



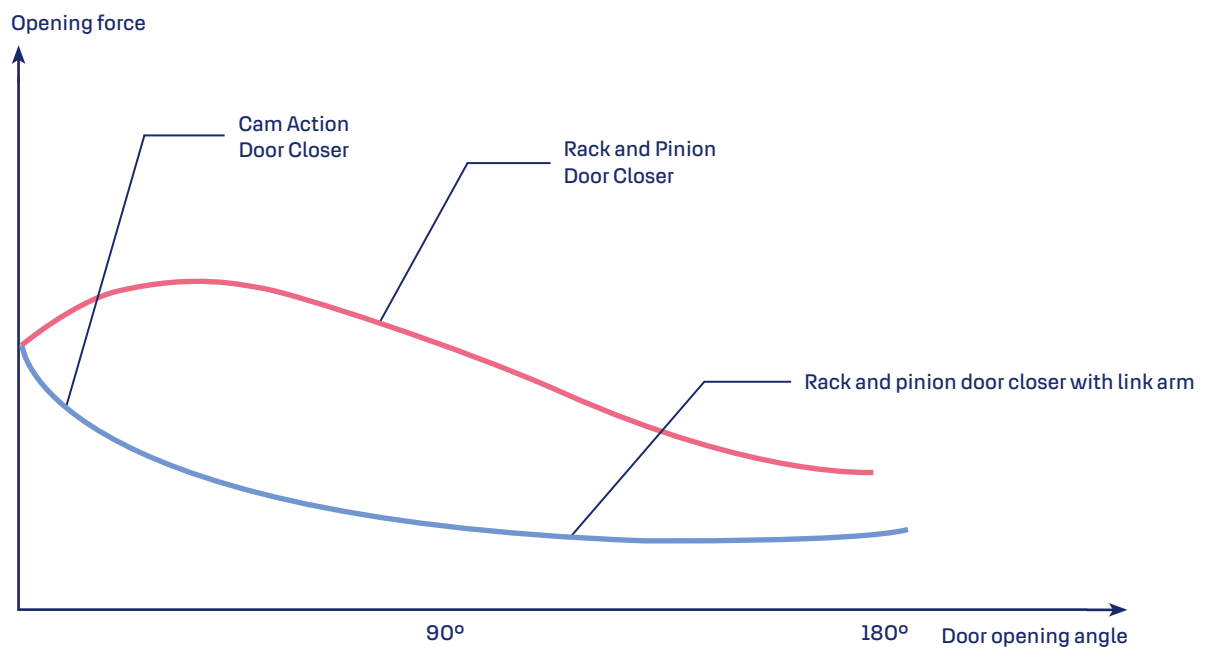
Door opening force with guide rail

Rack and pinion door closer with guide rail

Rack and pinion door closer is designed to work with link arm. With selected door closer models (DC240) it is possible to use guide rail, this requires correct pretension to be applied. User can find this installation heavy to use as the required opening force does not decrease as it does with link arm.

CAM door closer with guide rail

CAM door closers are designed to work with guide rail. While opening the door required opening force decreases and user finds the door easy to open. To ensure proper closing the closing force rapidly increases when the door gets near to the closed position. Symmetric CAM designs allows the same door closer to be installed to multiple positions. Door closer can be installed on door frame or door leaf on the opening or on the closing side.



ABLOY® DC120 door closer

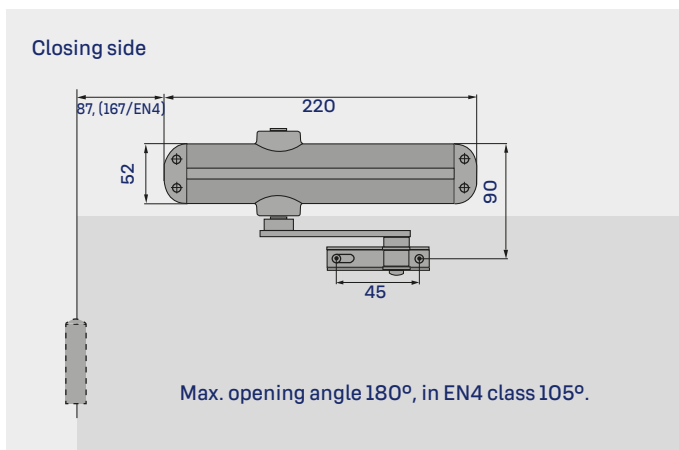
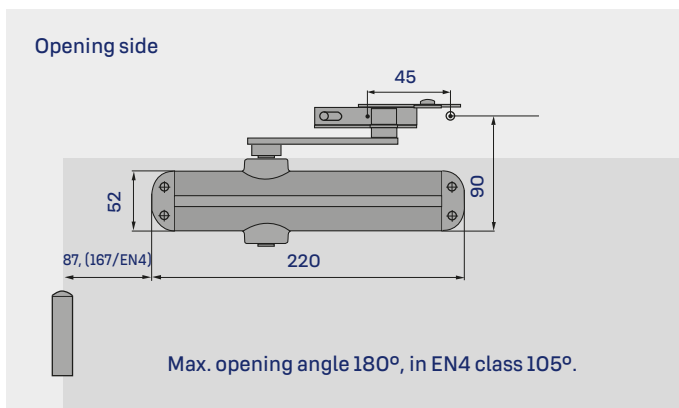


Interior light-weight doors with a maximum weight 80 kg and door leaf width 1100 mm.

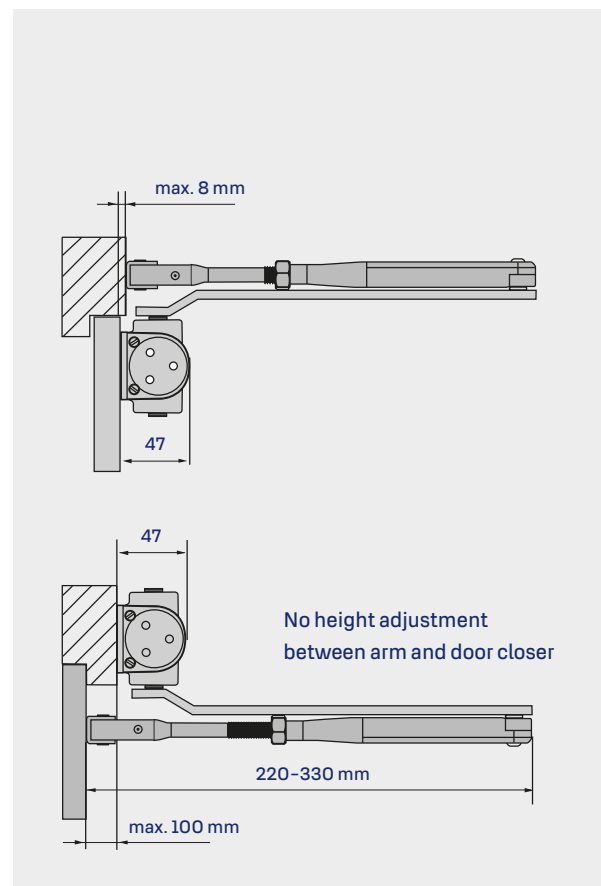
Features

- 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

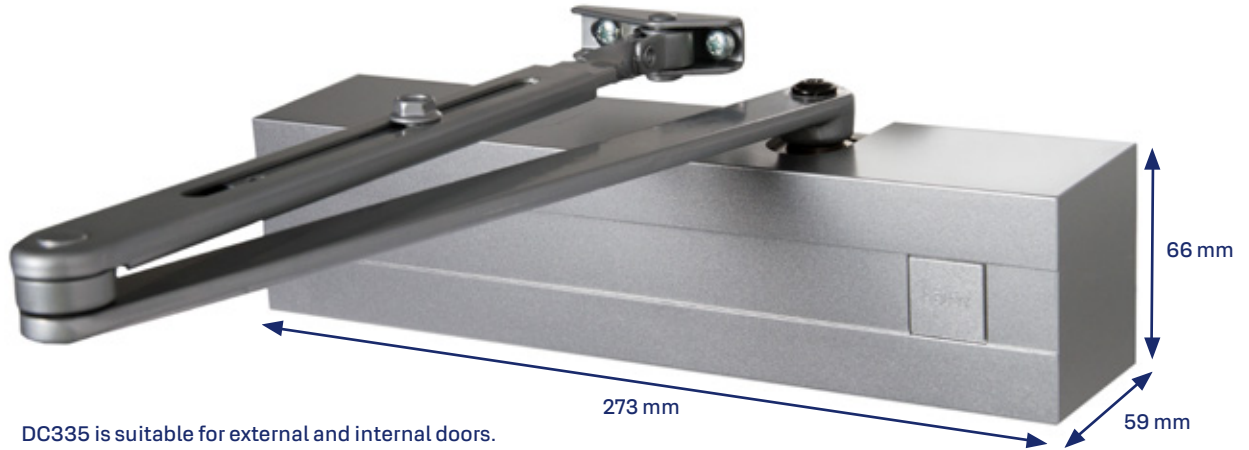
Installation



Dimensions



ABLOY® DC335 door closer



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

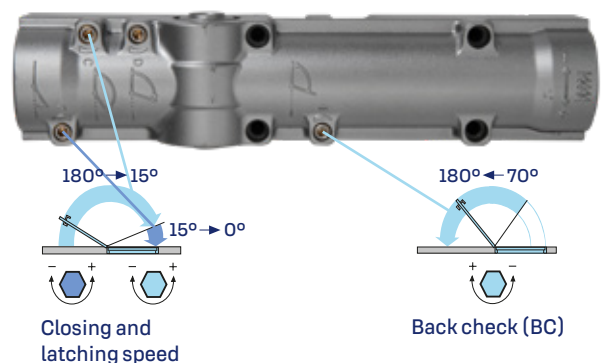
- Adjustable closing force size EN 3-5 with the standard arm according EN1154
- Separate adjusting valves for closing and latching speed
- Back check (BC) as a standard feature
- Comprehensive operating temperature range: -35oC... +45oC
- Adjustable latching and back check starting angle because of the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

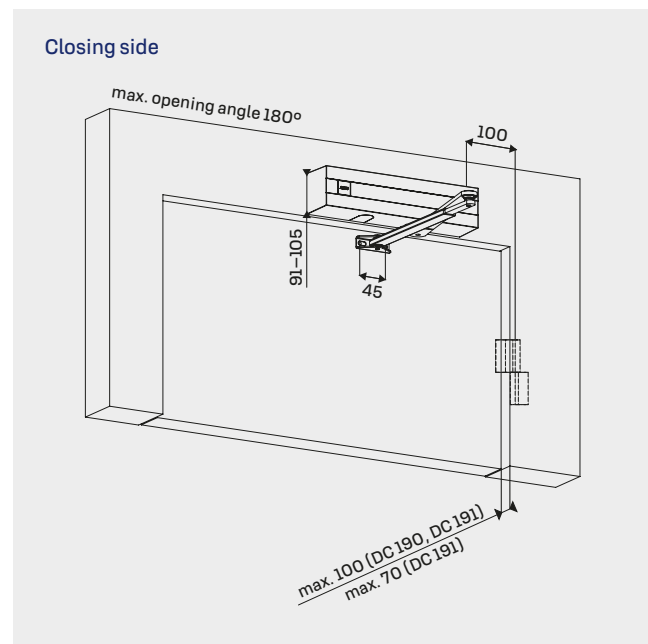
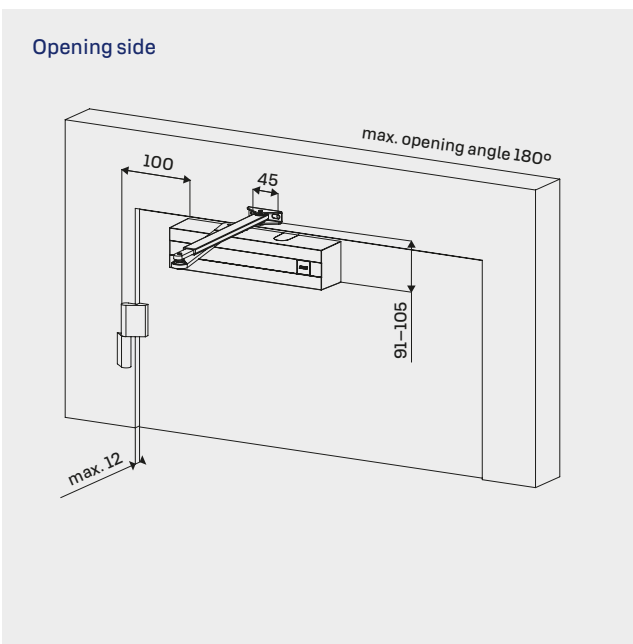
Adjustment

Back check (BC) as a standard feature





DC335 door closer installation with arms DC190, DC199, DC191 (EN3-5)



ABLOY® DC240 door closer



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 guide rail maximum door weight is 80 kg and door leaf width is 1100 mm.

Features

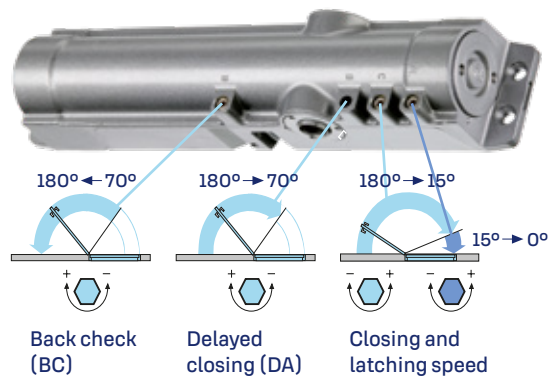
- CE certified with standard and guide rails
- Adjustable closing force size EN 2-6 with the standard arm and EN 1-4 with the guide rail according EN1154
- Separate adjusting valves for closing and latching speed
- Back check (BC) as a standard feature
- Delayed closing (DA) as an option
- Comprehensive 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) In addition, the guide rail has an additional 2mm height adjustment
- Two pressure relief valves to protect against abuse
- Die-cast aluminium body manufactured from high performance silicon alloy

WHEN ORDERING, PLEASE SPECIFY

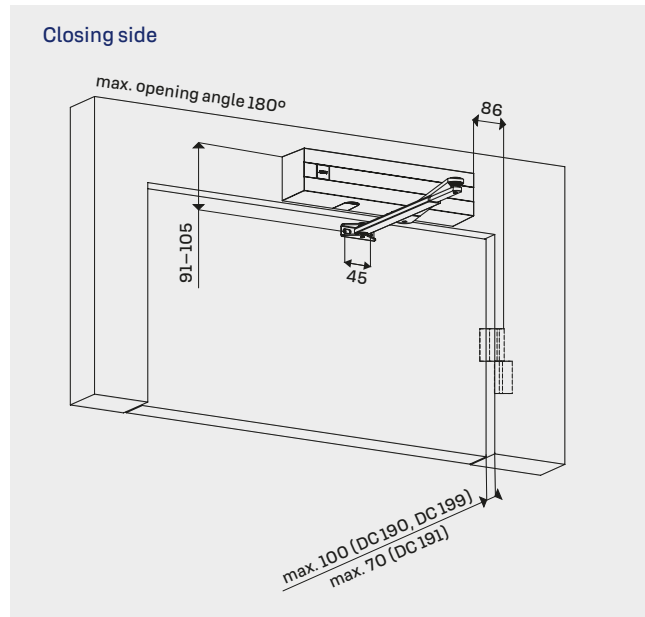
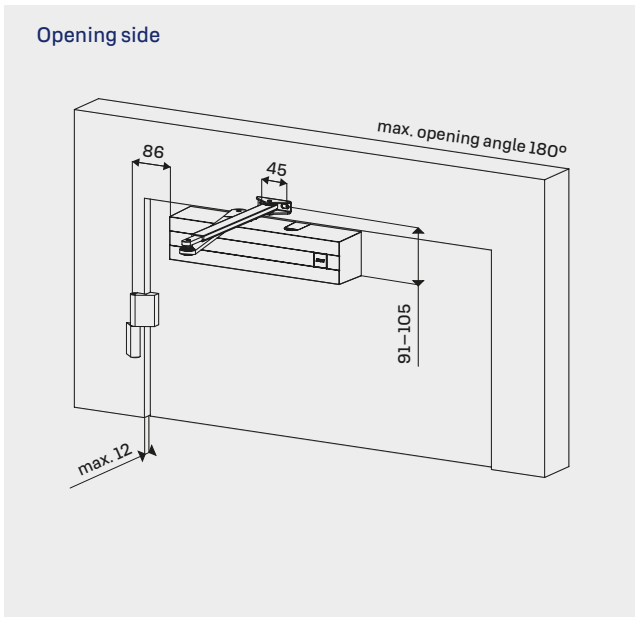
- Door closer model and colour e.g. DC240 (silver)
- Quantity
- Arm type and colour e.g. DC190 silver
- The arm is not included in the delivery or price of the door closer.
- Mounting plate e.g. DC126

Adjustment

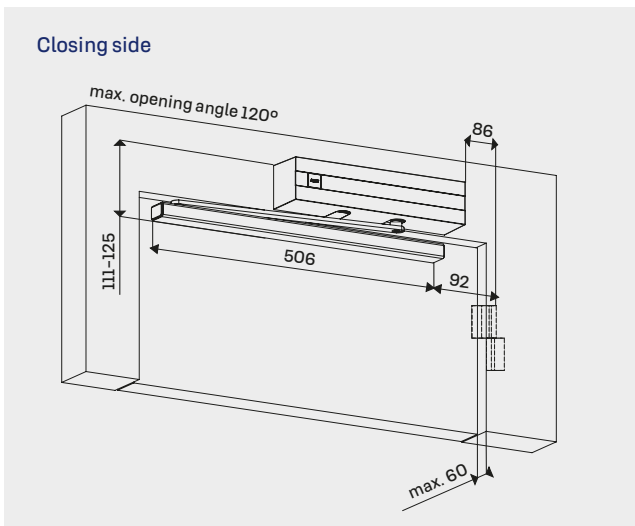
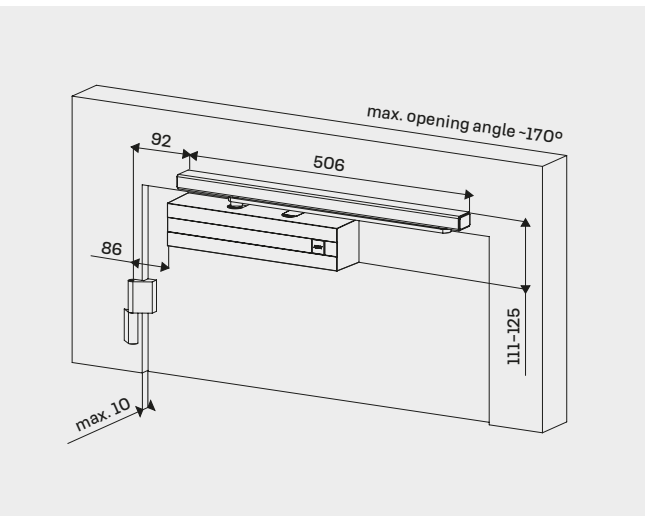
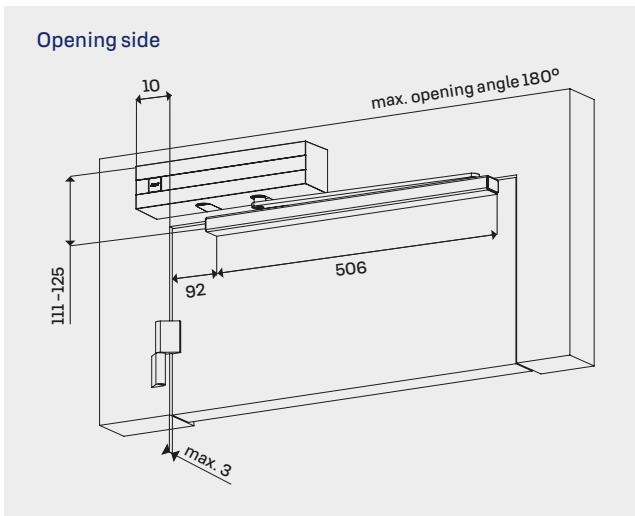
Back check (BC) as a standard feature and Delayed closing (DA) as an optional feature



DC240 door closer installation with arms DC190, DC191 ja DC 199 (EN 2-6)



DC240 door closer installation with arm DC195 (EN 1-4)



ABLOY® DC247 door closer



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.

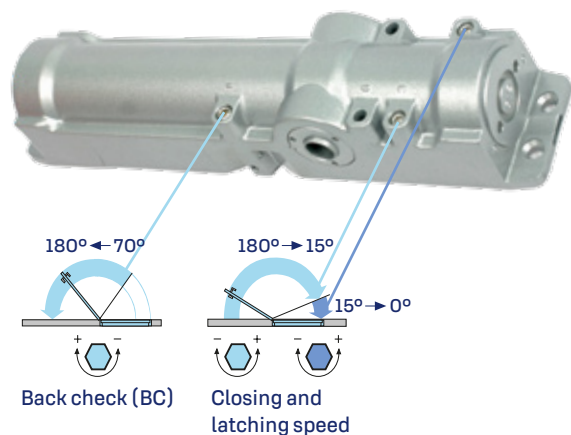
Features

- 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

WHEN ORDERING, PLEASE SPECIFY

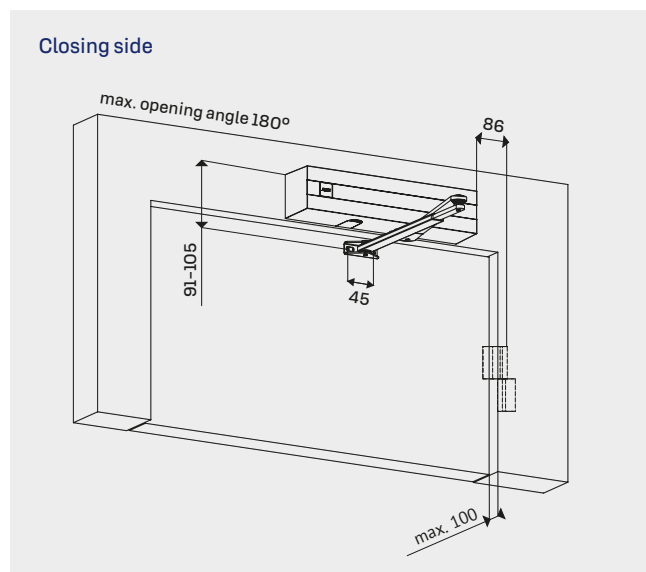
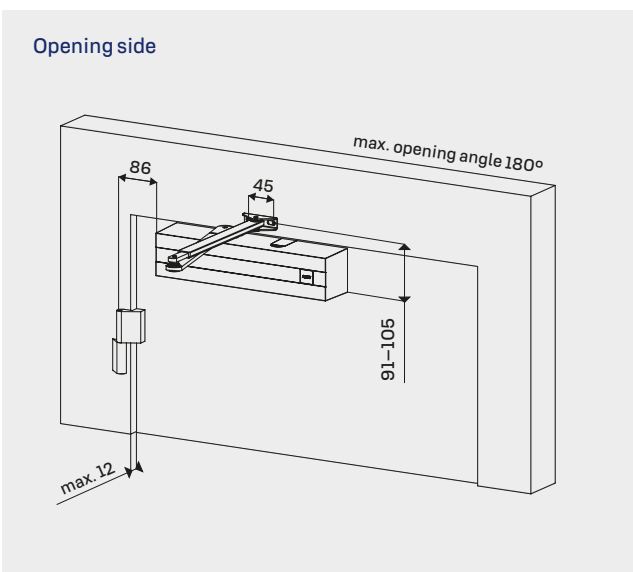
- Door closer model and colour e.g. DC247 (silver)
- Quantity
- Arm type and colour e.g. DC197 silver
- The arm is not included in the delivery or price of the door closer.
- Mounting plate e.g. DC126

Adjustment

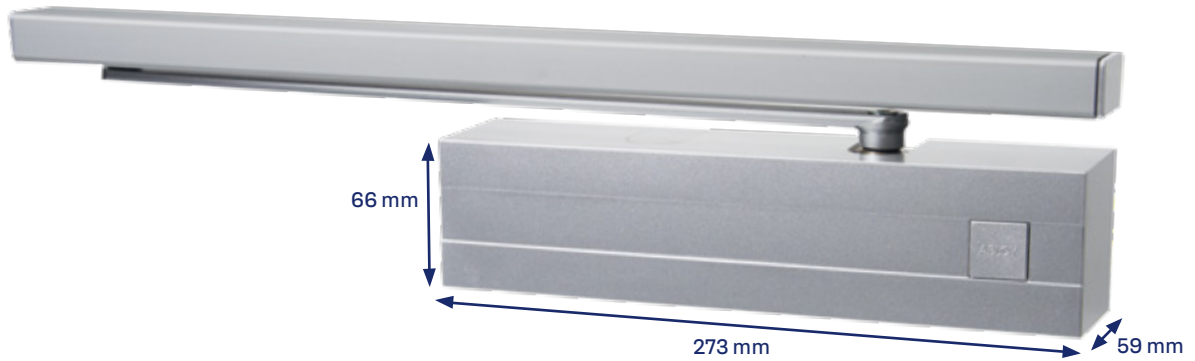




DC247 door closer installation with arm DC197



ABLOY® DC330 door closer



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 guide rail installation.

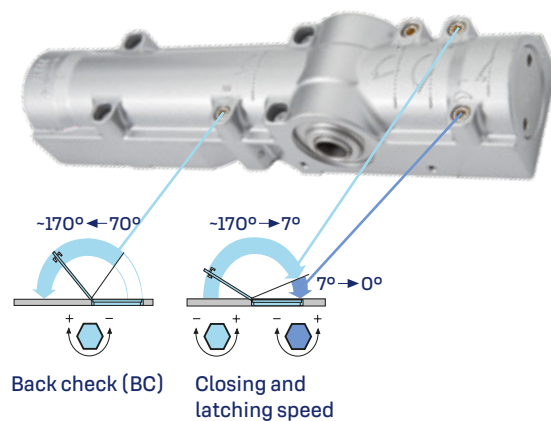
Features

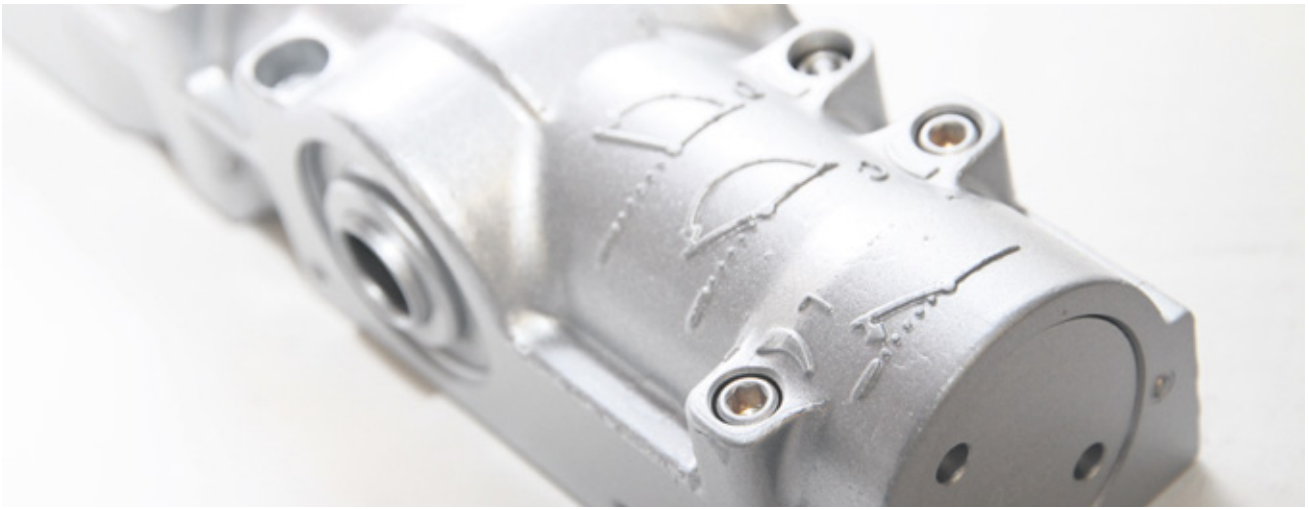
- CE certified with the guide rail
- Adjustable closing force size EN 1-4 with the guide rail according EN1154
- Separate adjusting valves for closing and latching speed
- Back check (BC) as a standard feature
- Wide operating temperature range: -15oC...+45oC
- Adjustable latching starting angle because of the grooved spindle
- Easy adjustment of arm height (14 mm) In addition, the guide rail has an additional 2mm height adjustment
- 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. DC195 silver
- The arm is not included in the delivery or price of the door closer.
- Mounting plate e.g. DC130

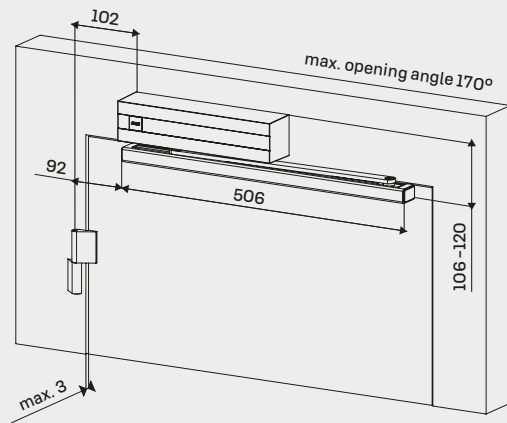
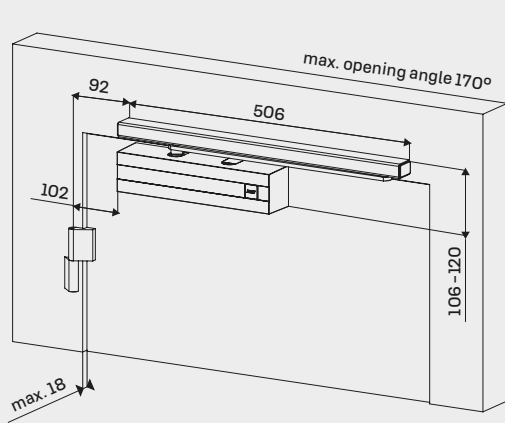
Adjustment



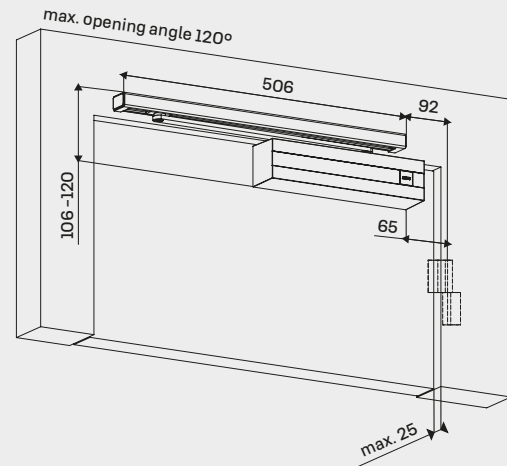
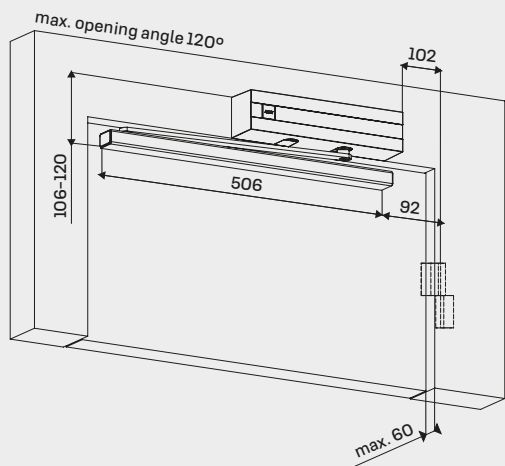


DC330 door closer installation with arm DC195

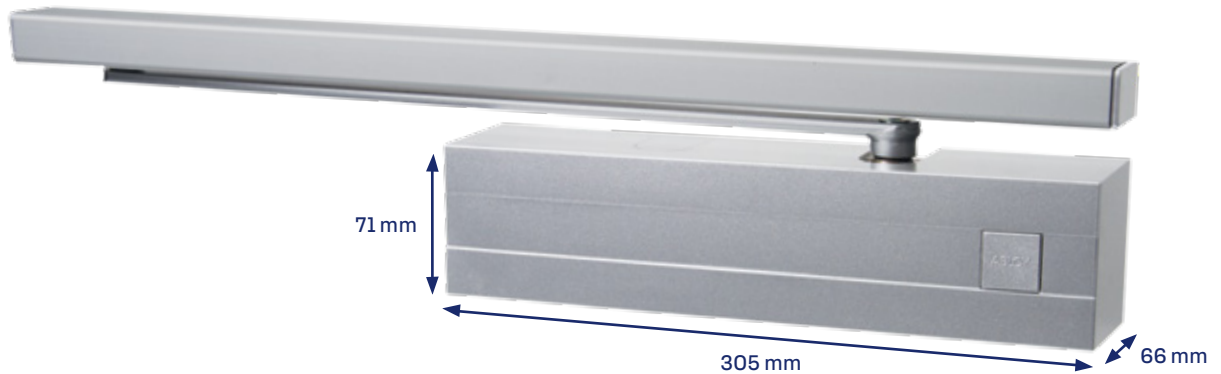
Opening side



Closing side



ABLOY® DC250 door closer



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 guide rail installation.

Features

- CE certified with guide rail
- Adjustable closing force size EN 1-6 with guide rail 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

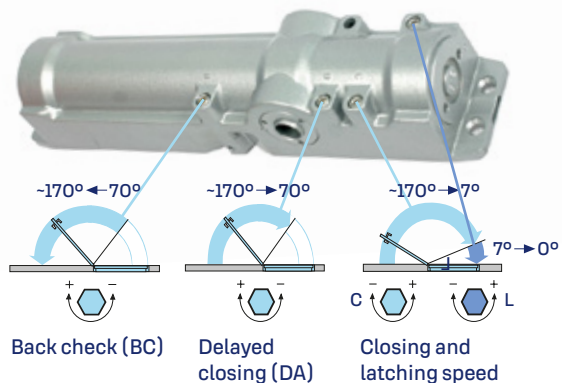
- Adjustable latching and back check starting angle because of the grooved spindle
- Easy adjustment of arm height (14 mm) In addition, the guide rail has an additional 2mm height adjustment
- Two pressure relief valves to protect against abuse
- Die-cast aluminium body manufactured from high performance silicon alloy

WHEN ORDERING, PLEASE SPECIFY

- Door closer model and colour e.g. DC330 (silver)
- Quantity
- Arm type and colour e.g. DC195 silver
- The arm is not included in the delivery or price of the door closer.
- Mounting plate e.g. DC130

Adjustment

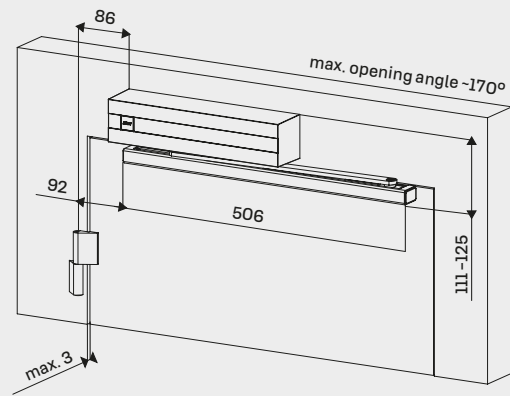
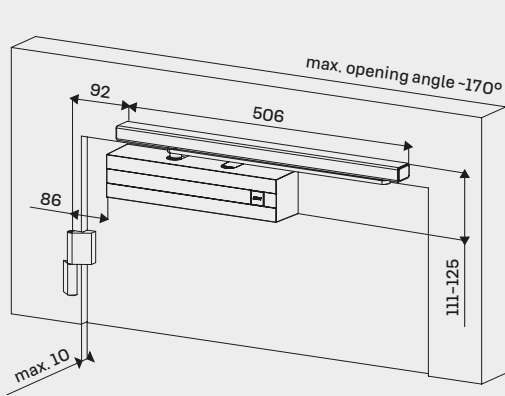
Back check (BC) as a standard feature and Delayed closing (DA) as an optional feature



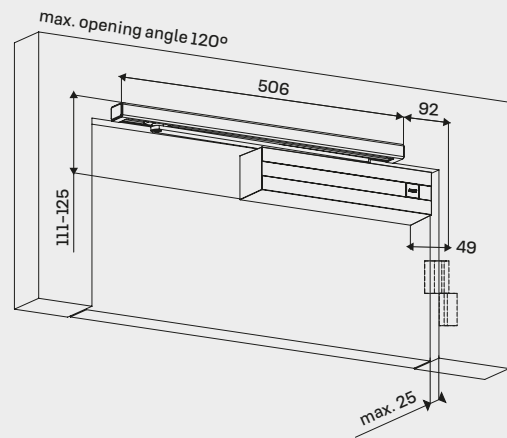
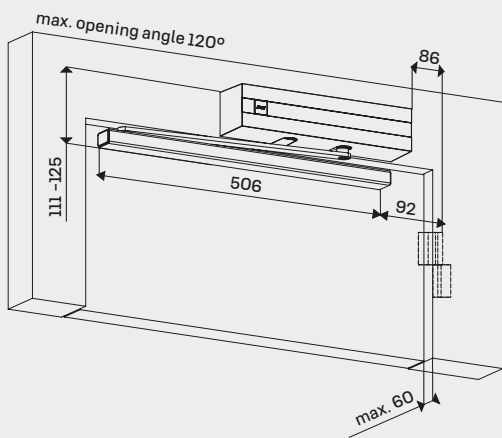


DC250 door closer installation with arm DC195

Opening side



Closing side



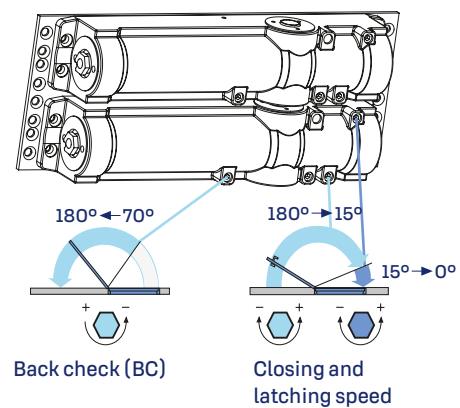
ABLOY® DC270 door closer



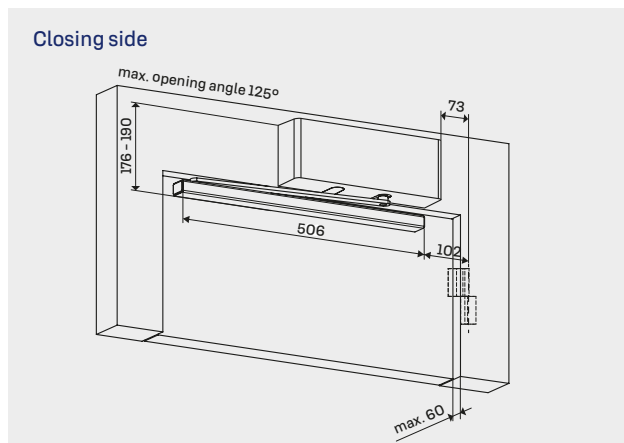
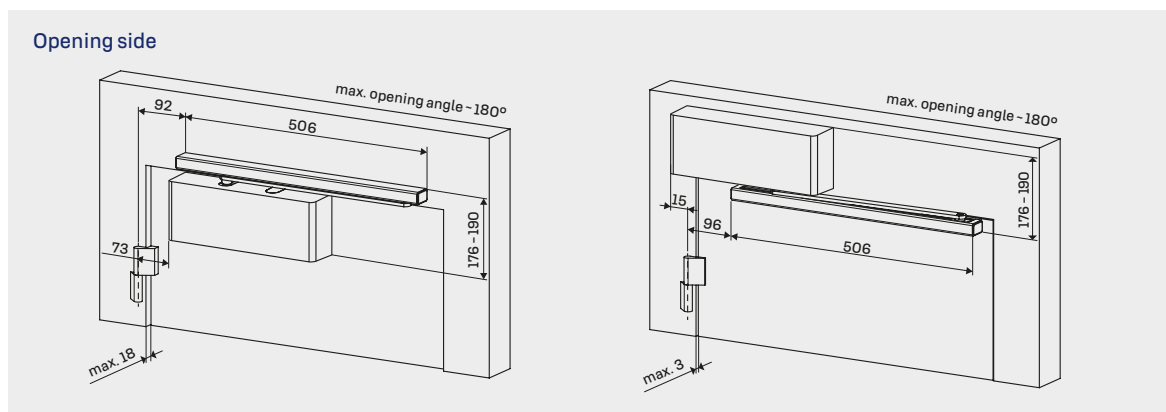
Features

- Adjustable closing force size EN 6-7 with guide rail 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°

Adjustment



Installation



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 guide rail 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 guide rail FD495
- If needed:
- Power supply EA701 or control unit 7400
 - Door release button 7463
 - Optical smoke detector FD601 2 pcs
 - FD145 connection box for door leaf installation

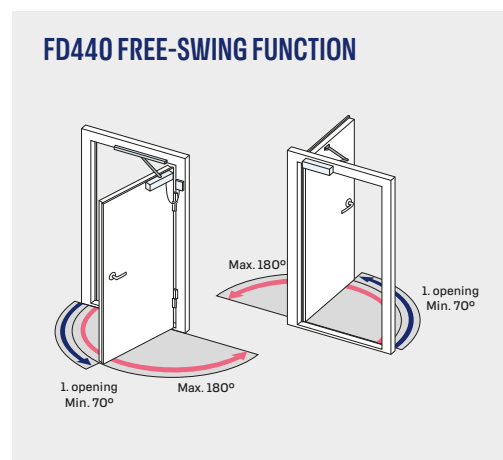
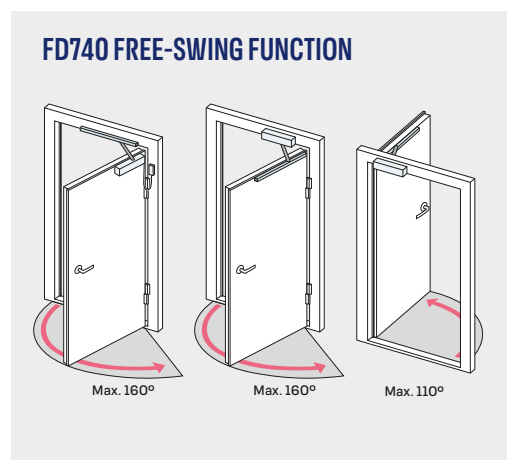
ABLOY® FD440

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 FD495. When installed with FD495 arm, the maximum door weight is 80 kg and door width 1100 mm.

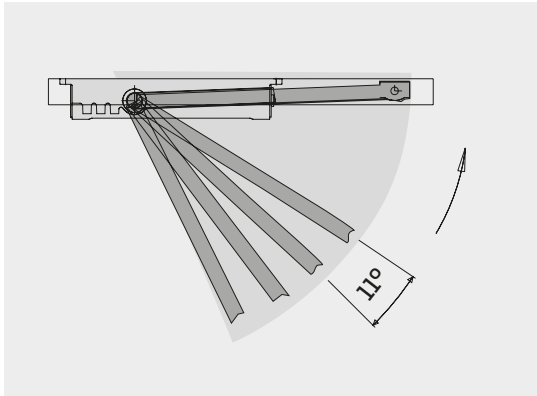
FD440 can be used as an electromechanical hold-open device when installed with guide rail DC195 or standard arm DC199. The door closes when the current is cut, e.g. when the smoke detectors give alarm.

Products

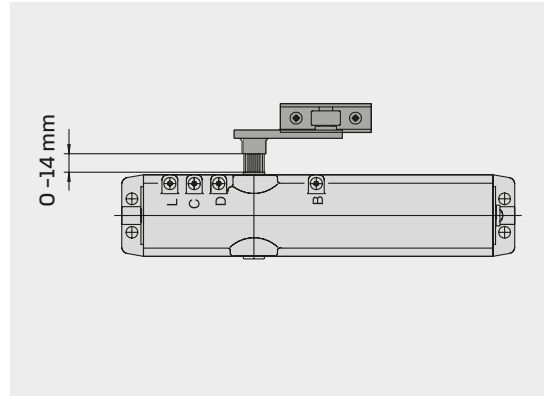
- ABLOY FD440
 - Arm FD495 or FD499
- If needed:
- Power supply EA701 or control unit 7400
 - Door release button 7463
 - Optical smoke detector FD601 2 pcs
 - FD145 connection box for door leaf installation



ABLOY® DOOR CLOSER ARMS

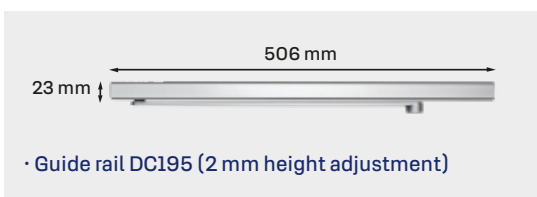
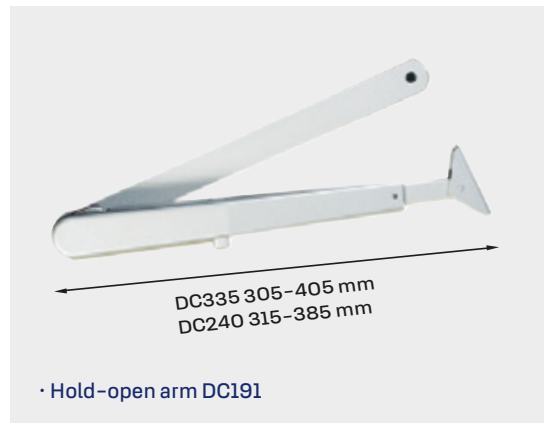


The starting angle for back check, delayed closing and latching speed can be adjusted by selecting the desired arm position in relation to the grooved spindle. Each groove represents an angle of 11 degrees.



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

Products



Compatibility

	DC120	DC335	DC240	DC247	DC330	DC250	DC270
DC190	(oma vetolaite, sis. toim.)	●	●				
DC191		●	●				
DC199		●	●				
DC195			●		●	●	●
DC197				●			

ABLOY® DOOR CLOSER ACCESSORIES

Hold-open device DC152

- Adjustable hold-open force
- Max. hold-open angle ~120°
- Installed inside of the guide rail

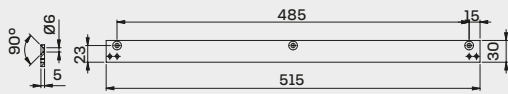


Opening damper DC153

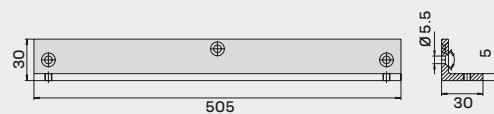
- Max. damping angle ~ 110°
- Designed to brake the door before hitting the door stopper
- Does not replace the mechanical door stopper
- Installed inside of the guide rail



Mounting plates for guide rails



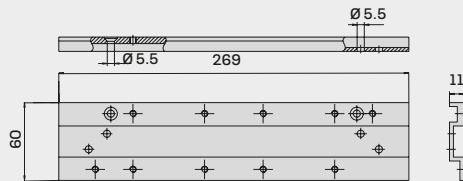
· Straight mounting plate DC115



· Angle mounting plate DC104

Mounting plates for door closers

DC335, DC330

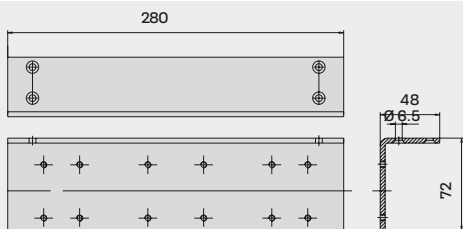


· Mounting plate DC102

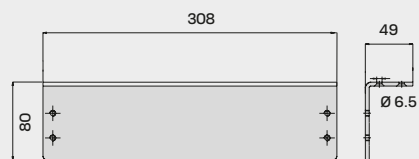
DC240, DC247, DC250



· Mounting plate DC126



· Angle mounting plate DC113



· Angle mounting plate DC107



· Mounting plate DC130

Mounting plates are used to secure door closer mounting when the strength of the material requires it. Alternatively mounting plates can help to move the installation position so that the door closer can work correctly. Angle mounting plates help installations where frame depth otherwise would restrict the installation of door closer.

Standards and features

Classification of **ABLOY® DOOR CLOSERS** according to European standard EN1154

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

When using DC240 with DC195 guide rail, the closing strength of the closer reduces by two classes (EN1-4)

	DC120	DC335	DC240	DC247	DC330	DC250	DC270
BC	●	●	●	●	●	●	●
DA			●			●	

● Standard ● Option

BC: Back check helps to control the door opening in example windy places

DA: Delayed action can be used to slow down door closing from the door maximum opening angle up to 70 degrees of opening. This is very helpful in cases where user opens the door and needs both hands to carry something trough the door.

EN 1154 –standardin vaatimukset

Door closer size	Max. door leaf width mm	Door leaf mass Kg
EN2	750	40
EN3	850	60
EN4	950	80
EN5	1100	100
EN6	1250	120
EN7	1400	160
	1600	

ABLOY® DOOR CLOSER

for every application

ABLOY® door closers	EN class	Application
ABLOY® DC120	2-4 (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 guide rail 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 guide rail: 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 guide rail 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 guide rail 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 guide rail in extremely heavy exterior and interior doors. Maximum door weight 160 kg and max. door width 1600 mm.

BC: Back check

DA: Delayed closing



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ABLOY offers security and locking innovations dedicated to creating more trust in the world. Combining digital and mechanical expertise, Abloy Oy develops industry-leading security solutions that protect people, property and business. Abloy is part of the ASSA ABLOY Group, the global leader in access solutions. Every day, we help billions of people experience a more open world.

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