ASSA ABLOY



Door Closers



An ASSA ABLOY Group brand

Door Closers

Door Closer Selection Guide

The Yale Hydraulic Door Closer Series has been designed and manufactured to world standards. These world recognised standards ensure the highest possible quality, effciency and reliable performance.

Effective door installation requires that the door and frame be of sufficient strength or reinforced to ensure secure anchorage of the door closer unit.

A door fitted with a door closer must be hung on good quality aligned hinges so that the door swings freely without bias in both directions.

The closed door must be clear in the door frame and when a lock is fitted the latch bolt must engage freely within the strike.

When specifying manually operated door closers the following should be considered:door size (in particular width of door), door weight, door height, type of installation, environmental conditions, location of door, operation frequency of door and the people using the door.

Door size and the pressure exerted on the surface area of the door due to wind gusts or air conditioning and the spring strength required to hold or close the door against this pressure must be considered along with the ability of the user to exert the force necessary to push or pull the door open. The location of door furniture will influence the leverage available to the person opening the door.



Door Closers

Features and Specifications

Handing

- Yale door closers are non-handed.
- Suitable for clockwise or anticlockwise opening door.

Backcheck

- Back check cushions or slows the opening movement of the door prior to reaching final open position.
- Back check intensity is adjustable to allow for door size, door weight and closing power.

Door Stops

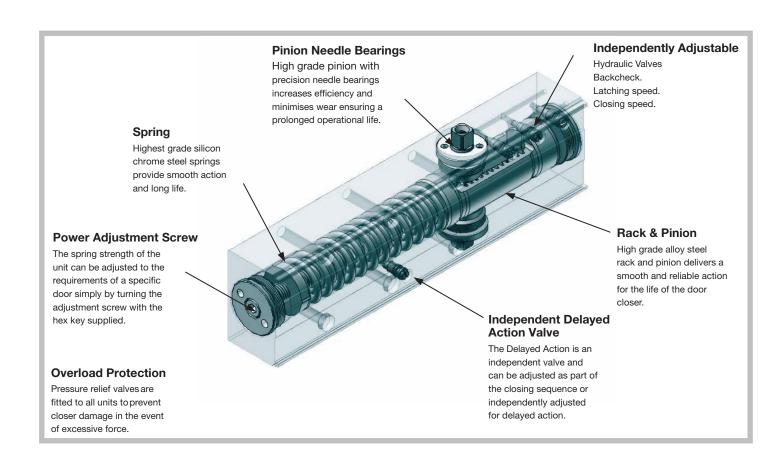
- Floor or wall mounted door stops should befitted .
- To prevent possible damage to the door unit or surrounds where a door may be subject to violent opening.
- To stop a door from being forced past the position where the arms are fully extended.
- To stop a door at a specific position to clear feature walls, glass panels, furniture, etc.

Delayed Action

- The Delayed Action is an independent valve and can either be adjusted aspart of the closing sequence or independently adjusted for delayed action.
- Such doors are particularly suitable for use by the disabled the aged and people with prams or trolleys.

Slide Rail Hold Open

• Hold-open is a standard feature for all slide arm door closers can be adjusted or disabled at any angle of the open arc.



Door Closers

Selection of door closer size is judged in two ways.

- 1. Does the door closer have the strength to effectively close the door against unexpected air pressures?
- 2. Is the door closer oversized for the application and therefore affecting the ease of operation?

Efficiency of the door closer also has a major bearing on ease of operation.

For optimum performance it is essential that a highly efficient door closer of a correct size is selected.

The use of spring strength adjustability, which allows fine tuning of strength on site, has simplified this task but not removed all of the guesswork. With more architects and engineers becoming conscious of the problems caused by incorrect selection of door closer strength, it has become the responsibility of manufacturers to provide better technical information, such as closing torque and efficiency of their products.

Fire doors and pressurised stairwells pose significant challenges in ensuring closing and latching of fire doors. The problems are created by differential air pressures resulting from airconditioning systems, either on one or the other side of the door. To achieve complete fire safety, fire doors must latch securely at all times. If this performance is not achieved, the stairwell may be unsafe, and in the event of fire, loss of life and property may occur. Correct selection of door hardware is of paramount importance in ensuring that the appropriate operating standards are met.

Fire doors which open into a pressurised stairwell must meet the following criteria:

- the door must close against a pressure differential between the airconditioned floor area and nonairconditioned stairwell;
- the door must latch securely every time it closes;
- the door must be able to be opened with a force not exceeding 110N when the stairwell is pressurised; and
- the door must be protected from damage when it is opened by means of a backcheck action which is built into the door closer.

Notes

Always round up to the next door width (ie for 870 mm door use 950 mm).

If parallel arm installation, then use next door width door line (ie, for 830 mm door use 950 mm).

For internal doors deduct 200 mm from actual door width (ie for 1250 mm internal door use 1050 mm).

If more severe conditions are expected then use the next door width or consult the office in your location (refer back page).

When specifying parallel arm and slide rail functions, allowance should be made for the following power loss:

Parallel Arm Mounting

Approximately 20 per cent loss

Slide Rail Mounting

Approximately 30 per cent loss

Power Selection Chart

This chart below will be most useful in selecting the correct door closer. Simply identify the dimensions of the appropriate door and select the recommended door closer.

The chart is intended as a guide only and as such the following variations should be taken into account when making your selection:

- Environmental factors such as the effect of wind or airconditioning pressures.
- An unsheltered external door is a door on which prevailing wind gusts will directly produce a "sail area" affect.
- A sheltered external door is a door way which is protected by a wind break or wall, which acts as a barrier against direct wind gusts.

Closer Selection Chart

| Door Width | Max Door Weight | Closer Size | Torque max |
|---------------|--------------------|----------------|---------------|
| 750 | 20kg | 1 | 13Nm |
| 850 | 40kg | 2 | 18Nm |
| 950 | 60kg | 3 | 26Nm |
| 1100 | 80kg | 4 | 37Nm |
| 1250 | 100kg | 5 | 54Nm |
| 1400 | 120kg | 6 | 87Nm |
| | | | |

C7722 Door Closer

Standard Features

- Size EN 2,3,4 Selectable power strength

 The force setting is altered by selecting position of closer on the door.
- Non-handed.
- Closing Speed Adjustable (160 ~ 15)
- \bullet Adjustable Latching Speed (15 ~ 0)

Options

- Parallel Arm Bracket
- Hold Open Option







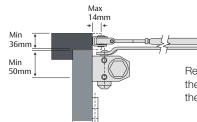
Standards

- Manufactured by quality assured ISO9001 factory.
- Passed 300,000 cycles in independent testing lab.
- UL Listed. Conform to UL228 & UL10C

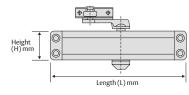
Finish

• Silver SIL

Mounting Details



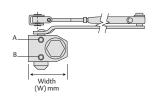
Regular arm installation closer is fixed to the pull (speed regulating valve towards the hinge) side of the door.



Body Dimension

- Length(L) 180 mmWidth(W) 44 mm
- Height(H) 65 mm





Legend - A. Closing speed B. Latching speed

- A. Closing speed captive valve is conveniently located on the end of the door closer to control the closing speed.
- B. Latching speed a separate adjustment valve to accelerate or decelerate the door to ensure positive latching.

Techincal Data

| | EN2 | EN3 | EN4 |
|------------------------|-----|-----|------|
| Maximum Door Width | 850 | 950 | 1100 |
| Maximum Door Weight | 45 | 57 | 78 |
| Maximum Door Angle | 160 | 160 | 145 |

Part Numbers

| Model No | Product Description |
|-----------|--|
| C7722 | Selectable Size 2 - 4 Surface Mounted Hydraulic Door Closer (Standard) |
| С7722НО | Selectable Size 2 - 4 Surface Mounted Hydraulic Door Closer (Hold Open) |
| C7722BCFR | Selectable Size 2 - 4 Surface Mounted Hydraulic Door Closer (Backcheck) |

Note: Hold open arm door closers are not permitted to be use on fire door assemblies.

DCR 1824FR Door Closer High Performence Door Closer Surface Mounted

Standard Features

- Conforms to EN 1154
- UL listed
- Back check : optional
- Rack & Pinion Mechanism
- Adjustable closing & Latching speed with Thermo constant valve
- Stable hydraulic fluid low sensitivity to temperature change
- A built-in pressure relief valve protects the closer against abuse usage







Product Specification

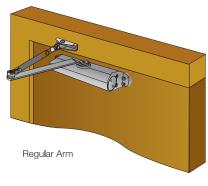
| Appl | Application Closing | | Latching | Max. Angle | |
|---------------|---------------------|-------------|-------------|------------|--|
| Closing Force | Max. Door Size | Speed Angle | Speed Angle | of Opening | |
| Size 2/3/4 | 1100mm, 80kg | 180 ° ~ 15° | 15° ~ 0° | 180° | |

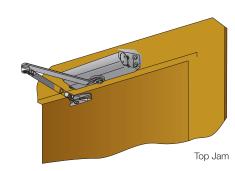
| Product Code | Finish | Arm Type |
|-----------------|--------|------------------|
| DCR 1824FR | Silver | R Regular Arm |
| DCR 1824HO | Silver | HO Hold Open Arm |

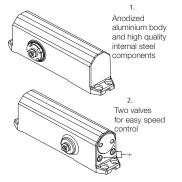
* OPTIONAL : SSS cover available

Note: Hold open arm door closers are not permitted to be use on fire door assemblies.

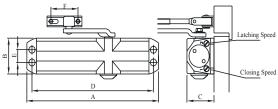








| | A | В | С | D | Е | F |
|----------|-----|------|----|-----|----|----|
| DCR-1824 | 219 | 53.4 | 45 | 202 | 19 | 45 |
| | _ | | | | | |



YDC 2022 VASIL Surface Mounted Door Closer Series

Standard Features

Closer Force - Spring Strength:

Application:

Door installation width:

Maximum door weight:

Mechanism

2 to 4 (Template adjustable)

Non handed 850mm-1100mm

Rack & Pinion

Arm Type Standard: Closing Speed Angle:

Latching Speed Angle: Door opening Angle:

Back check:

Snap on

180° - 15° adjustable 15° - 0° adjustable

180° Optional







Standards

- Fire Tested: 120mins
- EC certificate: conforms to EN 1154 certified with SS332 by PSB corporation - Singapore
- Tested to 500,000 cycles

Standard Finishes

•Silver - SIL

Body Dimension

• Length: 220mm • Height: 58mm • Width: 42mm

Ordering

YDC 2022 VASIL

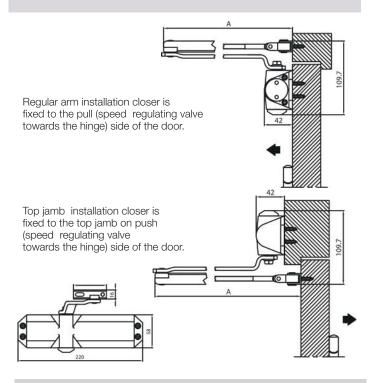


Standard Arm

• Closer installed on pull side of door. Standard mounting position permits door opening of 180°. If hold open is installed the hold open range is 80° to 165°.

Over Door Mounting

• Closer installed on push side top rail where door conditions do not allow parallel mounting. Standard mounting position permits door opening of 180°. If hold open is installed the hold open range is 165° to 80°.



Techincal Data

| | EN2 | EN3 | EN4 |
|------------------------|-----|-----|------|
| Maximum Door Width | 850 | 950 | 1100 |
| Maximum Door Weight | 35 | 60 | 80 |

How to order

| Ordering No. | Product Description | Door Weight Range |
|-----------------------|---|-------------------|
| YDC - 2022 VASIL | Yale Surface Mounted Door Closer Template Adjustable size EN2 - EN4 | 35kg ~ 80kg |
| YDC - 2022 VASILHO | Yale Surface Mounted Door Closer Template Adjustable size EN2 - EN4 (Hold open) | 35kg ~ 80kg |

Note: Hold open arm door closers are not permitted to be use on fire door assemblies.

YDC - 3025 Surface Mounted Door Closer

Standard Features

- EN2-EN5 power adjustable
- Door weight range of 20kg ~ 100kg
- •Tri-pack: Standard arm and parallel bracket included
- Adjustable backcheck
- •Rack & Pinion Mechanism

- Speed controls
- Overload protection
- Non-handed
- •Regular, parallel & over door mounting
- •500,000 cycles tested



Standard Arm

• Closer installed on pull side of door. This mounting position permits opening of 135°.

Parallel Arm

• Closer installed on push side of door. This mounting position permits

Over Door Mounting

• Closer installed on push side of door and top rail where conditions do not allow parallel mounting. This mounting position permits opening of 135°.



Standards (€

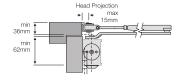


- Complied with CE standard with Size EN2-EN5
- EN1154: Product performance standard.
- •EN 1634.1:200: 2hour fire tested

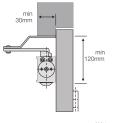
Standard Finishes

•Silver enamel - SIL

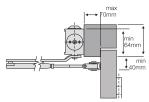
Applications - Mounting Details



Regular Arm installation closer is fixed to the pull (speed regulating valve towards the hinge) side of the door.



Parallel Arm installation closer is fixed to the push (speed regulating valve opposite to hinge) opposite to hinge side of the door.



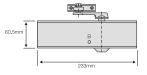
Top jamb installation closer is fixed to the top jamb on the push (speed regulating valve towards the hinge) side of the

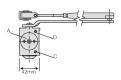
How to order

| Ordering No. | Ordering No. Product Description | |
|--------------|--|--------------|
| YDC - 3025 | Yale Surface Mounted Door Closer Power Adjustable size EN2 - EN5 | 20kg ~ 100kg |
| YDC - 3025HO | Yale Surface Mounted Door Closer Power Adjustable size EN2 - EN5 (Hold open) | 20kg ~ 100kg |

Note: Hold open arm door closers are not permitted to be use on fire door assemblies.

Technical Data - Limiting Dimensions Regular Arm





Lege nd - A. Power Adjustment B. Backcheck C. Closing Speed D. Latching Speed



K990 series Door Closer





K990 series Door Closer



Overview

Features

- Aluminum Alloy Body
- Standard, separate and independent, latch, sweep and back-check intensity valve
- Non-handed
- Tri-packed
- Rack-and-pinion design
- 32mm diameter piston
- · 16mm diameter pinion journals.
- 53mm projection.
- All standard arm applications (with slim, full covers) allow doors to swing 180 degrees, conditions permitting.

Optional Features

- Delayed action
- Slide Tracks: push or pull side mounting

Colours Available

AL: Aluminum

• BZ : Hardware Bronze (Gold) • DU: Storefront Bronze

Compliance Standards

- ANSI/BHMA A156.4, Grade1 certified **BHMA**
- UL listed
- ADA compliant



| | CLOSER CONTROLS | | | HOLD | |
|-------------------|-----------------|------------|-------------------|------|------------------|
| Model No | Latching | Back-Check | Delayed Action | OPEN | REMARKS |
| K-990 | M | | | | |
| K-990BF 👃 | | _ | _ | | |
| K-990BC | M | M | | | |
| K-990BF.BC | | | _ | _ | |
| K-990BC.DA | M | M | M | | |
| K-990BF.BC.DA 👃 | | | | 1 | |
| K-990S | M | | | M | |
| K-990S.DA | | _ | _ | | |
| K-990S.BC | M | M | | M | WITH OPTIONAL |
| K-990S.BF.BC | | | _ | | HOLD OPEN ARM |
| K-990S.BC.DA | 5 7 | 57 | N7. | N/ | 7 |
| K-990S.BF.BC.DA 👃 | | | | | |

- BF Barrier Free
- BC Backcheck
- DA Delay Action
- S Hold open









Door Closer

kinc ASSA ABLOY

K990 series Door Closer

Features

Aluminum Alloy Body

Closer bodies are constructed of special aluminum alloy, carefully selected to accommodate interactive steel component and operation conditions.

Rack & Pinion Operation

Provides a smooth constant control of the door through its full opening and closing cycle. 180°.door swing can be achieved when door, frame, hardware and arm function do not interfere

Non-handed

With few exceptions all series 990 door closers are non-handed and can be installed on either right or left hand swing doors. Pinion shaft extends vertically through the closer body in both directions.

Sweep Speed Control Valve

Allows adjustment of door speed from the door's full open position down to approximately 10° from the closed position.

Latch Speed Control Valve

Allows adjustment of door speed from approximately 10° down to the door's fully closed position.

Tri-Packed

K990 series come with screws, brackets and soffit plates to allow for regular, top jamb, and parallel arm installations.

Adjustable Back-check Valve

Provides control of the door in the opening cycle, beginning at approximately 75° of door opening, it cushions the door opening when the door is forcibly opened beyond its preadjusted limits.

Standard Molded Cover

Molded high impact material. These covers are non-handed for all applications.

Multi-Sized Door Closer

Adjustable through the power range of sizes 1 through 6.

The series K990 also confirms to the minimum opening force requirements of the ADA and ANSI/BHMA standard A117.1 for interior doors.

Compliance Standards

ANSI/BHMA A156.4, Grade1 certified. UL listed.

Optional Features - Cover

Full Cover



Standard



K990 series Door Closer

Optional Features – DA

Adjustable Delayed Action Closing

An optional hydraulic feature that add a third speed range to closing cycle. This feature becomes effective when the door is opened and released at any point beyond 70°. The amount of time delay depends upon the combination of the angle of door released and valve adjustment. The valve can be adjusted with 4mm hex key from no delay time up to maximum delay times of:

| Door opened | Approximate Time of Delay Cycle | |
|----------------|------------------------------------|--|
| 180° | 4~5 minutes | |
| 120° | 2~3 minutes | |
| 900 | 25~30 seconds | |

Pressure Relief Safety Valve

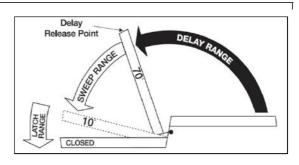
The delayed action hydraulic system contains a pressure relief valve. Any time the door is forced toward the closed direction while it is in the closing cycle, the valve will open and permit the door to close. This prevents damage to door, frame and closer.

Optional Features – Arm

Non-Hold Open

Self-closes door every time door is opened.

Auxiliary stop (by others) required.



Suggested Application

Delayed action closing allows slow-moving traffic to clear the opening before the door closer's normal closing cycle begins. This feature can be helpful in health care facilities such as hospitals and nursing homes. It provides sufficient time for persons on crutches or in wheelchairs to pass through a door without concern of closing. At the same time, it can accommodate the facility's staff with movement of food service carts, bed, and other wheeled traffic.

Use of delayed action closers on many doors throughout industrial and commercial buildings can also assist the flow of traffic. Locations where additional time to clear the opening is advantageous are doors between office, doors to workshops or laboratories, kitchens and food processing area.

Hold Open

Achieved by means of friction. Friction hold open has a range of 90° to 180° using a template location and mechanical adjustment.

| Mod | lel | Adjustable | Weight of Door (Kg) | |
|---------------|--------------|--------------|------------------------|--|
| Non-Hold Open | Hold Open | spring sizes | | |
| K-990 | K-990 K-990S | | 15~120 | |
| K-990BF | K-990S.BF | 1/2 ~ 4. | 10~85 | |

Hold open arm door closers are not permitted to be use on fire door assemblies.

SURFACE MOUNTED - DC130



ASSA ABLOY DC130

- Rack and pinion door closer with guide rail
 Certified in compliance with EN 1154, size 3
- · For single action doors up to 950 mm

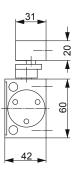


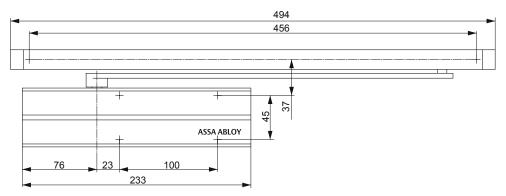
Characteristics DC130

- · Can be used for left and right-handed doors
- · Suitable for fire and smoke protection doors
- Closing speed, latching speed and backcheck continuously adjustable using regulating valves
- · Thermodynamic valves for consistent performance
- Standard colours: silver EV1; white, similar to RAL9016; black, similar to RAL9005 Hold open optional









The advantages at a glance

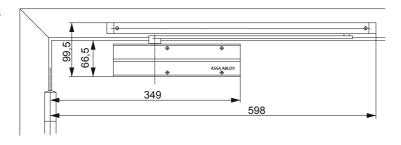
| Customer segment | Advantages |
|------------------|---|
| Project planners | - Inexpensive guide rail door closer - Compact design |
| Builders | - Quick and easy installation - Suitable for left and right handed doors - Easy to adjust |
| Trade | - Inexpensive closer model for standard doors - All-inclusive package with door closer and guide rail |
| User | - Thermodynamic valves - Backcheck feature offers optimum protection for doors and walls |

DC130 Technical attributes

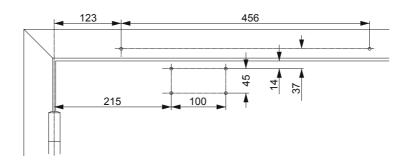
| Technical attributes | |
|----------------------------------|--------------------------|
| Closing force | EN 3 |
| Door width up to | 950 mm |
| Fire and smoke protection | yes |
| Door swing directions | Left / right handed |
| Closing speed | Variable between 180°-0° |
| Latching speed | Variable between 15°-0° |
| Backcheck | Variable above 75° |
| Weight | 2.4 kg |
| Height | 60 mm |
| Depth | 42 mm |
| Length | 233 mm |
| Certified in compliance with | EN 1154 |
| CE marking for building products | yes |

Required space on doors

Left handed shown in diagram Right handed is the reverse



Installation dimensions Installation dimensions EN3



Specifications for DC130

ASSA ABLOY Door Closer DC130 featuring rack and pinion technology with guide rail in compliance with EN 1154

- Closing force EN size 3, for doors up to 950 mm wide
- Closing speed, latching speed and backcheck continuously adjustable
- · Suitable for fire and smoke protection doors
- · CE approved
- · Suitable for left and right handed doors

| Description | Order no. |
|--|-----------|
| DC130 EN, size 3, silver EV1 | |
| DC130 EN size 3, white, similar to RAL9016 | |
| DC130 EN size 3, black, similar to RAL9005 | |
| Mechanical hold-open device A163 | |

Colour:

- ☐ Silver EV1
- ☐ White, similar to RAL9016
- ☐ Black, similar to RAL9005

DCR 3003 SH - Slim SS with Sliding track and arm

Standard Features

- Track, arm & body all in SSS finish
- Aluminium extruded body
- Rack & Pinion body
- Non handed
- Adjustable closing & Latching speed
- Size 3 design to meet EN1154 performance
- Non hold open optional



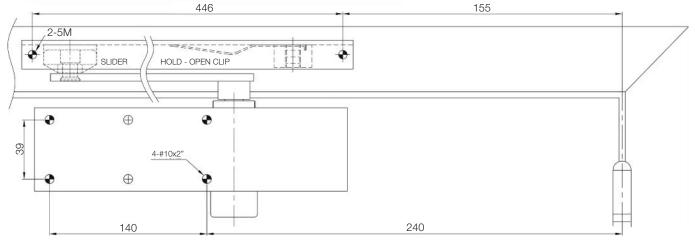
Product Specification

| Application | | Closing | Latching | Max. Angle | |
|---------------|----------------|-------------|-------------|------------|--|
| Closing Force | Max. Door Size | Speed Angle | Speed Angle | of Opening | |
| Size 3 | 950mm, 65kg | 120 ° ~ 15° | 15° ~ 0° | 120° | |

Finish

· Stainless steel finish.





YDC - 3013SA Sliding Arm Door Closer

The Slide Arm Series permits smoother opening by way of reducing power as the door opens. Ideally suited for schools, hospitals or doors where children, disabled or the aged may enter.

Standard Features

- Size 1- 3 power adjustable
- Door weight range of 15kg ~60kg
- Adjustable hold open (inclusive)
- Adjustable back check

- Speed controls
- Overload protection
- Non-handed
- Over door mounting



Hold Open

• Hold open angle is the same as opening angle.

Standards

• It is designed to meet EN1154 performance.

Standard Finishes

•Silver enamel - SIL

Slide Arm Pull Side

 Closer installed on pull side of door. This mounting position permits opening of 160°.

Slide Arm Push Side

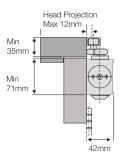
• Closer installed on push side of door. This mounting position permits opening of 130°.

Slide Arm Over Door Mounting

 Closer installed on push side of door and top rail where conditions do not allow parallel mounting. This mounting position permits opening of 130°.

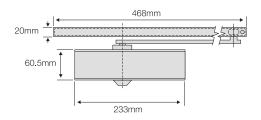


Applications - Mounting Details



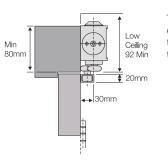
Regular track arm installation closer is fixed to the pull (speed regulating valve towards the hinge) side of the door.

Technical Data - Limiting Dimensions Slide Arm



How to order

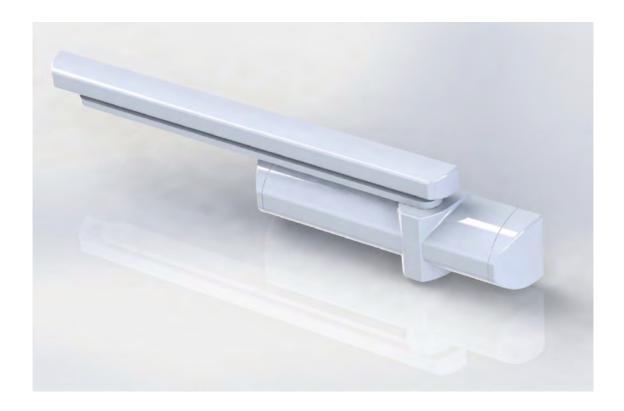
| Ordering No. | Product Description | Door Weight Range |
|--------------|---|-------------------|
| YDC - 3013SA | Yale Slide Arm Mounted Door Closer Power Adjustable size 1 - 3 | 15kg ~ 60kg |



Top jamb track arm installation closer is fixed to the top jamb on the pull (speed regulating valve towards the hinge) side of the door.



CD90 series Cam Action Door Closer





CD90 series Cam Action Door Closer



Overview

Features

- □ Cam Action technology
- Suitable for single door

- Slide Arm for push or pull side installation

Optional Features

· Adjustable Hold Open Arm

Colors Available

• AL : Aluminum

• BZ : Hardware Bronze (Gold)

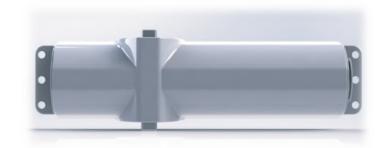
• DU: Storefront Bronze

Compliance Standards

EN1154







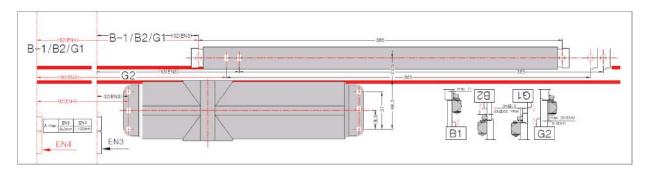
| Features | King CD 90 |
|---|--------------------|
| Power Size(EN) | 3/(4) |
| Door size | ≤ 950 mm/(≤1100mm) |
| Power adjustment | No |
| Closing speed | 160° ~ 15° |
| adjustable by valve | 15° ~ 0° |
| Non handed | Yes |
| Max. opening angle(°) | 160 |
| Back check | Yes |
| Mechanical Hold-Open with Cushioned limit Stay | Option |
| Delay Action | No |
| Dimension (mm) | 247L X 48W X 60H |

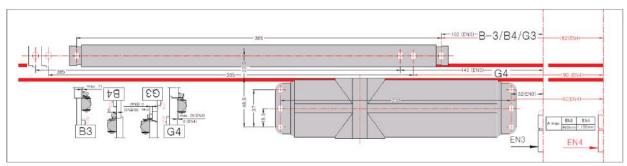


CD90 series Cam Action Door Closer

Technical Data

Power Adjustment EN3/EN4

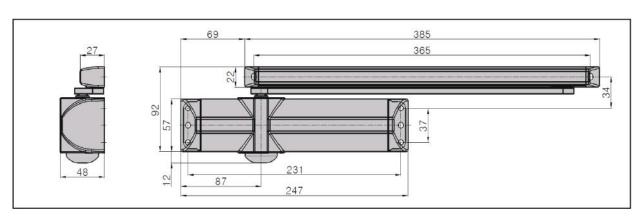




- Power setting is selected by the door size
 - Door Width ≤950mm ⋈ EN3
 - Door Width ≤1100mm

 EN4

Dimension



Slide Hold - Open Arm - Option

 $\ \ \, \square$ Hold-Open arm is to hold the door up to approximately 145°. Hold open arm door closers are not permitted to be use on fire door assemblies.



Surface Mounted Cam Motion Door Closers

YDC 4003 High Efficiency Surface Mounted Door Closer

Standard Features

The Yale 4003 Series is a non-handed High Efficiency Surface Mounted Cam Motion Closer. Due to the design mechanism, this premium door closer is light to open but still strong enough to close a door. The Yale 4003 Series Door Closer can be adjusted to meet the requirements of a light door opening resistance and is ideal for both interior and exterior doors. The Yale 4003 Series is suitable for doors with a maximum door weight of 60kg and a door leaf width of 950 mm (sliding arm installation).



Specifications

Back check (adjustable)

Available in this series, specify BC if required. Back check cushions or slows the door prior to reaching final opening position.

Hold-open

Available in this series, specify HO.

Handing

Non-handed. Suitable for left or right hand doors.

Adjustment

Independent valves control closing and latching speeds which can be readily adjusted on site when required.

Closing Speed Angle: 120° –15° degrees.

Latching Speed Angle: 15° – 0° degrees.

Door Opening Angle: 120° degrees

Part Numbers

Standard: YDC 4003 Hold Open YDC 4003HO Back Check: YDC 4003BC Back Check Hold Open: YDC 4003BCHO

Dimension

Length: 200 mm Height: 54 mm Projection: 32 mm

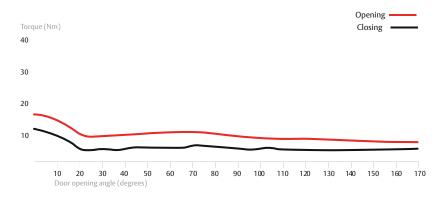
Standards CE 🎂

Complied with CE standard with Size EN3 EN1154: Product performance standard. Singapore Standard SS332:2007 EN 1634.1:2000: 2 hour fire doors

Technical Data

Door Closer Strength: Fixed size EN3
Maximum Door Width: 950 mm
Maximum Door Weight: 60 kg

Finish: Silver Baked Enamel



Note: Movement curve represents approximate forces required to operate a size 1 door closer. The illustration is an approximation based on one set of parameters. Any change to these parameters will result in a variation of performance.



Surface Mounted Cam Motion Door Closers

YDC4024 Slim-line High Efficiency Surface Mounted Door Closer

40

30

20

20 30 40 50

Standard Features

The Yale 4024 Series is a non-handed Slim-line High Efficiency Surface Mounted Cam Motion Closer. Due to the design mechanism, this premium door closer is light to open but still strong enough to close a door. The Yale 4024 Door Closer can be adjusted to meet the requirements of a light door opening resistance and is ideal for both interior and exterior doors. The Yale 4024 Series is suitable for doors with a maximum door weight of 80kg and a door leaf width of 1100mm (sliding arm installation).



Specifications

Back check (adjustable)

Available in this series, specify BC if required. Back check cushions or slows the door prior to reaching final opening

Hold-open

Available in this series, specify HO.

Handing

Non-handed. Suitable for left or right hand doors.

Adjustment

Independent valves control closing and latching speeds which can be readily adjusted on site when required.

Closing Speed Angle: 120° -15 ° degrees. Latching Speed Angle: 15° – 0° degrees. Door Opening Angle: 120° degrees

Part Numbers

Standard: YDC4024 Hold Open YDC4024HO YDC4024BC Back Check: Back Check Hold Open: YDC4024BCHO

Standards CE ...

Complied with CE standard with Size EN2 - EN4 EN1154: Product performance standard. Singapore Standard SS332:2007 EN 1634.1:2000: 2 hour fire doors

Technical Data

Door Closer Strength: Adjustable EN2 - EN4 Maximum Door Width: 850mm - 1100mm Maximum Door Weight: 45kg - 80kg Finish: Silver Baked Enamel

Opening • Torque (Nm) Closing

> 100 110

Note: Movement curve represents approximate forces required to operate a size 1 door closer. The illustration is an approximation based on one set of parameters. Any change to these parameters will result in a variation of performance.



Dimensions



All dimensions are in mm

130 140 150 160 170

Surface Mounted Cam Motion Door Closers

YDC4025 High Efficiency Surface Mounted Door Closer

Standard Features

The Yale 4025 High Effeciency Surface Mounted Cam Motion Door Closer is a premium, high quality door closing device. When opening a door fitted with a Yale 4025 High Effeciency Door Closer, the force required is less than that of a rack and pinion type door closer and continues to decrease through the opening arc.

The Yale 4025 Series is suitable for doors with a maximum door weight of 110kg and a door leaf width of 1250 mm. (sliding arm installation)



This aesthetically appealing, High Effeciency Surface Mounted Cam Motion Door Closer is suited for public and commercial applications where children, the elderly and the disabled are likely to be using the door. For disabled toilet applications where a breakout feature is required, the double action of the mechanism allows the door to be operated in the opposite direction for easy access in to the room. The Yale 4025 is light to open, but its adjustable closing force is high enough for heavyduty applications. The Yale YDC 4025 is non-handed and therefore very easy to install – either on the inside of the door or on the door frame.

Specifications

Back check (adjustable)

Available in this series, specify BC if required. Back check cushions or slows the door prior to reaching final opening position.

Hold-open

Available in this series, specify HO.

Handing

Non-handed. Suitable for left or right hand doors.

Adjustment

Independent valves control closing and latching speeds which can be readily adjusted

on site when required.

Closing Speed Angle: 120° –15 ° degrees.
Latching Speed Angle: 15° – 0° degrees.
Door Opening Angle: 120° degrees

Part Numbers

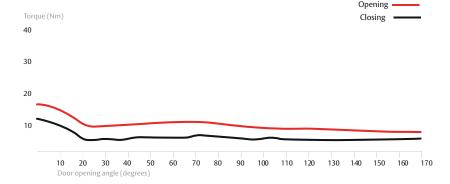
Standard: YDC4025 Hold Open YDC4025HO Back Check: YDC4025BC Back Check Hold Open: YDC4025BCHO

Standards CE

Complied with CE standard with Size EN2 - EN5 EN1154: Product performance standard. Singapore Standard SS332:2007 EN 1634.1:2000: 2 hour fire doors

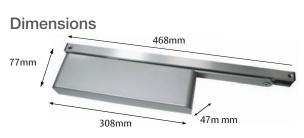
Technical Data

Door Closer Strength: Adjustable EN2 - EN5
Maximum Door Width: 850mm - 1250mm
Maximum Door Weight: 45kg - 110kg
Finish: Silver Baked Enamel



Note: Movement curve represents approximate forces required to operate a size 1 door closer. The illustration is an approximation based on one set of parameters. Any change to these parameters will result in a variation of performance.





SURFACE MOUNTED CAM MOTION DOOR CLOSER



ASSA ABLOY DC700

- Door closer with Cam-Motion technology and height-adjustable guide rail G195 or standard guide gail G193
- Fulfils barrier-free building requirements (DDA/ CEN TR 15894)
- · Certified in compliance with EN 1154, size 3-6
- · Suitable for fire and smoke protection doors
- · For single action doors up to 1400 mm wide
- Can be used in four installation types: hinge and non-hinge sides in standard and frame installation

Characteristics DC700

- Can be used with integrated concealed mounting plate, suitable for fire and smoke protection doors
- · Can be used for left and right-handed doors
- · Axis continuously height adjustable up to 14 mm
- Closing speed, latching speed and backcheck adjustable via front facing regulating valves
- · Thermodynamic valves for consistent performance
- · Variable adjustable closing force
- · Opening angle up to 170°
- Effective backcheck and latching speed range adjustable
- · Large range of applications
- Standard colours: silver EV1; white, similar to RAL9016; brown, similar to RAL8014; black, similar to RAL9005
- · Customized finishes available on request

Characteristics of special model DC700AC

- Opening angle of 180° for standard installation on hinge side
- · Other features as in Model DC700

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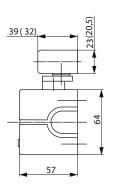
1162-CPD-0464 EN 1154:1996+A1:2002 3 8 6 1 1 4

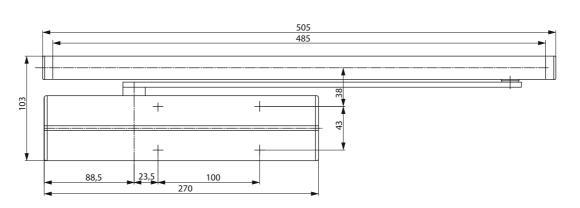
Characteristics for guide rail G195

- $\cdot\,$ Height-adjustable by 2 mm for tolerance
- · Concealed fastening screws
- · Installation dimensions: see diagram

Characteristics of standard guide rail G193

- · Without protective cover
- · Visible fastening screws
- Installation dimensions: see diagram (dimensions in brackets)





Technical attributes DC700

| Technical attributes | | | |
|------------------------------------|--------------------------|--|--|
| Variable adjustable closing force | EN 3-6 | | |
| Door width up to | 1400 mm | | |
| Fire and smoke protection | yes | | |
| Door swing directions | Left / right handed | | |
| Standard and frame installation | yes | | |
| Closing speed | Variable between 170°-0° | | |
| Latching speed | Variable between 15°-0° | | |
| Delayed closing (DC700DA) | yes | | |
| Backcheck | Variable above 75° | | |
| Opening angle, hinge side, DC700 | ca. 170° | | |
| Opening angle, hinge side, DC700AC | 180° | | |
| 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

Our service for you: here you can see the individual advantages of our door closer models for your respective field of business.

| 8 | |
|------------------|---|
| Customer segment | Advantages |
| Project planners | Extensive range of uses: Fire and smoke protection doors as well as standard doors Modern design Compact design Fulfils barrier-free building requirements (DDA, CEN/TR 15894) Same dimensions and design with and without mounting plate Comprehensive functions, standard and optional |
| Builders | 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 handed doors for standard and frame mounting on hinge and non-hinge side |
| Trade | Reduced inventory costs due to modular product range One single product suitable for a large variety of mounting positions Complementary accessories available for the whole product range |
| User | Largely unaffected by temperature fluctuations thanks to thermodynamic valves Easier door opening and improved accessibility due to Cam-Motion technology Backcheck feature offers optimum protection for doors and walls |

Specifications for DC700

ASSA ABLOY Door Closer DC700 with Cam-Motion technology and guide rail in compliance with EN 1154

- Closing power adjustable, EN size 3-6, for doors up to 1400 mm wide
- Closing speed, latch speed and backcheck adjustable via front facing regulating valves
- Can be used with integrated concealed mounting plate, suitable for fire and smoke protection doors
- · CE approved
- 14 mm height adjustable arm system for ease of fitting
- Standard and frame installation on hinge and nonhinge side of the door
- · Suitable for left and right handed doors

Accessories:

- ☐ Standard guide rail G193
- ☐ Height-adjustable guide rail G195
- ☐ 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 EV1
- ☐ White, similar to RAL9016
- ☐ Brown, similar to RAL8014
- ☐ Black, similar to RAL9005
- ☐ Customized finish

DC700 Accessories

Hold open device A152

Mechanical hold-open device for doors which sometimes need to be secured in the open position.

Simple fitting into guide rail G193 and G195.

Hold open angle max. 130°.

Adjustable hold-open force.

Not approved for use on fire and smoke protection doors.

Opening damper A153

Helps to prevent the door and door handle from hitting a return wall.

Simple fitting into guide rail G193 and G195.

Opening damper continuously adjustable up to an opening angle of max. 130°.

Does not replace a door stop.





Concealed Door Closer

DCR 7002H Door Concealed Door Closer

Standard Features

- Staked Valves allow precise speed adjustment and avoid valve backout
- High Quality steel spring sealed in hydraulic fluid for superior performance
- Graded Aluminium body with triple protection paint to avoid corrosion
- Noise free operation

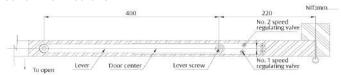


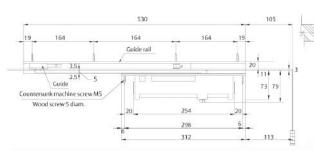
Application Door Weight Chart

| Model | Door Width | Door Weight | Type of door |
|----------|------------|-------------|---|
| DCR7002H | 850mm | 25-40kg | Suitable for all kinds of interior and exterior door wood & metal |

Features Finish

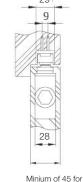
- Fixed size 2
- Non handed
- Hold open
- Cast Aluminium body
- Rack & Pinion Mechanism







Silver



wooden door Minimum of 40 for sash door



Concealed Door Closer

DCR 8003H Concealed Door Closer + Sliding track and arm

Standard Features

- Conforms to EN 1154
- Fixed size EN3
- Non handed
- Rack & Pinion Mechanism
- Closing & Latching speed adjustable
- Hold open optional
- Backcheck optional



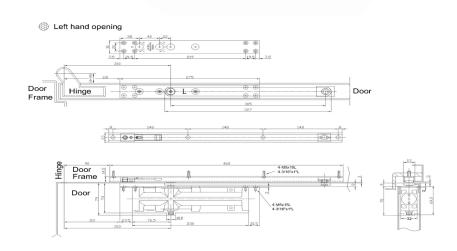
Product Specification

| Appl | ication | | | Max. Angle |
|---------------|----------------|-------------|-------------|------------|
| Closing Force | Max. Door Size | Speed Angle | Speed Angle | of Opening |
| Size 3 | 950mm, 60kg | 120 ° ~ 15° | 15° ~ 0° | 120° |

Finish

• Silver





Concealed door closer 800



Multifuction and reversible door closer-MAB 800 Servies

Features:

- Body in high duty cast iron.
- Four forces EN 1-2-3-4 in two body sizes.
- Fully reversible for in-frame or in-door mounting.
- Non handed.
- Suitable for metal and timber doors.
- Two speed valves for individual control of closing and latching.
- Overpressure relief valve.
- · Adjustable hold open (optional).
- Force sizes EN 3-4 have
 C € conformity.



Text specification:

Hydraulic rack and pinion door closer.

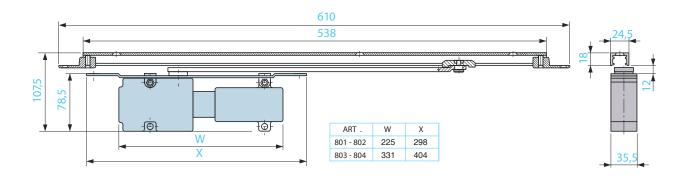
MAB 800 series fully concealed into the door or into the head frame, non handed, $\mathbf{C}\mathbf{E}$ marked, suitable for fire doors, MAB 800 series.





| CE | ASSA ABLOY Italia S.p.A. Via Bovaresa 13 - 40017 San Giovanni in Persiceto (BO) Italy | | | , | C |)4 | |
|--------------|---|--|--|---|---|----|---|
| 0425 DO.0609 | EN 1154:1996+A1:2002 3 8 4 | | | 4 | 1 | 1 | 4 |

Technical drawing



YIC 5124 Concealed Door Closer-Cam Action

The beauty of the new Yale YIC5124 Concealed Door Closer is that it stays virtually invisible when the door is closed, keeping your design pure and clean just as you intended. Featuring efficient 'cam action' technology, it has an in-built power adjustment mechanism which allows you to reduce opening force whilst maximising closing force, making it perfect for almost every new door design.

Standard Features

- Cam action for low opening moment
- Power adjustable Size 2 to 4
- Fits timber doors from 45mm thickness
- Fits metal profiles with 36 x 45mm inner chamber
- Max opening angle 120°
- Adjustable hydraulic back check optional
- Overpressure relief valve
- Adjustable hold-open from 70° to 95°
- Non-handed
- Two speed valves:

One to control closing speed from 120° to 5° Second to activate final latch from 15° to 0°





Standards

- Complied with CE standard with Size EN2 EN4
- EN 1154: Product performance standard
- 5,00,000 cycles tested

Technical Data

• Door Closer strength : Adjustable EN2 - EN4

• Maximum Door width: 850 mm - 1100 mm

• Maximum Door weight : 45kg - 80 kg

Recommended Maximum Door Size

In case of doors subject to wind or air draught select the next size up.

Min power - 2 = 15 Nm Max power - 4 = 32 Nm



Min. 750 x 2100 Max. 1100 x 2400

Limiting Dimensions

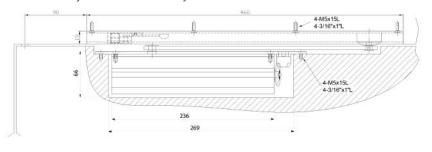


Yale YIC5124 Concealed Door Closer

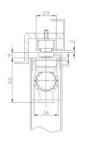
Top Rail



Closer Body and Arm Assembly



Door Closer Side Profile



Door Closer Top Plate



Concealed Door Closer

YIC 5324 FT Slim Cam Action concealed Door Closer

Standard Features

- Power Adjustable EN2~EN4
- A built-in pressure relief valve protects the closer against abuse usage.
- Stable hydraulic fluid low sensitivity to temperature change
- Using needle bearings to reach optima performance and efficiency
- None of components in a concealed door closer is visible when the door is closed
- Totally reversible without adjustment
- Adjustable Closing & Latching Speed with Thermo-constant Valve
- Non-Handed Installation
- Minimum door thickness 40 mm





Product Specification

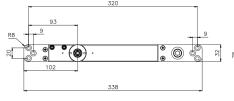
| Appl | Application | | Latching | Max. Angle | |
|---------------|----------------|-------------|-------------|------------|--|
| Closing Force | Max. Door Size | Speed Angle | Speed Angle | of Opening | |
| EN 2 - 4 | 1100mm, 80kg | 120° ~ 10° | 10° ~ 0° | 120° | |

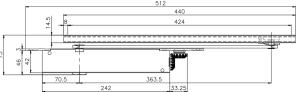
Certificate & Approvals

- Manufactured by quality assured ISO9001 factory
- EN1154: certified
- BS EN1634: Part 1 & 3: 2000 fire certified
- CE Mark
- 5,00,000 cycles tested



• Silver









Fit for Aluminium Narrow profile doors

Concealed Door Closer - DC 860





ASSA ABLOY DC860

- Concealed door closer with Cam-Motion technology and small standard concealed guide rail G892 or standard concealed guide rail G893
- Fullfils barrier-free building requirements (DDA / CEN PR 15894)
- Certified in compliance with EN 1154, size 1-5
- · Suitable for fire and smoke protection doors
- · For single action doors up to 1250 mm wide

Characteristics DC860

- · Can be used for left and right-handed doors
- Closing speed and latching speed adjustable from top via regulating valves
- · Built-in backcheck
- $\boldsymbol{\cdot}$ Thermodynamic valves for consistent performance
- · Opening angle up to 120°
- · Large range of applications
- · Versions with 4 mm and 8 mm spindle extensions
- · Standard colours: silver EV1
- · Customized finishes available on request

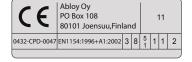
Characteristics of standard guide rail G892

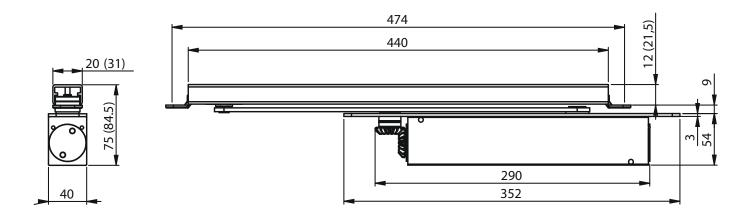
- · Small size guide rail
- · For standard applications
- Available with mechanical hold open device or opening damper
- · Installation dimensions: see diagram

Characteristics for guide rail G893

- Guide rail suitable for equipping with hold-open device and backcheck
- Installation dimensions: see diagram (dimensions in brackets)







DC860

Technical attributes

| Technical attributes | |
|-----------------------------------|---------------------|
| Variable adjustable closing force | EN 1-5 |
| Door width up to | 1250 mm |
| Fire and smoke protection | yes |
| Door swing directions | Left / right handed |
| Closing speed | variable 120° - 0° |
| Latching speed | variable 7° - 0° |
| Opening angle | ca. 120° |
| Weight | 2,3 kg |
| Height | 54 mm |
| Depth | 40 mm |
| Length | 290 mm |
| Certified in compliance with | EN 1154 |
| CE marking for building products | Yes |

The advantages at a glance

Our service for you: here you can see the individual advantages of our door closer models for your respective field of business.

| Customer segment | Advantages | |
|------------------|--|--|
| Project planners | Extensive range of uses: fire, smoke protection and standard doors Fulfils barrier-free building requirements (DDA, CEN/TR 15894) Comprehensive functions, standard or optional | |
| Builders | Quick and easy installation Quickly and easily adjustable Suitable for left and right handed doors | |
| Trade | Reduced inventory costs due to modular product range One single product suitable for a large variety of mounting positions Complementary accessories available for the whole product range | |
| User | Easier door opening and improved accessibility due to Cam-Motion technology Largely unaffected by temperature fluctuations thanks to thermodynamic valves | |



Specifications for DC860

ASSA ABLOY Concealed Door Closer DC860 with Cam-Motion Technology and concealed guide rail in compliance with EN 1154

- Closing force continuously adjustable, EN size 1-5, for doors up to 1250 mm wide
- Closing speed, latching speed and closing force continuously adjustable when installed
- · CE approved
- · Suitable for left and right handed doors
- Additional verification of suitability required for the respective fire or smoke protection door

| Accessories: | Colour: |
|------------------------|---------------------|
| ☐ Small concealed | ☐ Silver EV1 |
| guide rail DC892 | ☐ Customized finish |
| ☐ Standard concealed | |
| guide rail DC893 | |
| ☐ Mechanical hold open | |
| device A152 for G893 | |
| ☐ Mechanical hold open | |
| device A156 for G892 | |
| ☐ Mechanical opening | |
| damper A153 for | |
| G893 | |
| ☐ Mechanical opening | |
| damper A157 for | |
| G892 | |
| ☐ Fixing plate A162 | |
| | |

DC860 Accessories

Hold open device A152

Mechanical hold-open device for doors which sometimes need to be secured in the open position.

Simple fitting into guide rail G893.

Hold-open angle max. 120°.

Adjustable hold-open force.

Not approved for use on fire and smoke protection doors.

Hold open device A156

For guide rail G892.

Opening damper A153

Helps to prevent the door and door handle from hitting a return wall. Simple fitting into guide rail G893, does not replace a door stop. Adjustable up to an opening angle of 120°.



Opening damper A157

Helps to prevent the door and door handle from hitting a return wall. Simple fitting into guide rail G892, does not replace a door stop. Adjustable up to an opening angle of 120°.



Fixing plate A162

Mounting plate set for metal doors.



