

Overhead Door Closer



EN1154 SPECIFICATION



TABLE OF CONTENTS

EN1154 Standard Explained	Page 1
How to Order	Page 3
DC4025 Series Door Closer	Page 4
DC3003 Series Door Closer	Page 8
DC2003 Series Door Closer	Page 12

Controlled Door Closing Devices to EN1154

EN1154: 1997 + A1: 2003

SCOPE

The European standard provides details of controlled door closing device on product types, classification by use, test cycles, door mass, corrosion resistance, as well as definitions, product performance requirements, test apparatus, test methods and marking of products

CLASSIFICATION

EN1154 classifies door furniture by using an 6 digit coding system. A similar classification applies to all building hardware product standards so that complementary items of hardware can be specified to, for instance, a common level of corrosion resistance, category of use, etc. Each digit refers to a particular feature of the product measured against the standard's performance requirements.

EN1154: 1997

Digit 1

Category of use

For all internal and external doors for use by the public, and others, with little incentive to take care, i.e. where there is some chance of misuse of the door.

- grade 3: For closing doors from at least 105° open

- grade 4: For closing doors from 180° open

Note 1: Grade 4 classification assumes standard installation according to the manufacturer's instructions.

Note 2: For applications subject to extremes of abuse, or for particular limitations of opening angle, door closers incorporating a backcheck function or provision of a separate door stop should be considered.

Digit 2

Number of test cycles

Only one test duration is identified for door closers manufactured to this standard:

- grade 8: 500, 000 test cycles

Digit 3

Test Door mass/size

Seven test door mass grades and related door closer power sizes are identified according to table 1 of this standard.

Where a door closer provides a range of power sizes both the minimum and the maximum sizes shall be identified.

Table 1

Door closer power size	Recommended door leaf width max. (mm)	Test door mass (kg)
1	<750	20
2	850	40
3	950	60
4	1, 100	80
5	1, 250	100
6	1, 400	120
7	1, 600	160

inox[®] DC4025/DC3003/DC2003 Series Door Closer are tested and certified to the following classification

DC4025 Series Door Closer

4	8	$\frac{4}{2}$	1	1	3
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DC3003/DC2003 Series Door Closer

4	8	3	1	1	3
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inox[®]

DC4025/DC3003/DC2003 Door Closer

DC4025 Series Door Closer

4	8	$\frac{4}{2}$	1	1	3
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DC3003/DC2003 Door Closer

4	8	3	1	1	3
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inox[®]

DC4025/DC3003/DC2003 Door Closer

DC4025 Series Door Closer

4	8	$\frac{4}{2}$	1	1	3
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DC3003/DC2003 Door Closer

4	8	3	1	1	3
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inox[®]

DC4025/DC3003/DC2003 Door Closer

DC4025 Series Door Closer

4	8	$\frac{4}{2}$	1	1	3
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DC3003/DC2003 Door Closer

4	8	3	1	1	3
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Note 1: The door widths given are for standard installations. In the case of unusually high or heavy doors, windy or draughty conditions, or special installations, a larger power size of door closer should be used.

Note 2: The test door masses shown are only related to door closer power sizes for the purpose of the test procedure. These test door masses are not intended to indicate maximum values for actual use.

Digit 4
Fire behaviour

Two grades of fire behaviour are identified for door closing devices manufactured to this standard:

- grade 0: Not suitable for use on fire/smoke door assemblies
- grade 1: Suitable for use on fire/smoke door assemblies, subject to satisfactory assessment of the contribution of the door closer to the fire resistance of specified fire/smoke assemblies. Such assessment is outside the scope of this European Standard (See EN 1634-1).

Digit 5
Safety

All door closers are required to satisfy the Essential Requirement of safety in use. Therefore only grade 1 is identified.

Digit 6
Corrosion resistance

Five grades of corrosion resistance are identified according to EN 1670:

- grade 0: No defined corrosion resistance
- grade 1: Mild resistance
- grade 2: Moderate resistance
- grade 3: High resistance
- grade 4: Very high resistance

CE MARKING

Door closers intended for use on fire resisting doors and smoke control doors are covered by a Construction Products Directive mandate issued by the European Commission. Consequently, this standard is regarded as a "harmonised" standard and compliance with it, supported by suitable evidence, allows the application of the CE mark.

As closers for fire/smoke doors have a critical safety function, application of the CE mark will require the involvement of a notified certification body to provide verification of the compliance claims. This will involve initial type-testing of the product to EN 1154, initial inspection of the manufacturer's factory production control and continuing surveillance and approval of the factory production control. On satisfactory fulfilment of these tasks, the notified body issues an EC Certificate of Conformity which then permits the manufacturer to declare compliance and affix the CE marking to his product.

inox®
DC4025/DC3003/DC2003 Door Closer

DC4025 Series Door Closer

4	8	4	1	1	3
		2			

DC3003/DC2003 Door Closer

4	8	3	1	1	3
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inox®
DC4025/DC3003/DC2003 Door Closer

DC4025 Series Door Closer

4	8	4	1	1	3
		2			

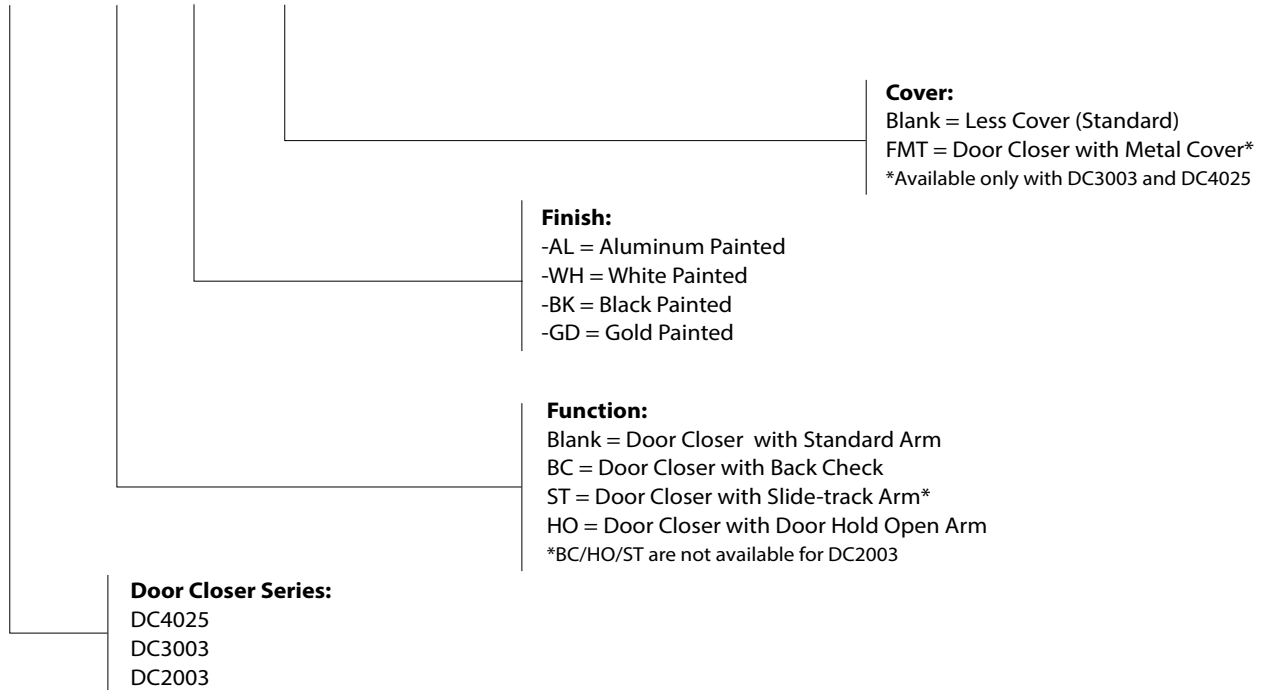
DC3003/DC2003 Door Closer

4	8	3	1	1	3
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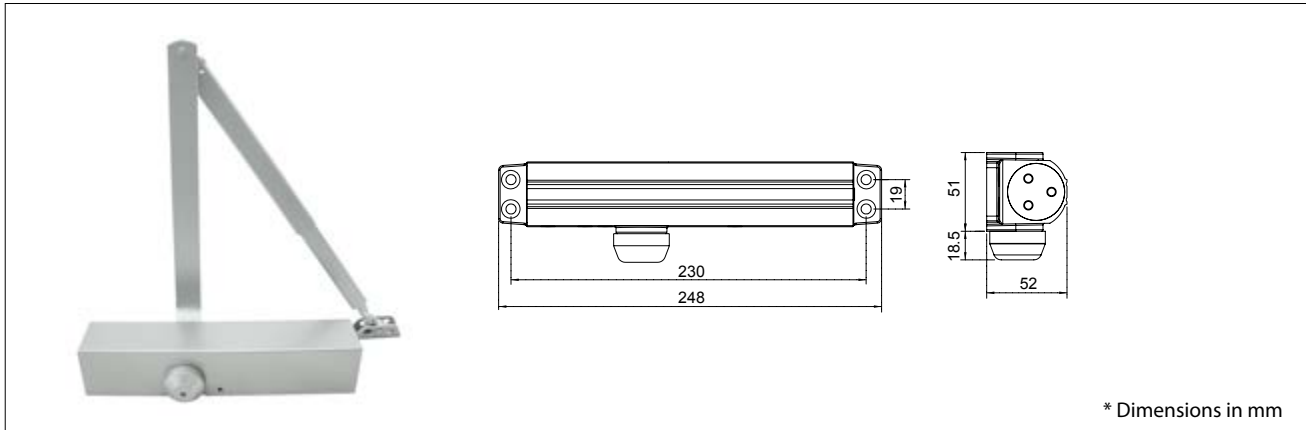
How to Order

Product Identification

DC4025 BC -AL -FMT



DC4025 Series Door Closer



Material

Aluminum Alloy Pressure Die-Cast

Application

INOX DC4025 is a mainstream overhead door closer suitable for both interior and exterior door type.

Standards and Certification

EN

Successfully type-tested for conformity to all of the requirements of EN1154:1996/A1:2002/AC:2006 including the additional requirements for latch action /backcheck / adjustable closing force.



Successfully passed 60 minutes fire test of metal door assemblies to EN1634:2008

CE

CE Marking: CE Declaration of Conformity available on request



All tests performed independently and certified by Intertek Testing and Certification Ltd. at UK

EN1154 Classification

4	8	4	1	1	3
		2			

Finishes

- Silver
- White
- Black
- Gold
- Other finishes available on request

Specification and Features

- Full Rack and Pinion Construction

Heat-treated rack and pinion immersed in high grade oil to give a smooth action and minimum wear and tear

- Adjustable Power Size (EN2 – EN5)

Power Size can be adjustable by spring valve according to door width and weight variation.

	DC4025	EN2	EN3	EN4	EN5
Max. Door Width (mm)	850	950	1100	1250	
Max. Door Weight (kgs)	40	60	50	100	
Max. Opening Angle	180°	180°	150°	120°	

- Non Handed

DC4025 can be universally fitted on both left and right handed swing door

- Flexible Mounting Position

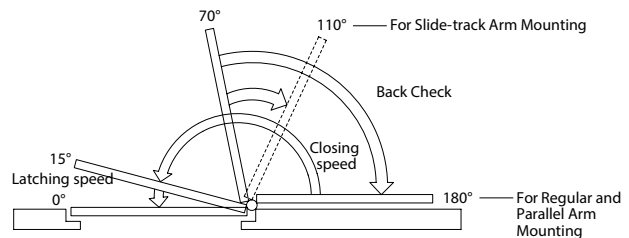
DC4025 can be installed on both pull and push side of door and can be fitted and both door and frame.

- Adjustable Latch and Closing Speed

DC4025 is supplied with hydraulic controlled valves to adjust latch and closing speed.

- Adjustable Backcheck

Backcheck feature set and adjusted by an independent valve to protect doorset from violent opening.

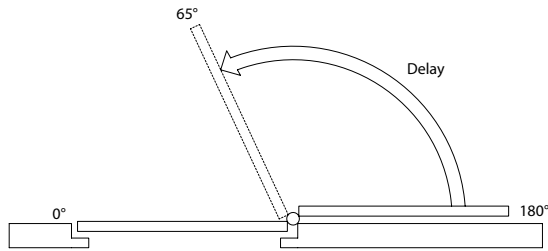


DC4025 Series Door Closer

Optional Features

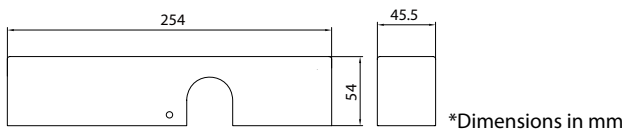
- Delayed Action

Additional adjustable valve can be included to allow additional time before closing.



- Closer Cover: DCCV40

Metal cover available to cover mounting screw holes and create a clean appearance



- Door Hold-Open

Hold-Open arm allows the door to be held open at a preset angle for special occasion

- Slide-track Arm Mounting

Slide-track arm mounting allows minimum overall projection of closer from door, which provides greater safety, smoother operation and more appealing aesthetics

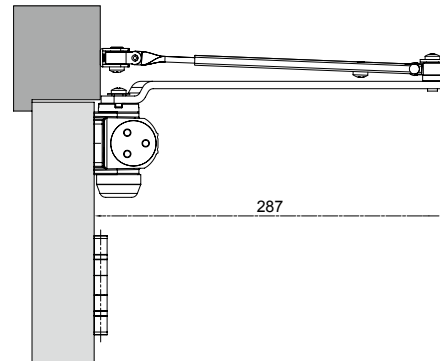
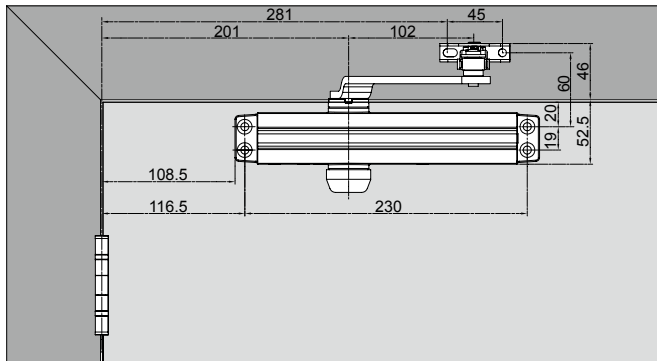
DC4025 Item List

Item No.	Description
DC4025	Door Closer with Standard Arm and BackCheck
DC4025DA	DC4025 with Delayed Action
DC4025ST	DC4025 with Slide-track Arm
DC4025DAST	DC4025 with Slide-track Arm and Delayed Action
DC4025HO	DC4025 with Hold Open Arm
-FMT	Add FMT suffix for order with DCCV40 cover

DC4025 Series Door Closer

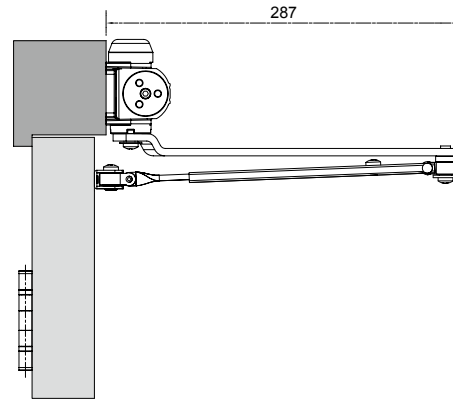
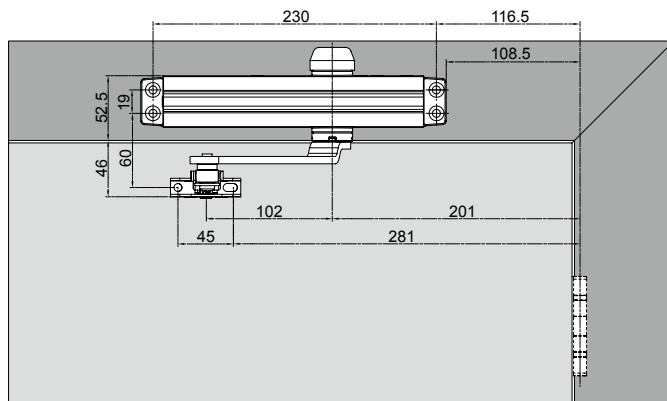
Mounting Diagrams

Door Leaf Mounting (Pull Side)



* Dimensions in mm

Door Frame Mounting (Push Side)

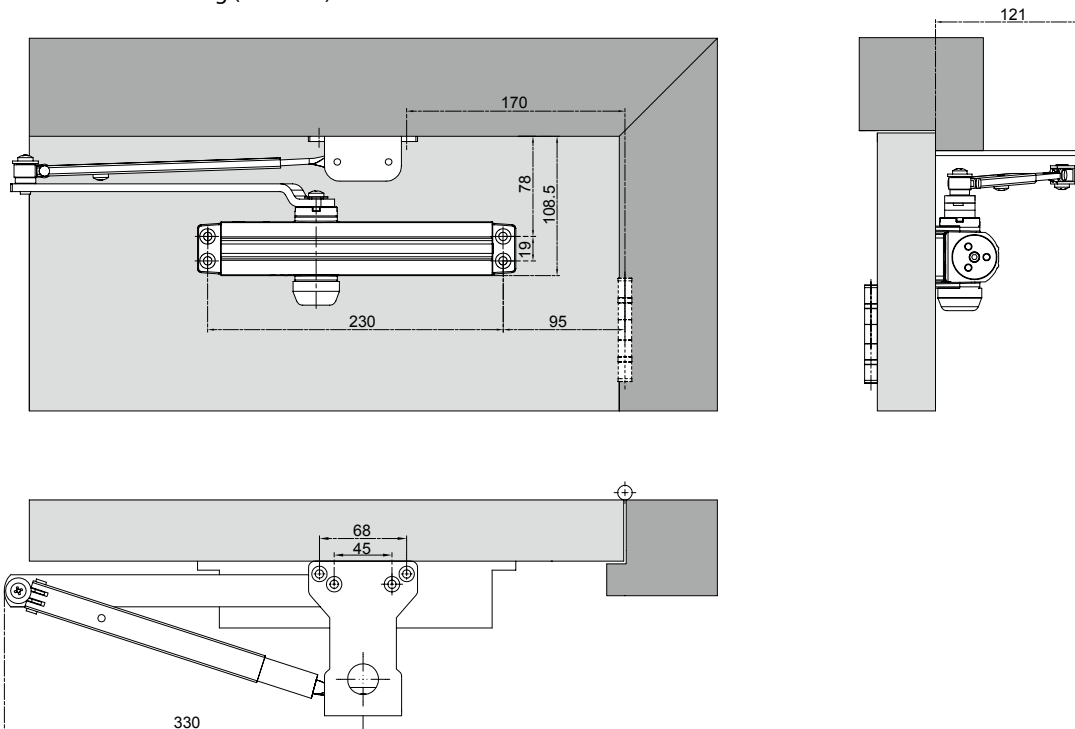


* Dimensions in mm

DC4025 Series Door Closer

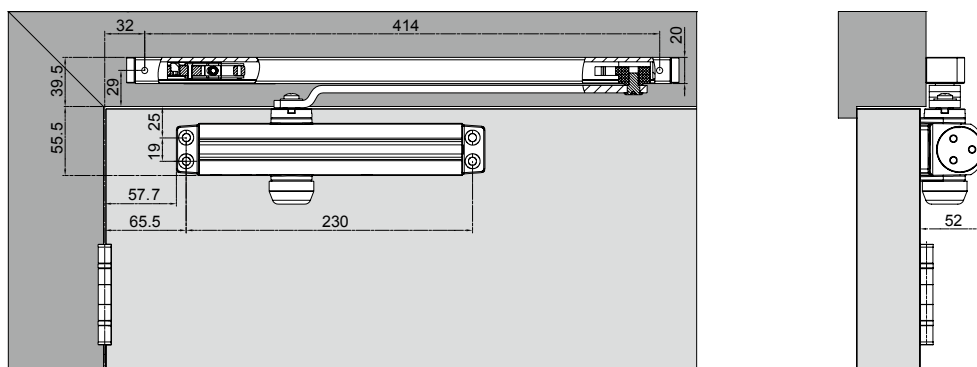
Mounting Diagrams

Parallel Arm Mounting (Pull Side)



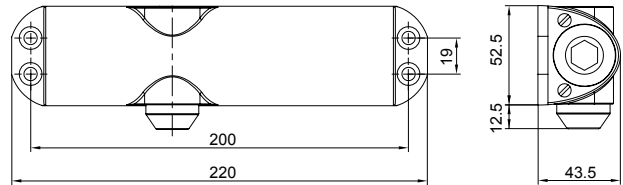
* Dimensions in mm

Slide Track Mounting (Pull Side)



* Dimensions in mm

DC3003 Series Door Closer



* Dimensions in mm

Material

Aluminum Alloy Pressure Die-Cast

Application

INOX DC3003 is an overhead door closer suitable for standard to medium weight doors for both interior or exterior application.

Standards and Certification

EN

Successfully type-tested for conformity to all of the requirements of EN1154:1996/A1:2002/AC:2006 including the additional requirements for latch action /backcheck / adjustable closing force.



Fire Safety: Successfully tested on fire door assemblies according to EN1634-1

CE

CE Marking: CE Declaration of Conformity available on request



Fire Safety: Successfully tested on fire door assemblies according to UL 10C



All tests performed independently and certified by Intertek Testing and Certification Ltd. at UK

EN1154 Classification

4	8	3	1	1	3
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Specifications and Features

- Slim Design

DC3003 has a compact size with minimized projection allowing installation to door's adjacent return wall

- Full Rack and Pinion Construction

Heat-treated rack and pinion immersed in high grade oil for smooth action and minimum wear and tear

- Selectable Power Size by Mounting Position (EN2, 3, 4)

DC3003	EN2	EN3	EN4
Max. Door Width (mm)	850	950	1050
Max. Door Weight (kgs)	40	60	75
Max. Opening Angle	180°	180°	100°

- Non Handed

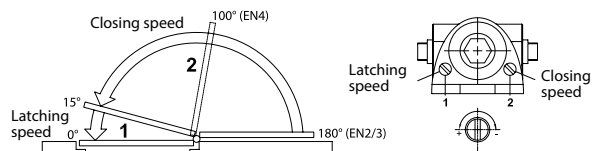
DC3003 can be universally fitted on both left and right handed swing doors

- Flexible Mounting Position

DC3003 can be installed on both pull and push side of door and can be fitted on both door and frame

- Adjustable Latching and Closing Speed

DC3003 is supplied with hydraulic controlled valves to adjust latching and closing speed



Finishes

In Stock:

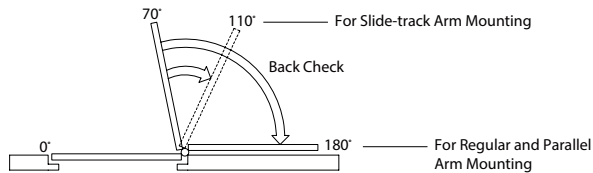
- AL = Aluminum Painted
- WH = White Painted
- BK = Black Painted
- GD = Gold Painted
- Other finishes available on request

DC3003 Series Door Closer

Optional Features

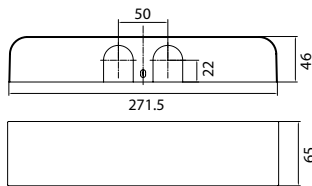
- Adjustable Backcheck

Backcheck feature set and adjusted by an independent valve to protect doorset from violent opening.



- Closer Cover: DCCV30

Metal cover available to cover mounting screw holes and create a clean appearance.



- Slide-track Arm Mounting

Slide-track arm mounting allows minimum overall projection of closer from door, which provides greater safety, smoother operation and more appealing aesthetics.

- Door Hold-Open

Hold-Open arm allows door to be held open at a preset angle

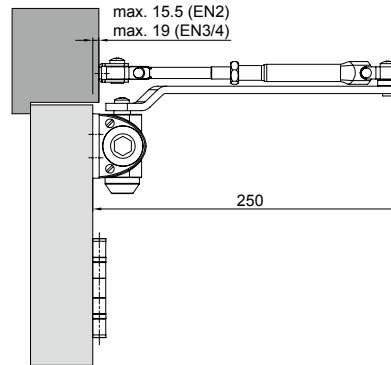
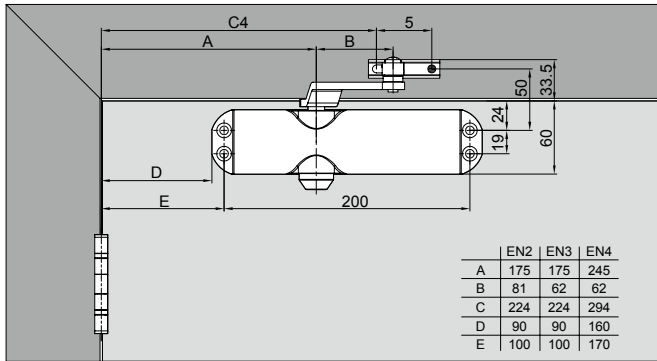
DC3003 Item List

Item No.	Description
DC3003	Door Closer with Standard Arm
DC3003BC	DC3003 with BackCheck
DC3003ST	DC3003 with Slide-track Arm
DC3003BCST	DC3003 with Slide-track Arm and BackCheck
DC3003HO	DC3003 with Hold Open Arm
-FMT	Add FMT suffix for order with DCCV30 cover

DC3003 Series Door Closer

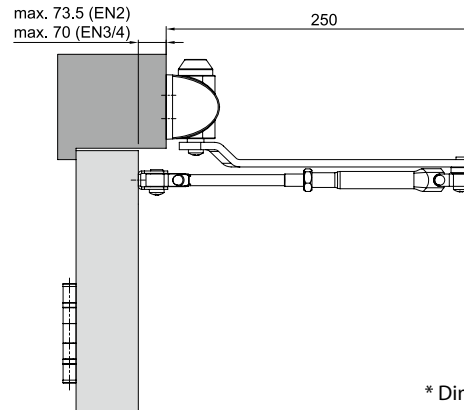
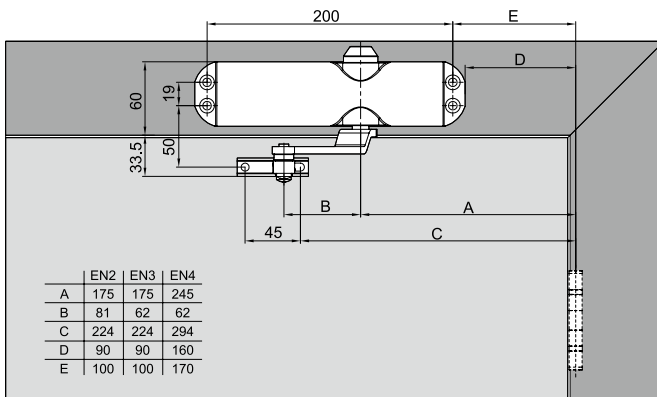
Mounting Diagrams

Door Leaf Mounting (Pull Side)



* Dimensions in mm

Door Frame Mounting (Push Side)

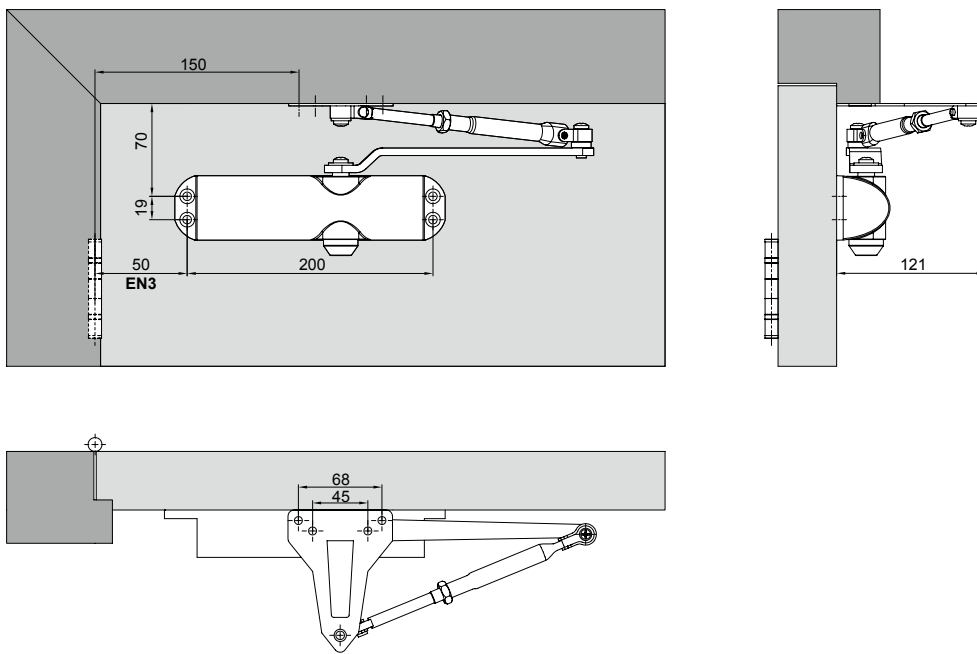


* Dimensions in mm

DC3003 Series Door Closer

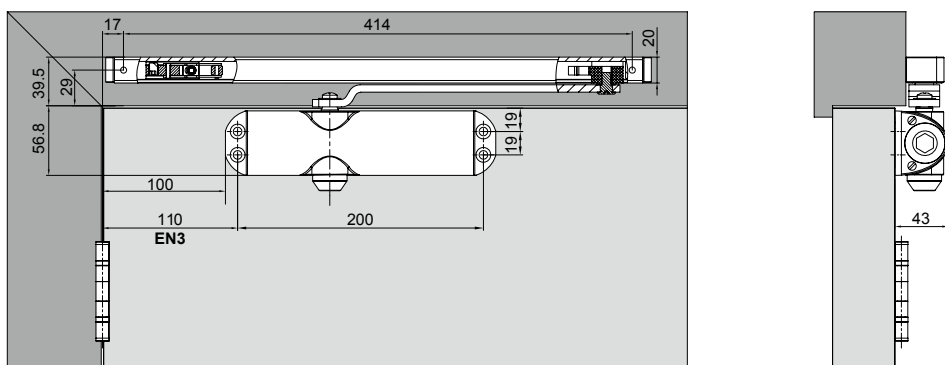
Mounting Diagrams All dimensions showing below are in mm.

Parallel Arm Mounting (Pull Side)



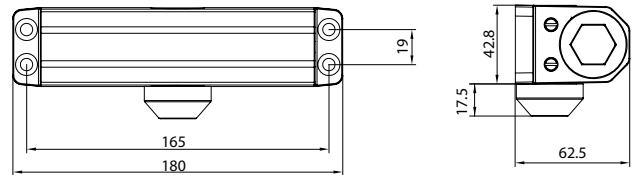
* Dimensions in mm

Slide Track Mounting (Pull Side)



* Dimensions in mm

DC2003 Series Door Closer



* Dimensions in mm

Material

Aluminum Alloy Pressure Die-Cast

Application

INOX DC2003 is a cost effective overhead door closer suitable for light duty commercial application.

Standards and Certification

EN

Successfully type-tested for conformity to all of the requirements of EN1154:1996/A1:2002/AC:2006 including the additional requirements for latch action/backcheck/adjustable closing force.



Fire Safety: Successfully tested on fire door assemblies according to EN1634-1

CE

CE Marking: CE Declaration of Conformity available on request



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EN1154 Classification

4	8	3	1	1	3
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Available Finishes

- AL = Aluminum Painted
- WH = White Painted
- BK = Black Painted
- GD = Gold Painted
- Other finishes available on request

Specification and Features

- Rack and Pinion Construction

Heat-treated rack and pinion immersed in high grade oil to give a smooth action and minimum wear and tear

- Fixed Power Size EN3

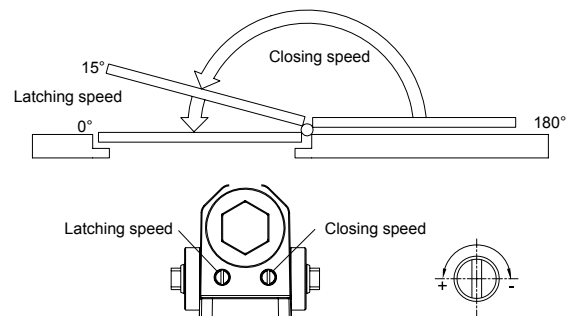
DC2003	EN3
Max. Door Width (mm)	950
Max. Door Weight (kgs)	60
Max. Opening Angle	180°

- Non Handed

DC2003 can be universally fitted on both left and right handed swing door

- Adjustable Latching and Closing Speed

DC2003 is supplied with hydraulic controlled valves to adjust latching and closing speed



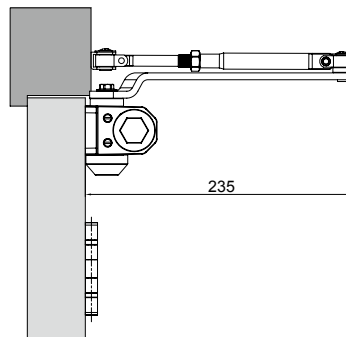
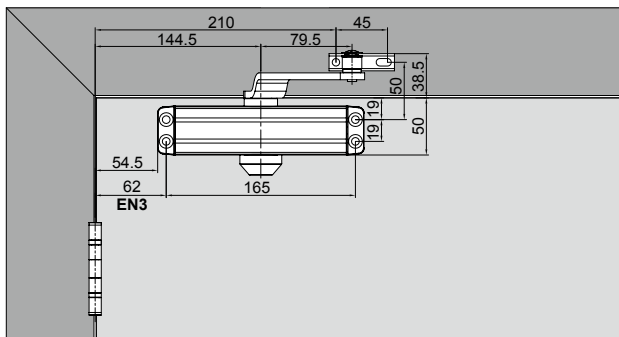
DC2003 Item List

Item No.	Description
DC2003	Door Closer with Standard Arm

DC2003 Series Door Closer

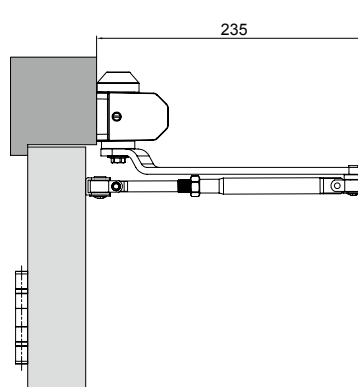
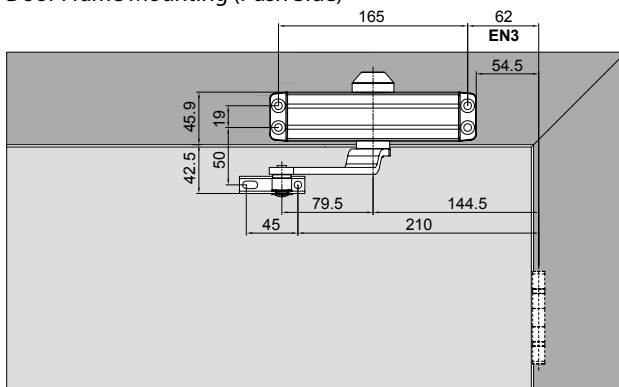
Mounting Diagrams

Door Leaf Mounting (Pull Side)



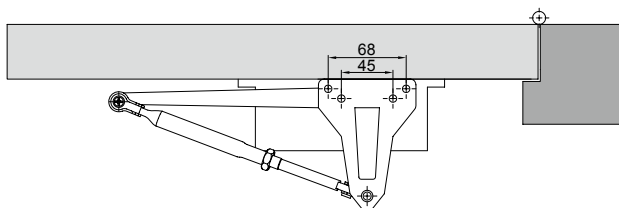
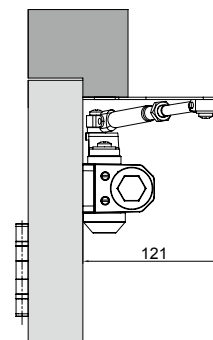
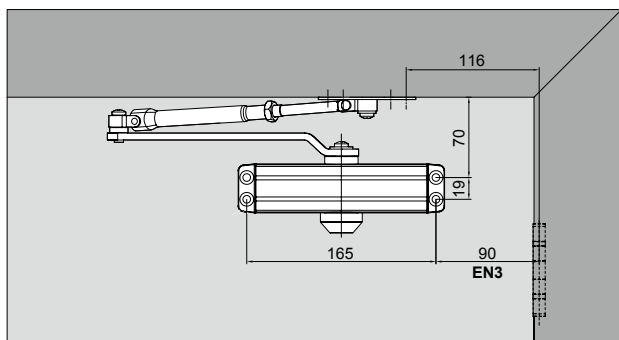
* Dimensions in mm

Door Frame Mounting (Push Side)



* Dimensions in mm

Parallel Arm Mounting (Pull Side)



* Dimensions in mm



Please visit our website
<http://www.inoxproducts.com>
for more technical and new product information.



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