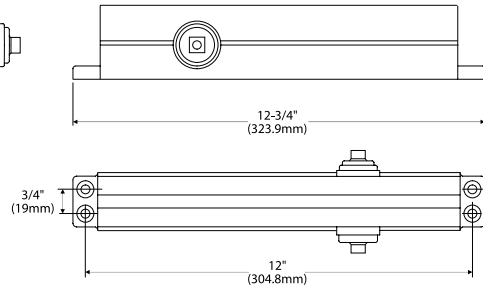
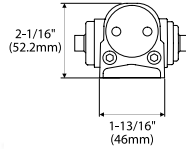


HEAVY DUTY DOOR CLOSER DC8516

ANSI/BHMA Grade 1



SPECIFICATIONS

Adjustable Power Size	1 Thru 6 meets ADA Barrier-Free requirements
Body	One piece Aluminum Alloy Body
Design	Rack-and-Pinion
Valves	Separate and independent latch, sweep, and back-check pressure valves
Handing	Non-Handed
Cover	Plastic full cover standard
Packing	Tri-packed
Fixing Packs	SRT fasteners furnished standard
Pinion	32mm (1-17/64") diameter
Pinion Shaft	16mm (5/8") diameter
Projection	53mm (2-3/32"), w/o cover

CODE COMPLIANCE



ANSI/BHMA A156.4 Grade 1 Closers
 ANSI A117.1 ADA Accessibility
 UL Listed for ANSI/UL10B and UL10C,
 CAN/ULC S104 up to 3 Hours
 UL 228 UBC Standard 7-2 (1997) NFPA 252
 NFPA 80 National Fire Protection - Fire Door Assembly
 NFPA101 National Fire Protection - Life Safety
 ANSI/BHMA A156.18 Finishes

STANDARD FINISHES

- AL Aluminum Painted
- DU Duro/Dark Bronze Painted
- 19G Graphite Black

For additional finish options not listed, contact Sales Department for MOQ and lead times

FEATURES

Aluminum Alloy Body

Closer bodies are cast of special aluminum alloy and machined to accommodate interactive steel components under operating conditions

Rack & Pinion Operation

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

Non-Handed

DC8516 Door Closer is non-handed and can be installed on either right or left hand swing doors

Sweep Speed Control Valve

Allows adjustment of door speed from the door's 90° open position down to approximately 10° from the closed position

Latch Speed Control Valve

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

Tri-Packed

DC85 Series come with self-tapping (SRT), sex nuts & bolts (SNB) and parallel arm (PA) bracket 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. The valve cushions the door opening when the door is forcibly opened beyond its preadjusted setting

Standard Molded Cover

Molded from high impact material
Covers are non-handed for all applications

Multi-Sized Door Closer

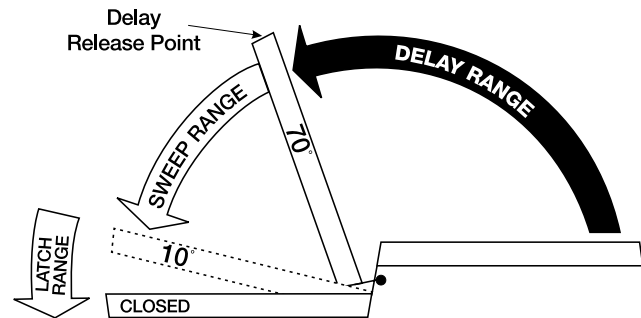
Shipped as size 3, but easily adjustable through the power range of 1 through 6. DC8516 Door Closer also conforms to the opening force requirements of the ADA as well as the ANSI/BHMA standard A117.1 for interior doors

OPTIONAL FUNCTIONS

Delayed Action Closing

An optional hydraulic adjustable feature adds a third speed (DA) range to the 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 angle of door release and valve adjustment. The valve can be adjusted with 4mm hex key (provided) 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
90°	25~30 seconds



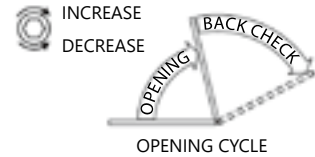
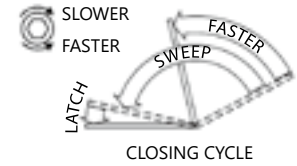
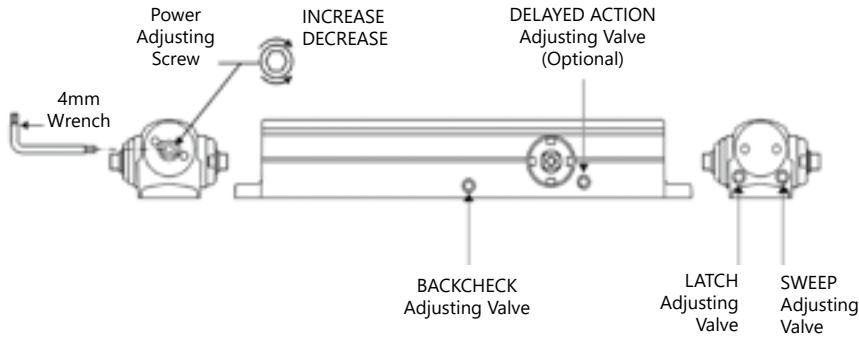
Suggested Applications

Delayed Action Closing allows slow-moving traffic to clear the opening before the door closer's "normal" closing cycle begins. Healthcare, Hospitals and Nursing Homes facilities all use this feature. It gives sufficient time for persons in beds, wheelchairs or on crutches to pass through an opening without concern of the door closing on them. Delayed Action closers can also accommodate openings with movement of food service carts, hand trucks, and pallet jacks

Pressure Relief Safety Valve

The (DA) 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 allow the door to close. This prevents damage to Closer, Arm, Frame and Door

APPLICATION CHART



Door Closer Size	Full turns of power adjusting screw*	Applicable Door Leaf Width		Applicable Door Weight
	8516 8516DA	Exterior (Swing out)	Interior	
1	-6	28" (0.71m)	32" (0.81m)	33~66LBS (15~30kg)
2	-4	32" (0.81m)	36" (0.91m)	66~99LBS (30~45kg)
3	O (Preset)	36" (0.91m)	42" (1.07m)	99~143LBS (45~55kg)
4	+5	42" (1.07m)	48" (1.22m)	143~187LBS (65~85kg)
5	+9	48" (1.22m)	54" (1.37m)	187~264LBS (85~120kg)
6	+12	54" (1.37m)	58" (1.47m)	264~330LBS (120~150kg)

CLOCKWISE FOR POSITIVE NUMBERS (+)



COUNTER-CLOCKWISE FOR NEGATIVE NUMBERS (-)



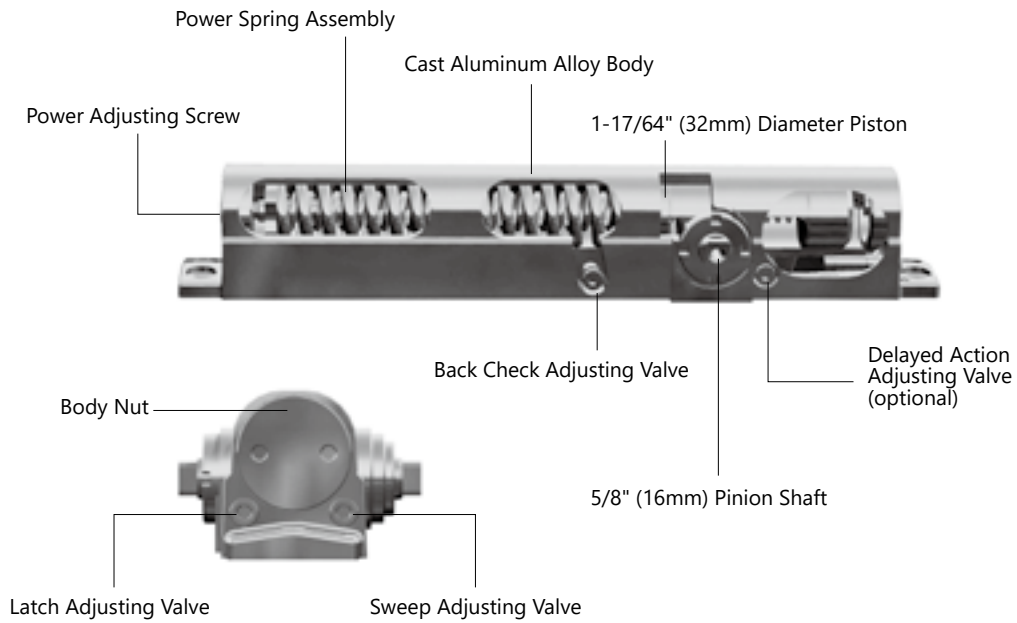
The closing force for DC8516 series door closers is adjustable from size 1 to size 6, as outlined in ANSI Standard A156.4. When these series of door closers are installed and adjusted to confirm to ADA reduced opening force requirements (5 lbs max.) for interior doors, they may not have adequate closing force to reliably close and latch door. Power adjustments charted on this page are recommended where possible to ensure proper door control

CAUTION!!

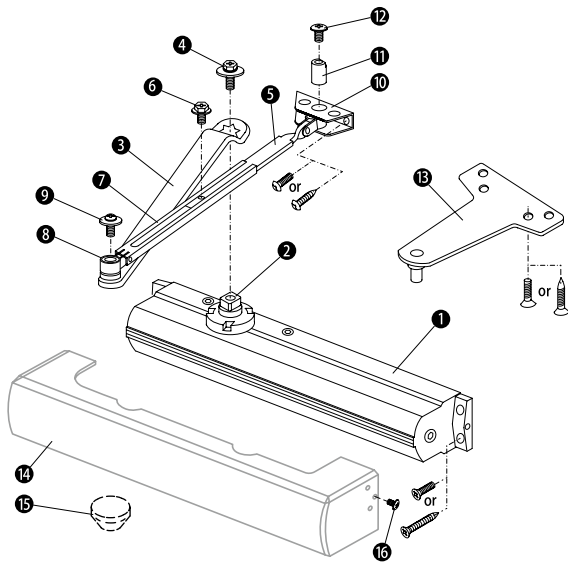
Turns required are approximate because of various door conditions and locations. You may have to further adjust spring tension to suit your requirements

DC8516 DOOR CLOSER

CUTAWAY VIEW



EXPLODED DIAGRAM

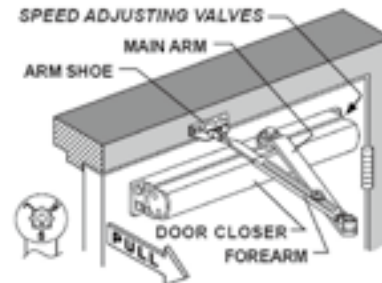
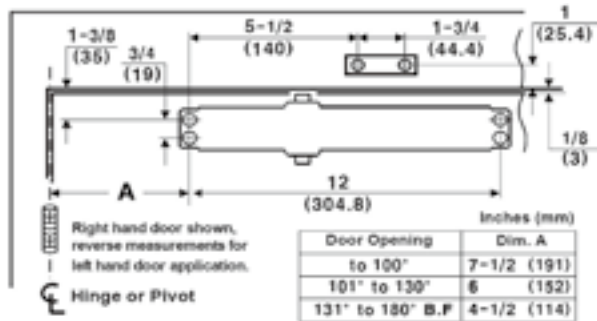


1. Closer Body
2. Pinion Shaft
3. Main Arm
4. Pinion Arm Screw
5. Adjustable Arm
6. Adjustable Arm Screw
7. Adjustable Sleeve
8. Pivot Bushing
9. Pivot Screw
10. Regular Shoe Plate
11. Bushing
12. Reg / PA Screw
13. Parallel Shoe
14. Cover, Slim or Full
15. Pinion Cap
16. Cover Screw

MOUNTING DIAGRAMS

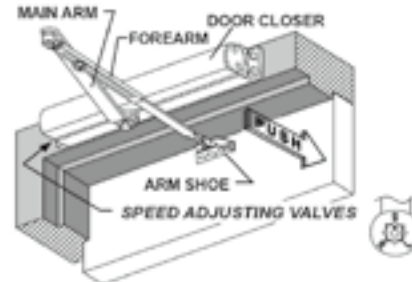
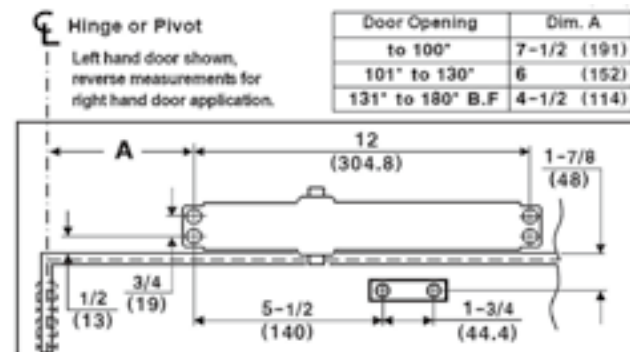
Regular Mounting (Pull Side)

Regular arm is the most common and strongest mounting option. Usually the closer is mounted on the door and the arm is mounted on the frame



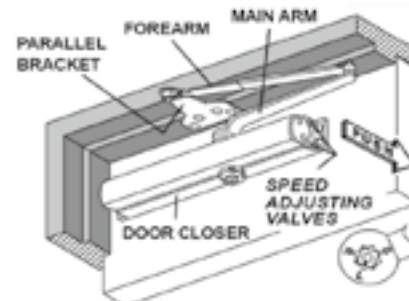
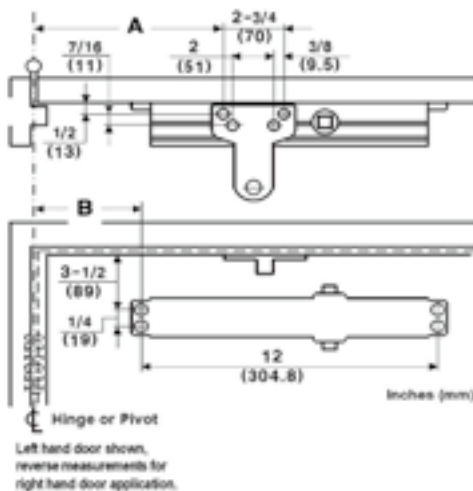
Top Jamb Mounting (Push Side)

Closer body is mounted to the frame with the arm straight out. Ideal for exterior door installations. You must consider frame depth reveal. Extended arm may be required



Parallel Arm Mounting (Push Side)

Closer body on door with parallel bracket on stop of frame. Arm is parallel to the door and does not stick out. Parallel arm installations have 25% less power than regular pull side mounting





STANDARD ARMS

Regular / Parallel Arm with bracket

Regular Non-handed arm with adjustable slider can be used for a wide range of frame conditions and can be mounted to hinge (pull) side, top jamb

For Parallel arm, use parallel arm bracket to mount on stop of frame on other (push) side of the door. Frame should be reinforced for parallel arm bracket

OPTIONAL ARMS

DC8516HO



Non-handed arm with adjustable round slide arm for a wide range of frame conditions. Open to desired range then tighten screw & lock nut and door will hold in that position every time until changed. For parallel mount use parallel arm bracket

DC8516CUSH



Non-handed heavy duty forged arm with cushion stop, parallel arm mount. Must use frame reinforcement in stop to mount

DC8516ST

Single lever (track) arm with a surface mounted closer designed for interior use on narrow head frames and top rails. Offers three mounting positions: Pull Side, Push Side and Top Jamb

DC8516STH



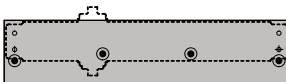
The Hold-Open options allows for hold-open points at 85°, 90°, 95°, 100°, 105° or 110° depending on clip location in track

OPTIONAL DROP PLATES – Narrow Top Rail

For use on doors with glass where the drop plates cover the back of the closer, for a more aesthetic view from the front. Also used when top rail is narrow and prevents the closer from being mounted to a surface of wood or metal. Correct installations will permit 180° maximum opening. Please see drop plate installation guide for detailed instructions. Drop plates available for DC85 closer with full cover or slim covers

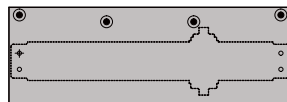
DCDP85P1:

Drop Plate for DC8516 with Full Cover Pull Side Mounting



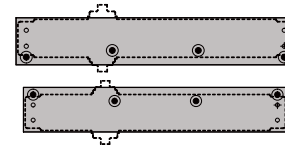
DCDP85P2:

Drop Plate for DC8516 with Full Cover Push Side Mounting



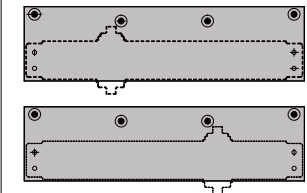
DCDP85P3:

Drop Plate for DC8516 with Slim Cover Pull Side Door Mount or Push Side Jamb Mount



DCDP85P4:

Drop Plate for DC8516 with Slim Cover Push Side Door Mount or Jamb Mount



OPTIONAL COVERS

DCCV85F

Plastic Full Cover



DCCV85SLC

Plastic Slim Cover



DCCV85FSS

Stainless Steel Cover



PARALLEL ARM BRACKET

DCBK

Parallel Arm Bracket



FIXING PACKS

DCFP85

Standard self-tapping screws (SRT) for closer body



DCFPBK

Standard fixing pack for parallel arm bracket




DCFPSNB

Standard sex nuts and bolts (SNB) fixing pack



HOW TO ORDER

Stocked DC85 Door Closer

Product	Power Size	Function	Finish
DC85 1	16 2	DA 3	AL 4
PRODUCT	POWER SIZE		FUNCTION
 DC85 Series	1-6		Blank Door Closer with Sleeve Arm, Plastic Full Cover (Standard) DA Door Closer with Delayed Action HO Door Closer with Friction Hold Open CUSH Door Closer with Cush Arm ST Door Closer with Slide Track Arm* STH Door Closer with Slide Track Hold Open Arm*

*Slide track arm is only available for AL finish

4 FINISH

- AL 28 Aluminum Painted
- DU 20 Duro/Dark Bronze Painted
- 19G Graphite Black

ACCESSORY PRODUCT IDENTIFICATION

Item No.	Description
DCCV85F	Plastic Full Cover for DC85 Series Door Closer
DCCV85SLC	Plastic Slim Cover for DC85 Series Door Closer
DCCV85FSS	Stainless Steel Cover for DC85 Series Door Closer
DC8516HO	Friction Hold Open Arm for DC85 Series Door Closer
DC8516CUSH	Cush Arm for DC85 Series Door Closer
DC8516ST	Slide Track Arm for DC85 Series Door Closer
DC8516STH	Slide Track Hold Open Arm for DC85 Series Door Closer
DCDP85P1	Drop Plate for DC85 Series Door Closer w/Full Cover, Pull Side Mount
DCDP85P2	Drop Plate for DC85 Series Door Closer w/Full Cover, Push Side Mount
DCDP85P3	Drop Plate for DC85 Series Door Closer w/Slim Cover, Pull Side Door Mount or Push Side Jamb Mount
DCDP85P4	Drop Plate for DC85 Series Door Closer w/Slim Cover, Push Side Door or Jamb Mount