# CRL DOOR CLOSERS

# **General Door Closer Terminology**

Action - Defines the ability of the door closer to swing one way (Single Action) or both ways (Double Action).

Adjustable Spring Power - Adjustable spring tension that allows a single door closer to handle a wide range of door sizes and applications.

A.D.A. - Americans with Disabilities Act. Federal legislation that specifies guidelines to eliminate barriers to handicapped access and mobility.

**Backcheck** - Feature that provides dampening or slowing of the door opening speed at approximately 60 to 85 degrees of opening to prevent damage to the door, the frame, or to an adjacent structure.

**Barrier-Free** - Term used to identify door closers that meet guidelines corresponding to the Americans with Disabilities Act (A.D.A.) and ANSI A117.1 Specifications. Barrier-Free guidelines include maximum opening forces and power-assist capabilities.

Center-Hung - Door pivot point at center of jamb, therefore, depending on the pivot type, will allow the door to swing both in and out.

Dead-Stop - Auxiliary hardware or special door closer feature that limits the maximum degree of door swing to a specified point.

**Delayed Action** - Feature that causes the door to slow or delay closing, usually down to approximately 70 degrees to allow unrestricted passage. The delay time is normally adjustable.

Efficiency - Percentage of closing force in relation to opening force provided by the door closer to close the door.

Fixed Spring Size - Single fixed spring tension that is not adjustable. Intended to handle a specific range of door sizes.

Handing - Determined by the swing of the door. Left Hand, Right Hand, Left Hand Reverse Bevel, or Right Hand Reverse Bevel.

**Hold Open** - Feature that allows the door to remain open at a pre-set position. Depending on the type of door closer and accessories, the hold open position may be adjustable.

Latch Speed - The closing speed from approximately 10 to 15 degrees from the closed position. This speed should allow positive latching of the lock or exit device without undue slamming.

Offset - Door Pivot Point is offset from jamb center line, and hung from an offset pivot or hinge, allowing it to swing only one way.

Spring Size - A measure of door closer spring strength. Relates directly to the amount of opening force required to open the door, and the amount of force available to close the door.

Sweep Speed - Initial closing speed from fully open to approximately 10 to 15 degrees from closed position.

## **CRL CLOSER FEATURES**

C.R.L.				SURFA	CE CLC	SER FE	ATURES	S AND SF	PECIFICAT	IONS				
CLOSER MODEL	SPRING SIZE	CONFORMS ANSI GRADE	BACKCHECK STANDARD	ADA BARRIER-FREE	DELAYED ACTION	COVER	HANDING	STANDARD INSTALLATION	CLOSE & LATCH VALVES	STANDARD ARM TYPE	HOLD-OPEN	MATERIAL	UL LISTING	WARRANTY
DC51	1	Not Rated	Not Available			Not Available	Reversible	Tri-Style Pkg	Independent	Regular	Optional Arm	Aluminum	UL	10 Years
DC52 - 5	2, 3, 4, 5	1	Adjustable			Optional Slim	Reversible	Tri-Style Pkg	Independent	Regular	Optional Arm	Aluminum	UL, UL10C	10 Years
PR40	ADJ 1-4	1	Adjustable	Yes		Not Available	Reversible	Tri-Style Pkg	Independent	Regular	Optional Arm	Aluminum	UL, UL10C	10 Years
PR42	ADJ 2-5	1	Adjustable			Not Available	Reversible	Tri-Style Pkg	Independent	Regular	Optional Arm	Aluminum	UL, UL10C	10 Years
PR44DA	ADJ 2-5	1	Adjustable		Adjustable	Not Available	Reversible	Tri-Style Pkg	Independent	Regular	Optional Arm	Aluminum	UL, UL10C	10 Years
PR50	ADJ 1-4	1	Adjustable	Yes		Full Cover	Reversible	Tri-Style Pkg	Independent	Regular	Optional Arm	Aluminum	UL, UL10C	10 Years
PR52	ADJ 2-5	1	Adjustable			Full Cover	Reversible	Tri-Style Pkg	Independent	Regular	Optional Arm	Aluminum	UL, UL10C	10 Years
PR54DA	ADJ 2-5	1	Adjustable		Adjustable	Full Cover	Reversible	Tri-Style Pkg	Independent	Regular	Optional Arm	Aluminum	UL, UL10C	10 Years
PR70BF	ADJ 1/2 - 4	2	Adjustable	Yes		Full Cover	Reversible	Tri-Style Pkg	Independent	Regular	Optional Arm	Aluminum	UL, UL10C	10 Years
PR72DA	ADJ 1/2 - 4	2	Adjustable	Yes	Adjustable	Full Cover	Reversible	Tri-Style Pkg	Independent	Regular	Optional Arm	Aluminum	UL, UL10C	10 Years
PR74	ADJ 2 - 6	2	Adjustable			Full Cover	Reversible	Tri-Style Pkg	Independent	Regular	Optional Arm	Aluminum	UL, UL10C	10 Years
PR76DA	ADJ 2 - 6	2	Adjustable		Adjustable	Full Cover	Reversible	Tri-Style Pkg	Independent	Regular	Optional Arm	Aluminum	UL, UL10C	10 Years
PR80	ADJ 2-5	2	Adjustable			Slim Style	Reversible	Tri-Style Pkg	Independent	Regular	Optional Arm	Aluminum	UL, UL10C	10 Years
PR82BF	ADJ 1-4	2	Adjustable	Yes		Slim Style	Reversible	Tri-Style Pkg	Independent	Regular	Optional Arm	Aluminum	UL, UL10C	10 Years
PR90	ADJ 1-6	1	Adjustable	Yes		Full Cover	Reversible	Tri-Style Pkg	Independent	Regular	Optional Arm	Cast Iron	UL, UL10C	10 Years
PR92DA	ADJ 1-6	1	Adjustable	Yes	Adjustable	Full Cover	Reversible	Tri-Style Pkg	Independent	Regular	Optional Arm	Cast Iron	UL, UL10C	10 Years

## **CLOSER SELECTION DATA**

## **ESTIMATED FREQUENCY OF DOOR OPERATION:**

APPLICATION	DAILY	FREQUENCY	CLOSER TYPE
Mall or Large Department Store Entrance	2,000 ~ 5,000	VERY HIGH	HD FLOOR
Large Office Building Entrance			
Large Store or Bank Entance			
Large School Entrance			FLOOR
Medium to Large Restaurants	1,000 ~ 2,000	HIGH	HD SURFACE
Busy Fast Food Restaurants			HD OH CONCEALED
Busy Convenience Stores			
Large Theater Entance			
Medium Store or Bank Entrance			
Medium Office Building Entrance			OH CONCEALED
Office Building Restroom Doors	100 ~ 1,000	MEDIUM	FLOOR
Corridor Doors			SURFACE
Public Restroom Doors			
Small Store or Public Building Entrance			
Small Store or Office Restroom Doors			
Residential Doors	10 ~ 100	LOW	SURFACE
Closet Doors			

## **DC50 SERIES SURFACE CLOSERS:**

## RECOMMENDED FOR MEDIUM FREQUENCY USE ON ALUMINUM, WOOD OR METAL DOORS

		APPLICA	APPLICABLE DOOR SIZE (WIDTH)		
CLOSER	CLOSER	INTERIOR	EXTERIO	R DOOR	APPLICABLE
MODEL	SIZE	DOOR	SWING OUT	SWING IN	DOOR WEIGHT
DC51A	1	32"	30"	26"	33-66 Lbs.
DC51BRZ		(0.81m)	(0.76m)	(0.66m)	(15-30 kg)
DC52A	2	36"	32"	28"	66-99 Lbs.
DC52BRZ		(0.91m)	(0.81m)	(0.71m)	(30-45 kg)
DC53A	3	42"	36"	32"	99-143 Lbs.
DC53BRZ		(1.07m)	(0.91m)	(0.81m)	(45-65 kg)
DC54A	4	48"	42"	36"	143-187 Lbs.
DC54BRZ		(1.22m)	(1.07m)	(0.91m)	(65-85 kg)
DC55A	5	54"	48"	42"	187-264 Lbs.
DC55BRZ		(1.37m)	(1.22m)	(1.07m)	(85-120 kg)

### **PR40 SERIES SURFACE CLOSERS:**

#### RECOMMENDED FOR MEDIUM FREQUENCY USE ON ALUMINUM, WOOD OR METAL DOORS

		APPLICABLE DOOR SIZE (WIDTH)			
CLOSER MODEL	CLOSER SIZE	INTERIOR DOOR	EXTERIO SWING OUT	R DOOR SWING IN	APPLICABLE DOOR WEIGHT
PR40	1 - 4	32 - 48"	28 - 42"	24 - 36"	33 - 187 Lbs.
		(0.81 - 1.22 m)	(0.71 - 1.07 m)	(0.61 - 0.91 m)	(15 - 85 kg)
PR42	2 - 5	36 - 54"	32 - 48"	28 - 42"	66 - 264 Lbs.
		(0.91 - 1.37 m)	(0.81 - 1.22 m)	(0.71 - 1.07 m)	(30 - 120 kg)
PR44DA	2 - 5	36 - 54"	32 - 48"	28 - 42"	66 - 264 Lbs.
		(0.91 - 1.37 m)	(0.81 - 1.22 m)	(0.71 - 1.07 m)	(30 - 120 kg)

## **PR50 SERIES SURFACE CLOSERS:**

#### RECOMMENDED FOR MEDIUM TO HIGH FREQUENCY USE ON ALUMINUM, WOOD OR METAL DOORS

		APPLICABLE DOOR SIZE (WIDTH)			
CLOSER	CLOSER	INTERIOR	EXTERIO	R DOOR	APPLICABLE
MODEL	SIZE	DOOR	SWING OUT	SWING IN	DOOR WEIGHT
PR50	1 - 4	32 - 48"	28 - 42"	24 - 36"	33 - 187 Lbs.
		(0.81 - 1.22 m)	(0.71 - 1.07 m)	(0.61 - 0.91 m)	(15 - 85 kg)
PR52	2 - 5	36 - 54"	32 - 48"	28 - 42"	66 - 264 Lbs.
		(0.91 - 1.37 m)	(0.81 - 1.22 m)	(0.71 - 1.07 m)	(30 - 120 kg)
PR54DA	2 - 5	36 - 54"	32 - 48"	28 - 42"	66 - 264 Lbs.
		(0.91 - 1.37 m)	(0.81 - 1.22 m)	(0.71 - 1.07 m)	(30 - 120 kg)

## **PR70 SERIES SURFACE CLOSERS:**

## RECOMMENDED FOR MEDIUM FREQUENCY USE ON ALUMINUM, WOOD OR METAL DOORS

		APPLICABLE DOOR SIZE (WIDTH)			
CLOSER	CLOSER	INTERIOR	EXTERIO	•	APPLICABLE
MODEL	SIZE	DOOR	SWING OUT	SWING IN	DOOR WEIGHT
PR70BF	1/2 - 4	28 - 48"	24 - 42"	20 - 36"	22 - 187 Lbs.
		(0.71 - 1.22 m)	(0.76 - 1.07 m)	(0.66 - 1.91 m)	(10 - 85 kg)
PR72DA	1/2 - 4	28 - 48"	24 - 42"	20 - 36"	22 - 187 Lbs.
		(0.71 - 1.22 m)	(0.76 - 1.07 m)	(0.66 - 1.91 m)	(10 - 85 kg)
PR74	2 - 6	36 - 58"	32 - 52"	28 - 48"	66 - 330 Lbs.
		(0.91 - 1.47 m)	(0.81 - 1.32 m)	(0.71 - 1.22 m)	(30 - 150 kg)
PR76DA	2 - 6	36 - 58"	32 - 52"	28 - 48"	66 - 330 Lbs.
		(0.91 - 1.47 m)	(0.81 - 1.32 m)	(0.71 - 1.22 m)	(30 - 150 kg)

### PR80 SERIES SURFACE CLOSERS:

#### RECOMMENDED FOR MEDIUM FREQUENCY USE ON ALUMINUM, WOOD OR METAL DOORS

		APPLICABLE DOOR SIZE (WIDTH)			
CLOSER	CLOSER	INTERIOR	EXTERIO	EXTERIOR DOOR	
MODEL	SIZE	DOOR	SWING OUT	SWING IN	DOOR WEIGHT
PR80	2 - 5	36 - 54"	32 - 48"	28 - 42"	66 - 264 Lbs.
		(0.91 - 1.37 m)	(0.81 - 1.22 m)	(0.71 - 1.07 m)	(30 - 120 kg)
PR82BF	1 - 4	32 - 48"	28 - 42"	24 - 36"	33 - 187 Lbs.
		(0.81 - 1.22 m)	(0.71 - 1.07 m)	(0.61 - 0.91 m)	(15 - 85 kg)

## PR90 SERIES SURFACE CLOSERS:

#### RECOMMENDED FOR MEDIUM TO HIGH FREQUENCY USE ON ALUMINUM, WOOD OR METAL DOORS

		APPLICABLE DOOR SIZE (WIDTH)			
CLOSER	CLOSER CLOSER INTER		EXTERIOR DOOR		APPLICABLE
MODEL	SIZE	DOOR	SWING OUT	SWING IN	DOOR WEIGHT
PR90	1 - 6	32 - 60"	28 - 54"	26 - 48"	33 - 330 Lbs.
		(0.81 - 1.52 m)	(0.71 - 1.37 m)	(0.66 - 1.22 m)	(15 - 150 kg)
PR92DA	1 - 6	32 - 60"	28 - 54"	26 - 48"	33 - 330 Lbs.
		(0.81 - 1.52 m)	(0.71 - 1.37 m)	(0.66 - 1.22 m)	(15 - 150 kg)

NOTE: 1. Closer Force readings are in pound force required to open specified door width and are taken at the lock stile.

- 2. All opening forces are based on average conditions. Tall or extremely heavy doors, doors that may be subjected to wind, drafts, or extreme air conditioning pressure, may require the next size closer.
- 3. Although the ADA Closer is designed to provide ADA barrier-free opening force requirements, adequate closing force may not be obtained due to varying site conditions and door size.

## **CRL CLOSER DIMENSIONS**

DC50 SERIES		CLOS			
DESCRIPTION	DC51	DC52	DC53	DC54	DC55
A: Length of Closer Body	7-1/8"	8-7/8"	8-7/8"	9-3/4"	9-3/4"
	(181 mm)	(225 mm)	(225 mm)	(247 mm)	(247 mm)
B: Horizontal Mounting Holes	6-1/2"	8-3/16"	8-3/16"	9-1/16"	9-1/16"
(Center-to-Center)	(165 mm)	(208 mm)	(208 mm)	(230 mm)	(230 mm)
C: Vertcal Mounting Holes	3/4"	3/4"	3/4"	3/4"	3/4"
(Center-to-Center)	(19 mm)				
D: Closer Body Height	1-5/8"	1-31/32"	1-31/32"	1-31/32"	1-31/32"
	(41 mm)	(50 mm)	(50 mm)	(50 mm)	(50 mm)
E: Projection from Door	2-15/32"	2-29/32"	2-29/32"	2-29/32"	2-29/32"
	(63 mm)	(73 mm)	(73 mm)	(73 mm)	(73 mm)

	R40 SERIES SCRIPTION	MODELS PR40 - PR44
A:	Length of Closer	9-3/4"
		(248 mm)
B:	Horizontal Mounting Holes	9-1/16"
	(Center-to-Center)	(230 mm)
C:	Vertcal Mounting Holes	3/4"
	(Center-to-Center)	(19 mm)
D:	Closer Body Height	1-13/16"
		(46 mm)
E:	Projection from Door	2-13/16"
		(72 mm)

	R70 SERIES SCRIPTION	MODELS PR70 - PR76
A:	Length of Closer Body	11-23/32"
		(298 mm)
	(Center-to-Center)	(282 mm)
C:	Vertcal Mounting Holes	3/4"
	(Center-to-Center)	(19 mm)
D:	Closer Body Height	1-27/32"
	-	(47 mm)
E:	Projection from Door	2-3/8"
		(60 mm)

PR90 SERIES DESCRIPTION	WITH COVER
A: Length of Closer	12-1/4"
	(311 mm)
B: Vertcal Mounting Holes	2-1/4"
(Center-to-Center)	(57 mm)
C: Closer Body Height	3-7/32"
	(82 mm)
D: Projection from Door	2-5/32"
	(55 mm)

PR50 SERIES	MODELS PR50 - PR54	
DESCRIPTION	BODY ONLY	WITH COVER
A: Length of Closer	12-9/16"	13"
	(319 mm)	(330 mm)
B: Horizontal Mounting Holes	11-15/16"	11-15/16"
(Center-to-Center)	(304 mm)	(304 mm)
C: Vertcal Mounting Holes	3/4"	3/4"
(Center-to-Center)	(19 mm)	(19 mm)
D: Closer Body Height	1-3/4"	2-15/16"
	(45 mm)	(75 mm)
E: Projection from Door	2-3/16"	2-5/16"
	(56 mm)	(59 mm)

PR80 SERIES	MODELS PR80 & PR82	
DESCRIPTION	BODY ONLY	WITH COVER
A: Length of Closer	9-3/4"	10-5/8"
_	(248 mm)	(270 mm)
(Center-to-Center)	(230 mm)	(230 mm)
C: Vertcal Mounting Holes	3/4"	3/4"
(Center-to-Center)	(19 mm)	(19 mm)
D: Closer Body Height	1-25/32"	2-1/16"
	(45 mm)	(53 mm)
E: Projection from Door	2-29/32"	2-15/16"
	(73 mm)	(75 mm)