INSTALLATION INSTRUCTIONS

Art#: DC8316 SERIES
DOOR CLOSER

DURABLE COLLECTION

Unit: mm

⚠ CAUTION

An improperly installed or incorrectly adjusted door closer can result in property damage or personal injury. Follow these instructions carefully to prevent misapplication or misadjustment.

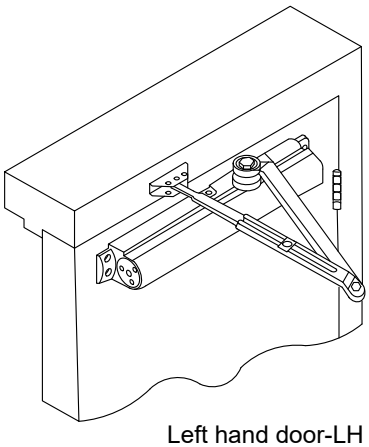
Adjustable power size by valve (1 to 6)
Non hold open
Grade 1, meets ANSI A 156.4

Regular Arm Installation

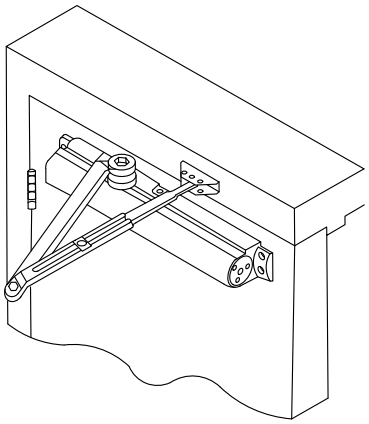
Closer mounts on pull side of door

See Page 3.

Closer cover not shown



Left hand door-LH
Right hand reverse-RHR



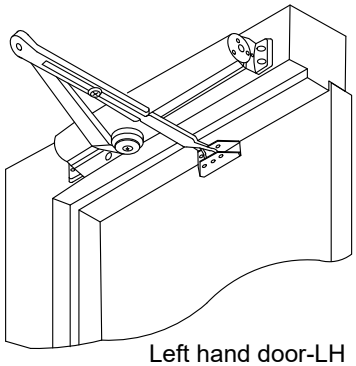
Right hand door-RH
Left hand reverse-LHR

Top Jamb Installation

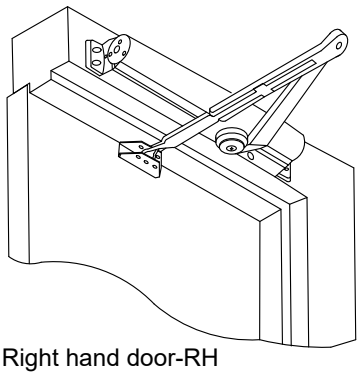
Closer mounts on frame face on opposite push side of door

See Page 4.

Closer cover not shown



Left hand door-LH
Right hand reverse-RHR



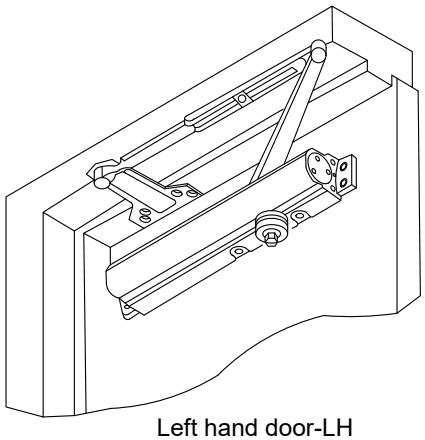
Right hand door-RH
Left hand reverse-LHR

Parallel Arm Installation

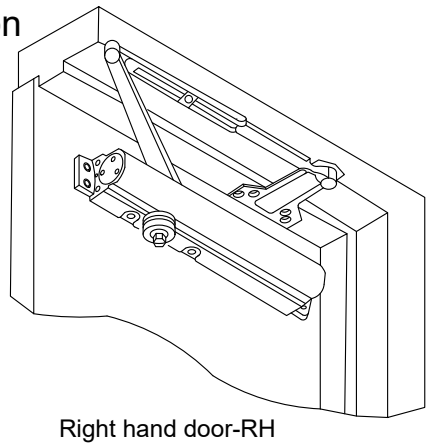
Closer mounts on opposite to push side of door

See Page 5.

Closer cover not shown



Left hand door-LH
Right hand reverse-RHR



Right hand door-RH
Left hand reverse-LHR

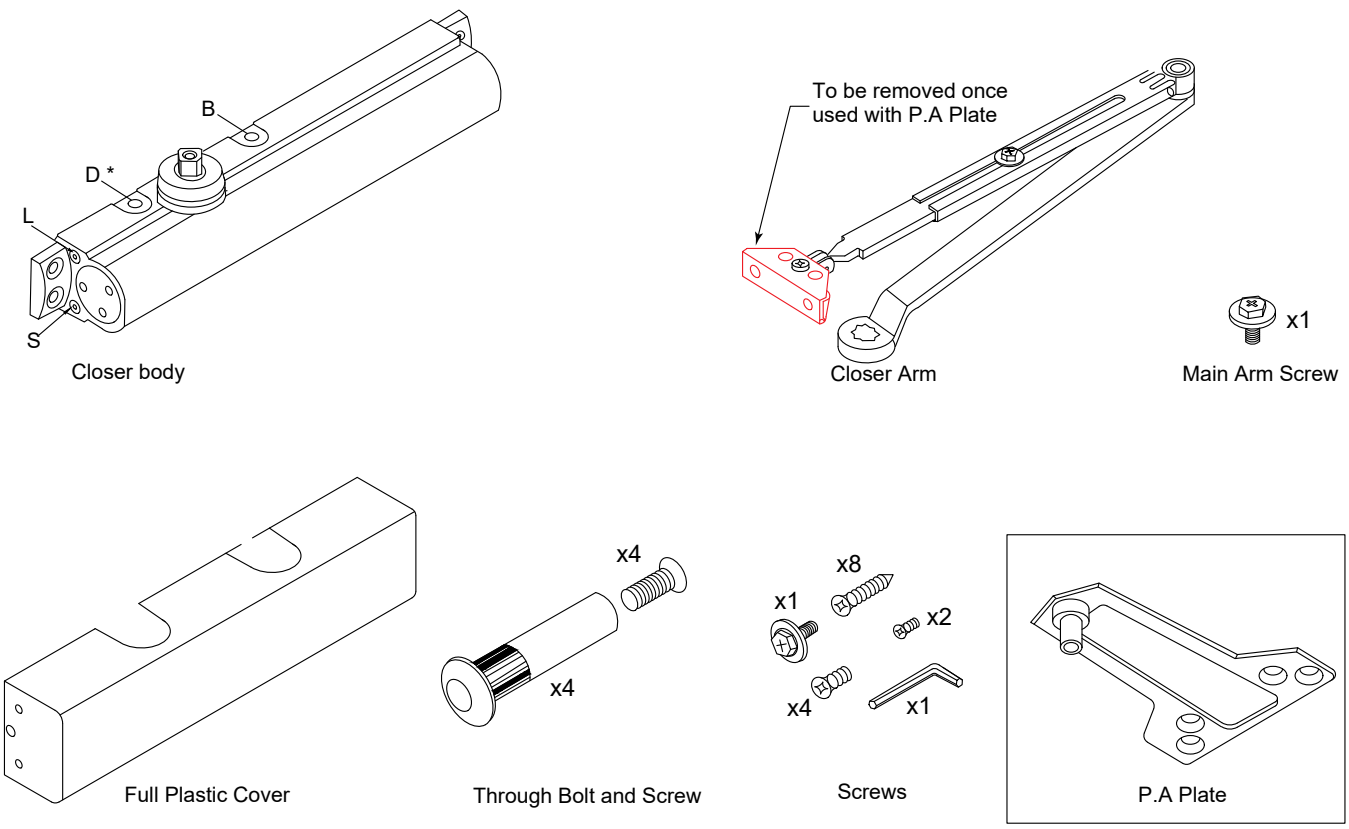
INSTALLATION INSTRUCTIONS
Art#: DC8316 SERIES
DOOR CLOSER

DURABLE COLLECTION

Unit: mm

Components:

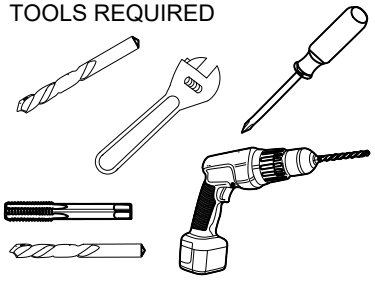
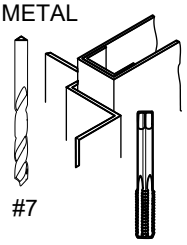
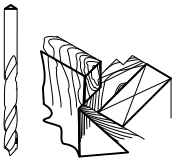
Figure 1



1. It is recommended that the door be hung on ball bearing type hinges so door swings freely.
2. A separate door stop (supplied by others) is recommended to prevent damage to the door closer, closer arm, or to the leaf, frame or adjacent walls.
3. Door and frame must be properly reinforced or through bolts used to prevent the mounting screws from pulling out.

Figure 2

Preparation for Fasteners

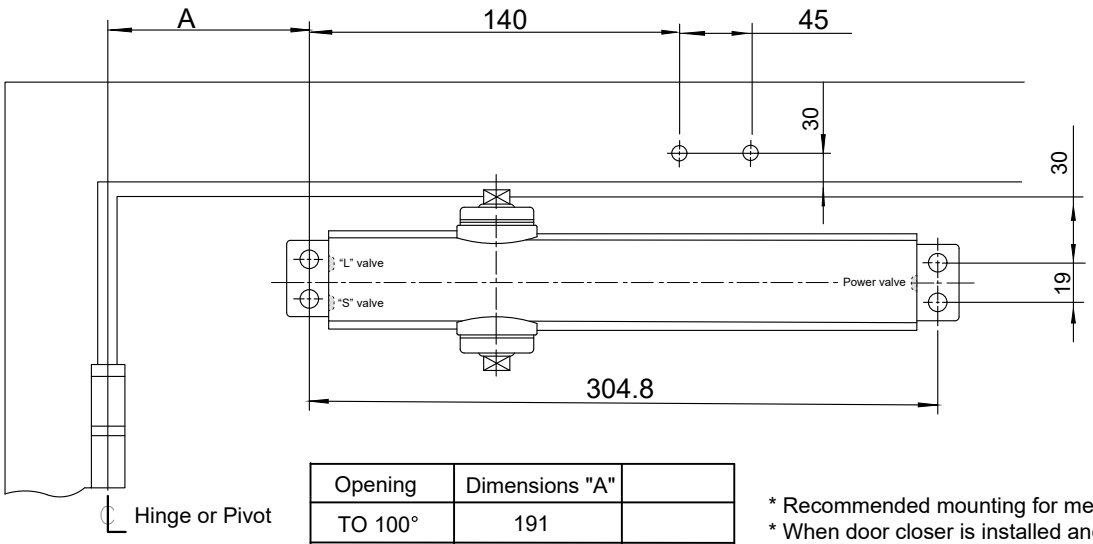
TOOLS REQUIRED	METAL	WOOD	Self Drilling /Tapping screws Wood and Metal	Sleeve Nut and Bolt
	 #7 1/4"-20	 3/16" *Pilot Hole Required	 For wood, drill 3/16" hole Machine Screws  #7 Drill, 1/4"-20 Tap	 Drill 9/32" thru from Closer side 3/8" Drill other Side Check building and fire codes to see if your application requires the use of sleeve nuts and bolts.

INSTALLATION INSTRUCTIONS
Art#: DC8316 SERIES
DOOR CLOSER

DURABLE COLLECTION

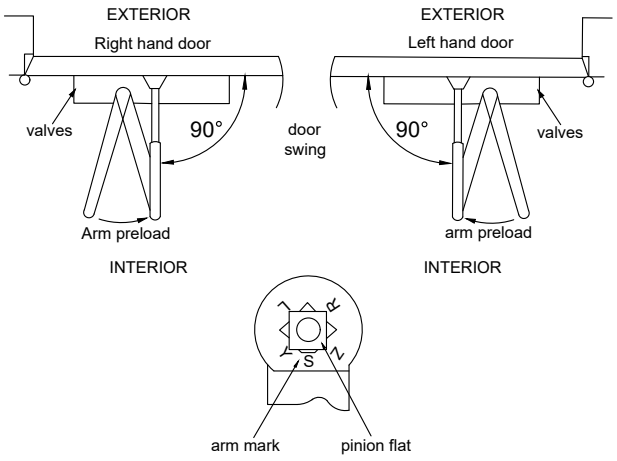
Unit: mm

Regular arm



Opening	Dimensions "A"	
TO 100°	191	
*TO 130°	152	
*TO 180°	114	

* Recommended mounting for meeting ADA compliance
* When door closer is installed and adjusted to conform to ADA reduced opening force requirements (5 lbs max.), it may not have adequate closing force to reliably close and latch the door.



Installation Sequence

1. Select degree of opening and use dimensions shown or template to locate 4 holes on door for closer body and 2 holes on frame face forearm shoe. For application that are different from above, a separate template will be required.

2. Prepare leaf and frame for fasteners. See 'Preparation for Fasteners", Figure 2, Page 2.

3. Before installing closer body, adjust spring power for closer using Power adjustment chart below right.

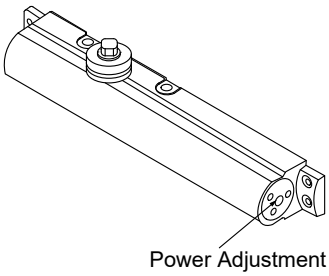
4. Install closer on door with speed regulating valves toward the hinge.

5. Remove forearm screw from adjusting rod and disassemble arm. See Figure 1, Fasten arm shoe (with rod) to frame face.

6. Mount main arm onto closer pinion shaft, aligning arm mark "S" with pinion flat. Secure with main arm screw.

7. Reassemble arm. Adjust forearm length so that it will be perpendicular (at a 90° degree) to the door face. Secure with forearm screw.

8.Adjust closer (See page 6) and install cover.



To increase power
Turn clockwise 13 turns maximum

To decrease power
Turn counter-clockwise

Power Adjustment Chart

Leaf size mm	Full clockwise turns of closer power adjustment nut (from "0" turns)	
	interior door	exterior door
609.6 - 762	-7	-5
762 - 863.6	-3	0
863.6 - 965.2	0 (default)	4
965.2 - 1219.2	4	8
1219.2 - 1371.6	8	13
1371.6 - 1524	13	

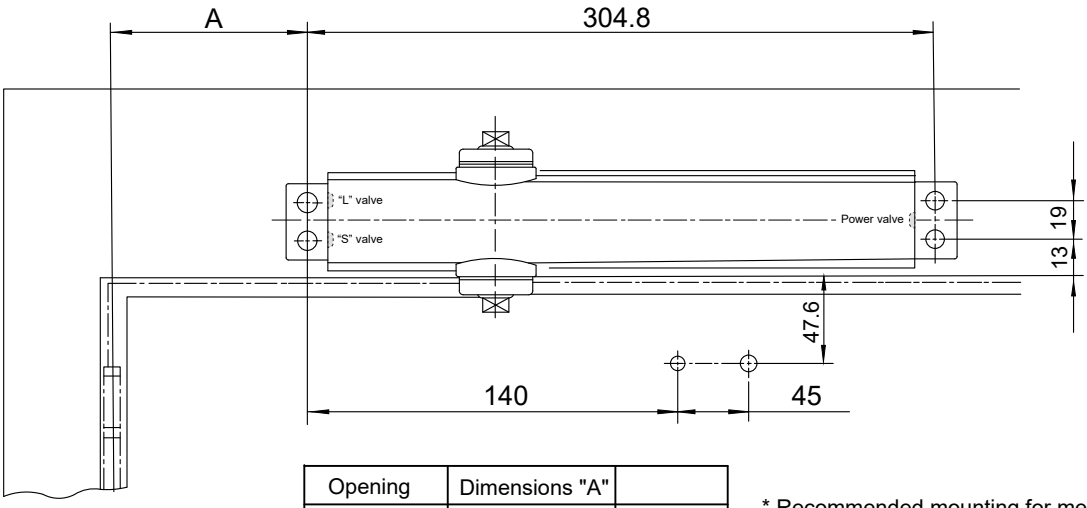
NOTE: Maximum of 20 turns (360°) of power adjustment Nut. Closer is shipped at 7 turns from the factory.

INSTALLATION INSTRUCTIONS
Art#: DC8316 SERIES
DOOR CLOSER

DURABLE COLLECTION

Unit: mm

Top Jamb



Opening	Dimensions "A"	
TO 100°	191	
*TO 130°	152	
*TO 180°	114	

℄ Hinge or Pivot

* Recommended mounting for meeting ADA compliance
* When door closer is installed and adjusted to conform to ADA reduced opening force requirements (5 lbs max.), it may not have adequate closing force to reliably close and latch the door.

Installation Sequence

1. Select degree of opening and use dimensions shown or template to locate 4 holes on frame face for closer body and 2 holes on door for forearm shoe. For application that are different from above, a separate template will be required.

2. Prepare leaf and frame for fasteners. See 'Preparation for Fasteners", Figure 2, Page 2.

3. Before installing closer body, adjust spring power for closer using Power adjustment chart below right.

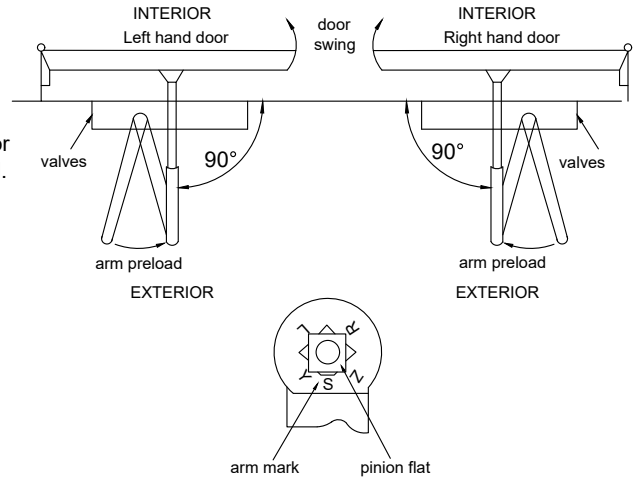
4. Install closer on frame face with speed regulating valves toward the hinge.

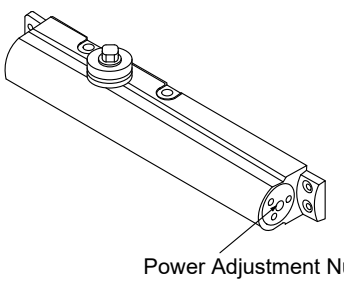
5. Remove forearm screw from adjusting rod and disassemble arm. See Figure 1, Fasten arm shoe (with rod) to door.

6. Mount main arm onto closer pinion shaft, aligning arm mark "S" with pinion flat. Secure with main arm screw.

7. Reassemble arm. Adjust forearm length so that it will be perpendicular (at a 90° degree) to the door face. Secure with forearm screw.

8.Adjust closer (See page 6) and install cover.





To increase power
Turn clockwise 13 turns maximum

To decrease power
Turn counter-clockwise

Power Adjustment Chart

Leaf size mm	Full clockwise turns of closer power adjustment nut (from "0" turns)	
	interior door	exterior door
609.6 - 762	-7	-5
762 - 863.6	-3	0
863.6 - 965.2	0 (default)	4
965.2 - 1219.2	4	8
1219.2 - 1371.6	8	13
1371.6 - 1524	13	

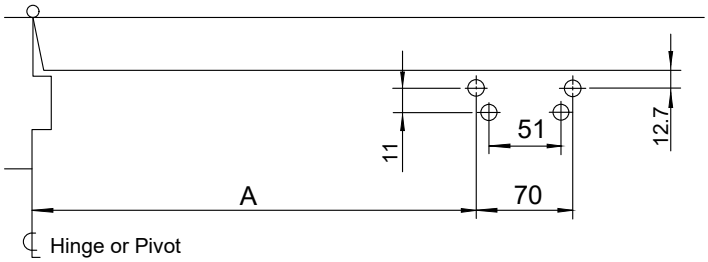
NOTE: Maximum of 20 turns (360°) of power adjustment Nut. Closer is shipped at 7 turns from the factory.

INSTALLATION INSTRUCTIONS
Art#: DC8316 SERIES
DOOR CLOSER

DURABLE COLLECTION

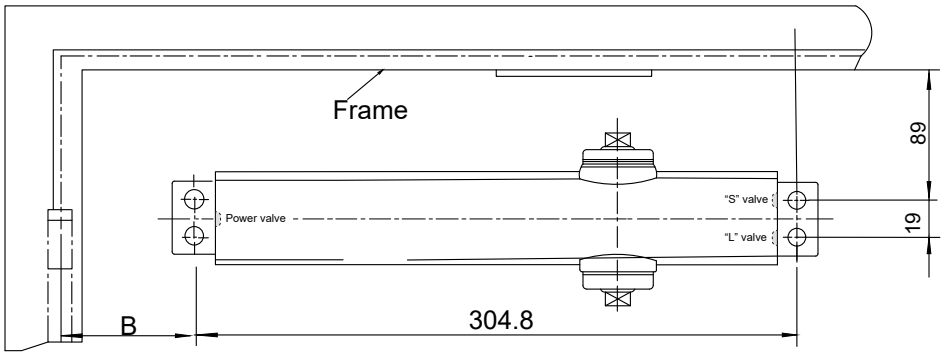
Unit: mm

Parallel Arm



Opening	Dimensions "A"	Dimensions "B"	
*TO 120°	241	95	
*TO 180°	178	32	

* Recommended mounting for meeting ADA compliance
* When door closer is installed and adjusted to conform to ADA reduced opening force requirements (5 lbs max.), it may not have adequate closing force to reliably close and latch the door.



Installation Sequence

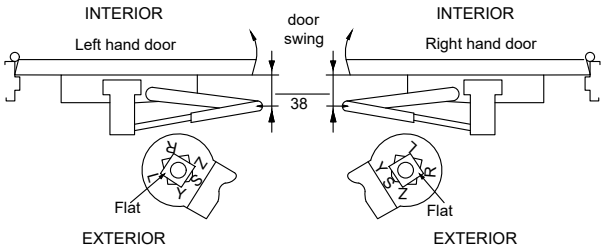
1. Select degree of opening and use dimensions shown or template to locate 4 holes on door for closer body and 4 holes underside of frame for P.A plate. For application that are different from above, a separate template will be required.
2. Prepare leaf and frame for fasteners. See 'Preparation for Fasteners", Figure 2, Page 2.
3. Before installing closer body, set spring power for closer using Power adjustment chart, Below.
4. Install closer on leaf with power adjustment nut toward the hinge.
5. Mount P.A. plate to frame. Remove forearm screw from adjusting rod (See Figure 1) and attach adjusting rod.
6. Install main arm on pinion shaft. See main arm installation instructions below.
7. Reassemble arm. Preload is accomplished by adjusting forearm length so that it will set arm elbow about 38 mm from the door face when connect to the main arm. Secure with forearm screw.
8. Adjust closer (See page 6) and install cover.

Power Adjustment Chart

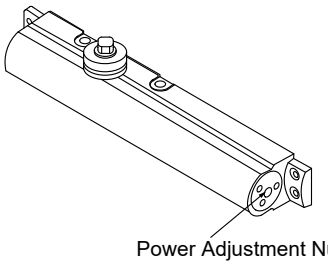
Leaf size mm	Full clockwise turns of closer power adjustment nut (from "0" turns)	
	interior door	exterior door
609.6 - 762	-4	0
762 - 863.6	0 (default)	5
863.6 - 965.2	6	10
965.2 - 1219.2	12	
1219.2 - 1371.6		

NOTE: Maximum of 20 turns (360°) of power adjustment Nut. Closer is shipped at 7 turns from the factory.

Main Arm Installation Instructions



Use adjustable wrench to rotate spindle 45° counter-clockwise for right hand door or clockwise for left hand door. Place main arm on spindle so that the "R' (Right hand door) or 'L" (Left hand door) lines up with spindle flat. Secure main arm and spindle by tightening spindle bolt.




To increase power
Turn clockwise 13 turns maximum


To decrease power
Turn counter-clockwise

INSTALLATION INSTRUCTIONS
Art#: DC8316 SERIES
DOOR CLOSER

DURABLE COLLECTION

Unit: mm

Unit adjustment

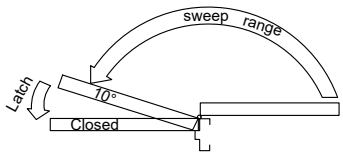
Closing speed controls (Figure 1, 2 or 6)

- Valve "S" controls sweep range
- Valve "L" controls latch range
- Valve "D" controls delayed action

Opening door control (Figure 4 & 5)

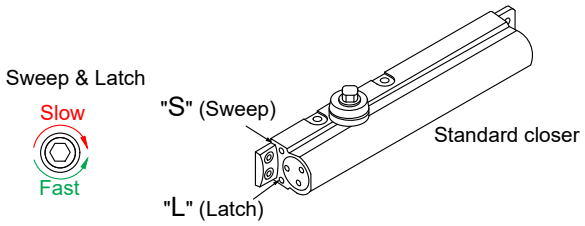
- Backcheck "B" Valve controls the hydraulic resistance to door opening. **Never close this valve completely. It is not to provide a position stop.**

Closing speed controls Figure 1

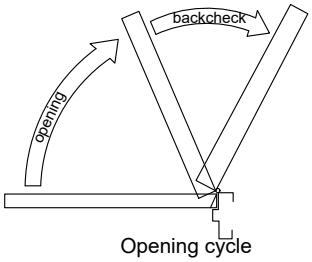


Standard
Closing cycle

Closing speed controls Figure 2

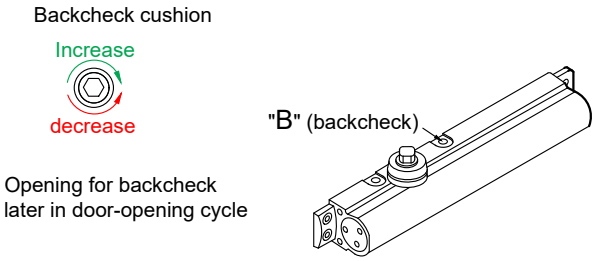


Opening door controls Figure 4



Opening cycle

Backcheck Figure 5

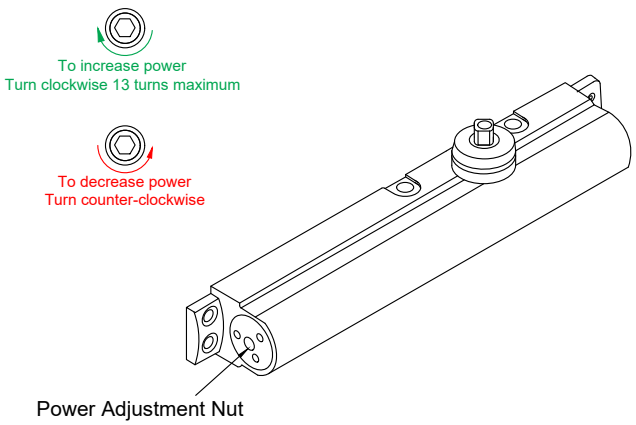


(Never close backcheck valve completely)

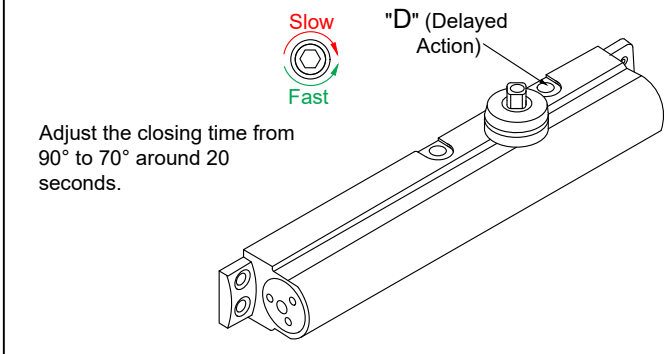
Spring power control

- Adjusted as required (see charts on pages 3, 4 & 5)

Closing power control Figure 3

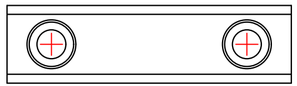


Delayed Closing (Optional) Figure 6



DURABLE COLLECTION

WARNING:
PLEASE PRINT AT ACTUAL SIZE, DO NOT SCALE TO FIT.



Notes:
1. Use this template to locate the mounting holes of the closer body and arm shoe.
2. Align Frame Stop and Edge of door with thick dark lines shown on template.
3. Align Door Edge with line of the desired degree of opening.
4. Mark holes locations and drill holes according to Preparation for Fasteners chart shown below.

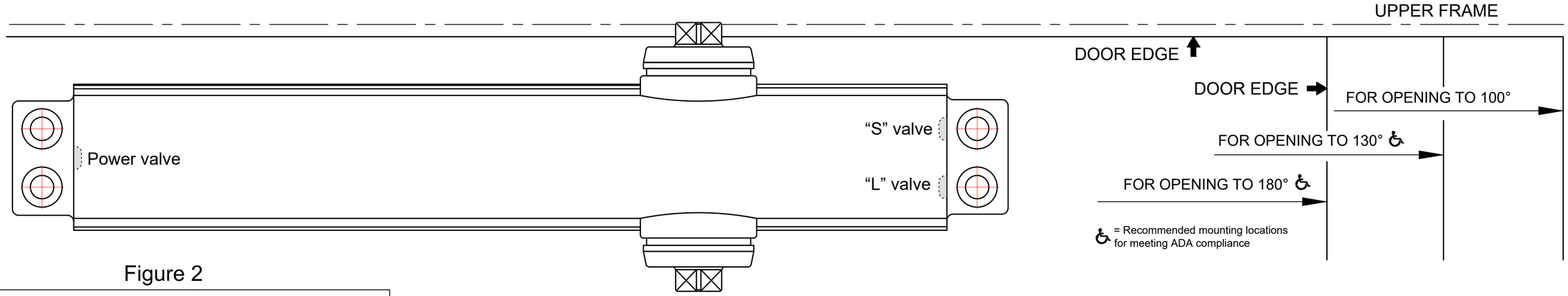


Figure 2

Preparation for Fasteners		
Fasteners	Door or Frame	Drill-Sizes
Self Drilling/Tapping Screw	Hollow Metal or Aluminum	No drill required
	Wood (see note*)	3/16" pilot hole
1/4"-20 Machine Screw	Hollow Metal	Drill #7 (0.201" dia.)& Tap 1/4"-20
1/4"-20 Machine Screw used with Through Bolt	Hollow Metal or Aluminum	9/32" drill closer side & 3/8" drill opposite side
	Wood	
Wood Screw-Optional	Wood	3/16" pilot hole

*NOTE: Wood doors/frames must have the pilot holes drilled when using Self Drilling/Tapping screws.

DC8316 SERIES
REGULAR ARM APPLICATION-PULL SIDE
TEMPLATE FOR A LEFT-HAND DOOR (LH)
OR RIGHT-HAND REVERSE (RHR)

DURABLE COLLECTION

WARNING:
PLEASE PRINT AT ACTUAL SIZE, DO NOT SCALE TO FIT.

Notes:
1. Use this template to locate the mounting holes of the closer body and arm shoe.
2. Align Frame Stop and Edge of door with thick dark lines shown on template.
3. Align Door Edge with line of the desired degree of opening.
4. Mark holes locations and drill holes according to Preparation for Fasteners chart shown below.

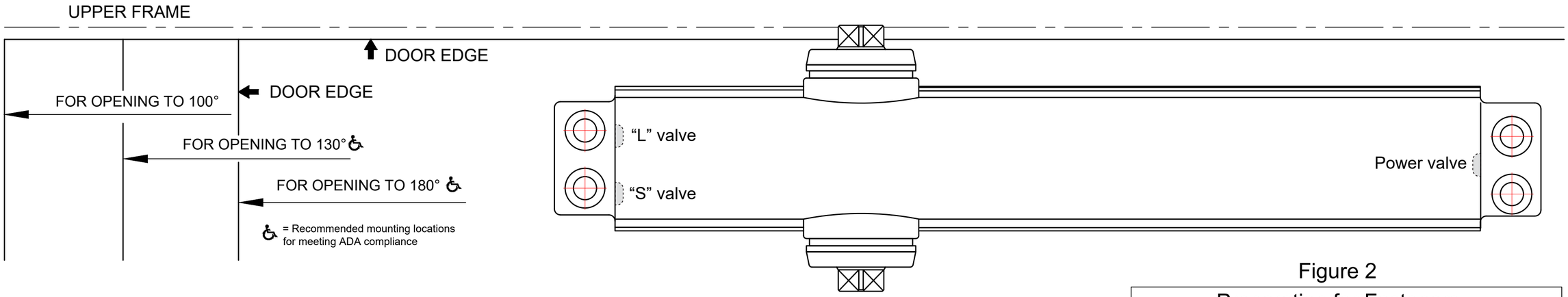


Figure 2

DC8316 SERIES
REGULAR ARM APPLICATION-PULL SIDE
TEMPLATE FOR A RIGHT-HAND DOOR (RH)
OR LEFT-HAND REVERSE (LHR)

Preparation for Fasteners		
Fasteners	Door or Frame	Drill-Sizes
Self Drilling/Tapping Screw	Hollow Metal or Aluminum	No drill required
	Wood (see note*)	3/16" pilot hole
1/4"-20 Machine Screw	Hollow Metal	Drill #7 (0.201" dia.)& Tap 1/4"-20
1/4"-20 Machine Screw used with Through Bolt	Hollow Metal or Aluminum	9/32" drill closer side & 3/8" drill opposite side
	Wood	
Wood Screw-Optional	Wood	3/16" pilot hole

*NOTE: Wood doors/frames must have the pilot holes drilled when using Self Drilling/Tapping screws.

DURABLE COLLECTION

WARNING:
PLEASE PRINT AT ACTUAL SIZE, DO NOT SCALE TO FIT.

Notes:
1. Use this template to locate the mounting holes of the closer body and arm shoe.
2. Align Frame Stop and Edge of door with thick dark lines shown on template.
3. Align Door Edge with line of the desired degree of opening.
4. Mark holes locations and drill holes according to Preparation for Fasteners chart shown below.

DC8316 SERIES
TOP JAMB APPLICATION-PUSH SIDE
TEMPLATE FOR A RIGHT-HAND DOOR (RH) OR LEFT-HAND REVERSE (LHR)

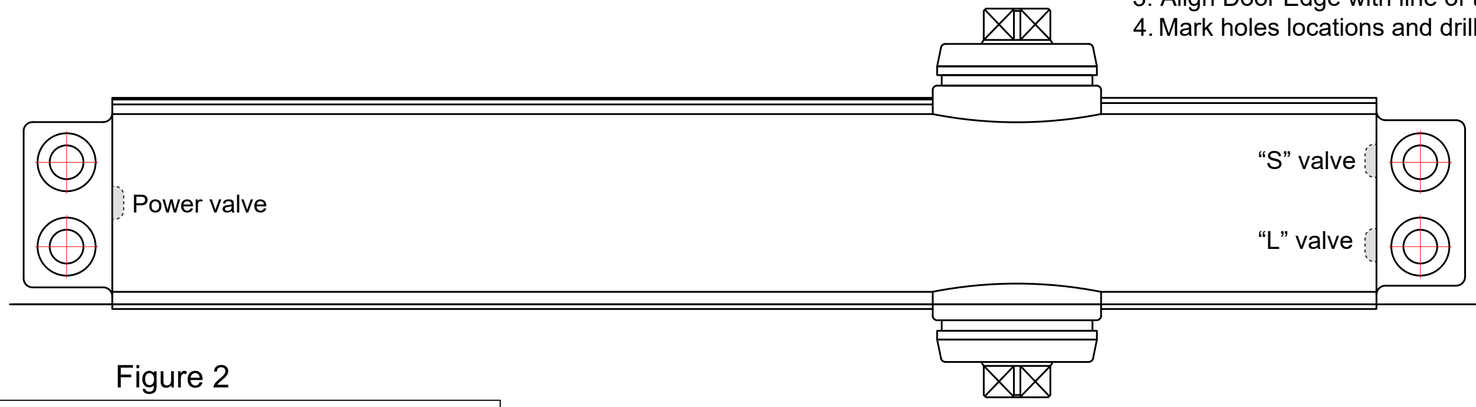
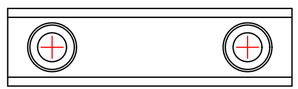
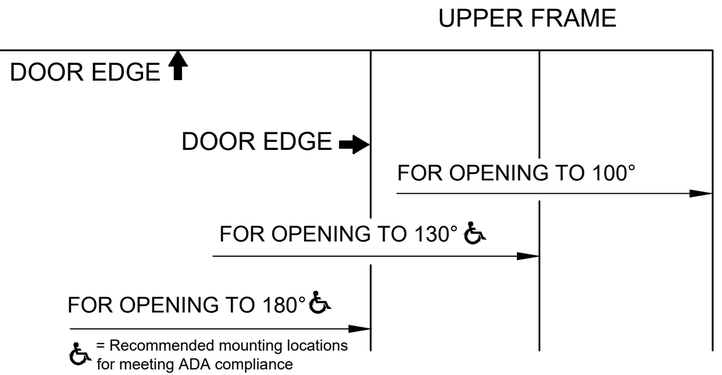


Figure 2





Preparation for Fasteners		
Fasteners	Door or Frame	Drill-Sizes
Self Drilling/Tapping Screw	Hollow Metal or Aluminum	No drill required
	Wood (see note*)	3/16" pilot hole
1/4"-20 Machine Screw	Hollow Metal	Drill #7 (0.201" dia.)& Tap 1/4"-20
1/4"-20 Machine Screw used with Through Bolt	Hollow Metal or Aluminum	9/32" drill closer side & 3/8" drill opposite side
	Wood	
Wood Screw-Optional	Wood	3/16" pilot hole

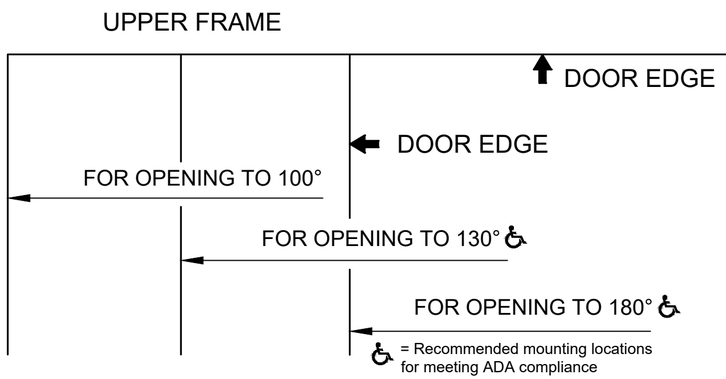
*NOTE: Wood doors/frames must have the pilot holes drilled when using Self Drilling/Tapping screws.

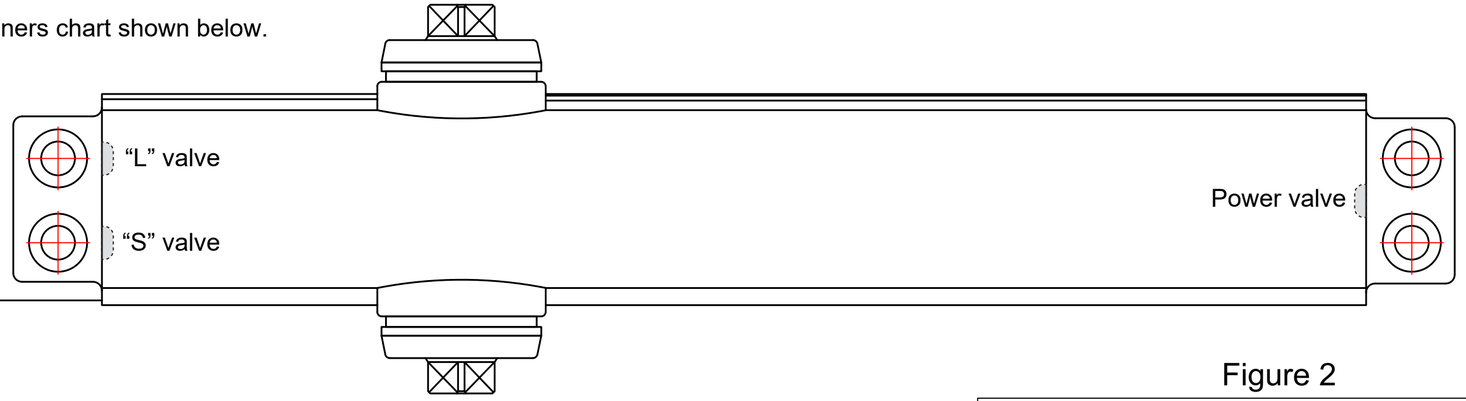
DURABLE COLLECTION

WARNING:
PLEASE PRINT AT ACTUAL SIZE, DO NOT SCALE TO FIT.

Notes:
1. Use this template to locate the mounting holes of the closer body and arm shoe.
2. Align Frame Stop and Edge of door with thick dark lines shown on template.
3. Align Door Edge with line of the desired degree of opening.
4. Mark holes locations and drill holes according to Preparation for Fasteners chart shown below.

DC8316 SERIES
TOP JAMB APPLICATION-PUSH SIDE
TEMPLATE FOR A LEFT-HAND DOOR (LH)
OR RIGHT-HAND REVERSE (RHR)





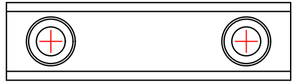


Figure 2

Preparation for Fasteners		
Fasteners	Door or Frame	Drill-Sizes
Self Drilling/Tapping Screw	Hollow Metal or Aluminum	No drill required
	Wood (see note*)	3/16" pilot hole
1/4"-20 Machine Screw	Hollow Metal	Drill #7 (0.201" dia.)& Tap 1/4"-20
1/4"-20 Machine Screw used with Through Bolt	Hollow Metal or Aluminum	9/32" drill closer side & 3/8" drill opposite side
	Wood	
Wood Screw-Optional	Wood	3/16" pilot hole

*NOTE: Wood doors/frames must have the pilot holes drilled when using Self Drilling/Tapping screws.

DURABLE COLLECTION

WARNING:
PLEASE PRINT AT ACTUAL SIZE, DO NOT SCALE TO FIT.

Notes:
1. Use this template to locate the mounting holes of the closer body and P.A Plate.
2. Align Frame Stop and Edge of door with thick dark lines shown on template.
3. Align Door Edge with line of the desired degree of opening.
4. Mark holes locations and drill holes according to Preparation for Fasteners chart shown below.

DC8316 SERIES PARALLEL ARM APPLICATION-PUSH SIDE TEMPLATE FOR A RIGHT-HAND DOOR (RH) OR LEFT-HAND REVERSE (LHR)

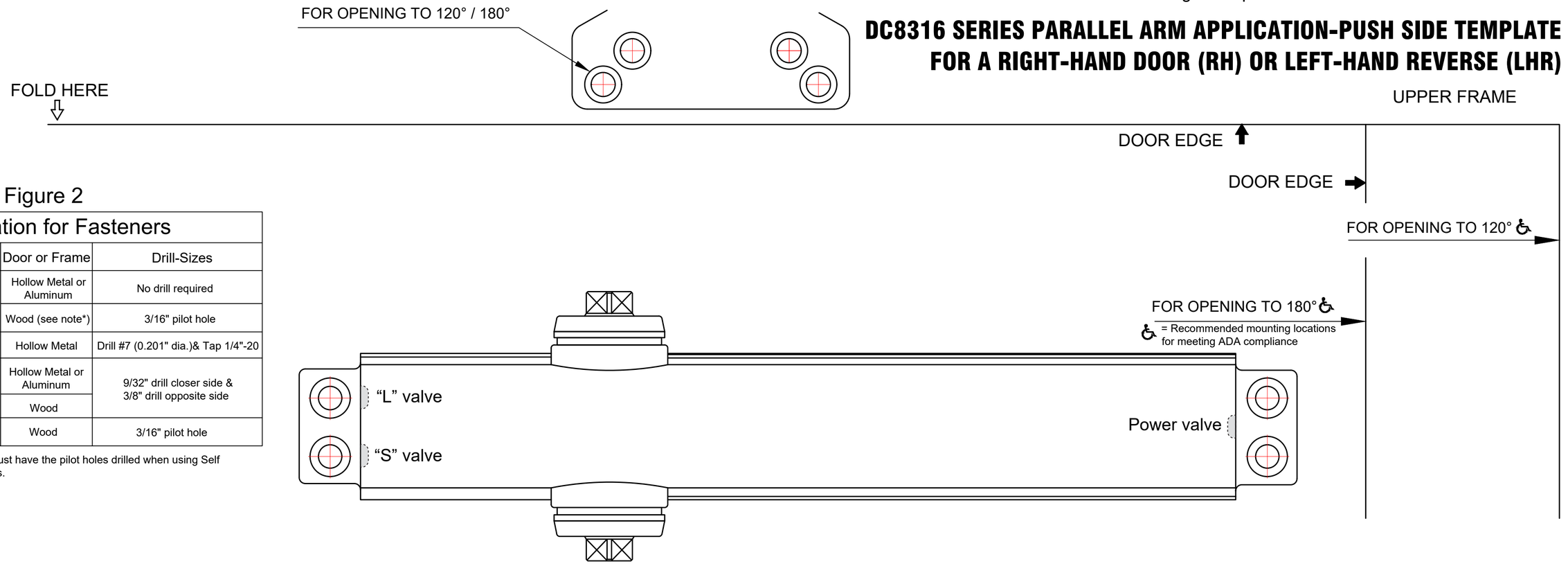


Figure 2

Preparation for Fasteners		
Fasteners	Door or Frame	Drill-Sizes
Self Drilling/Tapping Screw	Hollow Metal or Aluminum	No drill required
	Wood (see note*)	3/16" pilot hole
1/4"-20 Machine Screw	Hollow Metal	Drill #7 (0.201" dia.)& Tap 1/4"-20
1/4"-20 Machine Screw used with Through Bolt	Hollow Metal or Aluminum	9/32" drill closer side & 3/8" drill opposite side
	Wood	
Wood Screw-Optional	Wood	3/16" pilot hole

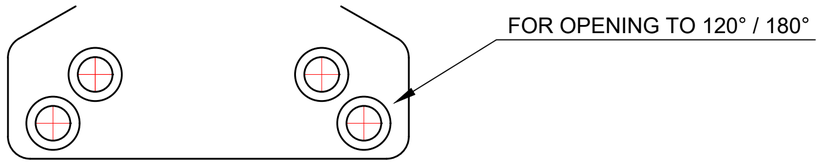
*NOTE: Wood doors/frames must have the pilot holes drilled when using Self Drilling/Tapping screws.

DURABLE COLLECTION

WARNING:
PLEASE PRINT AT ACTUAL SIZE, DO NOT SCALE TO FIT.

Notes:
1. Use this template to locate the mounting holes of the closer body and P.A Plate.
2. Align Frame Stop and Edge of door with thick dark lines shown on template.
3. Align Door Edge with line of the desired degree of opening.
4. Mark holes locations and drill holes according to Preparation for Fasteners chart shown below.

DC8316 SERIES PARALLEL ARM APPLICATION-PUSH SIDE TEMPLATE FOR A LEFT-HAND DOOR (LH) OR RIGHT-HAND REVERSE (RHR)



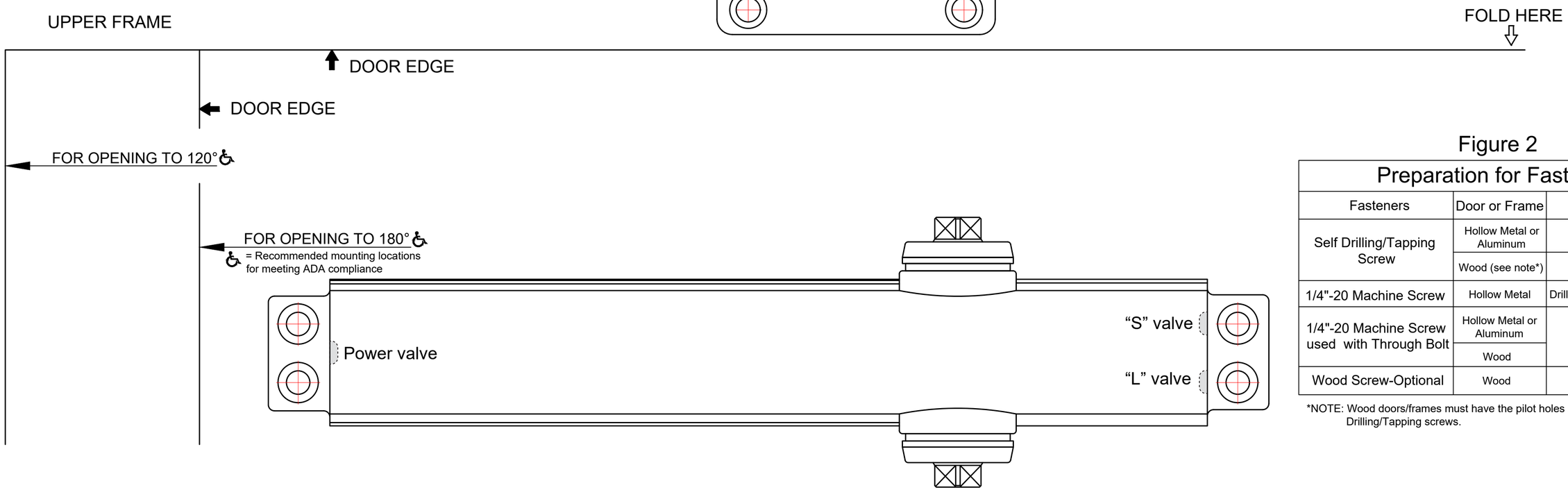


Figure 2

Preparation for Fasteners		
Fasteners	Door or Frame	Drill-Sizes
Self Drilling/Tapping Screw	Hollow Metal or Aluminum	No drill required
	Wood (see note*)	3/16" pilot hole
1/4"-20 Machine Screw	Hollow Metal	Drill #7 (0.201" dia.)& Tap 1/4"-20
1/4"-20 Machine Screw used with Through Bolt	Hollow Metal or Aluminum	9/32" drill closer side & 3/8" drill opposite side
	Wood	
Wood Screw-Optional	Wood	3/16" pilot hole

*NOTE: Wood doors/frames must have the pilot holes drilled when using Self Drilling/Tapping screws.