

Southco® F6 Hinge

Free Operating, Door Removal



- Easy to install and operate.
- Functions as a hinge or a latch.

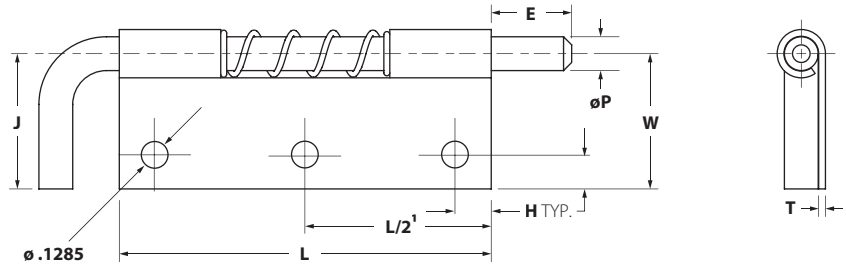
Material & Finish

Hinge: Low carbon steel with zinc plate or stainless steel

Springs: Stainless steel

Mechanical

Length: 0.87" to 2.75"



Note: Drawing and dimensions are simplified and are for reference use only.

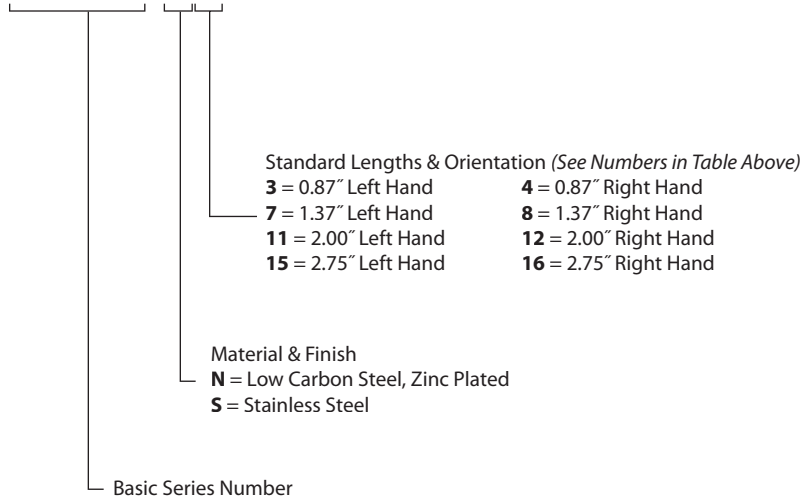
Standard Sizes

Length L	Part No. Code ²		Dim. E	Dim. H	Dim. J	Dia. P	Dim. T	Dim. W
	Left	Right						
.87"	3	4	.18"	.156"	.39"	.12"	.03"	.50"
1.37"	7	8	.25"	.188"	.50"	.15"	.04"	.75"
2.00"	11¹	12¹	.37"	.258"	.63"	.18"	.05"	.87"
2.75"	15¹	16¹	.50"	.258"	.75"	.25"	.06"	1.00"

Note: All dimensions are in inches.

Hinge Part Numbers

F6-23-S8AW



Notes:

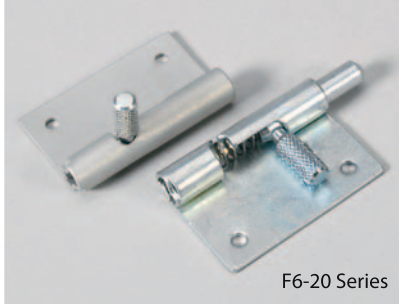
1. 3 holes provided with model numbers 11 through 16 only, 2 outside holes on all others.
2. Use in constructing part number below.

All dimensions on this page are in inches.

Southco® F6 Hinge

Free Operating, Door Removal

southco®



- Easy to install and operate
- Functions as a hinge or a latch
- Locking feature for simple removal and replacement

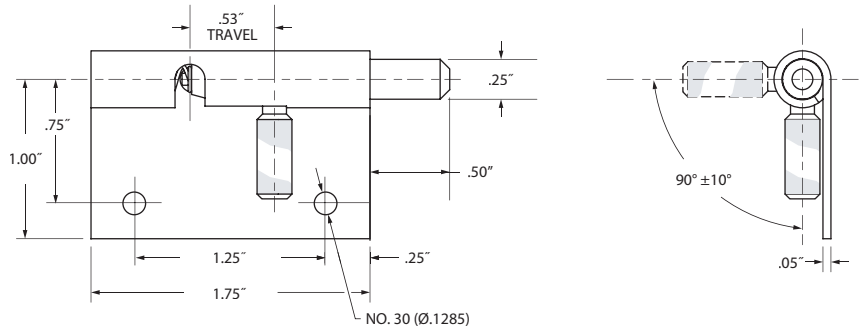
Material & Finish

Hinge: Low carbon steel with zinc plate or stainless steel

Springs: Stainless steel

Mechanical

Length: 1.75" and up

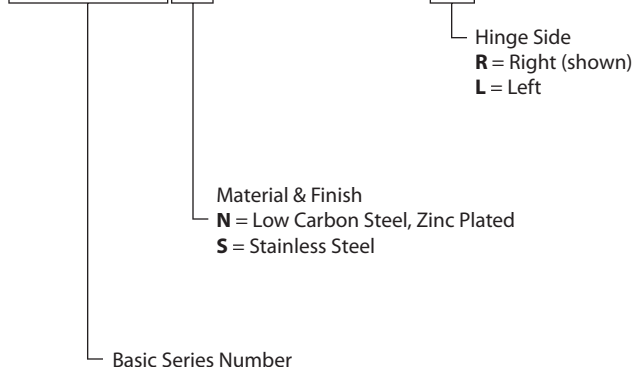


Note:

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2. All dimensions are in inches.

Hinge Part Numbers

F6-20- N 1 A 50 W R



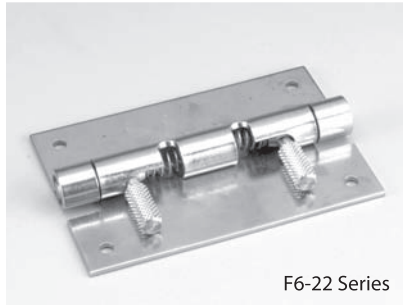
Note:

Consult Southco for special sizes, holes, pins, materials, or finishes.

All dimensions on this page are in inches.

Hinges & Controlled Motion Devices

Southco® F6 Hinge Free Operating, Door Removal



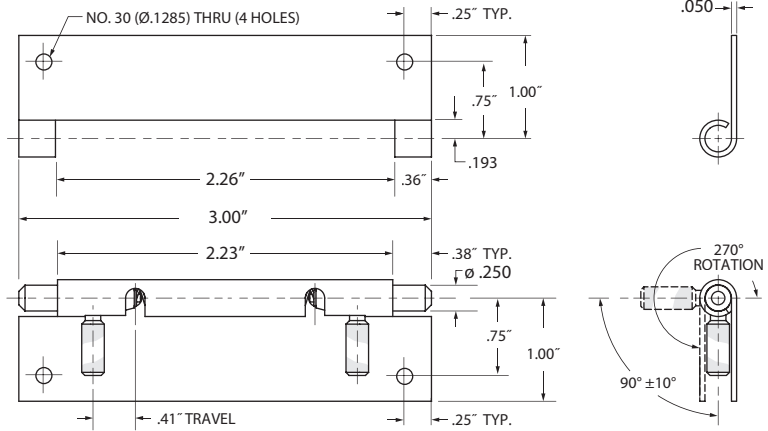
F6-22 Series

- Easy to install and operate
- Functions as a hinge or a latch
- Locking feature for simple removal and replacement
- Operate with one hand
- Dual hinge points provide greater stability

Material & Finish

Hinge: Low carbon steel with zinc plate or stainless steel

Springs: Stainless steel

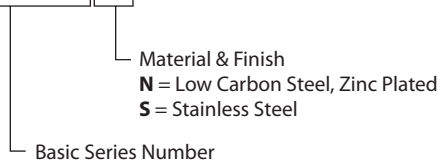


Notes:

1. Drawing and dimensions are simplified and are for reference use only.
2. All dimensions are in inches.

Hinge Part Numbers

F6-22- S 1 -3 W 1



Note:

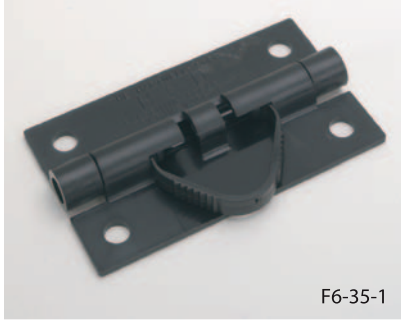
Consult Southco for special sizes, holes, pins, materials, or finishes.

All dimensions on this page are in inches.

Southco® F6 Hinge

Free Operating, Door Removal

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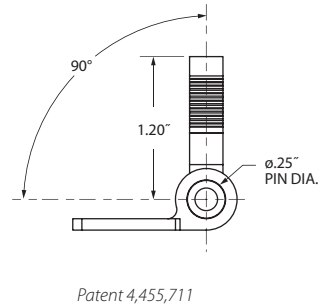
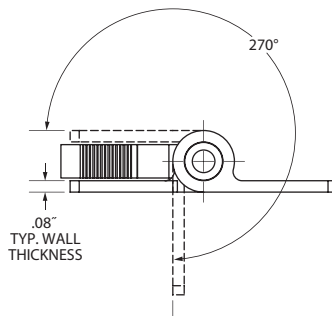
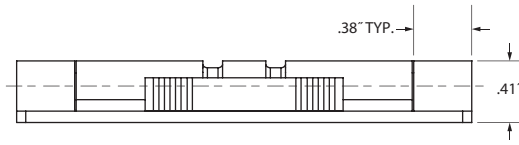
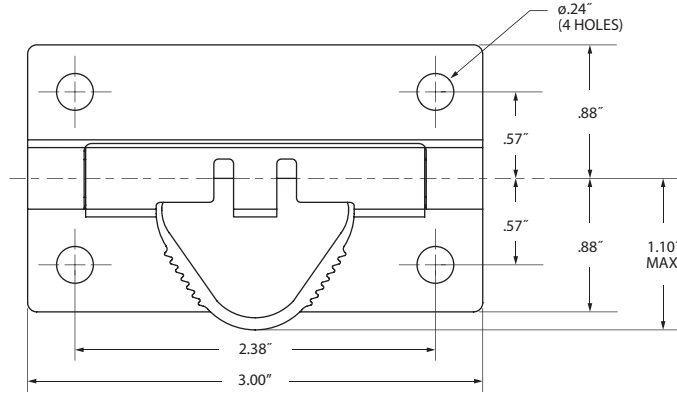


F6-35-1

Part Number	F6-35-1
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The Dual-Latching, Quick Release Hinge is molded from engineered plastic. Lightweight, non-conductive and non-corrosive.

- Very light in weight
- Made from non-conducting, non-corrosive materials
- Locking feature for simple operations
- Dual hinge points for greater stability



Note:

Drawing and dimensions are simplified and are for reference use only. Consult Southco for special sizes, holes, pins, materials, or finishes.

All dimensions on this page are in inches.

Southco® Hinges

Concealed, Removable Style

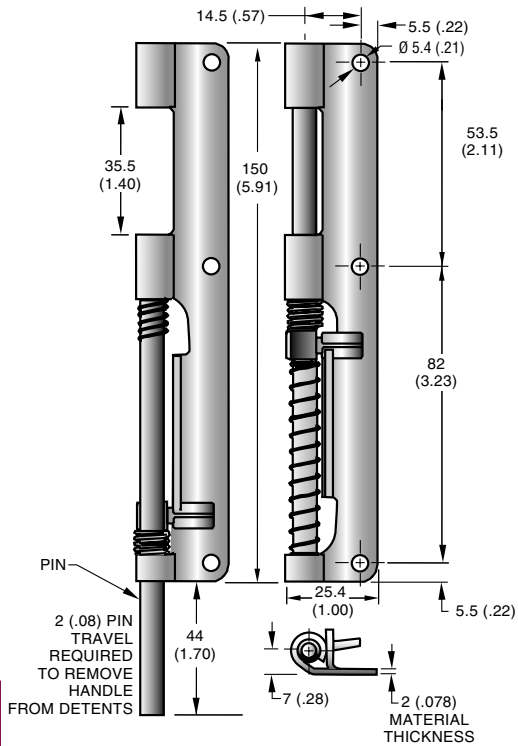
- High strength and durability
- Corrosion-resistant materials
- Resists vibration
- Accommodates various door/frame configurations
- Door and Frame Leaves can be installed independently

Door Leaf Type A

PART NUMBER

F6-941-5•

Disengaged Engaged

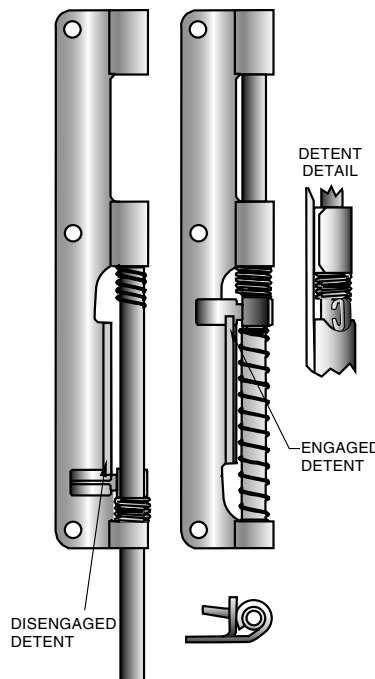


Door Leaf Type B

PART NUMBER

F6-942-5•

Disengaged Engaged



Material and Finish

DOOR LEAF, FRAME LEAF and PIN: 300 Series Stainless Steel, natural.
SPRINGS: 300 Series Stainless Steel, passivated.

Product Strength Guidelines

(To assist in your product selection; samples are available for your evaluation.)

AXIAL

Maximum axial static load:
3600 N (809 lbs.)
Average ultimate axial load:
6000 N (1350 lbs.)

RADIAL

Maximum radial static load:
1300 N (292 lbs.)
Average ultimate radial load:
4000 N (900 lbs.)

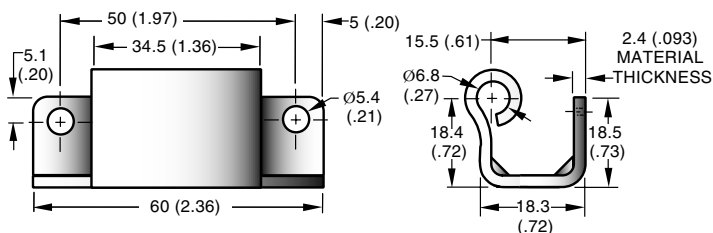
NOTE: Product strength guidelines are based on testing conducted using one hinge.

Hinges
Door Positioning

Formed Frame Leaf

PART NUMBER

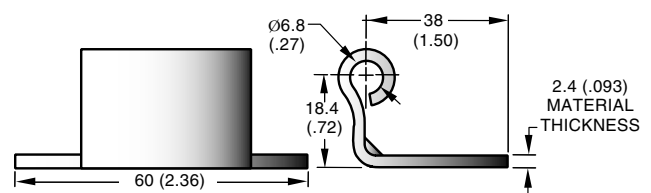
F6-905-5•



*Flat Frame Leaf

PART NUMBER

F6-904-5•



Note: Order separately 1 Door Leaf and 1 Frame Leaf for a complete assembly.

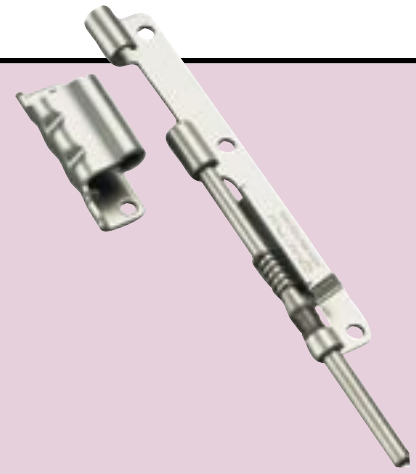
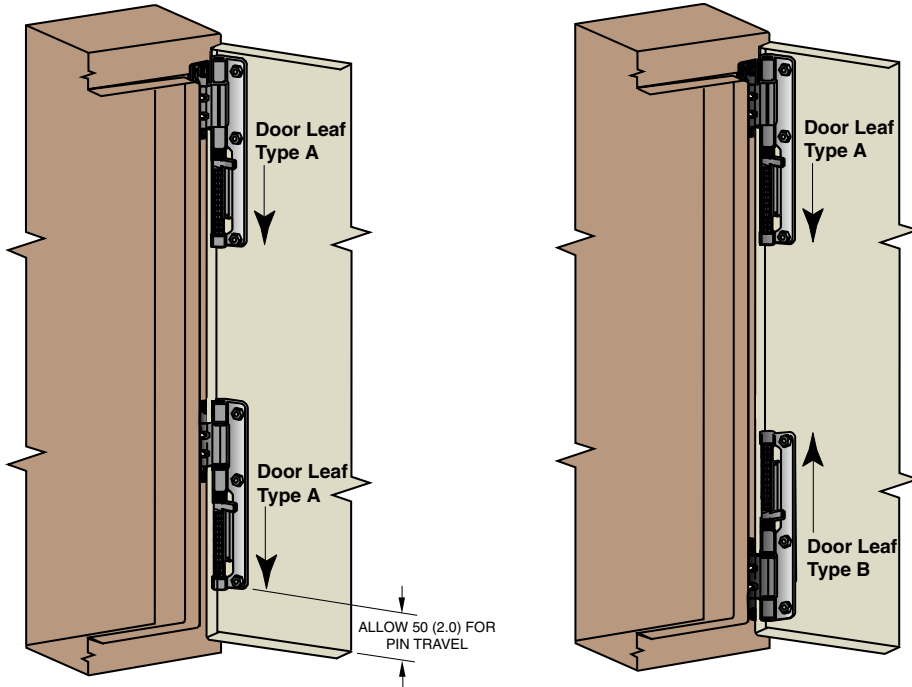
* Custom offset depths and mounting holes are available. Contact Southco for details.

millimeter (inch)
millimeter
(inch)

Dimensions without tolerances are for reference only.

Mounting Options

Typical hinge mounting using Formed Frame Leaf.
(Arrows indicate direction of pin travel)

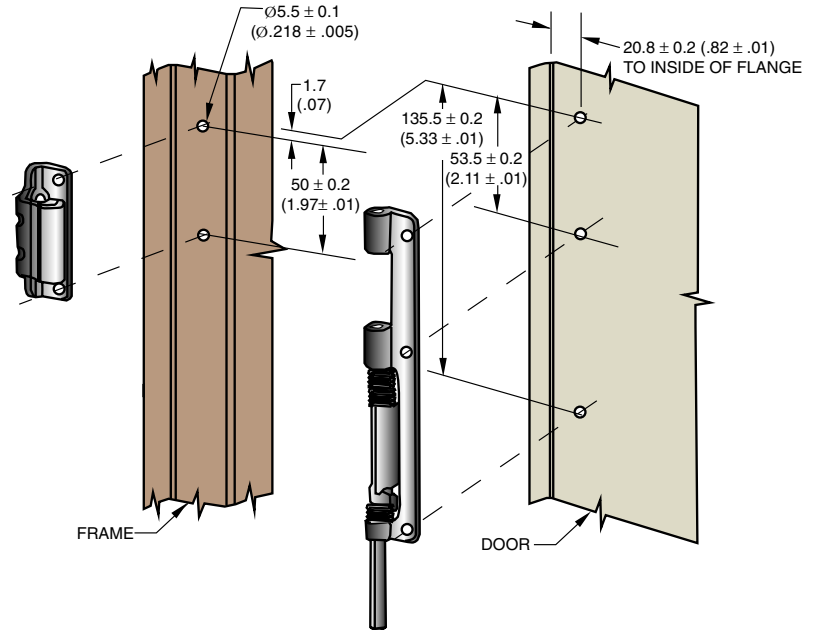
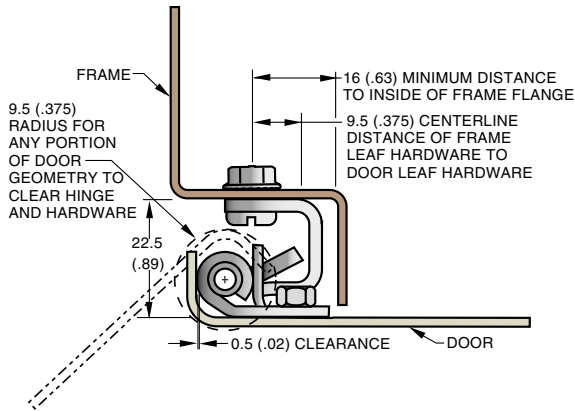


Notes: Hinge Leaves may be fastened to the door and the frame by: M5 or No. 10 hardware (machine screws are recommended) or by welding. *Proper precautions should be taken when welding.*

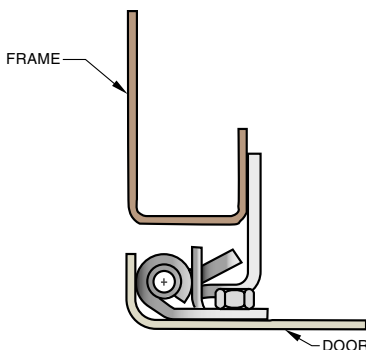
Lock washers or jam nuts may be used, but clearance with edge of door flange should be verified (mounting hardware not supplied).

Installation

Typical door and frame installation using Formed Frame Leaf



Typical door and frame installation using Flat Frame Leaf



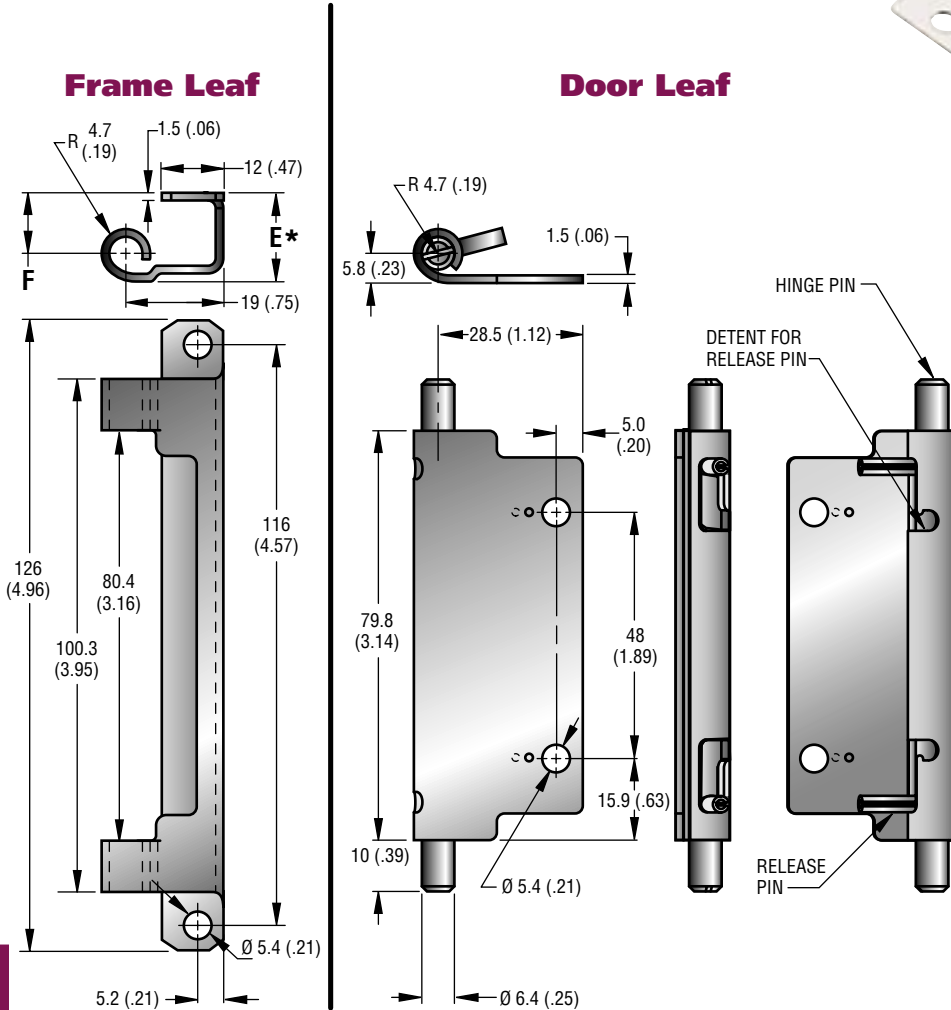
millimeter (inch)
millimeter
(inch)

Dimensions without tolerances are for reference only.

Southco Hinges

Concealed, Removable Style

- Mounts inside the frame of formed doors
- Hinge and hardware are concealed
- Allows the door to be removed from the hinge side
- Three styles to suit your door configuration



Material and Finish

Steel Version

FRAME LEAF, DOOR LEAF: 1010 steel, zinc plate plus chromate dip.
 HINGE PINS: 12L14 steel, zinc plate plus chromate dip and clear organic coating.
 RELEASE PINS: 420 Stainless steel, passivated.
 INTERNAL SPRING: 302 Stainless Steel, passivated.

Stainless Version

FRAME LEAF, DOOR LEAF: 304 Stainless Steel, passivated.
 HINGE PINS: 303 Stainless Steel, passivated plus clear organic coating.
 RELEASE PINS: 420 Stainless steel, passivated.
 INTERNAL SPRING: 302 Stainless Steel, passivated.

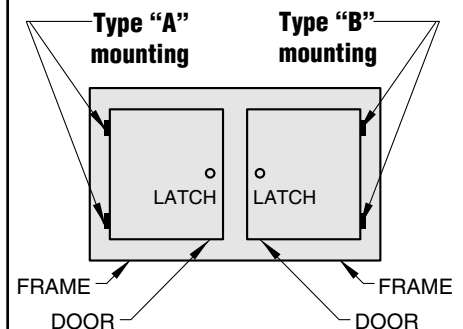
* Select the frame leaf with a value of **E** best suited to the configuration of your door. The dimension **E** + 0.6 (.02) = the distance from the outside surface of your frame to the inside surface of your door.

SERIES	PART NUMBERS (BULK PACKAGED **)				FRAME LEAF DIMENSIONS		PART NUMBERS (ONE ASSEMBLY PER BAG †)	
	Frame Leaf		Door Leaf		E*	F	Steel	Stainless Steel
	Steel	Stainless Steel	Steel	Stainless Steel				
1	F6-901 •	F6-901-1 •	F6-940 •	F6-940-1 •	17 (.67)	11.8 (.47)	F6-1 •	F6-1-1 •
2	F6-902 •	F6-902-1 •			20 (.79)	14.8 (.58)	F6-2 •	F6-2-1 •
3	F6-903 •	F6-903-1 •			23.4 (.92)	18.2 (.72)	F6-3 •	F6-3-1 •

**These Part Numbers specify bulk packaged parts. IMPORTANT: For one complete assembly, order 1 FRAME LEAF Part Number and 1 DOOR LEAF.

† These Part Numbers specify assemblies packaged 1 FRAME LEAF and 1 DOOR LEAF per bag.

Mounting Options

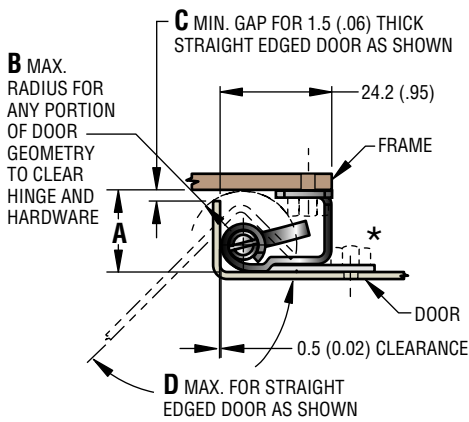


Same hinge can be used for both Type "A" and Type "B" mounting.

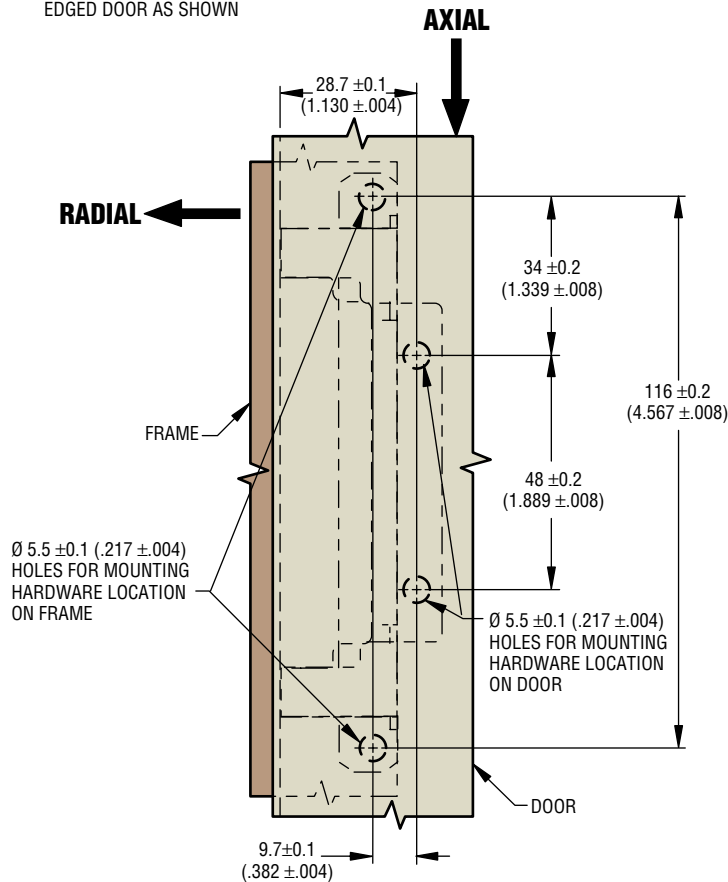
millimeter (inch)
 millimeter
 (inch)

Dimensions without tolerances are for reference only.

Panel Preparation



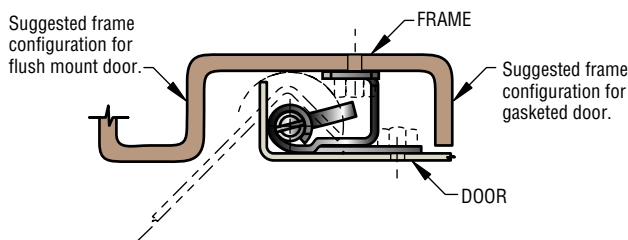
SERIES	PANEL PREPARATION DIMENSIONS			
	A	B	C	D
1	17.6 (.69)	10.9 (.43)	3.2 (.13)	132°
2	20.6 (.81)	12.7 (.50)	3.9 (.15)	125°
3	24 (.95)	15.3 (.60)	4.4 (.17)	118°



Hinges may be fastened to door and frame by:

- M5 or No. 10 Hardware. Machine screws are recommended for mounting frame leaf.
- *Hex jam nuts. Verify clearance with door edge. Depending on jam nut orientation, full rotation may be obstructed.
- Welding.

Additional Mounting Options



Installation

There are two methods of installation. One method may be more appropriate for your application;

Type A:

1. Mount the assembled door leaf, frame leaf assembly directly to the inside surface of the door.
2. With appropriate support under the door, position the door against the frame and attach as necessary.
3. Remove the supports which may have been used to support the weight of the door during installation.

Type B:

1. Mount the leaves to the door and frame respectively.
2. With appropriate support under the door, position the door against the frame, align the hinge leaves, and move the release pins out of the detents.
3. Check each door leaf to assure that release pins are fully engaged in the knuckle of the frame leaf.
4. Remove the supports which may have been used to support the weight of the door during installation.

Product Strength Guidelines

(To assist in your product selection; samples are available for your evaluation.)

Steel Version

Maximum axial static load: 500 N (112 lbs.)
 Maximum radial static load: 300 N (65 lbs.)
 Ultimate axial load: 800 N (180 lbs.)
 Ultimate radial load: 340 N (76 lbs.)

Stainless Steel Version

Maximum axial static load: 800 N (180 lbs.)
 Maximum radial static load: 300 N (65 lbs.)
 Ultimate axial load: 1340 N (300 lbs.)
 Ultimate radial load: 440 N (100 lbs.)

millimeter (inch)
 millimeter
 (inch)

Dimensions without tolerances are for reference only.