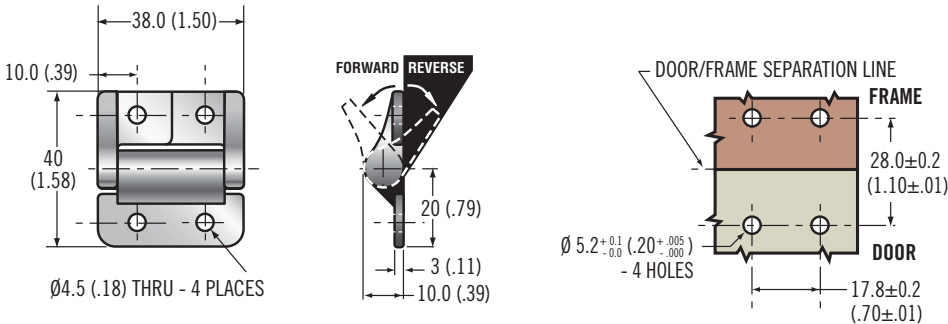


CEMA E6 Hinges

Position Control, Constant Torque

- Holds doors open without secondary mechanical support
- Eliminates extra components, reduces installation time; allows overall cost savings
- Provides smooth, consistent operation over 20,000 cycles, never needs adjusting

200 Series



Material and Finish

LEAVES

200 SERIES: Aluminum
400 SERIES: Die cast zinc

INTERNAL COMPONENTS

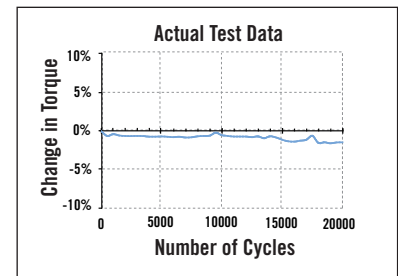
SHAFT & TORQUE ELEMENTS: Hardened steel
O-RINGS (2): Buna-N Rubber
BUSHINGS (2): Die-cast zinc

PART NUMBER	Symmetric Torque
E6-10-208-50	0.9 N•m (8 in-lbf)
E6-10-212-50	1.4 N•m (12 in-lbf)
E6-10-216-50	1.8 N•m (16 in-lbf)

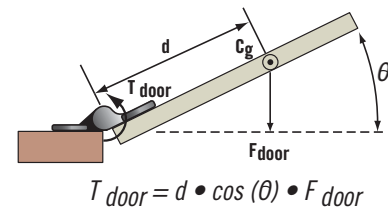
All Part Numbers listed have black powder coated finish (-50). For alternate finishes change the last 2 digits. A complete list of finishes is available at: www.southco.com

PART NUMBER	Forward Torque	Reverse Torque
E6-10-212F-50	1.4 N•m (12 in-lbf)	0.8 N•m (7.2 in-lbf)
E6-10-216F-50	1.8 N•m (16 in-lbf)	1.1 N•m (9.6 in-lbf)
E6-10-220F-50	2.3 N•m (20 in-lbf)	1.4 N•m (12 in-lbf)
E6-10-212R-50	0.8 N•m (7.2 in-lbf)	1.4 N•m (12 in-lbf)
E6-10-216R-50	1.1 N•m (9.6 in-lbf)	1.8 N•m (16 in-lbf)
E6-10-220R-50	1.4 N•m (12 in-lbf)	2.3 N•m (20 in-lbf)

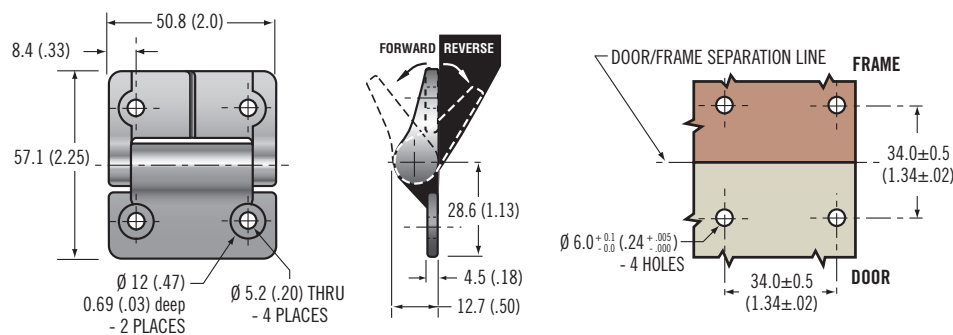
Performance



This formula is intended to assist with hinge selection. Consideration of application specific characteristics is required.



400 Series



PART NUMBER	Symmetric Torque
E6-10-416-50	1.8 N•m (16 in-lbf)
E6-10-420-50	2.3 N•m (20 in-lbf)
E6-10-430-50	3.4 N•m (30 in-lbf)

All Part Numbers listed have black powder coated finish (-50). For alternate finishes change the last 2 digits. A complete list of finishes is available at: www.southco.com

PART NUMBER	Forward Torque	Reverse Torque
E6-10-420F-50	2.3 N•m (20 in-lbf)	1.4 N•m (12 in-lbf)
E6-10-430F-50	3.4 N•m (30 in-lbf)	2.0 N•m (18 in-lbf)
E6-10-440F-50	4.5 N•m (40 in-lbf)	2.7 N•m (24 in-lbf)
E6-10-420R-50	1.4 N•m (12 in-lbf)	2.3 N•m (20 in-lbf)
E6-10-430R-50	2.0 N•m (18 in-lbf)	3.4 N•m (30 in-lbf)
E6-10-440R-50	2.7 N•m (24 in-lbf)	4.5 N•m (40 in-lbf)

PRODUCT STRENGTH GUIDELINES			
To assist in your product selection, samples are available for your evaluation			
TYPE OF LOAD	200 Series	400 Series	
Radial Load 	Maximum Static Load*	155N (35 lbs)	200N (45 lbs)
	Average Ultimate Load	3000N (675 lbs)	11000N (2470 lbs)
Axial Load 	Maximum Static Load*	155N (35 lbs)	200N (45 lbs)
	Average Ultimate Load	1600N (360 lbs)	2800N (630 lbs)

* Maximum recommended working load per pair of hinges
Operating Temperature Range: -20°C (-4°F) to 65°C (150°F)

millimeter (inch)
millimeter (inch)

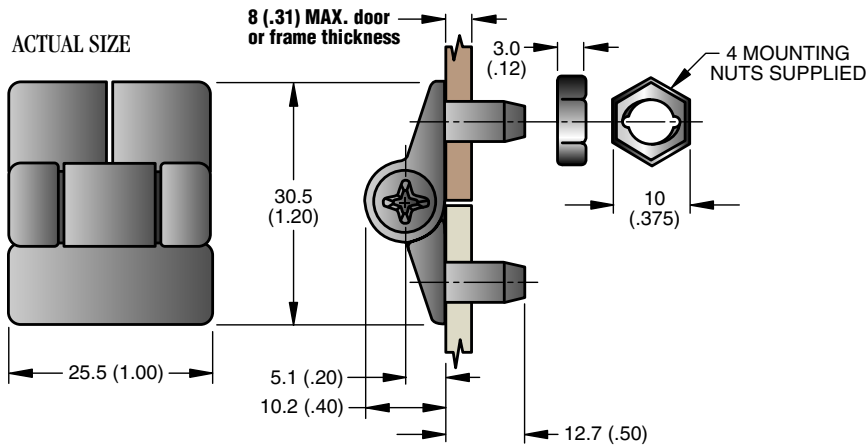
Dimensions without tolerances are for reference only.

For additional specifying and ordering information, downloadable CAD files, and 3-D solid models visit: www.southco.com or e-mail: info@southco.com

Southco® Hinges

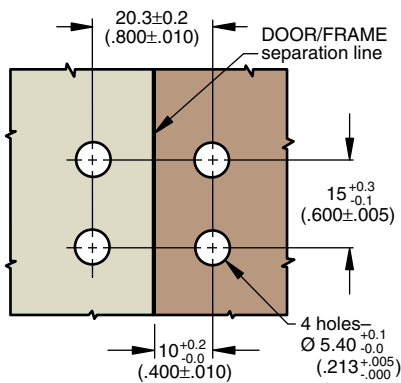
Adjustable Friction Hinge, Small

- Hold doors open, partially open, closed
- Turn the screw to increase or decrease torque
- All mounting hardware is concealed

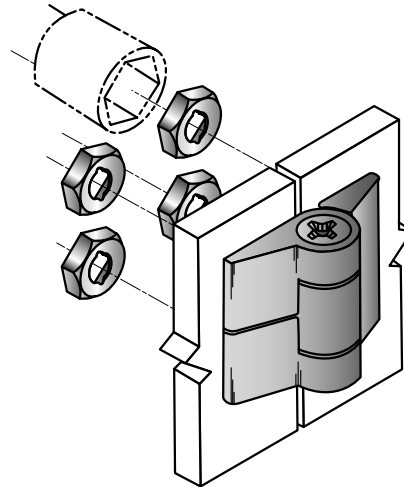


Installation

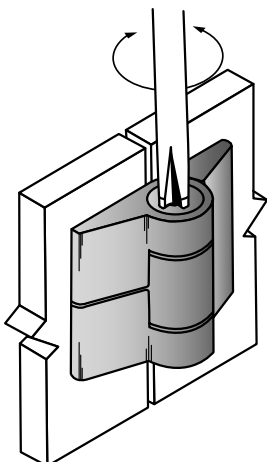
1 Prepare door and frame.



2 Mount hinge.



3 Adjust hinge friction.



Material and Finish

LEAVES, HINGE PIN and ADJUSTING SCREW: Acetal, black or white.
 WASHER: Nylon, black or natural.
 NUTS: Steel, zinc plated.

Individually Packaged

COLOR	PART NUMBERS
Black*	E6-10-101-20 •
White*	E6-10-101-30 •

* One hinge and four mounting nuts per bag.

PRODUCT STRENGTH GUIDELINES

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

Radial Load
 Average Ultimate Load= 1150 N (260 lbs.)

Axial Load
 Average Ultimate Load= 950 N (214 lbs.)

Maximum prevailing torque of hinge: 0.25 N•m (2.2 in. lbs.)

Flammability Rating: UL 94-HB

Operating temperature range: -5°C (-20°F) to 65°C (150°F)

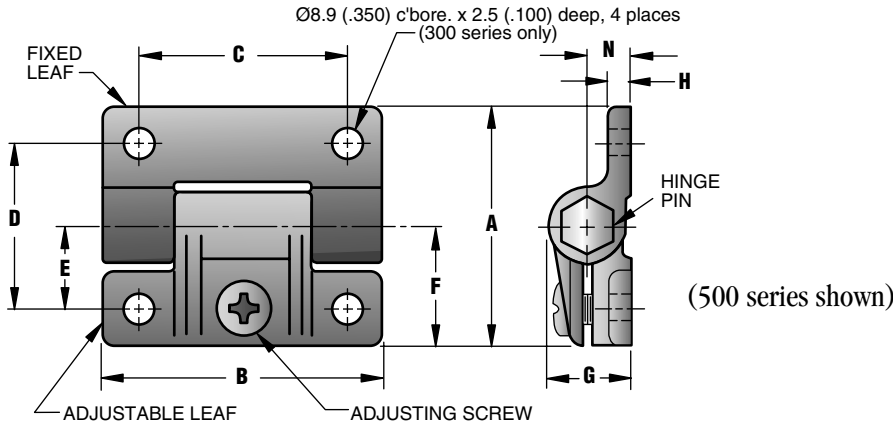
millimeter (inch)
 millimeter (inch)

Dimensions without tolerances are for reference only.

Southco® Hinges

Adjustable Friction Hinge, Medium and Large

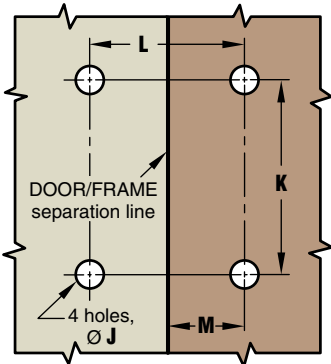
- Hold doors open, partially open, closed
- Turn the screw to dampen or free-up the door swing



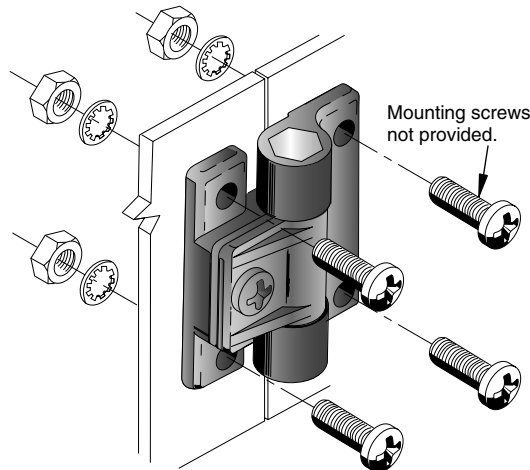
DIMENSIONS									COLOR	PART NUMBERS	SERIES (size)
A	B	C	D	E	F	G	H	N			
36.5 (1.44)	43 (1.69)	31.7 (1.25)	25.5 (1.00)	12.7 (.50)	18.3 (.72)	12.7 (.50)	6 (.23)	6.7 (.27)	White	E6-10-301-10 •	300
									Black	E6-10-301-20 •	
57.5 (2.25)	63.5 (2.50)	47.6 (1.88)	38 (1.50)	19 (.75)	28.5 (1.13)	19.4 (.77)	5.2 (.20)	10.3 (.41)	White	E6-10-501-10 •	500
									Black	E6-10-501-20 •	

Installation

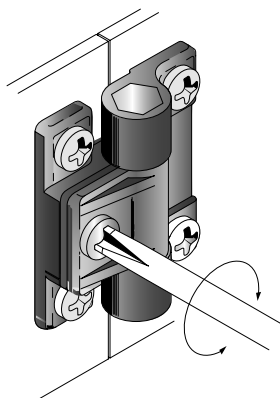
1. Prepare door and frame.



2. Mount hinge.



3. Adjust hinge friction.



SERIES (size)	K	L	M	FOR MOUNTING			
	+0.3 -0.0 (±.005)	±0.1 (±.010)	+0.2 -0.0 (±.010)	thread size-metric	Ø J +0.1 -0.0	thread size-inch	Ø J (+.005 -.000)
300	31.5 (1.250)	25.5 (1.000)	12.5 (.500)	M4	4.5	(8-32)	(.177)
500	47.5 (1.875)	38 (1.500)	19 (.75)	M6	6.6	(1/4-20)	(.265)



Material and Finish

LEAVES: Acetal, black or white.

HINGE PIN: Polycarbonate, clear.

NUT: 303 Stainless steel, passivated.

ADJUSTING SCREW: 303 Stainless steel, passivated (black oxide finish for black hinge).

Hinges are packaged bulk.

PRODUCT STRENGTH GUIDELINES

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

Type of load	300 Series	500 Series
Radial tensile Strength	1780 N (400 lbs.)	3110 N (700 lbs.)
Axial Strength	890 N (200 lbs.)	2000 N (450 lbs.)

Maximum prevailing torque of hinge:

300 Series: 0.8 N•m (7 in.-lbs.)

500 Series: 4 N•m (35 in.-lbs.)

Flammability Rating: (Leaves) UL 94-HB; (Pin) UL94-V2

Operating temperature range:

-5°C (20°F) to 65°C (150°F)

millimeter (inch)
millimeter
(inch)

Dimensions without tolerances are for reference only.