



ST-7A Hinge

Position control · Constant torque

- Smooth, zero backlash operation
- Space efficient design provides high torque in minimum space
- Constant torque, never needs adjusting

Material and Finish

Zinc alloy and steel, natural

Performance Details

Radial load:

Maximum static load: 400 N (90 lbf)

Axial load:

Maximum static load: 300 N (67 lbf)

Cycle performance:

20,000 cycles within $\pm 20\%$ of static torque specification

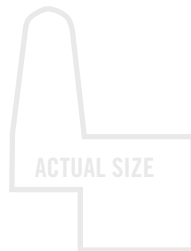
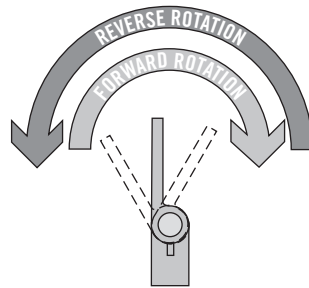
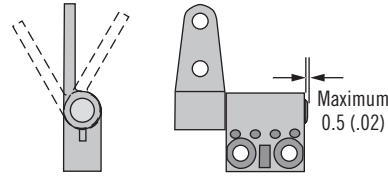
Installation Notes

1. Install hinge using No. 4 socket head cap screw.
2. For proper function, assembly must include (1) type A and (1) type B hinge.

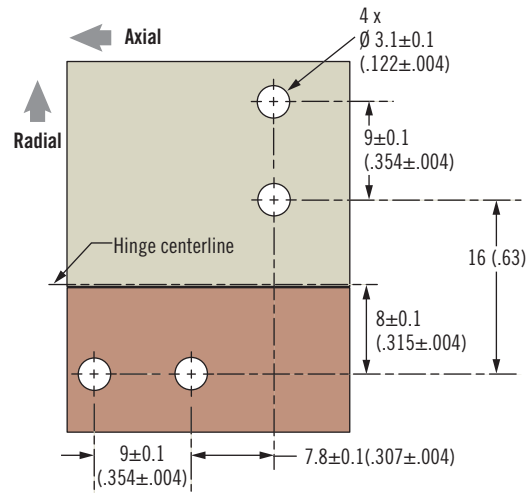
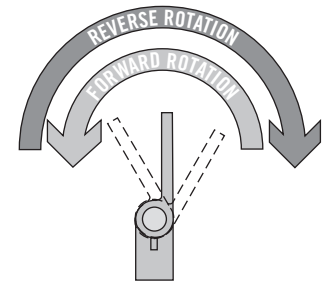
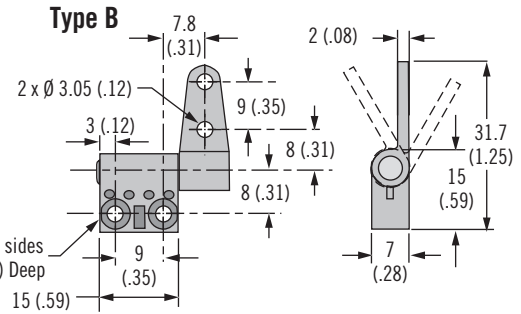
Part Number

See table

Type A



Type B



Symmetric Torque Versions		
Part Number		Static Torque (Forward and Reverse) N·m (in·lbf)
Type A	Type B	
ST-7A-30SA-33	ST-7A-30SB-33	0.34 (3)
ST-7A-40SA-33	ST-7A-40SB-33	0.45 (4)
ST-7A-50SA-33	ST-7A-50SB-33	0.56 (5)

Asymmetric Torque Versions			
Part Number		Static Torque N·m (in·lbf)	
Type A	Type B	Forward N·m (in·lbf)	Reverse N·m (in·lbf)
ST-7A-40FA-33	ST-7A-40FB-33	0.45 (4)	0.27 (2.4)
ST-7A-50FA-33	ST-7A-50FB-33	0.56 (5)	0.37 (3)
ST-7A-60FA-33	ST-7A-60FB-33	0.68 (6)	0.41 (3.6)
ST-7A-40RA-33	ST-7A-40RB-33	0.27 (2.4)	0.45 (4)
ST-7A-50RA-33	ST-7A-50RB-33	0.34 (3)	0.56 (5)
ST-7A-60RA-33	ST-7A-60RB-33	0.41 (3.6)	0.68 (6)

Other options available. For complete details on variety, part numbers, installation and specification, go to



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Dimensions in millimeters (inch) unless otherwise stated

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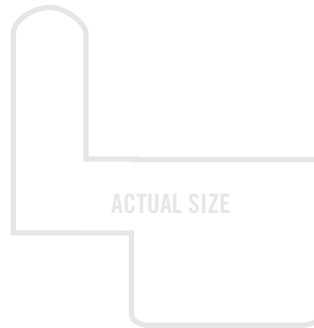
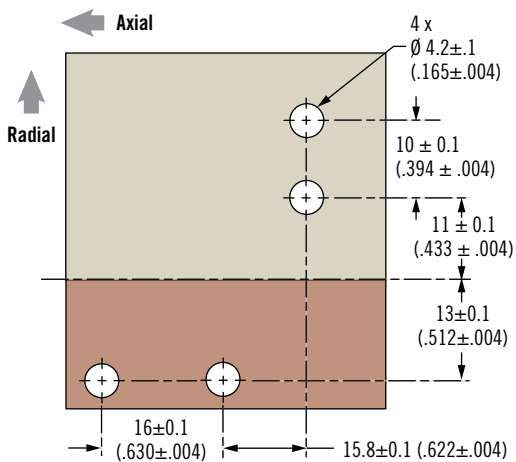
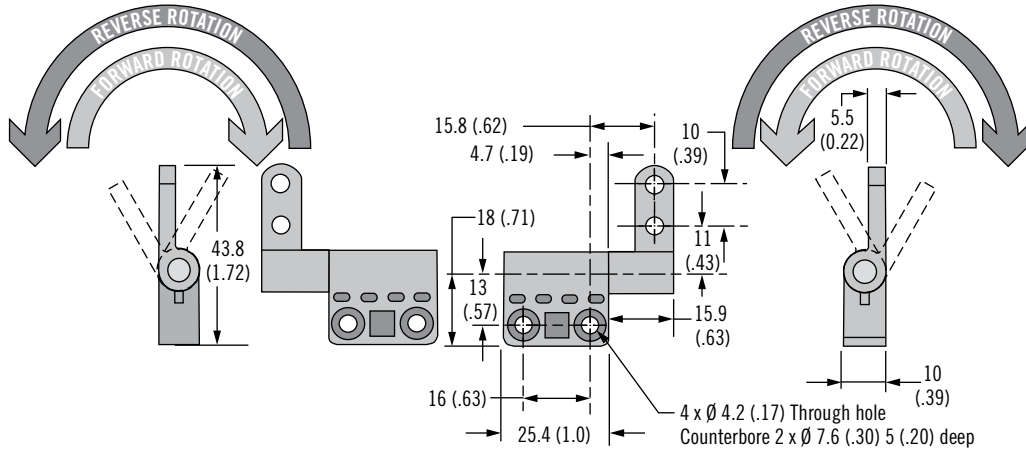
ST-10A Hinge

Position control · Constant torque



Type A

Type B



- Smooth, zero backlash operation
- Space efficient design provides high torque in minimum space
- Constant torque, never needs adjusting

Material and Finish

Zinc alloy and steel, natural

Performance Details

Radial load:

Maximum static load:

500 N (112 lbf)

Axial load:

Maximum static load:

1000 N (225 lbf)

Cycle performance:

20,000 cycles within ±20% of static torque specification

Installation Notes

1. Install hinge using M4 (No.8) socket head cap screw.
2. For proper function, assembly must include (1) type A and (1) type B hinge.

Part Number

See table

Symmetric Torque Versions

Part Number		Static Torque (Forward and Reverse) N·m (in·lbf)
Type A	Type B	
ST-10A-80SA-33	ST-10A-80SB-33	0.90 (8)
ST-10A-120SA-33	ST-10A-120SB-33	1.36 (12)
ST-10A-160SA-33	ST-10A-160SB-33	1.81 (16)
ST-10A-200SA-33	ST-10A-200SB-33	2.26 (20)

Asymmetric Torque Versions

Part Number		Static Torque N·m (in·lbf)	
Type A	Type B	Forward N·m (in·lbf)	Reverse N·m (in·lbf)
ST-10A-120FA-33	ST-10A-120FB-33	1.36 (12)	0.81 (7.2)
ST-10A-160FA-33	ST-10A-160FB-33	1.81 (16)	1.08 (9.6)
ST-10A-200FA-33	ST-10A-200FB-33	2.26 (20)	1.36 (12)
ST-10A-120RA-33	ST-10A-120RB-33	0.81 (7.2)	1.34 (12)
ST-10A-160RA-33	ST-10A-160RB-33	1.08 (9.6)	1.84 (16)
ST-10A-200RA-33	ST-10A-200RB-33	1.36 (12)	2.26 (20)



ST-10E Hinge

Position control · Constant torque

- Smooth, zero backlash operation
- Space efficient design provides high torque in minimum space
- Constant torque, never needs adjusting

Material and Finish

Zinc alloy and steel, natural

Performance Details

Cycle performance:

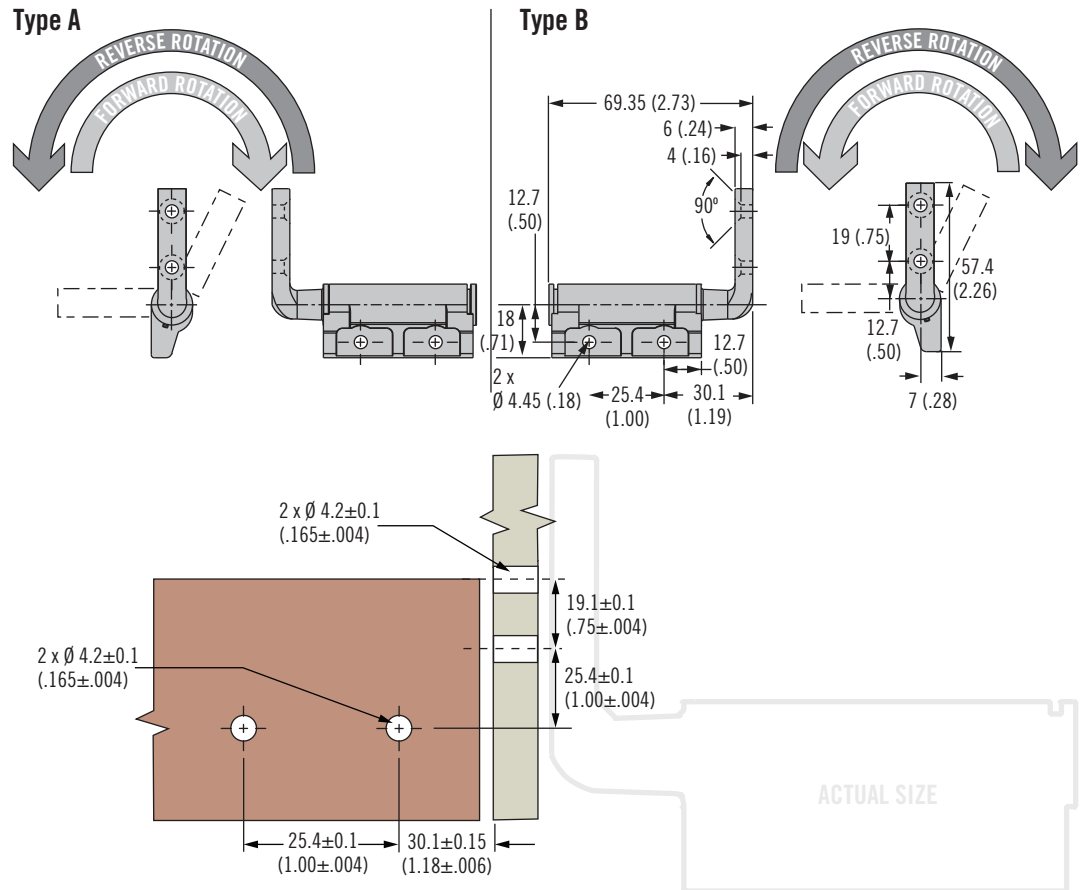
20,000 cycles within $\pm 20\%$ of static torque specification

Installation Notes

1. Install hinge using M4 (No.8) socket head cap screw.
2. For proper function, assembly must include (1) type A and (1) type B hinge.

Part Number

See table



Symmetric Torque Versions		
Part Number		Static Torque (Forward and Reverse) N·m (in·lbf)
Type A	Type B	
ST-10E-120SE-33	ST-10E-120SG-33	1.35 (12)
ST-10E-200SE-33	ST-10E-200SG-33	2.26 (20)
ST-10E-280SE-33	ST-10E-280SG-33	3.16 (28)
ST-10E-360SE-33	ST-10E-360SG-33	4.06 (36)

Asymmetric Torque Versions			
Part Number		Static Torque N·m (in·lbf)	
Type A	Type B	Forward N·m (in·lbf)	Reverse N·m (in·lbf)
ST-10E-200FE-33	ST-10E-200FG-33	2.26 (20)	1.35 (12)
ST-10E-280FE-33	ST-10E-280FG-33	3.16 (28)	2.26 (20)
ST-10E-360FE-33	ST-10E-360FG-33	4.06 (36)	2.44 (21.6)
ST-10E-440FE-33	ST-10E-440FG-33	4.97 (44)	2.93 (26)
ST-10E-200RE-33	ST-10E-200RG-33	1.35 (12)	2.26 (20)
ST-10E-280RE-33	ST-10E-280RG-33	2.26 (20)	3.16 (28)
ST-10E-360RE-33	ST-10E-360RG-33	2.44 (21.6)	4.06 (36)
ST-10E-440RE-33	ST-10E-440RG-33	2.93 (26)	4.97 (44)

Other options available. For complete details on variety, part numbers, installation and specification, go to



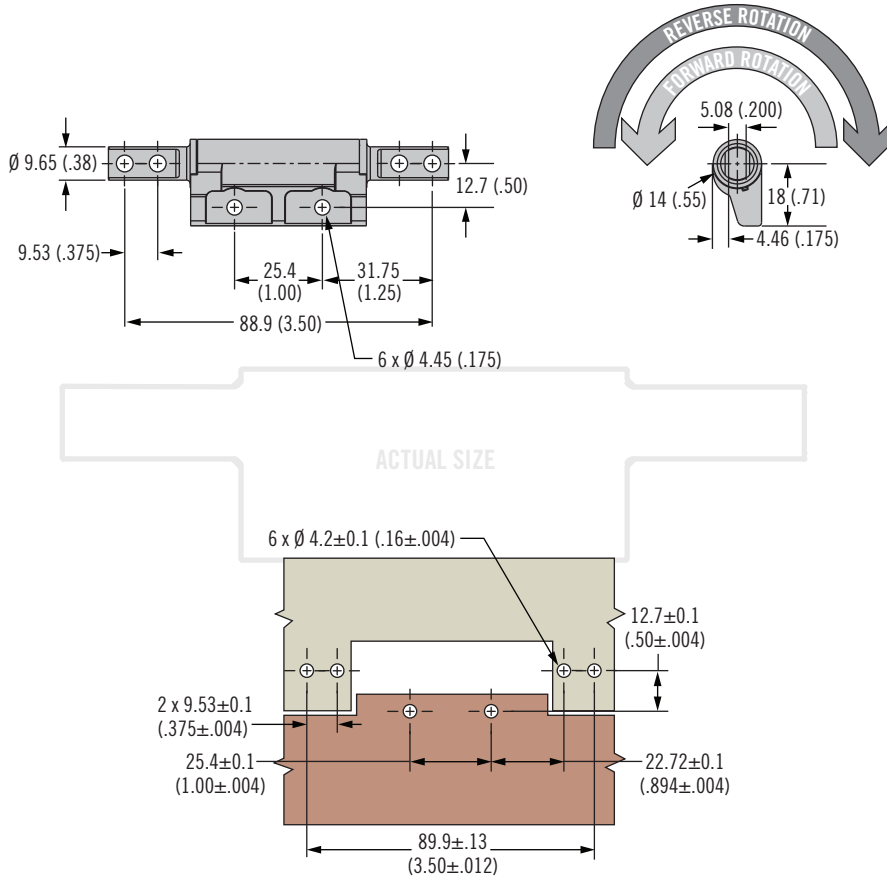
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Dimensions in millimeters (inch) unless otherwise stated

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ST-10E Hinge

Position control · Constant torque



- Smooth, zero backlash operation
- Space efficient design provides high torque in minimum space
- Constant torque, never needs adjusting

Material and Finish

Zinc alloy and steel, natural

Performance Details

Cycle performance:
20,000 cycles within ±20% of static torque specification

Installation Notes

Install hinge using M4 (No.8) socket head cap screw

Part Number

See table

Symmetric Torque Versions	
Part Number	Static Torque (Forward and Reverse) N·m (in·lbf)
ST-10E-120SH-33	1.35 (12)
ST-10E-200SH-33	2.26 (20)
ST-10E-280SH-33	3.16 (28)
ST-10E-360SH-33	4.06 (36)

Asymmetric Torque Versions		
Part Number	Static Torque N·m (in·lbf)	
	Forward N·m (in·lbf)	Reverse N·m (in·lbf)
ST-10E-200FH-33	2.26 (20)	1.35 (12)
ST-10E-280FH-33	3.16 (28)	1.89 (16.8)
ST-10E-360FH-33	4.06 (36)	2.44 (21.6)
ST-10E-440FH-33	4.97 (44)	2.93 (26)
ST-10E-200RH-33	1.35 (12)	2.26 (20)
ST-10E-280RH-33	1.89 (16.8)	3.16 (28)
ST-10E-360RH-33	2.44 (21.6)	4.06 (36)
ST-10E-440RH-33	2.93 (26)	4.97 (44)





ST-10E Hinge

Position control · Constant torque

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- Space efficient design provides high torque in minimum space
- Constant torque, never needs adjusting

Material and Finish

Zinc alloy and steel, natural

Performance Details

Cycle performance:
20,000 cycles within $\pm 20\%$ of static torque specification

Installation Notes

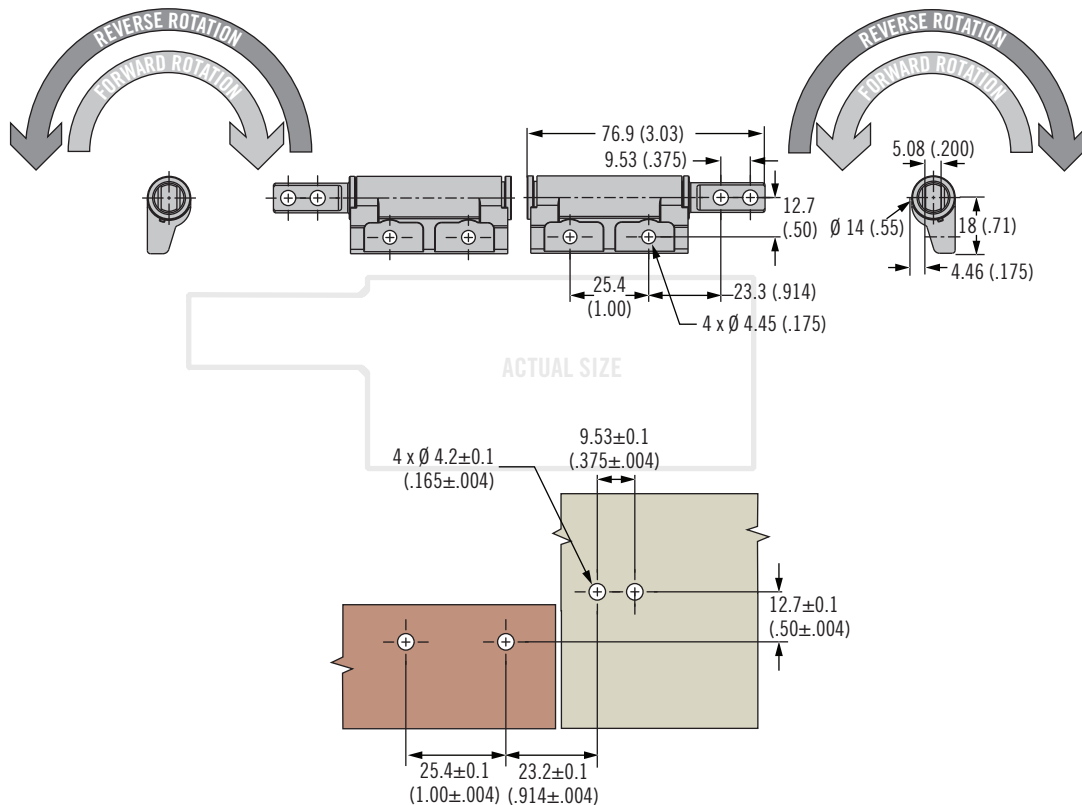
1. Install hinge using M4 (No. 8 socket head cap screw.
2. For proper function, assembly must include (1) type A and (1) type B hinge.

Part Number

See table

Type A

Type B



Symmetric Torque Versions		
Part Number		Static Torque (Forward and Reverse) N·m (in·lbf)
Type A	Type B	
ST-10E-120SJ-33	ST-10E-120SK-33	1.35 (12)
ST-10E-200SJ-33	ST-10E-200SK-33	2.26 (20)
ST-10E-280SJ-33	ST-10E-280SK-33	3.16 (28)
ST-10E-360SJ-33	ST-10E-360SK-33	4.06 (36)

Asymmetric Torque Versions			
Part Number		Static Torque N·m (in·lbf)	
Type A	Type B	Forward N·m (in·lbf)	Reverse N·m (in·lbf)
ST-10E-200FJ-33	ST-10E-200FK-33	2.26 (20)	1.35 (12)
ST-10E-280FJ-33	ST-10E-280FK-33	3.16 (28)	1.89 (16.8)
ST-10E-360FJ-33	ST-10E-360FK-33	4.06 (36)	2.44 (21.6)
ST-10E-440FJ-33	ST-10E-440FK-33	4.97 (44)	2.93 (26)
ST-10E-200RJ-33	ST-10E-200RK-33	1.35 (12)	2.26 (20)
ST-10E-280RJ-33	ST-10E-280RK-33	1.89 (16.8)	3.16 (28)
ST-10E-360RJ-33	ST-10E-360RK-33	2.44 (21.6)	4.06 (36)
ST-10E-440RJ-33	ST-10E-440RK-33	2.93 (26)	4.97 (44)

Other options available. For complete details on variety, part numbers, installation and specification, go to



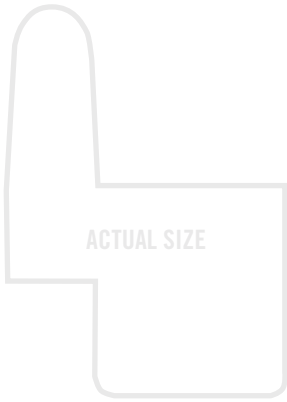
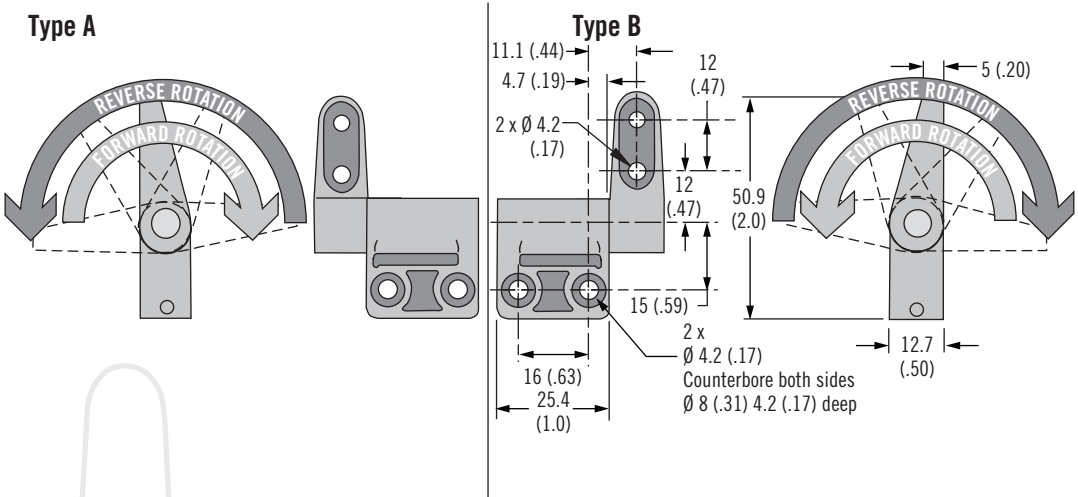
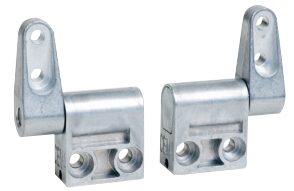
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Dimensions in millimeters (inch) unless otherwise stated

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ST-12A Hinge

Position control · Constant torque



- Smooth, zero backlash operation
- Space efficient design provides high torque in minimum space
- Constant torque, never needs adjusting

Material and Finish

Zinc alloy and steel, natural

Performance Details

Radial load:
Maximum static load:
1000 N (225 lbf)

Axial load:
Maximum static load:
1200 N (270 lbf)

Cycle performance:
20,000 cycles within ±20% of static torque specification

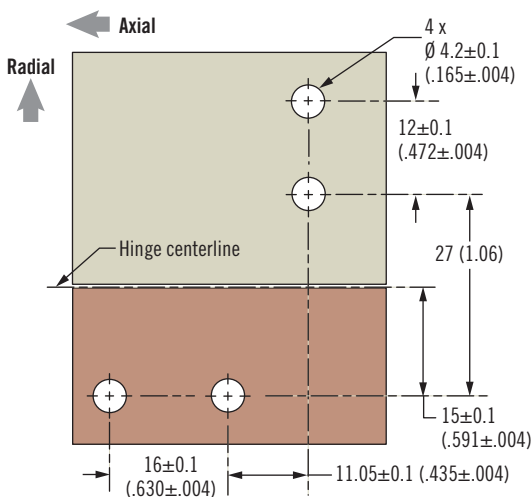
Installation Notes

1. Install hinge using M4 (No. 8) socket head cap screw.
2. For proper function, assembly must include (1) type A and (1) type B hinge.

Part Number

See table

Symmetric Torque Versions		
Part Number		Static Torque (Forward and Reverse) N·m (in·lbf)
Type A	Type B	
ST-12A-120SA-33	ST-12A-120SB-33	1.4 (12)
ST-12A-200SA-33	ST-12A-200SB-33	2.3 (20)
ST-12A-280SA-33	ST-12A-280SB-33	3.2 (28)
ST-12A-360SA-33	ST-12A-360SB-33	4.1 (36)



Asymmetric Torque Versions			
Part Number		Static Torque N·m (in·lbf)	
Type A	Type B	Forward N·m (in·lbf)	Reverse N·m (in·lbf)
ST-12A-200FA-33	ST-12A-200FB-33	2.3 (20)	1.5 (13.6)
ST-12A-280FA-33	ST-12A-280FB-33	3.2 (28)	2.2 (19.1)
ST-12A-360FA-33	ST-12A-360FB-33	4.1 (36)	2.8 (24.6)
ST-12A-440FA-33	ST-12A-440FB-33	5 (44)	3.4 (30)
ST-12A-200RA-33	ST-12A-200RB-33	1.5 (13.6)	2.3 (20)
ST-12A-280RA-33	ST-12A-280RB-33	2.2 (19.1)	3.2 (28)
ST-12A-360RA-33	ST-12A-360RB-33	2.8 (24.6)	4.1 (36)
ST-12A-440RA-33	ST-12A-440RB-33	3.4 (30)	5 (44)

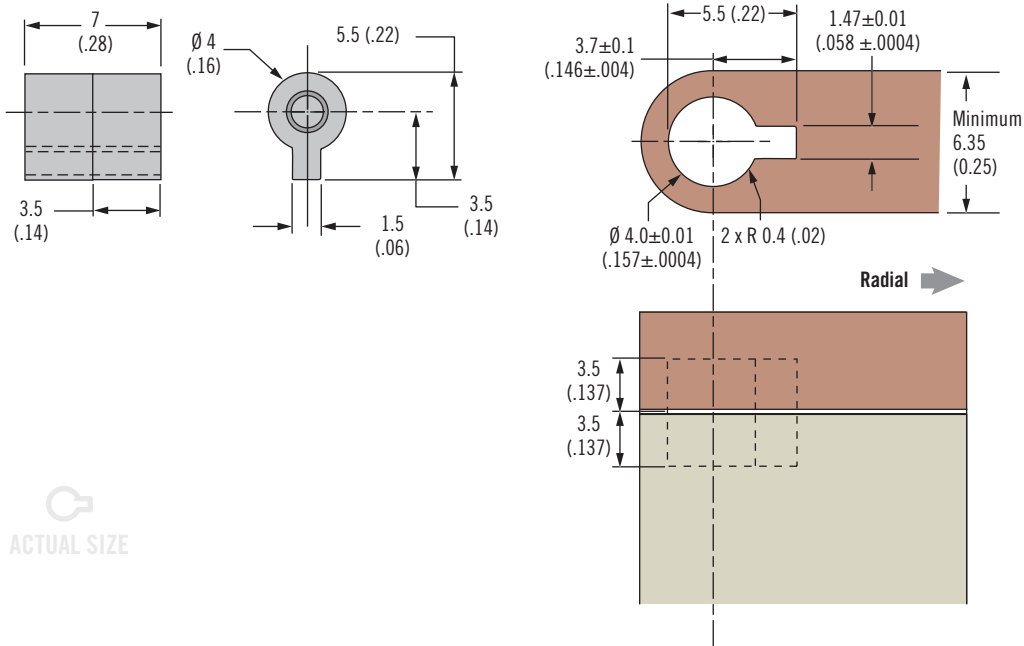
Other options available. For complete details on variety, part numbers, installation and specification, go to



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ST-4A Hinge

Position control · Constant torque



ACTUAL SIZE

- Smooth consistent operation
- Extremely compact, fits the smallest applications
- Never requires adjustment

Material and Finish

Aluminum, zinc alloy and steel, natural

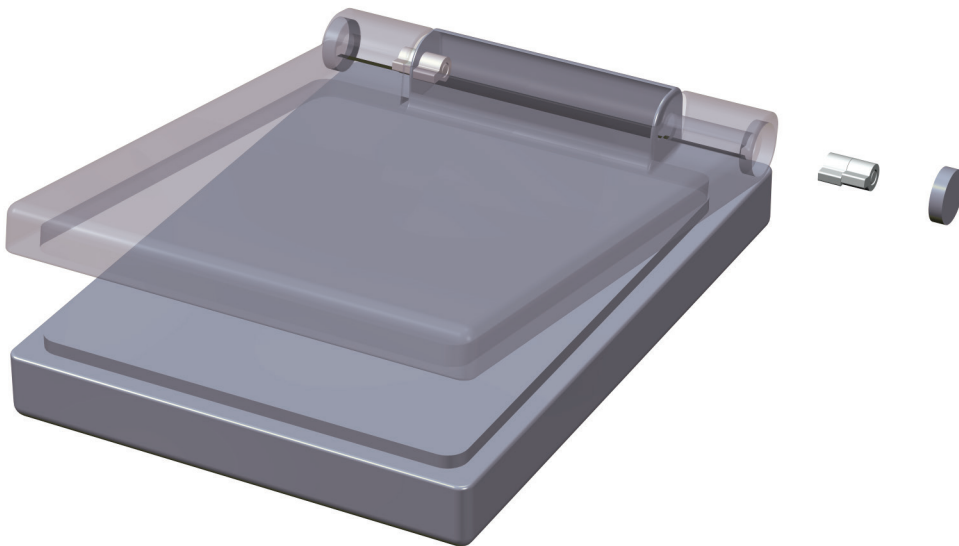
Performance Details

Radial load:

Maximum static load: 200 N (45 lbf)

Cycle performance:

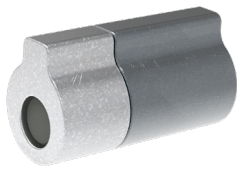
20,000 cycles within 0.023 N•m (.2 in•lbf) of static torque specification



Part Number	Static Torque
ST-4A-3S-33	0.034 N•m (.3 in•lbf)

Part Number

See table



ST-5A Hinge

Position control · Constant torque

- Smooth consistent operation
- Compact design fits the smallest applications
- Never requires adjustment

Material and Finish

Aluminum, zinc alloy and steel, natural

Performance Details

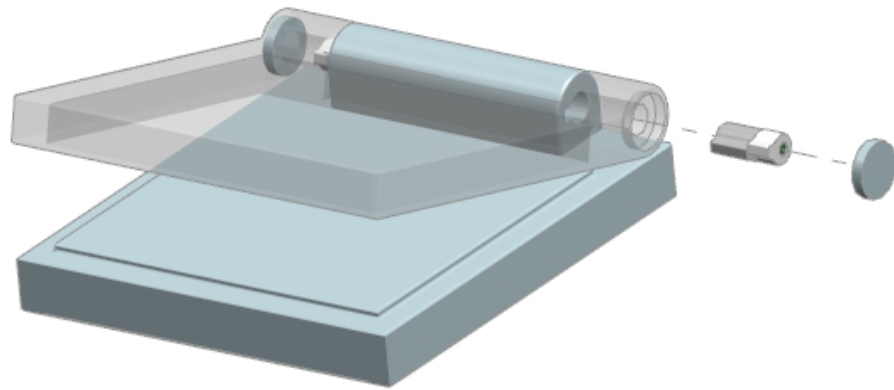
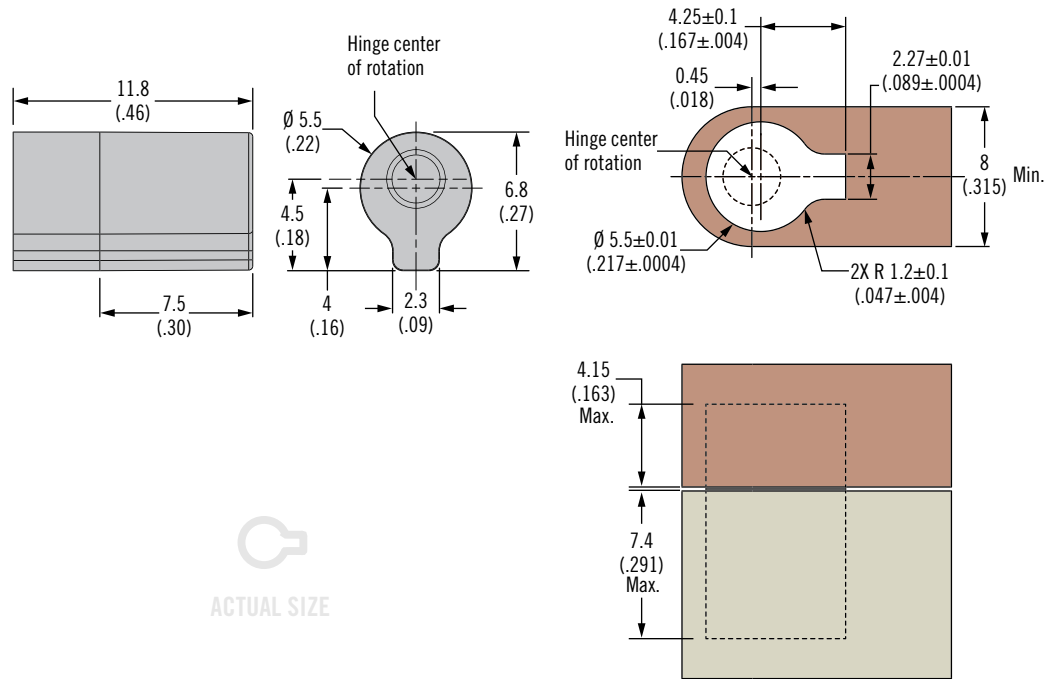
Radial load:

Maximum static load:

223 N (50 lbf)

Cycle performance:

20,000 cycles within $\pm 20\%$ of static torque specification



Part Number

See table

Part Number	Static Torque N·m (in·lbf)
ST-5A-10S-33	0.113 (1.0)
ST-5A-16S-33	0.181 (1.6)
ST-5A-23S-33	0.260 (2.3)
ST-5A-30S-33	0.339 (3.0)