



ST-4A Hinge

Position control · Constant torque

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

Material and Finish

Aluminum, zinc alloy and steel, natural

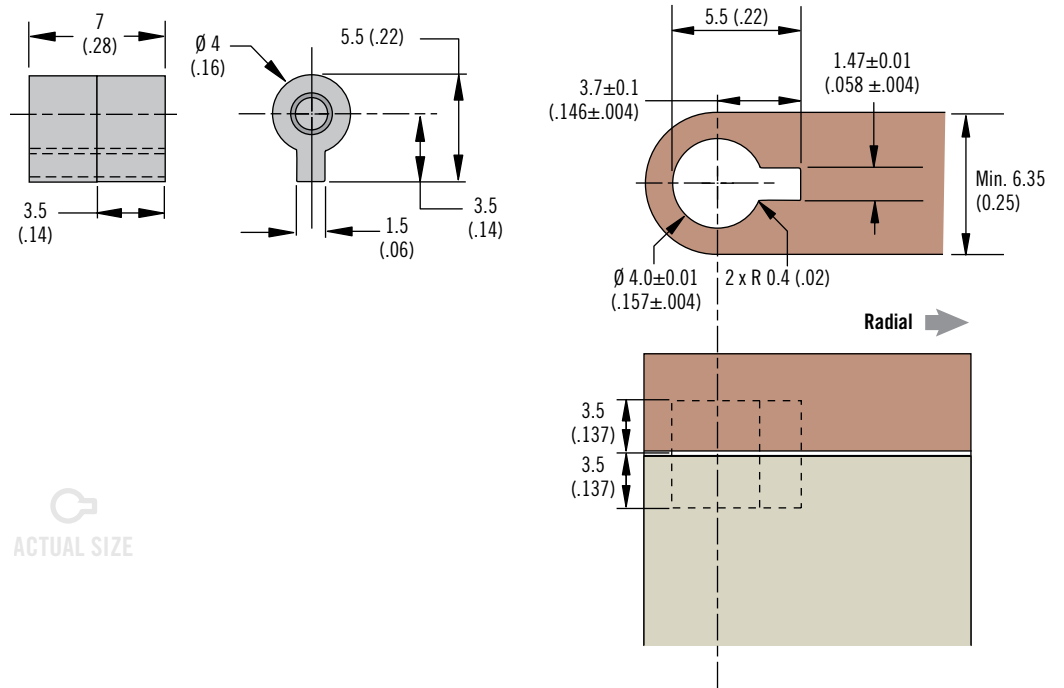
Performance Details

Radial load:

Max. 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

See table

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

Dimensions in millimeters (inch) unless otherwise stated



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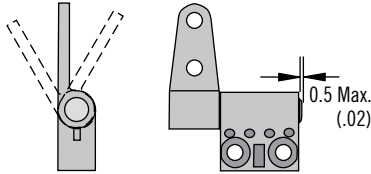
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ST-7A Hinge

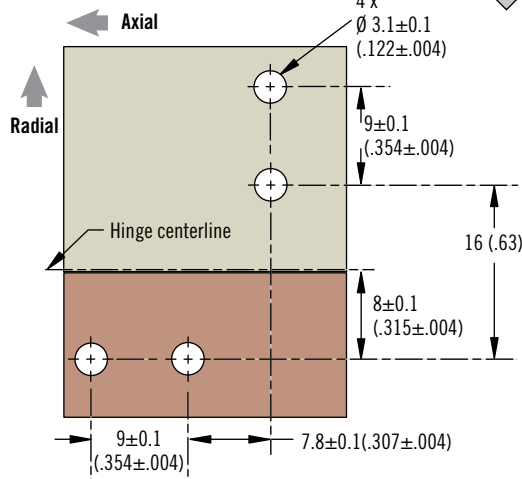
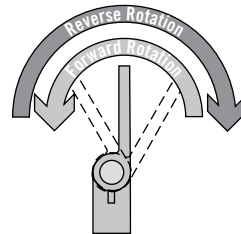
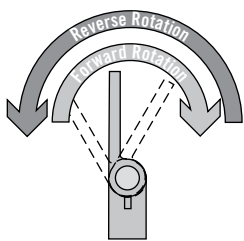
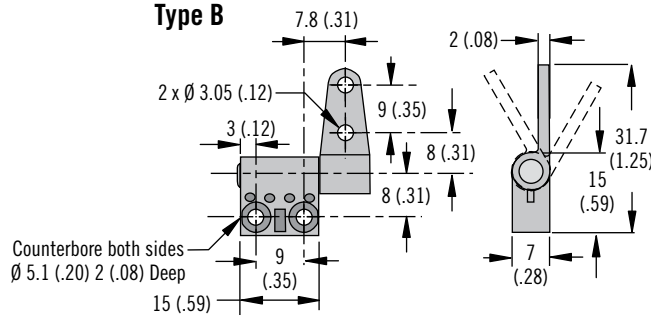
Position control · Constant torque



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:

Max. static load: 400 N (90 lbf)

Axial load:

Max. static load: 300 N (67 lbf)

Cycle performance:

20,000 cycles within ±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

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)





ST-10A 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:

Max. static load: 500 N (112 lbf)

Axial load:

Max. static load: 1000 N (225 lbf)

Cycle performance:

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

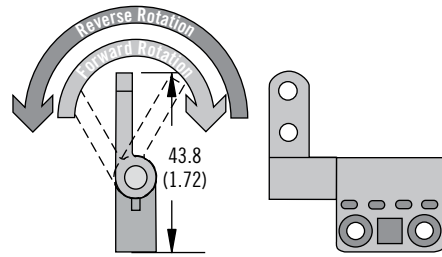
Installation Notes

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.

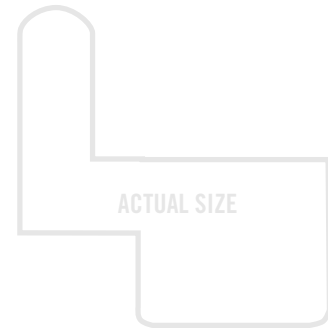
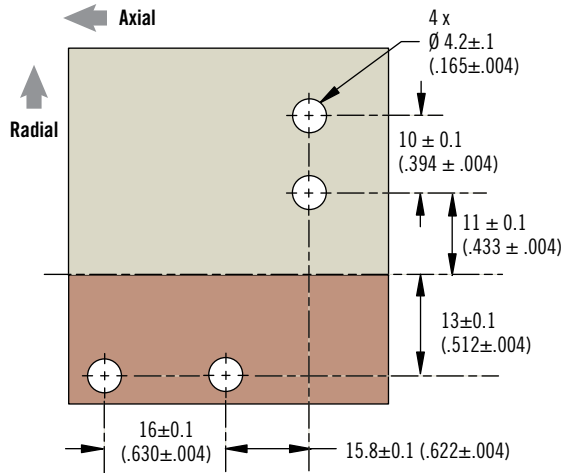
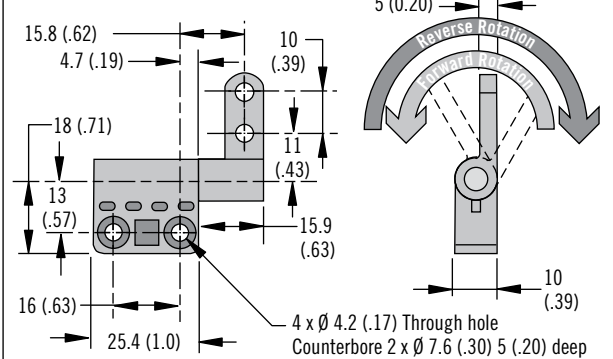
Part Number

See table

Type A



Type B



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)

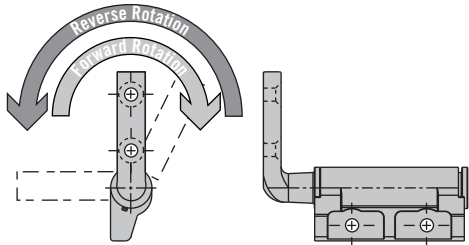


ST-10E Hinge

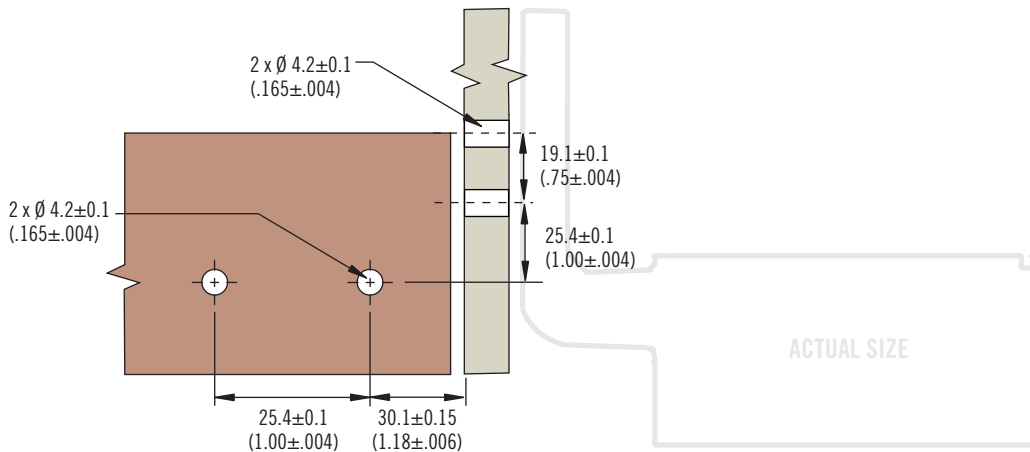
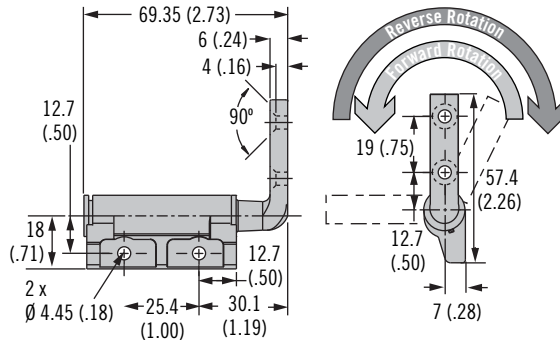
Position control · Constant torque



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

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)



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

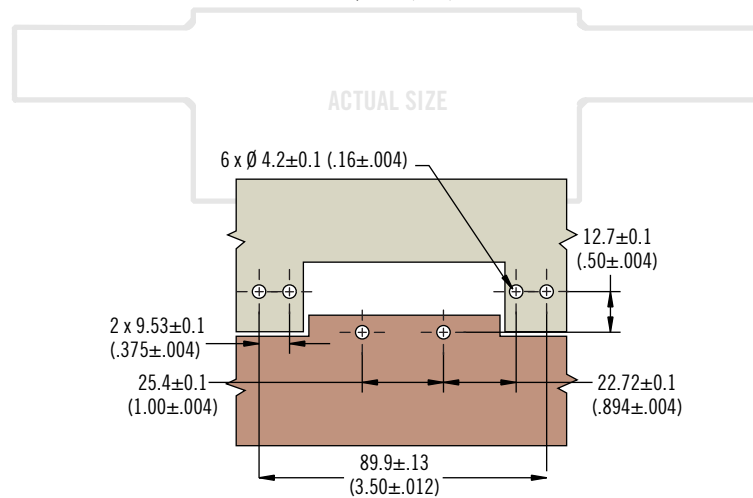
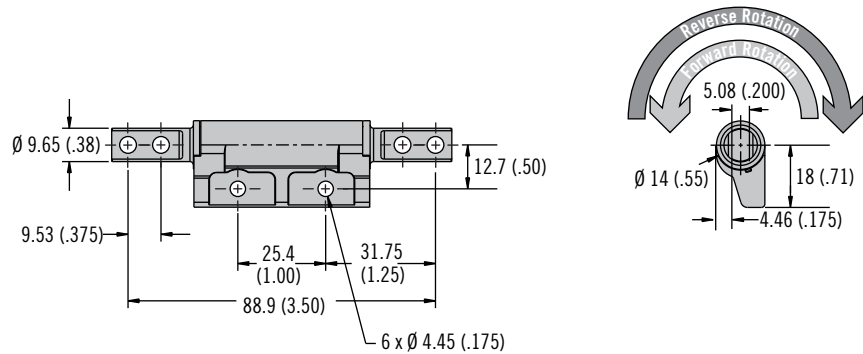
Zinc alloy and steel, natural

Performance Details

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

Installation Notes

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)

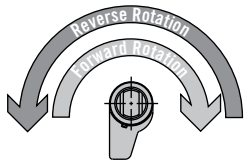
Asymmetric Torque Versions		
Part Number	Static Torque N·m (in·lbf)	
	Forward N·m (in·lbf)	Reverse N·m (in·lbf)
ST-10E-200FH-33	2.26 (20)	1.35 (12)
ST-10E-280FH-33	3.16 (28)	1.89 (16.8)
ST-10E-360FH-33	4.06 (36)	2.44 (21.6)
ST-10E-440FH-33	4.97 (44)	2.93 (26)
ST-10E-200RH-33	1.35 (12)	2.26 (20)
ST-10E-280RH-33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

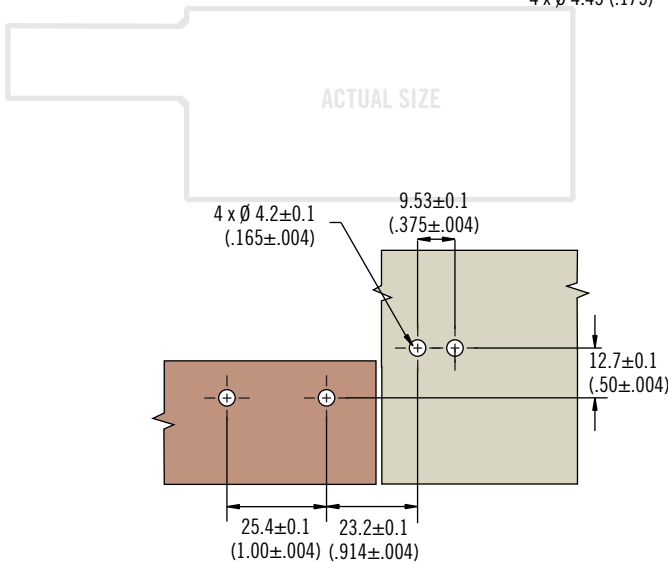
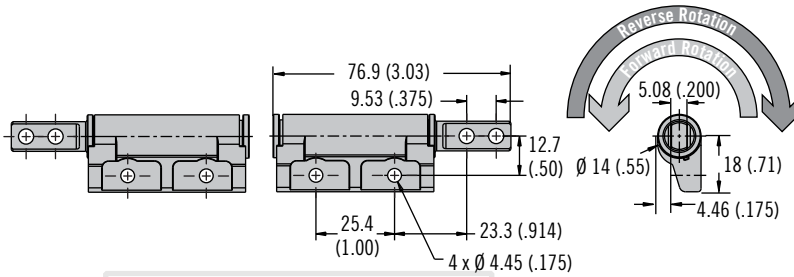
Position control · Constant torque



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

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-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)



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:

Max. static load: 1000 N (225 lbf)

Axial load:

Max. static load: 1200 N (270 lbf)

Cycle performance:

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

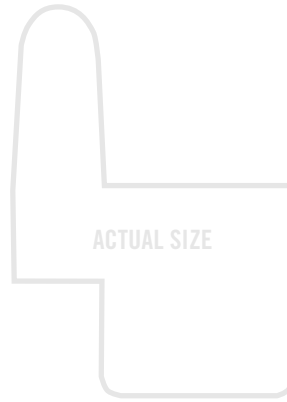
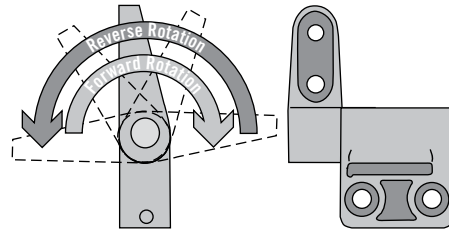
Installation Notes

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.

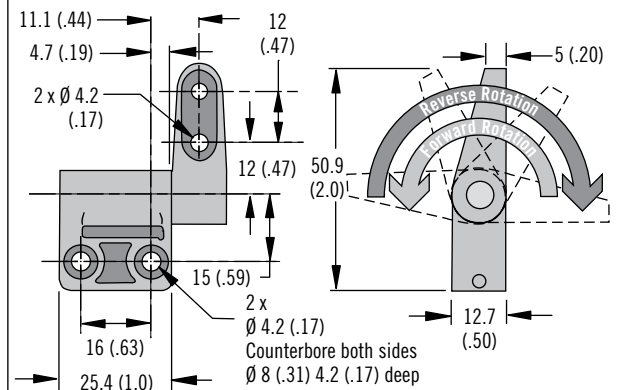
Part Number

See table

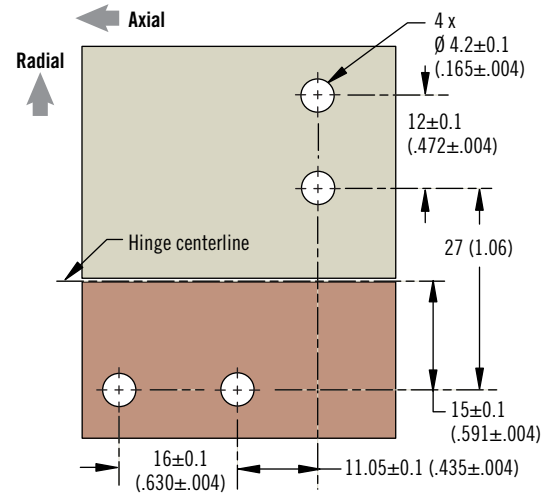
Type A



Type B



Symmetric Torque Versions		
Part Number		Static Torque (Forward and Reverse) N·m (in·lbf)
Type A	Type B	
ST-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)



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Dimensions in millimeters (inch) unless otherwise stated

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ST-10A-120FA-33	ST-10A2-115RA-53	ST-10A2-190RW-33	ST-10A2-300SW-53	ST-10E-200RG-50
ST-10A-120FA-50	ST-10A2-115RB-33	ST-10A2-190RW-53	ST-10A-240FA-33	ST-10E-200RH-33
ST-10A-120FB-33	ST-10A2-115RB-53	ST-10A2-200SA-33	ST-10A-240FA-50	ST-10E-200RH-50
ST-10A-120FB-50	ST-10A2-115RT-33	ST-10A2-200SA-53	ST-10A-240FB-33	ST-10E-200RJ-33
ST-10A-120RA-33	ST-10A2-115RT-53	ST-10A2-200SB-33	ST-10A-240FB-50	ST-10E-200RJ-50
ST-10A-120RA-50	ST-10A2-115RW-33	ST-10A2-200SB-53	ST-10A-240RA-33	ST-10E-200RK-33
ST-10A-120RB-33	ST-10A2-115RW-53	ST-10A2-200ST-33	ST-10A-240RA-50	ST-10E-200RK-50
ST-10A-120RB-50	ST-10A2-135SA-33	ST-10A2-200ST-53	ST-10A-240RB-33	ST-10E-200SA-33
ST-10A-120SA-33	ST-10A2-135SA-53	ST-10A2-200SW-33	ST-10A-240RB-50	ST-10E-200SA-50
ST-10A-120SA-50	ST-10A2-135SB-33	ST-10A2-200SW-53	ST-10A-50SA-33	ST-10E-200SB-33
ST-10A-120SB-33	ST-10A2-135SB-53	ST-10A2-225FA-33	ST-10A-50SA-50	ST-10E-200SB-50
ST-10A-120SB-50	ST-10A2-135ST-33	ST-10A2-225FA-53	ST-10A-50SB-33	ST-10E-200SE-33
ST-10A-160FA-33	ST-10A2-135ST-53	ST-10A2-225FB-33	ST-10A-50SB-50	ST-10E-200SE-50
ST-10A-160FA-50	ST-10A2-135SW-33	ST-10A2-225FB-53	ST-10A-80SA-33	ST-10E-200SG-33
ST-10A-160FB-33	ST-10A2-135SW-53	ST-10A2-225FT-33	ST-10A-80SA-50	ST-10E-200SG-50
ST-10A-160FB-50	ST-10A2-150FA-33	ST-10A2-225FT-53	ST-10A-80SB-33	ST-10E-200SH-33
ST-10A-160RA-33	ST-10A2-150FA-53	ST-10A2-225FW-33	ST-10A-80SB-50	ST-10E-200SH-50
ST-10A-160RA-50	ST-10A2-150FB-33	ST-10A2-225FW-53	ST-10E-100SH-33	ST-10E-200SJ-33
ST-10A-160RB-33	ST-10A2-150FB-53	ST-10A2-225RA-33	ST-10E-120SA-33	ST-10E-200SJ-50
ST-10A-160RB-50	ST-10A2-150FT-33	ST-10A2-225RA-53	ST-10E-120SA-50	ST-10E-200SK-33
ST-10A-160SA-33	ST-10A2-150FT-53	ST-10A2-225RB-33	ST-10E-120SB-33	ST-10E-200SK-50
ST-10A-160SA-50	ST-10A2-150FW-33	ST-10A2-225RB-53	ST-10E-120SB-50	ST-10E-280FA-33
ST-10A-160SB-33	ST-10A2-150FW-53	ST-10A2-225RT-33	ST-10E-120SE-33	ST-10E-280FA-50
ST-10A-160SB-50	ST-10A2-150RA-33	ST-10A2-225RT-53	ST-10E-120SE-50	ST-10E-280FB-33
ST-10A-200FA-33	ST-10A2-150RA-53	ST-10A2-225RW-33	ST-10E-120SG-33	ST-10E-280FB-50
ST-10A-200FA-50	ST-10A2-150RB-33	ST-10A2-225RW-53	ST-10E-120SG-50	ST-10E-280FE-33
ST-10A-200FB-33	ST-10A2-150RB-53	ST-10A2-240ST-33	ST-10E-120SH-33	ST-10E-280FE-50
ST-10A-200FB-50	ST-10A2-150RT-33	ST-10A2-240ST-53	ST-10E-120SH-50	ST-10E-280FG-33
ST-10A-200FC-33	ST-10A2-150RT-53	ST-10A2-240SW-33	ST-10E-120SJ-33	ST-10E-280FG-50
ST-10A-200FC-50	ST-10A2-150RW-33	ST-10A2-240SW-53	ST-10E-120SJ-50	ST-10E-280FH-33
ST-10A-200FD-33	ST-10A2-150RW-53	ST-10A2-270FT-33	ST-10E-120SK-33	ST-10E-280FH-50
ST-10A-200FD-50	ST-10A2-170SA-33	ST-10A2-270FT-53	ST-10E-120SK-50	ST-10E-280FJ-33
ST-10A-200RA-33	ST-10A2-170SA-53	ST-10A2-270FW-33	ST-10E-200FA-33	ST-10E-280FJ-50
ST-10A-200RA-50	ST-10A2-170SB-33	ST-10A2-270FW-53	ST-10E-200FA-50	ST-10E-280FK-33
ST-10A-200RB-33	ST-10A2-170SB-53	ST-10A2-270RT-33	ST-10E-200FB-33	ST-10E-280FK-50
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ST-10A-200RC-33	ST-10A2-170ST-53	ST-10A2-270RW-33	ST-10E-200FE-33	ST-10E-280RA-50
ST-10A-200RC-50	ST-10A2-170SW-33	ST-10A2-270RW-53	ST-10E-200FE-50	ST-10E-280RB-33
ST-10A-200RD-33	ST-10A2-170SW-53	ST-10A2-270ST-33	ST-10E-200FG-33	ST-10E-280RB-50
ST-10A-200RD-50	ST-10A2-190FA-33	ST-10A2-270ST-53	ST-10E-200FG-50	ST-10E-280RE-33
ST-10A-200SA-33	ST-10A2-190FA-53	ST-10A2-270SW-33	ST-10E-200FH-33	ST-10E-280RE-50
ST-10A-200SA-50	ST-10A2-190FB-33	ST-10A2-270SW-53	ST-10E-200FH-50	ST-10E-280RG-33
ST-10A-200SB-33	ST-10A2-190FB-53	ST-10A2-300FT-33	ST-10E-200FJ-33	ST-10E-280RG-50
ST-10A-200SB-50	ST-10A2-190FT-33	ST-10A2-300FT-53	ST-10E-200FJ-50	ST-10E-280RH-33
ST-10A2-115FA-33	ST-10A2-190FT-53	ST-10A2-300FW-33	ST-10E-200FK-33	ST-10E-280RH-50
ST-10A2-115FA-53	ST-10A2-190FW-33	ST-10A2-300FW-53	ST-10E-200FK-50	ST-10E-280RJ-33
ST-10A2-115FB-33	ST-10A2-190FW-53	ST-10A2-300RT-33	ST-10E-200RA-33	ST-10E-280RJ-50
ST-10A2-115FB-53	ST-10A2-190RA-33	ST-10A2-300RT-53	ST-10E-200RA-50	ST-10E-280RK-33
ST-10A2-115FT-33	ST-10A2-190RA-53	ST-10A2-300RW-33	ST-10E-200RB-33	ST-10E-280RK-50
ST-10A2-115FT-53	ST-10A2-190RB-33	ST-10A2-300RW-53	ST-10E-200RB-50	ST-10E-280SA-33
ST-10A2-115FW-33	ST-10A2-190RB-53	ST-10A2-300ST-33	ST-10E-200RE-33	ST-10E-280SA-50
ST-10A2-115FW-53	ST-10A2-190RT-33	ST-10A2-300ST-53	ST-10E-200RE-50	ST-10E-280SB-33
ST-10A2-115RA-33	ST-10A2-190RT-53	ST-10A2-300SW-33	ST-10E-200RG-33	ST-10E-280SB-50

ST-10E-280SE-33	ST-10E-360SK-50	ST-10P-040F-33	ST-11A1-320FB-33	ST-11P-200FA-50
ST-10E-280SE-40	ST-10E-400FA-50	ST-10P-040R-33	ST-11A1-320FB-50	ST-11P-200RA-50
ST-10E-280SE-50	ST-10E-400FB-50	ST-10P-040S-33	ST-11A1-320RA-33	ST-11P-200SA-50
ST-10E-280SG-33	ST-10E-400FE-33	ST-10P-080F-33	ST-11A1-320RA-50	ST-11P2-150FA-33
ST-10E-280SG-40	ST-10E-400FE-50	ST-10P-080R-33	ST-11A1-320RB-33	ST-11P2-150RA-33
ST-10E-280SG-50	ST-10E-400FG-33	ST-10P-080S-33	ST-11A1-320RB-50	ST-11P2-150SA-33
ST-10E-280SH-33	ST-10E-400FG-50	ST-10P-100S-33	ST-11A-140FA-33	ST-11P2-200FA-33
ST-10E-280SH-50	ST-10E-400FH-33	ST-10P-120F-33	ST-11A-140FA-50	ST-11P2-200RA-33
ST-10E-280SJ-33	ST-10E-400FH-50	ST-10P-120R-33	ST-11A-140FB-33	ST-11P2-200SA-33
ST-10E-280SJ-50	ST-10E-400FJ-33	ST-10P-140S-33	ST-11A-140FB-50	ST-11P2-250FA-33
ST-10E-280SK-33	ST-10E-400FJ-50	ST-10P-160F-33	ST-11A-140RA-33	ST-11P2-250RA-33
ST-10E-280SK-50	ST-10E-400FK-33	ST-10P-160FA-33	ST-11A-140RA-50	ST-11P2-250SA-33
ST-10E-360FA-33	ST-10E-400FK-50	ST-10P-160R-33	ST-11A-140RB-33	ST-11P2-300FA-33
ST-10E-360FA-50	ST-10E-400RA-50	ST-10P-200F-33	ST-11A-140RB-50	ST-11P2-300RA-33
ST-10E-360FB-33	ST-10E-400RB-50	ST-10P-200R-33	ST-11A-140SA-33	ST-11P2-300SA-33
ST-10E-360FB-50	ST-10E-400RE-33	ST-11A1-140FA-33	ST-11A-140SA-50	ST-11P2-350FA-33
ST-10E-360FE-33	ST-10E-400RE-50	ST-11A1-140FA-50	ST-11A-140SB-33	ST-11P2-350RA-33
ST-10E-360FE-50	ST-10E-400RG-33	ST-11A1-140FB-33	ST-11A-140SB-50	ST-11P2-350SA-33
ST-10E-360FG-33	ST-10E-400RG-50	ST-11A1-140FB-50	ST-11A-200FA-33	ST-11P2-400FA-33
ST-10E-360FG-50	ST-10E-400RH-33	ST-11A1-140RA-33	ST-11A-200FA-50	ST-11P2-400RA-33
ST-10E-360FH-33	ST-10E-400RH-50	ST-11A1-140RA-50	ST-11A-200FB-33	ST-11P-260FA-50
ST-10E-360FH-50	ST-10E-400RJ-33	ST-11A1-140RB-33	ST-11A-200FB-50	ST-11P-260RA-50
ST-10E-360FJ-33	ST-10E-400RJ-50	ST-11A1-140RB-50	ST-11A-200RA-33	ST-11P-260SA-50
ST-10E-360FJ-50	ST-10E-400RK-33	ST-11A1-140SA-33	ST-11A-200RA-50	ST-11P-320FA-50
ST-10E-360FK-33	ST-10E-400RK-50	ST-11A1-140SA-50	ST-11A-200RB-33	ST-11P-320RA-50
ST-10E-360FK-50	ST-10E-440FA-33	ST-11A1-140SB-33	ST-11A-200RB-50	ST-12A-120SA-33
ST-10E-360RA-33	ST-10E-440FA-50	ST-11A1-140SB-50	ST-11A-200SA-33	ST-12A-120SA-50
ST-10E-360RA-50	ST-10E-440FB-33	ST-11A1-200FA-33	ST-11A-200SA-50	ST-12A-120SB-33
ST-10E-360RB-33	ST-10E-440FB-50	ST-11A1-200FA-50	ST-11A-200SB-33	ST-12A-120SB-50
ST-10E-360RB-50	ST-10E-440FE-33	ST-11A1-200FB-33	ST-11A-200SB-50	ST-12A-200FA-10
ST-10E-360RE-33	ST-10E-440FE-50	ST-11A1-200FB-50	ST-11A-260FA-33	ST-12A-200FA-33
ST-10E-360RE-50	ST-10E-440FG-33	ST-11A1-200RA-33	ST-11A-260FA-50	ST-12A-200FA-50
ST-10E-360RG-33	ST-10E-440FG-50	ST-11A1-200RA-50	ST-11A-260FB-33	ST-12A-200FB-10
ST-10E-360RG-50	ST-10E-440FH-33	ST-11A1-200RB-33	ST-11A-260FB-50	ST-12A-200FB-33
ST-10E-360RH-33	ST-10E-440FH-50	ST-11A1-200RB-50	ST-11A-260RA-33	ST-12A-200FB-50
ST-10E-360RH-50	ST-10E-440FJ-33	ST-11A1-200SA-33	ST-11A-260RA-50	ST-12A-200RA-33
ST-10E-360RJ-33	ST-10E-440FJ-50	ST-11A1-200SA-50	ST-11A-260RB-33	ST-12A-200RB-33
ST-10E-360RJ-50	ST-10E-440FK-33	ST-11A1-200SB-33	ST-11A-260RB-50	ST-12A-200SA-33
ST-10E-360RK-33	ST-10E-440FK-50	ST-11A1-200SB-50	ST-11A-260SA-33	ST-12A-200SA-50
ST-10E-360RK-50	ST-10E-440RA-33	ST-11A1-260FA-33	ST-11A-260SA-50	ST-12A-200SB-33
ST-10E-360SA-33	ST-10E-440RA-50	ST-11A1-260FA-50	ST-11A-260SB-33	ST-12A-200SB-50
ST-10E-360SA-50	ST-10E-440RB-33	ST-11A1-260FB-33	ST-11A-260SB-50	ST-12A-280FA-10
ST-10E-360SB-33	ST-10E-440RB-50	ST-11A1-260FB-50	ST-11A-320FA-33	ST-12A-280FA-33
ST-10E-360SB-50	ST-10E-440RE-33	ST-11A1-260RA-33	ST-11A-320FA-50	ST-12A-280FA-50
ST-10E-360SE-33	ST-10E-440RE-50	ST-11A1-260RA-50	ST-11A-320FB-33	ST-12A-280FB-10
ST-10E-360SE-50	ST-10E-440RG-33	ST-11A1-260RB-33	ST-11A-320FB-50	ST-12A-280FB-33
ST-10E-360SG-33	ST-10E-440RG-50	ST-11A1-260RB-50	ST-11A-320RA-33	ST-12A-280FB-50
ST-10E-360SG-50	ST-10E-440RH-33	ST-11A1-260SA-33	ST-11A-320RA-50	ST-12A-280RA-33
ST-10E-360SH-33	ST-10E-440RH-50	ST-11A1-260SA-50	ST-11A-320RB-33	ST-12A-280RB-33
ST-10E-360SH-50	ST-10E-440RJ-33	ST-11A1-260SB-33	ST-11A-320RB-50	ST-12A-280SA-33
ST-10E-360SJ-33	ST-10E-440RJ-50	ST-11A1-260SB-50	ST-11P-140FA-50	ST-12A-280SA-50
ST-10E-360SJ-50	ST-10E-440RK-33	ST-11A1-320FA-33	ST-11P-140RA-50	ST-12A-280SB-33
ST-10E-360SK-33	ST-10E-440RK-50	ST-11A1-320FA-50	ST-11P-140SA-50	ST-12A-280SB-50

ST-12A-360FA-33	ST-12C-280FA1-50	ST-12C-360RA7-33	ST-20L-200FK-33	ST-7A-10SJ-50
ST-12A-360FA-50	ST-12C-280FA3-33	ST-12C-360RA7-50	ST-20L-200RA-33	ST-7A-20FA-33
ST-12A-360FB-33	ST-12C-280FA3-50	ST-12C-360RB1-33	ST-20L-200RB-33	ST-7A-20FA-50
ST-12A-360FB-50	ST-12C-280FA5-33	ST-12C-360RB1-50	ST-20L-200RJ-33	ST-7A-20FB-33
ST-12A-360RA-10	ST-12C-280FA5-50	ST-12C-360RB3-33	ST-20L-200RK-33	ST-7A-20FB-50
ST-12A-360RA-33	ST-12C-280FA7-33	ST-12C-360RB3-50	ST-20L-200SA-33	ST-7A-20FJ-33
ST-12A-360RB-10	ST-12C-280FA7-50	ST-12C-360RB5-33	ST-20L-200SB-33	ST-7A-20FJ-50
ST-12A-360RB-33	ST-12C-280FB1-33	ST-12C-360RB5-50	ST-20L-200SJ-33	ST-7A-20RA-33
ST-12A-360SA-33	ST-12C-280FB1-50	ST-12C-360RB7-33	ST-20L-200SK-33	ST-7A-20RA-50
ST-12A-360SB-33	ST-12C-280FB3-33	ST-12C-360RB7-50	ST-20L-300FA-33	ST-7A-20RB-33
ST-12A-400RA-33	ST-12C-280FB3-50	ST-12C-440FA1-33	ST-20L-300FB-33	ST-7A-20RB-50
ST-12A-400RB-33	ST-12C-280FB5-33	ST-12C-440FA1-50	ST-20L-300FJ-33	ST-7A-20RJ-33
ST-12A-440FA-33	ST-12C-280FB5-50	ST-12C-440FA3-33	ST-20L-300FK-33	ST-7A-20RJ-50
ST-12A-440FA-50	ST-12C-280FB7-33	ST-12C-440FA3-50	ST-20L-300RA-33	ST-7A-20SA-33
ST-12A-440FB-33	ST-12C-280FB7-50	ST-12C-440FA5-33	ST-20L-300RB-33	ST-7A-20SA-50
ST-12A-440FB-50	ST-12C-280RA1-33	ST-12C-440FA5-50	ST-20L-300RJ-33	ST-7A-20SB-33
ST-12A-440RA-33	ST-12C-280RA1-50	ST-12C-440FA7-33	ST-20L-300RK-33	ST-7A-20SB-50
ST-12A-440RA-50	ST-12C-280RA3-33	ST-12C-440FA7-50	ST-20L-400FA-33	ST-7A-20SJ-33
ST-12A-440RB-33	ST-12C-280RA3-50	ST-12C-440FB1-33	ST-20L-400FB-33	ST-7A-20SJ-50
ST-12A-440RB-50	ST-12C-280RA5-33	ST-12C-440FB1-50	ST-20L-400FJ-33	ST-7A2-15SA-33
ST-12C-200FA1-33	ST-12C-280RA5-50	ST-12C-440FB3-33	ST-20L-400FK-33	ST-7A2-15SA-53
ST-12C-200FA1-50	ST-12C-280RA7-33	ST-12C-440FB3-50	ST-20L-400RA-33	ST-7A2-15SB-33
ST-12C-200FA3-33	ST-12C-280RA7-50	ST-12C-440FB5-33	ST-20L-400RB-33	ST-7A2-15SB-53
ST-12C-200FA3-50	ST-12C-280RB1-33	ST-12C-440FB5-50	ST-20L-400RJ-33	ST-7A2-15ST-33
ST-12C-200FA5-33	ST-12C-280RB1-50	ST-12C-440FB7-33	ST-20L-400RK-33	ST-7A2-15ST-53
ST-12C-200FA5-50	ST-12C-280RB3-33	ST-12C-440FB7-50	ST-20L-400SA-33	ST-7A2-25FA-33
ST-12C-200FA7-33	ST-12C-280RB3-50	ST-12C-440RA1-33	ST-20L-400SB-33	ST-7A2-25FA-53
ST-12C-200FA7-50	ST-12C-280RB5-33	ST-12C-440RA1-50	ST-20L-400SJ-33	ST-7A2-25FB-33
ST-12C-200FB1-33	ST-12C-280RB5-50	ST-12C-440RA3-33	ST-20L-400SK-33	ST-7A2-25FB-53
ST-12C-200FB1-50	ST-12C-280RB7-33	ST-12C-440RA3-50	ST-23L	ST-7A2-25FT-33
ST-12C-200FB3-33	ST-12C-280RB7-50	ST-12C-440RA5-33	ST-4A-3S-33	ST-7A2-25FT-53
ST-12C-200FB3-50	ST-12C-360FA1-33	ST-12C-440RA5-50	ST-4A-8S-33	ST-7A2-25RA-33
ST-12C-200FB5-33	ST-12C-360FA1-50	ST-12C-440RA7-33	ST-5A-10S-33	ST-7A2-25RA-53
ST-12C-200FB5-50	ST-12C-360FA3-33	ST-12C-440RA7-50	ST-5A-16S-33	ST-7A2-25RB-33
ST-12C-200FB7-33	ST-12C-360FA3-50	ST-12C-440RB1-33	ST-5A-23S-33	ST-7A2-25RB-53
ST-12C-200FB7-50	ST-12C-360FA5-33	ST-12C-440RB1-50	ST-5A-30S-33	ST-7A2-25RT-33
ST-12C-200RA1-33	ST-12C-360FA5-50	ST-12C-440RB3-33	ST-7A-10FA-33	ST-7A2-25RT-53
ST-12C-200RA1-50	ST-12C-360FA7-33	ST-12C-440RB3-50	ST-7A-10FA-50	ST-7A2-30FA-33
ST-12C-200RA3-33	ST-12C-360FA7-50	ST-12C-440RB5-33	ST-7A-10FB-33	ST-7A2-30FA-53
ST-12C-200RA3-50	ST-12C-360FB1-33	ST-12C-440RB5-50	ST-7A-10FB-50	ST-7A2-30FB-33
ST-12C-200RA5-33	ST-12C-360FB1-50	ST-12C-440RB7-33	ST-7A-10FJ-33	ST-7A2-30FB-53
ST-12C-200RA5-50	ST-12C-360FB3-33	ST-12C-440RB7-50	ST-7A-10FJ-50	ST-7A2-30FT-33
ST-12C-200RA7-33	ST-12C-360FB3-50	ST-20L-100FA-33	ST-7A-10RA-33	ST-7A2-30FT-53
ST-12C-200RA7-50	ST-12C-360FB5-33	ST-20L-100FB-33	ST-7A-10RA-50	ST-7A2-30RA-33
ST-12C-200RB1-33	ST-12C-360FB5-50	ST-20L-100FJ-33	ST-7A-10RB-33	ST-7A2-30RA-53
ST-12C-200RB1-50	ST-12C-360FB7-33	ST-20L-100FK-33	ST-7A-10RB-50	ST-7A2-30RB-33
ST-12C-200RB3-33	ST-12C-360FB7-50	ST-20L-100RA-33	ST-7A-10RJ-33	ST-7A2-30RB-53
ST-12C-200RB3-50	ST-12C-360RA1-33	ST-20L-100RB-33	ST-7A-10RJ-50	ST-7A2-30RT-33
ST-12C-200RB5-33	ST-12C-360RA1-50	ST-20L-100RJ-33	ST-7A-10SA-33	ST-7A2-30RT-53
ST-12C-200RB5-50	ST-12C-360RA3-33	ST-20L-100RK-33	ST-7A-10SA-50	ST-7A2-30SA-33
ST-12C-200RB7-33	ST-12C-360RA3-50	ST-20L-200FA-33	ST-7A-10SB-33	ST-7A2-30SA-53
ST-12C-200RB7-50	ST-12C-360RA5-33	ST-20L-200FB-33	ST-7A-10SB-50	ST-7A2-30SB-33
ST-12C-280FA1-33	ST-12C-360RA5-50	ST-20L-200FJ-33	ST-7A-10SJ-33	ST-7A2-30SB-53

ST-7A2-30ST-33	ST-7A2-70FB-53	ST-7A3-30FW-53	ST-7A3-80FT-33	ST-7A-50SB-50
ST-7A2-30ST-53	ST-7A2-70FT-33	ST-7A3-30RT-33	ST-7A3-80FT-53	ST-7A-50SJ-33
ST-7A2-40FA-33	ST-7A2-70FT-53	ST-7A3-30RT-53	ST-7A3-80FW-33	ST-7A-50SJ-50
ST-7A2-40FA-53	ST-7A2-70RA-33	ST-7A3-30RW-33	ST-7A3-80FW-53	ST-7A-60FA-33
ST-7A2-40FB-33	ST-7A2-70RB-33	ST-7A3-30RW-53	ST-7A3-80RT-33	ST-7A-60FA-50
ST-7A2-40FB-53	ST-7A2-70RB-53	ST-7A3-30ST-33	ST-7A3-80RT-53	ST-7A-60FB-33
ST-7A2-40FT-33	ST-7A2-70RT-33	ST-7A3-30ST-53	ST-7A3-80RW-33	ST-7A-60FB-50
ST-7A2-40FT-53	ST-7A2-70RT-53	ST-7A3-30SW-33	ST-7A3-80RW-53	ST-7A-60FJ-33
ST-7A2-40RA-33	ST-7A2-75ST-33	ST-7A3-30SW-53	ST-7A3-90FT-33	ST-7A-60FJ-50
ST-7A2-40RA-53	ST-7A2-75ST-53	ST-7A3-40FT-33	ST-7A3-90FT-53	ST-7A-60RA-33
ST-7A2-40RB-33	ST-7A2-80FT-33	ST-7A3-40FT-53	ST-7A3-90FW-33	ST-7A-60RA-50
ST-7A2-40RB-53	ST-7A2-80FT-53	ST-7A3-40FW-33	ST-7A3-90FW-53	ST-7A-60RB-33
ST-7A2-40RT-33	ST-7A2-80RT-33	ST-7A3-40FW-53	ST-7A3-90RT-33	ST-7A-60RB-50
ST-7A2-40RT-53	ST-7A2-80RT-53	ST-7A3-40RT-33	ST-7A3-90RT-53	ST-7A-60RJ-33
ST-7A2-45SA-33	ST-7A2-90FT-33	ST-7A3-40RT-53	ST-7A3-90RW-33	ST-7A-60RJ-50
ST-7A2-45SA-53	ST-7A2-90FT-53	ST-7A3-40RW-33	ST-7A3-90RW-53	ST-7A-70FA-33
ST-7A2-45SB-33	ST-7A2-90RT-33	ST-7A3-40RW-53	ST-7A3-90ST-33	ST-7A-70FA-50
ST-7A2-45SB-53	ST-7A2-90RT-53	ST-7A3-45ST-33	ST-7A3-90ST-53	ST-7A-70FB-33
ST-7A2-45ST-33	ST-7A2-90ST-33	ST-7A3-45ST-53	ST-7A3-90SW-33	ST-7A-70FB-50
ST-7A2-45ST-53	ST-7A2-90ST-53	ST-7A3-45SW-33	ST-7A3-90SW-53	ST-7A-70FJ-33
ST-7A2-50FA-33	ST-7A-30FA-33	ST-7A3-45SW-53	ST-7A-40FA-33	ST-7A-70FJ-50
ST-7A2-50FA-53	ST-7A-30FA-50	ST-7A3-50FT-33	ST-7A-40FA-50	ST-7A-70RA-33
ST-7A2-50FB-33	ST-7A-30FB-33	ST-7A3-50FT-53	ST-7A-40FB-33	ST-7A-70RA-50
ST-7A2-50FB-53	ST-7A-30FB-50	ST-7A3-50FW-33	ST-7A-40FB-50	ST-7A-70RB-33
ST-7A2-50FT-33	ST-7A-30FJ-33	ST-7A3-50FW-53	ST-7A-40FJ-33	ST-7A-70RB-50
ST-7A2-50FT-53	ST-7A-30FJ-50	ST-7A3-50RT-33	ST-7A-40FJ-50	ST-7A-70RJ-33
ST-7A2-50RA-33	ST-7A-30RA-33	ST-7A3-50RT-53	ST-7A-40RA-33	ST-7A-70RJ-50
ST-7A2-50RA-53	ST-7A-30RA-50	ST-7A3-50RW-33	ST-7A-40RA-50	ST-7J-50FJ-33
ST-7A2-50RB-33	ST-7A-30RB-33	ST-7A3-50RW-53	ST-7A-40RB-33	ST-7J-50FJ-50
ST-7A2-50RB-53	ST-7A-30RB-50	ST-7A3-60FT-33	ST-7A-40RB-50	ST-7J-50RJ-33
ST-7A2-50RT-33	ST-7A-30RJ-33	ST-7A3-60FT-53	ST-7A-40RJ-33	ST-7J-50RJ-50
ST-7A2-50RT-53	ST-7A-30RJ-50	ST-7A3-60FW-33	ST-7A-40RJ-50	ST-7J-50SJ-33
ST-7A2-60FA-33	ST-7A-30SA-33	ST-7A3-60FW-53	ST-7A-40SA-33	ST-7J-50SJ-50
ST-7A2-60FA-53	ST-7A-30SA-50	ST-7A3-60RT-33	ST-7A-40SA-50	ST-8A-100FA-33
ST-7A2-60FB-33	ST-7A-30SB-33	ST-7A3-60RT-53	ST-7A-40SB-33	ST-8A-100FA-50
ST-7A2-60FB-53	ST-7A-30SB-50	ST-7A3-60RW-33	ST-7A-40SB-50	ST-8A-100FB-33
ST-7A2-60FT-33	ST-7A-30SJ-33	ST-7A3-60RW-53	ST-7A-40SJ-33	ST-8A-100FB-50
ST-7A2-60FT-53	ST-7A-30SJ-50	ST-7A3-60ST-33	ST-7A-40SJ-50	ST-8A-100RA-33
ST-7A2-60RA-33	ST-7A3-15ST-33	ST-7A3-60ST-53	ST-7A-50FA-33	ST-8A-100RA-50
ST-7A2-60RA-53	ST-7A3-15ST-53	ST-7A3-60SW-33	ST-7A-50FA-50	ST-8A-100RB-33
ST-7A2-60RB-33	ST-7A3-15SW-33	ST-7A3-60SW-53	ST-7A-50FB-33	ST-8A-100RB-50
ST-7A2-60RB-53	ST-7A3-15SW-53	ST-7A3-70FT-33	ST-7A-50FB-50	ST-8A1-100FA-50
ST-7A2-60RT-33	ST-7A3-25FT-33	ST-7A3-70FT-53	ST-7A-50FJ-33	ST-8A1-100FB-50
ST-7A2-60RT-53	ST-7A3-25FT-53	ST-7A3-70FW-33	ST-7A-50FJ-50	ST-8A1-100RA-50
ST-7A2-60SA-33	ST-7A3-25FW-33	ST-7A3-70FW-53	ST-7A-50RA-33	ST-8A1-100RB-50
ST-7A2-60SA-53	ST-7A3-25FW-53	ST-7A3-70RT-33	ST-7A-50RA-50	ST-8A1-40FA-50
ST-7A2-60SB-33	ST-7A3-25RT-33	ST-7A3-70RT-53	ST-7A-50RB-33	ST-8A1-40FB-50
ST-7A2-60SB-53	ST-7A3-25RT-53	ST-7A3-70RW-33	ST-7A-50RB-50	ST-8A1-40RA-50
ST-7A2-60ST-33	ST-7A3-25RW-33	ST-7A3-70RW-53	ST-7A-50RJ-33	ST-8A1-40RB-50
ST-7A2-60ST-53	ST-7A3-25RW-53	ST-7A3-75ST-33	ST-7A-50RJ-50	ST-8A1-40SA-50
ST-7A2-70FA-33	ST-7A3-30FT-33	ST-7A3-75ST-53	ST-7A-50SA-33	ST-8A1-40SB-50
ST-7A2-70FA-53	ST-7A3-30FT-53	ST-7A3-75SW-33	ST-7A-50SA-50	ST-8A1-60FA-50
ST-7A2-70FB-33	ST-7A3-30FW-33	ST-7A3-75SW-53	ST-7A-50SB-33	ST-8A1-60FB-50

ST-8A1-60RA-50	ST-8P-60SA-50
ST-8A1-60RB-50	ST-8P-80FA-50
ST-8A1-60SA-50	ST-8P-80RA-50
ST-8A1-60SB-50	ST-8P-80SA-50
ST-8A1-80FA-50	
ST-8A1-80FB-50	
ST-8A1-80RA-50	
ST-8A1-80RB-50	
ST-8A1-80SA-50	
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ST-8P-100FA-50	
ST-8P-100RA-50	
ST-8P-40FA-50	
ST-8P-40RA-50	
ST-8P-40SA-50	
ST-8P-60FA-50	
ST-8P-60RA-50	