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GROUP

Power Transmission & Gas Spring Accessories



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“Beautiful Parts, Right Now”



Longevity

AMPG is a privately-owned family business started by current management in 1987. With the second generation in the business, already for many years, we are realizing a future of serving our customers, collaborating with our employees, and contributing to a vibrant domestic manufacturing economy.

Philosophy

We are proud to be an American manufacturer dedicated to solving large problems that affect small numbers of customers. We are committed to our team, our products, and our customers.

Our continuous capital investments in production equipment, employees, automation, and inspection technologies allows us to design thousands of new items a year, get them into large distributor channels and produce on demand small quantities in a few days.

Stock & Custom...*FAST*

As a precision manufacturer of specialized fasteners, architectural hardware, mechanical components and industrial accessories, AMPG stocks over 80,000 products. We also offer custom manufacturing supported by design, product testing and engineering services. To see the latest and most complete catalog of our over 80,000 different items, visit www.ampg.com.

How to Buy Our Products

Visit us [online](http://www.ampg.com), email us at sales@ampg.com or give us a call at **317.472.9000** and we can help you with your inquiry. Our stock line of parts ships same day from Indianapolis, Indiana.



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Brackets for Nose-Mount Gear Motors

About Our Materials



Aluminum



Brass



Stainless Steel



Steel

Aluminum

- Aluminum has the strength of mild steel with one third the weight.
- Resists corrosion in wet environments.
- Lightweight material used for fittings, hardware and fasteners.
- Nonmagnetic.

Brass

- Brass is a softer material approximately two-thirds copper and one-third zinc.
- Provides good resistance to rust and atmospheric corrosion.
- Friction-resistant material used for gears, bearings, fasteners and valves.
- Nonmagnetic.

Stainless Steel 18-8 (303)

- Type 303 stainless offers excellent corrosion resistance.
- Resists chemicals, most dyes, food and nitric acid.
- Corrosion-resistant material used for screws, bushings, nuts and hardware.
- May be mildly magnetic.

Stainless Steel 316 (316/316L)

- Type 316 stainless offers superior corrosion resistance than Type 303 stainless.
- Resists salt water, acids, chlorides, alkalis and other industrial solvents.
- Low-maintenance material used in commercial kitchens and food processing.
- May be mildly magnetic.

**AMPG uses dual certified Type 316/316L stainless material. Meets all 316 stainless properties but has lower carbon content, making it more suitable for welding.*

Stainless Steel 17-4 PH

- Type 17-4 PH stainless maintains excellent corrosion resistance and strength at high temperatures.
- Resists chemicals, most dyes, food and nitric acid.
- High-strength material used for fittings, valves, bolts and shafts.
- Mildly magnetic.

Carbon Steel C1045

- C1045 Carbon Steel is generally stronger than aluminum and stainless steel but not as corrosion resistant. It offers medium strength properties making them ideal for general purpose use.
- Recommended for applications requiring higher strength and wear resistance than carbon steel and stainless steel shafts.
- Material requires a finish to resist rust, such as black-oxide treatment or zinc plating.

Steel Alloy 4140/41L40 (Alloy Steel)

- Alloy 4140 is a “primary” material used high strength fasteners and components.
- Material requires a finish to resist rust, such as black-oxide treatment or zinc plating.
- High-strength material that exceed Grade 8 used for socket screws, studs and components, only after heat treatment.
- Magnetic.

The most comprehensive supplier for USA made **Rotary Shafts**

A rotary shaft, also known as a shaft and a rotational shaft, is a mechanical component used to transmit rotary motion or torque in machines and mechanical systems. Unlike a linear shaft that moves objects in a straight line, forward and/or backward, a rotary shaft facilitates reliable rotational motion. Rotary shafts are used with pulleys, gears, sprockets & bearings.

It is important to consider the shaft's surface finish and hardness, which can affect bearing wear and life. The smoother the finish, the less friction it will create. Shafts with chamfered edges reduce damage to other components at installation. Shaft can be modified to suit application: keyed, stepped, internally threaded (tapped), externally threaded, D-profile & grooved.

Materials: 18-8 Stainless Steel, 316 Stainless Steel, Aluminum, 1045 Carbon Steel, 1144 Stress-Proof Alloy Steel
Available in Inch and Metric Sizes



Custom Rotary Shafts available.

Email us at sales@ampg.com for more information.

Keyed Rotary Shafts – Inch



18-8 Stainless Steel
316 Stainless Steel
C1045 Steel
1144 Steel
2024 Aluminum

Product Information

A keyed rotary shaft is a mechanical component used to transmit rotational motion and torque in machinery. It is characterized by a linear keyway cut along part of its length, into which a matching key is inserted. This key fits into a corresponding keyway on a hub, pulley, gear, or other components mounted on the shaft. These turned shafts are commonly used in applications where precise alignment and torque transmission are crucial, such as in motors, gearboxes, conveyors, and other mechanical systems. The use of a key and keyway is a simple yet effective method to secure the mounted component to the shaft, allowing for efficient power transmission while also facilitating assembly and disassembly of the system.

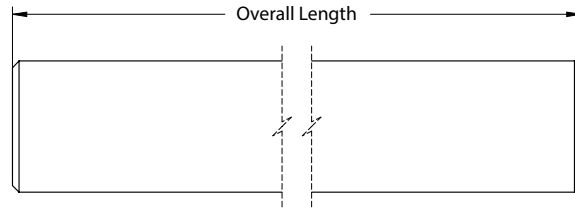
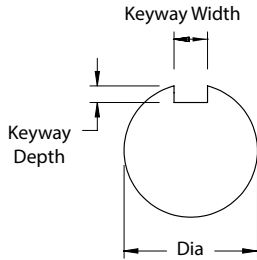
Length tolerance is +/-0.062 and straightness tolerance is 0.012 in/ft. All shafts are fully lot traceable. Made in the USA from DFARS & RoHS compliant materials. Keyways meet ANSI Standard dimensions and tolerances. Both ends are chamfered. Contact us for Made-to-Order options.

- 18-8 Stainless Steel offers excellent corrosion resistant.
- 316 Stainless Steel, also known as Marine Stainless Steel, offers superior corrosion resistant than 18-8 Stainless Steel.
- Aluminum have the strength of mild steel with one third the weight.
- C1045 Carbon Steel are generally stronger than Stainless Steel and Aluminum without corrosion resistance.
- 1144 Alloy Steel is stronger than Carbon Steel and hardened for increased wear resistance.



Materials Chart						
Material	Mechanical Finish	Edge Type	Specs Met	Rockwell Hardness	Tensile Strength (psi)	Magnetic?
18-8 SS	Ground & Polished	Chamfered	ASTM A 582 Cond A	B83	90,000	Mildly
316 SS			ASTM A 276 Cond	B83	85,000	Mildly
C1045 Carbon Steel			ASTM A108	C15	91,000	Magnetic
1144 Alloy Steel			ASTM A311	C22	115,000	Magnetic
2024 Aluminum			ASTM B211	B75	68,000	Nonmagnetic

Keyed Rotary Shafts — Inch



Dimensions Table — Inch

Diameter	Diameter Tolerance	Keyway Width	Keyway Depth	Straightness Tolerance	Length Tolerance
5/16	-.0005 to -.0025	3/32	3/64	.012 in/ft	+/- .062
3/8	-.0005 to -.0025	3/32	3/64	.012 in/ft	+/- .062
1/2	-.0005 to -.0025	1/8	1/16	.012 in/ft	+/- .062
9/16	-.0005 to -.0025	1/8	1/16	.012 in/ft	+/- .062
5/8	-.0005 to -.0025	3/16	3/32	.012 in/ft	+/- .062
3/4	-.0005 to -.0025	3/16	3/32	.012 in/ft	+/- .062
7/8	-.0005 to -.0025	3/16	3/32	.012 in/ft	+/- .062
15/16	-.0005 to -.0025	1/4	1/8	.012 in/ft	+/- .062
1	-.0005 to -.0025	1/4	1/8	.012 in/ft	+/- .062
1-1/8	-.0005 to -.0025	1/4	1/8	.012 in/ft	+/- .062
1-3/16	-.0005 to -.0025	1/4	1/8	.012 in/ft	+/- .062
1-1/4	-.0005 to -.0025	1/4	1/8	.012 in/ft	+/- .062
1-5/16	-.003 to 0	5/16	5/32	.012 in/ft	+/- .062
1-3/8	-.003 to 0	5/16	5/32	.012 in/ft	+/- .062
1-7/16	-.003 to 0	3/8	3/16	.012 in/ft	+/- .062
1-1/2	-.003 to 0	3/8	3/16	.012 in/ft	+/- .062
1-5/8	-.003 to 0	3/8	3/16	.012 in/ft	+/- .062
1-3/4	-.003 to 0	3/8	3/16	.012 in/ft	+/- .062
1-7/8	-.003 to 0	1/2	1/4	.012 in/ft	+/- .062
1-15/16	-.0035 to 0	1/2	1/4	.012 in/ft	+/- .062
2	-.0035 to 0	1/2	1/4	.012 in/ft	+/- .062
2-1/8	-.0035 to 0	1/2	1/4	.012 in/ft	+/- .062
2-3/16	-.0035 to 0	1/2	1/4	.012 in/ft	+/- .062
2-3/8	-.0035 to 0	5/8	5/16	.012 in/ft	+/- .062
2-7/16	-.0035 to 0	5/8	5/16	.012 in/ft	+/- .062
2.624	-.0035 to 0	5/8	5/16	.012 in/ft	+/- .062
2-7/8	-.0035 to 0	3/4	3/8	.012 in/ft	+/- .062
3-3/8	-.0035 to 0	7/8	7/16	.012 in/ft	+/- .062

Keyed Rotary Shafts — Inch



5/16 Dia. (Tolerance: -.0005" to -.0025")

O'all Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHK-312-03000-303SU	ZSHK-312-03000-316SU	ZSHK-312-03000-104SU	ZSHK-312-03000-114SU	ZSHK-312-03000-202SU
6	ZSHK-312-06000-303SU	ZSHK-312-06000-316SU	ZSHK-312-06000-104SU	ZSHK-312-06000-114SU	ZSHK-312-06000-202SU
9	ZSHK-312-09000-303SU	ZSHK-312-09000-316SU	ZSHK-312-09000-104SU	ZSHK-312-09000-114SU	ZSHK-312-09000-202SU
12	ZSHK-312-12000-303SU	ZSHK-312-12000-316SU	ZSHK-312-12000-104SU	ZSHK-312-12000-114SU	ZSHK-312-12000-202SU
18	ZSHK-312-18000-303SU	ZSHK-312-18000-316SU	ZSHK-312-18000-104SU	ZSHK-312-18000-114SU	ZSHK-312-18000-202SU
24	ZSHK-312-24000-303SU	ZSHK-312-24000-316SU	ZSHK-312-24000-104SU	ZSHK-312-24000-114SU	ZSHK-312-24000-202SU
36	ZSHK-312-36000-303SU	ZSHK-312-36000-316SU	ZSHK-312-36000-104SU	ZSHK-312-36000-114SU	ZSHK-312-36000-202SU
48	ZSHK-312-48000-303SU	ZSHK-312-48000-316SU	ZSHK-312-48000-104SU	ZSHK-312-48000-114SU	ZSHK-312-48000-202SU
60	ZSHK-312-60000-303SU	ZSHK-312-60000-316SU	ZSHK-312-60000-104SU	ZSHK-312-60000-114SU	ZSHK-312-60000-202SU
72	ZSHK-312-72000-303SU	ZSHK-312-72000-316SU	ZSHK-312-72000-104SU	ZSHK-312-72000-114SU	ZSHK-312-72000-202SU

3/8 Dia. (Tolerance: -.0005" to -.0025")

O'all Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHK-375-03000-303SU	ZSHK-375-03000-316SU	ZSHK-375-03000-104SU	ZSHK-375-03000-114SU	ZSHK-375-03000-202SU
6	ZSHK-375-06000-303SU	ZSHK-375-06000-316SU	ZSHK-375-06000-104SU	ZSHK-375-06000-114SU	ZSHK-375-06000-202SU
9	ZSHK-375-09000-303SU	ZSHK-375-09000-316SU	ZSHK-375-09000-104SU	ZSHK-375-09000-114SU	ZSHK-375-09000-202SU
12	ZSHK-375-12000-303SU	ZSHK-375-12000-316SU	ZSHK-375-12000-104SU	ZSHK-375-12000-114SU	ZSHK-375-12000-202SU
18	ZSHK-375-18000-303SU	ZSHK-375-18000-316SU	ZSHK-375-18000-104SU	ZSHK-375-18000-114SU	ZSHK-375-18000-202SU
24	ZSHK-375-24000-303SU	ZSHK-375-24000-316SU	ZSHK-375-24000-104SU	ZSHK-375-24000-114SU	ZSHK-375-24000-202SU
36	ZSHK-375-36000-303SU	ZSHK-375-36000-316SU	ZSHK-375-36000-104SU	ZSHK-375-36000-114SU	ZSHK-375-36000-202SU
48	ZSHK-375-48000-303SU	ZSHK-375-48000-316SU	ZSHK-375-48000-104SU	ZSHK-375-48000-114SU	ZSHK-375-48000-202SU
60	ZSHK-375-60000-303SU	ZSHK-375-60000-316SU	ZSHK-375-60000-104SU	ZSHK-375-60000-114SU	ZSHK-375-60000-202SU
72	ZSHK-375-72000-303SU	ZSHK-375-72000-316SU	ZSHK-375-72000-104SU	ZSHK-375-72000-114SU	ZSHK-375-72000-202SU

1/2 Dia. (Tolerance: -.0005" to -.0025")

O'all Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHK-500-03000-303SU	ZSHK-500-03000-316SU	ZSHK-500-03000-104SU	ZSHK-500-03000-114SU	ZSHK-500-03000-202SU
6	ZSHK-500-06000-303SU	ZSHK-500-06000-316SU	ZSHK-500-06000-104SU	ZSHK-500-06000-114SU	ZSHK-500-06000-202SU
9	ZSHK-500-09000-303SU	ZSHK-500-09000-316SU	ZSHK-500-09000-104SU	ZSHK-500-09000-114SU	ZSHK-500-09000-202SU
12	ZSHK-500-12000-303SU	ZSHK-500-12000-316SU	ZSHK-500-12000-104SU	ZSHK-500-12000-114SU	ZSHK-500-12000-202SU
18	ZSHK-500-18000-303SU	ZSHK-500-18000-316SU	ZSHK-500-18000-104SU	ZSHK-500-18000-114SU	ZSHK-500-18000-202SU
24	ZSHK-500-24000-303SU	ZSHK-500-24000-316SU	ZSHK-500-24000-104SU	ZSHK-500-24000-114SU	ZSHK-500-24000-202SU
36	ZSHK-500-36000-303SU	ZSHK-500-36000-316SU	ZSHK-500-36000-104SU	ZSHK-500-36000-114SU	ZSHK-500-36000-202SU
48	ZSHK-500-48000-303SU	ZSHK-500-48000-316SU	ZSHK-500-48000-104SU	ZSHK-500-48000-114SU	ZSHK-500-48000-202SU
60	ZSHK-500-60000-303SU	ZSHK-500-60000-316SU	ZSHK-500-60000-104SU	ZSHK-500-60000-114SU	ZSHK-500-60000-202SU
72	ZSHK-500-72000-303SU	ZSHK-500-72000-316SU	ZSHK-500-72000-104SU	ZSHK-500-72000-114SU	ZSHK-500-72000-202SU

Keyed Rotary Shafts – Inch



9/16 Dia. (Tolerance: -.0005" to -.0025")

O'all Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHK-562-03000-303SU	ZSHK-562-03000-316SU	ZSHK-562-03000-104SU	ZSHK-562-03000-114SU	—
6	ZSHK-562-06000-303SU	ZSHK-562-06000-316SU	ZSHK-562-06000-104SU	ZSHK-562-06000-114SU	—
9	ZSHK-562-09000-303SU	ZSHK-562-09000-316SU	ZSHK-562-09000-104SU	ZSHK-562-09000-114SU	—
12	ZSHK-562-12000-303SU	ZSHK-562-12000-316SU	ZSHK-562-12000-104SU	ZSHK-562-12000-114SU	—
18	ZSHK-562-18000-303SU	ZSHK-562-18000-316SU	ZSHK-562-18000-104SU	ZSHK-562-18000-114SU	—
24	ZSHK-562-24000-303SU	ZSHK-562-24000-316SU	ZSHK-562-24000-104SU	ZSHK-562-24000-114SU	—
36	ZSHK-562-36000-303SU	ZSHK-562-36000-316SU	ZSHK-562-36000-104SU	ZSHK-562-36000-114SU	—
48	ZSHK-562-48000-303SU	ZSHK-562-48000-316SU	ZSHK-562-48000-104SU	ZSHK-562-48000-114SU	—
60	ZSHK-562-60000-303SU	ZSHK-562-60000-316SU	ZSHK-562-60000-104SU	ZSHK-562-60000-114SU	—
72	ZSHK-562-72000-303SU	ZSHK-562-72000-316SU	ZSHK-562-72000-104SU	ZSHK-562-72000-114SU	—

5/8 Dia. (Tolerance: -.0005" to -.0025")

O'all Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHK-625-03000-303SU	ZSHK-625-03000-316SU	ZSHK-625-03000-104SU	ZSHK-625-03000-114SU	ZSHK-625-03000-202SU
6	ZSHK-625-06000-303SU	ZSHK-625-06000-316SU	ZSHK-625-06000-104SU	ZSHK-625-06000-114SU	ZSHK-625-06000-202SU
9	ZSHK-625-09000-303SU	ZSHK-625-09000-316SU	ZSHK-625-09000-104SU	ZSHK-625-09000-114SU	ZSHK-625-09000-202SU
12	ZSHK-625-12000-303SU	ZSHK-625-12000-316SU	ZSHK-625-12000-104SU	ZSHK-625-12000-114SU	ZSHK-625-12000-202SU
18	ZSHK-625-18000-303SU	ZSHK-625-18000-316SU	ZSHK-625-18000-104SU	ZSHK-625-18000-114SU	ZSHK-625-18000-202SU
24	ZSHK-625-24000-303SU	ZSHK-625-24000-316SU	ZSHK-625-24000-104SU	ZSHK-625-24000-114SU	ZSHK-625-24000-202SU
36	ZSHK-625-36000-303SU	ZSHK-625-36000-316SU	ZSHK-625-36000-104SU	ZSHK-625-36000-114SU	ZSHK-625-36000-202SU
48	ZSHK-625-48000-303SU	ZSHK-625-48000-316SU	ZSHK-625-48000-104SU	ZSHK-625-48000-114SU	ZSHK-625-48000-202SU
60	ZSHK-625-60000-303SU	ZSHK-625-60000-316SU	ZSHK-625-60000-104SU	ZSHK-625-60000-114SU	ZSHK-625-60000-202SU
72	ZSHK-625-72000-303SU	ZSHK-625-72000-316SU	ZSHK-625-72000-104SU	ZSHK-625-72000-114SU	ZSHK-625-72000-202SU

3/4 Dia. (Tolerance: -.0005" to -.0025")

O'all Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHK-750-03000-303SU	ZSHK-750-03000-316SU	ZSHK-750-03000-104SU	ZSHK-750-03000-114SU	ZSHK-750-03000-202SU
6	ZSHK-750-06000-303SU	ZSHK-750-06000-316SU	ZSHK-750-06000-104SU	ZSHK-750-06000-114SU	ZSHK-750-06000-202SU
9	ZSHK-750-09000-303SU	ZSHK-750-09000-316SU	ZSHK-750-09000-104SU	ZSHK-750-09000-114SU	ZSHK-750-09000-202SU
12	ZSHK-750-12000-303SU	ZSHK-750-12000-316SU	ZSHK-750-12000-104SU	ZSHK-750-12000-114SU	ZSHK-750-12000-202SU
18	ZSHK-750-18000-303SU	ZSHK-750-18000-316SU	ZSHK-750-18000-104SU	ZSHK-750-18000-114SU	ZSHK-750-18000-202SU
24	ZSHK-750-24000-303SU	ZSHK-750-24000-316SU	ZSHK-750-24000-104SU	ZSHK-750-24000-114SU	ZSHK-750-24000-202SU
36	ZSHK-750-36000-303SU	ZSHK-750-36000-316SU	ZSHK-750-36000-104SU	ZSHK-750-36000-114SU	ZSHK-750-36000-202SU
48	ZSHK-750-48000-303SU	ZSHK-750-48000-316SU	ZSHK-750-48000-104SU	ZSHK-750-48000-114SU	ZSHK-750-48000-202SU
60	ZSHK-750-60000-303SU	ZSHK-750-60000-316SU	ZSHK-750-60000-104SU	ZSHK-750-60000-114SU	ZSHK-750-60000-202SU
72	ZSHK-750-72000-303SU	ZSHK-750-72000-316SU	ZSHK-750-72000-104SU	ZSHK-750-72000-114SU	ZSHK-750-72000-202SU

Keyed Rotary Shafts — Inch



7/8 Dia. (Tolerance: -.0005" to -.0025")

O'all Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHK-875-03000-303SU	ZSHK-875-03000-316SU	ZSHK-875-03000-104SU	ZSHK-875-03000-114SU	ZSHK-875-03000-202SU
6	ZSHK-875-06000-303SU	ZSHK-875-06000-316SU	ZSHK-875-06000-104SU	ZSHK-875-06000-114SU	ZSHK-875-06000-202SU
9	ZSHK-875-09000-303SU	ZSHK-875-09000-316SU	ZSHK-875-09000-104SU	ZSHK-875-09000-114SU	ZSHK-875-09000-202SU
12	ZSHK-875-12000-303SU	ZSHK-875-12000-316SU	ZSHK-875-12000-104SU	ZSHK-875-12000-114SU	ZSHK-875-12000-202SU
18	ZSHK-875-18000-303SU	ZSHK-875-18000-316SU	ZSHK-875-18000-104SU	ZSHK-875-18000-114SU	ZSHK-875-18000-202SU
24	ZSHK-875-24000-303SU	ZSHK-875-24000-316SU	ZSHK-875-24000-104SU	ZSHK-875-24000-114SU	ZSHK-875-24000-202SU
36	ZSHK-875-36000-303SU	ZSHK-875-36000-316SU	ZSHK-875-36000-104SU	ZSHK-875-36000-114SU	ZSHK-875-36000-202SU
48	ZSHK-875-48000-303SU	ZSHK-875-48000-316SU	ZSHK-875-48000-104SU	ZSHK-875-48000-114SU	ZSHK-875-48000-202SU
60	ZSHK-875-60000-303SU	ZSHK-875-60000-316SU	ZSHK-875-60000-104SU	ZSHK-875-60000-114SU	ZSHK-875-60000-202SU
72	ZSHK-875-72000-303SU	ZSHK-875-72000-316SU	ZSHK-875-72000-104SU	ZSHK-875-72000-114SU	ZSHK-875-72000-202SU

15/16 Dia. (Tolerance: -.0005" to -.0025")

O'all Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	—	—	ZSHK-937-03000-104SU	—	—
6	—	—	ZSHK-937-06000-104SU	—	—
9	—	—	ZSHK-937-09000-104SU	—	—
12	—	—	ZSHK-937-12000-104SU	—	—
18	—	—	ZSHK-937-18000-104SU	—	—
24	—	—	ZSHK-937-24000-104SU	—	—
36	—	—	ZSHK-937-36000-104SU	—	—
48	—	—	ZSHK-937-48000-104SU	—	—
60	—	—	ZSHK-937-60000-104SU	—	—
72	—	—	ZSHK-937-72000-104SU	—	—

1 Dia. (Tolerance: -.0005" to -.0025")

O'all Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHK-1000-03000-303SU	ZSHK-1000-03000-316SU	ZSHK-1000-03000-104SU	ZSHK-1000-03000-114SU	ZSHK-1000-03000-202SU
6	ZSHK-1000-06000-303SU	ZSHK-1000-06000-316SU	ZSHK-1000-06000-104SU	ZSHK-1000-06000-114SU	ZSHK-1000-06000-202SU
9	ZSHK-1000-09000-303SU	ZSHK-1000-09000-316SU	ZSHK-1000-09000-104SU	ZSHK-1000-09000-114SU	ZSHK-1000-09000-202SU
12	ZSHK-1000-12000-303SU	ZSHK-1000-12000-316SU	ZSHK-1000-12000-104SU	ZSHK-1000-12000-114SU	ZSHK-1000-12000-202SU
18	ZSHK-1000-18000-303SU	ZSHK-1000-18000-316SU	ZSHK-1000-18000-104SU	ZSHK-1000-18000-114SU	ZSHK-1000-18000-202SU
24	ZSHK-1000-24000-303SU	ZSHK-1000-24000-316SU	ZSHK-1000-24000-104SU	ZSHK-1000-24000-114SU	ZSHK-1000-24000-202SU
36	ZSHK-1000-36000-303SU	ZSHK-1000-36000-316SU	ZSHK-1000-36000-104SU	ZSHK-1000-36000-114SU	ZSHK-1000-36000-202SU
48	ZSHK-1000-48000-303SU	ZSHK-1000-48000-316SU	ZSHK-1000-48000-104SU	ZSHK-1000-48000-114SU	ZSHK-1000-48000-202SU
60	ZSHK-1000-60000-303SU	ZSHK-1000-60000-316SU	ZSHK-1000-60000-104SU	ZSHK-1000-60000-114SU	ZSHK-1000-60000-202SU
72	ZSHK-1000-72000-303SU	ZSHK-1000-72000-316SU	ZSHK-1000-72000-104SU	ZSHK-1000-72000-114SU	ZSHK-1000-72000-202SU

Keyed Rotary Shafts – Inch



1-1/8 Dia. (Tolerance: -.0005" to -.0025")

O'all Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
3	ZSHK-1125-03000-303SU	ZSHK-1125-03000-316SU	ZSHK-1125-03000-104SU	ZSHK-1125-03000-114SU
6	ZSHK-1125-06000-303SU	ZSHK-1125-06000-316SU	ZSHK-1125-06000-104SU	ZSHK-1125-06000-114SU
9	ZSHK-1125-09000-303SU	ZSHK-1125-09000-316SU	ZSHK-1125-09000-104SU	ZSHK-1125-09000-114SU
12	ZSHK-1125-12000-303SU	ZSHK-1125-12000-316SU	ZSHK-1125-12000-104SU	ZSHK-1125-12000-114SU
18	ZSHK-1125-18000-303SU	ZSHK-1125-18000-316SU	ZSHK-1125-18000-104SU	ZSHK-1125-18000-114SU
24	ZSHK-1125-24000-303SU	ZSHK-1125-24000-316SU	ZSHK-1125-24000-104SU	ZSHK-1125-24000-114SU
36	ZSHK-1125-36000-303SU	ZSHK-1125-36000-316SU	ZSHK-1125-36000-104SU	ZSHK-1125-36000-114SU
48	ZSHK-1125-48000-303SU	ZSHK-1125-48000-316SU	ZSHK-1125-48000-104SU	ZSHK-1125-48000-114SU
60	ZSHK-1125-60000-303SU	ZSHK-1125-60000-316SU	ZSHK-1125-60000-104SU	ZSHK-1125-60000-114SU
72	ZSHK-1125-72000-303SU	ZSHK-1125-72000-316SU	ZSHK-1125-72000-104SU	ZSHK-1125-72000-114SU

1-3/16 Dia. (Tolerance: -.0005" to -.0025")

O'all Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
3	ZSHK-1187-03000-303SU	ZSHK-1187-03000-316SU	ZSHK-1187-03000-104SU	ZSHK-1187-03000-114SU
6	ZSHK-1187-06000-303SU	ZSHK-1187-06000-316SU	ZSHK-1187-06000-104SU	ZSHK-1187-06000-114SU
9	ZSHK-1187-09000-303SU	ZSHK-1187-09000-316SU	ZSHK-1187-09000-104SU	ZSHK-1187-09000-114SU
12	ZSHK-1187-12000-303SU	ZSHK-1187-12000-316SU	ZSHK-1187-12000-104SU	ZSHK-1187-12000-114SU
18	ZSHK-1187-18000-303SU	ZSHK-1187-18000-316SU	ZSHK-1187-18000-104SU	ZSHK-1187-18000-114SU
24	ZSHK-1187-24000-303SU	ZSHK-1187-24000-316SU	ZSHK-1187-24000-104SU	ZSHK-1187-24000-114SU
36	ZSHK-1187-36000-303SU	ZSHK-1187-36000-316SU	ZSHK-1187-36000-104SU	ZSHK-1187-36000-114SU
48	ZSHK-1187-48000-303SU	ZSHK-1187-48000-316SU	ZSHK-1187-48000-104SU	ZSHK-1187-48000-114SU
60	ZSHK-1187-60000-303SU	ZSHK-1187-60000-316SU	ZSHK-1187-60000-104SU	ZSHK-1187-60000-114SU
72	ZSHK-1187-72000-303SU	ZSHK-1187-72000-316SU	ZSHK-1187-72000-104SU	ZSHK-1187-72000-114SU

1-1/4 Dia. (Tolerance: -.0005" to -.0025")

O'all Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
3	ZSHK-1250-03000-303SU	ZSHK-1250-03000-316SU	ZSHK-1250-03000-104SU	ZSHK-1250-03000-114SU
6	ZSHK-1250-06000-303SU	ZSHK-1250-06000-316SU	ZSHK-1250-06000-104SU	ZSHK-1250-06000-114SU
9	ZSHK-1250-09000-303SU	ZSHK-1250-09000-316SU	ZSHK-1250-09000-104SU	ZSHK-1250-09000-114SU
12	ZSHK-1250-12000-303SU	ZSHK-1250-12000-316SU	ZSHK-1250-12000-104SU	ZSHK-1250-12000-114SU
18	ZSHK-1250-18000-303SU	ZSHK-1250-18000-316SU	ZSHK-1250-18000-104SU	ZSHK-1250-18000-114SU
24	ZSHK-1250-24000-303SU	ZSHK-1250-24000-316SU	ZSHK-1250-24000-104SU	ZSHK-1250-24000-114SU
36	ZSHK-1250-36000-303SU	ZSHK-1250-36000-316SU	ZSHK-1250-36000-104SU	ZSHK-1250-36000-114SU
48	ZSHK-1250-48000-303SU	ZSHK-1250-48000-316SU	ZSHK-1250-48000-104SU	ZSHK-1250-48000-114SU
60	ZSHK-1250-60000-303SU	ZSHK-1250-60000-316SU	ZSHK-1250-60000-104SU	ZSHK-1250-60000-114SU
72	ZSHK-1250-72000-303SU	ZSHK-1250-72000-316SU	ZSHK-1250-72000-104SU	ZSHK-1250-72000-114SU

Keyed Rotary Shafts — Inch



1-5/16 Dia. (Tolerance: -.003" to 0")

O'all Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
3	ZSHK-1312-03000-303SU	ZSHK-1312-03000-316SU	ZSHK-1312-03000-104SU	ZSHK-1312-03000-114SU
6	ZSHK-1312-06000-303SU	ZSHK-1312-06000-316SU	ZSHK-1312-06000-104SU	ZSHK-1312-06000-114SU
9	ZSHK-1312-09000-303SU	ZSHK-1312-09000-316SU	ZSHK-1312-09000-104SU	ZSHK-1312-09000-114SU
12	ZSHK-1312-12000-303SU	ZSHK-1312-12000-316SU	ZSHK-1312-12000-104SU	ZSHK-1312-12000-114SU
18	ZSHK-1312-18000-303SU	ZSHK-1312-18000-316SU	ZSHK-1312-18000-104SU	ZSHK-1312-18000-114SU
24	ZSHK-1312-24000-303SU	ZSHK-1312-24000-316SU	ZSHK-1312-24000-104SU	ZSHK-1312-24000-114SU
36	ZSHK-1312-36000-303SU	ZSHK-1312-36000-316SU	ZSHK-1312-36000-104SU	ZSHK-1312-36000-114SU
48	ZSHK-1312-48000-303SU	ZSHK-1312-48000-316SU	ZSHK-1312-48000-104SU	ZSHK-1312-48000-114SU
60	ZSHK-1312-60000-303SU	ZSHK-1312-60000-316SU	ZSHK-1312-60000-104SU	ZSHK-1312-60000-114SU
72	ZSHK-1312-72000-303SU	ZSHK-1312-72000-316SU	ZSHK-1312-72000-104SU	ZSHK-1312-72000-114SU

1-3/8 Dia. (Tolerance: -.003" to 0")

O'all Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
3	ZSHK-1375-03000-303SU	ZSHK-1375-03000-316SU	ZSHK-1375-03000-104SU	ZSHK-1375-03000-114SU
6	ZSHK-1375-06000-303SU	ZSHK-1375-06000-316SU	ZSHK-1375-06000-104SU	ZSHK-1375-06000-114SU
9	ZSHK-1375-09000-303SU	ZSHK-1375-09000-316SU	ZSHK-1375-09000-104SU	ZSHK-1375-09000-114SU
12	ZSHK-1375-12000-303SU	ZSHK-1375-12000-316SU	ZSHK-1375-12000-104SU	ZSHK-1375-12000-114SU
18	ZSHK-1375-18000-303SU	ZSHK-1375-18000-316SU	ZSHK-1375-18000-104SU	ZSHK-1375-18000-114SU
24	ZSHK-1375-24000-303SU	ZSHK-1375-24000-316SU	ZSHK-1375-24000-104SU	ZSHK-1375-24000-114SU
36	ZSHK-1375-36000-303SU	ZSHK-1375-36000-316SU	ZSHK-1375-36000-104SU	ZSHK-1375-36000-114SU
48	ZSHK-1375-48000-303SU	ZSHK-1375-48000-316SU	ZSHK-1375-48000-104SU	ZSHK-1375-48000-114SU
60	ZSHK-1375-60000-303SU	ZSHK-1375-60000-316SU	ZSHK-1375-60000-104SU	ZSHK-1375-60000-114SU
72	ZSHK-1375-72000-303SU	ZSHK-1375-72000-316SU	ZSHK-1375-72000-104SU	ZSHK-1375-72000-114SU

1-7/16 Dia. (Tolerance: -.003" to 0")

O'all Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
3	ZSHK-1437-03000-303SU	ZSHK-1437-03000-316SU	ZSHK-1437-03000-104SU	ZSHK-1437-03000-114SU
6	ZSHK-1437-06000-303SU	ZSHK-1437-06000-316SU	ZSHK-1437-06000-104SU	ZSHK-1437-06000-114SU
9	ZSHK-1437-09000-303SU	ZSHK-1437-09000-316SU	ZSHK-1437-09000-104SU	ZSHK-1437-09000-114SU
12	ZSHK-1437-12000-303SU	ZSHK-1437-12000-316SU	ZSHK-1437-12000-104SU	ZSHK-1437-12000-114SU
18	ZSHK-1437-18000-303SU	ZSHK-1437-18000-316SU	ZSHK-1437-18000-104SU	ZSHK-1437-18000-114SU
24	ZSHK-1437-24000-303SU	ZSHK-1437-24000-316SU	ZSHK-1437-24000-104SU	ZSHK-1437-24000-114SU
36	ZSHK-1437-36000-303SU	ZSHK-1437-36000-316SU	ZSHK-1437-36000-104SU	ZSHK-1437-36000-114SU
48	ZSHK-1437-48000-303SU	ZSHK-1437-48000-316SU	ZSHK-1437-48000-104SU	ZSHK-1437-48000-114SU
60	ZSHK-1437-60000-303SU	ZSHK-1437-60000-316SU	ZSHK-1437-60000-104SU	ZSHK-1437-60000-114SU
72	ZSHK-1437-72000-303SU	ZSHK-1437-72000-316SU	ZSHK-1437-72000-104SU	ZSHK-1437-72000-114SU

Keyed Rotary Shafts – Inch



1-1/2 Dia. (Tolerance: -.003" to 0")

O'all Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
3	ZSHK-1500-03000-303SU	ZSHK-1500-03000-316SU	ZSHK-1500-03000-104SU	ZSHK-1500-03000-114SU
6	ZSHK-1500-06000-303SU	ZSHK-1500-06000-316SU	ZSHK-1500-06000-104SU	ZSHK-1500-06000-114SU
9	ZSHK-1500-09000-303SU	ZSHK-1500-09000-316SU	ZSHK-1500-09000-104SU	ZSHK-1500-09000-114SU
12	ZSHK-1500-12000-303SU	ZSHK-1500-12000-316SU	ZSHK-1500-12000-104SU	ZSHK-1500-12000-114SU
18	ZSHK-1500-18000-303SU	ZSHK-1500-18000-316SU	ZSHK-1500-18000-104SU	ZSHK-1500-18000-114SU
24	ZSHK-1500-24000-303SU	ZSHK-1500-24000-316SU	ZSHK-1500-24000-104SU	ZSHK-1500-24000-114SU
36	ZSHK-1500-36000-303SU	ZSHK-1500-36000-316SU	ZSHK-1500-36000-104SU	ZSHK-1500-36000-114SU
48	ZSHK-1500-48000-303SU	ZSHK-1500-48000-316SU	ZSHK-1500-48000-104SU	ZSHK-1500-48000-114SU
60	ZSHK-1500-60000-303SU	ZSHK-1500-60000-316SU	ZSHK-1500-60000-104SU	ZSHK-1500-60000-114SU
72	ZSHK-1500-72000-303SU	ZSHK-1500-72000-316SU	ZSHK-1500-72000-104SU	ZSHK-1500-72000-114SU

1-5/8 Dia. (Tolerance: -.003" to 0")

O'all Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
3	ZSHK-1625-03000-303SU	ZSHK-1625-03000-316SU	ZSHK-1625-03000-104SU	ZSHK-1625-03000-114SU
6	ZSHK-1625-06000-303SU	ZSHK-1625-06000-316SU	ZSHK-1625-06000-104SU	ZSHK-1625-06000-114SU
9	ZSHK-1625-09000-303SU	ZSHK-1625-09000-316SU	ZSHK-1625-09000-104SU	ZSHK-1625-09000-114SU
12	ZSHK-1625-12000-303SU	ZSHK-1625-12000-316SU	ZSHK-1625-12000-104SU	ZSHK-1625-12000-114SU
18	ZSHK-1625-18000-303SU	ZSHK-1625-18000-316SU	ZSHK-1625-18000-104SU	ZSHK-1625-18000-114SU
24	ZSHK-1625-24000-303SU	ZSHK-1625-24000-316SU	ZSHK-1625-24000-104SU	ZSHK-1625-24000-114SU
36	ZSHK-1625-36000-303SU	ZSHK-1625-36000-316SU	ZSHK-1625-36000-104SU	ZSHK-1625-36000-114SU
48	ZSHK-1625-48000-303SU	ZSHK-1625-48000-316SU	ZSHK-1625-48000-104SU	ZSHK-1625-48000-114SU
60	ZSHK-1625-60000-303SU	ZSHK-1625-60000-316SU	ZSHK-1625-60000-104SU	ZSHK-1625-60000-114SU
72	ZSHK-1625-72000-303SU	ZSHK-1625-72000-316SU	ZSHK-1625-72000-104SU	ZSHK-1625-72000-114SU

1-3/4 Dia. (Tolerance: -.003" to 0")

O'all Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
3	ZSHK-1750-03000-303SU	ZSHK-1750-03000-316SU	ZSHK-1750-03000-104SU	ZSHK-1750-03000-114SU
6	ZSHK-1750-06000-303SU	ZSHK-1750-06000-316SU	ZSHK-1750-06000-104SU	ZSHK-1750-06000-114SU
9	ZSHK-1750-09000-303SU	ZSHK-1750-09000-316SU	ZSHK-1750-09000-104SU	ZSHK-1750-09000-114SU
12	ZSHK-1750-12000-303SU	ZSHK-1750-12000-316SU	ZSHK-1750-12000-104SU	ZSHK-1750-12000-114SU
18	ZSHK-1750-18000-303SU	ZSHK-1750-18000-316SU	ZSHK-1750-18000-104SU	ZSHK-1750-18000-114SU
24	ZSHK-1750-24000-303SU	ZSHK-1750-24000-316SU	ZSHK-1750-24000-104SU	ZSHK-1750-24000-114SU
36	ZSHK-1750-36000-303SU	ZSHK-1750-36000-316SU	ZSHK-1750-36000-104SU	ZSHK-1750-36000-114SU
48	ZSHK-1750-48000-303SU	ZSHK-1750-48000-316SU	ZSHK-1750-48000-104SU	ZSHK-1750-48000-114SU
60	ZSHK-1750-60000-303SU	ZSHK-1750-60000-316SU	ZSHK-1750-60000-104SU	ZSHK-1750-60000-114SU
72	ZSHK-1750-72000-303SU	ZSHK-1750-72000-316SU	ZSHK-1750-72000-104SU	ZSHK-1750-72000-114SU

Keyed Rotary Shafts — Inch



1-7/8 Dia. (Tolerance: -.003" to 0")

O'all Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
3	ZSHK-1875-03000-303SU	ZSHK-1875-03000-316SU	ZSHK-1875-03000-104SU	ZSHK-1875-03000-114SU
6	ZSHK-1875-06000-303SU	ZSHK-1875-06000-316SU	ZSHK-1875-06000-104SU	ZSHK-1875-06000-114SU
9	ZSHK-1875-09000-303SU	ZSHK-1875-09000-316SU	ZSHK-1875-09000-104SU	ZSHK-1875-09000-114SU
12	ZSHK-1875-12000-303SU	ZSHK-1875-12000-316SU	ZSHK-1875-12000-104SU	ZSHK-1875-12000-114SU
18	ZSHK-1875-18000-303SU	ZSHK-1875-18000-316SU	ZSHK-1875-18000-104SU	ZSHK-1875-18000-114SU
24	ZSHK-1875-24000-303SU	ZSHK-1875-24000-316SU	ZSHK-1875-24000-104SU	ZSHK-1875-24000-114SU
36	ZSHK-1875-36000-303SU	ZSHK-1875-36000-316SU	ZSHK-1875-36000-104SU	ZSHK-1875-36000-114SU
48	ZSHK-1875-48000-303SU	ZSHK-1875-48000-316SU	ZSHK-1875-48000-104SU	ZSHK-1875-48000-114SU
60	ZSHK-1875-60000-303SU	ZSHK-1875-60000-316SU	ZSHK-1875-60000-104SU	ZSHK-1875-60000-114SU
72	ZSHK-1875-72000-303SU	ZSHK-1875-72000-316SU	ZSHK-1875-72000-104SU	ZSHK-1875-72000-114SU

1-15/16 Dia. (Tolerance: -.0035" to 0")

O'all Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
3	ZSHK-1937-03000-303SU	ZSHK-1937-03000-316SU	ZSHK-1937-03000-104SU	ZSHK-1937-03000-114SU
6	ZSHK-1937-06000-303SU	ZSHK-1937-06000-316SU	ZSHK-1937-06000-104SU	ZSHK-1937-06000-114SU
9	ZSHK-1937-09000-303SU	ZSHK-1937-09000-316SU	ZSHK-1937-09000-104SU	ZSHK-1937-09000-114SU
12	ZSHK-1937-12000-303SU	ZSHK-1937-12000-316SU	ZSHK-1937-12000-104SU	ZSHK-1937-12000-114SU
18	ZSHK-1937-18000-303SU	ZSHK-1937-18000-316SU	ZSHK-1937-18000-104SU	ZSHK-1937-18000-114SU
24	ZSHK-1937-24000-303SU	ZSHK-1937-24000-316SU	ZSHK-1937-24000-104SU	ZSHK-1937-24000-114SU
36	ZSHK-1937-36000-303SU	ZSHK-1937-36000-316SU	ZSHK-1937-36000-104SU	ZSHK-1937-36000-114SU
48	ZSHK-1937-48000-303SU	ZSHK-1937-48000-316SU	ZSHK-1937-48000-104SU	ZSHK-1937-48000-114SU
60	ZSHK-1937-60000-303SU	ZSHK-1937-60000-316SU	ZSHK-1937-60000-104SU	ZSHK-1937-60000-114SU
72	ZSHK-1937-72000-303SU	ZSHK-1937-72000-316SU	ZSHK-1937-72000-104SU	ZSHK-1937-72000-114SU

2 Dia. (Tolerance: -.0035" to 0")

O'all Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
3	ZSHK-2000-03000-303SU	ZSHK-2000-03000-316SU	ZSHK-2000-03000-104SU	ZSHK-2000-03000-114SU
6	ZSHK-2000-06000-303SU	ZSHK-2000-06000-316SU	ZSHK-2000-06000-104SU	ZSHK-2000-06000-114SU
9	ZSHK-2000-09000-303SU	ZSHK-2000-09000-316SU	ZSHK-2000-09000-104SU	ZSHK-2000-09000-114SU
12	ZSHK-2000-12000-303SU	ZSHK-2000-12000-316SU	ZSHK-2000-12000-104SU	ZSHK-2000-12000-114SU
18	ZSHK-2000-18000-303SU	ZSHK-2000-18000-316SU	ZSHK-2000-18000-104SU	ZSHK-2000-18000-114SU
24	ZSHK-2000-24000-303SU	ZSHK-2000-24000-316SU	ZSHK-2000-24000-104SU	ZSHK-2000-24000-114SU
36	ZSHK-2000-36000-303SU	ZSHK-2000-36000-316SU	ZSHK-2000-36000-104SU	ZSHK-2000-36000-114SU
48	ZSHK-2000-48000-303SU	ZSHK-2000-48000-316SU	ZSHK-2000-48000-104SU	ZSHK-2000-48000-114SU
60	ZSHK-2000-60000-303SU	ZSHK-2000-60000-316SU	ZSHK-2000-60000-104SU	ZSHK-2000-60000-114SU
72	ZSHK-2000-72000-303SU	ZSHK-2000-72000-316SU	ZSHK-2000-72000-104SU	ZSHK-2000-72000-114SU

Keyed Rotary Shafts – Inch



2-1/8 Dia. (Tolerance: -.0035" to 0")

O'all Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
3	ZSHK-2125-03000-303SU	ZSHK-2125-03000-316SU	ZSHK-2125-03000-104SU	ZSHK-2125-03000-114SU
6	ZSHK-2125-06000-303SU	ZSHK-2125-06000-316SU	ZSHK-2125-06000-104SU	ZSHK-2125-06000-114SU
9	ZSHK-2125-09000-303SU	ZSHK-2125-09000-316SU	ZSHK-2125-09000-104SU	ZSHK-2125-09000-114SU
12	ZSHK-2125-12000-303SU	ZSHK-2125-12000-316SU	ZSHK-2125-12000-104SU	ZSHK-2125-12000-114SU
18	ZSHK-2125-18000-303SU	ZSHK-2125-18000-316SU	ZSHK-2125-18000-104SU	ZSHK-2125-18000-114SU
24	ZSHK-2125-24000-303SU	ZSHK-2125-24000-316SU	ZSHK-2125-24000-104SU	ZSHK-2125-24000-114SU
36	ZSHK-2125-36000-303SU	ZSHK-2125-36000-316SU	ZSHK-2125-36000-104SU	ZSHK-2125-36000-114SU
48	ZSHK-2125-48000-303SU	ZSHK-2125-48000-316SU	ZSHK-2125-48000-104SU	ZSHK-2125-48000-114SU
60	ZSHK-2125-60000-303SU	ZSHK-2125-60000-316SU	ZSHK-2125-60000-104SU	ZSHK-2125-60000-114SU
72	ZSHK-2125-72000-303SU	ZSHK-2125-72000-316SU	ZSHK-2125-72000-104SU	ZSHK-2125-72000-114SU

2-3/16 Dia. (Tolerance: -.0035" to 0")

O'all Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
3	ZSHK-2187-03000-303SU	ZSHK-2187-03000-316SU	ZSHK-2187-03000-104SU	ZSHK-2187-03000-114SU
6	ZSHK-2187-06000-303SU	ZSHK-2187-06000-316SU	ZSHK-2187-06000-104SU	ZSHK-2187-06000-114SU
9	ZSHK-2187-09000-303SU	ZSHK-2187-09000-316SU	ZSHK-2187-09000-104SU	ZSHK-2187-09000-114SU
12	ZSHK-2187-12000-303SU	ZSHK-2187-12000-316SU	ZSHK-2187-12000-104SU	ZSHK-2187-12000-114SU
18	ZSHK-2187-18000-303SU	ZSHK-2187-18000-316SU	ZSHK-2187-18000-104SU	ZSHK-2187-18000-114SU
24	ZSHK-2187-24000-303SU	ZSHK-2187-24000-316SU	ZSHK-2187-24000-104SU	ZSHK-2187-24000-114SU
36	ZSHK-2187-36000-303SU	ZSHK-2187-36000-316SU	ZSHK-2187-36000-104SU	ZSHK-2187-36000-114SU
48	ZSHK-2187-48000-303SU	ZSHK-2187-48000-316SU	ZSHK-2187-48000-104SU	ZSHK-2187-48000-114SU
60	ZSHK-2187-60000-303SU	ZSHK-2187-60000-316SU	ZSHK-2187-60000-104SU	ZSHK-2187-60000-114SU
72	ZSHK-2187-72000-303SU	ZSHK-2187-72000-316SU	ZSHK-2187-72000-104SU	ZSHK-2187-72000-114SU

2-3/8 Dia. (Tolerance: -.0035" to 0")

O'all Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
3	ZSHK-2375-03000-303SU	ZSHK-2375-03000-316SU	ZSHK-2375-03000-104SU	ZSHK-2375-03000-114SU
6	ZSHK-2375-06000-303SU	ZSHK-2375-06000-316SU	ZSHK-2375-06000-104SU	ZSHK-2375-06000-114SU
9	ZSHK-2375-09000-303SU	ZSHK-2375-09000-316SU	ZSHK-2375-09000-104SU	ZSHK-2375-09000-114SU
12	ZSHK-2375-12000-303SU	ZSHK-2375-12000-316SU	ZSHK-2375-12000-104SU	ZSHK-2375-12000-114SU
18	ZSHK-2375-18000-303SU	ZSHK-2375-18000-316SU	ZSHK-2375-18000-104SU	ZSHK-2375-18000-114SU
24	ZSHK-2375-24000-303SU	ZSHK-2375-24000-316SU	ZSHK-2375-24000-104SU	ZSHK-2375-24000-114SU
36	ZSHK-2375-36000-303SU	ZSHK-2375-36000-316SU	ZSHK-2375-36000-104SU	ZSHK-2375-36000-114SU
48	ZSHK-2375-48000-303SU	ZSHK-2375-48000-316SU	ZSHK-2375-48000-104SU	ZSHK-2375-48000-114SU
60	ZSHK-2375-60000-303SU	ZSHK-2375-60000-316SU	ZSHK-2375-60000-104SU	ZSHK-2375-60000-114SU
72	ZSHK-2375-72000-303SU	ZSHK-2375-72000-316SU	ZSHK-2375-72000-104SU	ZSHK-2375-72000-114SU

Keyed Rotary Shafts — Inch



2-7/16 Dia. (Tolerance: -.0035" to 0")

O'all Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
3	ZSHK-2437-03000-303SU	ZSHK-2437-03000-316SU	ZSHK-2437-03000-104SU	ZSHK-2437-03000-114SU
6	ZSHK-2437-06000-303SU	ZSHK-2437-06000-316SU	ZSHK-2437-06000-104SU	ZSHK-2437-06000-114SU
9	ZSHK-2437-09000-303SU	ZSHK-2437-09000-316SU	ZSHK-2437-09000-104SU	ZSHK-2437-09000-114SU
12	ZSHK-2437-12000-303SU	ZSHK-2437-12000-316SU	ZSHK-2437-12000-104SU	ZSHK-2437-12000-114SU
18	ZSHK-2437-18000-303SU	ZSHK-2437-18000-316SU	ZSHK-2437-18000-104SU	ZSHK-2437-18000-114SU
24	ZSHK-2437-24000-303SU	ZSHK-2437-24000-316SU	ZSHK-2437-24000-104SU	ZSHK-2437-24000-114SU
36	ZSHK-2437-36000-303SU	ZSHK-2437-36000-316SU	ZSHK-2437-36000-104SU	ZSHK-2437-36000-114SU
48	ZSHK-2437-48000-303SU	ZSHK-2437-48000-316SU	ZSHK-2437-48000-104SU	ZSHK-2437-48000-114SU
60	ZSHK-2437-60000-303SU	ZSHK-2437-60000-316SU	ZSHK-2437-60000-104SU	ZSHK-2437-60000-114SU
72	ZSHK-2437-72000-303SU	ZSHK-2437-72000-316SU	ZSHK-2437-72000-104SU	ZSHK-2437-72000-114SU

2.624 Dia. (Tolerance: -.0035" to 0")

O'all Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
6	ZSHK-2624-06000-303SU	ZSHK-2624-06000-316SU	ZSHK-2624-06000-104SU	ZSHK-2624-06000-114SU
9	ZSHK-2624-09000-303SU	ZSHK-2624-09000-316SU	ZSHK-2624-09000-104SU	ZSHK-2624-09000-114SU
12	ZSHK-2624-12000-303SU	ZSHK-2624-12000-316SU	ZSHK-2624-12000-104SU	ZSHK-2624-12000-114SU
18	ZSHK-2624-18000-303SU	ZSHK-2624-18000-316SU	ZSHK-2624-18000-104SU	ZSHK-2624-18000-114SU
24	ZSHK-2624-24000-303SU	ZSHK-2624-24000-316SU	ZSHK-2624-24000-104SU	ZSHK-2624-24000-114SU
36	ZSHK-2624-36000-303SU	ZSHK-2624-36000-316SU	ZSHK-2624-36000-104SU	ZSHK-2624-36000-114SU
48	ZSHK-2624-48000-303SU	ZSHK-2624-48000-316SU	ZSHK-2624-48000-104SU	ZSHK-2624-48000-114SU

2-7/8 Dia. (Tolerance: -.0035" to 0")

O'all Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
6	ZSHK-2875-06000-303SU	ZSHK-2875-06000-316SU	ZSHK-2875-06000-104SU	ZSHK-2875-06000-114SU
9	ZSHK-2875-09000-303SU	ZSHK-2875-09000-316SU	ZSHK-2875-09000-104SU	ZSHK-2875-09000-114SU
12	ZSHK-2875-12000-303SU	ZSHK-2875-12000-316SU	ZSHK-2875-12000-104SU	ZSHK-2875-12000-114SU
18	ZSHK-2875-18000-303SU	ZSHK-2875-18000-316SU	ZSHK-2875-18000-104SU	ZSHK-2875-18000-114SU
24	ZSHK-2875-24000-303SU	ZSHK-2875-24000-316SU	ZSHK-2875-24000-104SU	ZSHK-2875-24000-114SU
36	ZSHK-2875-36000-303SU	ZSHK-2875-36000-316SU	ZSHK-2875-36000-104SU	ZSHK-2875-36000-114SU
48	ZSHK-2875-48000-303SU	ZSHK-2875-48000-316SU	ZSHK-2875-48000-104SU	ZSHK-2875-48000-114SU

3-3/8 Dia. (Tolerance: -.0035" to 0")

O'all Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
6	ZSHK-3375-06000-303SU	ZSHK-3375-06000-316SU	ZSHK-3375-06000-104SU	ZSHK-3375-06000-114SU
9	ZSHK-3375-09000-303SU	ZSHK-3375-09000-316SU	ZSHK-3375-09000-104SU	ZSHK-3375-09000-114SU
12	ZSHK-3375-12000-303SU	ZSHK-3375-12000-316SU	ZSHK-3375-12000-104SU	ZSHK-3375-12000-114SU
18	ZSHK-3375-18000-303SU	ZSHK-3375-18000-316SU	ZSHK-3375-18000-104SU	ZSHK-3375-18000-114SU
24	ZSHK-3375-24000-303SU	ZSHK-3375-24000-316SU	ZSHK-3375-24000-104SU	ZSHK-3375-24000-114SU
36	ZSHK-3375-36000-303SU	ZSHK-3375-36000-316SU	ZSHK-3375-36000-104SU	ZSHK-3375-36000-114SU
48	ZSHK-3375-48000-303SU	ZSHK-3375-48000-316SU	ZSHK-3375-48000-104SU	ZSHK-3375-48000-114SU

Keyed Rotary Shafts – Metric



18-8 Stainless Steel
316 Stainless Steel
C1045 Steel
1144 Steel

Product Information

A keyed rotary shaft is a mechanical component used to transmit rotational motion and torque in machinery. It is characterized by a linear keyway cut along part of its length, into which a matching key is inserted. This key fits into a corresponding keyway on a hub, pulley, gear, or other components mounted on the shaft. These turned shafts are commonly used in applications where precise alignment and torque transmission are crucial, such as in motors, gearboxes, conveyors, and other mechanical systems. The use of a key and keyway is a simple yet effective method to secure the mounted component to the shaft, allowing for efficient power transmission while also facilitating assembly and disassembly of the system.

Length tolerance is +/-1.6mm and straightness tolerance is .33mm per 300mm. All shafts are fully lot traceable. Made in the USA from DFARS & RoHS compliant materials. Keyways meet ANSI Standard dimensions and tolerances. Both ends are chamfered. Contact us for Made-to-Order options.

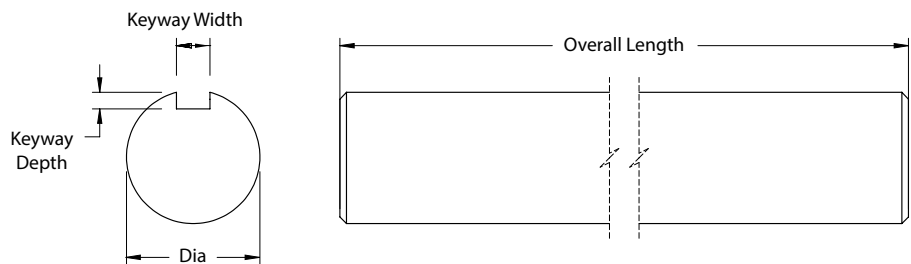
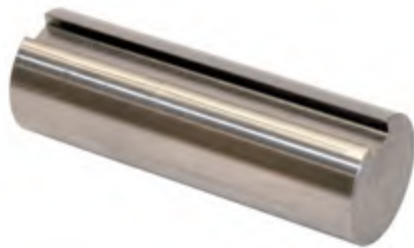
- 18-8 Stainless Steel offers excellent corrosion resistant.
- 316 Stainless Steel, also known as Marine Stainless Steel, offers superior corrosion resistant than 18-8 Stainless Steel.
- Aluminum have the strength of mild steel with one third the weight.
- C1045 Carbon Steel are generally stronger than Stainless Steel and Aluminum without corrosion resistance.
- 1144 Alloy Steel is stronger than Carbon Steel and hardened for increased wear resistance.



Materials Chart

Material	Mechanical Finish	Edge Type	Specs Met	Rockwell Hardness	Tensile Strength (psi)	Magnetic?
18-8 SS			ASTM A 582 Cond A	B83	90,000	Mildly
316 SS			ASTM A 276 Cond	B83	85,000	Mildly
C1045 Carbon Steel	Ground & Polished	Chamfered	ASTM A108	C15	91,000	Magnetic
1144 Alloy Steel			ASTM A311	C22	115,000	Magnetic
2024 Aluminum			ASTM B211	B75	68,000	Nonmagnetic

Keyed Rotary Shafts — Metric



Dimensions Table — Metric					
Diameter (mm)	Diameter Tolerance	Keyway Width (mm)	Keyway Depth (mm)	Straightness Tolerance (mm)	Length Tolerance (mm)
8	-.0635 to 0mm	2.00	1.20	.33 per 300	+/-1.60
10	-.0635 to 0mm	3.00	1.80	.33 per 300	+/-1.60
12	-.0635 to 0mm	4.00	2.50	.33 per 300	+/-1.60
15	-.0635 to 0mm	5.00	3.00	.33 per 300	+/-1.60
17	-.0635 to 0mm	5.00	3.00	.33 per 300	+/-1.60
20	-.0635 to 0mm	6.00	3.50	.33 per 300	+/-1.60
24	-.0635 to 0mm	8.00	4.00	.33 per 300	+/-1.60
25	-.0635 to 0mm	8.00	4.00	.33 per 300	+/-1.60
28	-.0635 to 0mm	8.00	4.00	.33 per 300	+/-1.60
38	-.076 to 0mm	10.00	5.00	.33 per 300	+/-1.60
40	-.076 to 0mm	12.00	5.00	.33 per 300	+/-1.60
42	-.076 to 0mm	12.00	5.00	.33 per 300	+/-1.60
50	-.076 to 0mm	14.00	5.50	.33 per 300	+/-1.60
55	-.076 to 0mm	14.00	5.50	.33 per 300	+/-1.60

Keyed Rotary Shafts — Metric



8mm Dia. (Tolerance: -.0635 to 0mm)

O'all Lg. (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHK-M08-M0300-303SU	ZSHK-M08-M0300-316SU	ZSHK-M08-M0300-104SU	ZSHK-M08-M0300-114SU
500	ZSHK-M08-M0500-303SU	ZSHK-M08-M0500-316SU	ZSHK-M08-M0500-104SU	ZSHK-M08-M0500-114SU
1,000	ZSHK-M08-M1000-303SU	ZSHK-M08-M1000-316SU	ZSHK-M08-M1000-104SU	ZSHK-M08-M1000-114SU
1,200	ZSHK-M08-M1200-303SU	ZSHK-M08-M1200-316SU	ZSHK-M08-M1200-104SU	ZSHK-M08-M1200-114SU
1,500	ZSHK-M08-M1500-303SU	ZSHK-M08-M1500-316SU	ZSHK-M08-M1500-104SU	ZSHK-M08-M1500-114SU
1,800	ZSHK-M08-M1800-303SU	ZSHK-M08-M1800-316SU	ZSHK-M08-M1800-104SU	ZSHK-M08-M1800-114SU

10mm Dia. (Tolerance: -.0635 to 0mm)

O'all Lg. (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHK-M10-M0300-303SU	ZSHK-M10-M0300-316SU	ZSHK-M10-M0300-104SU	ZSHK-M10-M0300-114SU
500	ZSHK-M10-M0500-303SU	ZSHK-M10-M0500-316SU	ZSHK-M10-M0500-104SU	ZSHK-M10-M0500-114SU
1,000	ZSHK-M10-M1000-303SU	ZSHK-M10-M1000-316SU	ZSHK-M10-M1000-104SU	ZSHK-M10-M1000-114SU
1,200	ZSHK-M10-M1200-303SU	ZSHK-M10-M1200-316SU	ZSHK-M10-M1200-104SU	ZSHK-M10-M1200-114SU
1,500	ZSHK-M10-M1500-303SU	ZSHK-M10-M1500-316SU	ZSHK-M10-M1500-104SU	ZSHK-M10-M1500-114SU
1,800	ZSHK-M10-M1800-303SU	ZSHK-M10-M1800-316SU	ZSHK-M10-M1800-104SU	ZSHK-M10-M1800-114SU

12mm Dia. (Tolerance: -.0635 to 0mm)

O'all Lg. (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHK-M12-M0300-303SU	ZSHK-M12-M0300-316SU	ZSHK-M12-M0300-104SU	ZSHK-M12-M0300-114SU
500	ZSHK-M12-M0500-303SU	ZSHK-M12-M0500-316SU	ZSHK-M12-M0500-104SU	ZSHK-M12-M0500-114SU
1,000	ZSHK-M12-M1000-303SU	ZSHK-M12-M1000-316SU	ZSHK-M12-M1000-104SU	ZSHK-M12-M1000-114SU
1,200	ZSHK-M12-M1200-303SU	ZSHK-M12-M1200-316SU	ZSHK-M12-M1200-104SU	ZSHK-M12-M1200-114SU
1,500	ZSHK-M12-M1500-303SU	ZSHK-M12-M1500-316SU	ZSHK-M12-M1500-104SU	ZSHK-M12-M1500-114SU
1,800	ZSHK-M12-M1800-303SU	ZSHK-M12-M1800-316SU	ZSHK-M12-M1800-104SU	ZSHK-M12-M1800-114SU

15mm Dia. (Tolerance: -.0635 to 0mm)

O'all Lg. (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHK-M15-M0300-303SU	ZSHK-M15-M0300-316SU	ZSHK-M15-M0300-104SU	ZSHK-M15-M0300-114SU
500	ZSHK-M15-M0500-303SU	ZSHK-M15-M0500-316SU	ZSHK-M15-M0500-104SU	ZSHK-M15-M0500-114SU
1,000	ZSHK-M15-M1000-303SU	ZSHK-M15-M1000-316SU	ZSHK-M15-M1000-104SU	ZSHK-M15-M1000-114SU
1,200	ZSHK-M15-M1200-303SU	ZSHK-M15-M1200-316SU	ZSHK-M15-M1200-104SU	ZSHK-M15-M1200-114SU
1,500	ZSHK-M15-M1500-303SU	ZSHK-M15-M1500-316SU	ZSHK-M15-M1500-104SU	ZSHK-M15-M1500-114SU
1,800	ZSHK-M15-M1800-303SU	ZSHK-M15-M1800-316SU	ZSHK-M15-M1800-104SU	ZSHK-M15-M1800-114SU

Keyed Rotary Shafts — Metric



17mm Dia. (Tolerance: -.0635 to 0mm)

O'all Lg. (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHK-M17-M0300-303SU	ZSHK-M17-M0300-316SU	ZSHK-M17-M0300-104SU	ZSHK-M17-M0300-114SU
500	ZSHK-M17-M0500-303SU	ZSHK-M17-M0500-316SU	ZSHK-M17-M0500-104SU	ZSHK-M17-M0500-114SU
1,000	ZSHK-M17-M1000-303SU	ZSHK-M17-M1000-316SU	ZSHK-M17-M1000-104SU	ZSHK-M17-M1000-114SU
1,200	ZSHK-M17-M1200-303SU	ZSHK-M17-M1200-316SU	ZSHK-M17-M1200-104SU	ZSHK-M17-M1200-114SU
1,500	ZSHK-M17-M1700-303SU	ZSHK-M17-M1700-316SU	ZSHK-M17-M1700-104SU	ZSHK-M17-M1700-114SU
1,800	ZSHK-M17-M1800-303SU	ZSHK-M17-M1800-316SU	ZSHK-M17-M1800-104SU	ZSHK-M17-M1800-114SU

20mm Dia. (Tolerance: -.0635 to 0mm)

O'all Lg. (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHK-M20-M0300-303SU	ZSHK-M20-M0300-316SU	ZSHK-M20-M0300-104SU	ZSHK-M20-M0300-114SU
500	ZSHK-M20-M0500-303SU	ZSHK-M20-M0500-316SU	ZSHK-M20-M0500-104SU	ZSHK-M20-M0500-114SU
1,000	ZSHK-M20-M1000-303SU	ZSHK-M20-M1000-316SU	ZSHK-M20-M1000-104SU	ZSHK-M20-M1000-114SU
1,200	ZSHK-M20-M1200-303SU	ZSHK-M20-M1200-316SU	ZSHK-M20-M1200-104SU	ZSHK-M20-M1200-114SU
1,500	ZSHK-M20-M1500-303SU	ZSHK-M20-M1500-316SU	ZSHK-M20-M1500-104SU	ZSHK-M20-M1500-114SU
1,800	ZSHK-M20-M1800-303SU	ZSHK-M20-M1800-316SU	ZSHK-M20-M1800-104SU	ZSHK-M20-M1800-114SU

24mm Dia. (Tolerance: -.0635 to 0mm)

O'all Lg. (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHK-M24-M0300-303SU	ZSHK-M24-M0300-316SU	ZSHK-M24-M0300-104SU	ZSHK-M24-M0300-114SU
500	ZSHK-M24-M0500-303SU	ZSHK-M24-M0500-316SU	ZSHK-M24-M0500-104SU	ZSHK-M24-M0500-114SU
1,000	ZSHK-M24-M1000-303SU	ZSHK-M24-M1000-316SU	ZSHK-M24-M1000-104SU	ZSHK-M24-M1000-114SU
1,200	ZSHK-M24-M1200-303SU	ZSHK-M24-M1200-316SU	ZSHK-M24-M1200-104SU	ZSHK-M24-M1200-114SU
1,500	ZSHK-M24-M1500-303SU	ZSHK-M24-M1500-316SU	ZSHK-M24-M1500-104SU	ZSHK-M24-M1500-114SU
1,800	ZSHK-M24-M1800-303SU	ZSHK-M24-M1800-316SU	ZSHK-M24-M1800-104SU	ZSHK-M24-M1800-114SU

25mm Dia. (Tolerance: -.0635 to 0mm)

O'all Lg. (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHK-M25-M0300-303SU	ZSHK-M25-M0300-316SU	ZSHK-M25-M0300-104SU	ZSHK-M25-M0300-114SU
500	ZSHK-M25-M0500-303SU	ZSHK-M25-M0500-316SU	ZSHK-M25-M0500-104SU	ZSHK-M25-M0500-114SU
1,000	ZSHK-M25-M1000-303SU	ZSHK-M25-M1000-316SU	ZSHK-M25-M1000-104SU	ZSHK-M25-M1000-114SU
1,200	ZSHK-M25-M1200-303SU	ZSHK-M25-M1200-316SU	ZSHK-M25-M1200-104SU	ZSHK-M25-M1200-114SU
1,500	ZSHK-M25-M1500-303SU	ZSHK-M25-M1500-316SU	ZSHK-M25-M1500-104SU	ZSHK-M25-M1500-114SU
1,800	ZSHK-M25-M1800-303SU	ZSHK-M25-M1800-316SU	ZSHK-M25-M1800-104SU	ZSHK-M25-M1800-114SU

Keyed Rotary Shafts – Metric



28mm Dia. (Tolerance: -.0635 to 0mm)

O'all Lg. (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHK-M28-M0300-303SU	ZSHK-M28-M0300-316SU	ZSHK-M28-M0300-104SU	ZSHK-M28-M0300-114SU
500	ZSHK-M28-M0500-303SU	ZSHK-M28-M0500-316SU	ZSHK-M28-M0500-104SU	ZSHK-M28-M0500-114SU
1,000	ZSHK-M28-M1000-303SU	ZSHK-M28-M1000-316SU	ZSHK-M28-M1000-104SU	ZSHK-M28-M1000-114SU
1,200	ZSHK-M28-M1200-303SU	ZSHK-M28-M1200-316SU	ZSHK-M28-M1200-104SU	ZSHK-M28-M1200-114SU
1,500	ZSHK-M28-M2800-303SU	ZSHK-M28-M2800-316SU	ZSHK-M28-M2800-104SU	ZSHK-M28-M2800-114SU
1,800	ZSHK-M28-M1800-303SU	ZSHK-M28-M1800-316SU	ZSHK-M28-M1800-104SU	ZSHK-M28-M1800-114SU

38mm Dia. (Tolerance: -.076 to 0mm)

O'all Lg. (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHK-M38-M0300-303SU	ZSHK-M38-M0300-316SU	ZSHK-M38-M0300-104SU	ZSHK-M38-M0300-114SU
500	ZSHK-M38-M0500-303SU	ZSHK-M38-M0500-316SU	ZSHK-M38-M0500-104SU	ZSHK-M38-M0500-114SU
1,000	ZSHK-M38-M1000-303SU	ZSHK-M38-M1000-316SU	ZSHK-M38-M1000-104SU	ZSHK-M38-M1000-114SU
1,200	ZSHK-M38-M1200-303SU	ZSHK-M38-M1200-316SU	ZSHK-M38-M1200-104SU	ZSHK-M38-M1200-114SU
1,500	ZSHK-M38-M3800-303SU	ZSHK-M38-M3800-316SU	ZSHK-M38-M3800-104SU	ZSHK-M38-M3800-114SU
1,800	ZSHK-M38-M1800-303SU	ZSHK-M38-M1800-316SU	ZSHK-M38-M1800-104SU	ZSHK-M38-M1800-114SU

40mm Dia. (Tolerance: -.076 to 0mm)

O'all Lg. (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHK-M40-M0300-303SU	ZSHK-M40-M0300-316SU	ZSHK-M40-M0300-104SU	ZSHK-M40-M0300-114SU
500	ZSHK-M40-M0500-303SU	ZSHK-M40-M0500-316SU	ZSHK-M40-M0500-104SU	ZSHK-M40-M0500-114SU
1,000	ZSHK-M40-M1000-303SU	ZSHK-M40-M1000-316SU	ZSHK-M40-M1000-104SU	ZSHK-M40-M1000-114SU
1,200	ZSHK-M40-M1200-303SU	ZSHK-M40-M1200-316SU	ZSHK-M40-M1200-104SU	ZSHK-M40-M1200-114SU
1,500	ZSHK-M40-M1500-303SU	ZSHK-M40-M1500-316SU	ZSHK-M40-M1500-104SU	ZSHK-M40-M1500-114SU
1,800	ZSHK-M40-M1800-303SU	ZSHK-M40-M1800-316SU	ZSHK-M40-M1800-104SU	ZSHK-M40-M1800-114SU

Keyed Rotary Shafts — Metric



42mm Dia. (Tolerance: -.076 to 0mm)

O'all Lg. (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHK-M42-M0300-303SU	ZSHK-M42-M0300-316SU	ZSHK-M42-M0300-104SU	ZSHK-M42-M0300-114SU
500	ZSHK-M42-M0500-303SU	ZSHK-M42-M0500-316SU	ZSHK-M42-M0500-104SU	ZSHK-M42-M0500-114SU
1,000	ZSHK-M42-M1000-303SU	ZSHK-M42-M1000-316SU	ZSHK-M42-M1000-104SU	ZSHK-M42-M1000-114SU

50mm Dia. (Tolerance: -.076 to 0mm)

O'all Lg. (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHK-M50-M0300-303SU	ZSHK-M50-M0300-316SU	ZSHK-M50-M0300-104SU	ZSHK-M50-M0300-114SU
500	ZSHK-M50-M0500-303SU	ZSHK-M50-M0500-316SU	ZSHK-M50-M0500-104SU	ZSHK-M50-M0500-114SU
1,000	ZSHK-M50-M1000-303SU	ZSHK-M50-M1000-316SU	ZSHK-M50-M1000-104SU	ZSHK-M50-M1000-114SU
1,200	ZSHK-M50-M1200-303SU	ZSHK-M50-M1200-316SU	ZSHK-M50-M1200-104SU	ZSHK-M50-M1200-114SU
1,500	ZSHK-M50-M1500-303SU	ZSHK-M50-M1500-316SU	ZSHK-M50-M1500-104SU	ZSHK-M50-M1500-114SU
1,800	ZSHK-M50-M1800-303SU	ZSHK-M50-M1800-316SU	ZSHK-M50-M1800-104SU	ZSHK-M50-M1800-114SU

55mm Dia. (Tolerance: -.076 to 0mm)

O'all Lg. (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHK-M55-M0300-303SU	ZSHK-M55-M0300-316SU	ZSHK-M55-M0300-104SU	ZSHK-M55-M0300-114SU
500	ZSHK-M55-M0500-303SU	ZSHK-M55-M0500-316SU	ZSHK-M55-M0500-104SU	ZSHK-M55-M0500-114SU
1,000	ZSHK-M55-M1000-303SU	ZSHK-M55-M1000-316SU	ZSHK-M55-M1000-104SU	ZSHK-M55-M1000-114SU

Partial Keyed Rotary Shafts – Inch

18-8 & 316 SS Steel & Aluminum

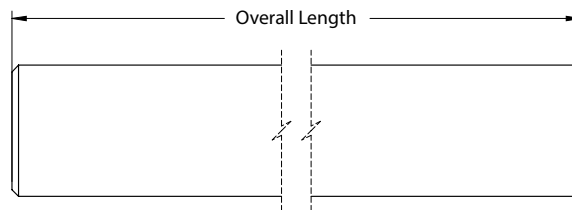
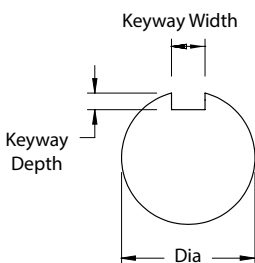


Product Information

Designed with keyways at each end and a smooth, central section, these shafts facilitate efficient torque transfer. The end keyways, compatible with standard ANSI machine keys, securely connect gears, sprockets, and other keyed components. The central plain shaft is ideal for bearing and round-bore component integration. To minimize installation damage, the edges are chamfered, and the entire shaft is precision-machined through turning, grinding, and polishing, ensuring strict diameter and straightness tolerances. The use of a key and keyway is a simple yet effective method to secure the mounted component to the shaft, allowing for efficient power transmission while also facilitating assembly and disassembly of the system.

All shafts are made in the USA from DFARS compliant & RoHS compliant stainless steel and shafts are fully lot traceable. Length tolerance is ± 0.062 and straightness tolerance is 0.012 in/ft.

- Shafts are turned, ground and polished to tight diameter and straightness tolerances.
- Keyways meet ANSI Standard dimensions and tolerances.
- 18-8 stainless steel shafts offer excellent corrosion resistant and can be mildly magnetic. Meets ASTM A582 Condition A. material specification.
- Type 316 stainless steel, also known as marine stainless steel, offers superior corrosion resistant than 18-8 stainless steel and maybe mildly magnetic. Meets ASTM A276 Condition A. material specification.
- Aluminum shafts are lightweight, corrosion resistant and nonmagnetic. They have a T4 temper, which means they have been heat treated for increased strength.
- Aluminum shafts have the strength of mild steel with one third the weight.
- C1045 Carbon Steel shafts are generally stronger than aluminum and stainless steel shafts but not as corrosion resistant. These Carbon Steel shafts offers medium strength properties making them ideal for general purpose use.
- C1045 Carbon Steel is recommended for shafts requiring higher strength and wear resistance than carbon steel and stainless steel shafts.
- 1144 Stressproof Alloy Steel has excellent strength and hardness, and is specifically treated to relieve stresses for this durable material.

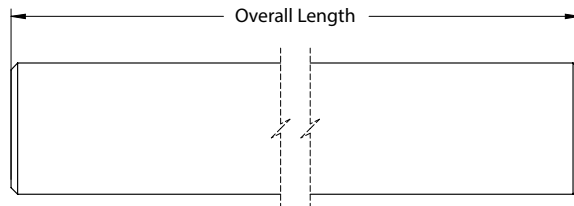
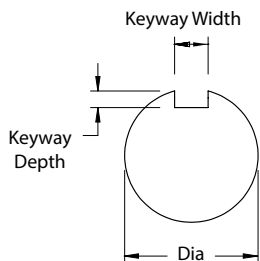


Materials Chart

Material	Mechanical Finish	Edge Type	Specs Met	Rockwell Hardness	Tensile Strength (psi)	Magnetic?
18-8 SS	Ground & Polished	Chamfered	ASTM A 582 Cond A	B83	90,000	Mildly
316 SS	Ground & Polished	Chamfered	ASTM A 276 Cond	B83	85,000	Mildly
C1045 Carbon Steel	Ground & Polished	Chamfered	ASTM A108	C15	91,000	Magnetic
1144 Alloy Steel	Ground & Polished	Chamfered	ASTM A311	C22	115,000	Magnetic
2024 Aluminum	Ground & Polished	Chamfered	ASTM B211	B75	68,000	Nonmagnetic

Partial Keyed Rotary Shafts — Inch

18-8 & 316 SS
Steel & Aluminum



Dimensions Table — Inch

Diameter	Diameter Tolerance	Keyway Width	Keyway Depth	Straightness Tolerance	Length Tolerance
5/16	-.0005 to -.0025	3/32	3/64	.012 in/ft	+/- .062
3/8	-.0005 to -.0025	3/32	3/64	.012 in/ft	+/- .062
1/2	-.0005 to -.0025	1/8	1/16	.012 in/ft	+/- .062
9/16	-.0005 to -.0025	1/8	1/16	.012 in/ft	+/- .062
5/8	-.0005 to -.0025	3/16	3/32	.012 in/ft	+/- .062
3/4	-.0005 to -.0025	3/16	3/32	.012 in/ft	+/- .062
7/8	-.0005 to -.0025	3/16	3/32	.012 in/ft	+/- .062
15/16	-.0005 to -.0025	3/32	3/64	.012 in/ft	+/- .062
1	-.0005 to -.0025	1/4	1/8	.012 in/ft	+/- .062
1-1/8	-.0005 to -.0025	1/4	1/8	.012 in/ft	+/- .062
1-3/16	-.0005 to -.0025	1/4	1/8	.012 in/ft	+/- .062
1-1/4	-.0005 to -.0025	1/4	1/8	.012 in/ft	+/- .062
1-5/16	-.003 to 0	5/16	5/32	.012 in/ft	+/- .062
1-3/8	-.003 to 0	5/16	5/32	.012 in/ft	+/- .062
1-7/16	-.003 to 0	3/8	3/16	.012 in/ft	+/- .062
1-1/2	-.003 to 0	3/8	3/16	.012 in/ft	+/- .062
1-5/8	-.003 to 0	3/8	3/16	.012 in/ft	+/- .062
1-3/4	-.003 to 0	3/8	3/16	.012 in/ft	+/- .062
1-7/8	-.003 to 0	1/2	1/4	.012 in/ft	+/- .062
1-15/16	-.0035 to 0	1/2	1/4	.012 in/ft	+/- .062
2	-.0035 to 0	1/2	1/4	.012 in/ft	+/- .062
2-1/8	-.0035 to 0	1/2	1/4	.012 in/ft	+/- .062
2-3/16	-.0035 to 0	1/2	1/4	.012 in/ft	+/- .062
2-3/8	-.0035 to 0	5/8	5/16	.012 in/ft	+/- .062
2-7/16	-.0035 to 0	5/8	5/16	.012 in/ft	+/- .062
2.624	-.0035 to 0	5/8	5/16	.012 in/ft	+/- .062
2-7/8	-.0035 to 0	3/4	3/8	.012 in/ft	+/- .062
3-3/8	-.0035 to 0	7/8	7/16	.012 in/ft	+/- .062

Key Lengths

Length Size	Key Lg 1 End	Key Lg 2 End
12	2.00	7.00
18	2.00	7.00
24	4.00	14.00
36	4.00	14.00
48	4.00	14.00
60	4.00	14.00
72	4.00	14.00

Partial Keyed Rotary Shafts — Inch



Key Lengths

Length Size	Key Lg 1 End	Key Lg 2 End
12	2.00	7.00
18	2.00	7.00
24	4.00	14.00
36	4.00	14.00
48	4.00	14.00
60	4.00	14.00
72	4.00	14.00

5/16 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
12	ZSHKK-312-12000-303SU	ZSHKK-312-12000-316SU	ZSHKK-312-12000-104SU	ZSHKK-312-12000-114SU	ZSHKK-312-12000-202SU
18	ZSHKK-312-18000-303SU	ZSHKK-312-18000-316SU	ZSHKK-312-18000-104SU	ZSHKK-312-18000-114SU	ZSHKK-312-18000-202SU
24	ZSHKK-312-24000-303SU	ZSHKK-312-24000-316SU	ZSHKK-312-24000-104SU	ZSHKK-312-24000-114SU	ZSHKK-312-24000-202SU
36	ZSHKK-312-36000-303SU	ZSHKK-312-36000-316SU	ZSHKK-312-36000-104SU	ZSHKK-312-36000-114SU	ZSHKK-312-36000-202SU
48	ZSHKK-312-48000-303SU	ZSHKK-312-48000-316SU	ZSHKK-312-48000-104SU	ZSHKK-312-48000-114SU	ZSHKK-312-48000-202SU
60	ZSHKK-312-60000-303SU	ZSHKK-312-60000-316SU	ZSHKK-312-60000-104SU	ZSHKK-312-60000-114SU	ZSHKK-312-60000-202SU
72	ZSHKK-312-72000-303SU	ZSHKK-312-72000-316SU	ZSHKK-312-72000-104SU	ZSHKK-312-72000-114SU	ZSHKK-312-72000-202SU

3/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
12	ZSHKK-375-12000-303SU	ZSHKK-375-12000-316SU	ZSHKK-375-12000-104SU	ZSHKK-375-12000-114SU	ZSHKK-375-12000-202SU
18	ZSHKK-375-18000-303SU	ZSHKK-375-18000-316SU	ZSHKK-375-18000-104SU	ZSHKK-375-18000-114SU	ZSHKK-375-18000-202SU
24	ZSHKK-375-24000-303SU	ZSHKK-375-24000-316SU	ZSHKK-375-24000-104SU	ZSHKK-375-24000-114SU	ZSHKK-375-24000-202SU
36	ZSHKK-375-36000-303SU	ZSHKK-375-36000-316SU	ZSHKK-375-36000-104SU	ZSHKK-375-36000-114SU	ZSHKK-375-36000-202SU
48	ZSHKK-375-48000-303SU	ZSHKK-375-48000-316SU	ZSHKK-375-48000-104SU	ZSHKK-375-48000-114SU	ZSHKK-375-48000-202SU
60	ZSHKK-375-60000-303SU	ZSHKK-375-60000-316SU	ZSHKK-375-60000-104SU	ZSHKK-375-60000-114SU	ZSHKK-375-60000-202SU
72	ZSHKK-375-72000-303SU	ZSHKK-375-72000-316SU	ZSHKK-375-72000-104SU	ZSHKK-375-72000-114SU	ZSHKK-375-72000-202SU

1/2 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
12	ZSHKK-500-12000-303SU	ZSHKK-500-12000-316SU	ZSHKK-500-12000-104SU	ZSHKK-500-12000-114SU	ZSHKK-500-12000-202SU
18	ZSHKK-500-18000-303SU	ZSHKK-500-18000-316SU	ZSHKK-500-18000-104SU	ZSHKK-500-18000-114SU	ZSHKK-500-18000-202SU
24	ZSHKK-500-24000-303SU	ZSHKK-500-24000-316SU	ZSHKK-500-24000-104SU	ZSHKK-500-24000-114SU	ZSHKK-500-24000-202SU
36	ZSHKK-500-36000-303SU	ZSHKK-500-36000-316SU	ZSHKK-500-36000-104SU	ZSHKK-500-36000-114SU	ZSHKK-500-36000-202SU
48	ZSHKK-500-48000-303SU	ZSHKK-500-48000-316SU	ZSHKK-500-48000-104SU	ZSHKK-500-48000-114SU	ZSHKK-500-48000-202SU
60	ZSHKK-500-60000-303SU	ZSHKK-500-60000-316SU	ZSHKK-500-60000-104SU	ZSHKK-500-60000-114SU	ZSHKK-500-60000-202SU
72	ZSHKK-500-72000-303SU	ZSHKK-500-72000-316SU	ZSHKK-500-72000-104SU	ZSHKK-500-72000-114SU	ZSHKK-500-72000-202SU

Partial Keyed Rotary Shafts — Inch



Key Lengths		
Length Size	Key Lg 1 End	Key Lg 2 End
12	2.00	7.00
18	2.00	7.00
24	4.00	14.00
36	4.00	14.00
48	4.00	14.00
60	4.00	14.00
72	4.00	14.00

9/16 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
12	ZSHKK-562-12000-303SU	ZSHKK-562-12000-316SU	ZSHKK-562-12000-104SU	ZSHKK-562-12000-114SU	—
18	ZSHKK-562-18000-303SU	ZSHKK-562-18000-316SU	ZSHKK-562-18000-104SU	ZSHKK-562-18000-114SU	—
24	ZSHKK-562-24000-303SU	ZSHKK-562-24000-316SU	ZSHKK-562-24000-104SU	ZSHKK-562-24000-114SU	—
36	ZSHKK-562-36000-303SU	ZSHKK-562-36000-316SU	ZSHKK-562-36000-104SU	ZSHKK-562-36000-114SU	—
48	ZSHKK-562-48000-303SU	ZSHKK-562-48000-316SU	ZSHKK-562-48000-104SU	ZSHKK-562-48000-114SU	—
60	ZSHKK-562-60000-303SU	ZSHKK-562-60000-316SU	ZSHKK-562-60000-104SU	ZSHKK-562-60000-114SU	—
72	ZSHKK-562-72000-303SU	ZSHKK-562-72000-316SU	ZSHKK-562-72000-104SU	ZSHKK-562-72000-114SU	—

5/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
12	ZSHKK-625-12000-303SU	ZSHKK-625-12000-316SU	ZSHKK-625-12000-104SU	ZSHKK-625-12000-114SU	ZSHKK-625-12000-202SU
18	ZSHKK-625-18000-303SU	ZSHKK-625-18000-316SU	ZSHKK-625-18000-104SU	ZSHKK-625-18000-114SU	ZSHKK-625-18000-202SU
24	ZSHKK-625-24000-303SU	ZSHKK-625-24000-316SU	ZSHKK-625-24000-104SU	ZSHKK-625-24000-114SU	ZSHKK-625-24000-202SU
36	ZSHKK-625-36000-303SU	ZSHKK-625-36000-316SU	ZSHKK-625-36000-104SU	ZSHKK-625-36000-114SU	ZSHKK-625-36000-202SU
48	ZSHKK-625-48000-303SU	ZSHKK-625-48000-316SU	ZSHKK-625-48000-104SU	ZSHKK-625-48000-114SU	ZSHKK-625-48000-202SU
60	ZSHKK-625-60000-303SU	ZSHKK-625-60000-316SU	ZSHKK-625-60000-104SU	ZSHKK-625-60000-114SU	ZSHKK-625-60000-202SU
72	ZSHKK-625-72000-303SU	ZSHKK-625-72000-316SU	ZSHKK-625-72000-104SU	ZSHKK-625-72000-114SU	ZSHKK-625-72000-202SU

3/4 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
12	ZSHKK-750-12000-303SU	ZSHKK-750-12000-316SU	ZSHKK-750-12000-104SU	ZSHKK-750-12000-114SU	ZSHKK-750-12000-202SU
18	ZSHKK-750-18000-303SU	ZSHKK-750-18000-316SU	ZSHKK-750-18000-104SU	ZSHKK-750-18000-114SU	ZSHKK-750-18000-202SU
24	ZSHKK-750-24000-303SU	ZSHKK-750-24000-316SU	ZSHKK-750-24000-104SU	ZSHKK-750-24000-114SU	ZSHKK-750-24000-202SU
36	ZSHKK-750-36000-303SU	ZSHKK-750-36000-316SU	ZSHKK-750-36000-104SU	ZSHKK-750-36000-114SU	ZSHKK-750-36000-202SU
48	ZSHKK-750-48000-303SU	ZSHKK-750-48000-316SU	ZSHKK-750-48000-104SU	ZSHKK-750-48000-114SU	ZSHKK-750-48000-202SU
60	ZSHKK-750-60000-303SU	ZSHKK-750-60000-316SU	ZSHKK-750-60000-104SU	ZSHKK-750-60000-114SU	ZSHKK-750-60000-202SU
72	ZSHKK-750-72000-303SU	ZSHKK-750-72000-316SU	ZSHKK-750-72000-104SU	ZSHKK-750-72000-114SU	ZSHKK-750-72000-202SU

Partial Keyed Rotary Shafts — Inch



Key Lengths

Length Size	Key Lg 1 End	Key Lg 2 End
12	2.00	7.00
18	2.00	7.00
24	4.00	14.00
36	4.00	14.00
48	4.00	14.00
60	4.00	14.00
72	4.00	14.00

7/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
12	ZSHKK-875-12000-303SU	ZSHKK-875-12000-316SU	ZSHKK-875-12000-104SU	ZSHKK-875-12000-114SU	ZSHKK-875-12000-202SU
18	ZSHKK-875-18000-303SU	ZSHKK-875-18000-316SU	ZSHKK-875-18000-104SU	ZSHKK-875-18000-114SU	ZSHKK-875-18000-202SU
24	ZSHKK-875-24000-303SU	ZSHKK-875-24000-316SU	ZSHKK-875-24000-104SU	ZSHKK-875-24000-114SU	ZSHKK-875-24000-202SU
36	ZSHKK-875-36000-303SU	ZSHKK-875-36000-316SU	ZSHKK-875-36000-104SU	ZSHKK-875-36000-114SU	ZSHKK-875-36000-202SU
48	ZSHKK-875-48000-303SU	ZSHKK-875-48000-316SU	ZSHKK-875-48000-104SU	ZSHKK-875-48000-114SU	ZSHKK-875-48000-202SU
60	ZSHKK-875-60000-303SU	ZSHKK-875-60000-316SU	ZSHKK-875-60000-104SU	ZSHKK-875-60000-114SU	ZSHKK-875-60000-202SU
72	ZSHKK-875-72000-303SU	ZSHKK-875-72000-316SU	ZSHKK-875-72000-104SU	ZSHKK-875-72000-114SU	ZSHKK-875-72000-202SU

5/16 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number	2024 Aluminum Part Number
12	—	—	ZSHKK-937-12000-104SU	—	—
18	—	—	ZSHKK-937-18000-104SU	—	—
24	—	—	ZSHKK-937-24000-104SU	—	—
36	—	—	ZSHKK-937-36000-104SU	—	—
48	—	—	ZSHKK-937-48000-104SU	—	—
60	—	—	ZSHKK-937-60000-104SU	—	—
72	—	—	ZSHKK-937-72000-104SU	—	—

1 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number	2024 Aluminum Part Number
12	ZSHKK-1000-12000-303SU	ZSHKK-1000-12000-316SU	ZSHKK-1000-12000-104SU	ZSHKK-1000-12000-114SU	ZSHKK-1000-12000-202SU
18	ZSHKK-1000-18000-303SU	ZSHKK-1000-18000-316SU	ZSHKK-1000-18000-104SU	ZSHKK-1000-18000-114SU	ZSHKK-1000-18000-202SU
24	ZSHKK-1000-24000-303SU	ZSHKK-1000-24000-316SU	ZSHKK-1000-24000-104SU	ZSHKK-1000-24000-114SU	ZSHKK-1000-24000-202SU
36	ZSHKK-1000-36000-303SU	ZSHKK-1000-36000-316SU	ZSHKK-1000-36000-104SU	ZSHKK-1000-36000-114SU	ZSHKK-1000-36000-202SU
48	ZSHKK-1000-48000-303SU	ZSHKK-1000-48000-316SU	ZSHKK-1000-48000-104SU	ZSHKK-1000-48000-114SU	ZSHKK-1000-48000-202SU
60	ZSHKK-1000-60000-303SU	ZSHKK-1000-60000-316SU	ZSHKK-1000-60000-104SU	ZSHKK-1000-60000-114SU	ZSHKK-1000-60000-202SU
72	ZSHKK-1000-72000-303SU	ZSHKK-1000-72000-316SU	ZSHKK-1000-72000-104SU	ZSHKK-1000-72000-114SU	ZSHKK-1000-72000-202SU

Partial Keyed Rotary Shafts — Inch



Key Lengths		
Length Size	Key Lg 1 End	Key Lg 2 End
12	2.00	7.00
18	2.00	7.00
24	4.00	14.00
36	4.00	14.00
48	4.00	14.00
60	4.00	14.00
72	4.00	14.00

1-1/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number	2024 Aluminum Part Number
12	ZSHKK-1125-12000-303SU	ZSHKK-1125-12000-316SU	ZSHKK-1125-12000-104SU	ZSHKK-1125-12000-114SU	—
18	ZSHKK-1125-18000-303SU	ZSHKK-1125-18000-316SU	ZSHKK-1125-18000-104SU	ZSHKK-1125-18000-114SU	—
24	ZSHKK-1125-24000-303SU	ZSHKK-1125-24000-316SU	ZSHKK-1125-24000-104SU	ZSHKK-1125-24000-114SU	—
36	ZSHKK-1125-36000-303SU	ZSHKK-1125-36000-316SU	ZSHKK-1125-36000-104SU	ZSHKK-1125-36000-114SU	—
48	ZSHKK-1125-48000-303SU	ZSHKK-1125-48000-316SU	ZSHKK-1125-48000-104SU	ZSHKK-1125-48000-114SU	—
60	ZSHKK-1125-60000-303SU	ZSHKK-1125-60000-316SU	ZSHKK-1125-60000-104SU	ZSHKK-1125-60000-114SU	—
72	ZSHKK-1125-72000-303SU	ZSHKK-1125-72000-316SU	ZSHKK-1125-72000-104SU	ZSHKK-1125-72000-114SU	—

1-3/16 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
12	ZSHKK-1187-12000-303SU	ZSHKK-1187-12000-316SU	ZSHKK-1187-12000-104SU	ZSHKK-1187-12000-114SU
18	ZSHKK-1187-18000-303SU	ZSHKK-1187-18000-316SU	ZSHKK-1187-18000-104SU	ZSHKK-1187-18000-114SU
24	ZSHKK-1187-24000-303SU	ZSHKK-1187-24000-316SU	ZSHKK-1187-24000-104SU	ZSHKK-1187-24000-114SU
36	ZSHKK-1187-36000-303SU	ZSHKK-1187-36000-316SU	ZSHKK-1187-36000-104SU	ZSHKK-1187-36000-114SU
48	ZSHKK-1187-48000-303SU	ZSHKK-1187-48000-316SU	ZSHKK-1187-48000-104SU	ZSHKK-1187-48000-114SU
60	ZSHKK-1187-60000-303SU	ZSHKK-1187-60000-316SU	ZSHKK-1187-60000-104SU	ZSHKK-1187-60000-114SU
72	ZSHKK-1187-72000-303SU	ZSHKK-1187-72000-316SU	ZSHKK-1187-72000-104SU	ZSHKK-1187-72000-114SU

1-1/4 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
12	ZSHKK-1250-12000-303SU	ZSHKK-1250-12000-316SU	ZSHKK-1250-12000-104SU	ZSHKK-1250-12000-114SU
18	ZSHKK-1250-18000-303SU	ZSHKK-1250-18000-316SU	ZSHKK-1250-18000-104SU	ZSHKK-1250-18000-114SU
24	ZSHKK-1250-24000-303SU	ZSHKK-1250-24000-316SU	ZSHKK-1250-24000-104SU	ZSHKK-1250-24000-114SU
36	ZSHKK-1250-36000-303SU	ZSHKK-1250-36000-316SU	ZSHKK-1250-36000-104SU	ZSHKK-1250-36000-114SU
48	ZSHKK-1250-48000-303SU	ZSHKK-1250-48000-316SU	ZSHKK-1250-48000-104SU	ZSHKK-1250-48000-114SU
60	ZSHKK-1250-60000-303SU	ZSHKK-1250-60000-316SU	ZSHKK-1250-60000-104SU	ZSHKK-1250-60000-114SU
72	ZSHKK-1250-72000-303SU	ZSHKK-1250-72000-316SU	ZSHKK-1250-72000-104SU	ZSHKK-1250-72000-114SU

Partial Keyed Rotary Shafts – Inch



Key Lengths

Length Size	Key Lg 1 End	Key Lg 2 End
12	2.00	7.00
18	2.00	7.00
24	4.00	14.00
36	4.00	14.00
48	4.00	14.00
60	4.00	14.00
72	4.00	14.00

1-5/16 Diameter (Tolerance: -.003" to 0")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
12	ZSHKK-1312-12000-303SU	ZSHKK-1312-12000-316SU	ZSHKK-1312-12000-104SU	ZSHKK-1312-12000-114SU
18	ZSHKK-1312-18000-303SU	ZSHKK-1312-18000-316SU	ZSHKK-1312-18000-104SU	ZSHKK-1312-18000-114SU
24	ZSHKK-1312-24000-303SU	ZSHKK-1312-24000-316SU	ZSHKK-1312-24000-104SU	ZSHKK-1312-24000-114SU
36	ZSHKK-1312-36000-303SU	ZSHKK-1312-36000-316SU	ZSHKK-1312-36000-104SU	ZSHKK-1312-36000-114SU
48	ZSHKK-1312-48000-303SU	ZSHKK-1312-48000-316SU	ZSHKK-1312-48000-104SU	ZSHKK-1312-48000-114SU
60	ZSHKK-1312-60000-303SU	ZSHKK-1312-60000-316SU	ZSHKK-1312-60000-104SU	ZSHKK-1312-60000-114SU
72	ZSHKK-1312-72000-303SU	ZSHKK-1312-72000-316SU	ZSHKK-1312-72000-104SU	ZSHKK-1312-72000-114SU

1-3/8 Diameter (Tolerance: -.003" to 0")

O'all Lg (inch)	Key Lg 1 End	Key Lg 2 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
12	2.00	7.00	ZSHKK-1375-12000-303SU	ZSHKK-1375-12000-316SU	ZSHKK-1375-12000-104SU	ZSHKK-1375-12000-114SU
18	2.00	7.00	ZSHKK-1375-18000-303SU	ZSHKK-1375-18000-316SU	ZSHKK-1375-18000-104SU	ZSHKK-1375-18000-114SU
24	4.00	14.00	ZSHKK-1375-24000-303SU	ZSHKK-1375-24000-316SU	ZSHKK-1375-24000-104SU	ZSHKK-1375-24000-114SU
36	4.00	14.00	ZSHKK-1375-36000-303SU	ZSHKK-1375-36000-316SU	ZSHKK-1375-36000-104SU	ZSHKK-1375-36000-114SU
48	4.00	14.00	ZSHKK-1375-48000-303SU	ZSHKK-1375-48000-316SU	ZSHKK-1375-48000-104SU	ZSHKK-1375-48000-114SU
60	4.00	14.00	ZSHKK-1375-60000-303SU	ZSHKK-1375-60000-316SU	ZSHKK-1375-60000-104SU	ZSHKK-1375-60000-114SU
72	4.00	14.00	ZSHKK-1375-72000-303SU	ZSHKK-1375-72000-316SU	ZSHKK-1375-72000-104SU	ZSHKK-1375-72000-114SU

1-7/16 Diameter (Tolerance: -.003" to 0")

O'all Lg (inch)	Key Lg 1 End	Key Lg 2 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
12	2.00	7.00	ZSHKK-1437-12000-303SU	ZSHKK-1437-12000-316SU	ZSHKK-1437-12000-104SU	ZSHKK-1437-12000-114SU
18	2.00	7.00	ZSHKK-1437-18000-303SU	ZSHKK-1437-18000-316SU	ZSHKK-1437-18000-104SU	ZSHKK-1437-18000-114SU
24	4.00	14.00	ZSHKK-1437-24000-303SU	ZSHKK-1437-24000-316SU	ZSHKK-1437-24000-104SU	ZSHKK-1437-24000-114SU
36	4.00	14.00	ZSHKK-1437-36000-303SU	ZSHKK-1437-36000-316SU	ZSHKK-1437-36000-104SU	ZSHKK-1437-36000-114SU
48	4.00	14.00	ZSHKK-1437-48000-303SU	ZSHKK-1437-48000-316SU	ZSHKK-1437-48000-104SU	ZSHKK-1437-48000-114SU
60	4.00	14.00	ZSHKK-1437-60000-303SU	ZSHKK-1437-60000-316SU	ZSHKK-1437-60000-104SU	ZSHKK-1437-60000-114SU
72	4.00	14.00	ZSHKK-1437-72000-303SU	ZSHKK-1437-72000-316SU	ZSHKK-1437-72000-104SU	ZSHKK-1437-72000-114SU

Partial Keyed Rotary Shafts — Inch



1-3/4 Diameter (Tolerance: -.003" to 0")

O'all Lg (inch)	Key Lg 1 End	Key Lg 2 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
12	2.00	7.00	ZSHKK-1750-12000-303SU	ZSHKK-1750-12000-316SU	ZSHKK-1750-12000-104SU	ZSHKK-1750-12000-114SU
18	2.00	7.00	ZSHKK-1750-18000-303SU	ZSHKK-1750-18000-316SU	ZSHKK-1750-18000-104SU	ZSHKK-1750-18000-114SU
24	4.00	14.00	ZSHKK-1750-24000-303SU	ZSHKK-1750-24000-316SU	ZSHKK-1750-24000-104SU	ZSHKK-1750-24000-114SU
36	4.00	14.00	ZSHKK-1750-36000-303SU	ZSHKK-1750-36000-316SU	ZSHKK-1750-36000-104SU	ZSHKK-1750-36000-114SU
48	4.00	14.00	ZSHKK-1750-48000-303SU	ZSHKK-1750-48000-316SU	ZSHKK-1750-48000-104SU	ZSHKK-1750-48000-114SU
60	4.00	14.00	ZSHKK-1750-60000-303SU	ZSHKK-1750-60000-316SU	ZSHKK-1750-60000-104SU	ZSHKK-1750-60000-114SU
72	4.00	14.00	ZSHKK-1750-72000-303SU	ZSHKK-1750-72000-316SU	ZSHKK-1750-72000-104SU	ZSHKK-1750-72000-114SU

1-7/8 Diameter (Tolerance: -.003" to 0")

O'all Lg (inch)	Key Lg 1 End	Key Lg 2 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
12	2.00	7.00	ZSHKK-1875-12000-303SU	ZSHKK-1875-12000-316SU	ZSHKK-1875-12000-104SU	ZSHKK-1875-12000-114SU
18	2.00	7.00	ZSHKK-1875-18000-303SU	ZSHKK-1875-18000-316SU	ZSHKK-1875-18000-104SU	ZSHKK-1875-18000-114SU
24	4.00	14.00	ZSHKK-1875-24000-303SU	ZSHKK-1875-24000-316SU	ZSHKK-1875-24000-104SU	ZSHKK-1875-24000-114SU
36	4.00	14.00	ZSHKK-1875-36000-303SU	ZSHKK-1875-36000-316SU	ZSHKK-1875-36000-104SU	ZSHKK-1875-36000-114SU
48	4.00	14.00	ZSHKK-1875-48000-303SU	ZSHKK-1875-48000-316SU	ZSHKK-1875-48000-104SU	ZSHKK-1875-48000-114SU
60	4.00	14.00	ZSHKK-1875-60000-303SU	ZSHKK-1875-60000-316SU	ZSHKK-1875-60000-104SU	ZSHKK-1875-60000-114SU
72	4.00	14.00	ZSHKK-1875-72000-303SU	ZSHKK-1875-72000-316SU	ZSHKK-1875-72000-104SU	ZSHKK-1875-72000-114SU

1-1/2 Diameter (Tolerance: -.003" to 0")

O'all Lg (inch)	Key Lg 1 End	Key Lg 2 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
12	2.00	7.00	ZSHKK-1500-12000-303SU	ZSHKK-1500-12000-316SU	ZSHKK-1500-12000-104SU	ZSHKK-1500-12000-114SU
18	2.00	7.00	ZSHKK-1500-18000-303SU	ZSHKK-1500-18000-316SU	ZSHKK-1500-18000-104SU	ZSHKK-1500-18000-114SU
24	4.00	14.00	ZSHKK-1500-24000-303SU	ZSHKK-1500-24000-316SU	ZSHKK-1500-24000-104SU	ZSHKK-1500-24000-114SU
36	4.00	14.00	ZSHKK-1500-36000-303SU	ZSHKK-1500-36000-316SU	ZSHKK-1500-36000-104SU	ZSHKK-1500-36000-114SU
48	4.00	14.00	ZSHKK-1500-48000-303SU	ZSHKK-1500-48000-316SU	ZSHKK-1500-48000-104SU	ZSHKK-1500-48000-114SU
60	4.00	14.00	ZSHKK-1500-60000-303SU	ZSHKK-1500-60000-316SU	ZSHKK-1500-60000-104SU	ZSHKK-1500-60000-114SU
72	4.00	14.00	ZSHKK-1500-72000-303SU	ZSHKK-1500-72000-316SU	ZSHKK-1500-72000-104SU	ZSHKK-1500-72000-114SU

1-5/8 Diameter (Tolerance: -.003" to 0")

O'all Lg (inch)	Key Lg 1 End	Key Lg 2 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
12	2.00	7.00	ZSHKK-1625-12000-303SU	ZSHKK-1625-12000-316SU	ZSHKK-1625-12000-104SU	ZSHKK-1625-12000-114SU
18	2.00	7.00	ZSHKK-1625-18000-303SU	ZSHKK-1625-18000-316SU	ZSHKK-1625-18000-104SU	ZSHKK-1625-18000-114SU
24	4.00	14.00	ZSHKK-1625-24000-303SU	ZSHKK-1625-24000-316SU	ZSHKK-1625-24000-104SU	ZSHKK-1625-24000-114SU
36	4.00	14.00	ZSHKK-1625-36000-303SU	ZSHKK-1625-36000-316SU	ZSHKK-1625-36000-104SU	ZSHKK-1625-36000-114SU
48	4.00	14.00	ZSHKK-1625-48000-303SU	ZSHKK-1625-48000-316SU	ZSHKK-1625-48000-104SU	ZSHKK-1625-48000-114SU
60	4.00	14.00	ZSHKK-1625-60000-303SU	ZSHKK-1625-60000-316SU	ZSHKK-1625-60000-104SU	ZSHKK-1625-60000-114SU
72	4.00	14.00	ZSHKK-1625-72000-303SU	ZSHKK-1625-72000-316SU	ZSHKK-1625-72000-104SU	ZSHKK-1625-72000-114SU

Partial Keyed Rotary Shafts – Inch



1-15/16 Diameter (Tolerance: -.0035" to 0")

O'all Lg (inch)	Key Lg 1 End	Key Lg 2 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
12	2.00	7.00	ZSHKK-1937-12000-303SU	ZSHKK-1937-12000-316SU	ZSHKK-1937-12000-104SU	ZSHKK-1937-12000-114SU
18	2.00	7.00	ZSHKK-1937-18000-303SU	ZSHKK-1937-18000-316SU	ZSHKK-1937-18000-104SU	ZSHKK-1937-18000-114SU
24	4.00	14.00	ZSHKK-1937-24000-303SU	ZSHKK-1937-24000-316SU	ZSHKK-1937-24000-104SU	ZSHKK-1937-24000-114SU
36	4.00	14.00	ZSHKK-1937-36000-303SU	ZSHKK-1937-36000-316SU	ZSHKK-1937-36000-104SU	ZSHKK-1937-36000-114SU
48	4.00	14.00	ZSHKK-1937-48000-303SU	ZSHKK-1937-48000-316SU	ZSHKK-1937-48000-104SU	ZSHKK-1937-48000-114SU
60	4.00	14.00	ZSHKK-1937-60000-303SU	ZSHKK-1937-60000-316SU	ZSHKK-1937-60000-104SU	ZSHKK-1937-60000-114SU
72	4.00	14.00	ZSHKK-1937-72000-303SU	ZSHKK-1937-72000-316SU	ZSHKK-1937-72000-104SU	ZSHKK-1937-72000-114SU

2 Diameter (Tolerance: -.0035" to 0")

O'all Lg (inch)	Key Lg 1 End	Key Lg 2 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
12	2.00	7.00	ZSHKK-2000-12000-303SU	ZSHKK-2000-12000-316SU	ZSHKK-2000-12000-104SU	ZSHKK-2000-12000-114SU
18	2.00	7.00	ZSHKK-2000-18000-303SU	ZSHKK-2000-18000-316SU	ZSHKK-2000-18000-104SU	ZSHKK-2000-18000-114SU
24	4.00	14.00	ZSHKK-2000-24000-303SU	ZSHKK-2000-24000-316SU	ZSHKK-2000-24000-104SU	ZSHKK-2000-24000-114SU
36	4.00	14.00	ZSHKK-2000-36000-303SU	ZSHKK-2000-36000-316SU	ZSHKK-2000-36000-104SU	ZSHKK-2000-36000-114SU
48	4.00	14.00	ZSHKK-2000-48000-303SU	ZSHKK-2000-48000-316SU	ZSHKK-2000-48000-104SU	ZSHKK-2000-48000-114SU
60	4.00	14.00	ZSHKK-2000-60000-303SU	ZSHKK-2000-60000-316SU	ZSHKK-2000-60000-104SU	ZSHKK-2000-60000-114SU
72	4.00	14.00	ZSHKK-2000-72000-303SU	ZSHKK-2000-72000-316SU	ZSHKK-2000-72000-104SU	ZSHKK-2000-72000-114SU

2-1/8 Diameter (Tolerance: -.0035" to 0")

O'all Lg (inch)	Key Lg 1 End	Key Lg 2 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
12	2.00	7.00	ZSHKK-2125-12000-303SU	ZSHKK-2125-12000-316SU	ZSHKK-2125-12000-104SU	ZSHKK-2125-12000-114SU
18	2.00	7.00	ZSHKK-2125-18000-303SU	ZSHKK-2125-18000-316SU	ZSHKK-2125-18000-104SU	ZSHKK-2125-18000-114SU
24	4.00	14.00	ZSHKK-2125-24000-303SU	ZSHKK-2125-24000-316SU	ZSHKK-2125-24000-104SU	ZSHKK-2125-24000-114SU
36	4.00	14.00	ZSHKK-2125-36000-303SU	ZSHKK-2125-36000-316SU	ZSHKK-2125-36000-104SU	ZSHKK-2125-36000-114SU
48	4.00	14.00	ZSHKK-2125-48000-303SU	ZSHKK-2125-48000-316SU	ZSHKK-2125-48000-104SU	ZSHKK-2125-48000-114SU
60	4.00	14.00	ZSHKK-2125-60000-303SU	ZSHKK-2125-60000-316SU	ZSHKK-2125-60000-104SU	ZSHKK-2125-60000-114SU
72	4.00	14.00	ZSHKK-2125-72000-303SU	ZSHKK-2125-72000-316SU	ZSHKK-2125-72000-104SU	ZSHKK-2125-72000-114SU

2-3/16 Diameter (Tolerance: -.0035" to 0")

O'all Lg (inch)	Key Lg 1 End	Key Lg 2 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
12	2.00	7.00	ZSHKK-2187-12000-303SU	ZSHKK-2187-12000-316SU	ZSHKK-2187-12000-104SU	ZSHKK-2187-12000-114SU
18	2.00	7.00	ZSHKK-2187-18000-303SU	ZSHKK-2187-18000-316SU	ZSHKK-2187-18000-104SU	ZSHKK-2187-18000-114SU
24	4.00	14.00	ZSHKK-2187-24000-303SU	ZSHKK-2187-24000-316SU	ZSHKK-2187-24000-104SU	ZSHKK-2187-24000-114SU
36	4.00	14.00	ZSHKK-2187-36000-303SU	ZSHKK-2187-36000-316SU	ZSHKK-2187-36000-104SU	ZSHKK-2187-36000-114SU
48	4.00	14.00	ZSHKK-2187-48000-303SU	ZSHKK-2187-48000-316SU	ZSHKK-2187-48000-104SU	ZSHKK-2187-48000-114SU
60	4.00	14.00	ZSHKK-2187-60000-303SU	ZSHKK-2187-60000-316SU	ZSHKK-2187-60000-104SU	ZSHKK-2187-60000-114SU
72	4.00	14.00	ZSHKK-2187-72000-303SU	ZSHKK-2187-72000-316SU	ZSHKK-2187-72000-104SU	ZSHKK-2187-72000-114SU

Partial Keyed Rotary Shafts — Inch



2-3/8 Diameter (Tolerance: -.0035" to 0")

O'all Lg (inch)	Key Lg 1 End	Key Lg 2 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
12	2.00	7.00	ZSHKK-2375-12000-303SU	ZSHKK-2375-12000-316SU	ZSHKK-2375-12000-104SU	ZSHKK-2375-12000-114SU
18	2.00	7.00	ZSHKK-2375-18000-303SU	ZSHKK-2375-18000-316SU	ZSHKK-2375-18000-104SU	ZSHKK-2375-18000-114SU
24	4.00	14.00	ZSHKK-2375-24000-303SU	ZSHKK-2375-24000-316SU	ZSHKK-2375-24000-104SU	ZSHKK-2375-24000-114SU
36	4.00	14.00	ZSHKK-2375-36000-303SU	ZSHKK-2375-36000-316SU	ZSHKK-2375-36000-104SU	ZSHKK-2375-36000-114SU
48	4.00	14.00	ZSHKK-2375-48000-303SU	ZSHKK-2375-48000-316SU	ZSHKK-2375-48000-104SU	ZSHKK-2375-48000-114SU
60	4.00	14.00	ZSHKK-2375-60000-303SU	ZSHKK-2375-60000-316SU	ZSHKK-2375-60000-104SU	ZSHKK-2375-60000-114SU
72	4.00	14.00	ZSHKK-2375-72000-303SU	ZSHKK-2375-72000-316SU	ZSHKK-2375-72000-104SU	ZSHKK-2375-72000-114SU

2-7/16 Diameter (Tolerance: -.0035" to 0")

O'all Lg (inch)	Key Lg 1 End	Key Lg 2 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
12	2.00	7.00	ZSHKK-2437-12000-303SU	ZSHKK-2437-12000-316SU	ZSHKK-2437-12000-104SU	ZSHKK-2437-12000-114SU
18	2.00	7.00	ZSHKK-2437-18000-303SU	ZSHKK-2437-18000-316SU	ZSHKK-2437-18000-104SU	ZSHKK-2437-18000-114SU
24	4.00	14.00	ZSHKK-2437-24000-303SU	ZSHKK-2437-24000-316SU	ZSHKK-2437-24000-104SU	ZSHKK-2437-24000-114SU
36	4.00	14.00	ZSHKK-2437-36000-303SU	ZSHKK-2437-36000-316SU	ZSHKK-2437-36000-104SU	ZSHKK-2437-36000-114SU
48	4.00	14.00	ZSHKK-2437-48000-303SU	ZSHKK-2437-48000-316SU	ZSHKK-2437-48000-104SU	ZSHKK-2437-48000-114SU
60	4.00	14.00	ZSHKK-2437-60000-303SU	ZSHKK-2437-60000-316SU	ZSHKK-2437-60000-104SU	ZSHKK-2437-60000-114SU
72	4.00	14.00	ZSHKK-2437-72000-303SU	ZSHKK-2437-72000-316SU	ZSHKK-2437-72000-104SU	ZSHKK-2437-72000-114SU

2.624 Diameter (Tolerance: -.0035" to 0")

O'all Lg (inch)	Key Lg 1 End	Key Lg 2 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
12	2.00	7.00	ZSHKK-2624-12000-303SU	ZSHKK-2624-12000-316SU	ZSHKK-2624-12000-104SU	ZSHKK-2624-12000-114SU
18	2.00	7.00	ZSHKK-2624-18000-303SU	ZSHKK-2624-18000-316SU	ZSHKK-2624-18000-104SU	ZSHKK-2624-18000-114SU
24	4.00	14.00	ZSHKK-2624-24000-303SU	ZSHKK-2624-24000-316SU	ZSHKK-2624-24000-104SU	ZSHKK-2624-24000-114SU
36	4.00	14.00	ZSHKK-2624-36000-303SU	ZSHKK-2624-36000-316SU	ZSHKK-2624-36000-104SU	ZSHKK-2624-36000-114SU
48	4.00	14.00	ZSHKK-2624-48000-303SU	ZSHKK-2624-48000-316SU	ZSHKK-2624-48000-104SU	ZSHKK-2624-48000-114SU

2-7/8 Diameter (Tolerance: -.0035" to 0")

O'all Lg (inch)	Key Lg 1 End	Key Lg 2 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
12	2.00	7.00	ZSHKK-2875-12000-303SU	ZSHKK-2875-12000-316SU	ZSHKK-2875-12000-104SU	ZSHKK-2875-12000-114SU
18	2.00	7.00	ZSHKK-2875-18000-303SU	ZSHKK-2875-18000-316SU	ZSHKK-2875-18000-104SU	ZSHKK-2875-18000-114SU
24	4.00	14.00	ZSHKK-2875-24000-303SU	ZSHKK-2875-24000-316SU	ZSHKK-2875-24000-104SU	ZSHKK-2875-24000-114SU
36	4.00	14.00	ZSHKK-2875-36000-303SU	ZSHKK-2875-36000-316SU	ZSHKK-2875-36000-104SU	ZSHKK-2875-36000-114SU
48	4.00	14.00	ZSHKK-2875-48000-303SU	ZSHKK-2875-48000-316SU	ZSHKK-2875-48000-104SU	ZSHKK-2875-48000-114SU

3-3/8 Diameter (Tolerance: -.0035" to 0")

O'all Lg (inch)	Key Lg 1 End	Key Lg 2 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
12	2.00	7.00	ZSHKK-3375-12000-303SU	ZSHKK-3375-12000-316SU	ZSHKK-3375-12000-104SU	ZSHKK-3375-12000-114SU
18	2.00	7.00	ZSHKK-3375-18000-303SU	ZSHKK-3375-18000-316SU	ZSHKK-3375-18000-104SU	ZSHKK-3375-18000-114SU
24	4.00	14.00	ZSHKK-3375-24000-303SU	ZSHKK-3375-24000-316SU	ZSHKK-3375-24000-104SU	ZSHKK-3375-24000-114SU
36	4.00	14.00	ZSHKK-3375-36000-303SU	ZSHKK-3375-36000-316SU	ZSHKK-3375-36000-104SU	ZSHKK-3375-36000-114SU
48	4.00	14.00	ZSHKK-3375-48000-303SU	ZSHKK-3375-48000-316SU	ZSHKK-3375-48000-104SU	ZSHKK-3375-48000-114SU

Partial Keyed Rotary Shafts – Metric



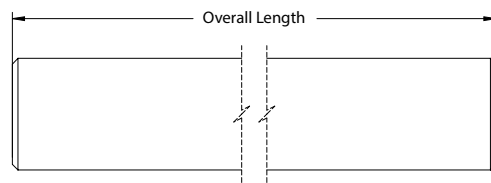
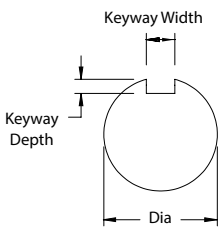
18-8 & 316 SS, Steel

Product Information

Designed with keyways at each end and a smooth, central section, these shafts facilitate efficient torque transfer. The end keyways, compatible with standard ANSI machine keys, securely connect gears, sprockets, and other keyed components. The central plain shaft is ideal for bearing and round-bore component integration. To minimize installation damage, the edges are chamfered, and the entire shaft is precision-machined through turning, grinding, and polishing, ensuring strict diameter and straightness tolerances. The use of a key and keyway is a simple yet effective method to secure the mounted component to the shaft, allowing for efficient power transmission while also facilitating assembly and disassembly of the system.

All shafts are made in the USA from DFARS compliant & RoHS compliant stainless steel and shafts are fully lot traceable. Length tolerance is $\pm 1.6\text{mm}$ and straightness tolerance is $.33\text{mm}$ per 300mm.

- Shafts are turned, ground and polished to tight diameter and straightness tolerances.
- Keyways meet ANSI Standard dimensions and tolerances.
- 18-8 stainless steel shafts offer excellent corrosion resistant and can be mildly magnetic. Meets ASTM A582 Condition A material specification.
- Type 316 stainless steel, also known as marine stainless steel, offers superior corrosion resistant than 18-8 stainless steel and maybe mildly magnetic. Meets ASTM A276 Condition A material specification.
- C1045 Carbon Steel shafts are generally stronger than aluminum and stainless steel shafts but not as corrosion resistant. These Carbon Steel shafts offers medium strength properties making them ideal for general purpose use.
- C1045 Carbon Steel is recommended for shafts requiring higher strength and wear resistance than carbon steel and stainless steel shafts.
- 1144 Stressproof Alloy Steel has excellent strength and hardness, and is specifically treated to relieve stresses for this durable material.



Dimensions Table – Metric

Dia. (mm)	Diameter Tolerance	Keyway Width	Keyway Depth	Straightness Tolerance (mm)	Length Tolerance
8	-.0635 to 0mm	2.00	1.20	.33 per 300	± 1.60
10	-.0635 to 0mm	3.00	1.80	.33 per 300	± 1.60
12	-.0635 to 0mm	4.00	2.50	.33 per 300	± 1.60
15	-.0635 to 0mm	5.00	3.00	.33 per 300	± 1.60
17	-.0635 to 0mm	5.00	3.00	.33 per 300	± 1.60
20	-.0635 to 0mm	6.00	3.50	.33 per 300	± 1.60
24	-.0635 to 0mm	8.00	4.00	.33 per 300	± 1.60
25	-.0635 to 0mm	8.00	4.00	.33 per 300	± 1.60
28	-.0635 to 0mm	8.00	4.00	.33 per 300	± 1.60
38	-.076 to 0mm	12.00	5.00	.33 per 300	± 1.60
40	-.076 to 0mm	12.00	5.00	.33 per 300	± 1.60
50	-.076 to 0mm	14.00	5.50	.33 per 300	± 1.60
55	-.076 to 0mm	14.00	5.50	.33 per 300	± 1.60

Key Lengths

Length Size	Key Lg 1 End	Key Lg 2 End
300 mm	50mm	175mm
500 mm	100mm	350mm
1,000 mm	100mm	350mm
1,200 mm	100mm	350mm
1,500 mm	100mm	350mm
1,800 mm	100mm	350mm

Materials Chart

Material	Mechanical Finish	Edge Type	Specs Met	Rockwell Hardness	Tensile Strength (psi)	Magnetic?
18-8 SS	Ground & Polished	Chamfered	ASTM A 582 Cond A	B83	90,000	Mildly
316 SS	Ground & Polished	Chamfered	ASTM A 276 Cond	B83	85,000	Mildly
C1045 Carbon Steel	Ground & Polished	Chamfered	ASTM A108	C15	91,000	Magnetic
1144 Alloy Steel	Ground & Polished	Chamfered	ASTM A311	C22	115,000	Magnetic

Partial Keyed Rotary Shafts – Metric



8mm Diameter (Tolerance: -.0635 to 0mm)

O'all Lg (mm)	Key Lg 1 End	Key Lg 2 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	50.00	175.00	ZSHKK-M08-M0300-303SU	ZSHKK-M08-M0300-316SU	ZSHKK-M08-M0300-104SU	ZSHKK-M08-M0300-114SU
500	100.00	350.00	ZSHKK-M08-M0500-303SU	ZSHKK-M08-M0500-316SU	ZSHKK-M08-M0500-104SU	ZSHKK-M08-M0500-114SU
1,000	100.00	350.00	ZSHKK-M08-M1000-303SU	ZSHKK-M08-M1000-316SU	ZSHKK-M08-M1000-104SU	ZSHKK-M08-M1000-114SU
1,200	100.00	350.00	ZSHKK-M08-M1200-303SU	ZSHKK-M08-M1200-316SU	ZSHKK-M08-M1200-104SU	ZSHKK-M08-M1200-114SU
1,500	100.00	350.00	ZSHKK-M08-M1500-303SU	ZSHKK-M08-M1500-316SU	ZSHKK-M08-M1500-104SU	ZSHKK-M08-M1500-114SU
1,800	100.00	350.00	ZSHKK-M08-M1800-303SU	ZSHKK-M08-M1800-316SU	ZSHKK-M08-M1800-104SU	ZSHKK-M08-M1800-114SU

10mm Diameter (Tolerance: -.0635 to 0mm)

O'all Lg (mm)	Key Lg 1 End	Key Lg 2 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	50.00	175.00	ZSHKK-M10-M0300-303SU	ZSHKK-M10-M0300-316SU	ZSHKK-M10-M0300-104SU	ZSHKK-M10-M0300-114SU
500	100.00	350.00	ZSHKK-M10-M0500-303SU	ZSHKK-M10-M0500-316SU	ZSHKK-M10-M0500-104SU	ZSHKK-M10-M0500-114SU
1,000	100.00	350.00	ZSHKK-M10-M1000-303SU	ZSHKK-M10-M1000-316SU	ZSHKK-M10-M1000-104SU	ZSHKK-M10-M1000-114SU
1,200	100.00	350.00	ZSHKK-M10-M1200-303SU	ZSHKK-M10-M1200-316SU	ZSHKK-M10-M1200-104SU	ZSHKK-M10-M1200-114SU
1,500	100.00	350.00	ZSHKK-M10-M1500-303SU	ZSHKK-M10-M1500-316SU	ZSHKK-M10-M1500-104SU	ZSHKK-M10-M1500-114SU
1,800	100.00	350.00	ZSHKK-M10-M1800-303SU	ZSHKK-M10-M1800-316SU	ZSHKK-M10-M1800-104SU	ZSHKK-M10-M1800-114SU

12mm Diameter (Tolerance: -.0635 to 0mm)

O'all Lg (mm)	Key Lg 1 End	Key Lg 2 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	50.00	175.00	ZSHKK-M12-M0300-303SU	ZSHKK-M12-M0300-316SU	ZSHKK-M12-M0300-104SU	ZSHKK-M12-M0300-114SU
500	100.00	350.00	ZSHKK-M12-M0500-303SU	ZSHKK-M12-M0500-316SU	ZSHKK-M12-M0500-104SU	ZSHKK-M12-M0500-114SU
1,000	100.00	350.00	ZSHKK-M12-M1000-303SU	ZSHKK-M12-M1000-316SU	ZSHKK-M12-M1000-104SU	ZSHKK-M12-M1000-114SU
1,200	100.00	350.00	ZSHKK-M12-M1200-303SU	ZSHKK-M12-M1200-316SU	ZSHKK-M12-M1200-104SU	ZSHKK-M12-M1200-114SU
1,500	100.00	350.00	ZSHKK-M12-M1500-303SU	ZSHKK-M12-M1500-316SU	ZSHKK-M12-M1500-104SU	ZSHKK-M12-M1500-114SU
1,800	100.00	350.00	ZSHKK-M12-M1800-303SU	ZSHKK-M12-M1800-316SU	ZSHKK-M12-M1800-104SU	ZSHKK-M12-M1800-114SU

15mm Diameter (Tolerance: -.0635 to 0mm)

O'all Lg (mm)	Key Lg 1 End	Key Lg 2 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	50.00	175.00	ZSHKK-M15-M0300-303SU	ZSHKK-M15-M0300-316SU	ZSHKK-M15-M0300-104SU	ZSHKK-M15-M0300-114SU
500	100.00	350.00	ZSHKK-M15-M0500-303SU	ZSHKK-M15-M0500-316SU	ZSHKK-M15-M0500-104SU	ZSHKK-M15-M0500-114SU
1,000	100.00	350.00	ZSHKK-M15-M1000-303SU	ZSHKK-M15-M1000-316SU	ZSHKK-M15-M1000-104SU	ZSHKK-M15-M1000-114SU
1,200	100.00	350.00	ZSHKK-M15-M1200-303SU	ZSHKK-M15-M1200-316SU	ZSHKK-M15-M1200-104SU	ZSHKK-M15-M1200-114SU
1,500	100.00	350.00	ZSHKK-M15-M1500-303SU	ZSHKK-M15-M1500-316SU	ZSHKK-M15-M1500-104SU	ZSHKK-M15-M1500-114SU
1,800	100.00	350.00	ZSHKK-M15-M1800-303SU	ZSHKK-M15-M1800-316SU	ZSHKK-M15-M1800-104SU	ZSHKK-M15-M1800-114SU

Partial Keyed Rotary Shafts — Metric



20mm Diameter (Tolerance: -.0635 to 0mm)

O'all Lg (mm)	Key Lg 1 End	Key Lg 2 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	50.00	175.00	ZSHKK-M20-M0300-303SU	ZSHKK-M20-M0300-316SU	ZSHKK-M20-M0300-104SU	ZSHKK-M20-M0300-114SU
500	100.00	350.00	ZSHKK-M20-M0500-303SU	ZSHKK-M20-M0500-316SU	ZSHKK-M20-M0500-104SU	ZSHKK-M20-M0500-114SU
1,000	100.00	350.00	ZSHKK-M20-M1000-303SU	ZSHKK-M20-M1000-316SU	ZSHKK-M20-M1000-104SU	ZSHKK-M20-M1000-114SU
1,200	100.00	350.00	ZSHKK-M20-M1200-303SU	ZSHKK-M20-M1200-316SU	ZSHKK-M20-M1200-104SU	ZSHKK-M20-M1200-114SU
1,500	100.00	350.00	ZSHKK-M20-M1500-303SU	ZSHKK-M20-M1500-316SU	ZSHKK-M20-M1500-104SU	ZSHKK-M20-M1500-114SU
1,800	100.00	350.00	ZSHKK-M20-M1800-303SU	ZSHKK-M20-M1800-316SU	ZSHKK-M20-M1800-104SU	ZSHKK-M20-M1800-114SU

24mm Diameter (Tolerance: -.0635 to 0mm)

O'all Lg (mm)	Key Lg 1 End	Key Lg 2 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	50.00	175.00	ZSHKK-M24-M0300-303SU	ZSHKK-M24-M0300-316SU	ZSHKK-M24-M0300-104SU	ZSHKK-M24-M0300-114SU
500	100.00	350.00	ZSHKK-M24-M0500-303SU	ZSHKK-M24-M0500-316SU	ZSHKK-M24-M0500-104SU	ZSHKK-M24-M0500-114SU
1,000	100.00	350.00	ZSHKK-M24-M1000-303SU	ZSHKK-M24-M1000-316SU	ZSHKK-M24-M1000-104SU	ZSHKK-M24-M1000-114SU
1,200	100.00	350.00	ZSHKK-M24-M1200-303SU	ZSHKK-M24-M1200-316SU	ZSHKK-M24-M1200-104SU	ZSHKK-M24-M1200-114SU
1,500	100.00	350.00	ZSHKK-M24-M1500-303SU	ZSHKK-M24-M1500-316SU	ZSHKK-M24-M1500-104SU	ZSHKK-M24-M1500-114SU
1,800	100.00	350.00	ZSHKK-M24-M1800-303SU	ZSHKK-M24-M1800-316SU	ZSHKK-M24-M1800-104SU	ZSHKK-M24-M1800-114SU

25mm Diameter (Tolerance: -.0635 to 0mm)

O'all Lg (mm)	Key Lg 1 End	Key Lg 2 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	50.00	175.00	ZSHKK-M25-M0300-303SU	ZSHKK-M25-M0300-316SU	ZSHKK-M25-M0300-104SU	ZSHKK-M25-M0300-114SU
500	100.00	350.00	ZSHKK-M25-M0500-303SU	ZSHKK-M25-M0500-316SU	ZSHKK-M25-M0500-104SU	ZSHKK-M25-M0500-114SU
1,000	100.00	350.00	ZSHKK-M25-M1000-303SU	ZSHKK-M25-M1000-316SU	ZSHKK-M25-M1000-104SU	ZSHKK-M25-M1000-114SU
1,200	100.00	350.00	ZSHKK-M25-M1200-303SU	ZSHKK-M25-M1200-316SU	ZSHKK-M25-M1200-104SU	ZSHKK-M25-M1200-114SU
1,500	100.00	350.00	ZSHKK-M25-M1500-303SU	ZSHKK-M25-M1500-316SU	ZSHKK-M25-M1500-104SU	ZSHKK-M25-M1500-114SU
1,800	100.00	350.00	ZSHKK-M25-M1800-303SU	ZSHKK-M25-M1800-316SU	ZSHKK-M25-M1800-104SU	ZSHKK-M25-M1800-114SU

28mm Diameter (Tolerance: -.0635 to 0mm)

O'all Lg (mm)	Key Lg 1 End	Key Lg 2 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	50.00	175.00	ZSHKK-M28-M0300-303SU	ZSHKK-M28-M0300-316SU	ZSHKK-M28-M0300-104SU	ZSHKK-M28-M0300-114SU
500	100.00	350.00	ZSHKK-M28-M0500-303SU	ZSHKK-M28-M0500-316SU	ZSHKK-M28-M0500-104SU	ZSHKK-M28-M0500-114SU
1,000	100.00	350.00	ZSHKK-M28-M1000-303SU	ZSHKK-M28-M1000-316SU	ZSHKK-M28-M1000-104SU	ZSHKK-M28-M1000-114SU
1,200	100.00	350.00	ZSHKK-M28-M1200-303SU	ZSHKK-M28-M1200-316SU	ZSHKK-M28-M1200-104SU	ZSHKK-M28-M1200-114SU
1,500	100.00	350.00	ZSHKK-M28-M2800-303SU	ZSHKK-M28-M2800-316SU	ZSHKK-M28-M2800-104SU	ZSHKK-M28-M2800-114SU
1,800	100.00	350.00	ZSHKK-M28-M1800-303SU	ZSHKK-M28-M1800-316SU	ZSHKK-M28-M1800-104SU	ZSHKK-M28-M1800-114SU

Partial Keyed Rotary Shafts — Metric



38mm Diameter (Tolerance: -.076 to 0mm)

O'all Lg (mm)	Key Lg 1 End	Key Lg 2 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	50.00	175.00	ZSHKK-M38-M0300-303SU	ZSHKK-M38-M0300-316SU	ZSHKK-M38-M0300-104SU	ZSHKK-M38-M0300-114SU
500	100.00	350.00	ZSHKK-M38-M0500-303SU	ZSHKK-M38-M0500-316SU	ZSHKK-M38-M0500-104SU	ZSHKK-M38-M0500-114SU
1,000	100.00	350.00	ZSHKK-M38-M1000-303SU	ZSHKK-M38-M1000-316SU	ZSHKK-M38-M1000-104SU	ZSHKK-M38-M1000-114SU
1,200	100.00	350.00	ZSHKK-M38-M1200-303SU	ZSHKK-M38-M1200-316SU	ZSHKK-M38-M1200-104SU	ZSHKK-M38-M1200-114SU
1,500	100.00	350.00	ZSHKK-M38-M3800-303SU	ZSHKK-M38-M3800-316SU	ZSHKK-M38-M3800-104SU	ZSHKK-M38-M3800-114SU
1,800	100.00	350.00	ZSHKK-M38-M1800-303SU	ZSHKK-M38-M1800-316SU	ZSHKK-M38-M1800-104SU	ZSHKK-M38-M1800-114SU

40mm Diameter (Tolerance: -.076 to 0mm)

O'all Lg (mm)	Key Lg 1 End	Key Lg 2 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	50.00	175.00	ZSHKK-M40-M0300-303SU	ZSHKK-M40-M0300-316SU	ZSHKK-M40-M0300-104SU	ZSHKK-M40-M0300-114SU
500	100.00	350.00	ZSHKK-M40-M0500-303SU	ZSHKK-M40-M0500-316SU	ZSHKK-M40-M0500-104SU	ZSHKK-M40-M0500-114SU
1,000	100.00	350.00	ZSHKK-M40-M1000-303SU	ZSHKK-M40-M1000-316SU	ZSHKK-M40-M1000-104SU	ZSHKK-M40-M1000-114SU
1,200	100.00	350.00	ZSHKK-M40-M1200-303SU	ZSHKK-M40-M1200-316SU	ZSHKK-M40-M1200-104SU	ZSHKK-M40-M1200-114SU
1,500	100.00	350.00	ZSHKK-M40-M1500-303SU	ZSHKK-M40-M1500-316SU	ZSHKK-M40-M1500-104SU	ZSHKK-M40-M1500-114SU
1,800	100.00	350.00	ZSHKK-M40-M1800-303SU	ZSHKK-M40-M1800-316SU	ZSHKK-M40-M1800-104SU	ZSHKK-M40-M1800-114SU

50mm Diameter (Tolerance: -.076 to 0mm)

O'all Lg (mm)	Key Lg 1 End	Key Lg 2 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	50.00	175.00	ZSHKK-M50-M0300-303SU	ZSHKK-M50-M0300-316SU	ZSHKK-M50-M0300-104SU	ZSHKK-M50-M0300-114SU
500	100.00	350.00	ZSHKK-M50-M0500-303SU	ZSHKK-M50-M0500-316SU	ZSHKK-M50-M0500-104SU	ZSHKK-M50-M0500-114SU
1,000	100.00	350.00	ZSHKK-M50-M1000-303SU	ZSHKK-M50-M1000-316SU	ZSHKK-M50-M1000-104SU	ZSHKK-M50-M1000-114SU
1,200	100.00	350.00	ZSHKK-M50-M1200-303SU	ZSHKK-M50-M1200-316SU	ZSHKK-M50-M1200-104SU	ZSHKK-M50-M1200-114SU
1,500	100.00	350.00	ZSHKK-M50-M1500-303SU	ZSHKK-M50-M1500-316SU	ZSHKK-M50-M1500-104SU	ZSHKK-M50-M1500-114SU
1,800	100.00	350.00	ZSHKK-M50-M1800-303SU	ZSHKK-M50-M1800-316SU	ZSHKK-M50-M1800-104SU	ZSHKK-M50-M1800-114SU

55mm Diameter (Tolerance: -.076 to 0mm)

O'all Lg (mm)	Key Lg 1 End	Key Lg 2 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	50.00	175.00	ZSHKK-M55-M0300-303SU	ZSHKK-M55-M0300-316SU	ZSHKK-M55-M0300-104SU	ZSHKK-M55-M0300-114SU
500	100.00	350.00	ZSHKK-M55-M0500-303SU	ZSHKK-M55-M0500-316SU	ZSHKK-M55-M0500-104SU	ZSHKK-M55-M0500-114SU
1,000	100.00	350.00	ZSHKK-M55-M1000-303SU	ZSHKK-M55-M1000-316SU	ZSHKK-M55-M1000-104SU	ZSHKK-M55-M1000-114SU

D-Profile Rotary Shafts – Inch

18-8 & 316 SS
Steel & Aluminum

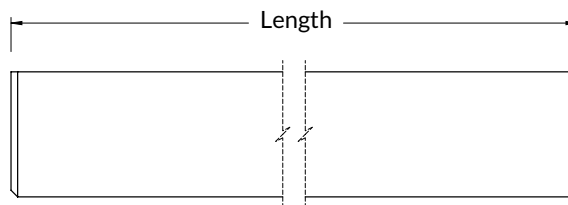
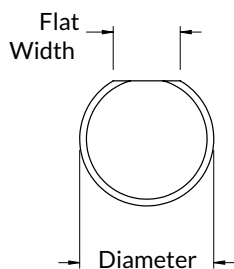
Product Information

D-Profile shafts are a specialized type of rotary shaft, offering a unique mounting solution. Unlike keyed shafts that rely on a keyway and key for torque transmission, D-Profile shafts feature a flattened surface area along a portion of their circumference. This flat allows set screws to engage the shaft for securely mounting gears, bearings, and other components, eliminating the need for complex keyways. These shafts are available in various configurations, including full D-profile length or partially D-profile length at each end, providing flexibility for diverse mechanical applications.

All shafts are made in the USA from DFARS compliant & RoHS compliant stainless steel and shafts are fully lot traceable.

Length tolerance is ± 0.062 and straightness tolerance is 0.012 in/ft.

- Shafts are turned, ground and polished to tight diameter and straightness tolerances.
- 18-8 stainless steel shafts offer excellent corrosion resistant and can be mildly magnetic. Meets ASTM A582 Condition A material specification.
- Type 316 stainless steel, also known as marine stainless steel, offers superior corrosion resistant than 18-8 stainless steel and maybe mildly magnetic. Meets ASTM A276 Condition A material specification.
- Aluminum shafts are lightweight, corrosion resistant and nonmagnetic. They have a T4 temper, which means they have been heat treated for increased strength.
- Aluminum shafts have the strength of mild steel with one third the weight.
- C1045 Carbon Steel shafts are generally stronger than aluminum and stainless steel shafts but not as corrosion resistant. These Carbon Steel shafts offers medium strength properties making them ideal for general purpose use.
- C1045 Carbon Steel is recommended for shafts requiring higher strength and wear resistance than carbon steel and stainless steel shafts.
- 1144 Stressproof Alloy Steel has excellent strength and hardness, and is specifically treated to relieve stresses for this durable material.



Materials Chart

Material	Mechanical Finish	Edge Type	Specs Met	Rockwell Hardness	Tensile Strength (psi)	Magnetic?
18-8 SS	Ground & Polished	Chamfered	ASTM A 582 Cond A	B83	90,000	Mildly
316 SS	Ground & Polished	Chamfered	ASTM A 276 Cond	B83	85,000	Mildly
C1045 Carbon Steel	Ground & Polished	Chamfered	ASTM A108	C15	91,000	Magnetic
1144 Alloy Steel	Ground & Polished	Chamfered	ASTM A311	C22	115,000	Magnetic
2024 Aluminum	Ground & Polished	Chamfered	ASTM B211	B75	68,000	Nonmagnetic

D-Profile Rotary Shafts — Inch



1/4 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number	2024 Aluminum Part Number
3	1/8	.233	ZSHD-250-03000-303SU	ZSHD-250-03000-316SU	ZSHD-250-03000-104SU	ZSHD-250-03000-114SU	—
6	1/8	.233	ZSHD-250-06000-303SU	ZSHD-250-06000-316SU	ZSHD-250-06000-104SU	ZSHD-250-06000-114SU	—
9	1/8	.233	ZSHD-250-09000-303SU	ZSHD-250-09000-316SU	ZSHD-250-09000-104SU	ZSHD-250-09000-114SU	—
12	1/8	.233	ZSHD-250-12000-303SU	ZSHD-250-12000-316SU	ZSHD-250-12000-104SU	ZSHD-250-12000-114SU	—

5/16 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number	2024 Aluminum Part Number
3	5/32	.292	ZSHD-312-03000-303SU	ZSHD-312-03000-316SU	ZSHD-312-03000-104SU	ZSHD-312-03000-114SU	ZSHD-312-03000-202SU
6	5/32	.292	ZSHD-312-06000-303SU	ZSHD-312-06000-316SU	ZSHD-312-06000-104SU	ZSHD-312-06000-114SU	ZSHD-312-06000-202SU
9	5/32	.292	ZSHD-312-09000-303SU	ZSHD-312-09000-316SU	ZSHD-312-09000-104SU	ZSHD-312-09000-114SU	ZSHD-312-09000-202SU
12	5/32	.292	ZSHD-312-12000-303SU	ZSHD-312-12000-316SU	ZSHD-312-12000-104SU	ZSHD-312-12000-114SU	ZSHD-312-12000-202SU
18	5/32	.292	ZSHD-312-18000-303SU	ZSHD-312-18000-316SU	ZSHD-312-18000-104SU	ZSHD-312-18000-114SU	ZSHD-312-18000-202SU
24	5/32	.292	ZSHD-312-24000-303SU	ZSHD-312-24000-316SU	ZSHD-312-24000-104SU	ZSHD-312-24000-114SU	ZSHD-312-24000-202SU
36	5/32	.292	ZSHD-312-36000-303SU	ZSHD-312-36000-316SU	ZSHD-312-36000-104SU	ZSHD-312-36000-114SU	ZSHD-312-36000-202SU
48	5/32	.292	ZSHD-312-48000-303SU	ZSHD-312-48000-316SU	ZSHD-312-48000-104SU	ZSHD-312-48000-114SU	ZSHD-312-48000-202SU
60	5/32	.292	ZSHD-312-60000-303SU	ZSHD-312-60000-316SU	ZSHD-312-60000-104SU	ZSHD-312-60000-114SU	ZSHD-312-60000-202SU
72	5/32	.292	ZSHD-312-72000-303SU	ZSHD-312-72000-316SU	ZSHD-312-72000-104SU	ZSHD-312-72000-114SU	ZSHD-312-72000-202SU

3/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number	2024 Aluminum Part Number
3	3/16	.350	ZSHD-375-03000-303SU	ZSHD-375-03000-316SU	ZSHD-375-03000-104SU	ZSHD-375-03000-114SU	ZSHD-375-03000-202SU
6	3/16	.350	ZSHD-375-06000-303SU	ZSHD-375-06000-316SU	ZSHD-375-06000-104SU	ZSHD-375-06000-114SU	ZSHD-375-06000-202SU
9	3/16	.350	ZSHD-375-09000-303SU	ZSHD-375-09000-316SU	ZSHD-375-09000-104SU	ZSHD-375-09000-114SU	ZSHD-375-09000-202SU
12	3/16	.350	ZSHD-375-12000-303SU	ZSHD-375-12000-316SU	ZSHD-375-12000-104SU	ZSHD-375-12000-114SU	ZSHD-375-12000-202SU
18	3/16	.350	ZSHD-375-18000-303SU	ZSHD-375-18000-316SU	ZSHD-375-18000-104SU	ZSHD-375-18000-114SU	ZSHD-375-18000-202SU
24	3/16	.350	ZSHD-375-24000-303SU	ZSHD-375-24000-316SU	ZSHD-375-24000-104SU	ZSHD-375-24000-114SU	ZSHD-375-24000-202SU
36	3/16	.350	ZSHD-375-36000-303SU	ZSHD-375-36000-316SU	ZSHD-375-36000-104SU	ZSHD-375-36000-114SU	ZSHD-375-36000-202SU
48	3/16	.350	ZSHD-375-48000-303SU	ZSHD-375-48000-316SU	ZSHD-375-48000-104SU	ZSHD-375-48000-114SU	ZSHD-375-48000-202SU
60	3/16	.350	ZSHD-375-60000-303SU	ZSHD-375-60000-316SU	ZSHD-375-60000-104SU	ZSHD-375-60000-114SU	ZSHD-375-60000-202SU
72	3/16	.350	ZSHD-375-72000-303SU	ZSHD-375-72000-316SU	ZSHD-375-72000-104SU	ZSHD-375-72000-114SU	ZSHD-375-72000-202SU

D-Profile Rotary Shafts — Inch



1/2 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number	2024 Aluminum Part Number
3	1/4	.467	ZSHD-500-03000-303SU	ZSHD-500-03000-316SU	ZSHD-500-03000-104SU	ZSHD-500-03000-114SU	ZSHD-500-03000-202SU
6	1/4	.467	ZSHD-500-06000-303SU	ZSHD-500-06000-316SU	ZSHD-500-06000-104SU	ZSHD-500-06000-114SU	ZSHD-500-06000-202SU
9	1/4	.467	ZSHD-500-09000-303SU	ZSHD-500-09000-316SU	ZSHD-500-09000-104SU	ZSHD-500-09000-114SU	ZSHD-500-09000-202SU
12	1/4	.467	ZSHD-500-12000-303SU	ZSHD-500-12000-316SU	ZSHD-500-12000-104SU	ZSHD-500-12000-114SU	ZSHD-500-12000-202SU
18	1/4	.467	ZSHD-500-18000-303SU	ZSHD-500-18000-316SU	ZSHD-500-18000-104SU	ZSHD-500-18000-114SU	ZSHD-500-18000-202SU
24	1/4	.467	ZSHD-500-24000-303SU	ZSHD-500-24000-316SU	ZSHD-500-24000-104SU	ZSHD-500-24000-114SU	ZSHD-500-24000-202SU
36	1/4	.467	ZSHD-500-36000-303SU	ZSHD-500-36000-316SU	ZSHD-500-36000-104SU	ZSHD-500-36000-114SU	ZSHD-500-36000-202SU
48	1/4	.467	ZSHD-500-48000-303SU	ZSHD-500-48000-316SU	ZSHD-500-48000-104SU	ZSHD-500-48000-114SU	ZSHD-500-48000-202SU
60	1/4	.467	ZSHD-500-60000-303SU	ZSHD-500-60000-316SU	ZSHD-500-60000-104SU	ZSHD-500-60000-114SU	ZSHD-500-60000-202SU
72	1/4	.467	ZSHD-500-72000-303SU	ZSHD-500-72000-316SU	ZSHD-500-72000-104SU	ZSHD-500-72000-114SU	ZSHD-500-72000-202SU

9/16 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number	2024 Aluminum Part Number
3	9/32	.525	ZSHD-562-03000-303SU	ZSHD-562-03000-316SU	ZSHD-562-03000-104SU	ZSHD-562-03000-114SU	—
6	9/32	.525	ZSHD-562-06000-303SU	ZSHD-562-06000-316SU	ZSHD-562-06000-104SU	ZSHD-562-06000-114SU	—
9	9/32	.525	ZSHD-562-09000-303SU	ZSHD-562-09000-316SU	ZSHD-562-09000-104SU	ZSHD-562-09000-114SU	—
12	9/32	.525	ZSHD-562-12000-303SU	ZSHD-562-12000-316SU	ZSHD-562-12000-104SU	ZSHD-562-12000-114SU	—
18	9/32	.525	ZSHD-562-18000-303SU	ZSHD-562-18000-316SU	ZSHD-562-18000-104SU	ZSHD-562-18000-114SU	—
24	9/32	.525	ZSHD-562-24000-303SU	ZSHD-562-24000-316SU	ZSHD-562-24000-104SU	ZSHD-562-24000-114SU	—
36	9/32	.525	ZSHD-562-36000-303SU	ZSHD-562-36000-316SU	ZSHD-562-36000-104SU	ZSHD-562-36000-114SU	—
48	9/32	.525	ZSHD-562-48000-303SU	ZSHD-562-48000-316SU	ZSHD-562-48000-104SU	ZSHD-562-48000-114SU	—
60	9/32	.525	ZSHD-562-60000-303SU	ZSHD-562-60000-316SU	ZSHD-562-60000-104SU	ZSHD-562-60000-114SU	—
72	9/32	.525	ZSHD-562-72000-303SU	ZSHD-562-72000-316SU	ZSHD-562-72000-104SU	ZSHD-562-72000-114SU	—

5/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number	2024 Aluminum Part Number
3	5/16	.583	ZSHD-625-03000-303SU	ZSHD-625-03000-316SU	ZSHD-625-03000-104SU	ZSHD-625-03000-114SU	ZSHD-625-03000-202SU
6	5/16	.583	ZSHD-625-06000-303SU	ZSHD-625-06000-316SU	ZSHD-625-06000-104SU	ZSHD-625-06000-114SU	ZSHD-625-06000-202SU
9	5/16	.583	ZSHD-625-09000-303SU	ZSHD-625-09000-316SU	ZSHD-625-09000-104SU	ZSHD-625-09000-114SU	ZSHD-625-09000-202SU
12	5/16	.583	ZSHD-625-12000-303SU	ZSHD-625-12000-316SU	ZSHD-625-12000-104SU	ZSHD-625-12000-114SU	ZSHD-625-12000-202SU
18	5/16	.583	ZSHD-625-18000-303SU	ZSHD-625-18000-316SU	ZSHD-625-18000-104SU	ZSHD-625-18000-114SU	ZSHD-625-18000-202SU
24	5/16	.583	ZSHD-625-24000-303SU	ZSHD-625-24000-316SU	ZSHD-625-24000-104SU	ZSHD-625-24000-114SU	ZSHD-625-24000-202SU
36	5/16	.583	ZSHD-625-36000-303SU	ZSHD-625-36000-316SU	ZSHD-625-36000-104SU	ZSHD-625-36000-114SU	ZSHD-625-36000-202SU
48	5/16	.583	ZSHD-625-48000-303SU	ZSHD-625-48000-316SU	ZSHD-625-48000-104SU	ZSHD-625-48000-114SU	ZSHD-625-48000-202SU
60	5/16	.583	ZSHD-625-60000-303SU	ZSHD-625-60000-316SU	ZSHD-625-60000-104SU	ZSHD-625-60000-114SU	ZSHD-625-60000-202SU
72	5/16	.583	ZSHD-625-72000-303SU	ZSHD-625-72000-316SU	ZSHD-625-72000-104SU	ZSHD-625-72000-114SU	ZSHD-625-72000-202SU

D-Profile Rotary Shafts — Inch



3/4 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number	2024 Aluminum Part Number
3	3/8	.700	ZSHD-750-03000-303SU	ZSHD-750-03000-316SU	ZSHD-750-03000-104SU	ZSHD-750-03000-114SU	ZSHD-750-03000-202SU
6	3/8	.700	ZSHD-750-06000-303SU	ZSHD-750-06000-316SU	ZSHD-750-06000-104SU	ZSHD-750-06000-114SU	ZSHD-750-06000-202SU
9	3/8	.700	ZSHD-750-09000-303SU	ZSHD-750-09000-316SU	ZSHD-750-09000-104SU	ZSHD-750-09000-114SU	ZSHD-750-09000-202SU
12	3/8	.700	ZSHD-750-12000-303SU	ZSHD-750-12000-316SU	ZSHD-750-12000-104SU	ZSHD-750-12000-114SU	ZSHD-750-12000-202SU
18	3/8	.700	ZSHD-750-18000-303SU	ZSHD-750-18000-316SU	ZSHD-750-18000-104SU	ZSHD-750-18000-114SU	ZSHD-750-18000-202SU
24	3/8	.700	ZSHD-750-24000-303SU	ZSHD-750-24000-316SU	ZSHD-750-24000-104SU	ZSHD-750-24000-114SU	ZSHD-750-24000-202SU
36	3/8	.700	ZSHD-750-36000-303SU	ZSHD-750-36000-316SU	ZSHD-750-36000-104SU	ZSHD-750-36000-114SU	ZSHD-750-36000-202SU
48	3/8	.700	ZSHD-750-48000-303SU	ZSHD-750-48000-316SU	ZSHD-750-48000-104SU	ZSHD-750-48000-114SU	ZSHD-750-48000-202SU
60	3/8	.700	ZSHD-750-60000-303SU	ZSHD-750-60000-316SU	ZSHD-750-60000-104SU	ZSHD-750-60000-114SU	ZSHD-750-60000-202SU
72	3/8	.700	ZSHD-750-72000-303SU	ZSHD-750-72000-316SU	ZSHD-750-72000-104SU	ZSHD-750-72000-114SU	ZSHD-750-72000-202SU

7/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number	2024 Aluminum Part Number
3	7/16	.816	ZSHD-875-03000-303SU	ZSHD-875-03000-316SU	ZSHD-875-03000-104SU	ZSHD-875-03000-114SU	ZSHD-875-03000-202SU
6	7/16	.816	ZSHD-875-06000-303SU	ZSHD-875-06000-316SU	ZSHD-875-06000-104SU	ZSHD-875-06000-114SU	ZSHD-875-06000-202SU
9	7/16	.816	ZSHD-875-09000-303SU	ZSHD-875-09000-316SU	ZSHD-875-09000-104SU	ZSHD-875-09000-114SU	ZSHD-875-09000-202SU
12	7/16	.816	ZSHD-875-12000-303SU	ZSHD-875-12000-316SU	ZSHD-875-12000-104SU	ZSHD-875-12000-114SU	ZSHD-875-12000-202SU
18	7/16	.816	ZSHD-875-18000-303SU	ZSHD-875-18000-316SU	ZSHD-875-18000-104SU	ZSHD-875-18000-114SU	ZSHD-875-18000-202SU
24	7/16	.816	ZSHD-875-24000-303SU	ZSHD-875-24000-316SU	ZSHD-875-24000-104SU	ZSHD-875-24000-114SU	ZSHD-875-24000-202SU
36	7/16	.816	ZSHD-875-36000-303SU	ZSHD-875-36000-316SU	ZSHD-875-36000-104SU	ZSHD-875-36000-114SU	ZSHD-875-36000-202SU
48	7/16	.816	ZSHD-875-48000-303SU	ZSHD-875-48000-316SU	ZSHD-875-48000-104SU	ZSHD-875-48000-114SU	ZSHD-875-48000-202SU
60	7/16	.816	ZSHD-875-60000-303SU	ZSHD-875-60000-316SU	ZSHD-875-60000-104SU	ZSHD-875-60000-114SU	ZSHD-875-60000-202SU
72	7/16	.816	ZSHD-875-72000-303SU	ZSHD-875-72000-316SU	ZSHD-875-72000-104SU	ZSHD-875-72000-114SU	ZSHD-875-72000-202SU

15/16 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number	2024 Aluminum Part Number
3	7/16	.784	—	—	ZSHD-937-03000-104SU	—	—
6	7/16	.784	—	—	ZSHD-937-06000-104SU	—	—
9	7/16	.784	—	—	ZSHD-937-09000-104SU	—	—
12	7/16	.784	—	—	ZSHD-937-12000-104SU	—	—
18	7/16	.784	—	—	ZSHD-937-18000-104SU	—	—
24	7/16	.784	—	—	ZSHD-937-24000-104SU	—	—
36	7/16	.784	—	—	ZSHD-937-36000-104SU	—	—
48	7/16	.784	—	—	ZSHD-937-48000-104SU	—	—
60	7/16	.784	—	—	ZSHD-937-60000-104SU	—	—
72	7/16	.784	—	—	ZSHD-937-72000-104SU	—	—

D-Profile Rotary Shafts — Inch



1 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number	2024 Aluminum Part Number
3	1/2	.933	ZSHD-1000-03000-303SU	ZSHD-1000-03000-316SU	ZSHD-1000-03000-104SU	ZSHD-1000-03000-114SU	ZSHD-1000-03000-202SU
6	1/2	.933	ZSHD-1000-06000-303SU	ZSHD-1000-06000-316SU	ZSHD-1000-06000-104SU	ZSHD-1000-06000-114SU	ZSHD-1000-06000-202SU
9	1/2	.933	ZSHD-1000-09000-303SU	ZSHD-1000-09000-316SU	ZSHD-1000-09000-104SU	ZSHD-1000-09000-114SU	ZSHD-1000-09000-202SU
12	1/2	.933	ZSHD-1000-12000-303SU	ZSHD-1000-12000-316SU	ZSHD-1000-12000-104SU	ZSHD-1000-12000-114SU	ZSHD-1000-12000-202SU
18	1/2	.933	ZSHD-1000-18000-303SU	ZSHD-1000-18000-316SU	ZSHD-1000-18000-104SU	ZSHD-1000-18000-114SU	ZSHD-1000-18000-202SU
24	1/2	.933	ZSHD-1000-24000-303SU	ZSHD-1000-24000-316SU	ZSHD-1000-24000-104SU	ZSHD-1000-24000-114SU	ZSHD-1000-24000-202SU
36	1/2	.933	ZSHD-1000-36000-303SU	ZSHD-1000-36000-316SU	ZSHD-1000-36000-104SU	ZSHD-1000-36000-114SU	ZSHD-1000-36000-202SU
48	1/2	.933	ZSHD-1000-48000-303SU	ZSHD-1000-48000-316SU	ZSHD-1000-48000-104SU	ZSHD-1000-48000-114SU	ZSHD-1000-48000-202SU
60	1/2	.933	ZSHD-1000-60000-303SU	ZSHD-1000-60000-316SU	ZSHD-1000-60000-104SU	ZSHD-1000-60000-114SU	ZSHD-1000-60000-202SU
72	1/2	.933	ZSHD-1000-72000-303SU	ZSHD-1000-72000-316SU	ZSHD-1000-72000-104SU	ZSHD-1000-72000-114SU	ZSHD-1000-72000-202SU

1-1/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number	2024 Aluminum Part Number
3	9/16	1.050	ZSHD-1125-03000-303SU	ZSHD-1125-03000-316SU	ZSHD-1125-03000-104SU	ZSHD-1125-03000-114SU	—
6	9/16	1.050	ZSHD-1125-06000-303SU	ZSHD-1125-06000-316SU	ZSHD-1125-06000-104SU	ZSHD-1125-06000-114SU	—
9	9/16	1.050	ZSHD-1125-09000-303SU	ZSHD-1125-09000-316SU	ZSHD-1125-09000-104SU	ZSHD-1125-09000-114SU	—
12	9/16	1.050	ZSHD-1125-12000-303SU	ZSHD-1125-12000-316SU	ZSHD-1125-12000-104SU	ZSHD-1125-12000-114SU	—
18	9/16	1.050	ZSHD-1125-18000-303SU	ZSHD-1125-18000-316SU	ZSHD-1125-18000-104SU	ZSHD-1125-18000-114SU	—
24	9/16	1.050	ZSHD-1125-24000-303SU	ZSHD-1125-24000-316SU	ZSHD-1125-24000-104SU	ZSHD-1125-24000-114SU	—
36	9/16	1.050	ZSHD-1125-36000-303SU	ZSHD-1125-36000-316SU	ZSHD-1125-36000-104SU	ZSHD-1125-36000-114SU	—
48	9/16	1.050	ZSHD-1125-48000-303SU	ZSHD-1125-48000-316SU	ZSHD-1125-48000-104SU	ZSHD-1125-48000-114SU	—
60	9/16	1.050	ZSHD-1125-60000-303SU	ZSHD-1125-60000-316SU	ZSHD-1125-60000-104SU	ZSHD-1125-60000-114SU	—
72	9/16	1.050	ZSHD-1125-72000-303SU	ZSHD-1125-72000-316SU	ZSHD-1125-72000-104SU	ZSHD-1125-72000-114SU	—

1-3/16 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	19/32	1.107	ZSHD-1187-03000-303SU	ZSHD-1187-03000-316SU	ZSHD-1187-03000-104SU	ZSHD-1187-03000-114SU
6	19/32	1.107	ZSHD-1187-06000-303SU	ZSHD-1187-06000-316SU	ZSHD-1187-06000-104SU	ZSHD-1187-06000-114SU
9	19/32	1.107	ZSHD-1187-09000-303SU	ZSHD-1187-09000-316SU	ZSHD-1187-09000-104SU	ZSHD-1187-09000-114SU
12	19/32	1.107	ZSHD-1187-12000-303SU	ZSHD-1187-12000-316SU	ZSHD-1187-12000-104SU	ZSHD-1187-12000-114SU
18	19/32	1.107	ZSHD-1187-18000-303SU	ZSHD-1187-18000-316SU	ZSHD-1187-18000-104SU	ZSHD-1187-18000-114SU
24	19/32	1.107	ZSHD-1187-24000-303SU	ZSHD-1187-24000-316SU	ZSHD-1187-24000-104SU	ZSHD-1187-24000-114SU
36	19/32	1.107	ZSHD-1187-36000-303SU	ZSHD-1187-36000-316SU	ZSHD-1187-36000-104SU	ZSHD-1187-36000-114SU
48	19/32	1.107	ZSHD-1187-48000-303SU	ZSHD-1187-48000-316SU	ZSHD-1187-48000-104SU	ZSHD-1187-48000-114SU
60	19/32	1.107	ZSHD-1187-60000-303SU	ZSHD-1187-60000-316SU	ZSHD-1187-60000-104SU	ZSHD-1187-60000-114SU
72	19/32	1.107	ZSHD-1187-72000-303SU	ZSHD-1187-72000-316SU	ZSHD-1187-72000-104SU	ZSHD-1187-72000-114SU

D-Profile Rotary Shafts — Inch



1-1/4 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	5/8	1.166	ZSHD-1250-03000-303SU	ZSHD-1250-03000-316SU	ZSHD-1250-03000-104SU	ZSHD-1250-03000-114SU
6	5/8	1.166	ZSHD-1250-06000-303SU	ZSHD-1250-06000-316SU	ZSHD-1250-06000-104SU	ZSHD-1250-06000-114SU
9	5/8	1.166	ZSHD-1250-09000-303SU	ZSHD-1250-09000-316SU	ZSHD-1250-09000-104SU	ZSHD-1250-09000-114SU
12	5/8	1.166	ZSHD-1250-12000-303SU	ZSHD-1250-12000-316SU	ZSHD-1250-12000-104SU	ZSHD-1250-12000-114SU
18	5/8	1.166	ZSHD-1250-18000-303SU	ZSHD-1250-18000-316SU	ZSHD-1250-18000-104SU	ZSHD-1250-18000-114SU
24	5/8	1.166	ZSHD-1250-24000-303SU	ZSHD-1250-24000-316SU	ZSHD-1250-24000-104SU	ZSHD-1250-24000-114SU
36	5/8	1.166	ZSHD-1250-36000-303SU	ZSHD-1250-36000-316SU	ZSHD-1250-36000-104SU	ZSHD-1250-36000-114SU
48	5/8	1.166	ZSHD-1250-48000-303SU	ZSHD-1250-48000-316SU	ZSHD-1250-48000-104SU	ZSHD-1250-48000-114SU
60	5/8	1.166	ZSHD-1250-60000-303SU	ZSHD-1250-60000-316SU	ZSHD-1250-60000-104SU	ZSHD-1250-60000-114SU
72	5/8	1.166	ZSHD-1250-72000-303SU	ZSHD-1250-72000-316SU	ZSHD-1250-72000-104SU	ZSHD-1250-72000-114SU

1-5/16 Diameter (Tolerance: +0/-.003)

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	21/32	1.224	ZSHD-1312-03000-303SU	ZSHD-1312-03000-316SU	ZSHD-1312-03000-104SU	ZSHD-1312-03000-114SU
6	21/32	1.224	ZSHD-1312-06000-303SU	ZSHD-1312-06000-316SU	ZSHD-1312-06000-104SU	ZSHD-1312-06000-114SU
9	21/32	1.224	ZSHD-1312-09000-303SU	ZSHD-1312-09000-316SU	ZSHD-1312-09000-104SU	ZSHD-1312-09000-114SU
12	21/32	1.224	ZSHD-1312-12000-303SU	ZSHD-1312-12000-316SU	ZSHD-1312-12000-104SU	ZSHD-1312-12000-114SU
18	21/32	1.224	ZSHD-1312-18000-303SU	ZSHD-1312-18000-316SU	ZSHD-1312-18000-104SU	ZSHD-1312-18000-114SU
24	21/32	1.224	ZSHD-1312-24000-303SU	ZSHD-1312-24000-316SU	ZSHD-1312-24000-104SU	ZSHD-1312-24000-114SU
36	21/32	1.224	ZSHD-1312-36000-303SU	ZSHD-1312-36000-316SU	ZSHD-1312-36000-104SU	ZSHD-1312-36000-114SU
48	21/32	1.224	ZSHD-1312-48000-303SU	ZSHD-1312-48000-316SU	ZSHD-1312-48000-104SU	ZSHD-1312-48000-114SU
60	21/32	1.224	ZSHD-1312-60000-303SU	ZSHD-1312-60000-316SU	ZSHD-1312-60000-104SU	ZSHD-1312-60000-114SU
72	21/32	1.224	ZSHD-1312-72000-303SU	ZSHD-1312-72000-316SU	ZSHD-1312-72000-104SU	ZSHD-1312-72000-114SU

1-3/8 Diameter (Tolerance: +0/-.003)

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	11/16	1.283	ZSHD-1375-03000-303SU	ZSHD-1375-03000-316SU	ZSHD-1375-03000-104SU	ZSHD-1375-03000-114SU
6	11/16	1.283	ZSHD-1375-06000-303SU	ZSHD-1375-06000-316SU	ZSHD-1375-06000-104SU	ZSHD-1375-06000-114SU
9	11/16	1.283	ZSHD-1375-09000-303SU	ZSHD-1375-09000-316SU	ZSHD-1375-09000-104SU	ZSHD-1375-09000-114SU
12	11/16	1.283	ZSHD-1375-12000-303SU	ZSHD-1375-12000-316SU	ZSHD-1375-12000-104SU	ZSHD-1375-12000-114SU
18	11/16	1.283	ZSHD-1375-18000-303SU	ZSHD-1375-18000-316SU	ZSHD-1375-18000-104SU	ZSHD-1375-18000-114SU
24	11/16	1.283	ZSHD-1375-24000-303SU	ZSHD-1375-24000-316SU	ZSHD-1375-24000-104SU	ZSHD-1375-24000-114SU
36	11/16	1.283	ZSHD-1375-36000-303SU	ZSHD-1375-36000-316SU	ZSHD-1375-36000-104SU	ZSHD-1375-36000-114SU
48	11/16	1.283	ZSHD-1375-48000-303SU	ZSHD-1375-48000-316SU	ZSHD-1375-48000-104SU	ZSHD-1375-48000-114SU
60	11/16	1.283	ZSHD-1375-60000-303SU	ZSHD-1375-60000-316SU	ZSHD-1375-60000-104SU	ZSHD-1375-60000-114SU
72	11/16	1.283	ZSHD-1375-72000-303SU	ZSHD-1375-72000-316SU	ZSHD-1375-72000-104SU	ZSHD-1375-72000-114SU

D-Profile Rotary Shafts — Inch



1-7/16 Diameter (Tolerance: +0/-.003)

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	23/32	1.341	ZSHD-1437-03000-303SU	ZSHD-1437-03000-316SU	ZSHD-1437-03000-104SU	ZSHD-1437-03000-114SU
6	23/32	1.341	ZSHD-1437-06000-303SU	ZSHD-1437-06000-316SU	ZSHD-1437-06000-104SU	ZSHD-1437-06000-114SU
9	23/32	1.341	ZSHD-1437-09000-303SU	ZSHD-1437-09000-316SU	ZSHD-1437-09000-104SU	ZSHD-1437-09000-114SU
12	23/32	1.341	ZSHD-1437-12000-303SU	ZSHD-1437-12000-316SU	ZSHD-1437-12000-104SU	ZSHD-1437-12000-114SU
18	23/32	1.341	ZSHD-1437-18000-303SU	ZSHD-1437-18000-316SU	ZSHD-1437-18000-104SU	ZSHD-1437-18000-114SU
24	23/32	1.341	ZSHD-1437-24000-303SU	ZSHD-1437-24000-316SU	ZSHD-1437-24000-104SU	ZSHD-1437-24000-114SU
36	23/32	1.341	ZSHD-1437-36000-303SU	ZSHD-1437-36000-316SU	ZSHD-1437-36000-104SU	ZSHD-1437-36000-114SU
48	23/32	1.341	ZSHD-1437-48000-303SU	ZSHD-1437-48000-316SU	ZSHD-1437-48000-104SU	ZSHD-1437-48000-114SU
60	23/32	1.341	ZSHD-1437-60000-303SU	ZSHD-1437-60000-316SU	ZSHD-1437-60000-104SU	ZSHD-1437-60000-114SU
72	23/32	1.341	ZSHD-1437-72000-303SU	ZSHD-1437-72000-316SU	ZSHD-1437-72000-104SU	ZSHD-1437-72000-114SU

1-1/2 Diameter (Tolerance: +0/-.003)

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	3/4	1.400	ZSHD-1500-03000-303SU	ZSHD-1500-03000-316SU	ZSHD-1500-03000-104SU	ZSHD-1500-03000-114SU
6	3/4	1.400	ZSHD-1500-06000-303SU	ZSHD-1500-06000-316SU	ZSHD-1500-06000-104SU	ZSHD-1500-06000-114SU
9	3/4	1.400	ZSHD-1500-09000-303SU	ZSHD-1500-09000-316SU	ZSHD-1500-09000-104SU	ZSHD-1500-09000-114SU
12	3/4	1.400	ZSHD-1500-12000-303SU	ZSHD-1500-12000-316SU	ZSHD-1500-12000-104SU	ZSHD-1500-12000-114SU
18	3/4	1.400	ZSHD-1500-18000-303SU	ZSHD-1500-18000-316SU	ZSHD-1500-18000-104SU	ZSHD-1500-18000-114SU
24	3/4	1.400	ZSHD-1500-24000-303SU	ZSHD-1500-24000-316SU	ZSHD-1500-24000-104SU	ZSHD-1500-24000-114SU
36	3/4	1.400	ZSHD-1500-36000-303SU	ZSHD-1500-36000-316SU	ZSHD-1500-36000-104SU	ZSHD-1500-36000-114SU
48	3/4	1.400	ZSHD-1500-48000-303SU	ZSHD-1500-48000-316SU	ZSHD-1500-48000-104SU	ZSHD-1500-48000-114SU
60	3/4	1.400	ZSHD-1500-60000-303SU	ZSHD-1500-60000-316SU	ZSHD-1500-60000-104SU	ZSHD-1500-60000-114SU
72	3/4	1.400	ZSHD-1500-72000-303SU	ZSHD-1500-72000-316SU	ZSHD-1500-72000-104SU	ZSHD-1500-72000-114SU

1-5/8 Diameter (Tolerance: +0/-.003)

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	13/16	1.516	ZSHD-1625-03000-303SU	ZSHD-1625-03000-316SU	ZSHD-1625-03000-104SU	ZSHD-1625-03000-114SU
6	13/16	1.516	ZSHD-1625-06000-303SU	ZSHD-1625-06000-316SU	ZSHD-1625-06000-104SU	ZSHD-1625-06000-114SU
9	13/16	1.516	ZSHD-1625-09000-303SU	ZSHD-1625-09000-316SU	ZSHD-1625-09000-104SU	ZSHD-1625-09000-114SU
12	13/16	1.516	ZSHD-1625-12000-303SU	ZSHD-1625-12000-316SU	ZSHD-1625-12000-104SU	ZSHD-1625-12000-114SU
18	13/16	1.516	ZSHD-1625-18000-303SU	ZSHD-1625-18000-316SU	ZSHD-1625-18000-104SU	ZSHD-1625-18000-114SU
24	13/16	1.516	ZSHD-1625-24000-303SU	ZSHD-1625-24000-316SU	ZSHD-1625-24000-104SU	ZSHD-1625-24000-114SU
36	13/16	1.516	ZSHD-1625-36000-303SU	ZSHD-1625-36000-316SU	ZSHD-1625-36000-104SU	ZSHD-1625-36000-114SU
48	13/16	1.516	ZSHD-1625-48000-303SU	ZSHD-1625-48000-316SU	ZSHD-1625-48000-104SU	ZSHD-1625-48000-114SU
60	13/16	1.516	ZSHD-1625-60000-303SU	ZSHD-1625-60000-316SU	ZSHD-1625-60000-104SU	ZSHD-1625-60000-114SU
72	13/16	1.516	ZSHD-1625-72000-303SU	ZSHD-1625-72000-316SU	ZSHD-1625-72000-104SU	ZSHD-1625-72000-114SU

D-Profile Rotary Shafts — Inch



1-3/4 Diameter (Tolerance: +0/-.003)

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	7/8	1.633	ZSHD-1750-03000-303SU	ZSHD-1750-03000-316SU	ZSHD-1750-03000-104SU	ZSHD-1750-03000-114SU
6	7/8	1.633	ZSHD-1750-06000-303SU	ZSHD-1750-06000-316SU	ZSHD-1750-06000-104SU	ZSHD-1750-06000-114SU
9	7/8	1.633	ZSHD-1750-09000-303SU	ZSHD-1750-09000-316SU	ZSHD-1750-09000-104SU	ZSHD-1750-09000-114SU
12	7/8	1.633	ZSHD-1750-12000-303SU	ZSHD-1750-12000-316SU	ZSHD-1750-12000-104SU	ZSHD-1750-12000-114SU
18	7/8	1.633	ZSHD-1750-18000-303SU	ZSHD-1750-18000-316SU	ZSHD-1750-18000-104SU	ZSHD-1750-18000-114SU
24	7/8	1.633	ZSHD-1750-24000-303SU	ZSHD-1750-24000-316SU	ZSHD-1750-24000-104SU	ZSHD-1750-24000-114SU
36	7/8	1.633	ZSHD-1750-36000-303SU	ZSHD-1750-36000-316SU	ZSHD-1750-36000-104SU	ZSHD-1750-36000-114SU
48	7/8	1.633	ZSHD-1750-48000-303SU	ZSHD-1750-48000-316SU	ZSHD-1750-48000-104SU	ZSHD-1750-48000-114SU
60	7/8	1.633	ZSHD-1750-60000-303SU	ZSHD-1750-60000-316SU	ZSHD-1750-60000-104SU	ZSHD-1750-60000-114SU
72	7/8	1.633	ZSHD-1750-72000-303SU	ZSHD-1750-72000-316SU	ZSHD-1750-72000-104SU	ZSHD-1750-72000-114SU

1-7/8 Diameter (Tolerance: +0/-.003)

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	15/16	1.749	ZSHD-1875-03000-303SU	ZSHD-1875-03000-316SU	ZSHD-1875-03000-104SU	ZSHD-1875-03000-114SU
6	15/16	1.749	ZSHD-1875-06000-303SU	ZSHD-1875-06000-316SU	ZSHD-1875-06000-104SU	ZSHD-1875-06000-114SU
9	15/16	1.749	ZSHD-1875-09000-303SU	ZSHD-1875-09000-316SU	ZSHD-1875-09000-104SU	ZSHD-1875-09000-114SU
12	15/16	1.749	ZSHD-1875-12000-303SU	ZSHD-1875-12000-316SU	ZSHD-1875-12000-104SU	ZSHD-1875-12000-114SU
18	15/16	1.749	ZSHD-1875-18000-303SU	ZSHD-1875-18000-316SU	ZSHD-1875-18000-104SU	ZSHD-1875-18000-114SU
24	15/16	1.749	ZSHD-1875-24000-303SU	ZSHD-1875-24000-316SU	ZSHD-1875-24000-104SU	ZSHD-1875-24000-114SU
36	15/16	1.749	ZSHD-1875-36000-303SU	ZSHD-1875-36000-316SU	ZSHD-1875-36000-104SU	ZSHD-1875-36000-114SU
48	15/16	1.749	ZSHD-1875-48000-303SU	ZSHD-1875-48000-316SU	ZSHD-1875-48000-104SU	ZSHD-1875-48000-114SU
60	15/16	1.749	ZSHD-1875-60000-303SU	ZSHD-1875-60000-316SU	ZSHD-1875-60000-104SU	ZSHD-1875-60000-114SU
72	15/16	1.749	ZSHD-1875-72000-303SU	ZSHD-1875-72000-316SU	ZSHD-1875-72000-104SU	ZSHD-1875-72000-114SU

1-15/16 Diameter (Tolerance: +0/-.0035)

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	31/32	1.816	ZSHD-1937-03000-303SU	ZSHD-1937-03000-316SU	ZSHD-1937-03000-104SU	ZSHD-1937-03000-114SU
6	31/32	1.816	ZSHD-1937-06000-303SU	ZSHD-1937-06000-316SU	ZSHD-1937-06000-104SU	ZSHD-1937-06000-114SU
9	31/32	1.816	ZSHD-1937-09000-303SU	ZSHD-1937-09000-316SU	ZSHD-1937-09000-104SU	ZSHD-1937-09000-114SU
12	31/32	1.816	ZSHD-1937-12000-303SU	ZSHD-1937-12000-316SU	ZSHD-1937-12000-104SU	ZSHD-1937-12000-114SU
18	31/32	1.816	ZSHD-1937-18000-303SU	ZSHD-1937-18000-316SU	ZSHD-1937-18000-104SU	ZSHD-1937-18000-114SU
24	31/32	1.816	ZSHD-1937-24000-303SU	ZSHD-1937-24000-316SU	ZSHD-1937-24000-104SU	ZSHD-1937-24000-114SU
36	31/32	1.816	ZSHD-1937-36000-303SU	ZSHD-1937-36000-316SU	ZSHD-1937-36000-104SU	ZSHD-1937-36000-114SU
48	31/32	1.816	ZSHD-1937-48000-303SU	ZSHD-1937-48000-316SU	ZSHD-1937-48000-104SU	ZSHD-1937-48000-114SU
60	31/32	1.816	ZSHD-1937-60000-303SU	ZSHD-1937-60000-316SU	ZSHD-1937-60000-104SU	ZSHD-1937-60000-114SU
72	31/32	1.816	ZSHD-1937-72000-303SU	ZSHD-1937-72000-316SU	ZSHD-1937-72000-104SU	ZSHD-1937-72000-114SU

D-Profile Rotary Shafts — Inch



2 Diameter (Tolerance: +0/-.0035)

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	1	1.866	ZSHD-2000-03000-303SU	ZSHD-2000-03000-316SU	ZSHD-2000-03000-104SU	ZSHD-2000-03000-114SU
6	1	1.866	ZSHD-2000-06000-303SU	ZSHD-2000-06000-316SU	ZSHD-2000-06000-104SU	ZSHD-2000-06000-114SU
9	1	1.866	ZSHD-2000-09000-303SU	ZSHD-2000-09000-316SU	ZSHD-2000-09000-104SU	ZSHD-2000-09000-114SU
12	1	1.866	ZSHD-2000-12000-303SU	ZSHD-2000-12000-316SU	ZSHD-2000-12000-104SU	ZSHD-2000-12000-114SU
18	1	1.866	ZSHD-2000-18000-303SU	ZSHD-2000-18000-316SU	ZSHD-2000-18000-104SU	ZSHD-2000-18000-114SU
24	1	1.866	ZSHD-2000-24000-303SU	ZSHD-2000-24000-316SU	ZSHD-2000-24000-104SU	ZSHD-2000-24000-114SU
36	1	1.866	ZSHD-2000-36000-303SU	ZSHD-2000-36000-316SU	ZSHD-2000-36000-104SU	ZSHD-2000-36000-114SU
48	1	1.866	ZSHD-2000-48000-303SU	ZSHD-2000-48000-316SU	ZSHD-2000-48000-104SU	ZSHD-2000-48000-114SU
60	1	1.866	ZSHD-2000-60000-303SU	ZSHD-2000-60000-316SU	ZSHD-2000-60000-104SU	ZSHD-2000-60000-114SU
72	1	1.866	ZSHD-2000-72000-303SU	ZSHD-2000-72000-316SU	ZSHD-2000-72000-104SU	ZSHD-2000-72000-114SU

2-1/8 Diameter (Tolerance: +0/-.0035)

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	1-1/16	1.983	ZSHD-2125-03000-303SU	ZSHD-2125-03000-316SU	ZSHD-2125-03000-104SU	ZSHD-2125-03000-114SU
6	1-1/16	1.983	ZSHD-2125-06000-303SU	ZSHD-2125-06000-316SU	ZSHD-2125-06000-104SU	ZSHD-2125-06000-114SU
9	1-1/16	1.983	ZSHD-2125-09000-303SU	ZSHD-2125-09000-316SU	ZSHD-2125-09000-104SU	ZSHD-2125-09000-114SU
12	1-1/16	1.983	ZSHD-2125-12000-303SU	ZSHD-2125-12000-316SU	ZSHD-2125-12000-104SU	ZSHD-2125-12000-114SU
18	1-1/16	1.983	ZSHD-2125-18000-303SU	ZSHD-2125-18000-316SU	ZSHD-2125-18000-104SU	ZSHD-2125-18000-114SU
24	1-1/16	1.983	ZSHD-2125-24000-303SU	ZSHD-2125-24000-316SU	ZSHD-2125-24000-104SU	ZSHD-2125-24000-114SU
36	1-1/16	1.983	ZSHD-2125-36000-303SU	ZSHD-2125-36000-316SU	ZSHD-2125-36000-104SU	ZSHD-2125-36000-114SU
48	1-1/16	1.983	ZSHD-2125-48000-303SU	ZSHD-2125-48000-316SU	ZSHD-2125-48000-104SU	ZSHD-2125-48000-114SU
60	1-1/16	1.983	ZSHD-2125-60000-303SU	ZSHD-2125-60000-316SU	ZSHD-2125-60000-104SU	ZSHD-2125-60000-114SU
72	1-1/16	1.983	ZSHD-2125-72000-303SU	ZSHD-2125-72000-316SU	ZSHD-2125-72000-104SU	ZSHD-2125-72000-114SU

2-3/16 Diameter (Tolerance: +0/-.0035)

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	1-3/32	2.040	ZSHD-2187-03000-303SU	ZSHD-2187-03000-316SU	ZSHD-2187-03000-104SU	ZSHD-2187-03000-114SU
6	1-3/32	2.040	ZSHD-2187-06000-303SU	ZSHD-2187-06000-316SU	ZSHD-2187-06000-104SU	ZSHD-2187-06000-114SU
9	1-3/32	2.040	ZSHD-2187-09000-303SU	ZSHD-2187-09000-316SU	ZSHD-2187-09000-104SU	ZSHD-2187-09000-114SU
12	1-3/32	2.040	ZSHD-2187-12000-303SU	ZSHD-2187-12000-316SU	ZSHD-2187-12000-104SU	ZSHD-2187-12000-114SU
18	1-3/32	2.040	ZSHD-2187-18000-303SU	ZSHD-2187-18000-316SU	ZSHD-2187-18000-104SU	ZSHD-2187-18000-114SU
24	1-3/32	2.040	ZSHD-2187-24000-303SU	ZSHD-2187-24000-316SU	ZSHD-2187-24000-104SU	ZSHD-2187-24000-114SU
36	1-3/32	2.040	ZSHD-2187-36000-303SU	ZSHD-2187-36000-316SU	ZSHD-2187-36000-104SU	ZSHD-2187-36000-114SU
48	1-3/32	2.040	ZSHD-2187-48000-303SU	ZSHD-2187-48000-316SU	ZSHD-2187-48000-104SU	ZSHD-2187-48000-114SU
60	1-3/32	2.040	ZSHD-2187-60000-303SU	ZSHD-2187-60000-316SU	ZSHD-2187-60000-104SU	ZSHD-2187-60000-114SU
72	1-3/32	2.040	ZSHD-2187-72000-303SU	ZSHD-2187-72000-316SU	ZSHD-2187-72000-104SU	ZSHD-2187-72000-114SU

D-Profile Rotary Shafts — Inch



2-3/8 Diameter (Tolerance: +0/-.0035)

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	1-3/16	2.216	ZSHD-2375-03000-303SU	ZSHD-2375-03000-316SU	ZSHD-2375-03000-104SU	ZSHD-2375-03000-114SU
6	1-3/16	2.216	ZSHD-2375-06000-303SU	ZSHD-2375-06000-316SU	ZSHD-2375-06000-104SU	ZSHD-2375-06000-114SU
9	1-3/16	2.216	ZSHD-2375-09000-303SU	ZSHD-2375-09000-316SU	ZSHD-2375-09000-104SU	ZSHD-2375-09000-114SU
12	1-3/16	2.216	ZSHD-2375-12000-303SU	ZSHD-2375-12000-316SU	ZSHD-2375-12000-104SU	ZSHD-2375-12000-114SU
18	1-3/16	2.216	ZSHD-2375-18000-303SU	ZSHD-2375-18000-316SU	ZSHD-2375-18000-104SU	ZSHD-2375-18000-114SU
24	1-3/16	2.216	ZSHD-2375-24000-303SU	ZSHD-2375-24000-316SU	ZSHD-2375-24000-104SU	ZSHD-2375-24000-114SU
36	1-3/16	2.216	ZSHD-2375-36000-303SU	ZSHD-2375-36000-316SU	ZSHD-2375-36000-104SU	ZSHD-2375-36000-114SU
48	1-3/16	2.216	ZSHD-2375-48000-303SU	ZSHD-2375-48000-316SU	ZSHD-2375-48000-104SU	ZSHD-2375-48000-114SU
60	1-3/16	2.216	ZSHD-2375-60000-303SU	ZSHD-2375-60000-316SU	ZSHD-2375-60000-104SU	ZSHD-2375-60000-114SU
72	1-3/16	2.216	ZSHD-2375-72000-303SU	ZSHD-2375-72000-316SU	ZSHD-2375-72000-104SU	ZSHD-2375-72000-114SU

2-7/16 Diameter (Tolerance: +0/-.0035)

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	1-7/32	2.274	ZSHD-2437-03000-303SU	ZSHD-2437-03000-316SU	ZSHD-2437-03000-104SU	ZSHD-2437-03000-114SU
6	1-7/32	2.274	ZSHD-2437-06000-303SU	ZSHD-2437-06000-316SU	ZSHD-2437-06000-104SU	ZSHD-2437-06000-114SU
9	1-7/32	2.274	ZSHD-2437-09000-303SU	ZSHD-2437-09000-316SU	ZSHD-2437-09000-104SU	ZSHD-2437-09000-114SU
12	1-7/32	2.274	ZSHD-2437-12000-303SU	ZSHD-2437-12000-316SU	ZSHD-2437-12000-104SU	ZSHD-2437-12000-114SU
18	1-7/32	2.274	ZSHD-2437-18000-303SU	ZSHD-2437-18000-316SU	ZSHD-2437-18000-104SU	ZSHD-2437-18000-114SU
24	1-7/32	2.274	ZSHD-2437-24000-303SU	ZSHD-2437-24000-316SU	ZSHD-2437-24000-104SU	ZSHD-2437-24000-114SU
36	1-7/32	2.274	ZSHD-2437-36000-303SU	ZSHD-2437-36000-316SU	ZSHD-2437-36000-104SU	ZSHD-2437-36000-114SU
48	1-7/32	2.274	ZSHD-2437-48000-303SU	ZSHD-2437-48000-316SU	ZSHD-2437-48000-104SU	ZSHD-2437-48000-114SU
60	1-7/32	2.274	ZSHD-2437-60000-303SU	ZSHD-2437-60000-316SU	ZSHD-2437-60000-104SU	ZSHD-2437-60000-114SU
72	1-7/32	2.274	ZSHD-2437-72000-303SU	ZSHD-2437-72000-316SU	ZSHD-2437-72000-104SU	ZSHD-2437-72000-114SU

2.624 Diameter (Tolerance: +0/-.0035)

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
6	1-5/16	2.449	ZSHD-2624-06000-303SU	ZSHD-2624-06000-316SU	ZSHD-2624-06000-104SU	ZSHD-2624-06000-114SU
9	1-5/16	2.449	ZSHD-2624-09000-303SU	ZSHD-2624-09000-316SU	ZSHD-2624-09000-104SU	ZSHD-2624-09000-114SU
12	1-5/16	2.449	ZSHD-2624-12000-303SU	ZSHD-2624-12000-316SU	ZSHD-2624-12000-104SU	ZSHD-2624-12000-114SU
18	1-5/16	2.449	ZSHD-2624-18000-303SU	ZSHD-2624-18000-316SU	ZSHD-2624-18000-104SU	ZSHD-2624-18000-114SU
24	1-5/16	2.449	ZSHD-2624-24000-303SU	ZSHD-2624-24000-316SU	ZSHD-2624-24000-104SU	ZSHD-2624-24000-114SU
36	1-5/16	2.449	ZSHD-2624-36000-303SU	ZSHD-2624-36000-316SU	ZSHD-2624-36000-104SU	ZSHD-2624-36000-114SU
48	1-5/16	2.449	ZSHD-2624-48000-303SU	ZSHD-2624-48000-316SU	ZSHD-2624-48000-104SU	ZSHD-2624-48000-114SU

D-Profile Rotary Shafts — Inch



2-7/8 Diameter (Tolerance: +0/-0.0035)

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
6	1-7/16	2.682	ZSHD-2875-06000-303SU	ZSHD-2875-06000-316SU	ZSHD-2875-06000-104SU	ZSHD-2875-06000-114SU
9	1-7/16	2.682	ZSHD-2875-09000-303SU	ZSHD-2875-09000-316SU	ZSHD-2875-09000-104SU	ZSHD-2875-09000-114SU
12	1-7/16	2.682	ZSHD-2875-12000-303SU	ZSHD-2875-12000-316SU	ZSHD-2875-12000-104SU	ZSHD-2875-12000-114SU
18	1-7/16	2.682	ZSHD-2875-18000-303SU	ZSHD-2875-18000-316SU	ZSHD-2875-18000-104SU	ZSHD-2875-18000-114SU
24	1-7/16	2.682	ZSHD-2875-24000-303SU	ZSHD-2875-24000-316SU	ZSHD-2875-24000-104SU	ZSHD-2875-24000-114SU
36	1-7/16	2.682	ZSHD-2875-36000-303SU	ZSHD-2875-36000-316SU	ZSHD-2875-36000-104SU	ZSHD-2875-36000-114SU
48	1-7/16	2.682	ZSHD-2875-48000-303SU	ZSHD-2875-48000-316SU	ZSHD-2875-48000-104SU	ZSHD-2875-48000-114SU

3-3/8 Diameter (Tolerance: +0/-0.0035)

O'all Lg (inch)	Flat Wd.	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
6	1-5/8	3.167	ZSHD-3375-06000-303SU	ZSHD-3375-06000-316SU	ZSHD-3375-06000-104SU	ZSHD-3375-06000-114SU
9	1-5/8	3.167	ZSHD-3375-09000-303SU	ZSHD-3375-09000-316SU	ZSHD-3375-09000-104SU	ZSHD-3375-09000-114SU
12	1-5/8	3.167	ZSHD-3375-12000-303SU	ZSHD-3375-12000-316SU	ZSHD-3375-12000-104SU	ZSHD-3375-12000-114SU
18	1-5/8	3.167	ZSHD-3375-18000-303SU	ZSHD-3375-18000-316SU	ZSHD-3375-18000-104SU	ZSHD-3375-18000-114SU
24	1-5/8	3.167	ZSHD-3375-24000-303SU	ZSHD-3375-24000-316SU	ZSHD-3375-24000-104SU	ZSHD-3375-24000-114SU
36	1-5/8	3.167	ZSHD-3375-36000-303SU	ZSHD-3375-36000-316SU	ZSHD-3375-36000-104SU	ZSHD-3375-36000-114SU
48	1-5/8	3.167	ZSHD-3375-48000-303SU	ZSHD-3375-48000-316SU	ZSHD-3375-48000-104SU	ZSHD-3375-48000-114SU

D-Profile Rotary Shafts — Metric

18-8 & 316 SS, Steel



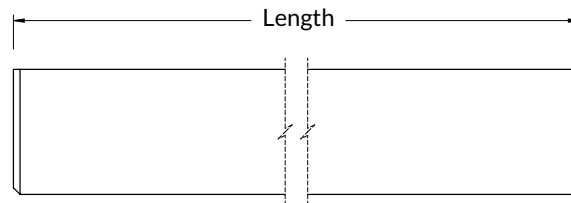
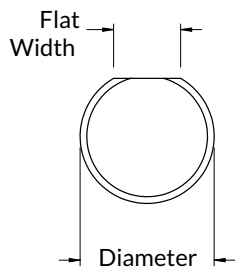
Product Information

D-Profile shafts are a specialized type of rotary shaft, offering a unique mounting solution. Unlike keyed shafts that rely on a keyway and key for torque transmission, D-Profile shafts feature a flattened surface area along a portion of their circumference. This flat allows set screws to engage the shaft for securely mounting gears, bearings, and other components, eliminating the need for complex keyways. These shafts are available in various configurations, including full D-profile length or partially D-profile length at each end, providing flexibility for diverse mechanical applications.

All shafts are made in the USA from DFARS compliant & RoHS compliant materials and shafts are fully lot traceable.

Length tolerance is $\pm 1.6\text{mm}$ and straightness tolerance is $.33\text{mm}$ per 300mm.

- Shafts are turned, ground and polished to tight diameter and straightness tolerances.
- 18-8 stainless steel shafts offer excellent corrosion resistant and can be mildly magnetic. Meets ASTM A582 Condition A. material specification.
- Type 316 stainless steel, also known as marine stainless steel, offers superior corrosion resistant than 18-8 stainless steel and maybe mildly magnetic. Meets ASTM A276 Condition A. material specification.
- C1045 Carbon Steel shafts are generally stronger than aluminum and stainless steel shafts but not as corrosion resistant. These Carbon Steel shafts offers medium strength properties making them ideal for general purpose use.
- C1045 Carbon Steel is recommended for shafts requiring higher strength and wear resistance than carbon steel and stainless steel shafts.
- 1144 Stressproof Alloy Steel has excellent strength and hardness, and is specifically treated to relieve stresses for this durable material.



Materials Chart

Material	Mechanical Finish	Edge Type	Specs Met	Rockwell Hardness	Tensile Strength (psi)	Magnetic?
18-8 SS	Ground & Polished	Chamfered	ASTM A 582 Cond A	B83	90,000	Mildly
316 SS	Ground & Polished	Chamfered	ASTM A 276 Cond	B83	85,000	Mildly
C1045 Carbon Steel	Ground & Polished	Chamfered	ASTM A108	C15	91,000	Magnetic
1144 Alloy Steel	Ground & Polished	Chamfered	ASTM A311	C22	115,000	Magnetic

8mm Diameter (Tolerance ± 0.0635)

O'all Lg (mm)	Flat Width	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	4.00	7.50	ZSHD-M08-M0300-303SU	ZSHD-M08-M0300-316SU	ZSHD-M08-M0300-104SU	ZSHD-M08-M0300-114SU
500	4.00	7.50	ZSHD-M08-M0500-303SU	ZSHD-M08-M0500-316SU	ZSHD-M08-M0500-104SU	ZSHD-M08-M0500-114SU
1,000	4.00	7.50	ZSHD-M08-M1000-303SU	ZSHD-M08-M1000-316SU	ZSHD-M08-M1000-104SU	ZSHD-M08-M1000-114SU
1,200	4.00	7.50	ZSHD-M08-M1200-303SU	ZSHD-M08-M1200-316SU	ZSHD-M08-M1200-104SU	ZSHD-M08-M1200-114SU
1,500	4.00	7.50	ZSHD-M08-M1500-303SU	ZSHD-M08-M1500-316SU	ZSHD-M08-M1500-104SU	ZSHD-M08-M1500-114SU
1,800	4.00	7.50	ZSHD-M08-M1800-303SU	ZSHD-M08-M1800-316SU	ZSHD-M08-M1800-104SU	ZSHD-M08-M1800-114SU

D-Profile Rotary Shafts – Metric

18-8 & 316 SS, Steel



10mm Diameter (Tolerance +0/-0.0635)

O'all Lg (mm)	Flat Width	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	5.00	9.30	ZSHD-M10-M0300-303SU	ZSHD-M10-M0300-316SU	ZSHD-M10-M0300-104SU	ZSHD-M10-M0300-114SU
500	5.00	9.30	ZSHD-M10-M0500-303SU	ZSHD-M10-M0500-316SU	ZSHD-M10-M0500-104SU	ZSHD-M10-M0500-114SU
1,000	5.00	9.30	ZSHD-M10-M1000-303SU	ZSHD-M10-M1000-316SU	ZSHD-M10-M1000-104SU	ZSHD-M10-M1000-114SU
1,200	5.00	9.30	ZSHD-M10-M1200-303SU	ZSHD-M10-M1200-316SU	ZSHD-M10-M1200-104SU	ZSHD-M10-M1200-114SU
1,500	5.00	9.30	ZSHD-M10-M1500-303SU	ZSHD-M10-M1500-316SU	ZSHD-M10-M1500-104SU	ZSHD-M10-M1500-114SU
1,800	5.00	9.30	ZSHD-M10-M1800-303SU	ZSHD-M10-M1800-316SU	ZSHD-M10-M1800-104SU	ZSHD-M10-M1800-114SU

12mm Diameter (Tolerance +0/-0.0635)

O'all Lg (mm)	Flat Width	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	6.00	11.20	ZSHD-M12-M0300-303SU	ZSHD-M12-M0300-316SU	ZSHD-M12-M0300-104SU	ZSHD-M12-M0300-114SU
500	6.00	11.20	ZSHD-M12-M0500-303SU	ZSHD-M12-M0500-316SU	ZSHD-M12-M0500-104SU	ZSHD-M12-M0500-114SU
1,000	6.00	11.20	ZSHD-M12-M1000-303SU	ZSHD-M12-M1000-316SU	ZSHD-M12-M1000-104SU	ZSHD-M12-M1000-114SU
1,200	6.00	11.20	ZSHD-M12-M1200-303SU	ZSHD-M12-M1200-316SU	ZSHD-M12-M1200-104SU	ZSHD-M12-M1200-114SU
1,500	6.00	11.20	ZSHD-M12-M1500-303SU	ZSHD-M12-M1500-316SU	ZSHD-M12-M1500-104SU	ZSHD-M12-M1500-114SU
1,800	6.00	11.20	ZSHD-M12-M1800-303SU	ZSHD-M12-M1800-316SU	ZSHD-M12-M1800-104SU	ZSHD-M12-M1800-114SU

15mm Diameter (Tolerance +0/-0.0635)

O'all Lg (mm)	Flat Width	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	7.50	14.00	ZSHD-M15-M0300-303SU	ZSHD-M15-M0300-316SU	ZSHD-M15-M0300-104SU	ZSHD-M15-M0300-114SU
500	7.50	14.00	ZSHD-M15-M0500-303SU	ZSHD-M15-M0500-316SU	ZSHD-M15-M0500-104SU	ZSHD-M15-M0500-114SU
1,000	7.50	14.00	ZSHD-M15-M1000-303SU	ZSHD-M15-M1000-316SU	ZSHD-M15-M1000-104SU	ZSHD-M15-M1000-114SU
1,200	7.50	14.00	ZSHD-M15-M1200-303SU	ZSHD-M15-M1200-316SU	ZSHD-M15-M1200-104SU	ZSHD-M15-M1200-114SU
1,500	7.50	14.00	ZSHD-M15-M1500-303SU	ZSHD-M15-M1500-316SU	ZSHD-M15-M1500-104SU	ZSHD-M15-M1500-114SU
1,800	7.50	14.00	ZSHD-M15-M1800-303SU	ZSHD-M15-M1800-316SU	ZSHD-M15-M1800-104SU	ZSHD-M15-M1800-114SU

17mm Diameter (Tolerance +0/-0.0635)

O'all Lg (mm)	Flat Width	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	8.50	15.80	ZSHD-M17-M0300-303SU	ZSHD-M17-M0300-316SU	ZSHD-M17-M0300-104SU	ZSHD-M17-M0300-114SU
500	8.50	15.80	ZSHD-M17-M0500-303SU	ZSHD-M17-M0500-316SU	ZSHD-M17-M0500-104SU	ZSHD-M17-M0500-114SU
1,000	8.50	15.80	ZSHD-M17-M1000-303SU	ZSHD-M17-M1000-316SU	ZSHD-M17-M1000-104SU	ZSHD-M17-M1000-114SU
1,200	8.50	15.80	ZSHD-M17-M1200-303SU	ZSHD-M17-M1200-316SU	ZSHD-M17-M1200-104SU	ZSHD-M17-M1200-114SU
1,500	8.50	15.80	ZSHD-M17-M1700-303SU	ZSHD-M17-M1700-316SU	ZSHD-M17-M1700-104SU	ZSHD-M17-M1700-114SU
1,800	8.50	15.80	ZSHD-M17-M1800-303SU	ZSHD-M17-M1800-316SU	ZSHD-M17-M1800-104SU	ZSHD-M17-M1800-114SU

D-Profile Rotary Shafts — Metric



20mm Diameter (Tolerance +0/-0.0635)

O'all Lg (mm)	Flat Width	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	10.00	18.60	ZSHD-M20-M0300-303SU	ZSHD-M20-M0300-316SU	ZSHD-M20-M0300-104SU	ZSHD-M20-M0300-114SU
500	10.00	18.60	ZSHD-M20-M0500-303SU	ZSHD-M20-M0500-316SU	ZSHD-M20-M0500-104SU	ZSHD-M20-M0500-114SU
1,000	10.00	18.60	ZSHD-M20-M1000-303SU	ZSHD-M20-M1000-316SU	ZSHD-M20-M1000-104SU	ZSHD-M20-M1000-114SU
1,200	10.00	18.60	ZSHD-M20-M1200-303SU	ZSHD-M20-M1200-316SU	ZSHD-M20-M1200-104SU	ZSHD-M20-M1200-114SU
1,500	10.00	18.60	ZSHD-M20-M1500-303SU	ZSHD-M20-M1500-316SU	ZSHD-M20-M1500-104SU	ZSHD-M20-M1500-114SU
1,800	10.00	18.60	ZSHD-M20-M1800-303SU	ZSHD-M20-M1800-316SU	ZSHD-M20-M1800-104SU	ZSHD-M20-M1800-114SU

24mm Diameter (Tolerance +0/-0.0635)

O'all Lg (mm)	Flat Width	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	12.00	22.40	ZSHD-M24-M0300-303SU	ZSHD-M24-M0300-316SU	ZSHD-M24-M0300-104SU	ZSHD-M24-M0300-114SU
500	12.00	22.40	ZSHD-M24-M0500-303SU	ZSHD-M24-M0500-316SU	ZSHD-M24-M0500-104SU	ZSHD-M24-M0500-114SU
1,000	12.00	22.40	ZSHD-M24-M1000-303SU	ZSHD-M24-M1000-316SU	ZSHD-M24-M1000-104SU	ZSHD-M24-M1000-114SU
1,200	12.00	22.40	ZSHD-M24-M1200-303SU	ZSHD-M24-M1200-316SU	ZSHD-M24-M1200-104SU	ZSHD-M24-M1200-114SU
1,500	12.00	22.40	ZSHD-M24-M1500-303SU	ZSHD-M24-M1500-316SU	ZSHD-M24-M1500-104SU	ZSHD-M24-M1500-114SU
1,800	12.00	22.40	ZSHD-M24-M1800-303SU	ZSHD-M24-M1800-316SU	ZSHD-M24-M1800-104SU	ZSHD-M24-M1800-114SU

25mm Diameter (Tolerance +0/-0.0635)

O'all Lg (mm)	Flat Width	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	12.50	23.30	ZSHD-M25-M0300-303SU	ZSHD-M25-M0300-316SU	ZSHD-M25-M0300-104SU	ZSHD-M25-M0300-114SU
500	12.50	23.30	ZSHD-M25-M0500-303SU	ZSHD-M25-M0500-316SU	ZSHD-M25-M0500-104SU	ZSHD-M25-M0500-114SU
1,000	12.50	23.30	ZSHD-M25-M1000-303SU	ZSHD-M25-M1000-316SU	ZSHD-M25-M1000-104SU	ZSHD-M25-M1000-114SU
1,200	12.50	23.30	ZSHD-M25-M1200-303SU	ZSHD-M25-M1200-316SU	ZSHD-M25-M1200-104SU	ZSHD-M25-M1200-114SU
1,500	12.50	23.30	ZSHD-M25-M1500-303SU	ZSHD-M25-M1500-316SU	ZSHD-M25-M1500-104SU	ZSHD-M25-M1500-114SU
1,800	12.50	23.30	ZSHD-M25-M1800-303SU	ZSHD-M25-M1800-316SU	ZSHD-M25-M1800-104SU	ZSHD-M25-M1800-114SU

28mm Diameter (Tolerance +0/-0.0635)

O'all Lg (mm)	Flat Width	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	14.00	26.10	ZSHD-M28-M0300-303SU	ZSHD-M28-M0300-316SU	ZSHD-M28-M0300-104SU	ZSHD-M28-M0300-114SU
500	14.00	26.10	ZSHD-M28-M0500-303SU	ZSHD-M28-M0500-316SU	ZSHD-M28-M0500-104SU	ZSHD-M28-M0500-114SU
1,000	14.00	26.10	ZSHD-M28-M1000-303SU	ZSHD-M28-M1000-316SU	ZSHD-M28-M1000-104SU	ZSHD-M28-M1000-114SU
1,200	14.00	26.10	ZSHD-M28-M1200-303SU	ZSHD-M28-M1200-316SU	ZSHD-M28-M1200-104SU	ZSHD-M28-M1200-114SU
1,500	14.00	26.10	ZSHD-M28-M2800-303SU	ZSHD-M28-M2800-316SU	ZSHD-M28-M2800-104SU	ZSHD-M28-M2800-114SU
1,800	14.00	26.10	ZSHD-M28-M1800-303SU	ZSHD-M28-M1800-316SU	ZSHD-M28-M1800-104SU	ZSHD-M28-M1800-114SU

D-Profile Rotary Shafts – Metric

18-8 & 316 SS, Steel



38mm Diameter (Tolerance +0/-0.076mm)

O'all Lg (mm)	Flat Width	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	19.00	35.50	ZSHD-M38-M0300-303SU	ZSHD-M38-M0300-316SU	ZSHD-M38-M0300-104SU	ZSHD-M38-M0300-114SU
500	19.00	35.50	ZSHD-M38-M0500-303SU	ZSHD-M38-M0500-316SU	ZSHD-M38-M0500-104SU	ZSHD-M38-M0500-114SU
1,000	19.00	35.50	ZSHD-M38-M1000-303SU	ZSHD-M38-M1000-316SU	ZSHD-M38-M1000-104SU	ZSHD-M38-M1000-114SU
1,200	19.00	35.50	ZSHD-M38-M1200-303SU	ZSHD-M38-M1200-316SU	ZSHD-M38-M1200-104SU	ZSHD-M38-M1200-114SU
1,500	19.00	35.50	ZSHD-M38-M3800-303SU	ZSHD-M38-M3800-316SU	ZSHD-M38-M3800-104SU	ZSHD-M38-M3800-114SU
1,800	19.00	35.50	ZSHD-M38-M1800-303SU	ZSHD-M38-M1800-316SU	ZSHD-M38-M1800-104SU	ZSHD-M38-M1800-114SU

40mm Diameter (Tolerance +0/-0.076mm)

O'all Lg (mm)	Flat Width	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	12.50	23.30	ZSHD-M25-M0300-303SU	ZSHD-M25-M0300-316SU	ZSHD-M25-M0300-104SU	ZSHD-M25-M0300-114SU
500	12.50	23.30	ZSHD-M25-M0500-303SU	ZSHD-M25-M0500-316SU	ZSHD-M25-M0500-104SU	ZSHD-M25-M0500-114SU
1,000	12.50	23.30	ZSHD-M25-M1000-303SU	ZSHD-M25-M1000-316SU	ZSHD-M25-M1000-104SU	ZSHD-M25-M1000-114SU
1,200	12.50	23.30	ZSHD-M25-M1200-303SU	ZSHD-M25-M1200-316SU	ZSHD-M25-M1200-104SU	ZSHD-M25-M1200-114SU
1,500	12.50	23.30	ZSHD-M25-M1500-303SU	ZSHD-M25-M1500-316SU	ZSHD-M25-M1500-104SU	ZSHD-M25-M1500-114SU
1,800	12.50	23.30	ZSHD-M25-M1800-303SU	ZSHD-M25-M1800-316SU	ZSHD-M25-M1800-104SU	ZSHD-M25-M1800-114SU

42mm Diameter (Tolerance +0/-0.076mm)

O'all Lg (mm)	Flat Width	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	21.00	39.20	ZSHD-M42-M0300-303SU	ZSHD-M42-M0300-316SU	ZSHD-M42-M0300-104SU	ZSHD-M42-M0300-114SU
500	21.00	39.20	ZSHD-M42-M0500-303SU	ZSHD-M42-M0500-316SU	ZSHD-M42-M0500-104SU	ZSHD-M42-M0500-114SU
1,000	21.00	39.20	ZSHD-M42-M1000-303SU	ZSHD-M42-M1000-316SU	ZSHD-M42-M1000-104SU	ZSHD-M42-M1000-114SU

50mm Diameter (Tolerance +0/-0.076mm)

O'all Lg (mm)	Flat Width	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	25.00	46.70	ZSHD-M50-M0300-303SU	ZSHD-M50-M0300-316SU	ZSHD-M50-M0300-104SU	ZSHD-M50-M0300-114SU
500	25.00	46.70	ZSHD-M50-M0500-303SU	ZSHD-M50-M0500-316SU	ZSHD-M50-M0500-104SU	ZSHD-M50-M0500-114SU
1,000	25.00	46.70	ZSHD-M50-M1000-303SU	ZSHD-M50-M1000-316SU	ZSHD-M50-M1000-104SU	ZSHD-M50-M1000-114SU
1,200	25.00	46.70	ZSHD-M50-M1200-303SU	ZSHD-M50-M1200-316SU	ZSHD-M50-M1200-104SU	ZSHD-M50-M1200-114SU
1,500	25.00	46.70	ZSHD-M50-M1500-303SU	ZSHD-M50-M1500-316SU	ZSHD-M50-M1500-104SU	ZSHD-M50-M1500-114SU
1,800	25.00	46.70	ZSHD-M50-M1800-303SU	ZSHD-M50-M1800-316SU	ZSHD-M50-M1800-104SU	ZSHD-M50-M1800-114SU

55mm Diameter (Tolerance +0/-0.076mm)

O'all Lg (mm)	Flat Width	Dim, Flat to Top	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	27.50	51.30	ZSHD-M55-M0300-303SU	ZSHD-M55-M0300-316SU	ZSHD-M55-M0300-104SU	ZSHD-M55-M0300-114SU
500	27.50	51.30	ZSHD-M55-M0500-303SU	ZSHD-M55-M0500-316SU	ZSHD-M55-M0500-104SU	ZSHD-M55-M0500-114SU
1,000	27.50	51.30	ZSHD-M55-M1000-303SU	ZSHD-M55-M1000-316SU	ZSHD-M55-M1000-104SU	ZSHD-M55-M1000-114SU

D-Profile Partial Ends Rotary Shafts – Inch

18-8 & 316 SS, Steel, Aluminum

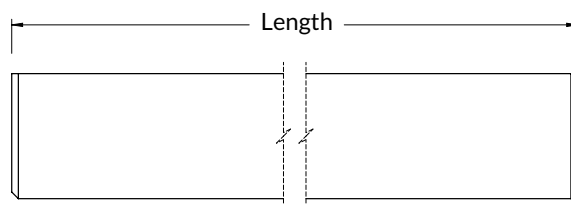
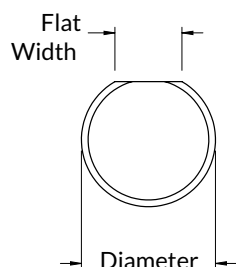


Product Information

D-Profile shafts are a specialized type of rotary shaft, offering a unique mounting solution. Unlike keyed shafts that rely on a keyway and key for torque transmission, D-Profile shafts feature a flattened surface area along a portion of their circumference. This flat allows set screws to engage the shaft for securely mounting gears, bearings, and other components, eliminating the need for complex keyways. Partial D-profile rotary shafts have a flat section milled into each end to prevent slippage between the shaft and the rotating machine element. They are used in high-precision applications such as robotics and drive systems. All shafts are made in the USA from DFARS compliant & RoHS compliant stainless steel and shafts are fully lot traceable.

Length tolerance is +/-0.062 and straightness tolerance is 0.012 in/ft.

- Shafts are turned, ground and polished to tight diameter and straightness tolerances.
- 18-8 stainless steel shafts offer excellent corrosion resistant and can be mildly magnetic. Meets ASTM A582 Condition A. material specification.
- Type 316 stainless steel, also known as marine stainless steel, offers superior corrosion resistant than 18-8 stainless steel and maybe mildly magnetic. Meets ASTM A276 Condition A. material specification.
- Aluminum shafts are lightweight, corrosion resistant and nonmagnetic. They have a T4 temper, which means they have been heat treated for increased strength.
- Aluminum shafts have the strength of mild steel with one third the weight.
- C1045 Carbon Steel shafts are generally stronger than aluminum and stainless steel shafts but not as corrosion resistant. These Carbon Steel shafts offers medium strength properties making them ideal for general purpose use.
- C1045 Carbon Steel is recommended for shafts requiring higher strength and wear resistance than carbon steel and stainless steel shafts.
- 1144 Stressproof Alloy Steel has excellent strength and hardness, and is specifically treated to relieve stresses for this durable material.



Materials Chart

Material	Mechanical Finish	Edge Type	Specs Met	Rockwell Hardness	Tensile Strength (psi)	Magnetic?
18-8 SS	Ground & Polished	Chamfered	ASTM A 582 Cond A	B83	90,000	Mildly
316 SS	Ground & Polished	Chamfered	ASTM A 276 Cond	B83	85,000	Mildly
C1045 Carbon Steel	Ground & Polished	Chamfered	ASTM A108	C15	91,000	Magnetic
1144 Alloy Steel	Ground & Polished	Chamfered	ASTM A311	C22	115,000	Magnetic
2024 Aluminum	Ground & Polished	Chamfered	ASTM B211	B75	68,000	Nonmagnetic

D-Profile Partial Ends Rotary Shafts – Inch



5/16 Diameter (±0.0025 in Tolerance)

O'all Lg (in.)	Flat Wd.	Dim, Flat to Top	D Flat Lg. Ea End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number	2024 Aluminum Part Number
3	5/32	.292	1.00	ZSHDD-312-03000-303SU	ZSHDD-312-03000-316SU	ZSHDD-312-03000-104SU	ZSHDD-312-03000-114SU	ZSHDD-312-03000-202SU
6	5/32	.292	2.00	ZSHDD-312-06000-303SU	ZSHDD-312-06000-316SU	ZSHDD-312-06000-104SU	ZSHDD-312-06000-114SU	ZSHDD-312-06000-202SU
9	5/32	.292	3.00	ZSHDD-312-09000-303SU	ZSHDD-312-09000-316SU	ZSHDD-312-09000-104SU	ZSHDD-312-09000-114SU	ZSHDD-312-09000-202SU
12	5/32	.292	4.00	ZSHDD-312-12000-303SU	ZSHDD-312-12000-316SU	ZSHDD-312-12000-104SU	ZSHDD-312-12000-114SU	ZSHDD-312-12000-202SU
18	5/32	.292	4.00	ZSHDD-312-18000-303SU	ZSHDD-312-18000-316SU	ZSHDD-312-18000-104SU	ZSHDD-312-18000-114SU	ZSHDD-312-18000-202SU
24	5/32	.292	6.00	ZSHDD-312-24000-303SU	ZSHDD-312-24000-316SU	ZSHDD-312-24000-104SU	ZSHDD-312-24000-114SU	ZSHDD-312-24000-202SU
36	5/32	.292	6.00	ZSHDD-312-36000-303SU	ZSHDD-312-36000-316SU	ZSHDD-312-36000-104SU	ZSHDD-312-36000-114SU	ZSHDD-312-36000-202SU
48	5/32	.292	6.00	ZSHDD-312-48000-303SU	ZSHDD-312-48000-316SU	ZSHDD-312-48000-104SU	ZSHDD-312-48000-114SU	ZSHDD-312-48000-202SU
60	5/32	.292	6.00	ZSHDD-312-60000-303SU	ZSHDD-312-60000-316SU	ZSHDD-312-60000-104SU	ZSHDD-312-60000-114SU	ZSHDD-312-60000-202SU
72	5/32	.292	6.00	ZSHDD-312-72000-303SU	ZSHDD-312-72000-316SU	ZSHDD-312-72000-104SU	ZSHDD-312-72000-114SU	ZSHDD-312-72000-202SU

1 Diameter (±0.0025 in Tolerance)

O'all Lg (in.)	Flat Wd.	Dim, Flat to Top	D Flat Lg. Ea End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number	2024 Aluminum Part Number
3	1/2	.933	1.00	ZSHDD-1000-03000-303SU	ZSHDD-1000-03000-316SU	ZSHDD-1000-03000-104SU	ZSHDD-1000-03000-114SU	ZSHDD-1000-03000-202SU
6	1/2	.933	2.00	ZSHDD-1000-06000-303SU	ZSHDD-1000-06000-316SU	ZSHDD-1000-06000-104SU	ZSHDD-1000-06000-114SU	ZSHDD-1000-06000-202SU
9	1/2	.933	3.00	ZSHDD-1000-09000-303SU	ZSHDD-1000-09000-316SU	ZSHDD-1000-09000-104SU	ZSHDD-1000-09000-114SU	ZSHDD-1000-09000-202SU
12	1/2	.933	4.00	ZSHDD-1000-12000-303SU	ZSHDD-1000-12000-316SU	ZSHDD-1000-12000-104SU	ZSHDD-1000-12000-114SU	ZSHDD-1000-12000-202SU
18	1/2	.933	4.00	ZSHDD-1000-18000-303SU	ZSHDD-1000-18000-316SU	ZSHDD-1000-18000-104SU	ZSHDD-1000-18000-114SU	ZSHDD-1000-18000-202SU
24	1/2	.933	6.00	ZSHDD-1000-24000-303SU	ZSHDD-1000-24000-316SU	ZSHDD-1000-24000-104SU	ZSHDD-1000-24000-114SU	ZSHDD-1000-24000-202SU
36	1/2	.933	6.00	ZSHDD-1000-36000-303SU	ZSHDD-1000-36000-316SU	ZSHDD-1000-36000-104SU	ZSHDD-1000-36000-114SU	ZSHDD-1000-36000-202SU
48	1/2	.933	6.00	ZSHDD-1000-48000-303SU	ZSHDD-1000-48000-316SU	ZSHDD-1000-48000-104SU	ZSHDD-1000-48000-114SU	ZSHDD-1000-48000-202SU
60	1/2	.933	6.00	ZSHDD-1000-60000-303SU	ZSHDD-1000-60000-316SU	ZSHDD-1000-60000-104SU	ZSHDD-1000-60000-114SU	ZSHDD-1000-60000-202SU
72	1/2	.933	6.00	ZSHDD-1000-72000-303SU	ZSHDD-1000-72000-316SU	ZSHDD-1000-72000-104SU	ZSHDD-1000-72000-114SU	ZSHDD-1000-72000-202SU

1-1/8 Diameter (±0.0025 in Tolerance)

O'all Lg (in.)	Flat Wd.	Dim, Flat to Top	D Flat Lg. Ea End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number	2024 Aluminum Part Number
3	9/16	1.05	1.00	ZSHDD-1125-03000-303SU	ZSHDD-1125-03000-316SU	ZSHDD-1125-03000-104SU	ZSHDD-1125-03000-114SU	–
6	9/16	1.05	2.00	ZSHDD-1125-06000-303SU	ZSHDD-1125-06000-316SU	ZSHDD-1125-06000-104SU	ZSHDD-1125-06000-114SU	–
9	9/16	1.05	3.00	ZSHDD-1125-09000-303SU	ZSHDD-1125-09000-316SU	ZSHDD-1125-09000-104SU	ZSHDD-1125-09000-114SU	–
12	9/16	1.05	4.00	ZSHDD-1125-12000-303SU	ZSHDD-1125-12000-316SU	ZSHDD-1125-12000-104SU	ZSHDD-1125-12000-114SU	–
18	9/16	1.05	4.00	ZSHDD-1125-18000-303SU	ZSHDD-1125-18000-316SU	ZSHDD-1125-18000-104SU	ZSHDD-1125-18000-114SU	–
24	9/16	1.05	6.00	ZSHDD-1125-24000-303SU	ZSHDD-1125-24000-316SU	ZSHDD-1125-24000-104SU	ZSHDD-1125-24000-114SU	–
36	9/16	1.05	6.00	ZSHDD-1125-36000-303SU	ZSHDD-1125-36000-316SU	ZSHDD-1125-36000-104SU	ZSHDD-1125-36000-114SU	–
48	9/16	1.05	6.00	ZSHDD-1125-48000-303SU	ZSHDD-1125-48000-316SU	ZSHDD-1125-48000-104SU	ZSHDD-1125-48000-114SU	–
60	9/16	1.05	6.00	ZSHDD-1125-60000-303SU	ZSHDD-1125-60000-316SU	ZSHDD-1125-60000-104SU	ZSHDD-1125-60000-114SU	–
72	9/16	1.05	6.00	ZSHDD-1125-72000-303SU	ZSHDD-1125-72000-316SU	ZSHDD-1125-72000-104SU	ZSHDD-1125-72000-114SU	–

D-Profile Partial Ends Rotary Shafts – Inch



1-3/16 Diameter (± 0.0025 in Tolerance)

O'all Lg (in.)	Flat Wd.	Dim, Flat to Top	D Flat Lg. Ea End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	19/32	1.107	1.00	ZSHDD-1187-03000-303SU	ZSHDD-1187-03000-316SU	ZSHDD-1187-03000-104SU	ZSHDD-1187-03000-114SU
6	19/32	1.107	2.00	ZSHDD-1187-06000-303SU	ZSHDD-1187-06000-316SU	ZSHDD-1187-06000-104SU	ZSHDD-1187-06000-114SU
9	19/32	1.107	3.00	ZSHDD-1187-09000-303SU	ZSHDD-1187-09000-316SU	ZSHDD-1187-09000-104SU	ZSHDD-1187-09000-114SU
12	19/32	1.107	4.00	ZSHDD-1187-12000-303SU	ZSHDD-1187-12000-316SU	ZSHDD-1187-12000-104SU	ZSHDD-1187-12000-114SU
18	19/32	1.107	4.00	ZSHDD-1187-18000-303SU	ZSHDD-1187-18000-316SU	ZSHDD-1187-18000-104SU	ZSHDD-1187-18000-114SU
24	19/32	1.107	6.00	ZSHDD-1187-24000-303SU	ZSHDD-1187-24000-316SU	ZSHDD-1187-24000-104SU	ZSHDD-1187-24000-114SU
36	19/32	1.107	6.00	ZSHDD-1187-36000-303SU	ZSHDD-1187-36000-316SU	ZSHDD-1187-36000-104SU	ZSHDD-1187-36000-114SU
48	19/32	1.107	6.00	ZSHDD-1187-48000-303SU	ZSHDD-1187-48000-316SU	ZSHDD-1187-48000-104SU	ZSHDD-1187-48000-114SU
60	19/32	1.107	6.00	ZSHDD-1187-60000-303SU	ZSHDD-1187-60000-316SU	ZSHDD-1187-60000-104SU	ZSHDD-1187-60000-114SU
72	19/32	1.107	6.00	ZSHDD-1187-72000-303SU	ZSHDD-1187-72000-316SU	ZSHDD-1187-72000-104SU	ZSHDD-1187-72000-114SU

1-1/4 Diameter (± 0.0025 in Tolerance)

O'all Lg (in.)	Flat Wd.	Dim, Flat to Top	D Flat Lg. Ea End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	5/8	1.166	1.00	ZSHDD-1250-03000-303SU	ZSHDD-1250-03000-316SU	ZSHDD-1250-03000-104SU	ZSHDD-1250-03000-114SU
6	5/8	1.166	2.00	ZSHDD-1250-06000-303SU	ZSHDD-1250-06000-316SU	ZSHDD-1250-06000-104SU	ZSHDD-1250-06000-114SU
9	5/8	1.166	3.00	ZSHDD-1250-09000-303SU	ZSHDD-1250-09000-316SU	ZSHDD-1250-09000-104SU	ZSHDD-1250-09000-114SU
12	5/8	1.166	4.00	ZSHDD-1250-12000-303SU	ZSHDD-1250-12000-316SU	ZSHDD-1250-12000-104SU	ZSHDD-1250-12000-114SU
18	5/8	1.166	4.00	ZSHDD-1250-18000-303SU	ZSHDD-1250-18000-316SU	ZSHDD-1250-18000-104SU	ZSHDD-1250-18000-114SU
24	5/8	1.166	6.00	ZSHDD-1250-24000-303SU	ZSHDD-1250-24000-316SU	ZSHDD-1250-24000-104SU	ZSHDD-1250-24000-114SU
36	5/8	1.166	6.00	ZSHDD-1250-36000-303SU	ZSHDD-1250-36000-316SU	ZSHDD-1250-36000-104SU	ZSHDD-1250-36000-114SU
48	5/8	1.166	6.00	ZSHDD-1250-48000-303SU	ZSHDD-1250-48000-316SU	ZSHDD-1250-48000-104SU	ZSHDD-1250-48000-114SU
60	5/8	1.166	6.00	ZSHDD-1250-60000-303SU	ZSHDD-1250-60000-316SU	ZSHDD-1250-60000-104SU	ZSHDD-1250-60000-114SU
72	5/8	1.166	6.00	ZSHDD-1250-72000-303SU	ZSHDD-1250-72000-316SU	ZSHDD-1250-72000-104SU	ZSHDD-1250-72000-114SU

1-5/16 Diameter ($+0/-0.003$ in Tolerance)

O'all Lg (in.)	Flat Wd.	Dim, Flat to Top	D Flat Lg. Ea End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	21/32	1.224	1.00	ZSHDD-1312-03000-303SU	ZSHDD-1312-03000-316SU	ZSHDD-1312-03000-104SU	ZSHDD-1312-03000-114SU
6	21/32	1.224	2.00	ZSHDD-1312-06000-303SU	ZSHDD-1312-06000-316SU	ZSHDD-1312-06000-104SU	ZSHDD-1312-06000-114SU
9	21/32	1.224	3.00	ZSHDD-1312-09000-303SU	ZSHDD-1312-09000-316SU	ZSHDD-1312-09000-104SU	ZSHDD-1312-09000-114SU
12	21/32	1.224	4.00	ZSHDD-1312-12000-303SU	ZSHDD-1312-12000-316SU	ZSHDD-1312-12000-104SU	ZSHDD-1312-12000-114SU
18	21/32	1.224	4.00	ZSHDD-1312-18000-303SU	ZSHDD-1312-18000-316SU	ZSHDD-1312-18000-104SU	ZSHDD-1312-18000-114SU
24	21/32	1.224	6.00	ZSHDD-1312-24000-303SU	ZSHDD-1312-24000-316SU	ZSHDD-1312-24000-104SU	ZSHDD-1312-24000-114SU
36	21/32	1.224	6.00	ZSHDD-1312-36000-303SU	ZSHDD-1312-36000-316SU	ZSHDD-1312-36000-104SU	ZSHDD-1312-36000-114SU
48	21/32	1.224	6.00	ZSHDD-1312-48000-303SU	ZSHDD-1312-48000-316SU	ZSHDD-1312-48000-104SU	ZSHDD-1312-48000-114SU
60	21/32	1.224	6.00	ZSHDD-1312-60000-303SU	ZSHDD-1312-60000-316SU	ZSHDD-1312-60000-104SU	ZSHDD-1312-60000-114SU
72	21/32	1.224	6.00	ZSHDD-1312-72000-303SU	ZSHDD-1312-72000-316SU	ZSHDD-1312-72000-104SU	ZSHDD-1312-72000-114SU

D-Profile Partial Ends Rotary Shafts – Inch



1-3/8 Diameter (+0/-.003 in Tolerance)

O'all Lg (in.)	Flat Wd.	Dim, Flat to Top	D Flat Lg. Ea End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	11/16	1.283	1.00	ZSHDD-1375-03000-303SU	ZSHDD-1375-03000-316SU	ZSHDD-1375-03000-104SU	ZSHDD-1375-03000-114SU
6	11/16	1.283	2.00	ZSHDD-1375-06000-303SU	ZSHDD-1375-06000-316SU	ZSHDD-1375-06000-104SU	ZSHDD-1375-06000-114SU
9	11/16	1.283	3.00	ZSHDD-1375-09000-303SU	ZSHDD-1375-09000-316SU	ZSHDD-1375-09000-104SU	ZSHDD-1375-09000-114SU
12	11/16	1.283	4.00	ZSHDD-1375-12000-303SU	ZSHDD-1375-12000-316SU	ZSHDD-1375-12000-104SU	ZSHDD-1375-12000-114SU
18	11/16	1.283	4.00	ZSHDD-1375-18000-303SU	ZSHDD-1375-18000-316SU	ZSHDD-1375-18000-104SU	ZSHDD-1375-18000-114SU
24	11/16	1.283	6.00	ZSHDD-1375-24000-303SU	ZSHDD-1375-24000-316SU	ZSHDD-1375-24000-104SU	ZSHDD-1375-24000-114SU
36	11/16	1.283	6.00	ZSHDD-1375-36000-303SU	ZSHDD-1375-36000-316SU	ZSHDD-1375-36000-104SU	ZSHDD-1375-36000-114SU
48	11/16	1.283	6.00	ZSHDD-1375-48000-303SU	ZSHDD-1375-48000-316SU	ZSHDD-1375-48000-104SU	ZSHDD-1375-48000-114SU
60	11/16	1.283	6.00	ZSHDD-1375-60000-303SU	ZSHDD-1375-60000-316SU	ZSHDD-1375-60000-104SU	ZSHDD-1375-60000-114SU
72	11/16	1.283	6.00	ZSHDD-1375-72000-303SU	ZSHDD-1375-72000-316SU	ZSHDD-1375-72000-104SU	ZSHDD-1375-72000-114SU

1-7/16 Diameter (+0/-.003 in Tolerance)

O'all Lg (in.)	Flat Wd.	Dim, Flat to Top	D Flat Lg. Ea End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	23/32	1.341	1.00	ZSHDD-1437-03000-303SU	ZSHDD-1437-03000-316SU	ZSHDD-1437-03000-104SU	ZSHDD-1437-03000-114SU
6	23/32	1.341	2.00	ZSHDD-1437-06000-303SU	ZSHDD-1437-06000-316SU	ZSHDD-1437-06000-104SU	ZSHDD-1437-06000-114SU
9	23/32	1.341	3.00	ZSHDD-1437-09000-303SU	ZSHDD-1437-09000-316SU	ZSHDD-1437-09000-104SU	ZSHDD-1437-09000-114SU
12	23/32	1.341	4.00	ZSHDD-1437-12000-303SU	ZSHDD-1437-12000-316SU	ZSHDD-1437-12000-104SU	ZSHDD-1437-12000-114SU
18	23/32	1.341	4.00	ZSHDD-1437-18000-303SU	ZSHDD-1437-18000-316SU	ZSHDD-1437-18000-104SU	ZSHDD-1437-18000-114SU
24	23/32	1.341	6.00	ZSHDD-1437-24000-303SU	ZSHDD-1437-24000-316SU	ZSHDD-1437-24000-104SU	ZSHDD-1437-24000-114SU
36	23/32	1.341	6.00	ZSHDD-1437-36000-303SU	ZSHDD-1437-36000-316SU	ZSHDD-1437-36000-104SU	ZSHDD-1437-36000-114SU
48	23/32	1.341	6.00	ZSHDD-1437-48000-303SU	ZSHDD-1437-48000-316SU	ZSHDD-1437-48000-104SU	ZSHDD-1437-48000-114SU
60	23/32	1.341	6.00	ZSHDD-1437-60000-303SU	ZSHDD-1437-60000-316SU	ZSHDD-1437-60000-104SU	ZSHDD-1437-60000-114SU
72	23/32	1.341	6.00	ZSHDD-1437-72000-303SU	ZSHDD-1437-72000-316SU	ZSHDD-1437-72000-104SU	ZSHDD-1437-72000-114SU

1-1/2 Diameter (+0/-.003 in Tolerance)

O'all Lg (in.)	Flat Wd.	Dim, Flat to Top	D Flat Lg. Ea End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	3/4	1.40	1.00	ZSHDD-1500-03000-303SU	ZSHDD-1500-03000-316SU	ZSHDD-1500-03000-104SU	ZSHDD-1500-03000-114SU
6	3/4	1.40	2.00	ZSHDD-1500-06000-303SU	ZSHDD-1500-06000-316SU	ZSHDD-1500-06000-104SU	ZSHDD-1500-06000-114SU
9	3/4	1.40	3.00	ZSHDD-1500-09000-303SU	ZSHDD-1500-09000-316SU	ZSHDD-1500-09000-104SU	ZSHDD-1500-09000-114SU
12	3/4	1.40	4.00	ZSHDD-1500-12000-303SU	ZSHDD-1500-12000-316SU	ZSHDD-1500-12000-104SU	ZSHDD-1500-12000-114SU
18	3/4	1.40	4.00	ZSHDD-1500-18000-303SU	ZSHDD-1500-18000-316SU	ZSHDD-1500-18000-104SU	ZSHDD-1500-18000-114SU
24	3/4	1.40	6.00	ZSHDD-1500-24000-303SU	ZSHDD-1500-24000-316SU	ZSHDD-1500-24000-104SU	ZSHDD-1500-24000-114SU
36	3/4	1.40	6.00	ZSHDD-1500-36000-303SU	ZSHDD-1500-36000-316SU	ZSHDD-1500-36000-104SU	ZSHDD-1500-36000-114SU
48	3/4	1.40	6.00	ZSHDD-1500-48000-303SU	ZSHDD-1500-48000-316SU	ZSHDD-1500-48000-104SU	ZSHDD-1500-48000-114SU
60	3/4	1.40	6.00	ZSHDD-1500-60000-303SU	ZSHDD-1500-60000-316SU	ZSHDD-1500-60000-104SU	ZSHDD-1500-60000-114SU
72	3/4	1.40	6.00	ZSHDD-1500-72000-303SU	ZSHDD-1500-72000-316SU	ZSHDD-1500-72000-104SU	ZSHDD-1500-72000-114SU

D-Profile Partial Ends Rotary Shafts – Inch



1-5/8 Diameter (+0/-.003 in Tolerance)

O'all Lg (in.)	Flat Wd.	Dim, Flat to Top	D Flat Lg. Ea End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	13/16	1.516	1.00	ZSHDD-1625-03000-303SU	ZSHDD-1625-03000-316SU	ZSHDD-1625-03000-104SU	ZSHDD-1625-03000-114SU
6	13/16	1.516	2.00	ZSHDD-1625-06000-303SU	ZSHDD-1625-06000-316SU	ZSHDD-1625-06000-104SU	ZSHDD-1625-06000-114SU
9	13/16	1.516	3.00	ZSHDD-1625-09000-303SU	ZSHDD-1625-09000-316SU	ZSHDD-1625-09000-104SU	ZSHDD-1625-09000-114SU
12	13/16	1.516	4.00	ZSHDD-1625-12000-303SU	ZSHDD-1625-12000-316SU	ZSHDD-1625-12000-104SU	ZSHDD-1625-12000-114SU
18	13/16	1.516	4.00	ZSHDD-1625-18000-303SU	ZSHDD-1625-18000-316SU	ZSHDD-1625-18000-104SU	ZSHDD-1625-18000-114SU
24	13/16	1.516	6.00	ZSHDD-1625-24000-303SU	ZSHDD-1625-24000-316SU	ZSHDD-1625-24000-104SU	ZSHDD-1625-24000-114SU
36	13/16	1.516	6.00	ZSHDD-1625-36000-303SU	ZSHDD-1625-36000-316SU	ZSHDD-1625-36000-104SU	ZSHDD-1625-36000-114SU
48	13/16	1.516	6.00	ZSHDD-1625-48000-303SU	ZSHDD-1625-48000-316SU	ZSHDD-1625-48000-104SU	ZSHDD-1625-48000-114SU
60	13/16	1.516	6.00	ZSHDD-1625-60000-303SU	ZSHDD-1625-60000-316SU	ZSHDD-1625-60000-104SU	ZSHDD-1625-60000-114SU
72	13/16	1.516	6.00	ZSHDD-1625-72000-303SU	ZSHDD-1625-72000-316SU	ZSHDD-1625-72000-104SU	ZSHDD-1625-72000-114SU

1-3/4 Diameter (+0/-.003 in Tolerance)

O'all Lg (in.)	Flat Wd.	Dim, Flat to Top	D Flat Lg. Ea End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	7/8	1.633	1.00	ZSHDD-1750-03000-303SU	ZSHDD-1750-03000-316SU	ZSHDD-1750-03000-104SU	ZSHDD-1750-03000-114SU
6	7/8	1.633	2.00	ZSHDD-1750-06000-303SU	ZSHDD-1750-06000-316SU	ZSHDD-1750-06000-104SU	ZSHDD-1750-06000-114SU
9	7/8	1.633	3.00	ZSHDD-1750-09000-303SU	ZSHDD-1750-09000-316SU	ZSHDD-1750-09000-104SU	ZSHDD-1750-09000-114SU
12	7/8	1.633	4.00	ZSHDD-1750-12000-303SU	ZSHDD-1750-12000-316SU	ZSHDD-1750-12000-104SU	ZSHDD-1750-12000-114SU
18	7/8	1.633	4.00	ZSHDD-1750-18000-303SU	ZSHDD-1750-18000-316SU	ZSHDD-1750-18000-104SU	ZSHDD-1750-18000-114SU
24	7/8	1.633	6.00	ZSHDD-1750-24000-303SU	ZSHDD-1750-24000-316SU	ZSHDD-1750-24000-104SU	ZSHDD-1750-24000-114SU
36	7/8	1.633	6.00	ZSHDD-1750-36000-303SU	ZSHDD-1750-36000-316SU	ZSHDD-1750-36000-104SU	ZSHDD-1750-36000-114SU
48	7/8	1.633	6.00	ZSHDD-1750-48000-303SU	ZSHDD-1750-48000-316SU	ZSHDD-1750-48000-104SU	ZSHDD-1750-48000-114SU
60	7/8	1.633	6.00	ZSHDD-1750-60000-303SU	ZSHDD-1750-60000-316SU	ZSHDD-1750-60000-104SU	ZSHDD-1750-60000-114SU
72	7/8	1.633	6.00	ZSHDD-1750-72000-303SU	ZSHDD-1750-72000-316SU	ZSHDD-1750-72000-104SU	ZSHDD-1750-72000-114SU

1-7/8 Diameter (+0/-.003 in Tolerance)

O'all Lg (in.)	Flat Wd.	Dim, Flat to Top	D Flat Lg. Ea End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	15/16	1.749	1.00	ZSHDD-1875-03000-303SU	ZSHDD-1875-03000-316SU	ZSHDD-1875-03000-104SU	ZSHDD-1875-03000-114SU
6	15/16	1.749	2.00	ZSHDD-1875-06000-303SU	ZSHDD-1875-06000-316SU	ZSHDD-1875-06000-104SU	ZSHDD-1875-06000-114SU
9	15/16	1.749	3.00	ZSHDD-1875-09000-303SU	ZSHDD-1875-09000-316SU	ZSHDD-1875-09000-104SU	ZSHDD-1875-09000-114SU
12	15/16	1.749	4.00	ZSHDD-1875-12000-303SU	ZSHDD-1875-12000-316SU	ZSHDD-1875-12000-104SU	ZSHDD-1875-12000-114SU
18	15/16	1.749	4.00	ZSHDD-1875-18000-303SU	ZSHDD-1875-18000-316SU	ZSHDD-1875-18000-104SU	ZSHDD-1875-18000-114SU
24	15/16	1.749	6.00	ZSHDD-1875-24000-303SU	ZSHDD-1875-24000-316SU	ZSHDD-1875-24000-104SU	ZSHDD-1875-24000-114SU
36	15/16	1.749	6.00	ZSHDD-1875-36000-303SU	ZSHDD-1875-36000-316SU	ZSHDD-1875-36000-104SU	ZSHDD-1875-36000-114SU
48	15/16	1.749	6.00	ZSHDD-1875-48000-303SU	ZSHDD-1875-48000-316SU	ZSHDD-1875-48000-104SU	ZSHDD-1875-48000-114SU
60	15/16	1.749	6.00	ZSHDD-1875-60000-303SU	ZSHDD-1875-60000-316SU	ZSHDD-1875-60000-104SU	ZSHDD-1875-60000-114SU
72	15/16	1.749	6.00	ZSHDD-1875-72000-303SU	ZSHDD-1875-72000-316SU	ZSHDD-1875-72000-104SU	ZSHDD-1875-72000-114SU

D-Profile Partial Ends Rotary Shafts – Inch



1-15/16 Diameter (+0/-.0035 in Tolerance)

O'all Lg (in.)	Flat Wd.	Dim, Flat to Top	D Flat Lg. Ea End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	31/32	1.816	1.00	ZSHDD-1937-03000-303SU	ZSHDD-1937-03000-316SU	ZSHDD-1937-03000-104SU	ZSHDD-1937-03000-114SU
6	31/32	1.816	2.00	ZSHDD-1937-06000-303SU	ZSHDD-1937-06000-316SU	ZSHDD-1937-06000-104SU	ZSHDD-1937-06000-114SU
9	31/32	1.816	3.00	ZSHDD-1937-09000-303SU	ZSHDD-1937-09000-316SU	ZSHDD-1937-09000-104SU	ZSHDD-1937-09000-114SU
12	31/32	1.816	4.00	ZSHDD-1937-12000-303SU	ZSHDD-1937-12000-316SU	ZSHDD-1937-12000-104SU	ZSHDD-1937-12000-114SU
18	31/32	1.816	4.00	ZSHDD-1937-18000-303SU	ZSHDD-1937-18000-316SU	ZSHDD-1937-18000-104SU	ZSHDD-1937-18000-114SU
24	31/32	1.816	6.00	ZSHDD-1937-24000-303SU	ZSHDD-1937-24000-316SU	ZSHDD-1937-24000-104SU	ZSHDD-1937-24000-114SU
36	31/32	1.816	6.00	ZSHDD-1937-36000-303SU	ZSHDD-1937-36000-316SU	ZSHDD-1937-36000-104SU	ZSHDD-1937-36000-114SU
48	31/32	1.816	6.00	ZSHDD-1937-48000-303SU	ZSHDD-1937-48000-316SU	ZSHDD-1937-48000-104SU	ZSHDD-1937-48000-114SU
60	31/32	1.816	6.00	ZSHDD-1937-60000-303SU	ZSHDD-1937-60000-316SU	ZSHDD-1937-60000-104SU	ZSHDD-1937-60000-114SU
72	31/32	1.816	6.00	ZSHDD-1937-72000-303SU	ZSHDD-1937-72000-316SU	ZSHDD-1937-72000-104SU	ZSHDD-1937-72000-114SU

2 Diameter (+0/-.0035 in Tolerance)

O'all Lg (in.)	Flat Wd.	Dim, Flat to Top	D Flat Lg. Ea End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	1	1.866	1.00	ZSHDD-2000-03000-303SU	ZSHDD-2000-03000-316SU	ZSHDD-2000-03000-104SU	ZSHDD-2000-03000-114SU
6	1	1.866	2.00	ZSHDD-2000-06000-303SU	ZSHDD-2000-06000-316SU	ZSHDD-2000-06000-104SU	ZSHDD-2000-06000-114SU
9	1	1.866	3.00	ZSHDD-2000-09000-303SU	ZSHDD-2000-09000-316SU	ZSHDD-2000-09000-104SU	ZSHDD-2000-09000-114SU
12	1	1.866	4.00	ZSHDD-2000-12000-303SU	ZSHDD-2000-12000-316SU	ZSHDD-2000-12000-104SU	ZSHDD-2000-12000-114SU
18	1	1.866	4.00	ZSHDD-2000-18000-303SU	ZSHDD-2000-18000-316SU	ZSHDD-2000-18000-104SU	ZSHDD-2000-18000-114SU
24	1	1.866	6.00	ZSHDD-2000-24000-303SU	ZSHDD-2000-24000-316SU	ZSHDD-2000-24000-104SU	ZSHDD-2000-24000-114SU
36	1	1.866	6.00	ZSHDD-2000-36000-303SU	ZSHDD-2000-36000-316SU	ZSHDD-2000-36000-104SU	ZSHDD-2000-36000-114SU
48	1	1.866	6.00	ZSHDD-2000-48000-303SU	ZSHDD-2000-48000-316SU	ZSHDD-2000-48000-104SU	ZSHDD-2000-48000-114SU
60	1	1.866	6.00	ZSHDD-2000-60000-303SU	ZSHDD-2000-60000-316SU	ZSHDD-2000-60000-104SU	ZSHDD-2000-60000-114SU
72	1	1.866	6.00	ZSHDD-2000-72000-303SU	ZSHDD-2000-72000-316SU	ZSHDD-2000-72000-104SU	ZSHDD-2000-72000-114SU

2-1/8 Diameter (+0/-.0035 in Tolerance)

O'all Lg (in.)	Flat Wd.	Dim, Flat to Top	D Flat Lg. Ea End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	1-1/16	1.983	1.00	ZSHDD-2125-03000-303SU	ZSHDD-2125-03000-316SU	ZSHDD-2125-03000-104SU	ZSHDD-2125-03000-114SU
6	1-1/16	1.983	2.00	ZSHDD-2125-06000-303SU	ZSHDD-2125-06000-316SU	ZSHDD-2125-06000-104SU	ZSHDD-2125-06000-114SU
9	1-1/16	1.983	3.00	ZSHDD-2125-09000-303SU	ZSHDD-2125-09000-316SU	ZSHDD-2125-09000-104SU	ZSHDD-2125-09000-114SU
12	1-1/16	1.983	4.00	ZSHDD-2125-12000-303SU	ZSHDD-2125-12000-316SU	ZSHDD-2125-12000-104SU	ZSHDD-2125-12000-114SU
18	1-1/16	1.983	4.00	ZSHDD-2125-18000-303SU	ZSHDD-2125-18000-316SU	ZSHDD-2125-18000-104SU	ZSHDD-2125-18000-114SU
24	1-1/16	1.983	6.00	ZSHDD-2125-24000-303SU	ZSHDD-2125-24000-316SU	ZSHDD-2125-24000-104SU	ZSHDD-2125-24000-114SU
36	1-1/16	1.983	6.00	ZSHDD-2125-36000-303SU	ZSHDD-2125-36000-316SU	ZSHDD-2125-36000-104SU	ZSHDD-2125-36000-114SU
48	1-1/16	1.983	6.00	ZSHDD-2125-48000-303SU	ZSHDD-2125-48000-316SU	ZSHDD-2125-48000-104SU	ZSHDD-2125-48000-114SU
60	1-1/16	1.983	6.00	ZSHDD-2125-60000-303SU	ZSHDD-2125-60000-316SU	ZSHDD-2125-60000-104SU	ZSHDD-2125-60000-114SU
72	1-1/16	1.983	6.00	ZSHDD-2125-72000-303SU	ZSHDD-2125-72000-316SU	ZSHDD-2125-72000-104SU	ZSHDD-2125-72000-114SU

D-Profile Partial Ends Rotary Shafts – Inch



2-3/16 Diameter (+0/-.0035 in Tolerance)

O'all Lg (in.)	Flat Wd.	Dim, Flat to Top	D Flat Lg. Ea End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	1-3/32	2.04	1.00	ZSHDD-2187-03000-303SU	ZSHDD-2187-03000-316SU	ZSHDD-2187-03000-104SU	ZSHDD-2187-03000-114SU
6	1-3/32	2.04	2.00	ZSHDD-2187-06000-303SU	ZSHDD-2187-06000-316SU	ZSHDD-2187-06000-104SU	ZSHDD-2187-06000-114SU
9	1-3/32	2.04	3.00	ZSHDD-2187-09000-303SU	ZSHDD-2187-09000-316SU	ZSHDD-2187-09000-104SU	ZSHDD-2187-09000-114SU
12	1-3/32	2.04	4.00	ZSHDD-2187-12000-303SU	ZSHDD-2187-12000-316SU	ZSHDD-2187-12000-104SU	ZSHDD-2187-12000-114SU
18	1-3/32	2.04	4.00	ZSHDD-2187-18000-303SU	ZSHDD-2187-18000-316SU	ZSHDD-2187-18000-104SU	ZSHDD-2187-18000-114SU
24	1-3/32	2.04	6.00	ZSHDD-2187-24000-303SU	ZSHDD-2187-24000-316SU	ZSHDD-2187-24000-104SU	ZSHDD-2187-24000-114SU
36	1-3/32	2.04	6.00	ZSHDD-2187-36000-303SU	ZSHDD-2187-36000-316SU	ZSHDD-2187-36000-104SU	ZSHDD-2187-36000-114SU
48	1-3/32	2.04	6.00	ZSHDD-2187-48000-303SU	ZSHDD-2187-48000-316SU	ZSHDD-2187-48000-104SU	ZSHDD-2187-48000-114SU
60	1-3/32	2.04	6.00	ZSHDD-2187-60000-303SU	ZSHDD-2187-60000-316SU	ZSHDD-2187-60000-104SU	ZSHDD-2187-60000-114SU
72	1-3/32	2.04	6.00	ZSHDD-2187-72000-303SU	ZSHDD-2187-72000-316SU	ZSHDD-2187-72000-104SU	ZSHDD-2187-72000-114SU

2-3/8 Diameter (+0/-.0035 in Tolerance)

O'all Lg (in.)	Flat Wd.	Dim, Flat to Top	D Flat Lg. Ea End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	1-3/16	2.216	1.00	ZSHDD-2375-03000-303SU	ZSHDD-2375-03000-316SU	ZSHDD-2375-03000-104SU	ZSHDD-2375-03000-114SU
6	1-3/16	2.216	2.00	ZSHDD-2375-06000-303SU	ZSHDD-2375-06000-316SU	ZSHDD-2375-06000-104SU	ZSHDD-2375-06000-114SU
9	1-3/16	2.216	3.00	ZSHDD-2375-09000-303SU	ZSHDD-2375-09000-316SU	ZSHDD-2375-09000-104SU	ZSHDD-2375-09000-114SU
12	1-3/16	2.216	4.00	ZSHDD-2375-12000-303SU	ZSHDD-2375-12000-316SU	ZSHDD-2375-12000-104SU	ZSHDD-2375-12000-114SU
18	1-3/16	2.216	4.00	ZSHDD-2375-18000-303SU	ZSHDD-2375-18000-316SU	ZSHDD-2375-18000-104SU	ZSHDD-2375-18000-114SU
24	1-3/16	2.216	6.00	ZSHDD-2375-24000-303SU	ZSHDD-2375-24000-316SU	ZSHDD-2375-24000-104SU	ZSHDD-2375-24000-114SU
36	1-3/16	2.216	6.00	ZSHDD-2375-36000-303SU	ZSHDD-2375-36000-316SU	ZSHDD-2375-36000-104SU	ZSHDD-2375-36000-114SU
48	1-3/16	2.216	6.00	ZSHDD-2375-48000-303SU	ZSHDD-2375-48000-316SU	ZSHDD-2375-48000-104SU	ZSHDD-2375-48000-114SU
60	1-3/16	2.216	6.00	ZSHDD-2375-60000-303SU	ZSHDD-2375-60000-316SU	ZSHDD-2375-60000-104SU	ZSHDD-2375-60000-114SU
72	1-3/16	2.216	6.00	ZSHDD-2375-72000-303SU	ZSHDD-2375-72000-316SU	ZSHDD-2375-72000-104SU	ZSHDD-2375-72000-114SU

2-7/16 Diameter (+0/-.0035 in Tolerance)

O'all Lg (in.)	Flat Wd.	Dim, Flat to Top	D Flat Lg. Ea End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
3	1-7/32	2.274	1.00	ZSHDD-2437-03000-303SU	ZSHDD-2437-03000-316SU	ZSHDD-2437-03000-104SU	ZSHDD-2437-03000-114SU
6	1-7/32	2.274	2.00	ZSHDD-2437-06000-303SU	ZSHDD-2437-06000-316SU	ZSHDD-2437-06000-104SU	ZSHDD-2437-06000-114SU
9	1-7/32	2.274	3.00	ZSHDD-2437-09000-303SU	ZSHDD-2437-09000-316SU	ZSHDD-2437-09000-104SU	ZSHDD-2437-09000-114SU
12	1-7/32	2.274	4.00	ZSHDD-2437-12000-303SU	ZSHDD-2437-12000-316SU	ZSHDD-2437-12000-104SU	ZSHDD-2437-12000-114SU
18	1-7/32	2.274	4.00	ZSHDD-2437-18000-303SU	ZSHDD-2437-18000-316SU	ZSHDD-2437-18000-104SU	ZSHDD-2437-18000-114SU
24	1-7/32	2.274	6.00	ZSHDD-2437-24000-303SU	ZSHDD-2437-24000-316SU	ZSHDD-2437-24000-104SU	ZSHDD-2437-24000-114SU
36	1-7/32	2.274	6.00	ZSHDD-2437-36000-303SU	ZSHDD-2437-36000-316SU	ZSHDD-2437-36000-104SU	ZSHDD-2437-36000-114SU
48	1-7/32	2.274	6.00	ZSHDD-2437-48000-303SU	ZSHDD-2437-48000-316SU	ZSHDD-2437-48000-104SU	ZSHDD-2437-48000-114SU
60	1-7/32	2.274	6.00	ZSHDD-2437-60000-303SU	ZSHDD-2437-60000-316SU	ZSHDD-2437-60000-104SU	ZSHDD-2437-60000-114SU
72	1-7/32	2.274	6.00	ZSHDD-2437-72000-303SU	ZSHDD-2437-72000-316SU	ZSHDD-2437-72000-104SU	ZSHDD-2437-72000-114SU

D-Profile Partial Ends Rotary Shafts – Metric

18-8 & 316 SS, Steel

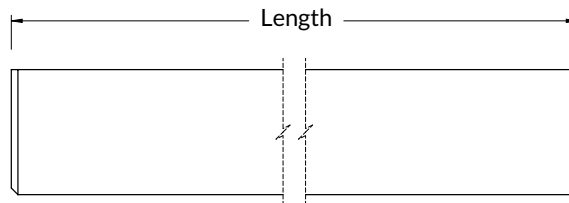
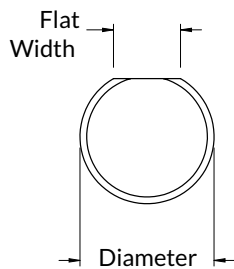


Product Information

D-Profile shafts are a specialized type of rotary shaft, offering a unique mounting solution. Unlike keyed shafts that rely on a keyway and key for torque transmission, D-Profile shafts feature a flattened surface area along a portion of their circumference. This flat allows set screws to engage the shaft for securely mounting gears, bearings, and other components, eliminating the need for complex keyways. Partial D-profile rotary shafts have a flat section milled into each end to prevent slippage between the shaft and the rotating machine element. They are used in high-precision applications such as robotics and drive systems. All shafts are made in the USA from DFARS compliant & RoHS compliant stainless steel and shafts are fully lot traceable.

Length tolerance is $\pm 1.57\text{mm}$ and straightness tolerance is $0.33\text{ mm per } 300\text{ mm}$.

- Shafts are turned, ground and polished to tight diameter and straightness tolerances.
- 18-8 stainless steel shafts offer excellent corrosion resistant and can be mildly magnetic. Meets ASTM A582 Condition A. material specification.
- Type 316 stainless steel, also known as marine stainless steel, offers superior corrosion resistant than 18-8 stainless steel and maybe mildly magnetic. Meets ASTM A276 Condition A. material specification.
- C1045 Carbon Steel shafts are generally stronger than aluminum and stainless steel shafts but not as corrosion resistant. These Carbon Steel shafts offers medium strength properties making them ideal for general purpose use.
- C1045 Carbon Steel is recommended for shafts requiring higher strength and wear resistance than carbon steel and stainless steel shafts.
- 1144 Stressproof Alloy Steel has excellent strength and hardness, and is specifically treated to relieve stresses for this durable material.



Materials Chart

Material	Mechanical Finish	Edge Type	Specs Met	Rockwell Hardness	Tensile Strength (psi)	Magnetic?
18-8 SS	Ground & Polished	Chamfered	ASTM A 582 Cond A	B83	90,000	Mildly
316 SS	Ground & Polished	Chamfered	ASTM A 276 Cond	B83	85,000	Mildly
C1045 Carbon Steel	Ground & Polished	Chamfered	ASTM A108	C15	91,000	Magnetic
1144 Alloy Steel	Ground & Polished	Chamfered	ASTM A311	C22	115,000	Magnetic

D-Profile Partial Ends Rotary Shafts – Metric



8mm Diameter (+0/-.0635mm in Tolerance)

O'all Lg (mm)	Flat Wd.	Dim, Flat to Top	D Flat Lg. Ea End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	4.00	7.50	25.00	ZSHDD-M08-M0300-303SU	ZSHDD-M08-M0300-316SU	ZSHDD-M08-M0300-104SU	ZSHDD-M08-M0300-114SU
500	4.00	7.50	50.00	ZSHDD-M08-M0500-303SU	ZSHDD-M08-M0500-316SU	ZSHDD-M08-M0500-104SU	ZSHDD-M08-M0500-114SU
1,000	4.00	7.50	75.00	ZSHDD-M08-M1000-303SU	ZSHDD-M08-M1000-316SU	ZSHDD-M08-M1000-104SU	ZSHDD-M08-M1000-114SU
1,200	4.00	7.50	100.00	ZSHDD-M08-M1200-303SU	ZSHDD-M08-M1200-316SU	ZSHDD-M08-M1200-104SU	ZSHDD-M08-M1200-114SU
1,500	4.00	7.50	100.00	ZSHDD-M08-M1500-303SU	ZSHDD-M08-M1500-316SU	ZSHDD-M08-M1500-104SU	ZSHDD-M08-M1500-114SU
1,800	4.00	7.50	150.00	ZSHDD-M08-M1800-303SU	ZSHDD-M08-M1800-316SU	ZSHDD-M08-M1800-104SU	ZSHDD-M08-M1800-114SU

10mm Diameter (+0/-.0635mm in Tolerance)

O'all Lg (mm)	Flat Wd.	Dim, Flat to Top	D Flat Lg. Ea End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	5.00	9.30	25.00	ZSHDD-M10-M0300-303SU	ZSHDD-M10-M0300-316SU	ZSHDD-M10-M0300-104SU	ZSHDD-M10-M0300-114SU
500	5.00	9.30	50.00	ZSHDD-M10-M0500-303SU	ZSHDD-M10-M0500-316SU	ZSHDD-M10-M0500-104SU	ZSHDD-M10-M0500-114SU
1,000	5.00	9.30	75.00	ZSHDD-M10-M1000-303SU	ZSHDD-M10-M1000-316SU	ZSHDD-M10-M1000-104SU	ZSHDD-M10-M1000-114SU
1,200	5.00	9.30	100.00	ZSHDD-M10-M1200-303SU	ZSHDD-M10-M1200-316SU	ZSHDD-M10-M1200-104SU	ZSHDD-M10-M1200-114SU
1,500	5.00	9.30	100.00	ZSHDD-M10-M1500-303SU	ZSHDD-M10-M1500-316SU	ZSHDD-M10-M1500-104SU	ZSHDD-M10-M1500-114SU
1,800	5.00	9.30	150.00	ZSHDD-M10-M1800-303SU	ZSHDD-M10-M1800-316SU	ZSHDD-M10-M1800-104SU	ZSHDD-M10-M1800-114SU

15mm Diameter (+0/-.0635mm in Tolerance)

O'all Lg (mm)	Flat Wd.	Dim, Flat to Top	D Flat Lg. Ea End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	7.50	14.00	25.00	ZSHDD-M15-M0300-303SU	ZSHDD-M15-M0300-316SU	ZSHDD-M15-M0300-104SU	ZSHDD-M15-M0300-114SU
500	7.50	14.00	50.00	ZSHDD-M15-M0500-303SU	ZSHDD-M15-M0500-316SU	ZSHDD-M15-M0500-104SU	ZSHDD-M15-M0500-114SU
1,000	7.50	14.00	75.00	ZSHDD-M15-M1000-303SU	ZSHDD-M15-M1000-316SU	ZSHDD-M15-M1000-104SU	ZSHDD-M15-M1000-114SU
1,200	7.50	14.00	100.00	ZSHDD-M15-M1200-303SU	ZSHDD-M15-M1200-316SU	ZSHDD-M15-M1200-104SU	ZSHDD-M15-M1200-114SU
1,500	7.50	14.00	100.00	ZSHDD-M15-M1500-303SU	ZSHDD-M15-M1500-316SU	ZSHDD-M15-M1500-104SU	ZSHDD-M15-M1500-114SU
1,800	7.50	14.00	150.00	ZSHDD-M15-M1800-303SU	ZSHDD-M15-M1800-316SU	ZSHDD-M15-M1800-104SU	ZSHDD-M15-M1800-114SU

20mm Diameter (+0/-.0635mm in Tolerance)

O'all Lg (mm)	Flat Wd.	Dim, Flat to Top	D Flat Lg. Ea End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	10.00	18.60	25.00	ZSHDD-M20-M0300-303SU	ZSHDD-M20-M0300-316SU	ZSHDD-M20-M0300-104SU	ZSHDD-M20-M0300-114SU
500	10.00	18.60	50.00	ZSHDD-M20-M0500-303SU	ZSHDD-M20-M0500-316SU	ZSHDD-M20-M0500-104SU	ZSHDD-M20-M0500-114SU
1,000	10.00	18.60	75.00	ZSHDD-M20-M1000-303SU	ZSHDD-M20-M1000-316SU	ZSHDD-M20-M1000-104SU	ZSHDD-M20-M1000-114SU
1,200	10.00	18.60	100.00	ZSHDD-M20-M1200-303SU	ZSHDD-M20-M1200-316SU	ZSHDD-M20-M1200-104SU	ZSHDD-M20-M1200-114SU
1,500	10.00	18.60	100.00	ZSHDD-M20-M1500-303SU	ZSHDD-M20-M1500-316SU	ZSHDD-M20-M1500-104SU	ZSHDD-M20-M1500-114SU
1,800	10.00	18.60	150.00	ZSHDD-M20-M1800-303SU	ZSHDD-M20-M1800-316SU	ZSHDD-M20-M1800-104SU	ZSHDD-M20-M1800-114SU

D-Profile Partial Ends Rotary Shafts – Metric



24mm Diameter (+0/-.0635mm in Tolerance)

O'all Lg (mm)	Flat Wd.	Dim, Flat to Top	D Flat Lg. Ea End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	12.00	22.40	25.00	ZSHDD-M24-M0300-303SU	ZSHDD-M24-M0300-316SU	ZSHDD-M24-M0300-104SU	ZSHDD-M24-M0300-114SU
500	12.00	22.40	50.00	ZSHDD-M24-M0500-303SU	ZSHDD-M24-M0500-316SU	ZSHDD-M24-M0500-104SU	ZSHDD-M24-M0500-114SU
1,000	12.00	22.40	75.00	ZSHDD-M24-M1000-303SU	ZSHDD-M24-M1000-316SU	ZSHDD-M24-M1000-104SU	ZSHDD-M24-M1000-114SU
1,200	12.00	22.40	100.00	ZSHDD-M24-M1200-303SU	ZSHDD-M24-M1200-316SU	ZSHDD-M24-M1200-104SU	ZSHDD-M24-M1200-114SU
1,500	12.00	22.40	100.00	ZSHDD-M24-M1500-303SU	ZSHDD-M24-M1500-316SU	ZSHDD-M24-M1500-104SU	ZSHDD-M24-M1500-114SU
1,800	12.00	22.40	150.00	ZSHDD-M24-M1800-303SU	ZSHDD-M24-M1800-316SU	ZSHDD-M24-M1800-104SU	ZSHDD-M24-M1800-114SU

25mm Diameter (+0/-.0635mm in Tolerance)

O'all Lg (mm)	Flat Wd.	Dim, Flat to Top	D Flat Lg. Ea End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	12.50	23.30	25.00	ZSHDD-M25-M0300-303SU	ZSHDD-M25-M0300-316SU	ZSHDD-M25-M0300-104SU	ZSHDD-M25-M0300-114SU
500	12.50	23.30	50.00	ZSHDD-M25-M0500-303SU	ZSHDD-M25-M0500-316SU	ZSHDD-M25-M0500-104SU	ZSHDD-M25-M0500-114SU
1,000	12.50	23.30	75.00	ZSHDD-M25-M1000-303SU	ZSHDD-M25-M1000-316SU	ZSHDD-M25-M1000-104SU	ZSHDD-M25-M1000-114SU
1,200	12.50	23.30	100.00	ZSHDD-M25-M1200-303SU	ZSHDD-M25-M1200-316SU	ZSHDD-M25-M1200-104SU	ZSHDD-M25-M1200-114SU
1,500	12.50	23.30	100.00	ZSHDD-M25-M1500-303SU	ZSHDD-M25-M1500-316SU	ZSHDD-M25-M1500-104SU	ZSHDD-M25-M1500-114SU
1,800	12.50	23.30	150.00	ZSHDD-M25-M1800-303SU	ZSHDD-M25-M1800-316SU	ZSHDD-M25-M1800-104SU	ZSHDD-M25-M1800-114SU

40mm Diameter (+0/-.076mm in Tolerance)

O'all Lg (mm)	Flat Wd.	Dim, Flat to Top	D Flat Lg. Ea End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	20.00	37.30	25.00	ZSHDD-M40-M0300-303SU	ZSHDD-M40-M0300-316SU	ZSHDD-M40-M0300-104SU	ZSHDD-M40-M0300-114SU
500	20.00	37.30	50.00	ZSHDD-M40-M0500-303SU	ZSHDD-M40-M0500-316SU	ZSHDD-M40-M0500-104SU	ZSHDD-M40-M0500-114SU
1,000	20.00	37.30	75.00	ZSHDD-M40-M1000-303SU	ZSHDD-M40-M1000-316SU	ZSHDD-M40-M1000-104SU	ZSHDD-M40-M1000-114SU
1,200	20.00	37.30	100.00	ZSHDD-M40-M1200-303SU	ZSHDD-M40-M1200-316SU	ZSHDD-M40-M1200-104SU	ZSHDD-M40-M1200-114SU
1,500	20.00	37.30	100.00	ZSHDD-M40-M1500-303SU	ZSHDD-M40-M1500-316SU	ZSHDD-M40-M1500-104SU	ZSHDD-M40-M1500-114SU
1,800	20.00	37.30	150.00	ZSHDD-M40-M1800-303SU	ZSHDD-M40-M1800-316SU	ZSHDD-M40-M1800-104SU	ZSHDD-M40-M1800-114SU

50mm Diameter (+0/-.076mm in Tolerance)

O'all Lg (mm)	Flat Wd.	Dim, Flat to Top	D Flat Lg. Ea End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	25.00	46.70	25.00	ZSHDD-M50-M0300-303SU	ZSHDD-M50-M0300-316SU	ZSHDD-M50-M0300-104SU	ZSHDD-M50-M0300-114SU
500	25.00	46.70	50.00	ZSHDD-M50-M0500-303SU	ZSHDD-M50-M0500-316SU	ZSHDD-M50-M0500-104SU	ZSHDD-M50-M0500-114SU
1,000	25.00	46.70	75.00	ZSHDD-M50-M1000-303SU	ZSHDD-M50-M1000-316SU	ZSHDD-M50-M1000-104SU	ZSHDD-M50-M1000-114SU
1,200	25.00	46.70	100.00	ZSHDD-M50-M1200-303SU	ZSHDD-M50-M1200-316SU	ZSHDD-M50-M1200-104SU	ZSHDD-M50-M1200-114SU
1,500	25.00	46.70	100.00	ZSHDD-M50-M1500-303SU	ZSHDD-M50-M1500-316SU	ZSHDD-M50-M1500-104SU	ZSHDD-M50-M1500-114SU
1,800	25.00	46.70	150.00	ZSHDD-M50-M1800-303SU	ZSHDD-M50-M1800-316SU	ZSHDD-M50-M1800-104SU	ZSHDD-M50-M1800-114SU

D-Profile Rotary Shafts with Tap One End – Inch

18-8 & 316 SS, Steel, Aluminum

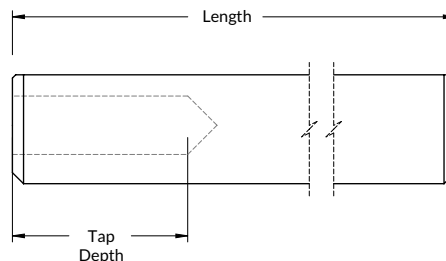
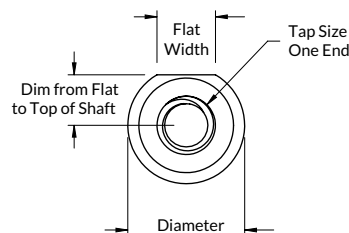


Product Information

D-Profile shafts are a specialized type of rotary shaft, offering a unique mounting solution. These internally threaded shafts offer versatile connection options, allowing direct attachment to threaded components or secure fastening with hardware. Their flat surface facilitates set screw engagement, ensuring firm mounting of gears, sprockets, and bearings. These shafts are available in various configurations, including full D-profile length or partially D-profile length at each end, providing flexibility for diverse mechanical applications.

All shafts are made in the USA from DFARS compliant & RoHS compliant stainless steel and shafts are fully lot traceable. Length tolerance is $\pm .062$ and straightness tolerance is 0.012 in/ft.

- Shafts are turned, ground and polished to tight diameter and straightness tolerances.
- 18-8 stainless steel shafts offer excellent corrosion resistant and can be mildly magnetic. Meets ASTM A582 Condition A material specification.
- Type 316 stainless steel, also known as marine stainless steel, offers superior corrosion resistant than 18-8 stainless steel and maybe mildly magnetic. Meets ASTM A276 Condition A material specification.
- Aluminum shafts are lightweight, corrosion resistant and nonmagnetic. They have a T4 temper, which means they have been heat treated for increased strength.
- Aluminum shafts have the strength of mild steel with one third the weight.
- C1045 Carbon Steel shafts are generally stronger than aluminum and stainless steel shafts but not as corrosion resistant. These Carbon Steel shafts offers medium strength properties making them ideal for general purpose use.
- C1045 Carbon Steel is recommended for shafts requiring higher strength and wear resistance than carbon steel and stainless steel shafts.
- 1144 Stressproof Alloy Steel has excellent strength and hardness, and is specifically treated to relieve stresses for this durable material.



Dimensions Table – Inch

Diameter	Diameter Tolerance	Flat Width	Dim from Flat to Top of Shaft	Tap Size One End	Tap Depth 1 End	Straightness Tolerance	Length Tolerance
5/16	-.0005 to -.0025	5/32	0.292	8-32	.250	.012 in/ft	$\pm .062$
3/8	-.0005 to -.0025	3/16	0.350	10-32	.375	.012 in/ft	$\pm .062$
1/2	-.0005 to -.0025	1/4	0.467	1/4-20	.500	.012 in/ft	$\pm .062$
5/8	-.0005 to -.0025	5/16	0.583	1/4-20	.500	.012 in/ft	$\pm .062$
3/4	-.0005 to -.0025	3/8	0.700	5/16-18	.625	.012 in/ft	$\pm .062$
7/8	-.0005 to -.0025	7/16	0.816	5/16-18	.625	.012 in/ft	$\pm .062$
15/16	-.0005 to -.0025	15/32	0.875	3/8-16	.750	.012 in/ft	$\pm .062$
1	-.0005 to -.0025	1/2	0.933	3/8-16	.750	.012 in/ft	$\pm .062$

Materials Chart

Material	Mechanical Finish	Edge Type	Specs Met	Rockwell Hardness	Tensile Strength (psi)	Magnetic?
18-8 SS	Ground & Polished	Chamfered	ASTM A 582 Cond A	B83	90,000	Mildly
316 SS	Ground & Polished	Chamfered	ASTM A 276 Cond	B83	85,000	Mildly
C1045 Carbon Steel	Ground & Polished	Chamfered	ASTM A108	C15	91,000	Magnetic
1144 Alloy Steel	Ground & Polished	Chamfered	ASTM A311	C22	115,000	Magnetic
2024 Aluminum	Ground & Polished	Chamfered	ASTM B211	B75	68,000	Nonmagnetic

D-Profile Rotary Shafts with Tap One End – Inch



5/16 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Tap Size 1 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number	2024 Aluminum Part Number
3	8-32	ZSHDTT-312-03000-303SU	ZSHDTT-312-03000-316SU	ZSHDTT-312-03000-104SU	ZSHDTT-312-03000-114SU	ZSHDTT-312-03000-202SU
6	8-32	ZSHDTT-312-06000-303SU	ZSHDTT-312-06000-316SU	ZSHDTT-312-06000-104SU	ZSHDTT-312-06000-114SU	ZSHDTT-312-06000-202SU
9	8-32	ZSHDTT-312-09000-303SU	ZSHDTT-312-09000-316SU	ZSHDTT-312-09000-104SU	ZSHDTT-312-09000-114SU	ZSHDTT-312-09000-202SU
12	8-32	ZSHDTT-312-12000-303SU	ZSHDTT-312-12000-316SU	ZSHDTT-312-12000-104SU	ZSHDTT-312-12000-114SU	ZSHDTT-312-12000-202SU
18	8-32	ZSHDTT-312-18000-303SU	ZSHDTT-312-18000-316SU	ZSHDTT-312-18000-104SU	ZSHDTT-312-18000-114SU	ZSHDTT-312-18000-202SU
24	8-32	ZSHDTT-312-24000-303SU	ZSHDTT-312-24000-316SU	ZSHDTT-312-24000-104SU	ZSHDTT-312-24000-114SU	ZSHDTT-312-24000-202SU
36	8-32	ZSHDTT-312-36000-303SU	ZSHDTT-312-36000-316SU	ZSHDTT-312-36000-104SU	ZSHDTT-312-36000-114SU	ZSHDTT-312-36000-202SU
48	8-32	ZSHDTT-312-48000-303SU	ZSHDTT-312-48000-316SU	ZSHDTT-312-48000-104SU	ZSHDTT-312-48000-114SU	ZSHDTT-312-48000-202SU
60	8-32	ZSHDTT-312-60000-303SU	ZSHDTT-312-60000-316SU	ZSHDTT-312-60000-104SU	ZSHDTT-312-60000-114SU	ZSHDTT-312-60000-202SU
72	8-32	ZSHDTT-312-72000-303SU	ZSHDTT-312-72000-316SU	ZSHDTT-312-72000-104SU	ZSHDTT-312-72000-114SU	ZSHDTT-312-72000-202SU

3/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Tap Size 1 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number	2024 Aluminum Part Number
3	10-32	ZSHDTT-375-03000-303SU	ZSHDTT-375-03000-316SU	ZSHDTT-375-03000-104SU	ZSHDTT-375-03000-114SU	ZSHDTT-375-03000-202SU
6	10-32	ZSHDTT-375-06000-303SU	ZSHDTT-375-06000-316SU	ZSHDTT-375-06000-104SU	ZSHDTT-375-06000-114SU	ZSHDTT-375-06000-202SU
9	10-32	ZSHDTT-375-09000-303SU	ZSHDTT-375-09000-316SU	ZSHDTT-375-09000-104SU	ZSHDTT-375-09000-114SU	ZSHDTT-375-09000-202SU
12	10-32	ZSHDTT-375-12000-303SU	ZSHDTT-375-12000-316SU	ZSHDTT-375-12000-104SU	ZSHDTT-375-12000-114SU	ZSHDTT-375-12000-202SU
18	10-32	ZSHDTT-375-18000-303SU	ZSHDTT-375-18000-316SU	ZSHDTT-375-18000-104SU	ZSHDTT-375-18000-114SU	ZSHDTT-375-18000-202SU
24	10-32	ZSHDTT-375-24000-303SU	ZSHDTT-375-24000-316SU	ZSHDTT-375-24000-104SU	ZSHDTT-375-24000-114SU	ZSHDTT-375-24000-202SU
36	10-32	ZSHDTT-375-36000-303SU	ZSHDTT-375-36000-316SU	ZSHDTT-375-36000-104SU	ZSHDTT-375-36000-114SU	ZSHDTT-375-36000-202SU
48	10-32	ZSHDTT-375-48000-303SU	ZSHDTT-375-48000-316SU	ZSHDTT-375-48000-104SU	ZSHDTT-375-48000-114SU	ZSHDTT-375-48000-202SU
60	10-32	ZSHDTT-375-60000-303SU	ZSHDTT-375-60000-316SU	ZSHDTT-375-60000-104SU	ZSHDTT-375-60000-114SU	ZSHDTT-375-60000-202SU
72	10-32	ZSHDTT-375-72000-303SU	ZSHDTT-375-72000-316SU	ZSHDTT-375-72000-104SU	ZSHDTT-375-72000-114SU	ZSHDTT-375-72000-202SU

1/2 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Tap Size 1 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number	2024 Aluminum Part Number
3	1/4-20	ZSHDTT-500-03000-303SU	ZSHDTT-500-03000-316SU	ZSHDTT-500-03000-104SU	ZSHDTT-500-03000-114SU	ZSHDTT-500-03000-202SU
6	1/4-20	ZSHDTT-500-06000-303SU	ZSHDTT-500-06000-316SU	ZSHDTT-500-06000-104SU	ZSHDTT-500-06000-114SU	ZSHDTT-500-06000-202SU
9	1/4-20	ZSHDTT-500-09000-303SU	ZSHDTT-500-09000-316SU	ZSHDTT-500-09000-104SU	ZSHDTT-500-09000-114SU	ZSHDTT-500-09000-202SU
12	1/4-20	ZSHDTT-500-12000-303SU	ZSHDTT-500-12000-316SU	ZSHDTT-500-12000-104SU	ZSHDTT-500-12000-114SU	ZSHDTT-500-12000-202SU
18	1/4-20	ZSHDTT-500-18000-303SU	ZSHDTT-500-18000-316SU	ZSHDTT-500-18000-104SU	ZSHDTT-500-18000-114SU	ZSHDTT-500-18000-202SU
24	1/4-20	ZSHDTT-500-24000-303SU	ZSHDTT-500-24000-316SU	ZSHDTT-500-24000-104SU	ZSHDTT-500-24000-114SU	ZSHDTT-500-24000-202SU
36	1/4-20	ZSHDTT-500-36000-303SU	ZSHDTT-500-36000-316SU	ZSHDTT-500-36000-104SU	ZSHDTT-500-36000-114SU	ZSHDTT-500-36000-202SU
48	1/4-20	ZSHDTT-500-48000-303SU	ZSHDTT-500-48000-316SU	ZSHDTT-500-48000-104SU	ZSHDTT-500-48000-114SU	ZSHDTT-500-48000-202SU
60	1/4-20	ZSHDTT-500-60000-303SU	ZSHDTT-500-60000-316SU	ZSHDTT-500-60000-104SU	ZSHDTT-500-60000-114SU	ZSHDTT-500-60000-202SU
72	1/4-20	ZSHDTT-500-72000-303SU	ZSHDTT-500-72000-316SU	ZSHDTT-500-72000-104SU	ZSHDTT-500-72000-114SU	ZSHDTT-500-72000-202SU

D-Profile Rotary Shafts with Tap One End — Inch



5/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Tap Size 1 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number	2024 Aluminum Part Number
3	1/4-20	ZSHDTT-625-03000-303SU	ZSHDTT-625-03000-316SU	ZSHDTT-625-03000-104SU	ZSHDTT-625-03000-114SU	ZSHDTT-625-03000-202SU
6	1/4-20	ZSHDTT-625-06000-303SU	ZSHDTT-625-06000-316SU	ZSHDTT-625-06000-104SU	ZSHDTT-625-06000-114SU	ZSHDTT-625-06000-202SU
9	1/4-20	ZSHDTT-625-09000-303SU	ZSHDTT-625-09000-316SU	ZSHDTT-625-09000-104SU	ZSHDTT-625-09000-114SU	ZSHDTT-625-09000-202SU
12	1/4-20	ZSHDTT-625-12000-303SU	ZSHDTT-625-12000-316SU	ZSHDTT-625-12000-104SU	ZSHDTT-625-12000-114SU	ZSHDTT-625-12000-202SU
18	1/4-20	ZSHDTT-625-18000-303SU	ZSHDTT-625-18000-316SU	ZSHDTT-625-18000-104SU	ZSHDTT-625-18000-114SU	ZSHDTT-625-18000-202SU
24	1/4-20	ZSHDTT-625-24000-303SU	ZSHDTT-625-24000-316SU	ZSHDTT-625-24000-104SU	ZSHDTT-625-24000-114SU	ZSHDTT-625-24000-202SU
36	1/4-20	ZSHDTT-625-36000-303SU	ZSHDTT-625-36000-316SU	ZSHDTT-625-36000-104SU	ZSHDTT-625-36000-114SU	ZSHDTT-625-36000-202SU
48	1/4-20	ZSHDTT-625-48000-303SU	ZSHDTT-625-48000-316SU	ZSHDTT-625-48000-104SU	ZSHDTT-625-48000-114SU	ZSHDTT-625-48000-202SU
60	1/4-20	ZSHDTT-625-60000-303SU	ZSHDTT-625-60000-316SU	ZSHDTT-625-60000-104SU	ZSHDTT-625-60000-114SU	ZSHDTT-625-60000-202SU
72	1/4-20	ZSHDTT-625-72000-303SU	ZSHDTT-625-72000-316SU	ZSHDTT-625-72000-104SU	ZSHDTT-625-72000-114SU	ZSHDTT-625-72000-202SU

3/4 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Tap Size 1 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number	2024 Aluminum Part Number
3	5/16-18	ZSHDTT-750-03000-303SU	ZSHDTT-750-03000-316SU	ZSHDTT-750-03000-104SU	ZSHDTT-750-03000-114SU	ZSHDTT-750-03000-202SU
6	5/16-18	ZSHDTT-750-06000-303SU	ZSHDTT-750-06000-316SU	ZSHDTT-750-06000-104SU	ZSHDTT-750-06000-114SU	ZSHDTT-750-06000-202SU
9	5/16-18	ZSHDTT-750-09000-303SU	ZSHDTT-750-09000-316SU	ZSHDTT-750-09000-104SU	ZSHDTT-750-09000-114SU	ZSHDTT-750-09000-202SU
12	5/16-18	ZSHDTT-750-12000-303SU	ZSHDTT-750-12000-316SU	ZSHDTT-750-12000-104SU	ZSHDTT-750-12000-114SU	ZSHDTT-750-12000-202SU
18	5/16-18	ZSHDTT-750-18000-303SU	ZSHDTT-750-18000-316SU	ZSHDTT-750-18000-104SU	ZSHDTT-750-18000-114SU	ZSHDTT-750-18000-202SU
24	5/16-18	ZSHDTT-750-24000-303SU	ZSHDTT-750-24000-316SU	ZSHDTT-750-24000-104SU	ZSHDTT-750-24000-114SU	ZSHDTT-750-24000-202SU
36	5/16-18	ZSHDTT-750-36000-303SU	ZSHDTT-750-36000-316SU	ZSHDTT-750-36000-104SU	ZSHDTT-750-36000-114SU	ZSHDTT-750-36000-202SU
48	5/16-18	ZSHDTT-750-48000-303SU	ZSHDTT-750-48000-316SU	ZSHDTT-750-48000-104SU	ZSHDTT-750-48000-114SU	ZSHDTT-750-48000-202SU
60	5/16-18	ZSHDTT-750-60000-303SU	ZSHDTT-750-60000-316SU	ZSHDTT-750-60000-104SU	ZSHDTT-750-60000-114SU	ZSHDTT-750-60000-202SU
72	5/16-18	ZSHDTT-750-72000-303SU	ZSHDTT-750-72000-316SU	ZSHDTT-750-72000-104SU	ZSHDTT-750-72000-114SU	ZSHDTT-750-72000-202SU

7/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Tap Size 1 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number	2024 Aluminum Part Number
3	5/16-18	ZSHDTT-875-03000-303SU	ZSHDTT-875-03000-316SU	ZSHDTT-875-03000-104SU	ZSHDTT-875-03000-114SU	ZSHDTT-875-03000-202SU
6	5/16-18	ZSHDTT-875-06000-303SU	ZSHDTT-875-06000-316SU	ZSHDTT-875-06000-104SU	ZSHDTT-875-06000-114SU	ZSHDTT-875-06000-202SU
9	5/16-18	ZSHDTT-875-09000-303SU	ZSHDTT-875-09000-316SU	ZSHDTT-875-09000-104SU	ZSHDTT-875-09000-114SU	ZSHDTT-875-09000-202SU
12	5/16-18	ZSHDTT-875-12000-303SU	ZSHDTT-875-12000-316SU	ZSHDTT-875-12000-104SU	ZSHDTT-875-12000-114SU	ZSHDTT-875-12000-202SU
18	5/16-18	ZSHDTT-875-18000-303SU	ZSHDTT-875-18000-316SU	ZSHDTT-875-18000-104SU	ZSHDTT-875-18000-114SU	ZSHDTT-875-18000-202SU
24	5/16-18	ZSHDTT-875-24000-303SU	ZSHDTT-875-24000-316SU	ZSHDTT-875-24000-104SU	ZSHDTT-875-24000-114SU	ZSHDTT-875-24000-202SU
36	5/16-18	ZSHDTT-875-36000-303SU	ZSHDTT-875-36000-316SU	ZSHDTT-875-36000-104SU	ZSHDTT-875-36000-114SU	ZSHDTT-875-36000-202SU
48	5/16-18	ZSHDTT-875-48000-303SU	ZSHDTT-875-48000-316SU	ZSHDTT-875-48000-104SU	ZSHDTT-875-48000-114SU	ZSHDTT-875-48000-202SU
60	5/16-18	ZSHDTT-875-60000-303SU	ZSHDTT-875-60000-316SU	ZSHDTT-875-60000-104SU	ZSHDTT-875-60000-114SU	ZSHDTT-875-60000-202SU
72	5/16-18	ZSHDTT-875-72000-303SU	ZSHDTT-875-72000-316SU	ZSHDTT-875-72000-104SU	ZSHDTT-875-72000-114SU	ZSHDTT-875-72000-202SU

D-Profile Rotary Shafts with Tap One End – Inch



15/16 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Tap Size 1 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number	2024 Aluminum Part Number
3	3/8-16	—	—	ZSHDTT-937-03000-104SU	—	—
6	3/8-16	—	—	ZSHDTT-937-06000-104SU	—	—
9	3/8-16	—	—	ZSHDTT-937-09000-104SU	—	—
12	3/8-16	—	—	ZSHDTT-937-12000-104SU	—	—
18	3/8-16	—	—	ZSHDTT-937-18000-104SU	—	—
24	3/8-16	—	—	ZSHDTT-937-24000-104SU	—	—
36	3/8-16	—	—	ZSHDTT-937-36000-104SU	—	—
48	3/8-16	—	—	ZSHDTT-937-48000-104SU	—	—
60	3/8-16	—	—	ZSHDTT-937-60000-104SU	—	—
72	3/8-16	—	—	ZSHDTT-937-72000-104SU	—	—

1 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Tap Size 1 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number	2024 Aluminum Part Number
3	3/8-16	ZSHDTT-1000-03000-303SU	ZSHDTT-1000-03000-316SU	ZSHDTT-1000-03000-104SU	ZSHDTT-1000-03000-114SU	ZSHDTT-1000-03000-202SU
6	3/8-16	ZSHDTT-1000-06000-303SU	ZSHDTT-1000-06000-316SU	ZSHDTT-1000-06000-104SU	ZSHDTT-1000-06000-114SU	ZSHDTT-1000-06000-202SU
9	3/8-16	ZSHDTT-1000-09000-303SU	ZSHDTT-1000-09000-316SU	ZSHDTT-1000-09000-104SU	ZSHDTT-1000-09000-114SU	ZSHDTT-1000-09000-202SU
12	3/8-16	ZSHDTT-1000-12000-303SU	ZSHDTT-1000-12000-316SU	ZSHDTT-1000-12000-104SU	ZSHDTT-1000-12000-114SU	ZSHDTT-1000-12000-202SU
18	3/8-16	ZSHDTT-1000-18000-303SU	ZSHDTT-1000-18000-316SU	ZSHDTT-1000-18000-104SU	ZSHDTT-1000-18000-114SU	ZSHDTT-1000-18000-202SU
24	3/8-16	ZSHDTT-1000-24000-303SU	ZSHDTT-1000-24000-316SU	ZSHDTT-1000-24000-104SU	ZSHDTT-1000-24000-114SU	ZSHDTT-1000-24000-202SU
36	3/8-16	ZSHDTT-1000-36000-303SU	ZSHDTT-1000-36000-316SU	ZSHDTT-1000-36000-104SU	ZSHDTT-1000-36000-114SU	ZSHDTT-1000-36000-202SU
48	3/8-16	ZSHDTT-1000-48000-303SU	ZSHDTT-1000-48000-316SU	ZSHDTT-1000-48000-104SU	ZSHDTT-1000-48000-114SU	ZSHDTT-1000-48000-202SU
60	3/8-16	ZSHDTT-1000-60000-303SU	ZSHDTT-1000-60000-316SU	ZSHDTT-1000-60000-104SU	ZSHDTT-1000-60000-114SU	ZSHDTT-1000-60000-202SU
72	3/8-16	ZSHDTT-1000-72000-303SU	ZSHDTT-1000-72000-316SU	ZSHDTT-1000-72000-104SU	ZSHDTT-1000-72000-114SU	ZSHDTT-1000-72000-202SU



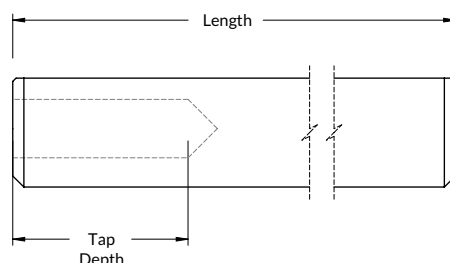
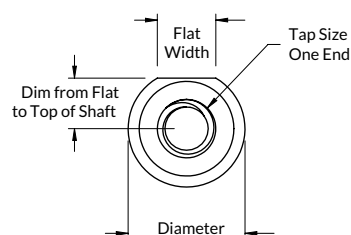
D-Profile Rotary Shafts with Tap One End – Metric

Product Information

D-Profile shafts are a specialized type of rotary shaft, offering a unique mounting solution. These internally threaded shafts offer versatile connection options, allowing direct attachment to threaded components or secure fastening with hardware. Their flat surface facilitates set screw engagement, ensuring firm mounting of gears, sprockets, and bearings. These shafts are available in various configurations, including full D-profile length or partially D-profile length at each end, providing flexibility for diverse mechanical applications.

All shafts are made in the USA from DFARS compliant & RoHS compliant stainless steel and shafts are fully lot traceable. Length tolerance is $\pm 1.6\text{mm}$ and straightness tolerance is $.33\text{mm}$ per 300mm.

- Shafts are turned, ground and polished to tight diameter and straightness tolerances.
- 18-8 stainless steel shafts offer excellent corrosion resistant and can be mildly magnetic. Meets ASTM A582 Condition A material specification.
- Type 316 stainless steel, also known as marine stainless steel, offers superior corrosion resistant than 18-8 stainless steel and maybe mildly magnetic. Meets ASTM A276 Condition A material specification.
- C1045 Carbon Steel shafts are generally stronger than aluminum and stainless steel shafts but not as corrosion resistant. These Carbon Steel shafts offers medium strength properties making them ideal for general purpose use.
- C1045 Carbon Steel is recommended for shafts requiring higher strength and wear resistance than carbon steel and stainless steel shafts.
- 1144 Stressproof Alloy Steel has excellent strength and hardness, and is specifically treated to relieve stresses for this durable material.



Dimensions Table – Metric

Diameter	Diameter Tolerance	Flat Width	Dim from Flat to Top of Shaft	Tap Size One End	Tap Depth 1 End	Straightness Tolerance	Length Tolerance
8 mm	-.0635 to 0mm	4.00	7.50	M4x0.7	8.00	.33mm per 300mm	$\pm 1.6\text{mm}$
10 mm	-.0635 to 0mm	5.00	9.30	M4x0.7	8.00	.33mm per 300mm	$\pm 1.6\text{mm}$
12 mm	-.0635 to 0mm	6.00	11.20	M6x1	12.00	.33mm per 300mm	$\pm 1.6\text{mm}$
15 mm	-.0635 to 0mm	7.50	14.00	M6x1	12.00	.33mm per 300mm	$\pm 1.6\text{mm}$
20 mm	-.0635 to 0mm	10.00	18.60	M8x1.25	16.00	.33mm per 300mm	$\pm 1.6\text{mm}$
24 mm	-.0635 to 0mm	12.00	22.40	M10x1.5	20.00	.33mm per 300mm	$\pm 1.6\text{mm}$
25 mm	-.0635 to 0mm	12.50	23.30	M10x1.5	20.00	.33mm per 300mm	$\pm 1.6\text{mm}$

Materials Chart

Material	Mechanical Finish	Edge Type	Specs Met	Rockwell Hardness	Tensile Strength (psi)	Magnetic?
18-8 SS	Ground & Polished	Chamfered	ASTM A 582 Cond A	B83	90,000	Mildly
316 SS	Ground & Polished	Chamfered	ASTM A 276 Cond	B83	85,000	Mildly
C1045 Carbon Steel	Ground & Polished	Chamfered	ASTM A108	C15	91,000	Magnetic
1144 Alloy Steel	Ground & Polished	Chamfered	ASTM A311	C22	115,000	Magnetic

D-Profile Rotary Shafts with Tap One End – Metric



8mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Tap Size 1 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	M4x0.7	ZSHD TT-M08-M0300-303SU	ZSHD TT-M08-M0300-316SU	ZSHD TT-M08-M0300-104SU	ZSHD TT-M08-M0300-114SU
500	M4x0.7	ZSHD TT-M08-M0500-303SU	ZSHD TT-M08-M0500-316SU	ZSHD TT-M08-M0500-104SU	ZSHD TT-M08-M0500-114SU
1,000	M4x0.7	ZSHD TT-M08-M1000-303SU	ZSHD TT-M08-M1000-316SU	ZSHD TT-M08-M1000-104SU	ZSHD TT-M08-M1000-114SU
1,200	M4x0.7	ZSHD TT-M08-M1200-303SU	ZSHD TT-M08-M1200-316SU	ZSHD TT-M08-M1200-104SU	ZSHD TT-M08-M1200-114SU
1,500	M4x0.7	ZSHD TT-M08-M1500-303SU	ZSHD TT-M08-M1500-316SU	ZSHD TT-M08-M1500-104SU	ZSHD TT-M08-M1500-114SU
1,800	M4x0.7	ZSHD TT-M08-M1800-303SU	ZSHD TT-M08-M1800-316SU	ZSHD TT-M08-M1800-104SU	ZSHD TT-M08-M1800-114SU

10mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Tap Size 1 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	M4x0.7	ZSHD TT-M10-M0300-303SU	ZSHD TT-M10-M0300-316SU	ZSHD TT-M10-M0300-104SU	ZSHD TT-M10-M0300-114SU
500	M4x0.7	ZSHD TT-M10-M0500-303SU	ZSHD TT-M10-M0500-316SU	ZSHD TT-M10-M0500-104SU	ZSHD TT-M10-M0500-114SU
1,000	M4x0.7	ZSHD TT-M10-M1000-303SU	ZSHD TT-M10-M1000-316SU	ZSHD TT-M10-M1000-104SU	ZSHD TT-M10-M1000-114SU
1,200	M4x0.7	ZSHD TT-M10-M1200-303SU	ZSHD TT-M10-M1200-316SU	ZSHD TT-M10-M1200-104SU	ZSHD TT-M10-M1200-114SU
1,500	M4x0.7	ZSHD TT-M10-M1500-303SU	ZSHD TT-M10-M1500-316SU	ZSHD TT-M10-M1500-104SU	ZSHD TT-M10-M1500-114SU
1,800	M4x0.7	ZSHD TT-M10-M1800-303SU	ZSHD TT-M10-M1800-316SU	ZSHD TT-M10-M1800-104SU	ZSHD TT-M10-M1800-114SU

12mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Tap Size 1 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	M6x1	ZSHD TT-M12-M0300-303SU	ZSHD TT-M12-M0300-316SU	ZSHD TT-M12-M0300-104SU	ZSHD TT-M12-M0300-114SU
500	M6x1	ZSHD TT-M12-M0500-303SU	ZSHD TT-M12-M0500-316SU	ZSHD TT-M12-M0500-104SU	ZSHD TT-M12-M0500-114SU
1,000	M6x1	ZSHD TT-M12-M1000-303SU	ZSHD TT-M12-M1000-316SU	ZSHD TT-M12-M1000-104SU	ZSHD TT-M12-M1000-114SU
1,200	M6x1	ZSHD TT-M12-M1200-303SU	ZSHD TT-M12-M1200-316SU	ZSHD TT-M12-M1200-104SU	ZSHD TT-M12-M1200-114SU
1,500	M6x1	ZSHD TT-M12-M1500-303SU	ZSHD TT-M12-M1500-316SU	ZSHD TT-M12-M1500-104SU	ZSHD TT-M12-M1500-114SU
1,800	M6x1	ZSHD TT-M12-M1800-303SU	ZSHD TT-M12-M1800-316SU	ZSHD TT-M12-M1800-104SU	ZSHD TT-M12-M1800-114SU

15mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Tap Size 1 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	M6x1	ZSHD TT-M15-M0300-303SU	ZSHD TT-M15-M0300-316SU	ZSHD TT-M15-M0300-104SU	ZSHD TT-M15-M0300-114SU
500	M6x1	ZSHD TT-M15-M0500-303SU	ZSHD TT-M15-M0500-316SU	ZSHD TT-M15-M0500-104SU	ZSHD TT-M15-M0500-114SU
1,000	M6x1	ZSHD TT-M15-M1000-303SU	ZSHD TT-M15-M1000-316SU	ZSHD TT-M15-M1000-104SU	ZSHD TT-M15-M1000-114SU
1,200	M6x1	ZSHD TT-M15-M1200-303SU	ZSHD TT-M15-M1200-316SU	ZSHD TT-M15-M1200-104SU	ZSHD TT-M15-M1200-114SU
1,500	M6x1	ZSHD TT-M15-M1500-303SU	ZSHD TT-M15-M1500-316SU	ZSHD TT-M15-M1500-104SU	ZSHD TT-M15-M1500-114SU
1,800	M6x1	ZSHD TT-M15-M1800-303SU	ZSHD TT-M15-M1800-316SU	ZSHD TT-M15-M1800-104SU	ZSHD TT-M15-M1800-114SU

D-Profile Rotary Shafts with Tap One End – Metric

18-8 & 316 SS, Steel



20mm Diameter (Tolerance: +0/-.0635mm)

O'all Lg (mm)	Tap Size 1 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	M8x1.25	ZSHDTT-M20-M0300-303SU	ZSHDTT-M20-M0300-316SU	ZSHDTT-M20-M0300-104SU	ZSHDTT-M20-M0300-114SU
500	M8x1.25	ZSHDTT-M20-M0500-303SU	ZSHDTT-M20-M0500-316SU	ZSHDTT-M20-M0500-104SU	ZSHDTT-M20-M0500-114SU
1,000	M8x1.25	ZSHDTT-M20-M1000-303SU	ZSHDTT-M20-M1000-316SU	ZSHDTT-M20-M1000-104SU	ZSHDTT-M20-M1000-114SU
1,200	M8x1.25	ZSHDTT-M20-M1200-303SU	ZSHDTT-M20-M1200-316SU	ZSHDTT-M20-M1200-104SU	ZSHDTT-M20-M1200-114SU
1,500	M8x1.25	ZSHDTT-M20-M1500-303SU	ZSHDTT-M20-M1500-316SU	ZSHDTT-M20-M1500-104SU	ZSHDTT-M20-M1500-114SU
1,800	M8x1.25	ZSHDTT-M20-M1800-303SU	ZSHDTT-M20-M1800-316SU	ZSHDTT-M20-M1800-104SU	ZSHDTT-M20-M1800-114SU

24mm Diameter (Tolerance: +0/-.0635mm)

O'all Lg (mm)	Tap Size 1 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	M10x1.5	ZSHDTT-M24-M0300-303SU	ZSHDTT-M24-M0300-316SU	ZSHDTT-M24-M0300-104SU	ZSHDTT-M24-M0300-114SU
500	M10x1.5	ZSHDTT-M24-M0500-303SU	ZSHDTT-M24-M0500-316SU	ZSHDTT-M24-M0500-104SU	ZSHDTT-M24-M0500-114SU
1,000	M10x1.5	ZSHDTT-M24-M1000-303SU	ZSHDTT-M24-M1000-316SU	ZSHDTT-M24-M1000-104SU	ZSHDTT-M24-M1000-114SU
1,200	M10x1.5	ZSHDTT-M24-M1200-303SU	ZSHDTT-M24-M1200-316SU	ZSHDTT-M24-M1200-104SU	ZSHDTT-M24-M1200-114SU
1,500	M10x1.5	ZSHDTT-M24-M1500-303SU	ZSHDTT-M24-M1500-316SU	ZSHDTT-M24-M1500-104SU	ZSHDTT-M24-M1500-114SU
1,800	M10x1.5	ZSHDTT-M24-M1800-303SU	ZSHDTT-M24-M1800-316SU	ZSHDTT-M24-M1800-104SU	ZSHDTT-M24-M1800-114SU

25mm Diameter (Tolerance: +0/-.0635mm)

O'all Lg (mm)	Tap Size 1 End	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Stressproof Steel Part Number
300	M10x1.5	ZSHDTT-M25-M0300-303SU	ZSHDTT-M25-M0300-316SU	ZSHDTT-M25-M0300-104SU	ZSHDTT-M25-M0300-114SU
500	M10x1.5	ZSHDTT-M25-M0500-303SU	ZSHDTT-M25-M0500-316SU	ZSHDTT-M25-M0500-104SU	ZSHDTT-M25-M0500-114SU
1,000	M10x1.5	ZSHDTT-M25-M1000-303SU	ZSHDTT-M25-M1000-316SU	ZSHDTT-M25-M1000-104SU	ZSHDTT-M25-M1000-114SU
1,200	M10x1.5	ZSHDTT-M25-M1200-303SU	ZSHDTT-M25-M1200-316SU	ZSHDTT-M25-M1200-104SU	ZSHDTT-M25-M1200-114SU
1,500	M10x1.5	ZSHDTT-M25-M1500-303SU	ZSHDTT-M25-M1500-316SU	ZSHDTT-M25-M1500-104SU	ZSHDTT-M25-M1500-114SU
1,800	M10x1.5	ZSHDTT-M25-M1800-303SU	ZSHDTT-M25-M1800-316SU	ZSHDTT-M25-M1800-104SU	ZSHDTT-M25-M1800-114SU

Tapped End(s) Rotary Shafts – Inch

18-8 & 316 SS, Steel, Aluminum

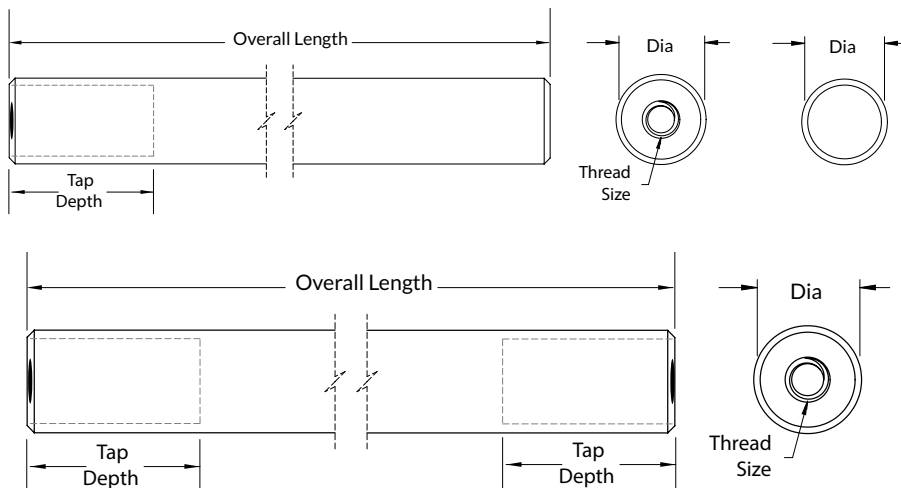


Product Information

Internal threads enable direct mounting of these shafts to threaded fasteners, eliminating the need for additional support. Engineered for low friction in both manual and automated systems, their smooth, hard, and wear-resistant surfaces are ideal for use with linear bearings. Commonly found in packaging, machine tool, and material handling applications, these shafts undergo precise turning, grinding, and polishing to ensure strict diameter and straightness tolerances. A hardened surface provides exceptional durability under repeated motion while maintaining a soft core to absorb stress from shifting loads. Chamfered ends protect bearings, housings, and other components from damage during installation.

All shafts are made in the USA from DFARS compliant & RoHS compliant stainless steel and shafts are fully lot traceable. Length tolerance is ± 0.062 and straightness tolerance is 0.012 in/ft.

- Shafts are turned, ground and polished to tight diameter and straightness tolerances.
- 18-8 stainless steel shafts offer excellent corrosion resistant and can be mildly magnetic. Meets ASTM A582 Condition A material specification.
- Type 316 stainless steel, also known as marine stainless steel, offers superior corrosion resistant than 18-8 stainless steel and maybe mildly magnetic. Meets ASTM A276 Condition A material specification.
- Aluminum shafts are lightweight, corrosion resistant and nonmagnetic. They have a T4 temper, which means they have been heat treated for increased strength.
- Aluminum shafts have the strength of mild steel with one third the weight.
- C1045 Carbon Steel shafts are generally stronger than aluminum and stainless steel shafts but not as corrosion resistant. These Carbon Steel shafts offers medium strength properties making them ideal for general purpose use.
- C1045 Carbon Steel is recommended for shafts requiring higher strength and wear resistance than carbon steel and stainless steel shafts.
- 1144 Stressproof Alloy Steel has excellent strength and hardness, and is specifically treated to relieve stresses for this durable material.



Materials Chart

Material	Mechanical Finish	Edge Type	Specs Met	Rockwell Hardness	Tensile Strength (psi)	Magnetic?
18-8 SS	Ground & Polished	Chamfered	ASTM A 582 Cond A	B83	90,000	Mildly
316 SS	Ground & Polished	Chamfered	ASTM A 276 Cond	B83	85,000	Mildly
C1045 Carbon Steel	Ground & Polished	Chamfered	ASTM A108	C15	91,000	Magnetic
1144 Alloy Steel	Ground & Polished	Chamfered	ASTM A311	C22	115,000	Magnetic
2024 Aluminum	Ground & Polished	Chamfered	ASTM B211	B75	68,000	Nonmagnetic

Tapped End Rotary Shafts One End – Inch



5/16 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Thread Size	Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	10-32	.375	ZSHI-312-03000-303SU	ZSHI-312-03000-316SU	ZSHI-312-03000-104SU	ZSHI-312-03000-114SU	ZSHI-312-03000-202SU
6	10-32	.375	ZSHI-312-06000-303SU	ZSHI-312-06000-316SU	ZSHI-312-06000-104SU	ZSHI-312-06000-114SU	ZSHI-312-06000-202SU
9	10-32	.375	ZSHI-312-09000-303SU	ZSHI-312-09000-316SU	ZSHI-312-09000-104SU	ZSHI-312-09000-114SU	ZSHI-312-09000-202SU
12	10-32	.375	ZSHI-312-12000-303SU	ZSHI-312-12000-316SU	ZSHI-312-12000-104SU	ZSHI-312-12000-114SU	ZSHI-312-12000-202SU
18	10-32	.375	ZSHI-312-18000-303SU	ZSHI-312-18000-316SU	ZSHI-312-18000-104SU	ZSHI-312-18000-114SU	ZSHI-312-18000-202SU
24	10-32	.375	ZSHI-312-24000-303SU	ZSHI-312-24000-316SU	ZSHI-312-24000-104SU	ZSHI-312-24000-114SU	ZSHI-312-24000-202SU
36	10-32	.375	ZSHI-312-36000-303SU	ZSHI-312-36000-316SU	ZSHI-312-36000-104SU	ZSHI-312-36000-114SU	ZSHI-312-36000-202SU
48	10-32	.375	ZSHI-312-48000-303SU	ZSHI-312-48000-316SU	ZSHI-312-48000-104SU	ZSHI-312-48000-114SU	ZSHI-312-48000-202SU
60	10-32	.375	ZSHI-312-60000-303SU	ZSHI-312-60000-316SU	ZSHI-312-60000-104SU	ZSHI-312-60000-114SU	ZSHI-312-60000-202SU
72	10-32	.375	ZSHI-312-72000-303SU	ZSHI-312-72000-316SU	ZSHI-312-72000-104SU	ZSHI-312-72000-114SU	ZSHI-312-72000-202SU

3/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Thread Size	Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	1/4-20	0.5	ZSHI-375-03000-303SU	ZSHI-375-03000-316SU	ZSHI-375-03000-104SU	ZSHI-375-03000-114SU	ZSHI-375-03000-202SU
6	1/4-20	0.5	ZSHI-375-06000-303SU	ZSHI-375-06000-316SU	ZSHI-375-06000-104SU	ZSHI-375-06000-114SU	ZSHI-375-06000-202SU
9	1/4-20	0.5	ZSHI-375-09000-303SU	ZSHI-375-09000-316SU	ZSHI-375-09000-104SU	ZSHI-375-09000-114SU	ZSHI-375-09000-202SU
12	1/4-20	0.5	ZSHI-375-12000-303SU	ZSHI-375-12000-316SU	ZSHI-375-12000-104SU	ZSHI-375-12000-114SU	ZSHI-375-12000-202SU
18	1/4-20	0.5	ZSHI-375-18000-303SU	ZSHI-375-18000-316SU	ZSHI-375-18000-104SU	ZSHI-375-18000-114SU	ZSHI-375-18000-202SU
24	1/4-20	0.5	ZSHI-375-24000-303SU	ZSHI-375-24000-316SU	ZSHI-375-24000-104SU	ZSHI-375-24000-114SU	ZSHI-375-24000-202SU
36	1/4-20	0.5	ZSHI-375-36000-303SU	ZSHI-375-36000-316SU	ZSHI-375-36000-104SU	ZSHI-375-36000-114SU	ZSHI-375-36000-202SU
48	1/4-20	0.5	ZSHI-375-48000-303SU	ZSHI-375-48000-316SU	ZSHI-375-48000-104SU	ZSHI-375-48000-114SU	ZSHI-375-48000-202SU
60	1/4-20	0.5	ZSHI-375-60000-303SU	ZSHI-375-60000-316SU	ZSHI-375-60000-104SU	ZSHI-375-60000-114SU	ZSHI-375-60000-202SU
72	1/4-20	0.5	ZSHI-375-72000-303SU	ZSHI-375-72000-316SU	ZSHI-375-72000-104SU	ZSHI-375-72000-114SU	ZSHI-375-72000-202SU

1/2 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Thread Size	Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	5/16-18	0.625	ZSHI-500-03000-303SU	ZSHI-500-03000-316SU	ZSHI-500-03000-104SU	ZSHI-500-03000-114SU	ZSHI-500-03000-202SU
6	5/16-18	0.625	ZSHI-500-06000-303SU	ZSHI-500-06000-316SU	ZSHI-500-06000-104SU	ZSHI-500-06000-114SU	ZSHI-500-06000-202SU
9	5/16-18	0.625	ZSHI-500-09000-303SU	ZSHI-500-09000-316SU	ZSHI-500-09000-104SU	ZSHI-500-09000-114SU	ZSHI-500-09000-202SU
12	5/16-18	0.625	ZSHI-500-12000-303SU	ZSHI-500-12000-316SU	ZSHI-500-12000-104SU	ZSHI-500-12000-114SU	ZSHI-500-12000-202SU
18	5/16-18	0.625	ZSHI-500-18000-303SU	ZSHI-500-18000-316SU	ZSHI-500-18000-104SU	ZSHI-500-18000-114SU	ZSHI-500-18000-202SU
24	5/16-18	0.625	ZSHI-500-24000-303SU	ZSHI-500-24000-316SU	ZSHI-500-24000-104SU	ZSHI-500-24000-114SU	ZSHI-500-24000-202SU
36	5/16-18	0.625	ZSHI-500-36000-303SU	ZSHI-500-36000-316SU	ZSHI-500-36000-104SU	ZSHI-500-36000-114SU	ZSHI-500-36000-202SU
48	5/16-18	0.625	ZSHI-500-48000-303SU	ZSHI-500-48000-316SU	ZSHI-500-48000-104SU	ZSHI-500-48000-114SU	ZSHI-500-48000-202SU
60	5/16-18	0.625	ZSHI-500-60000-303SU	ZSHI-500-60000-316SU	ZSHI-500-60000-104SU	ZSHI-500-60000-114SU	ZSHI-500-60000-202SU
72	5/16-18	0.625	ZSHI-500-72000-303SU	ZSHI-500-72000-316SU	ZSHI-500-72000-104SU	ZSHI-500-72000-114SU	ZSHI-500-72000-202SU

Tapped End Rotary Shafts One End – Inch



9/16 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Thread Size	Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	5/16-18	.625	ZSHI-562-03000-303SU	ZSHI-562-03000-316SU	ZSHI-562-03000-104SU	ZSHI-562-03000-114SU	—
6	5/16-18	.625	ZSHI-562-06000-303SU	ZSHI-562-06000-316SU	ZSHI-562-06000-104SU	ZSHI-562-06000-114SU	—
9	5/16-18	.625	ZSHI-562-09000-303SU	ZSHI-562-09000-316SU	ZSHI-562-09000-104SU	ZSHI-562-09000-114SU	—
12	5/16-18	.625	ZSHI-562-12000-303SU	ZSHI-562-12000-316SU	ZSHI-562-12000-104SU	ZSHI-562-12000-114SU	—
18	5/16-18	.625	ZSHI-562-18000-303SU	ZSHI-562-18000-316SU	ZSHI-562-18000-104SU	ZSHI-562-18000-114SU	—
24	5/16-18	.625	ZSHI-562-24000-303SU	ZSHI-562-24000-316SU	ZSHI-562-24000-104SU	ZSHI-562-24000-114SU	—
36	5/16-18	.625	ZSHI-562-36000-303SU	ZSHI-562-36000-316SU	ZSHI-562-36000-104SU	ZSHI-562-36000-114SU	—
48	5/16-18	.625	ZSHI-562-48000-303SU	ZSHI-562-48000-316SU	ZSHI-562-48000-104SU	ZSHI-562-48000-114SU	—
60	5/16-18	.625	ZSHI-562-60000-303SU	ZSHI-562-60000-316SU	ZSHI-562-60000-104SU	ZSHI-562-60000-114SU	—
72	5/16-18	.625	ZSHI-562-72000-303SU	ZSHI-562-72000-316SU	ZSHI-562-72000-104SU	ZSHI-562-72000-114SU	—

5/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Thread Size	Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	3/8-16	.750	ZSHI-625-03000-303SU	ZSHI-625-03000-316SU	ZSHI-625-03000-104SU	ZSHI-625-03000-114SU	ZSHI-625-03000-202SU
6	3/8-16	.750	ZSHI-625-06000-303SU	ZSHI-625-06000-316SU	ZSHI-625-06000-104SU	ZSHI-625-06000-114SU	ZSHI-625-06000-202SU
9	3/8-16	.750	ZSHI-625-09000-303SU	ZSHI-625-09000-316SU	ZSHI-625-09000-104SU	ZSHI-625-09000-114SU	ZSHI-625-09000-202SU
12	3/8-16	.750	ZSHI-625-12000-303SU	ZSHI-625-12000-316SU	ZSHI-625-12000-104SU	ZSHI-625-12000-114SU	ZSHI-625-12000-202SU
18	3/8-16	.750	ZSHI-625-18000-303SU	ZSHI-625-18000-316SU	ZSHI-625-18000-104SU	ZSHI-625-18000-114SU	ZSHI-625-18000-202SU
24	3/8-16	.750	ZSHI-625-24000-303SU	ZSHI-625-24000-316SU	ZSHI-625-24000-104SU	ZSHI-625-24000-114SU	ZSHI-625-24000-202SU
36	3/8-16	.750	ZSHI-625-36000-303SU	ZSHI-625-36000-316SU	ZSHI-625-36000-104SU	ZSHI-625-36000-114SU	ZSHI-625-36000-202SU
48	3/8-16	.750	ZSHI-625-48000-303SU	ZSHI-625-48000-316SU	ZSHI-625-48000-104SU	ZSHI-625-48000-114SU	ZSHI-625-48000-202SU
60	3/8-16	.750	ZSHI-625-60000-303SU	ZSHI-625-60000-316SU	ZSHI-625-60000-104SU	ZSHI-625-60000-114SU	ZSHI-625-60000-202SU
72	3/8-16	.750	ZSHI-625-72000-303SU	ZSHI-625-72000-316SU	ZSHI-625-72000-104SU	ZSHI-625-72000-114SU	ZSHI-625-72000-202SU

3/4 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Thread Size	Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	1/2-13	1	ZSHI-750-03000-303SU	ZSHI-750-03000-316SU	ZSHI-750-03000-104SU	ZSHI-750-03000-114SU	ZSHI-750-03000-202SU
6	1/2-13	1	ZSHI-750-06000-303SU	ZSHI-750-06000-316SU	ZSHI-750-06000-104SU	ZSHI-750-06000-114SU	ZSHI-750-06000-202SU
9	1/2-13	1	ZSHI-750-09000-303SU	ZSHI-750-09000-316SU	ZSHI-750-09000-104SU	ZSHI-750-09000-114SU	ZSHI-750-09000-202SU
12	1/2-13	1	ZSHI-750-12000-303SU	ZSHI-750-12000-316SU	ZSHI-750-12000-104SU	ZSHI-750-12000-114SU	ZSHI-750-12000-202SU
18	1/2-13	1	ZSHI-750-18000-303SU	ZSHI-750-18000-316SU	ZSHI-750-18000-104SU	ZSHI-750-18000-114SU	ZSHI-750-18000-202SU
24	1/2-13	1	ZSHI-750-24000-303SU	ZSHI-750-24000-316SU	ZSHI-750-24000-104SU	ZSHI-750-24000-114SU	ZSHI-750-24000-202SU
36	1/2-13	1	ZSHI-750-36000-303SU	ZSHI-750-36000-316SU	ZSHI-750-36000-104SU	ZSHI-750-36000-114SU	ZSHI-750-36000-202SU
48	1/2-13	1	ZSHI-750-48000-303SU	ZSHI-750-48000-316SU	ZSHI-750-48000-104SU	ZSHI-750-48000-114SU	ZSHI-750-48000-202SU
60	1/2-13	1	ZSHI-750-60000-303SU	ZSHI-750-60000-316SU	ZSHI-750-60000-104SU	ZSHI-750-60000-114SU	ZSHI-750-60000-202SU
72	1/2-13	1	ZSHI-750-72000-303SU	ZSHI-750-72000-316SU	ZSHI-750-72000-104SU	ZSHI-750-72000-114SU	ZSHI-750-72000-202SU

Tapped End Rotary Shafts One End – Inch



7/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Thread Size	Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	5/8-11	1.125	ZSHI-875-03000-303SU	ZSHI-875-03000-316SU	ZSHI-875-03000-104SU	ZSHI-875-03000-114SU	ZSHI-875-03000-202SU
6	5/8-11	1.125	ZSHI-875-06000-303SU	ZSHI-875-06000-316SU	ZSHI-875-06000-104SU	ZSHI-875-06000-114SU	ZSHI-875-06000-202SU
9	5/8-11	1.125	ZSHI-875-09000-303SU	ZSHI-875-09000-316SU	ZSHI-875-09000-104SU	ZSHI-875-09000-114SU	ZSHI-875-09000-202SU
12	5/8-11	1.125	ZSHI-875-12000-303SU	ZSHI-875-12000-316SU	ZSHI-875-12000-104SU	ZSHI-875-12000-114SU	ZSHI-875-12000-202SU
18	5/8-11	1.125	ZSHI-875-18000-303SU	ZSHI-875-18000-316SU	ZSHI-875-18000-104SU	ZSHI-875-18000-114SU	ZSHI-875-18000-202SU
24	5/8-11	1.125	ZSHI-875-24000-303SU	ZSHI-875-24000-316SU	ZSHI-875-24000-104SU	ZSHI-875-24000-114SU	ZSHI-875-24000-202SU
36	5/8-11	1.125	ZSHI-875-36000-303SU	ZSHI-875-36000-316SU	ZSHI-875-36000-104SU	ZSHI-875-36000-114SU	ZSHI-875-36000-202SU
48	5/8-11	1.125	ZSHI-875-48000-303SU	ZSHI-875-48000-316SU	ZSHI-875-48000-104SU	ZSHI-875-48000-114SU	ZSHI-875-48000-202SU
60	5/8-11	1.125	ZSHI-875-60000-303SU	ZSHI-875-60000-316SU	ZSHI-875-60000-104SU	ZSHI-875-60000-114SU	ZSHI-875-60000-202SU
72	5/8-11	1.125	ZSHI-875-72000-303SU	ZSHI-875-72000-316SU	ZSHI-875-72000-104SU	ZSHI-875-72000-114SU	ZSHI-875-72000-202SU

15/16 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Thread Size	Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	10-32	.375	—	—	ZSHI-937-03000-104SU	—	—
6	10-32	.375	—	—	ZSHI-937-06000-104SU	—	—
9	10-32	.375	—	—	ZSHI-937-09000-104SU	—	—
12	10-32	.375	—	—	ZSHI-937-12000-104SU	—	—
18	10-32	.375	—	—	ZSHI-937-18000-104SU	—	—
24	10-32	.375	—	—	ZSHI-937-24000-104SU	—	—
36	10-32	.375	—	—	ZSHI-937-36000-104SU	—	—
48	10-32	.375	—	—	ZSHI-937-48000-104SU	—	—
60	10-32	.375	—	—	ZSHI-937-60000-104SU	—	—
72	10-32	.375	—	—	ZSHI-937-72000-104SU	—	—

1 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Thread Size	Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	3/4-10	1.5	ZSHI-1000-03000-303SU	ZSHI-1000-03000-316SU	ZSHI-625-03000-104SU	ZSHI-625-03000-114SU	ZSHI-625-03000-202SU
6	3/4-10	1.5	ZSHI-1000-06000-303SU	ZSHI-1000-06000-316SU	ZSHI-625-06000-104SU	ZSHI-625-06000-114SU	ZSHI-625-06000-202SU
9	3/4-10	1.5	ZSHI-1000-09000-303SU	ZSHI-1000-09000-316SU	ZSHI-625-09000-104SU	ZSHI-625-09000-114SU	ZSHI-625-09000-202SU
12	3/4-10	1.5	ZSHI-1000-12000-303SU	ZSHI-1000-12000-316SU	ZSHI-625-12000-104SU	ZSHI-625-12000-114SU	ZSHI-625-12000-202SU
18	3/4-10	1.5	ZSHI-1000-18000-303SU	ZSHI-1000-18000-316SU	ZSHI-625-18000-104SU	ZSHI-625-18000-114SU	ZSHI-625-18000-202SU
24	3/4-10	1.5	ZSHI-1000-24000-303SU	ZSHI-1000-24000-316SU	ZSHI-625-24000-104SU	ZSHI-625-24000-114SU	ZSHI-625-24000-202SU
36	3/4-10	1.5	ZSHI-1000-36000-303SU	ZSHI-1000-36000-316SU	ZSHI-625-36000-104SU	ZSHI-625-36000-114SU	ZSHI-625-36000-202SU
48	3/4-10	1.5	ZSHI-1000-48000-303SU	ZSHI-1000-48000-316SU	ZSHI-625-48000-104SU	ZSHI-625-48000-114SU	ZSHI-625-48000-202SU
60	3/4-10	1.5	ZSHI-1000-60000-303SU	ZSHI-1000-60000-316SU	ZSHI-625-60000-104SU	ZSHI-625-60000-114SU	ZSHI-625-60000-202SU
72	3/4-10	1.5	ZSHI-1000-72000-303SU	ZSHI-1000-72000-316SU	ZSHI-625-72000-104SU	ZSHI-625-72000-114SU	ZSHI-625-72000-202SU

Tapped End Rotary Shafts Both Ends – Inch



5/16 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Both Thread Sizes	Both Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	10-32	.375	ZSHII-312-03000-303SU	ZSHII-312-03000-316SU	ZSHII-312-03000-104SU	ZSHII-312-03000-114SU	ZSHII-312-03000-202SU
6	10-32	.375	ZSHII-312-06000-303SU	ZSHII-312-06000-316SU	ZSHII-312-06000-104SU	ZSHII-312-06000-114SU	ZSHII-312-06000-202SU
9	10-32	.375	ZSHII-312-09000-303SU	ZSHII-312-09000-316SU	ZSHII-312-09000-104SU	ZSHII-312-09000-114SU	ZSHII-312-09000-202SU
12	10-32	.375	ZSHII-312-12000-303SU	ZSHII-312-12000-316SU	ZSHII-312-12000-104SU	ZSHII-312-12000-114SU	ZSHII-312-12000-202SU
18	10-32	.375	ZSHII-312-18000-303SU	ZSHII-312-18000-316SU	ZSHII-312-18000-104SU	ZSHII-312-18000-114SU	ZSHII-312-18000-202SU
24	10-32	.375	ZSHII-312-24000-303SU	ZSHII-312-24000-316SU	ZSHII-312-24000-104SU	ZSHII-312-24000-114SU	ZSHII-312-24000-202SU
36	10-32	.375	ZSHII-312-36000-303SU	ZSHII-312-36000-316SU	ZSHII-312-36000-104SU	ZSHII-312-36000-114SU	ZSHII-312-36000-202SU
48	10-32	.375	ZSHII-312-48000-303SU	ZSHII-312-48000-316SU	ZSHII-312-48000-104SU	ZSHII-312-48000-114SU	ZSHII-312-48000-202SU
60	10-32	.375	ZSHII-312-60000-303SU	ZSHII-312-60000-316SU	ZSHII-312-60000-104SU	ZSHII-312-60000-114SU	ZSHII-312-60000-202SU
72	10-32	.375	ZSHII-312-72000-303SU	ZSHII-312-72000-316SU	ZSHII-312-72000-104SU	ZSHII-312-72000-114SU	ZSHII-312-72000-202SU

3/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Both Thread Sizes	Both Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	1/4-20	0.5	ZSHII-375-03000-303SU	ZSHII-375-03000-316SU	ZSHII-375-03000-104SU	ZSHII-375-03000-114SU	ZSHII-375-03000-202SU
6	1/4-20	0.5	ZSHII-375-06000-303SU	ZSHII-375-06000-316SU	ZSHII-375-06000-104SU	ZSHII-375-06000-114SU	ZSHII-375-06000-202SU
9	1/4-20	0.5	ZSHII-375-09000-303SU	ZSHII-375-09000-316SU	ZSHII-375-09000-104SU	ZSHII-375-09000-114SU	ZSHII-375-09000-202SU
12	1/4-20	0.5	ZSHII-375-12000-303SU	ZSHII-375-12000-316SU	ZSHII-375-12000-104SU	ZSHII-375-12000-114SU	ZSHII-375-12000-202SU
18	1/4-20	0.5	ZSHII-375-18000-303SU	ZSHII-375-18000-316SU	ZSHII-375-18000-104SU	ZSHII-375-18000-114SU	ZSHII-375-18000-202SU
24	1/4-20	0.5	ZSHII-375-24000-303SU	ZSHII-375-24000-316SU	ZSHII-375-24000-104SU	ZSHII-375-24000-114SU	ZSHII-375-24000-202SU
36	1/4-20	0.5	ZSHII-375-36000-303SU	ZSHII-375-36000-316SU	ZSHII-375-36000-104SU	ZSHII-375-36000-114SU	ZSHII-375-36000-202SU
48	1/4-20	0.5	ZSHII-375-48000-303SU	ZSHII-375-48000-316SU	ZSHII-375-48000-104SU	ZSHII-375-48000-114SU	ZSHII-375-48000-202SU
60	1/4-20	0.5	ZSHII-375-60000-303SU	ZSHII-375-60000-316SU	ZSHII-375-60000-104SU	ZSHII-375-60000-114SU	ZSHII-375-60000-202SU
72	1/4-20	0.5	ZSHII-375-72000-303SU	ZSHII-375-72000-316SU	ZSHII-375-72000-104SU	ZSHII-375-72000-114SU	ZSHII-375-72000-202SU

1/2 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Both Thread Sizes	Both Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	5/16-18	0.625	ZSHII-500-03000-303SU	ZSHII-500-03000-316SU	ZSHII-500-03000-104SU	ZSHII-500-03000-114SU	ZSHII-500-03000-202SU
6	5/16-18	0.625	ZSHII-500-06000-303SU	ZSHII-500-06000-316SU	ZSHII-500-06000-104SU	ZSHII-500-06000-114SU	ZSHII-500-06000-202SU
9	5/16-18	0.625	ZSHII-500-09000-303SU	ZSHII-500-09000-316SU	ZSHII-500-09000-104SU	ZSHII-500-09000-114SU	ZSHII-500-09000-202SU
12	5/16-18	0.625	ZSHII-500-12000-303SU	ZSHII-500-12000-316SU	ZSHII-500-12000-104SU	ZSHII-500-12000-114SU	ZSHII-500-12000-202SU
18	5/16-18	0.625	ZSHII-500-18000-303SU	ZSHII-500-18000-316SU	ZSHII-500-18000-104SU	ZSHII-500-18000-114SU	ZSHII-500-18000-202SU
24	5/16-18	0.625	ZSHII-500-24000-303SU	ZSHII-500-24000-316SU	ZSHII-500-24000-104SU	ZSHII-500-24000-114SU	ZSHII-500-24000-202SU
36	5/16-18	0.625	ZSHII-500-36000-303SU	ZSHII-500-36000-316SU	ZSHII-500-36000-104SU	ZSHII-500-36000-114SU	ZSHII-500-36000-202SU
48	5/16-18	0.625	ZSHII-500-48000-303SU	ZSHII-500-48000-316SU	ZSHII-500-48000-104SU	ZSHII-500-48000-114SU	ZSHII-500-48000-202SU
60	5/16-18	0.625	ZSHII-500-60000-303SU	ZSHII-500-60000-316SU	ZSHII-500-60000-104SU	ZSHII-500-60000-114SU	ZSHII-500-60000-202SU
72	5/16-18	0.625	ZSHII-500-72000-303SU	ZSHII-500-72000-316SU	ZSHII-500-72000-104SU	ZSHII-500-72000-114SU	ZSHII-500-72000-202SU

Tapped End Rotary Shafts Both Ends – Inch



5/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Both Thread Sizes	Both Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	3/8-16	.750	ZSHII-625-03000-303SU	ZSHII-625-03000-316SU	ZSHII-625-03000-104SU	ZSHII-625-03000-114SU	ZSHII-625-03000-202SU
6	3/8-16	.750	ZSHII-625-06000-303SU	ZSHII-625-06000-316SU	ZSHII-625-06000-104SU	ZSHII-625-06000-114SU	ZSHII-625-06000-202SU
9	3/8-16	.750	ZSHII-625-09000-303SU	ZSHII-625-09000-316SU	ZSHII-625-09000-104SU	ZSHII-625-09000-114SU	ZSHII-625-09000-202SU
12	3/8-16	.750	ZSHII-625-12000-303SU	ZSHII-625-12000-316SU	ZSHII-625-12000-104SU	ZSHII-625-12000-114SU	ZSHII-625-12000-202SU
18	3/8-16	.750	ZSHII-625-18000-303SU	ZSHII-625-18000-316SU	ZSHII-625-18000-104SU	ZSHII-625-18000-114SU	ZSHII-625-18000-202SU
24	3/8-16	.750	ZSHII-625-24000-303SU	ZSHII-625-24000-316SU	ZSHII-625-24000-104SU	ZSHII-625-24000-114SU	ZSHII-625-24000-202SU
36	3/8-16	.750	ZSHII-625-36000-303SU	ZSHII-625-36000-316SU	ZSHII-625-36000-104SU	ZSHII-625-36000-114SU	ZSHII-625-36000-202SU
48	3/8-16	.750	ZSHII-625-48000-303SU	ZSHII-625-48000-316SU	ZSHII-625-48000-104SU	ZSHII-625-48000-114SU	ZSHII-625-48000-202SU
60	3/8-16	.750	ZSHII-625-60000-303SU	ZSHII-625-60000-316SU	ZSHII-625-60000-104SU	ZSHII-625-60000-114SU	ZSHII-625-60000-202SU
72	3/8-16	.750	ZSHII-625-72000-303SU	ZSHII-625-72000-316SU	ZSHII-625-72000-104SU	ZSHII-625-72000-114SU	ZSHII-625-72000-202SU

3/4 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Both Thread Sizes	Both Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	1/2-13	1	ZSHII-750-03000-303SU	ZSHII-750-03000-316SU	ZSHII-750-03000-104SU	ZSHII-750-03000-114SU	ZSHII-750-03000-202SU
6	1/2-13	1	ZSHII-750-06000-303SU	ZSHII-750-06000-316SU	ZSHII-750-06000-104SU	ZSHII-750-06000-114SU	ZSHII-750-06000-202SU
9	1/2-13	1	ZSHII-750-09000-303SU	ZSHII-750-09000-316SU	ZSHII-750-09000-104SU	ZSHII-750-09000-114SU	ZSHII-750-09000-202SU
12	1/2-13	1	ZSHII-750-12000-303SU	ZSHII-750-12000-316SU	ZSHII-750-12000-104SU	ZSHII-750-12000-114SU	ZSHII-750-12000-202SU
18	1/2-13	1	ZSHII-750-18000-303SU	ZSHII-750-18000-316SU	ZSHII-750-18000-104SU	ZSHII-750-18000-114SU	ZSHII-750-18000-202SU
24	1/2-13	1	ZSHII-750-24000-303SU	ZSHII-750-24000-316SU	ZSHII-750-24000-104SU	ZSHII-750-24000-114SU	ZSHII-750-24000-202SU
36	1/2-13	1	ZSHII-750-36000-303SU	ZSHII-750-36000-316SU	ZSHII-750-36000-104SU	ZSHII-750-36000-114SU	ZSHII-750-36000-202SU
48	1/2-13	1	ZSHII-750-48000-303SU	ZSHII-750-48000-316SU	ZSHII-750-48000-104SU	ZSHII-750-48000-114SU	ZSHII-750-48000-202SU
60	1/2-13	1	ZSHII-750-60000-303SU	ZSHII-750-60000-316SU	ZSHII-750-60000-104SU	ZSHII-750-60000-114SU	ZSHII-750-60000-202SU
72	1/2-13	1	ZSHII-750-72000-303SU	ZSHII-750-72000-316SU	ZSHII-750-72000-104SU	ZSHII-750-72000-114SU	ZSHII-750-72000-202SU

7/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Both Thread Sizes	Both Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	5/8-11	1.125	ZSHII-875-03000-303SU	ZSHII-875-03000-316SU	ZSHII-875-03000-104SU	ZSHII-875-03000-114SU	ZSHII-875-03000-202SU
6	5/8-11	1.125	ZSHII-875-06000-303SU	ZSHII-875-06000-316SU	ZSHII-875-06000-104SU	ZSHII-875-06000-114SU	ZSHII-875-06000-202SU
9	5/8-11	1.125	ZSHII-875-09000-303SU	ZSHII-875-09000-316SU	ZSHII-875-09000-104SU	ZSHII-875-09000-114SU	ZSHII-875-09000-202SU
12	5/8-11	1.125	ZSHII-875-12000-303SU	ZSHII-875-12000-316SU	ZSHII-875-12000-104SU	ZSHII-875-12000-114SU	ZSHII-875-12000-202SU
18	5/8-11	1.125	ZSHII-875-18000-303SU	ZSHII-875-18000-316SU	ZSHII-875-18000-104SU	ZSHII-875-18000-114SU	ZSHII-875-18000-202SU
24	5/8-11	1.125	ZSHII-875-24000-303SU	ZSHII-875-24000-316SU	ZSHII-875-24000-104SU	ZSHII-875-24000-114SU	ZSHII-875-24000-202SU
36	5/8-11	1.125	ZSHII-875-36000-303SU	ZSHII-875-36000-316SU	ZSHII-875-36000-104SU	ZSHII-875-36000-114SU	ZSHII-875-36000-202SU
48	5/8-11	1.125	ZSHII-875-48000-303SU	ZSHII-875-48000-316SU	ZSHII-875-48000-104SU	ZSHII-875-48000-114SU	ZSHII-875-48000-202SU
60	5/8-11	1.125	ZSHII-875-60000-303SU	ZSHII-875-60000-316SU	ZSHII-875-60000-104SU	ZSHII-875-60000-114SU	ZSHII-875-60000-202SU
72	5/8-11	1.125	ZSHII-875-72000-303SU	ZSHII-875-72000-316SU	ZSHII-875-72000-104SU	ZSHII-875-72000-114SU	ZSHII-875-72000-202SU

Tapped End Rotary Shafts Both Ends — Inch



5/16 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Both Thread Sizes	Both Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	5/8-11	1.125	—	—	ZSHII-937-03000-104SU	—	—
6	5/8-11	1.125	—	—	ZSHII-937-06000-104SU	—	—
9	5/8-11	1.125	—	—	ZSHII-937-09000-104SU	—	—
12	5/8-11	1.125	—	—	ZSHII-937-12000-104SU	—	—
18	5/8-11	1.125	—	—	ZSHII-937-18000-104SU	—	—
24	5/8-11	1.125	—	—	ZSHII-937-24000-104SU	—	—
36	5/8-11	1.125	—	—	ZSHII-937-36000-104SU	—	—
48	5/8-11	1.125	—	—	ZSHII-937-48000-104SU	—	—
60	5/8-11	1.125	—	—	ZSHII-937-60000-104SU	—	—
72	5/8-11	1.125	—	—	ZSHII-937-72000-104SU	—	—

1 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Both Thread Sizes	Both Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	3/4-10	1.5	ZSHII-1000-03000-303SU	ZSHII-1000-03000-316SU	ZSHII-1000-03000-104SU	ZSHII-1000-03000-114SU	ZSHII-1000-03000-202SU
6	3/4-10	1.5	ZSHII-1000-06000-303SU	ZSHII-1000-06000-316SU	ZSHII-1000-06000-104SU	ZSHII-1000-06000-114SU	ZSHII-1000-06000-202SU
9	3/4-10	1.5	ZSHII-1000-09000-303SU	ZSHII-1000-09000-316SU	ZSHII-1000-09000-104SU	ZSHII-1000-09000-114SU	ZSHII-1000-09000-202SU
12	3/4-10	1.5	ZSHII-1000-12000-303SU	ZSHII-1000-12000-316SU	ZSHII-1000-12000-104SU	ZSHII-1000-12000-114SU	ZSHII-1000-12000-202SU
18	3/4-10	1.5	ZSHII-1000-18000-303SU	ZSHII-1000-18000-316SU	ZSHII-1000-18000-104SU	ZSHII-1000-18000-114SU	ZSHII-1000-18000-202SU
24	3/4-10	1.5	ZSHII-1000-24000-303SU	ZSHII-1000-24000-316SU	ZSHII-1000-24000-104SU	ZSHII-1000-24000-114SU	ZSHII-1000-24000-202SU
36	3/4-10	1.5	ZSHII-1000-36000-303SU	ZSHII-1000-36000-316SU	ZSHII-1000-36000-104SU	ZSHII-1000-36000-114SU	ZSHII-1000-36000-202SU
48	3/4-10	1.5	ZSHII-1000-48000-303SU	ZSHII-1000-48000-316SU	ZSHII-1000-48000-104SU	ZSHII-1000-48000-114SU	ZSHII-1000-48000-202SU
60	3/4-10	1.5	ZSHII-1000-60000-303SU	ZSHII-1000-60000-316SU	ZSHII-1000-60000-104SU	ZSHII-1000-60000-114SU	ZSHII-1000-60000-202SU
72	3/4-10	1.5	ZSHII-1000-72000-303SU	ZSHII-1000-72000-316SU	ZSHII-1000-72000-104SU	ZSHII-1000-72000-114SU	ZSHII-1000-72000-202SU

Tapped End(s) Rotary Shafts – Metric

18-8 & 316 SS, Steel



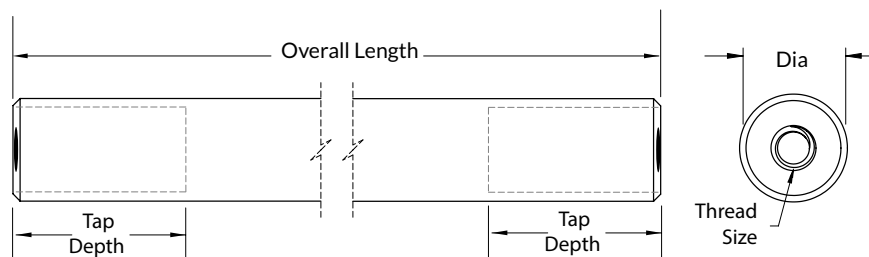
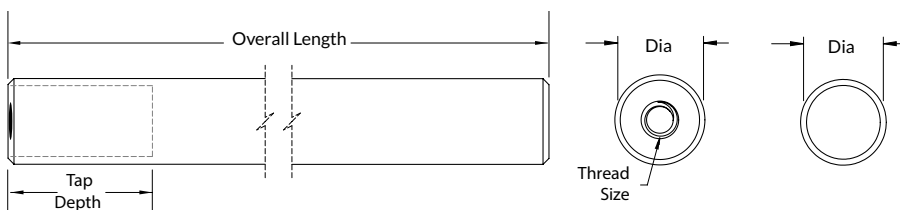
Product Information

Internal threads enable direct mounting of these shafts to threaded fasteners, eliminating the need for additional support. Engineered for low friction in both manual and automated systems, their smooth, hard, and wear-resistant surfaces are ideal for use with linear bearings. Commonly found in packaging, machine tool, and material handling applications, these shafts undergo precise turning, grinding, and polishing to ensure strict diameter and straightness tolerances. A hardened surface provides exceptional durability under repeated motion while maintaining a soft core to absorb stress from shifting loads. Chamfered ends protect bearings, housings, and other components from damage during installation.

All shafts are made in the USA from DFARS compliant & RoHS compliant stainless steel and shafts are fully lot traceable.

Length tolerance is $\pm 1.6\text{mm}$ and straightness tolerance is $.33\text{mm}$ per 300mm.

- Shafts are turned, ground and polished to tight diameter and straightness tolerances.
- 18-8 stainless steel shafts offer excellent corrosion resistant and can be mildly magnetic. Meets ASTM A582 Condition A material specification.
- Type 316 stainless steel, also known as marine stainless steel, offers superior corrosion resistant than 18-8 stainless steel and maybe mildly magnetic. Meets ASTM A276 Condition A material specification.
- C1045 Carbon Steel shafts are generally stronger than aluminum and stainless steel shafts but not as corrosion resistant. These Carbon Steel shafts offers medium strength properties making them ideal for general purpose use.
- C1045 Carbon Steel is recommended for shafts requiring higher strength and wear resistance than carbon steel and stainless steel shafts.
- 1144 Stressproof Alloy Steel has excellent strength and hardness, and is specifically treated to relieve stresses for this durable material.



Materials Chart

Material	Mechanical Finish	Edge Type	Specs Met	Rockwell Hardness	Tensile Strength (psi)	Magnetic?
18-8 SS	Ground & Polished	Chamfered	ASTM A 582 Cond A	B83	90,000	Mildly
316 SS	Ground & Polished	Chamfered	ASTM A 276 Cond	B83	85,000	Mildly
C1045 Carbon Steel	Ground & Polished	Chamfered	ASTM A108	C15	91,000	Magnetic
1144 Alloy Steel	Ground & Polished	Chamfered	ASTM A311	C22	115,000	Magnetic

Tapped End Rotary Shafts One End – Metric



8mm Diameter (Tolerance: +0/-.0635mm)

O'all Lg (mm)	Thread Size	Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number
300	M5x0.8	10	ZSHI-M08-M0300-303SU	ZSHI-M08-M0300-316SU	ZSHI-M08-M0300-104SU	ZSHI-M08-M0300-114SU
500	M5x0.8	10	ZSHI-M08-M0500-303SU	ZSHI-M08-M0500-316SU	ZSHI-M08-M0500-104SU	ZSHI-M08-M0500-114SU
1,000	M5x0.8	10	ZSHI-M08-M1000-303SU	ZSHI-M08-M1000-316SU	ZSHI-M08-M1000-104SU	ZSHI-M08-M1000-114SU
1,200	M5x0.8	10	ZSHI-M08-M1200-303SU	ZSHI-M08-M1200-316SU	ZSHI-M08-M1200-104SU	ZSHI-M08-M1200-114SU
1,500	M5x0.8	10	ZSHI-M08-M1500-303SU	ZSHI-M08-M1500-316SU	ZSHI-M08-M1500-104SU	ZSHI-M08-M1500-114SU
1,800	M5x0.8	10	ZSHI-M08-M1800-303SU	ZSHI-M08-M1800-316SU	ZSHI-M08-M1800-104SU	ZSHI-M08-M1800-114SU

10mm Diameter (Tolerance: +0/-.0635mm)

O'all Lg (mm)	Thread Size	Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number
300	M6x1.00	12	ZSHI-M10-M0300-303SU	ZSHI-M10-M0300-316SU	ZSHI-M10-M0300-104SU	ZSHI-M10-M0300-114SU
500	M6x1.00	12	ZSHI-M10-M0500-303SU	ZSHI-M10-M0500-316SU	ZSHI-M10-M0500-104SU	ZSHI-M10-M0500-114SU
1,000	M6x1.00	12	ZSHI-M10-M1000-303SU	ZSHI-M10-M1000-316SU	ZSHI-M10-M1000-104SU	ZSHI-M10-M1000-114SU
1,200	M6x1.00	12	ZSHI-M10-M1200-303SU	ZSHI-M10-M1200-316SU	ZSHI-M10-M1200-104SU	ZSHI-M10-M1200-114SU
1,500	M6x1.00	12	ZSHI-M10-M1500-303SU	ZSHI-M10-M1500-316SU	ZSHI-M10-M1500-104SU	ZSHI-M10-M1500-114SU
1,800	M6x1.00	12	ZSHI-M10-M1800-303SU	ZSHI-M10-M1800-316SU	ZSHI-M10-M1800-104SU	ZSHI-M10-M1800-114SU

12mm Diameter (Tolerance: +0/-.0635mm)

O'all Lg (mm)	Thread Size	Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number
300	M8x1	16	ZSHI-M12-M0300-303SU	ZSHI-M12-M0300-316SU	ZSHI-M12-M0300-104SU	ZSHI-M12-M0300-114SU
500	M8x1	16	ZSHI-M12-M0500-303SU	ZSHI-M12-M0500-316SU	ZSHI-M12-M0500-104SU	ZSHI-M12-M0500-114SU
1,000	M8x1	16	ZSHI-M12-M1000-303SU	ZSHI-M12-M1000-316SU	ZSHI-M12-M1000-104SU	ZSHI-M12-M1000-114SU
1,200	M8x1	16	ZSHI-M12-M1200-303SU	ZSHI-M12-M1200-316SU	ZSHI-M12-M1200-104SU	ZSHI-M12-M1200-114SU
1,500	M8x1	16	ZSHI-M12-M1500-303SU	ZSHI-M12-M1500-316SU	ZSHI-M12-M1500-104SU	ZSHI-M12-M1500-114SU
1,800	M8x1	16	ZSHI-M12-M1800-303SU	ZSHI-M12-M1800-316SU	ZSHI-M12-M1800-104SU	ZSHI-M12-M1800-114SU

15mm Diameter (Tolerance: +0/-.0635mm)

O'all Lg (mm)	Thread Size	Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number
300	M10x1.25	20	ZSHI-M15-M0300-303SU	ZSHI-M15-M0300-316SU	ZSHI-M15-M0300-104SU	ZSHI-M15-M0300-114SU
500	M10x1.25	20	ZSHI-M15-M0500-303SU	ZSHI-M15-M0500-316SU	ZSHI-M15-M0500-104SU	ZSHI-M15-M0500-114SU
1,000	M10x1.25	20	ZSHI-M15-M1000-303SU	ZSHI-M15-M1000-316SU	ZSHI-M15-M1000-104SU	ZSHI-M15-M1000-114SU
1,200	M10x1.25	20	ZSHI-M15-M1200-303SU	ZSHI-M15-M1200-316SU	ZSHI-M15-M1200-104SU	ZSHI-M15-M1200-114SU
1,500	M10x1.25	20	ZSHI-M15-M1500-303SU	ZSHI-M15-M1500-316SU	ZSHI-M15-M1500-104SU	ZSHI-M15-M1500-114SU
1,800	M10x1.25	20	ZSHI-M15-M1800-303SU	ZSHI-M15-M1800-316SU	ZSHI-M15-M1800-104SU	ZSHI-M15-M1800-114SU

Tapped End Rotary Shafts One End – Metric



17mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Thread Size	Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number
300	M10x1.25	20	ZSHI-M17-M0300-303SU	ZSHI-M17-M0300-316SU	ZSHI-M17-M0300-104SU	ZSHI-M17-M0300-114SU
500	M10x1.25	20	ZSHI-M17-M0500-303SU	ZSHI-M17-M0500-316SU	ZSHI-M17-M0500-104SU	ZSHI-M17-M0500-114SU
1,000	M10x1.25	20	ZSHI-M17-M1000-303SU	ZSHI-M17-M1000-316SU	ZSHI-M17-M1000-104SU	ZSHI-M17-M1000-114SU
1,200	M10x1.25	20	ZSHI-M17-M1200-303SU	ZSHI-M17-M1200-316SU	ZSHI-M17-M1200-104SU	ZSHI-M17-M1200-114SU
1,500	M10x1.25	20	ZSHI-M17-M1700-303SU	ZSHI-M17-M1700-316SU	ZSHI-M17-M1700-104SU	ZSHI-M17-M1700-114SU
1,800	M10x1.25	20	ZSHI-M17-M1800-303SU	ZSHI-M17-M1800-316SU	ZSHI-M17-M1800-104SU	ZSHI-M17-M1800-114SU

20mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Thread Size	Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number
300	M12x1.25	24	ZSHI-M20-M0300-303SU	ZSHI-M20-M0300-316SU	ZSHI-M20-M0300-104SU	ZSHI-M20-M0300-114SU
500	M12x1.25	24	ZSHI-M20-M0500-303SU	ZSHI-M20-M0500-316SU	ZSHI-M20-M0500-104SU	ZSHI-M20-M0500-114SU
1,000	M12x1.25	24	ZSHI-M20-M1000-303SU	ZSHI-M20-M1000-316SU	ZSHI-M20-M1000-104SU	ZSHI-M20-M1000-114SU
1,200	M12x1.25	24	ZSHI-M20-M1200-303SU	ZSHI-M20-M1200-316SU	ZSHI-M20-M1200-104SU	ZSHI-M20-M1200-114SU
1,500	M12x1.25	24	ZSHI-M20-M1500-303SU	ZSHI-M20-M1500-316SU	ZSHI-M20-M1500-104SU	ZSHI-M20-M1500-114SU
1,800	M12x1.25	24	ZSHI-M20-M1800-303SU	ZSHI-M20-M1800-316SU	ZSHI-M20-M1800-104SU	ZSHI-M20-M1800-114SU

24mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Thread Size	Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number
300	M16x1.5	30	ZSHI-M24-M0300-303SU	ZSHI-M24-M0300-316SU	ZSHI-M24-M0300-104SU	ZSHI-M24-M0300-114SU
500	M16x1.5	30	ZSHI-M24-M0500-303SU	ZSHI-M24-M0500-316SU	ZSHI-M24-M0500-104SU	ZSHI-M24-M0500-114SU
1,000	M16x1.5	30	ZSHI-M24-M1000-303SU	ZSHI-M24-M1000-316SU	ZSHI-M24-M1000-104SU	ZSHI-M24-M1000-114SU
1,200	M16x1.5	30	ZSHI-M24-M1200-303SU	ZSHI-M24-M1200-316SU	ZSHI-M24-M1200-104SU	ZSHI-M24-M1200-114SU
1,500	M16x1.5	30	ZSHI-M24-M1500-303SU	ZSHI-M24-M1500-316SU	ZSHI-M24-M1500-104SU	ZSHI-M24-M1500-114SU
1,800	M16x1.5	30	ZSHI-M24-M1800-303SU	ZSHI-M24-M1800-316SU	ZSHI-M24-M1800-104SU	ZSHI-M24-M1800-114SU

25mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Thread Size	Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number
300	M16x1.5	30	ZSHI-M25-M0300-303SU	ZSHI-M25-M0300-316SU	ZSHI-M25-M0300-104SU	ZSHI-M25-M0300-114SU
500	M16x1.5	30	ZSHI-M25-M0500-303SU	ZSHI-M25-M0500-316SU	ZSHI-M25-M0500-104SU	ZSHI-M25-M0500-114SU
1,000	M16x1.5	30	ZSHI-M25-M1000-303SU	ZSHI-M25-M1000-316SU	ZSHI-M25-M1000-104SU	ZSHI-M25-M1000-114SU
1,200	M16x1.5	30	ZSHI-M25-M1200-303SU	ZSHI-M25-M1200-316SU	ZSHI-M25-M1200-104SU	ZSHI-M25-M1200-114SU
1,500	M16x1.5	30	ZSHI-M25-M1500-303SU	ZSHI-M25-M1500-316SU	ZSHI-M25-M1500-104SU	ZSHI-M25-M1500-114SU
1,800	M16x1.5	30	ZSHI-M25-M1800-303SU	ZSHI-M25-M1800-316SU	ZSHI-M25-M1800-104SU	ZSHI-M25-M1800-114SU

28mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Thread Size	Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number
300	M16x1.5	30	ZSHI-M28-M0300-303SU	ZSHI-M28-M0300-316SU	ZSHI-M28-M0300-104SU	ZSHI-M28-M0300-114SU
500	M16x1.5	30	ZSHI-M28-M0500-303SU	ZSHI-M28-M0500-316SU	ZSHI-M28-M0500-104SU	ZSHI-M28-M0500-114SU
1,000	M16x1.5	30	ZSHI-M28-M1000-303SU	ZSHI-M28-M1000-316SU	ZSHI-M28-M1000-104SU	ZSHI-M28-M1000-114SU
1,200	M16x1.5	30	ZSHI-M28-M1200-303SU	ZSHI-M28-M1200-316SU	ZSHI-M28-M1200-104SU	ZSHI-M28-M1200-114SU
1,500	M16x1.5	30	ZSHI-M28-M2800-303SU	ZSHI-M28-M2800-316SU	ZSHI-M28-M2800-104SU	ZSHI-M28-M2800-114SU
1,800	M16x1.5	30	ZSHI-M28-M1800-303SU	ZSHI-M28-M1800-316SU	ZSHI-M28-M1800-104SU	ZSHI-M28-M1800-114SU

Tapped End Rotary Shafts Both Ends — Metric



8mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Both Thread Sizes	Both Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number
300	M5x0.8	10	ZSHII-M08-M0300-303SU	ZSHII-M08-M0300-316SU	ZSHII-M08-M0300-104SU	ZSHII-M08-M0300-114SU
500	M5x0.8	10	ZSHII-M08-M0500-303SU	ZSHII-M08-M0500-316SU	ZSHII-M08-M0500-104SU	ZSHII-M08-M0500-114SU
1,000	M5x0.8	10	ZSHII-M08-M1000-303SU	ZSHII-M08-M1000-316SU	ZSHII-M08-M1000-104SU	ZSHII-M08-M1000-114SU
1,200	M5x0.8	10	ZSHII-M08-M1200-303SU	ZSHII-M08-M1200-316SU	ZSHII-M08-M1200-104SU	ZSHII-M08-M1200-114SU
1,500	M5x0.8	10	ZSHII-M08-M1500-303SU	ZSHII-M08-M1500-316SU	ZSHII-M08-M1500-104SU	ZSHII-M08-M1500-114SU
1,800	M5x0.8	10	ZSHII-M08-M1800-303SU	ZSHII-M08-M1800-316SU	ZSHII-M08-M1800-104SU	ZSHII-M08-M1800-114SU

10mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Both Thread Sizes	Both Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number
300	M6x1	12	ZSHII-M10-M0300-303SU	ZSHII-M10-M0300-316SU	ZSHII-M10-M0300-104SU	ZSHII-M10-M0300-114SU
500	M6x1	12	ZSHII-M10-M0500-303SU	ZSHII-M10-M0500-316SU	ZSHII-M10-M0500-104SU	ZSHII-M10-M0500-114SU
1,000	M6x1	12	ZSHII-M10-M1000-303SU	ZSHII-M10-M1000-316SU	ZSHII-M10-M1000-104SU	ZSHII-M10-M1000-114SU
1,200	M6x1	12	ZSHII-M10-M1200-303SU	ZSHII-M10-M1200-316SU	ZSHII-M10-M1200-104SU	ZSHII-M10-M1200-114SU
1,500	M6x1	12	ZSHII-M10-M1500-303SU	ZSHII-M10-M1500-316SU	ZSHII-M10-M1500-104SU	ZSHII-M10-M1500-114SU
1,800	M6x1	12	ZSHII-M10-M1800-303SU	ZSHII-M10-M1800-316SU	ZSHII-M10-M1800-104SU	ZSHII-M10-M1800-114SU

12mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Both Thread Sizes	Both Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number
300	M8x1	16	ZSHII-M12-M0300-303SU	ZSHII-M12-M0300-316SU	ZSHII-M12-M0300-104SU	ZSHII-M12-M0300-114SU
500	M8x1	16	ZSHII-M12-M0500-303SU	ZSHII-M12-M0500-316SU	ZSHII-M12-M0500-104SU	ZSHII-M12-M0500-114SU
1,000	M8x1	16	ZSHII-M12-M1000-303SU	ZSHII-M12-M1000-316SU	ZSHII-M12-M1000-104SU	ZSHII-M12-M1000-114SU
1,200	M8x1	16	ZSHII-M12-M1200-303SU	ZSHII-M12-M1200-316SU	ZSHII-M12-M1200-104SU	ZSHII-M12-M1200-114SU
1,500	M8x1	16	ZSHII-M12-M1500-303SU	ZSHII-M12-M1500-316SU	ZSHII-M12-M1500-104SU	ZSHII-M12-M1500-114SU
1,800	M8x1	16	ZSHII-M12-M1800-303SU	ZSHII-M12-M1800-316SU	ZSHII-M12-M1800-104SU	ZSHII-M12-M1800-114SU

15mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Both Thread Sizes	Both Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number
300	M10x1.25	20	ZSHII-M15-M0300-303SU	ZSHII-M15-M0300-316SU	ZSHII-M15-M0300-104SU	ZSHII-M15-M0300-114SU
500	M10x1.25	20	ZSHII-M15-M0500-303SU	ZSHII-M15-M0500-316SU	ZSHII-M15-M0500-104SU	ZSHII-M15-M0500-114SU
1,000	M10x1.25	20	ZSHII-M15-M1000-303SU	ZSHII-M15-M1000-316SU	ZSHII-M15-M1000-104SU	ZSHII-M15-M1000-114SU
1,200	M10x1.25	20	ZSHII-M15-M1200-303SU	ZSHII-M15-M1200-316SU	ZSHII-M15-M1200-104SU	ZSHII-M15-M1200-114SU
1,500	M10x1.25	20	ZSHII-M15-M1500-303SU	ZSHII-M15-M1500-316SU	ZSHII-M15-M1500-104SU	ZSHII-M15-M1500-114SU
1,800	M10x1.25	20	ZSHII-M15-M1800-303SU	ZSHII-M15-M1800-316SU	ZSHII-M15-M1800-104SU	ZSHII-M15-M1800-114SU

Tapped End Rotary Shafts Both Ends — Metric



20mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Both Thread Sizes	Both Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number
300	M12x1.25	24	ZSHII-M20-M0300-303SU	ZSHII-M20-M0300-316SU	ZSHII-M20-M0300-104SU	ZSHII-M20-M0300-114SU
500	M12x1.25	24	ZSHII-M20-M0500-303SU	ZSHII-M20-M0500-316SU	ZSHII-M20-M0500-104SU	ZSHII-M20-M0500-114SU
1,000	M12x1.25	24	ZSHII-M20-M1000-303SU	ZSHII-M20-M1000-316SU	ZSHII-M20-M1000-104SU	ZSHII-M20-M1000-114SU
1,200	M12x1.25	24	ZSHII-M20-M1200-303SU	ZSHII-M20-M1200-316SU	ZSHII-M20-M1200-104SU	ZSHII-M20-M1200-114SU
1,500	M12x1.25	24	ZSHII-M20-M1500-303SU	ZSHII-M20-M1500-316SU	ZSHII-M20-M1500-104SU	ZSHII-M20-M1500-114SU
1,800	M12x1.25	24	ZSHII-M20-M1800-303SU	ZSHII-M20-M1800-316SU	ZSHII-M20-M1800-104SU	ZSHII-M20-M1800-114SU

24mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Both Thread Sizes	Both Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number
300	M16x1.5	30	ZSHII-M24-M0300-303SU	ZSHII-M24-M0300-316SU	ZSHII-M24-M0300-104SU	ZSHII-M24-M0300-114SU
500	M16x1.5	30	ZSHII-M24-M0500-303SU	ZSHII-M24-M0500-316SU	ZSHII-M24-M0500-104SU	ZSHII-M24-M0500-114SU
1,000	M16x1.5	30	ZSHII-M24-M1000-303SU	ZSHII-M24-M1000-316SU	ZSHII-M24-M1000-104SU	ZSHII-M24-M1000-114SU
1,200	M16x1.5	30	ZSHII-M24-M1200-303SU	ZSHII-M24-M1200-316SU	ZSHII-M24-M1200-104SU	ZSHII-M24-M1200-114SU
1,500	M16x1.5	30	ZSHII-M24-M1500-303SU	ZSHII-M24-M1500-316SU	ZSHII-M24-M1500-104SU	ZSHII-M24-M1500-114SU
1,800	M16x1.5	30	ZSHII-M24-M1800-303SU	ZSHII-M24-M1800-316SU	ZSHII-M24-M1800-104SU	ZSHII-M24-M1800-114SU

25mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Both Thread Sizes	Both Tap Depth	18-8 SS Part Number	316 SS Part Number	C0145 Steel Part Number	1144 Steel Part Number
300	M16x1.5	30	ZSHII-M25-M0300-303SU	ZSHII-M25-M0300-316SU	ZSHII-M25-M0300-104SU	ZSHII-M25-M0300-114SU
500	M16x1.5	30	ZSHII-M25-M0500-303SU	ZSHII-M25-M0500-316SU	ZSHII-M25-M0500-104SU	ZSHII-M25-M0500-114SU
1,000	M16x1.5	30	ZSHII-M25-M1000-303SU	ZSHII-M25-M1000-316SU	ZSHII-M25-M1000-104SU	ZSHII-M25-M1000-114SU
1,200	M16x1.5	30	ZSHII-M25-M1200-303SU	ZSHII-M25-M1200-316SU	ZSHII-M25-M1200-104SU	ZSHII-M25-M1200-114SU
1,500	M16x1.5	30	ZSHII-M25-M1500-303SU	ZSHII-M25-M1500-316SU	ZSHII-M25-M1500-104SU	ZSHII-M25-M1500-114SU
1,800	M16x1.5	30	ZSHII-M25-M1800-303SU	ZSHII-M25-M1800-316SU	ZSHII-M25-M1800-104SU	ZSHII-M25-M1800-114SU

Threaded Stud Rotary Shaft — Inch

18-8 & 316 SS, Steel, Aluminum



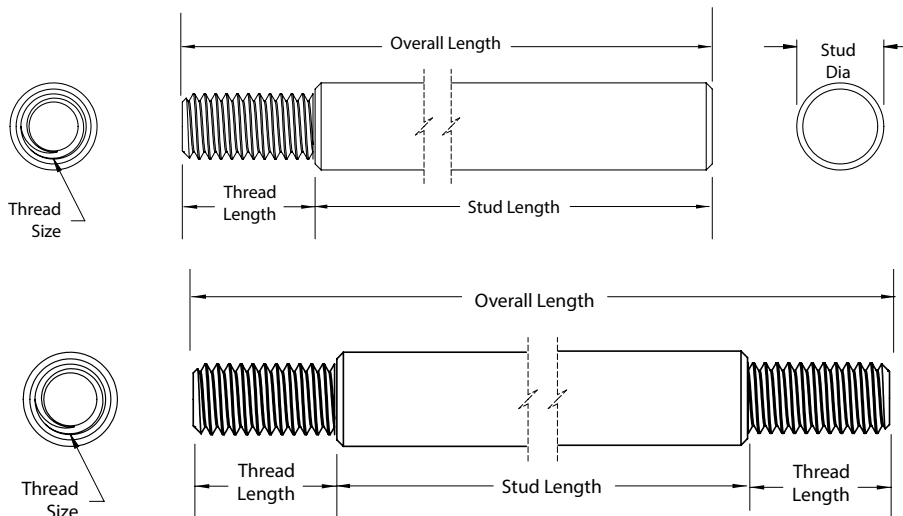
Product Information

Threaded Rotary Shafts are precision-engineered metal rods designed for rotational applications. Featuring threaded ends for secure component attachment, these shafts excel in transmitting power and motion. Crafted from high-quality materials and available in various diameters and lengths, they offer exceptional durability and performance. Ideal for a wide range of industrial machinery, automation systems, and mechanical assemblies, threaded rotary shafts provide reliable and efficient operation.

All shafts are made in the USA from DFARS compliant & RoHS compliant stainless steel and shafts are fully lot traceable.

Length tolerance is ± 0.062 and straightness tolerance is 0.012 in/ft.

- 18-8 stainless steel shafts offer excellent corrosion resistant and can be mildly magnetic. Meets ASTM A582 Condition A material specification.
- Type 316 stainless steel, also known as marine stainless steel, offers superior corrosion resistant than 18-8 stainless steel and maybe mildly magnetic. Meets ASTM A276 Condition A material specification.
- Aluminum shafts have the strength of mild steel with one third the weight.
- Aluminum shafts are lightweight, corrosion resistant and nonmagnetic. They have a T4 temper, which means they have been heat treated for increased strength.
- C1045 Carbon Steel shafts are generally stronger than aluminum and stainless steel shafts but not as corrosion resistant. These Carbon Steel shafts offers medium strength properties making them ideal for general purpose use.
- C1045 Carbon Steel is recommended for shafts requiring higher strength and wear resistance than carbon steel and stainless steel shafts.
- 1144 Stressproof Alloy Steel has excellent strength and hardness, and is specifically treated to relieve stresses for this durable material.



Materials Chart

Material	Mechanical Finish	Edge Type	Specs Met	Rockwell Hardness	Tensile Strength (psi)	Magnetic?
18-8 SS	Ground & Polished	Chamfered	ASTM A 582 Cond A	B83	90,000	Mildly
316 SS	Ground & Polished	Chamfered	ASTM A 276 Cond	B83	85,000	Mildly
C1045 Carbon Steel	Ground & Polished	Chamfered	ASTM A108	C15	91,000	Magnetic
1144 Alloy Steel	Ground & Polished	Chamfered	ASTM A311	C22	115,000	Magnetic
2024 Aluminum	Ground & Polished	Chamfered	ASTM B211	B75	68,000	Nonmagnetic

Threaded Stud Rotary Shaft One End — Inch



5/16 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Stud Lg	Thread Size	Thread Lg	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	2.25	1/4-20	.750	ZSHT-312-03000-303SU	ZSHT-312-03000-316SU	ZSHT-312-03000-104SU	ZSHT-312-03000-114SU	ZSHT-312-03000-202SU
6	5.625	1/4-20	.375	ZSHT-312-06000-303SU	ZSHT-312-06000-316SU	ZSHT-312-06000-104SU	ZSHT-312-06000-114SU	ZSHT-312-06000-202SU
9	8.625	1/4-20	.375	ZSHT-312-09000-303SU	ZSHT-312-09000-316SU	ZSHT-312-09000-104SU	ZSHT-312-09000-114SU	ZSHT-312-09000-202SU
12	11.625	1/4-20	.375	ZSHT-312-12000-303SU	ZSHT-312-12000-316SU	ZSHT-312-12000-104SU	ZSHT-312-12000-114SU	ZSHT-312-12000-202SU
18	17.625	1/4-20	.375	ZSHT-312-18000-303SU	ZSHT-312-18000-316SU	ZSHT-312-18000-104SU	ZSHT-312-18000-114SU	ZSHT-312-18000-202SU
24	23.625	1/4-20	.375	ZSHT-312-24000-303SU	ZSHT-312-24000-316SU	ZSHT-312-24000-104SU	ZSHT-312-24000-114SU	ZSHT-312-24000-202SU
36	35.625	1/4-20	.375	ZSHT-312-36000-303SU	ZSHT-312-36000-316SU	ZSHT-312-36000-104SU	ZSHT-312-36000-114SU	ZSHT-312-36000-202SU
48	47.625	1/4-20	.375	ZSHT-312-48000-303SU	ZSHT-312-48000-316SU	ZSHT-312-48000-104SU	ZSHT-312-48000-114SU	ZSHT-312-48000-202SU
60	59.625	1/4-20	.375	ZSHT-312-60000-303SU	ZSHT-312-60000-316SU	ZSHT-312-60000-104SU	ZSHT-312-60000-114SU	ZSHT-312-60000-202SU
72	71.625	1/4-20	.375	ZSHT-312-72000-303SU	ZSHT-312-72000-316SU	ZSHT-312-72000-104SU	ZSHT-312-72000-114SU	ZSHT-312-72000-202SU

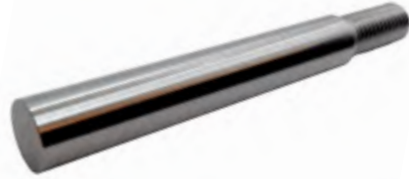
3/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Stud Lg	Thread Size	Thread Lg	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	2.25	5/16-18	.750	ZSHT-375-03000-303SU	ZSHT-375-03000-316SU	ZSHT-375-03000-104SU	ZSHT-375-03000-114SU	ZSHT-375-03000-202SU
6	5.25	5/16-18	.750	ZSHT-375-06000-303SU	ZSHT-375-06000-316SU	ZSHT-375-06000-104SU	ZSHT-375-06000-114SU	ZSHT-375-06000-202SU
9	8.25	5/16-18	.750	ZSHT-375-09000-303SU	ZSHT-375-09000-316SU	ZSHT-375-09000-104SU	ZSHT-375-09000-114SU	ZSHT-375-09000-202SU
12	11.25	5/16-18	.750	ZSHT-375-12000-303SU	ZSHT-375-12000-316SU	ZSHT-375-12000-104SU	ZSHT-375-12000-114SU	ZSHT-375-12000-202SU
18	17.25	5/16-18	.750	ZSHT-375-18000-303SU	ZSHT-375-18000-316SU	ZSHT-375-18000-104SU	ZSHT-375-18000-114SU	ZSHT-375-18000-202SU
24	23.25	5/16-18	.750	ZSHT-375-24000-303SU	ZSHT-375-24000-316SU	ZSHT-375-24000-104SU	ZSHT-375-24000-114SU	ZSHT-375-24000-202SU
36	35.25	5/16-18	.750	ZSHT-375-36000-303SU	ZSHT-375-36000-316SU	ZSHT-375-36000-104SU	ZSHT-375-36000-114SU	ZSHT-375-36000-202SU
48	47.25	5/16-18	.750	ZSHT-375-48000-303SU	ZSHT-375-48000-316SU	ZSHT-375-48000-104SU	ZSHT-375-48000-114SU	ZSHT-375-48000-202SU
60	59.25	5/16-18	.750	ZSHT-375-60000-303SU	ZSHT-375-60000-316SU	ZSHT-375-60000-104SU	ZSHT-375-60000-114SU	ZSHT-375-60000-202SU
72	71.25	5/16-18	.750	ZSHT-375-72000-303SU	ZSHT-375-72000-316SU	ZSHT-375-72000-104SU	ZSHT-375-72000-114SU	ZSHT-375-72000-202SU

1/2 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Stud Lg	Thread Size	Thread Lg	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	2.25	3/8-16	.750	ZSHT-500-03000-303SU	ZSHT-500-03000-316SU	ZSHT-500-03000-104SU	ZSHT-500-03000-114SU	ZSHT-500-03000-202SU
6	5.125	3/8-16	.875	ZSHT-500-06000-303SU	ZSHT-500-06000-316SU	ZSHT-500-06000-104SU	ZSHT-500-06000-114SU	ZSHT-500-06000-202SU
9	8.125	3/8-16	.875	ZSHT-500-09000-303SU	ZSHT-500-09000-316SU	ZSHT-500-09000-104SU	ZSHT-500-09000-114SU	ZSHT-500-09000-202SU
12	11.125	3/8-16	.875	ZSHT-500-12000-303SU	ZSHT-500-12000-316SU	ZSHT-500-12000-104SU	ZSHT-500-12000-114SU	ZSHT-500-12000-202SU
18	17.125	3/8-16	.875	ZSHT-500-18000-303SU	ZSHT-500-18000-316SU	ZSHT-500-18000-104SU	ZSHT-500-18000-114SU	ZSHT-500-18000-202SU
24	23.125	3/8-16	.875	ZSHT-500-24000-303SU	ZSHT-500-24000-316SU	ZSHT-500-24000-104SU	ZSHT-500-24000-114SU	ZSHT-500-24000-202SU
36	35.125	3/8-16	.875	ZSHT-500-36000-303SU	ZSHT-500-36000-316SU	ZSHT-500-36000-104SU	ZSHT-500-36000-114SU	ZSHT-500-36000-202SU
48	47.125	3/8-16	.875	ZSHT-500-48000-303SU	ZSHT-500-48000-316SU	ZSHT-500-48000-104SU	ZSHT-500-48000-114SU	ZSHT-500-48000-202SU
60	59.125	3/8-16	.875	ZSHT-500-60000-303SU	ZSHT-500-60000-316SU	ZSHT-500-60000-104SU	ZSHT-500-60000-114SU	ZSHT-500-60000-202SU
72	71.125	3/8-16	.875	ZSHT-500-72000-303SU	ZSHT-500-72000-316SU	ZSHT-500-72000-104SU	ZSHT-500-72000-114SU	ZSHT-500-72000-202SU

Threaded Stud Rotary Shaft One End — Inch



9/16 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Stud Lg	Thread Size	Thread Lg	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	2.25	1/2-13	.750	ZSHT-562-03000-303SU	ZSHT-562-03000-316SU	ZSHT-562-03000-104SU	ZSHT-562-03000-114SU	—
6	5	1/2-13	1	ZSHT-562-06000-303SU	ZSHT-562-06000-316SU	ZSHT-562-06000-104SU	ZSHT-562-06000-114SU	—
9	8	1/2-13	1	ZSHT-562-09000-303SU	ZSHT-562-09000-316SU	ZSHT-562-09000-104SU	ZSHT-562-09000-114SU	—
12	11	1/2-13	1	ZSHT-562-12000-303SU	ZSHT-562-12000-316SU	ZSHT-562-12000-104SU	ZSHT-562-12000-114SU	—
18	17	1/2-13	1	ZSHT-562-18000-303SU	ZSHT-562-18000-316SU	ZSHT-562-18000-104SU	ZSHT-562-18000-114SU	—
24	23	1/2-13	1	ZSHT-562-24000-303SU	ZSHT-562-24000-316SU	ZSHT-562-24000-104SU	ZSHT-562-24000-114SU	—
36	35	1/2-13	1	ZSHT-562-36000-303SU	ZSHT-562-36000-316SU	ZSHT-562-36000-104SU	ZSHT-562-36000-114SU	—
48	47	1/2-13	1	ZSHT-562-48000-303SU	ZSHT-562-48000-316SU	ZSHT-562-48000-104SU	ZSHT-562-48000-114SU	—
60	59	1/2-13	1	ZSHT-562-60000-303SU	ZSHT-562-60000-316SU	ZSHT-562-60000-104SU	ZSHT-562-60000-114SU	—
72	71	1/2-13	1	ZSHT-562-72000-303SU	ZSHT-562-72000-316SU	ZSHT-562-72000-104SU	ZSHT-562-72000-114SU	—

5/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Stud Lg	Thread Size	Thread Lg	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	2.25	1/2-13	.750	ZSHT-625-03000-303SU	ZSHT-625-03000-316SU	ZSHT-625-03000-104SU	ZSHT-625-03000-114SU	ZSHT-625-03000-202SU
6	5	1/2-13	1	ZSHT-625-06000-303SU	ZSHT-625-06000-316SU	ZSHT-625-06000-104SU	ZSHT-625-06000-114SU	ZSHT-625-06000-202SU
9	8	1/2-13	1	ZSHT-625-09000-303SU	ZSHT-625-09000-316SU	ZSHT-625-09000-104SU	ZSHT-625-09000-114SU	ZSHT-625-09000-202SU
12	11	1/2-13	1	ZSHT-625-12000-303SU	ZSHT-625-12000-316SU	ZSHT-625-12000-104SU	ZSHT-625-12000-114SU	ZSHT-625-12000-202SU
18	17	1/2-13	1	ZSHT-625-18000-303SU	ZSHT-625-18000-316SU	ZSHT-625-18000-104SU	ZSHT-625-18000-114SU	ZSHT-625-18000-202SU
24	23	1/2-13	1	ZSHT-625-24000-303SU	ZSHT-625-24000-316SU	ZSHT-625-24000-104SU	ZSHT-625-24000-114SU	ZSHT-625-24000-202SU
36	35	1/2-13	1	ZSHT-625-36000-303SU	ZSHT-625-36000-316SU	ZSHT-625-36000-104SU	ZSHT-625-36000-114SU	ZSHT-625-36000-202SU
48	47	1/2-13	1	ZSHT-625-48000-303SU	ZSHT-625-48000-316SU	ZSHT-625-48000-104SU	ZSHT-625-48000-114SU	ZSHT-625-48000-202SU
60	59	1/2-13	1	ZSHT-625-60000-303SU	ZSHT-625-60000-316SU	ZSHT-625-60000-104SU	ZSHT-625-60000-114SU	ZSHT-625-60000-202SU
72	71	1/2-13	1	ZSHT-625-72000-303SU	ZSHT-625-72000-316SU	ZSHT-625-72000-104SU	ZSHT-625-72000-114SU	ZSHT-625-72000-202SU

3/4 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Stud Lg	Thread Size	Thread Lg	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	2.25	5/8-11	.750	ZSHT-750-03000-303SU	ZSHT-750-03000-316SU	ZSHT-750-03000-104SU	ZSHT-750-03000-114SU	ZSHT-750-03000-202SU
6	4.75	5/8-11	1.25	ZSHT-750-06000-303SU	ZSHT-750-06000-316SU	ZSHT-750-06000-104SU	ZSHT-750-06000-114SU	ZSHT-750-06000-202SU
9	7.75	5/8-11	1.25	ZSHT-750-09000-303SU	ZSHT-750-09000-316SU	ZSHT-750-09000-104SU	ZSHT-750-09000-114SU	ZSHT-750-09000-202SU
12	10.75	5/8-11	1.25	ZSHT-750-12000-303SU	ZSHT-750-12000-316SU	ZSHT-750-12000-104SU	ZSHT-750-12000-114SU	ZSHT-750-12000-202SU
18	16.75	5/8-11	1.25	ZSHT-750-18000-303SU	ZSHT-750-18000-316SU	ZSHT-750-18000-104SU	ZSHT-750-18000-114SU	ZSHT-750-18000-202SU
24	22.75	5/8-11	1.25	ZSHT-750-24000-303SU	ZSHT-750-24000-316SU	ZSHT-750-24000-104SU	ZSHT-750-24000-114SU	ZSHT-750-24000-202SU
36	34.75	5/8-11	1.25	ZSHT-750-36000-303SU	ZSHT-750-36000-316SU	ZSHT-750-36000-104SU	ZSHT-750-36000-114SU	ZSHT-750-36000-202SU
48	46.75	5/8-11	1.25	ZSHT-750-48000-303SU	ZSHT-750-48000-316SU	ZSHT-750-48000-104SU	ZSHT-750-48000-114SU	ZSHT-750-48000-202SU
60	58.75	5/8-11	1.25	ZSHT-750-60000-303SU	ZSHT-750-60000-316SU	ZSHT-750-60000-104SU	ZSHT-750-60000-114SU	ZSHT-750-60000-202SU
72	70.75	5/8-11	1.25	ZSHT-750-72000-303SU	ZSHT-750-72000-316SU	ZSHT-750-72000-104SU	ZSHT-750-72000-114SU	ZSHT-750-72000-202SU

Threaded Stud Rotary Shaft One End — Inch



7/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Stud Lg	Thread Size	Thread Lg	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	2.25	5/8-11	.750	ZSHT-875-03000-303SU	ZSHT-875-03000-316SU	ZSHT-875-03000-104SU	ZSHT-875-03000-114SU	ZSHT-875-03000-202SU
6	4.5	5/8-11	1.25	ZSHT-875-06000-303SU	ZSHT-875-06000-316SU	ZSHT-875-06000-104SU	ZSHT-875-06000-114SU	ZSHT-875-06000-202SU
9	7.5	5/8-11	1.25	ZSHT-875-09000-303SU	ZSHT-875-09000-316SU	ZSHT-875-09000-104SU	ZSHT-875-09000-114SU	ZSHT-875-09000-202SU
12	10.5	5/8-11	1.25	ZSHT-875-12000-303SU	ZSHT-875-12000-316SU	ZSHT-875-12000-104SU	ZSHT-875-12000-114SU	ZSHT-875-12000-202SU
18	16.5	5/8-11	1.25	ZSHT-875-18000-303SU	ZSHT-875-18000-316SU	ZSHT-875-18000-104SU	ZSHT-875-18000-114SU	ZSHT-875-18000-202SU
24	22.5	5/8-11	1.25	ZSHT-875-24000-303SU	ZSHT-875-24000-316SU	ZSHT-875-24000-104SU	ZSHT-875-24000-114SU	ZSHT-875-24000-202SU
36	34.5	5/8-11	1.25	ZSHT-875-36000-303SU	ZSHT-875-36000-316SU	ZSHT-875-36000-104SU	ZSHT-875-36000-114SU	ZSHT-875-36000-202SU
48	46.5	5/8-11	1.25	ZSHT-875-48000-303SU	ZSHT-875-48000-316SU	ZSHT-875-48000-104SU	ZSHT-875-48000-114SU	ZSHT-875-48000-202SU
60	58.5	5/8-11	1.25	ZSHT-875-60000-303SU	ZSHT-875-60000-316SU	ZSHT-875-60000-104SU	ZSHT-875-60000-114SU	ZSHT-875-60000-202SU
72	70.5	5/8-11	1.25	ZSHT-875-72000-303SU	ZSHT-875-72000-316SU	ZSHT-875-72000-104SU	ZSHT-875-72000-114SU	ZSHT-875-72000-202SU

15/16 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Stud Lg	Thread Size	Thread Lg	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	2.25	7/8-9	.750	—	—	ZSHT-937-03000-104SU	—	—
6	4.5	7/8-9	1.50	—	—	ZSHT-937-06000-104SU	—	—
9	7.5	7/8-9	1.50	—	—	ZSHT-937-09000-104SU	—	—
12	10.5	7/8-9	1.50	—	—	ZSHT-937-12000-104SU	—	—
18	16.5	7/8-9	1.50	—	—	ZSHT-937-18000-104SU	—	—
24	22.5	7/8-9	1.50	—	—	ZSHT-937-24000-104SU	—	—
36	34.5	7/8-9	1.50	—	—	ZSHT-937-36000-104SU	—	—
48	46.5	7/8-9	1.50	—	—	ZSHT-937-48000-104SU	—	—
60	58.5	7/8-9	1.50	—	—	ZSHT-937-60000-104SU	—	—
72	70.5	7/8-9	1.50	—	—	ZSHT-937-72000-104SU	—	—

1 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Stud Lg	Thread Size	Thread Lg	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	2.25	7/8-9	.750	ZSHT-1000-03000-303SU	ZSHT-1000-03000-316SU	ZSHT-1000-03000-104SU	ZSHT-1000-03000-114SU	ZSHT-1000-03000-202SU
6	4.5	7/8-9	1.50	ZSHT-1000-06000-303SU	ZSHT-1000-06000-316SU	ZSHT-1000-06000-104SU	ZSHT-1000-06000-114SU	ZSHT-1000-06000-202SU
9	7.5	7/8-9	1.50	ZSHT-1000-09000-303SU	ZSHT-1000-09000-316SU	ZSHT-1000-09000-104SU	ZSHT-1000-09000-114SU	ZSHT-1000-09000-202SU
12	10.5	7/8-9	1.50	ZSHT-1000-12000-303SU	ZSHT-1000-12000-316SU	ZSHT-1000-12000-104SU	ZSHT-1000-12000-114SU	ZSHT-1000-12000-202SU
18	16.5	7/8-9	1.50	ZSHT-1000-18000-303SU	ZSHT-1000-18000-316SU	ZSHT-1000-18000-104SU	ZSHT-1000-18000-114SU	ZSHT-1000-18000-202SU
24	22.5	7/8-9	1.50	ZSHT-1000-24000-303SU	ZSHT-1000-24000-316SU	ZSHT-1000-24000-104SU	ZSHT-1000-24000-114SU	ZSHT-1000-24000-202SU
36	34.5	7/8-9	1.50	ZSHT-1000-36000-303SU	ZSHT-1000-36000-316SU	ZSHT-1000-36000-104SU	ZSHT-1000-36000-114SU	ZSHT-1000-36000-202SU
48	46.5	7/8-9	1.50	ZSHT-1000-48000-303SU	ZSHT-1000-48000-316SU	ZSHT-1000-48000-104SU	ZSHT-1000-48000-114SU	ZSHT-1000-48000-202SU
60	58.5	7/8-9	1.50	ZSHT-1000-60000-303SU	ZSHT-1000-60000-316SU	ZSHT-1000-60000-104SU	ZSHT-1000-60000-114SU	ZSHT-1000-60000-202SU
72	70.5	7/8-9	1.50	ZSHT-1000-72000-303SU	ZSHT-1000-72000-316SU	ZSHT-1000-72000-104SU	ZSHT-1000-72000-114SU	ZSHT-1000-72000-202SU

Threaded Stud Rotary Shaft Both Ends — Inch



5/16 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Stud Lg	Threads Size	Threads Lg	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	1.5	1/4-20	.750	ZSHTT-312-03000-303SU	ZSHTT-312-03000-316SU	ZSHTT-312-03000-104SU	ZSHTT-312-03000-114SU	ZSHTT-312-03000-202SU
6	5.25	1/4-20	.375	ZSHTT-312-06000-303SU	ZSHTT-312-06000-316SU	ZSHTT-312-06000-104SU	ZSHTT-312-06000-114SU	ZSHTT-312-06000-202SU
9	8.25	1/4-20	.375	ZSHTT-312-09000-303SU	ZSHTT-312-09000-316SU	ZSHTT-312-09000-104SU	ZSHTT-312-09000-114SU	ZSHTT-312-09000-202SU
12	11.25	1/4-20	.375	ZSHTT-312-12000-303SU	ZSHTT-312-12000-316SU	ZSHTT-312-12000-104SU	ZSHTT-312-12000-114SU	ZSHTT-312-12000-202SU
18	17.25	1/4-20	.375	ZSHTT-312-18000-303SU	ZSHTT-312-18000-316SU	ZSHTT-312-18000-104SU	ZSHTT-312-18000-114SU	ZSHTT-312-18000-202SU
24	23.25	1/4-20	.375	ZSHTT-312-24000-303SU	ZSHTT-312-24000-316SU	ZSHTT-312-24000-104SU	ZSHTT-312-24000-114SU	ZSHTT-312-24000-202SU
36	35.25	1/4-20	.375	ZSHTT-312-36000-303SU	ZSHTT-312-36000-316SU	ZSHTT-312-36000-104SU	ZSHTT-312-36000-114SU	ZSHTT-312-36000-202SU
48	47.25	1/4-20	.375	ZSHTT-312-48000-303SU	ZSHTT-312-48000-316SU	ZSHTT-312-48000-104SU	ZSHTT-312-48000-114SU	ZSHTT-312-48000-202SU
60	59.25	1/4-20	.375	ZSHTT-312-60000-303SU	ZSHTT-312-60000-316SU	ZSHTT-312-60000-104SU	ZSHTT-312-60000-114SU	ZSHTT-312-60000-202SU
72	71.25	1/4-20	.375	ZSHTT-312-72000-303SU	ZSHTT-312-72000-316SU	ZSHTT-312-72000-104SU	ZSHTT-312-72000-114SU	ZSHTT-312-72000-202SU

3/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Stud Lg	Threads Size	Threads Lg	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	1.5	5/16-18	.750	ZSHTT-375-03000-303SU	ZSHTT-375-03000-316SU	ZSHTT-375-03000-104SU	ZSHTT-375-03000-114SU	ZSHTT-375-03000-202SU
6	4.5	5/16-18	.750	ZSHTT-375-06000-303SU	ZSHTT-375-06000-316SU	ZSHTT-375-06000-104SU	ZSHTT-375-06000-114SU	ZSHTT-375-06000-202SU
9	7.5	5/16-18	.750	ZSHTT-375-09000-303SU	ZSHTT-375-09000-316SU	ZSHTT-375-09000-104SU	ZSHTT-375-09000-114SU	ZSHTT-375-09000-202SU
12	10.5	5/16-18	.750	ZSHTT-375-12000-303SU	ZSHTT-375-12000-316SU	ZSHTT-375-12000-104SU	ZSHTT-375-12000-114SU	ZSHTT-375-12000-202SU
18	16.5	5/16-18	.750	ZSHTT-375-18000-303SU	ZSHTT-375-18000-316SU	ZSHTT-375-18000-104SU	ZSHTT-375-18000-114SU	ZSHTT-375-18000-202SU
24	22.5	5/16-18	.750	ZSHTT-375-24000-303SU	ZSHTT-375-24000-316SU	ZSHTT-375-24000-104SU	ZSHTT-375-24000-114SU	ZSHTT-375-24000-202SU
36	34.5	5/16-18	.750	ZSHTT-375-36000-303SU	ZSHTT-375-36000-316SU	ZSHTT-375-36000-104SU	ZSHTT-375-36000-114SU	ZSHTT-375-36000-202SU
48	46.5	5/16-18	.750	ZSHTT-375-48000-303SU	ZSHTT-375-48000-316SU	ZSHTT-375-48000-104SU	ZSHTT-375-48000-114SU	ZSHTT-375-48000-202SU
60	58.5	5/16-18	.750	ZSHTT-375-60000-303SU	ZSHTT-375-60000-316SU	ZSHTT-375-60000-104SU	ZSHTT-375-60000-114SU	ZSHTT-375-60000-202SU
72	70.5	5/16-18	.750	ZSHTT-375-72000-303SU	ZSHTT-375-72000-316SU	ZSHTT-375-72000-104SU	ZSHTT-375-72000-114SU	ZSHTT-375-72000-202SU

1/2 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Stud Lg	Threads Size	Threads Lg	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	1.5	3/8-16	.750	ZSHTT-500-03000-303SU	ZSHTT-500-03000-316SU	ZSHTT-500-03000-104SU	ZSHTT-500-03000-114SU	ZSHTT-500-03000-202SU
6	4.25	3/8-16	.875	ZSHTT-500-06000-303SU	ZSHTT-500-06000-316SU	ZSHTT-500-06000-104SU	ZSHTT-500-06000-114SU	ZSHTT-500-06000-202SU
9	7.25	3/8-16	.875	ZSHTT-500-09000-303SU	ZSHTT-500-09000-316SU	ZSHTT-500-09000-104SU	ZSHTT-500-09000-114SU	ZSHTT-500-09000-202SU
12	10.25	3/8-16	.875	ZSHTT-500-12000-303SU	ZSHTT-500-12000-316SU	ZSHTT-500-12000-104SU	ZSHTT-500-12000-114SU	ZSHTT-500-12000-202SU
18	16.25	3/8-16	.875	ZSHTT-500-18000-303SU	ZSHTT-500-18000-316SU	ZSHTT-500-18000-104SU	ZSHTT-500-18000-114SU	ZSHTT-500-18000-202SU
24	22.25	3/8-16	.875	ZSHTT-500-24000-303SU	ZSHTT-500-24000-316SU	ZSHTT-500-24000-104SU	ZSHTT-500-24000-114SU	ZSHTT-500-24000-202SU
36	34.25	3/8-16	.875	ZSHTT-500-36000-303SU	ZSHTT-500-36000-316SU	ZSHTT-500-36000-104SU	ZSHTT-500-36000-114SU	ZSHTT-500-36000-202SU
48	46.25	3/8-16	.875	ZSHTT-500-48000-303SU	ZSHTT-500-48000-316SU	ZSHTT-500-48000-104SU	ZSHTT-500-48000-114SU	ZSHTT-500-48000-202SU
60	58.25	3/8-16	.875	ZSHTT-500-60000-303SU	ZSHTT-500-60000-316SU	ZSHTT-500-60000-104SU	ZSHTT-500-60000-114SU	ZSHTT-500-60000-202SU
72	70.25	3/8-16	.875	ZSHTT-500-72000-303SU	ZSHTT-500-72000-316SU	ZSHTT-500-72000-104SU	ZSHTT-500-72000-114SU	ZSHTT-500-72000-202SU

Threaded Stud Rotary Shaft Both Ends — Inch



5/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Stud Lg	Threads Size	Threads Lg	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	1.5	1/2-13	.750	ZSHTT-625-03000-303SU	ZSHTT-625-03000-316SU	ZSHTT-625-03000-104SU	ZSHTT-625-03000-114SU	ZSHTT-625-03000-202SU
6	4	1/2-13	1	ZSHTT-625-06000-303SU	ZSHTT-625-06000-316SU	ZSHTT-625-06000-104SU	ZSHTT-625-06000-114SU	ZSHTT-625-06000-202SU
9	7	1/2-13	1	ZSHTT-625-09000-303SU	ZSHTT-625-09000-316SU	ZSHTT-625-09000-104SU	ZSHTT-625-09000-114SU	ZSHTT-625-09000-202SU
12	10	1/2-13	1	ZSHTT-625-12000-303SU	ZSHTT-625-12000-316SU	ZSHTT-625-12000-104SU	ZSHTT-625-12000-114SU	ZSHTT-625-12000-202SU
18	16	1/2-13	1	ZSHTT-625-18000-303SU	ZSHTT-625-18000-316SU	ZSHTT-625-18000-104SU	ZSHTT-625-18000-114SU	ZSHTT-625-18000-202SU
24	22	1/2-13	1	ZSHTT-625-24000-303SU	ZSHTT-625-24000-316SU	ZSHTT-625-24000-104SU	ZSHTT-625-24000-114SU	ZSHTT-625-24000-202SU
36	34	1/2-13	1	ZSHTT-625-36000-303SU	ZSHTT-625-36000-316SU	ZSHTT-625-36000-104SU	ZSHTT-625-36000-114SU	ZSHTT-625-36000-202SU
48	46	1/2-13	1	ZSHTT-625-48000-303SU	ZSHTT-625-48000-316SU	ZSHTT-625-48000-104SU	ZSHTT-625-48000-114SU	ZSHTT-625-48000-202SU
60	58	1/2-13	1	ZSHTT-625-60000-303SU	ZSHTT-625-60000-316SU	ZSHTT-625-60000-104SU	ZSHTT-625-60000-114SU	ZSHTT-625-60000-202SU
72	70	1/2-13	1	ZSHTT-625-72000-303SU	ZSHTT-625-72000-316SU	ZSHTT-625-72000-104SU	ZSHTT-625-72000-114SU	ZSHTT-625-72000-202SU

3/4 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Stud Lg	Threads Size	Threads Lg	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	1.5	5/8-11	.750	ZSHTT-750-03000-303SU	ZSHTT-750-03000-316SU	ZSHTT-750-03000-104SU	ZSHTT-750-03000-114SU	ZSHTT-750-03000-202SU
6	3.5	5/8-11	1.25	ZSHTT-750-06000-303SU	ZSHTT-750-06000-316SU	ZSHTT-750-06000-104SU	ZSHTT-750-06000-114SU	ZSHTT-750-06000-202SU
9	6.5	5/8-11	1.25	ZSHTT-750-09000-303SU	ZSHTT-750-09000-316SU	ZSHTT-750-09000-104SU	ZSHTT-750-09000-114SU	ZSHTT-750-09000-202SU
12	9.5	5/8-11	1.25	ZSHTT-750-12000-303SU	ZSHTT-750-12000-316SU	ZSHTT-750-12000-104SU	ZSHTT-750-12000-114SU	ZSHTT-750-12000-202SU
18	15.5	5/8-11	1.25	ZSHTT-750-18000-303SU	ZSHTT-750-18000-316SU	ZSHTT-750-18000-104SU	ZSHTT-750-18000-114SU	ZSHTT-750-18000-202SU
24	21.5	5/8-11	1.25	ZSHTT-750-24000-303SU	ZSHTT-750-24000-316SU	ZSHTT-750-24000-104SU	ZSHTT-750-24000-114SU	ZSHTT-750-24000-202SU
36	33.5	5/8-11	1.25	ZSHTT-750-36000-303SU	ZSHTT-750-36000-316SU	ZSHTT-750-36000-104SU	ZSHTT-750-36000-114SU	ZSHTT-750-36000-202SU
48	45.5	5/8-11	1.25	ZSHTT-750-48000-303SU	ZSHTT-750-48000-316SU	ZSHTT-750-48000-104SU	ZSHTT-750-48000-114SU	ZSHTT-750-48000-202SU
60	57.5	5/8-11	1.25	ZSHTT-750-60000-303SU	ZSHTT-750-60000-316SU	ZSHTT-750-60000-104SU	ZSHTT-750-60000-114SU	ZSHTT-750-60000-202SU
72	69.5	5/8-11	1.25	ZSHTT-750-72000-303SU	ZSHTT-750-72000-316SU	ZSHTT-750-72000-104SU	ZSHTT-750-72000-114SU	ZSHTT-750-72000-202SU

7/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Stud Lg	Threads Size	Threads Lg	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	1.5	3/4-10	.750	ZSHTT-875-03000-303SU	ZSHTT-875-03000-316SU	ZSHTT-875-03000-104SU	ZSHTT-875-03000-114SU	ZSHTT-875-03000-202SU
6	3	3/4-10	1.50	ZSHTT-875-06000-303SU	ZSHTT-875-06000-316SU	ZSHTT-875-06000-104SU	ZSHTT-875-06000-114SU	ZSHTT-875-06000-202SU
9	6	3/4-10	1.50	ZSHTT-875-09000-303SU	ZSHTT-875-09000-316SU	ZSHTT-875-09000-104SU	ZSHTT-875-09000-114SU	ZSHTT-875-09000-202SU
12	9	3/4-10	1.50	ZSHTT-875-12000-303SU	ZSHTT-875-12000-316SU	ZSHTT-875-12000-104SU	ZSHTT-875-12000-114SU	ZSHTT-875-12000-202SU
18	15	3/4-10	1.50	ZSHTT-875-18000-303SU	ZSHTT-875-18000-316SU	ZSHTT-875-18000-104SU	ZSHTT-875-18000-114SU	ZSHTT-875-18000-202SU
24	21	3/4-10	1.50	ZSHTT-875-24000-303SU	ZSHTT-875-24000-316SU	ZSHTT-875-24000-104SU	ZSHTT-875-24000-114SU	ZSHTT-875-24000-202SU
36	33	3/4-10	1.50	ZSHTT-875-36000-303SU	ZSHTT-875-36000-316SU	ZSHTT-875-36000-104SU	ZSHTT-875-36000-114SU	ZSHTT-875-36000-202SU
48	45	3/4-10	1.50	ZSHTT-875-48000-303SU	ZSHTT-875-48000-316SU	ZSHTT-875-48000-104SU	ZSHTT-875-48000-114SU	ZSHTT-875-48000-202SU
60	57	3/4-10	1.50	ZSHTT-875-60000-303SU	ZSHTT-875-60000-316SU	ZSHTT-875-60000-104SU	ZSHTT-875-60000-114SU	ZSHTT-875-60000-202SU
72	69	3/4-10	1.50	ZSHTT-875-72000-303SU	ZSHTT-875-72000-316SU	ZSHTT-875-72000-104SU	ZSHTT-875-72000-114SU	ZSHTT-875-72000-202SU

Threaded Stud Rotary Shaft Both Ends — Inch



15/16 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Stud Lg	Threads Size	Threads Lg	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	1.5	7/8-9	.750	—	—	ZSHTT-937-03000-104SU	—	—
6	3	7/8-9	1.50	—	—	ZSHTT-937-06000-104SU	—	—
9	6	7/8-9	1.50	—	—	ZSHTT-937-09000-104SU	—	—
12	9	7/8-9	1.50	—	—	ZSHTT-937-12000-104SU	—	—
18	15	7/8-9	1.50	—	—	ZSHTT-937-18000-104SU	—	—
24	21	7/8-9	1.50	—	—	ZSHTT-937-24000-104SU	—	—
36	33	7/8-9	1.50	—	—	ZSHTT-937-36000-104SU	—	—
48	45	7/8-9	1.50	—	—	ZSHTT-937-48000-104SU	—	—
60	57	7/8-9	1.50	—	—	ZSHTT-937-60000-104SU	—	—
72	69	7/8-9	1.50	—	—	ZSHTT-937-72000-104SU	—	—

1 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Stud Lg	Threads Size	Threads Lg	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	1.5	7/8-9	.750	ZSHTT-1000-03000-303SU	ZSHTT-1000-03000-316SU	ZSHTT-1000-03000-104SU	ZSHTT-1000-03000-114SU	ZSHTT-1000-03000-202SU
6	3	7/8-9	1.50	ZSHTT-1000-06000-303SU	ZSHTT-1000-06000-316SU	ZSHTT-1000-06000-104SU	ZSHTT-1000-06000-114SU	ZSHTT-1000-06000-202SU
9	6	7/8-9	1.50	ZSHTT-1000-09000-303SU	ZSHTT-1000-09000-316SU	ZSHTT-1000-09000-104SU	ZSHTT-1000-09000-114SU	ZSHTT-1000-09000-202SU
12	9	7/8-9	1.50	ZSHTT-1000-12000-303SU	ZSHTT-1000-12000-316SU	ZSHTT-1000-12000-104SU	ZSHTT-1000-12000-114SU	ZSHTT-1000-12000-202SU
18	15	7/8-9	1.50	ZSHTT-1000-18000-303SU	ZSHTT-1000-18000-316SU	ZSHTT-1000-18000-104SU	ZSHTT-1000-18000-114SU	ZSHTT-1000-18000-202SU
24	21	7/8-9	1.50	ZSHTT-1000-24000-303SU	ZSHTT-1000-24000-316SU	ZSHTT-1000-24000-104SU	ZSHTT-1000-24000-114SU	ZSHTT-1000-24000-202SU
36	33	7/8-9	1.50	ZSHTT-1000-36000-303SU	ZSHTT-1000-36000-316SU	ZSHTT-1000-36000-104SU	ZSHTT-1000-36000-114SU	ZSHTT-1000-36000-202SU
48	45	7/8-9	1.50	ZSHTT-1000-48000-303SU	ZSHTT-1000-48000-316SU	ZSHTT-1000-48000-104SU	ZSHTT-1000-48000-114SU	ZSHTT-1000-48000-202SU
60	57	7/8-9	1.50	ZSHTT-1000-60000-303SU	ZSHTT-1000-60000-316SU	ZSHTT-1000-60000-104SU	ZSHTT-1000-60000-114SU	ZSHTT-1000-60000-202SU
72	69	7/8-9	1.50	ZSHTT-1000-72000-303SU	ZSHTT-1000-72000-316SU	ZSHTT-1000-72000-104SU	ZSHTT-1000-72000-114SU	ZSHTT-1000-72000-202SU

Threaded Stud Rotary Shaft – Metric
18-8 & 316 SS, Steel



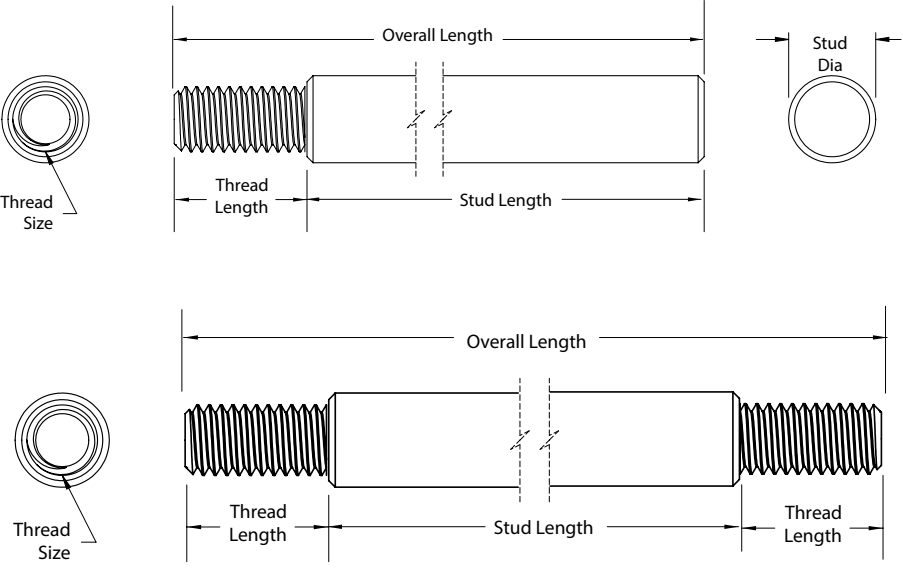
Product Information

Threaded Rotary Shafts are precision-engineered metal rods designed for rotational applications.

Featuring threaded ends for secure component attachment, these shafts excel in transmitting power and motion. Crafted from high-quality materials and available in various diameters and lengths, they offer exceptional durability and performance. Ideal for a wide range of industrial machinery, automation systems, and mechanical assemblies, threaded rotary shafts provide reliable and efficient operation.

All shafts are made in the USA from DFARS compliant & RoHS compliant stainless steel and shafts are fully lot traceable. Length tolerance is +/-1.6mm and straightness tolerance is .33mm per 300mm.

- 18-8 stainless steel shafts offer excellent corrosion resistant and can be mildly magnetic. Meets ASTM A582 Condition A. material specification.
- Type 316 stainless steel, also known as marine stainless steel, offers superior corrosion resistant than 18-8 stainless steel and maybe mildly magnetic. Meets ASTM A276 Condition A. material specification.
- C1045 Carbon Steel shafts are generally stronger than aluminum and stainless steel shafts but not as corrosion resistant. These Carbon Steel shafts offers medium strength properties making them ideal for general purpose use.
- C1045 Carbon Steel is recommended for shafts requiring higher strength and wear resistance than carbon steel and stainless steel shafts.
- 1144 Stressproof Alloy Steel has excellent strength and hardness, and is specifically treated to relieve stresses for this durable material.



Materials Chart						
Material	Mechanical Finish	Edge Type	Specs Met	Rockwell Hardness	Tensile Strength (psi)	Magnetic?
18-8 SS	Ground & Polished	Chamfered	ASTM A 582 Cond A	B83	90,000	Mildly
316 SS	Ground & Polished	Chamfered	ASTM A 276 Cond	B83	85,000	Mildly
C1045 Carbon Steel	Ground & Polished	Chamfered	ASTM A108	C15	91,000	Magnetic
1144 Alloy Steel	Ground & Polished	Chamfered	ASTM A311	C22	115,000	Magnetic

Threaded Stud Rotary Shaft One End – Metric



8mm Diameter (Tolerance: +0/-.0635mm)

O'all Lg (mm)	Stud Length	Thread Size	Thread Length	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	288	M6 x 1.00	12	ZSHT-M08-M0300-303SU	ZSHT-M08-M0300-316SU	ZSHT-M08-M0300-104SU	ZSHT-M08-M0300-114SU
500	488	M6 x 1.00	12	ZSHT-M08-M0500-303SU	ZSHT-M08-M0500-316SU	ZSHT-M08-M0500-104SU	ZSHT-M08-M0500-114SU
1,000	988	M6 x 1.00	12	ZSHT-M08-M1000-303SU	ZSHT-M08-M1000-316SU	ZSHT-M08-M1000-104SU	ZSHT-M08-M1000-114SU
1,200	1188	M6 x 1.00	12	ZSHT-M08-M1200-303SU	ZSHT-M08-M1200-316SU	ZSHT-M08-M1200-104SU	ZSHT-M08-M1200-114SU
1,500	1488	M6 x 1.00	12	ZSHT-M08-M1500-303SU	ZSHT-M08-M1500-316SU	ZSHT-M08-M1500-104SU	ZSHT-M08-M1500-114SU
1,800	1788	M6 x 1.00	12	ZSHT-M08-M1800-303SU	ZSHT-M08-M1800-316SU	ZSHT-M08-M1800-104SU	ZSHT-M08-M1800-114SU

10mm Diameter (Tolerance: +0/-.0635mm)

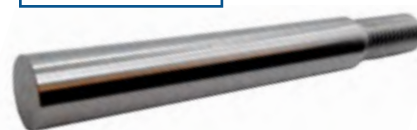
O'all Lg (mm)	Stud Length	Thread Size	Thread Length	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	285	M8 x 1	15	ZSHT-M10-M0300-303SU	ZSHT-M10-M0300-316SU	ZSHT-M10-M0300-104SU	ZSHT-M10-M0300-114SU
500	485	M8 x 1	15	ZSHT-M10-M0500-303SU	ZSHT-M10-M0500-316SU	ZSHT-M10-M0500-104SU	ZSHT-M10-M0500-114SU
1,000	985	M8 x 1	15	ZSHT-M10-M1000-303SU	ZSHT-M10-M1000-316SU	ZSHT-M10-M1000-104SU	ZSHT-M10-M1000-114SU
1,200	1185	M8 x 1	15	ZSHT-M10-M1200-303SU	ZSHT-M10-M1200-316SU	ZSHT-M10-M1200-104SU	ZSHT-M10-M1200-114SU
1,500	1485	M8 x 1	15	ZSHT-M10-M1500-303SU	ZSHT-M10-M1500-316SU	ZSHT-M10-M1500-104SU	ZSHT-M10-M1500-114SU
1,800	1785	M8 x 1	15	ZSHT-M10-M1800-303SU	ZSHT-M10-M1800-316SU	ZSHT-M10-M1800-104SU	ZSHT-M10-M1800-114SU

12mm Diameter (Tolerance: +0/-.0635mm)

O'all Lg (mm)	Stud Length	Thread Size	Thread Length	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	280	M10 x 1.25	20	ZSHT-M12-M0300-303SU	ZSHT-M12-M0300-316SU	ZSHT-M12-M0300-104SU	ZSHT-M12-M0300-114SU
500	480	M10 x 1.25	20	ZSHT-M12-M0500-303SU	ZSHT-M12-M0500-316SU	ZSHT-M12-M0500-104SU	ZSHT-M12-M0500-114SU
1,000	980	M10 x 1.25	20	ZSHT-M12-M1000-303SU	ZSHT-M12-M1000-316SU	ZSHT-M12-M1000-104SU	ZSHT-M12-M1000-114SU
1,200	1180	M10 x 1.25	20	ZSHT-M12-M1200-303SU	ZSHT-M12-M1200-316SU	ZSHT-M12-M1200-104SU	ZSHT-M12-M1200-114SU
1,500	1480	M10 x 1.25	20	ZSHT-M12-M1500-303SU	ZSHT-M12-M1500-316SU	ZSHT-M12-M1500-104SU	ZSHT-M12-M1500-114SU
1,800	1780	M10 x 1.25	20	ZSHT-M12-M1800-303SU	ZSHT-M12-M1800-316SU	ZSHT-M12-M1800-104SU	ZSHT-M12-M1800-114SU

15mm Diameter (Tolerance: +0/-.0635mm)

O'all Lg (mm)	Stud Length	Thread Size	Thread Length	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	280	M12 x 1.25	20	ZSHT-M15-M0300-303SU	ZSHT-M15-M0300-316SU	ZSHT-M15-M0300-104SU	ZSHT-M15-M0300-114SU
500	480	M12 x 1.25	20	ZSHT-M15-M0500-303SU	ZSHT-M15-M0500-316SU	ZSHT-M15-M0500-104SU	ZSHT-M15-M0500-114SU
1,000	980	M12 x 1.25	20	ZSHT-M15-M1000-303SU	ZSHT-M15-M1000-316SU	ZSHT-M15-M1000-104SU	ZSHT-M15-M1000-114SU
1,200	1180	M12 x 1.25	20	ZSHT-M15-M1200-303SU	ZSHT-M15-M1200-316SU	ZSHT-M15-M1200-104SU	ZSHT-M15-M1200-114SU
1,500	1480	M12 x 1.25	20	ZSHT-M15-M1500-303SU	ZSHT-M15-M1500-316SU	ZSHT-M15-M1500-104SU	ZSHT-M15-M1500-114SU
1,800	1780	M12 x 1.25	20	ZSHT-M15-M1800-303SU	ZSHT-M15-M1800-316SU	ZSHT-M15-M1800-104SU	ZSHT-M15-M1800-114SU



Threaded Stud Rotary Shaft One End – Metric

17mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Stud Length	Thread Size	Thread Length	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	278	M12 x 1.25	22	ZSHT-M17-M0300-303SU	ZSHT-M17-M0300-316SU	ZSHT-M17-M0300-104SU	ZSHT-M17-M0300-114SU
500	478	M12 x 1.25	22	ZSHT-M17-M0500-303SU	ZSHT-M17-M0500-316SU	ZSHT-M17-M0500-104SU	ZSHT-M17-M0500-114SU
1,000	978	M12 x 1.25	22	ZSHT-M17-M1000-303SU	ZSHT-M17-M1000-316SU	ZSHT-M17-M1000-104SU	ZSHT-M17-M1000-114SU
1,200	1178	M12 x 1.25	22	ZSHT-M17-M1200-303SU	ZSHT-M17-M1200-316SU	ZSHT-M17-M1200-104SU	ZSHT-M17-M1200-114SU
1,500	1478	M12 x 1.25	22	ZSHT-M17-M1700-303SU	ZSHT-M17-M1700-316SU	ZSHT-M17-M1700-104SU	ZSHT-M17-M1700-114SU
1,800	1778	M12 x 1.25	22	ZSHT-M17-M1800-303SU	ZSHT-M17-M1800-316SU	ZSHT-M17-M1800-104SU	ZSHT-M17-M1800-114SU

20mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Stud Length	Thread Size	Thread Length	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	275	M16 x 1.5	25	ZSHT-M20-M0300-303SU	ZSHT-M20-M0300-316SU	ZSHT-M20-M0300-104SU	ZSHT-M20-M0300-114SU
500	475	M16 x 1.5	25	ZSHT-M20-M0500-303SU	ZSHT-M20-M0500-316SU	ZSHT-M20-M0500-104SU	ZSHT-M20-M0500-114SU
1,000	975	M16 x 1.5	25	ZSHT-M20-M1000-303SU	ZSHT-M20-M1000-316SU	ZSHT-M20-M1000-104SU	ZSHT-M20-M1000-114SU
1,200	1175	M16 x 1.5	25	ZSHT-M20-M1200-303SU	ZSHT-M20-M1200-316SU	ZSHT-M20-M1200-104SU	ZSHT-M20-M1200-114SU
1,500	1475	M16 x 1.5	25	ZSHT-M20-M1500-303SU	ZSHT-M20-M1500-316SU	ZSHT-M20-M1500-104SU	ZSHT-M20-M1500-114SU
1,800	1775	M16 x 1.5	25	ZSHT-M20-M1800-303SU	ZSHT-M20-M1800-316SU	ZSHT-M20-M1800-104SU	ZSHT-M20-M1800-114SU

24mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Stud Length	Thread Size	Thread Length	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	270	M20 x 1.50	30	ZSHT-M24-M0300-303SU	ZSHT-M24-M0300-316SU	ZSHT-M24-M0300-104SU	ZSHT-M24-M0300-114SU
500	470	M20 x 1.50	30	ZSHT-M24-M0500-303SU	ZSHT-M24-M0500-316SU	ZSHT-M24-M0500-104SU	ZSHT-M24-M0500-114SU
1,000	970	M20 x 1.50	30	ZSHT-M24-M1000-303SU	ZSHT-M24-M1000-316SU	ZSHT-M24-M1000-104SU	ZSHT-M24-M1000-114SU
1,200	1170	M20 x 1.50	30	ZSHT-M24-M1200-303SU	ZSHT-M24-M1200-316SU	ZSHT-M24-M1200-104SU	ZSHT-M24-M1200-114SU
1,500	1470	M20 x 1.50	30	ZSHT-M24-M1500-303SU	ZSHT-M24-M1500-316SU	ZSHT-M24-M1500-104SU	ZSHT-M24-M1500-114SU
1,800	1770	M20 x 1.50	30	ZSHT-M24-M1800-303SU	ZSHT-M24-M1800-316SU	ZSHT-M24-M1800-104SU	ZSHT-M24-M1800-114SU

25mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Stud Length	Thread Size	Thread Length	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	270	M20 x 1.50	30	ZSHT-M25-M0300-303SU	ZSHT-M25-M0300-316SU	ZSHT-M25-M0300-104SU	ZSHT-M25-M0300-114SU
500	470	M20 x 1.50	30	ZSHT-M25-M0500-303SU	ZSHT-M25-M0500-316SU	ZSHT-M25-M0500-104SU	ZSHT-M25-M0500-114SU
1,000	970	M20 x 1.50	30	ZSHT-M25-M1000-303SU	ZSHT-M25-M1000-316SU	ZSHT-M25-M1000-104SU	ZSHT-M25-M1000-114SU
1,200	1170	M20 x 1.50	30	ZSHT-M25-M1200-303SU	ZSHT-M25-M1200-316SU	ZSHT-M25-M1200-104SU	ZSHT-M25-M1200-114SU
1,500	1470	M20 x 1.50	30	ZSHT-M25-M1500-303SU	ZSHT-M25-M1500-316SU	ZSHT-M25-M1500-104SU	ZSHT-M25-M1500-114SU
1,800	1770	M20 x 1.50	30	ZSHT-M25-M1800-303SU	ZSHT-M25-M1800-316SU	ZSHT-M25-M1800-104SU	ZSHT-M25-M1800-114SU

28mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Stud Length	Thread Size	Thread Length	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	270	M20 x 1.50	30	ZSHT-M28-M0300-303SU	ZSHT-M28-M0300-316SU	ZSHT-M28-M0300-104SU	ZSHT-M28-M0300-114SU
500	470	M20 x 1.50	30	ZSHT-M28-M0500-303SU	ZSHT-M28-M0500-316SU	ZSHT-M28-M0500-104SU	ZSHT-M28-M0500-114SU
1,000	970	M20 x 1.50	30	ZSHT-M28-M1000-303SU	ZSHT-M28-M1000-316SU	ZSHT-M28-M1000-104SU	ZSHT-M28-M1000-114SU
1,200	1170	M20 x 1.50	30	ZSHT-M28-M1200-303SU	ZSHT-M28-M1200-316SU	ZSHT-M28-M1200-104SU	ZSHT-M28-M1200-114SU
1,500	1470	M20 x 1.50	30	ZSHT-M28-M2800-303SU	ZSHT-M28-M2800-316SU	ZSHT-M28-M2800-104SU	ZSHT-M28-M2800-114SU
1,800	1770	M20 x 1.50	30	ZSHT-M28-M1800-303SU	ZSHT-M28-M1800-316SU	ZSHT-M28-M1800-104SU	ZSHT-M28-M1800-114SU

Threaded Stud Rotary Shaft Both Ends – **Metric****8mm Diameter (Tolerance: +0/-0.0635mm)**

O'all Lg (mm)	Stud Length	Threads Size	Threads Length	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	276	M6 x 1.00	12	ZSHTT-M08-M0300-303SU	ZSHTT-M08-M0300-316SU	ZSHTT-M08-M0300-104SU	ZSHTT-M08-M0300-114SU
500	476	M6 x 1.00	12	ZSHTT-M08-M0500-303SU	ZSHTT-M08-M0500-316SU	ZSHTT-M08-M0500-104SU	ZSHTT-M08-M0500-114SU
1,000	976	M6 x 1.00	12	ZSHTT-M08-M1000-303SU	ZSHTT-M08-M1000-316SU	ZSHTT-M08-M1000-104SU	ZSHTT-M08-M1000-114SU
1,200	1176	M6 x 1.00	12	ZSHTT-M08-M1200-303SU	ZSHTT-M08-M1200-316SU	ZSHTT-M08-M1200-104SU	ZSHTT-M08-M1200-114SU
1,500	1476	M6 x 1.00	12	ZSHTT-M08-M1500-303SU	ZSHTT-M08-M1500-316SU	ZSHTT-M08-M1500-104SU	ZSHTT-M08-M1500-114SU
1,800	1776	M6 x 1.00	12	ZSHTT-M08-M1800-303SU	ZSHTT-M08-M1800-316SU	ZSHTT-M08-M1800-104SU	ZSHTT-M08-M1800-114SU

10mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Stud Length	Threads Size	Threads Length	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	270	M8 x 1	15	ZSHTT-M10-M0300-303SU	ZSHTT-M10-M0300-316SU	ZSHTT-M10-M0300-104SU	ZSHTT-M10-M0300-114SU
500	470	M8 x 1	15	ZSHTT-M10-M0500-303SU	ZSHTT-M10-M0500-316SU	ZSHTT-M10-M0500-104SU	ZSHTT-M10-M0500-114SU
1,000	970	M8 x 1	15	ZSHTT-M10-M1000-303SU	ZSHTT-M10-M1000-316SU	ZSHTT-M10-M1000-104SU	ZSHTT-M10-M1000-114SU
1,200	1170	M8 x 1	15	ZSHTT-M10-M1200-303SU	ZSHTT-M10-M1200-316SU	ZSHTT-M10-M1200-104SU	ZSHTT-M10-M1200-114SU
1,500	1470	M8 x 1	15	ZSHTT-M10-M1500-303SU	ZSHTT-M10-M1500-316SU	ZSHTT-M10-M1500-104SU	ZSHTT-M10-M1500-114SU
1,800	1770	M8 x 1	15	ZSHTT-M10-M1800-303SU	ZSHTT-M10-M1800-316SU	ZSHTT-M10-M1800-104SU	ZSHTT-M10-M1800-114SU

12mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Stud Length	Threads Size	Threads Length	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	260	M10 x 1.25	20	ZSHTT-M12-M0300-303SU	ZSHTT-M12-M0300-316SU	ZSHTT-M12-M0300-104SU	ZSHTT-M12-M0300-114SU
500	460	M10 x 1.25	20	ZSHTT-M12-M0500-303SU	ZSHTT-M12-M0500-316SU	ZSHTT-M12-M0500-104SU	ZSHTT-M12-M0500-114SU
1,000	960	M10 x 1.25	20	ZSHTT-M12-M1000-303SU	ZSHTT-M12-M1000-316SU	ZSHTT-M12-M1000-104SU	ZSHTT-M12-M1000-114SU
1,200	1160	M10 x 1.25	20	ZSHTT-M12-M1200-303SU	ZSHTT-M12-M1200-316SU	ZSHTT-M12-M1200-104SU	ZSHTT-M12-M1200-114SU
1,500	1460	M10 x 1.25	20	ZSHTT-M12-M1500-303SU	ZSHTT-M12-M1500-316SU	ZSHTT-M12-M1500-104SU	ZSHTT-M12-M1500-114SU
1,800	1760	M10 x 1.25	20	ZSHTT-M12-M1800-303SU	ZSHTT-M12-M1800-316SU	ZSHTT-M12-M1800-104SU	ZSHTT-M12-M1800-114SU

15mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Stud Length	Threads Size	Threads Length	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	260	M12 x 1.25	20	ZSHTT-M15-M0300-303SU	ZSHTT-M15-M0300-316SU	ZSHTT-M15-M0300-104SU	ZSHTT-M15-M0300-114SU
500	460	M12 x 1.25	20	ZSHTT-M15-M0500-303SU	ZSHTT-M15-M0500-316SU	ZSHTT-M15-M0500-104SU	ZSHTT-M15-M0500-114SU
1,000	960	M12 x 1.25	20	ZSHTT-M15-M1000-303SU	ZSHTT-M15-M1000-316SU	ZSHTT-M15-M1000-104SU	ZSHTT-M15-M1000-114SU
1,200	1160	M12 x 1.25	20	ZSHTT-M15-M1200-303SU	ZSHTT-M15-M1200-316SU	ZSHTT-M15-M1200-104SU	ZSHTT-M15-M1200-114SU
1,500	1460	M12 x 1.25	20	ZSHTT-M15-M1500-303SU	ZSHTT-M15-M1500-316SU	ZSHTT-M15-M1500-104SU	ZSHTT-M15-M1500-114SU
1,800	1760	M12 x 1.25	20	ZSHTT-M15-M1800-303SU	ZSHTT-M15-M1800-316SU	ZSHTT-M15-M1800-104SU	ZSHTT-M15-M1800-114SU

Threaded Stud Rotary Shaft Both Ends – Metric



20mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Stud Length	Threads Size	Threads Length	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	250	M16 x 1.5	25	ZSHTT-M20-M0300-303SU	ZSHTT-M20-M0300-316SU	ZSHTT-M20-M0300-104SU	ZSHTT-M20-M0300-114SU
500	450	M16 x 1.5	25	ZSHTT-M20-M0500-303SU	ZSHTT-M20-M0500-316SU	ZSHTT-M20-M0500-104SU	ZSHTT-M20-M0500-114SU
1,000	950	M16 x 1.5	25	ZSHTT-M20-M1000-303SU	ZSHTT-M20-M1000-316SU	ZSHTT-M20-M1000-104SU	ZSHTT-M20-M1000-114SU
1,200	1150	M16 x 1.5	25	ZSHTT-M20-M1200-303SU	ZSHTT-M20-M1200-316SU	ZSHTT-M20-M1200-104SU	ZSHTT-M20-M1200-114SU
1,500	1450	M16 x 1.5	25	ZSHTT-M20-M1500-303SU	ZSHTT-M20-M1500-316SU	ZSHTT-M20-M1500-104SU	ZSHTT-M20-M1500-114SU
1,800	1750	M16 x 1.5	25	ZSHTT-M20-M1800-303SU	ZSHTT-M20-M1800-316SU	ZSHTT-M20-M1800-104SU	ZSHTT-M20-M1800-114SU

24mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Stud Length	Threads Size	Threads Length	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	240	M20 x 1.50	30	ZSHTT-M24-M0300-303SU	ZSHTT-M24-M0300-316SU	ZSHTT-M24-M0300-104SU	ZSHTT-M24-M0300-114SU
500	440	M20 x 1.50	30	ZSHTT-M24-M0500-303SU	ZSHTT-M24-M0500-316SU	ZSHTT-M24-M0500-104SU	ZSHTT-M24-M0500-114SU
1,000	940	M20 x 1.50	30	ZSHTT-M24-M1000-303SU	ZSHTT-M24-M1000-316SU	ZSHTT-M24-M1000-104SU	ZSHTT-M24-M1000-114SU
1,200	1140	M20 x 1.50	30	ZSHTT-M24-M1200-303SU	ZSHTT-M24-M1200-316SU	ZSHTT-M24-M1200-104SU	ZSHTT-M24-M1200-114SU
1,500	1440	M20 x 1.50	30	ZSHTT-M24-M1500-303SU	ZSHTT-M24-M1500-316SU	ZSHTT-M24-M1500-104SU	ZSHTT-M24-M1500-114SU
1,800	1740	M20 x 1.50	30	ZSHTT-M24-M1800-303SU	ZSHTT-M24-M1800-316SU	ZSHTT-M24-M1800-104SU	ZSHTT-M24-M1800-114SU

25mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Stud Length	Threads Size	Threads Length	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	240	M20 x 1.50	30	ZSHTT-M25-M0300-303SU	ZSHTT-M25-M0300-316SU	ZSHTT-M25-M0300-104SU	ZSHTT-M25-M0300-114SU
500	440	M20 x 1.50	30	ZSHTT-M25-M0500-303SU	ZSHTT-M25-M0500-316SU	ZSHTT-M25-M0500-104SU	ZSHTT-M25-M0500-114SU
1,000	940	M20 x 1.50	30	ZSHTT-M25-M1000-303SU	ZSHTT-M25-M1000-316SU	ZSHTT-M25-M1000-104SU	ZSHTT-M25-M1000-114SU
1,200	1140	M20 x 1.50	30	ZSHTT-M25-M1200-303SU	ZSHTT-M25-M1200-316SU	ZSHTT-M25-M1200-104SU	ZSHTT-M25-M1200-114SU
1,500	1440	M20 x 1.50	30	ZSHTT-M25-M1500-303SU	ZSHTT-M25-M1500-316SU	ZSHTT-M25-M1500-104SU	ZSHTT-M25-M1500-114SU
1,800	1740	M20 x 1.50	30	ZSHTT-M25-M1800-303SU	ZSHTT-M25-M1800-316SU	ZSHTT-M25-M1800-104SU	ZSHTT-M25-M1800-114SU

Step-Down Rotary Shafts – Inch

18-8 & 316 SS, Steel, Aluminum



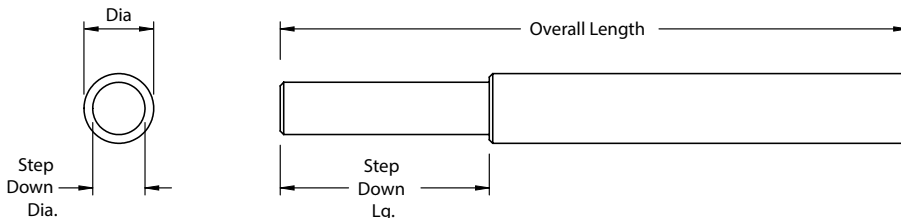
Product Information

A step-down rotary shaft is a type of shaft with a diameter that decreases along its length. This creates a shoulder on the shaft that can be used for various purposes. They are commonly used in machinery to provide a location for bearings, gears, or other components to be mounted. The step down reduces the need for separate collars or spacers, simplifying the design and potentially reducing weight. For instance, a step-down rotary shaft might be used in a gearbox to support a bearing that separates two gears of different sizes. Step-down rotary shafts can be found in a wide variety of applications, including gearboxes, pumps, and conveyor systems.

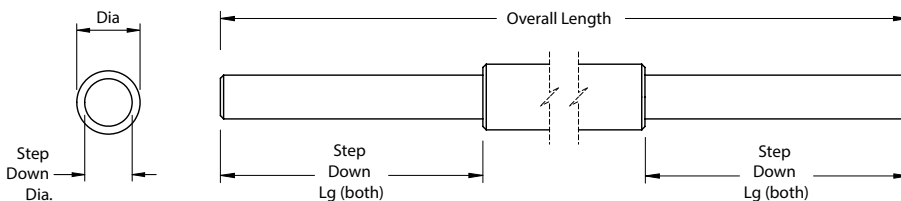
All shafts are made in the USA from DFARS compliant & RoHS compliant stainless steel and shafts are fully lot traceable. Length tolerance is ± 0.062 and straightness tolerance is 0.012 in/ft.

- 18-8 stainless steel shafts offer excellent corrosion resistant and can be mildly magnetic. Meets ASTM A582 Condition A material specification.
- Type 316 stainless steel, also known as marine stainless steel, offers superior corrosion resistant than 18-8 stainless steel and maybe mildly magnetic. Meets ASTM A276 Condition A material specification.
- Aluminum shafts have the strength of mild steel with one third the weight.
- Aluminum shafts are lightweight, corrosion resistant and nonmagnetic. They have a T4 temper, which means they have been heat treated for increased strength.
- C1045 Carbon Steel shafts are generally stronger than aluminum and stainless steel shafts but not as corrosion resistant. These Carbon Steel shafts offers medium strength properties making them ideal for general purpose use.
- C1045 Carbon Steel is recommended for shafts requiring higher strength and wear resistance than carbon steel and stainless steel shafts.
- 1144 Stressproof Alloy Steel has excellent strength and hardness, and is specifically treated to relieve stresses for this durable material.

One End



Both Ends



Materials Chart

Material	Mechanical Finish	Edge Type	Specs Met	Rockwell Hardness	Tensile Strength (psi)	Magnetic?
18-8 SS	Ground & Polished	Chamfered	ASTM A 582 Cond A	B83	90,000	Mildly
316 SS	Ground & Polished	Chamfered	ASTM A 276 Cond	B83	85,000	Mildly
C1045 Carbon Steel	Ground & Polished	Chamfered	ASTM A108	C15	91,000	Magnetic
1144 Alloy Steel	Ground & Polished	Chamfered	ASTM A311	C22	115,000	Magnetic
2024 Aluminum	Ground & Polished	Chamfered	ASTM B211	B75	68,000	Nonmagnetic

Step-Down Rotary Shafts – Inch



5/16 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Step Down Dia	Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	.250	1	ZSHS-312-03000-303SU	ZSHS-312-03000-316SU	ZSHS-312-03000-104SU	ZSHS-312-03000-114SU	ZSHS-312-03000-202SU
6	.250	3	ZSHS-312-06000-303SU	ZSHS-312-06000-316SU	ZSHS-312-06000-104SU	ZSHS-312-06000-114SU	ZSHS-312-06000-202SU
9	.250	3	ZSHS-312-09000-303SU	ZSHS-312-09000-316SU	ZSHS-312-09000-104SU	ZSHS-312-09000-114SU	ZSHS-312-09000-202SU
12	.250	3	ZSHS-312-12000-303SU	ZSHS-312-12000-316SU	ZSHS-312-12000-104SU	ZSHS-312-12000-114SU	ZSHS-312-12000-202SU
18	.250	3	ZSHS-312-18000-303SU	ZSHS-312-18000-316SU	ZSHS-312-18000-104SU	ZSHS-312-18000-114SU	ZSHS-312-18000-202SU
24	.250	3	ZSHS-312-24000-303SU	ZSHS-312-24000-316SU	ZSHS-312-24000-104SU	ZSHS-312-24000-114SU	ZSHS-312-24000-202SU
36	.250	3	ZSHS-312-36000-303SU	ZSHS-312-36000-316SU	ZSHS-312-36000-104SU	ZSHS-312-36000-114SU	ZSHS-312-36000-202SU
48	.250	3	ZSHS-312-48000-303SU	ZSHS-312-48000-316SU	ZSHS-312-48000-104SU	ZSHS-312-48000-114SU	ZSHS-312-48000-202SU
60	.250	3	ZSHS-312-60000-303SU	ZSHS-312-60000-316SU	ZSHS-312-60000-104SU	ZSHS-312-60000-114SU	ZSHS-312-60000-202SU
72	.250	3	ZSHS-312-72000-303SU	ZSHS-312-72000-316SU	ZSHS-312-72000-104SU	ZSHS-312-72000-114SU	ZSHS-312-72000-202SU

3/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Step Down Dia	Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	.250	1	ZSHS-375-03000-303SU	ZSHS-375-03000-316SU	ZSHS-375-03000-104SU	ZSHS-375-03000-114SU	ZSHS-375-03000-202SU
6	.250	3	ZSHS-375-06000-303SU	ZSHS-375-06000-316SU	ZSHS-375-06000-104SU	ZSHS-375-06000-114SU	ZSHS-375-06000-202SU
9	.250	3	ZSHS-375-09000-303SU	ZSHS-375-09000-316SU	ZSHS-375-09000-104SU	ZSHS-375-09000-114SU	ZSHS-375-09000-202SU
12	.250	3	ZSHS-375-12000-303SU	ZSHS-375-12000-316SU	ZSHS-375-12000-104SU	ZSHS-375-12000-114SU	ZSHS-375-12000-202SU
18	.250	3	ZSHS-375-18000-303SU	ZSHS-375-18000-316SU	ZSHS-375-18000-104SU	ZSHS-375-18000-114SU	ZSHS-375-18000-202SU
24	.250	3	ZSHS-375-24000-303SU	ZSHS-375-24000-316SU	ZSHS-375-24000-104SU	ZSHS-375-24000-114SU	ZSHS-375-24000-202SU
36	.250	3	ZSHS-375-36000-303SU	ZSHS-375-36000-316SU	ZSHS-375-36000-104SU	ZSHS-375-36000-114SU	ZSHS-375-36000-202SU
48	.250	3	ZSHS-375-48000-303SU	ZSHS-375-48000-316SU	ZSHS-375-48000-104SU	ZSHS-375-48000-114SU	ZSHS-375-48000-202SU
60	.250	3	ZSHS-375-60000-303SU	ZSHS-375-60000-316SU	ZSHS-375-60000-104SU	ZSHS-375-60000-114SU	ZSHS-375-60000-202SU
72	.250	3	ZSHS-375-72000-303SU	ZSHS-375-72000-316SU	ZSHS-375-72000-104SU	ZSHS-375-72000-114SU	ZSHS-375-72000-202SU

1/2 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Step Down Dia	Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	.375	1	ZSHS-500-03000-303SU	ZSHS-500-03000-316SU	ZSHS-500-03000-104SU	ZSHS-500-03000-114SU	ZSHS-500-03000-202SU
6	.375	3	ZSHS-500-06000-303SU	ZSHS-500-06000-316SU	ZSHS-500-06000-104SU	ZSHS-500-06000-114SU	ZSHS-500-06000-202SU
9	.375	3	ZSHS-500-09000-303SU	ZSHS-500-09000-316SU	ZSHS-500-09000-104SU	ZSHS-500-09000-114SU	ZSHS-500-09000-202SU
12	.375	3	ZSHS-500-12000-303SU	ZSHS-500-12000-316SU	ZSHS-500-12000-104SU	ZSHS-500-12000-114SU	ZSHS-500-12000-202SU
18	.375	3	ZSHS-500-18000-303SU	ZSHS-500-18000-316SU	ZSHS-500-18000-104SU	ZSHS-500-18000-114SU	ZSHS-500-18000-202SU
24	.375	3	ZSHS-500-24000-303SU	ZSHS-500-24000-316SU	ZSHS-500-24000-104SU	ZSHS-500-24000-114SU	ZSHS-500-24000-202SU
36	.375	3	ZSHS-500-36000-303SU	ZSHS-500-36000-316SU	ZSHS-500-36000-104SU	ZSHS-500-36000-114SU	ZSHS-500-36000-202SU
48	.375	3	ZSHS-500-48000-303SU	ZSHS-500-48000-316SU	ZSHS-500-48000-104SU	ZSHS-500-48000-114SU	ZSHS-500-48000-202SU
60	.375	3	ZSHS-500-60000-303SU	ZSHS-500-60000-316SU	ZSHS-500-60000-104SU	ZSHS-500-60000-114SU	ZSHS-500-60000-202SU
72	.375	3	ZSHS-500-72000-303SU	ZSHS-500-72000-316SU	ZSHS-500-72000-104SU	ZSHS-500-72000-114SU	ZSHS-500-72000-202SU

Step-Down Rotary Shafts – Inch



5/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Step Down Dia	Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	.375	1	ZSHS-625-03000-303SU	ZSHS-625-03000-316SU	ZSHS-625-03000-104SU	ZSHS-625-03000-114SU	ZSHS-625-03000-202SU
6	.375	3	ZSHS-625-06000-303SU	ZSHS-625-06000-316SU	ZSHS-625-06000-104SU	ZSHS-625-06000-114SU	ZSHS-625-06000-202SU
9	.375	3	ZSHS-625-09000-303SU	ZSHS-625-09000-316SU	ZSHS-625-09000-104SU	ZSHS-625-09000-114SU	ZSHS-625-09000-202SU
12	.375	3	ZSHS-625-12000-303SU	ZSHS-625-12000-316SU	ZSHS-625-12000-104SU	ZSHS-625-12000-114SU	ZSHS-625-12000-202SU
18	.375	3	ZSHS-625-18000-303SU	ZSHS-625-18000-316SU	ZSHS-625-18000-104SU	ZSHS-625-18000-114SU	ZSHS-625-18000-202SU
24	.375	3	ZSHS-625-24000-303SU	ZSHS-625-24000-316SU	ZSHS-625-24000-104SU	ZSHS-625-24000-114SU	ZSHS-625-24000-202SU
36	.375	3	ZSHS-625-36000-303SU	ZSHS-625-36000-316SU	ZSHS-625-36000-104SU	ZSHS-625-36000-114SU	ZSHS-625-36000-202SU
48	.375	3	ZSHS-625-48000-303SU	ZSHS-625-48000-316SU	ZSHS-625-48000-104SU	ZSHS-625-48000-114SU	ZSHS-625-48000-202SU
60	.375	3	ZSHS-625-60000-303SU	ZSHS-625-60000-316SU	ZSHS-625-60000-104SU	ZSHS-625-60000-114SU	ZSHS-625-60000-202SU
72	.375	3	ZSHS-625-72000-303SU	ZSHS-625-72000-316SU	ZSHS-625-72000-104SU	ZSHS-625-72000-114SU	ZSHS-625-72000-202SU

3/4 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Step Down Dia	Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	.5	1	ZSHS-750-03000-303SU	ZSHS-750-03000-316SU	ZSHS-750-03000-104SU	ZSHS-750-03000-114SU	ZSHS-750-03000-202SU
6	.5	3	ZSHS-750-06000-303SU	ZSHS-750-06000-316SU	ZSHS-750-06000-104SU	ZSHS-750-06000-114SU	ZSHS-750-06000-202SU
9	.5	3	ZSHS-750-09000-303SU	ZSHS-750-09000-316SU	ZSHS-750-09000-104SU	ZSHS-750-09000-114SU	ZSHS-750-09000-202SU
12	.5	3	ZSHS-750-12000-303SU	ZSHS-750-12000-316SU	ZSHS-750-12000-104SU	ZSHS-750-12000-114SU	ZSHS-750-12000-202SU
18	.5	3	ZSHS-750-18000-303SU	ZSHS-750-18000-316SU	ZSHS-750-18000-104SU	ZSHS-750-18000-114SU	ZSHS-750-18000-202SU
24	.5	3	ZSHS-750-24000-303SU	ZSHS-750-24000-316SU	ZSHS-750-24000-104SU	ZSHS-750-24000-114SU	ZSHS-750-24000-202SU
36	.5	3	ZSHS-750-36000-303SU	ZSHS-750-36000-316SU	ZSHS-750-36000-104SU	ZSHS-750-36000-114SU	ZSHS-750-36000-202SU
48	.5	3	ZSHS-750-48000-303SU	ZSHS-750-48000-316SU	ZSHS-750-48000-104SU	ZSHS-750-48000-114SU	ZSHS-750-48000-202SU
60	.5	3	ZSHS-750-60000-303SU	ZSHS-750-60000-316SU	ZSHS-750-60000-104SU	ZSHS-750-60000-114SU	ZSHS-750-60000-202SU
72	.5	3	ZSHS-750-72000-303SU	ZSHS-750-72000-316SU	ZSHS-750-72000-104SU	ZSHS-750-72000-114SU	ZSHS-750-72000-202SU

7/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Step Down Dia	Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	.625	1	ZSHS-875-03000-303SU	ZSHS-875-03000-316SU	ZSHS-875-03000-104SU	ZSHS-875-03000-114SU	ZSHS-875-03000-202SU
6	.625	3	ZSHS-875-06000-303SU	ZSHS-875-06000-316SU	ZSHS-875-06000-104SU	ZSHS-875-06000-114SU	ZSHS-875-06000-202SU
9	.625	3	ZSHS-875-09000-303SU	ZSHS-875-09000-316SU	ZSHS-875-09000-104SU	ZSHS-875-09000-114SU	ZSHS-875-09000-202SU
12	.625	3	ZSHS-875-12000-303SU	ZSHS-875-12000-316SU	ZSHS-875-12000-104SU	ZSHS-875-12000-114SU	ZSHS-875-12000-202SU
18	.625	3	ZSHS-875-18000-303SU	ZSHS-875-18000-316SU	ZSHS-875-18000-104SU	ZSHS-875-18000-114SU	ZSHS-875-18000-202SU
24	.625	3	ZSHS-875-24000-303SU	ZSHS-875-24000-316SU	ZSHS-875-24000-104SU	ZSHS-875-24000-114SU	ZSHS-875-24000-202SU
36	.625	3	ZSHS-875-36000-303SU	ZSHS-875-36000-316SU	ZSHS-875-36000-104SU	ZSHS-875-36000-114SU	ZSHS-875-36000-202SU
48	.625	3	ZSHS-875-48000-303SU	ZSHS-875-48000-316SU	ZSHS-875-48000-104SU	ZSHS-875-48000-114SU	ZSHS-875-48000-202SU
60	.625	3	ZSHS-875-60000-303SU	ZSHS-875-60000-316SU	ZSHS-875-60000-104SU	ZSHS-875-60000-114SU	ZSHS-875-60000-202SU
72	.625	3	ZSHS-875-72000-303SU	ZSHS-875-72000-316SU	ZSHS-875-72000-104SU	ZSHS-875-72000-114SU	ZSHS-875-72000-202SU

Step-Down Rotary Shafts – Inch



15/16 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Step Down Dia	Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	.750	1	—	—	ZSHS-937-03000-104SU	—	—
6	.750	3	—	—	ZSHS-937-06000-104SU	—	—
9	.750	3	—	—	ZSHS-937-09000-104SU	—	—
12	.750	3	—	—	ZSHS-937-12000-104SU	—	—
18	.750	3	—	—	ZSHS-937-18000-104SU	—	—
24	.750	3	—	—	ZSHS-937-24000-104SU	—	—
36	.750	3	—	—	ZSHS-937-36000-104SU	—	—
48	.750	3	—	—	ZSHS-937-48000-104SU	—	—
60	.750	3	—	—	ZSHS-937-60000-104SU	—	—
72	.750	3	—	—	ZSHS-937-72000-104SU	—	—

1 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Step Down Dia	Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	.750	1	ZSHS-1000-03000-303SU	ZSHS-1000-03000-316SU	ZSHS-1000-03000-104SU	ZSHS-1000-03000-114SU	ZSHS-1000-03000-202SU
6	.750	3	ZSHS-1000-06000-303SU	ZSHS-1000-06000-316SU	ZSHS-1000-06000-104SU	ZSHS-1000-06000-114SU	ZSHS-1000-06000-202SU
9	.750	3	ZSHS-1000-09000-303SU	ZSHS-1000-09000-316SU	ZSHS-1000-09000-104SU	ZSHS-1000-09000-114SU	ZSHS-1000-09000-202SU
12	.750	3	ZSHS-1000-12000-303SU	ZSHS-1000-12000-316SU	ZSHS-1000-12000-104SU	ZSHS-1000-12000-114SU	ZSHS-1000-12000-202SU
18	.750	3	ZSHS-1000-18000-303SU	ZSHS-1000-18000-316SU	ZSHS-1000-18000-104SU	ZSHS-1000-18000-114SU	ZSHS-1000-18000-202SU
24	.750	3	ZSHS-1000-24000-303SU	ZSHS-1000-24000-316SU	ZSHS-1000-24000-104SU	ZSHS-1000-24000-114SU	ZSHS-1000-24000-202SU
36	.750	3	ZSHS-1000-36000-303SU	ZSHS-1000-36000-316SU	ZSHS-1000-36000-104SU	ZSHS-1000-36000-114SU	ZSHS-1000-36000-202SU
48	.750	3	ZSHS-1000-48000-303SU	ZSHS-1000-48000-316SU	ZSHS-1000-48000-104SU	ZSHS-1000-48000-114SU	ZSHS-1000-48000-202SU
60	.750	3	ZSHS-1000-60000-303SU	ZSHS-1000-60000-316SU	ZSHS-1000-60000-104SU	ZSHS-1000-60000-114SU	ZSHS-1000-60000-202SU
72	.750	3	ZSHS-1000-72000-303SU	ZSHS-1000-72000-316SU	ZSHS-1000-72000-104SU	ZSHS-1000-72000-114SU	ZSHS-1000-72000-202SU

Both Ends Step-Down Rotary Shafts — Inch



5/16 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Step Down Dia	Both Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	.250	.750	ZSHSS-312-03000-303SU	ZSHSS-312-03000-316SU	ZSHSS-312-03000-104SU	ZSHSS-312-03000-114SU	ZSHSS-312-03000-202SU
6	.250	1.00	ZSHSS-312-06000-303SU	ZSHSS-312-06000-316SU	ZSHSS-312-06000-104SU	ZSHSS-312-06000-114SU	ZSHSS-312-06000-202SU
9	.250	1.50	ZSHSS-312-09000-303SU	ZSHSS-312-09000-316SU	ZSHSS-312-09000-104SU	ZSHSS-312-09000-114SU	ZSHSS-312-09000-202SU
12	.250	3.00	ZSHSS-312-12000-303SU	ZSHSS-312-12000-316SU	ZSHSS-312-12000-104SU	ZSHSS-312-12000-114SU	ZSHSS-312-12000-202SU
18	.250	3.00	ZSHSS-312-18000-303SU	ZSHSS-312-18000-316SU	ZSHSS-312-18000-104SU	ZSHSS-312-18000-114SU	ZSHSS-312-18000-202SU
24	.250	3.00	ZSHSS-312-24000-303SU	ZSHSS-312-24000-316SU	ZSHSS-312-24000-104SU	ZSHSS-312-24000-114SU	ZSHSS-312-24000-202SU
36	.250	3.00	ZSHSS-312-36000-303SU	ZSHSS-312-36000-316SU	ZSHSS-312-36000-104SU	ZSHSS-312-36000-114SU	ZSHSS-312-36000-202SU
48	.250	3.00	ZSHSS-312-48000-303SU	ZSHSS-312-48000-316SU	ZSHSS-312-48000-104SU	ZSHSS-312-48000-114SU	ZSHSS-312-48000-202SU
60	.250	3.00	ZSHSS-312-60000-303SU	ZSHSS-312-60000-316SU	ZSHSS-312-60000-104SU	ZSHSS-312-60000-114SU	ZSHSS-312-60000-202SU
72	.250	3.00	ZSHSS-312-72000-303SU	ZSHSS-312-72000-316SU	ZSHSS-312-72000-104SU	ZSHSS-312-72000-114SU	ZSHSS-312-72000-202SU

3/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Step Down Dia	Both Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	.250	.750	ZSHSS-375-03000-303SU	ZSHSS-375-03000-316SU	ZSHSS-375-03000-104SU	ZSHSS-375-03000-114SU	ZSHSS-375-03000-202SU
6	.250	1.00	ZSHSS-375-06000-303SU	ZSHSS-375-06000-316SU	ZSHSS-375-06000-104SU	ZSHSS-375-06000-114SU	ZSHSS-375-06000-202SU
9	.250	1.50	ZSHSS-375-09000-303SU	ZSHSS-375-09000-316SU	ZSHSS-375-09000-104SU	ZSHSS-375-09000-114SU	ZSHSS-375-09000-202SU
12	.250	3.00	ZSHSS-375-12000-303SU	ZSHSS-375-12000-316SU	ZSHSS-375-12000-104SU	ZSHSS-375-12000-114SU	ZSHSS-375-12000-202SU
18	.250	3.00	ZSHSS-375-18000-303SU	ZSHSS-375-18000-316SU	ZSHSS-375-18000-104SU	ZSHSS-375-18000-114SU	ZSHSS-375-18000-202SU
24	.250	3.00	ZSHSS-375-24000-303SU	ZSHSS-375-24000-316SU	ZSHSS-375-24000-104SU	ZSHSS-375-24000-114SU	ZSHSS-375-24000-202SU
36	.250	3.00	ZSHSS-375-36000-303SU	ZSHSS-375-36000-316SU	ZSHSS-375-36000-104SU	ZSHSS-375-36000-114SU	ZSHSS-375-36000-202SU
48	.250	3.00	ZSHSS-375-48000-303SU	ZSHSS-375-48000-316SU	ZSHSS-375-48000-104SU	ZSHSS-375-48000-114SU	ZSHSS-375-48000-202SU
60	.250	3.00	ZSHSS-375-60000-303SU	ZSHSS-375-60000-316SU	ZSHSS-375-60000-104SU	ZSHSS-375-60000-114SU	ZSHSS-375-60000-202SU
72	.250	3.00	ZSHSS-375-72000-303SU	ZSHSS-375-72000-316SU	ZSHSS-375-72000-104SU	ZSHSS-375-72000-114SU	ZSHSS-375-72000-202SU

1/2 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Step Down Dia	Both Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	.375	.750	ZSHSS-500-03000-303SU	ZSHSS-500-03000-316SU	ZSHSS-500-03000-104SU	ZSHSS-500-03000-114SU	ZSHSS-500-03000-202SU
6	.375	1.00	ZSHSS-500-06000-303SU	ZSHSS-500-06000-316SU	ZSHSS-500-06000-104SU	ZSHSS-500-06000-114SU	ZSHSS-500-06000-202SU
9	.375	1.50	ZSHSS-500-09000-303SU	ZSHSS-500-09000-316SU	ZSHSS-500-09000-104SU	ZSHSS-500-09000-114SU	ZSHSS-500-09000-202SU
12	.375	3.00	ZSHSS-500-12000-303SU	ZSHSS-500-12000-316SU	ZSHSS-500-12000-104SU	ZSHSS-500-12000-114SU	ZSHSS-500-12000-202SU
18	.375	3.00	ZSHSS-500-18000-303SU	ZSHSS-500-18000-316SU	ZSHSS-500-18000-104SU	ZSHSS-500-18000-114SU	ZSHSS-500-18000-202SU
24	.375	3.00	ZSHSS-500-24000-303SU	ZSHSS-500-24000-316SU	ZSHSS-500-24000-104SU	ZSHSS-500-24000-114SU	ZSHSS-500-24000-202SU
36	.375	3.00	ZSHSS-500-36000-303SU	ZSHSS-500-36000-316SU	ZSHSS-500-36000-104SU	ZSHSS-500-36000-114SU	ZSHSS-500-36000-202SU
48	.375	3.00	ZSHSS-500-48000-303SU	ZSHSS-500-48000-316SU	ZSHSS-500-48000-104SU	ZSHSS-500-48000-114SU	ZSHSS-500-48000-202SU
60	.375	3.00	ZSHSS-500-60000-303SU	ZSHSS-500-60000-316SU	ZSHSS-500-60000-104SU	ZSHSS-500-60000-114SU	ZSHSS-500-60000-202SU
72	.375	3.00	ZSHSS-500-72000-303SU	ZSHSS-500-72000-316SU	ZSHSS-500-72000-104SU	ZSHSS-500-72000-114SU	ZSHSS-500-72000-202SU

Both Ends Step-Down Rotary Shafts – Inch



5/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Step Down Dia	Both Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	.375	.750	ZSHSS-625-03000-303SU	ZSHSS-625-03000-316SU	ZSHSS-625-03000-104SU	ZSHSS-625-03000-114SU	ZSHSS-625-03000-202SU
6	.375	1.00	ZSHSS-625-06000-303SU	ZSHSS-625-06000-316SU	ZSHSS-625-06000-104SU	ZSHSS-625-06000-114SU	ZSHSS-625-06000-202SU
9	.375	1.50	ZSHSS-625-09000-303SU	ZSHSS-625-09000-316SU	ZSHSS-625-09000-104SU	ZSHSS-625-09000-114SU	ZSHSS-625-09000-202SU
12	.375	3.00	ZSHSS-625-12000-303SU	ZSHSS-625-12000-316SU	ZSHSS-625-12000-104SU	ZSHSS-625-12000-114SU	ZSHSS-625-12000-202SU
18	.375	3.00	ZSHSS-625-18000-303SU	ZSHSS-625-18000-316SU	ZSHSS-625-18000-104SU	ZSHSS-625-18000-114SU	ZSHSS-625-18000-202SU
24	.375	3.00	ZSHSS-625-24000-303SU	ZSHSS-625-24000-316SU	ZSHSS-625-24000-104SU	ZSHSS-625-24000-114SU	ZSHSS-625-24000-202SU
36	.375	3.00	ZSHSS-625-36000-303SU	ZSHSS-625-36000-316SU	ZSHSS-625-36000-104SU	ZSHSS-625-36000-114SU	ZSHSS-625-36000-202SU
48	.375	3.00	ZSHSS-625-48000-303SU	ZSHSS-625-48000-316SU	ZSHSS-625-48000-104SU	ZSHSS-625-48000-114SU	ZSHSS-625-48000-202SU
60	.375	3.00	ZSHSS-625-60000-303SU	ZSHSS-625-60000-316SU	ZSHSS-625-60000-104SU	ZSHSS-625-60000-114SU	ZSHSS-625-60000-202SU
72	.375	3.00	ZSHSS-625-72000-303SU	ZSHSS-625-72000-316SU	ZSHSS-625-72000-104SU	ZSHSS-625-72000-114SU	ZSHSS-625-72000-202SU

3/4 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Step Down Dia	Both Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	.5	.750	ZSHSS-750-03000-303SU	ZSHSS-750-03000-316SU	ZSHSS-750-03000-104SU	ZSHSS-750-03000-114SU	ZSHSS-750-03000-202SU
6	.5	1.00	ZSHSS-750-06000-303SU	ZSHSS-750-06000-316SU	ZSHSS-750-06000-104SU	ZSHSS-750-06000-114SU	ZSHSS-750-06000-202SU
9	.5	1.50	ZSHSS-750-09000-303SU	ZSHSS-750-09000-316SU	ZSHSS-750-09000-104SU	ZSHSS-750-09000-114SU	ZSHSS-750-09000-202SU
12	.5	3.00	ZSHSS-750-12000-303SU	ZSHSS-750-12000-316SU	ZSHSS-750-12000-104SU	ZSHSS-750-12000-114SU	ZSHSS-750-12000-202SU
18	.5	3.00	ZSHSS-750-18000-303SU	ZSHSS-750-18000-316SU	ZSHSS-750-18000-104SU	ZSHSS-750-18000-114SU	ZSHSS-750-18000-202SU
24	.5	3.00	ZSHSS-750-24000-303SU	ZSHSS-750-24000-316SU	ZSHSS-750-24000-104SU	ZSHSS-750-24000-114SU	ZSHSS-750-24000-202SU
36	.5	3.00	ZSHSS-750-36000-303SU	ZSHSS-750-36000-316SU	ZSHSS-750-36000-104SU	ZSHSS-750-36000-114SU	ZSHSS-750-36000-202SU
48	.5	3.00	ZSHSS-750-48000-303SU	ZSHSS-750-48000-316SU	ZSHSS-750-48000-104SU	ZSHSS-750-48000-114SU	ZSHSS-750-48000-202SU
60	.5	3.00	ZSHSS-750-60000-303SU	ZSHSS-750-60000-316SU	ZSHSS-750-60000-104SU	ZSHSS-750-60000-114SU	ZSHSS-750-60000-202SU
72	.5	3.00	ZSHSS-750-72000-303SU	ZSHSS-750-72000-316SU	ZSHSS-750-72000-104SU	ZSHSS-750-72000-114SU	ZSHSS-750-72000-202SU

7/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Step Down Dia	Both Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	.625	.750	ZSHSS-875-03000-303SU	ZSHSS-875-03000-316SU	ZSHSS-875-03000-104SU	ZSHSS-875-03000-114SU	ZSHSS-875-03000-202SU
6	.625	1.00	ZSHSS-875-06000-303SU	ZSHSS-875-06000-316SU	ZSHSS-875-06000-104SU	ZSHSS-875-06000-114SU	ZSHSS-875-06000-202SU
9	.625	1.50	ZSHSS-875-09000-303SU	ZSHSS-875-09000-316SU	ZSHSS-875-09000-104SU	ZSHSS-875-09000-114SU	ZSHSS-875-09000-202SU
12	.625	3.00	ZSHSS-875-12000-303SU	ZSHSS-875-12000-316SU	ZSHSS-875-12000-104SU	ZSHSS-875-12000-114SU	ZSHSS-875-12000-202SU
18	.625	3.00	ZSHSS-875-18000-303SU	ZSHSS-875-18000-316SU	ZSHSS-875-18000-104SU	ZSHSS-875-18000-114SU	ZSHSS-875-18000-202SU
24	.625	3.00	ZSHSS-875-24000-303SU	ZSHSS-875-24000-316SU	ZSHSS-875-24000-104SU	ZSHSS-875-24000-114SU	ZSHSS-875-24000-202SU
36	.625	3.00	ZSHSS-875-36000-303SU	ZSHSS-875-36000-316SU	ZSHSS-875-36000-104SU	ZSHSS-875-36000-114SU	ZSHSS-875-36000-202SU
48	.625	3.00	ZSHSS-875-48000-303SU	ZSHSS-875-48000-316SU	ZSHSS-875-48000-104SU	ZSHSS-875-48000-114SU	ZSHSS-875-48000-202SU
60	.625	3.00	ZSHSS-875-60000-303SU	ZSHSS-875-60000-316SU	ZSHSS-875-60000-104SU	ZSHSS-875-60000-114SU	ZSHSS-875-60000-202SU
72	.625	3.00	ZSHSS-875-72000-303SU	ZSHSS-875-72000-316SU	ZSHSS-875-72000-104SU	ZSHSS-875-72000-114SU	ZSHSS-875-72000-202SU

Both Ends Step-Down Rotary Shafts — Inch



15/16 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Step Down Dia	Both Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	.625	.750	—	—	ZSHSS-937-03000-104SU	—	—
6	.625	1.00	—	—	ZSHSS-937-06000-104SU	—	—
9	.625	1.50	—	—	ZSHSS-937-09000-104SU	—	—
12	.625	3.00	—	—	ZSHSS-937-12000-104SU	—	—
18	.625	3.00	—	—	ZSHSS-937-18000-104SU	—	—
24	.625	3.00	—	—	ZSHSS-937-24000-104SU	—	—
36	.625	3.00	—	—	ZSHSS-937-36000-104SU	—	—
48	.625	3.00	—	—	ZSHSS-937-48000-104SU	—	—
60	.625	3.00	—	—	ZSHSS-937-60000-104SU	—	—
72	.625	3.00	—	—	ZSHSS-937-72000-104SU	—	—

1 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	Step Down Dia	Both Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	.750	.750	ZSHSS-1000-03000-303SU	ZSHSS-1000-03000-316SU	ZSHSS-1000-03000-104SU	ZSHSS-1000-03000-114SU	ZSHSS-1000-03000-202SU
6	.750	1.00	ZSHSS-1000-06000-303SU	ZSHSS-1000-06000-316SU	ZSHSS-1000-06000-104SU	ZSHSS-1000-06000-114SU	ZSHSS-1000-06000-202SU
9	.750	1.50	ZSHSS-1000-09000-303SU	ZSHSS-1000-09000-316SU	ZSHSS-1000-09000-104SU	ZSHSS-1000-09000-114SU	ZSHSS-1000-09000-202SU
12	.750	3.00	ZSHSS-1000-12000-303SU	ZSHSS-1000-12000-316SU	ZSHSS-1000-12000-104SU	ZSHSS-1000-12000-114SU	ZSHSS-1000-12000-202SU
18	.750	3.00	ZSHSS-1000-18000-303SU	ZSHSS-1000-18000-316SU	ZSHSS-1000-18000-104SU	ZSHSS-1000-18000-114SU	ZSHSS-1000-18000-202SU
24	.750	3.00	ZSHSS-1000-24000-303SU	ZSHSS-1000-24000-316SU	ZSHSS-1000-24000-104SU	ZSHSS-1000-24000-114SU	ZSHSS-1000-24000-202SU
36	.750	3.00	ZSHSS-1000-36000-303SU	ZSHSS-1000-36000-316SU	ZSHSS-1000-36000-104SU	ZSHSS-1000-36000-114SU	ZSHSS-1000-36000-202SU
48	.750	3.00	ZSHSS-1000-48000-303SU	ZSHSS-1000-48000-316SU	ZSHSS-1000-48000-104SU	ZSHSS-1000-48000-114SU	ZSHSS-1000-48000-202SU
60	.750	3.00	ZSHSS-1000-60000-303SU	ZSHSS-1000-60000-316SU	ZSHSS-1000-60000-104SU	ZSHSS-1000-60000-114SU	ZSHSS-1000-60000-202SU
72	.750	3.00	ZSHSS-1000-72000-303SU	ZSHSS-1000-72000-316SU	ZSHSS-1000-72000-104SU	ZSHSS-1000-72000-114SU	ZSHSS-1000-72000-202SU

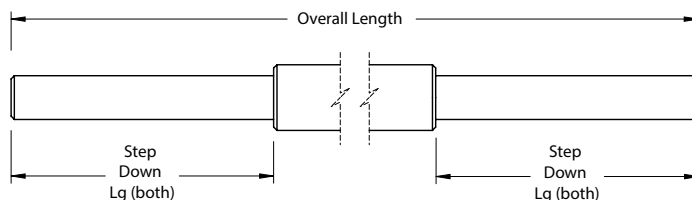
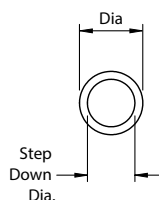
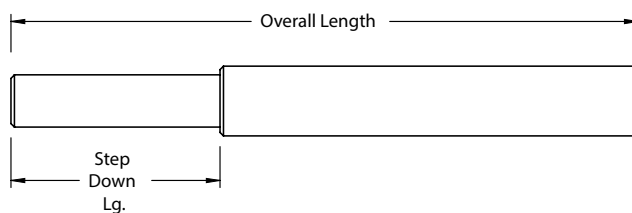
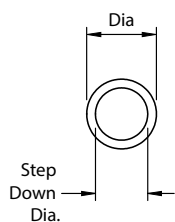
Step-Down Rotary Shafts – Metric



Product Information

A step-down rotary shaft is a type of shaft with a diameter that decreases along its length. This creates a shoulder on the shaft that can be used for various purposes. They are commonly used in machinery to provide a location for bearings, gears, or other components to be mounted. The step down reduces the need for separate collars or spacers, simplifying the design and potentially reducing weight. For instance, a step-down rotary shaft might be used in a gearbox to support a bearing that separates two gears of different sizes. Step-down rotary shafts can be found in a wide variety of applications, including gearboxes, pumps, and conveyor systems. All shafts are made in the USA from DFARS compliant & RoHS compliant stainless steel and shafts are fully lot traceable.

- 18-8 stainless steel shafts offer excellent corrosion resistant and can be mildly magnetic. Meets ASTM A582 Condition A material specification.
- Type 316 stainless steel, also known as marine stainless steel, offers superior corrosion resistant than 18-8 stainless steel and maybe mildly magnetic. Meets ASTM A276 Condition A material specification.
- C1045 Carbon Steel shafts are generally stronger than aluminum and stainless steel shafts but not as corrosion resistant. These Carbon Steel shafts offers medium strength properties making them ideal for general purpose use.
- C1045 Carbon Steel is recommended for shafts requiring higher strength and wear resistance than carbon steel and stainless steel shafts.
- 1144 Stressproof Alloy Steel has excellent strength and hardness, and is specifically treated to relieve stresses for this durable material.



Materials Chart

Material	Mechanical Finish	Edge Type	Specs Met	Rockwell Hardness	Tensile Strength (psi)	Magnetic?
18-8 SS	Ground & Polished	Chamfered	ASTM A 582 Cond A	B83	90,000	Mildly
316 SS	Ground & Polished	Chamfered	ASTM A 276 Cond	B83	85,000	Mildly
C1045 Carbon Steel	Ground & Polished	Chamfered	ASTM A108	C15	91,000	Magnetic
1144 Alloy Steel	Ground & Polished	Chamfered	ASTM A311	C22	115,000	Magnetic

One End Step-Down Rotary Shafts — Metric



8mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Step Down Diameter	Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	6	75	ZSHS-M08-M0300-303SU	ZSHS-M08-M0300-316SU	ZSHS-M08-M0300-104SU	ZSHS-M08-M0300-114SU
500	6	75	ZSHS-M08-M0500-303SU	ZSHS-M08-M0500-316SU	ZSHS-M08-M0500-104SU	ZSHS-M08-M0500-114SU
1,000	6	75	ZSHS-M08-M1000-303SU	ZSHS-M08-M1000-316SU	ZSHS-M08-M1000-104SU	ZSHS-M08-M1000-114SU
1,200	6	75	ZSHS-M08-M1200-303SU	ZSHS-M08-M1200-316SU	ZSHS-M08-M1200-104SU	ZSHS-M08-M1200-114SU
1,500	6	75	ZSHS-M08-M1500-303SU	ZSHS-M08-M1500-316SU	ZSHS-M08-M1500-104SU	ZSHS-M08-M1500-114SU
1,800	6	75	ZSHS-M08-M1800-303SU	ZSHS-M08-M1800-316SU	ZSHS-M08-M1800-104SU	ZSHS-M08-M1800-114SU

10mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Step Down Diameter	Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	6	75	ZSHS-M10-M0300-303SU	ZSHS-M10-M0300-316SU	ZSHS-M10-M0300-104SU	ZSHS-M10-M0300-114SU
500	6	75	ZSHS-M10-M0500-303SU	ZSHS-M10-M0500-316SU	ZSHS-M10-M0500-104SU	ZSHS-M10-M0500-114SU
1,000	6	75	ZSHS-M10-M1000-303SU	ZSHS-M10-M1000-316SU	ZSHS-M10-M1000-104SU	ZSHS-M10-M1000-114SU
1,200	6	75	ZSHS-M10-M1200-303SU	ZSHS-M10-M1200-316SU	ZSHS-M10-M1200-104SU	ZSHS-M10-M1200-114SU
1,500	6	75	ZSHS-M10-M1500-303SU	ZSHS-M10-M1500-316SU	ZSHS-M10-M1500-104SU	ZSHS-M10-M1500-114SU
1,800	6	75	ZSHS-M10-M1800-303SU	ZSHS-M10-M1800-316SU	ZSHS-M10-M1800-104SU	ZSHS-M10-M1800-114SU

12mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Step Down Diameter	Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	8	75	ZSHS-M12-M0300-303SU	ZSHS-M12-M0300-316SU	ZSHS-M12-M0300-104SU	ZSHS-M12-M0300-114SU
500	8	75	ZSHS-M12-M0500-303SU	ZSHS-M12-M0500-316SU	ZSHS-M12-M0500-104SU	ZSHS-M12-M0500-114SU
1,000	8	75	ZSHS-M12-M1000-303SU	ZSHS-M12-M1000-316SU	ZSHS-M12-M1000-104SU	ZSHS-M12-M1000-114SU
1,200	8	75	ZSHS-M12-M1200-303SU	ZSHS-M12-M1200-316SU	ZSHS-M12-M1200-104SU	ZSHS-M12-M1200-114SU
1,500	8	75	ZSHS-M12-M1500-303SU	ZSHS-M12-M1500-316SU	ZSHS-M12-M1500-104SU	ZSHS-M12-M1500-114SU
1,800	8	75	ZSHS-M12-M1800-303SU	ZSHS-M12-M1800-316SU	ZSHS-M12-M1800-104SU	ZSHS-M12-M1800-114SU

15mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Step Down Diameter	Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	10	75	ZSHS-M15-M0300-303SU	ZSHS-M15-M0300-316SU	ZSHS-M15-M0300-104SU	ZSHS-M15-M0300-114SU
500	10	75	ZSHS-M15-M0500-303SU	ZSHS-M15-M0500-316SU	ZSHS-M15-M0500-104SU	ZSHS-M15-M0500-114SU
1,000	10	75	ZSHS-M15-M1000-303SU	ZSHS-M15-M1000-316SU	ZSHS-M15-M1000-104SU	ZSHS-M15-M1000-114SU
1,200	10	75	ZSHS-M15-M1200-303SU	ZSHS-M15-M1200-316SU	ZSHS-M15-M1200-104SU	ZSHS-M15-M1200-114SU
1,500	10	75	ZSHS-M15-M1500-303SU	ZSHS-M15-M1500-316SU	ZSHS-M15-M1500-104SU	ZSHS-M15-M1500-114SU
1,800	10	75	ZSHS-M15-M1800-303SU	ZSHS-M15-M1800-316SU	ZSHS-M15-M1800-104SU	ZSHS-M15-M1800-114SU

One End Step-Down Rotary Shafts — Metric



20mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Step Down Diameter	Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	12	75	ZSHS-M20-M0300-303SU	ZSHS-M20-M0300-316SU	ZSHS-M20-M0300-104SU	ZSHS-M20-M0300-114SU
500	12	75	ZSHS-M20-M0500-303SU	ZSHS-M20-M0500-316SU	ZSHS-M20-M0500-104SU	ZSHS-M20-M0500-114SU
1,000	12	75	ZSHS-M20-M1000-303SU	ZSHS-M20-M1000-316SU	ZSHS-M20-M1000-104SU	ZSHS-M20-M1000-114SU
1,200	12	75	ZSHS-M20-M1200-303SU	ZSHS-M20-M1200-316SU	ZSHS-M20-M1200-104SU	ZSHS-M20-M1200-114SU
1,500	12	75	ZSHS-M20-M1500-303SU	ZSHS-M20-M1500-316SU	ZSHS-M20-M1500-104SU	ZSHS-M20-M1500-114SU
1,800	12	75	ZSHS-M20-M1800-303SU	ZSHS-M20-M1800-316SU	ZSHS-M20-M1800-104SU	ZSHS-M20-M1800-114SU

24mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Step Down Diameter	Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	16	75	ZSHS-M24-M0300-303SU	ZSHS-M24-M0300-316SU	ZSHS-M24-M0300-104SU	ZSHS-M24-M0300-114SU
500	16	75	ZSHS-M24-M0500-303SU	ZSHS-M24-M0500-316SU	ZSHS-M24-M0500-104SU	ZSHS-M24-M0500-114SU
1,000	16	75	ZSHS-M24-M1000-303SU	ZSHS-M24-M1000-316SU	ZSHS-M24-M1000-104SU	ZSHS-M24-M1000-114SU
1,200	16	75	ZSHS-M24-M1200-303SU	ZSHS-M24-M1200-316SU	ZSHS-M24-M1200-104SU	ZSHS-M24-M1200-114SU
1,500	16	75	ZSHS-M24-M1500-303SU	ZSHS-M24-M1500-316SU	ZSHS-M24-M1500-104SU	ZSHS-M24-M1500-114SU
1,800	16	75	ZSHS-M24-M1800-303SU	ZSHS-M24-M1800-316SU	ZSHS-M24-M1800-104SU	ZSHS-M24-M1800-114SU

25mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Step Down Diameter	Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	16	75	ZSHS-M25-M0300-303SU	ZSHS-M25-M0300-316SU	ZSHS-M25-M0300-104SU	ZSHS-M25-M0300-114SU
500	16	75	ZSHS-M25-M0500-303SU	ZSHS-M25-M0500-316SU	ZSHS-M25-M0500-104SU	ZSHS-M25-M0500-114SU
1,000	16	75	ZSHS-M25-M1000-303SU	ZSHS-M25-M1000-316SU	ZSHS-M25-M1000-104SU	ZSHS-M25-M1000-114SU
1,200	16	75	ZSHS-M25-M1200-303SU	ZSHS-M25-M1200-316SU	ZSHS-M25-M1200-104SU	ZSHS-M25-M1200-114SU
1,500	16	75	ZSHS-M25-M1500-303SU	ZSHS-M25-M1500-316SU	ZSHS-M25-M1500-104SU	ZSHS-M25-M1500-114SU
1,800	16	75	ZSHS-M25-M1800-303SU	ZSHS-M25-M1800-316SU	ZSHS-M25-M1800-104SU	ZSHS-M25-M1800-114SU

Both Ends Step-Down Rotary Shafts — Metric



8mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Step Down Diameter	Both Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	6	75	ZSHSS-M08-M0300-303SU	ZSHSS-M08-M0300-316SU	ZSHSS-M08-M0300-104SU	ZSHSS-M08-M0300-114SU
500	6	75	ZSHSS-M08-M0500-303SU	ZSHSS-M08-M0500-316SU	ZSHSS-M08-M0500-104SU	ZSHSS-M08-M0500-114SU
1,000	6	75	ZSHSS-M08-M1000-303SU	ZSHSS-M08-M1000-316SU	ZSHSS-M08-M1000-104SU	ZSHSS-M08-M1000-114SU
1,200	6	75	ZSHSS-M08-M1200-303SU	ZSHSS-M08-M1200-316SU	ZSHSS-M08-M1200-104SU	ZSHSS-M08-M1200-114SU
1,500	6	75	ZSHSS-M08-M1500-303SU	ZSHSS-M08-M1500-316SU	ZSHSS-M08-M1500-104SU	ZSHSS-M08-M1500-114SU
1,800	6	75	ZSHSS-M08-M1800-303SU	ZSHSS-M08-M1800-316SU	ZSHSS-M08-M1800-104SU	ZSHSS-M08-M1800-114SU

10mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Step Down Diameter	Both Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	6	75	ZSHSS-M10-M0300-303SU	ZSHSS-M10-M0300-316SU	ZSHSS-M10-M0300-104SU	ZSHSS-M10-M0300-114SU
500	6	75	ZSHSS-M10-M0500-303SU	ZSHSS-M10-M0500-316SU	ZSHSS-M10-M0500-104SU	ZSHSS-M10-M0500-114SU
1,000	6	75	ZSHSS-M10-M1000-303SU	ZSHSS-M10-M1000-316SU	ZSHSS-M10-M1000-104SU	ZSHSS-M10-M1000-114SU
1,200	6	75	ZSHSS-M10-M1200-303SU	ZSHSS-M10-M1200-316SU	ZSHSS-M10-M1200-104SU	ZSHSS-M10-M1200-114SU
1,500	6	75	ZSHSS-M10-M1500-303SU	ZSHSS-M10-M1500-316SU	ZSHSS-M10-M1500-104SU	ZSHSS-M10-M1500-114SU
1,800	6	75	ZSHSS-M10-M1800-303SU	ZSHSS-M10-M1800-316SU	ZSHSS-M10-M1800-104SU	ZSHSS-M10-M1800-114SU

12mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Step Down Diameter	Both Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	8	75	ZSHSS-M12-M0300-303SU	ZSHSS-M12-M0300-316SU	ZSHSS-M12-M0300-104SU	ZSHSS-M12-M0300-114SU
500	8	75	ZSHSS-M12-M0500-303SU	ZSHSS-M12-M0500-316SU	ZSHSS-M12-M0500-104SU	ZSHSS-M12-M0500-114SU
1,000	8	75	ZSHSS-M12-M1000-303SU	ZSHSS-M12-M1000-316SU	ZSHSS-M12-M1000-104SU	ZSHSS-M12-M1000-114SU
1,200	8	75	ZSHSS-M12-M1200-303SU	ZSHSS-M12-M1200-316SU	ZSHSS-M12-M1200-104SU	ZSHSS-M12-M1200-114SU
1,500	8	75	ZSHSS-M12-M1500-303SU	ZSHSS-M12-M1500-316SU	ZSHSS-M12-M1500-104SU	ZSHSS-M12-M1500-114SU
1,800	8	75	ZSHSS-M12-M1800-303SU	ZSHSS-M12-M1800-316SU	ZSHSS-M12-M1800-104SU	ZSHSS-M12-M1800-114SU

15mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Step Down Dia	Both Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	10	75	ZSHSS-M15-M0300-303SU	ZSHSS-M15-M0300-316SU	ZSHSS-M15-M0300-104SU	ZSHSS-M15-M0300-114SU
500	10	75	ZSHSS-M15-M0500-303SU	ZSHSS-M15-M0500-316SU	ZSHSS-M15-M0500-104SU	ZSHSS-M15-M0500-114SU
1,000	10	75	ZSHSS-M15-M1000-303SU	ZSHSS-M15-M1000-316SU	ZSHSS-M15-M1000-104SU	ZSHSS-M15-M1000-114SU
1,200	10	75	ZSHSS-M15-M1200-303SU	ZSHSS-M15-M1200-316SU	ZSHSS-M15-M1200-104SU	ZSHSS-M15-M1200-114SU
1,500	10	75	ZSHSS-M15-M1500-303SU	ZSHSS-M15-M1500-316SU	ZSHSS-M15-M1500-104SU	ZSHSS-M15-M1500-114SU
1,800	10	75	ZSHSS-M15-M1800-303SU	ZSHSS-M15-M1800-316SU	ZSHSS-M15-M1800-104SU	ZSHSS-M15-M1800-114SU

Both Ends Step-Down Rotary Shafts — Metric



20mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Step Down Diameter	Both Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	12	75	ZSHSS-M20-M0300-303SU	ZSHSS-M20-M0300-316SU	ZSHSS-M20-M0300-104SU	ZSHSS-M20-M0300-114SU
500	12	75	ZSHSS-M20-M0500-303SU	ZSHSS-M20-M0500-316SU	ZSHSS-M20-M0500-104SU	ZSHSS-M20-M0500-114SU
1,000	12	75	ZSHSS-M20-M1000-303SU	ZSHSS-M20-M1000-316SU	ZSHSS-M20-M1000-104SU	ZSHSS-M20-M1000-114SU
1200	12	75	ZSHSS-M20-M1200-303SU	ZSHSS-M20-M1200-316SU	ZSHSS-M20-M1200-104SU	ZSHSS-M20-M1200-114SU
1,500	12	75	ZSHSS-M20-M1500-303SU	ZSHSS-M20-M1500-316SU	ZSHSS-M20-M1500-104SU	ZSHSS-M20-M1500-114SU
1,800	12	75	ZSHSS-M20-M1800-303SU	ZSHSS-M20-M1800-316SU	ZSHSS-M20-M1800-104SU	ZSHSS-M20-M1800-114SU

24mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Step Down Diameter	Both Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	16	75	ZSHSS-M24-M0300-303SU	ZSHSS-M24-M0300-316SU	ZSHSS-M24-M0300-104SU	ZSHSS-M24-M0300-114SU
500	16	75	ZSHSS-M24-M0500-303SU	ZSHSS-M24-M0500-316SU	ZSHSS-M24-M0500-104SU	ZSHSS-M24-M0500-114SU
1,000	16	75	ZSHSS-M24-M1000-303SU	ZSHSS-M24-M1000-316SU	ZSHSS-M24-M1000-104SU	ZSHSS-M24-M1000-114SU
1200	16	75	ZSHSS-M24-M1200-303SU	ZSHSS-M24-M1200-316SU	ZSHSS-M24-M1200-104SU	ZSHSS-M24-M1200-114SU
1,500	16	75	ZSHSS-M24-M1500-303SU	ZSHSS-M24-M1500-316SU	ZSHSS-M24-M1500-104SU	ZSHSS-M24-M1500-114SU
1,800	16	75	ZSHSS-M24-M1800-303SU	ZSHSS-M24-M1800-316SU	ZSHSS-M24-M1800-104SU	ZSHSS-M24-M1800-114SU

25mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	Step Down Diameter	Both Step Down Lg.	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	16	75	ZSHSS-M25-M0300-303SU	ZSHSS-M25-M0300-316SU	ZSHSS-M25-M0300-104SU	ZSHSS-M25-M0300-114SU
500	16	75	ZSHSS-M25-M0500-303SU	ZSHSS-M25-M0500-316SU	ZSHSS-M25-M0500-104SU	ZSHSS-M25-M0500-114SU
1,000	16	75	ZSHSS-M25-M1000-303SU	ZSHSS-M25-M1000-316SU	ZSHSS-M25-M1000-104SU	ZSHSS-M25-M1000-114SU
1200	16	75	ZSHSS-M25-M1200-303SU	ZSHSS-M25-M1200-316SU	ZSHSS-M25-M1200-104SU	ZSHSS-M25-M1200-114SU
1,500	16	75	ZSHSS-M25-M1500-303SU	ZSHSS-M25-M1500-316SU	ZSHSS-M25-M1500-104SU	ZSHSS-M25-M1500-114SU
1,800	16	75	ZSHSS-M25-M1800-303SU	ZSHSS-M25-M1800-316SU	ZSHSS-M25-M1800-104SU	ZSHSS-M25-M1800-114SU

Shafts with Retaining Ring Grooves Both Ends — Inch

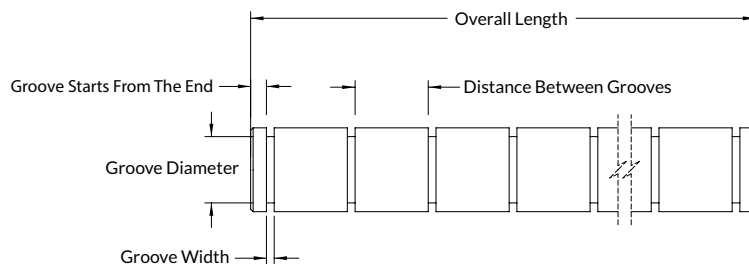
18-8 & 316 SS, Steel & Aluminum



Product Information

Grooved Rotary shafts feature machined grooves that are specially designed to accommodate retaining rings. The retaining rings hold components such as gears or bearings in place along the shaft (Both Ends) within grooves. Their chamfered edges minimize damage to components during installation. Precision-engineered with tight tolerances, these rings are turned, ground, and polished for accuracy.

- 18-8 stainless steel shafts offer excellent corrosion resistant and can be mildly magnetic. Meets ASTM A582 Condition A. material specification.
- Type 316 stainless steel, also known as marine stainless steel, offers superior corrosion resistant than 18-8 stainless steel and maybe mildly magnetic. Meets ASTM A276 Condition A. material specification.
- Aluminum shafts have the strength of mild steel with one third the weight.
- Aluminum shafts are lightweight, corrosion resistant and nonmagnetic. They have a T4 temper, which means they have been heat treated for increased strength.
- C1045 Carbon Steel shafts are generally stronger than aluminum and stainless steel shafts but not as corrosion resistant. These Carbon Steel shafts offers medium strength properties making them ideal for general purpose use.
- C1045 Carbon Steel is recommended for shafts requiring higher strength and wear resistance than carbon steel and stainless steel shafts.
- 1144 Stressproof Alloy Steel has excellent strength and hardness, and is specifically treated to relieve stresses for this durable material.



Dimensions Table — Inch

Dia.	Diameter Tolerance	Groove Width	Groove Dia	# of Grooves Each End	Groove Starts From the End	Distance Btw Grooves	Straightness Tolerance	Length Tolerance
5/16	-.0005 to -.0025	.029	.250	2 & 4	.063	.250	.012 in/ft	+/- .062
3/8	-.0005 to -.0025	.039	.303	2 & 4	.063	.375	.012 in/ft	+/- .062
1/2	-.0005 to -.0025	.046	.396	2 & 4	.094	.437	.012 in/ft	+/- .062
5/8	-.0005 to -.0025	.046	.485	2 & 4	.125	.500	.012 in/ft	+/- .062
3/4	-.0005 to -.0025	.056	.625	2 & 4	.125	.563	.012 in/ft	+/- .062
7/8	-.0005 to -.0025	.056	.675	2 & 4	.125	.563	.012 in/ft	+/- .062
1	-.0005 to -.0025	.056	.835	2 & 4	.125	.563	.012 in/ft	+/- .062

Materials Chart

Material	Mechanical Finish	Edge Type	Specs Met	Rockwell Hardness	Tensile Strength (psi)	Magnetic?
18-8 SS	Ground & Polished	Chamfered	ASTM A 582 Cond A	B83	90,000	Mildly
316 SS	Ground & Polished	Chamfered	ASTM A 276 Cond	B83	85,000	Mildly
C1045 Carbon Steel	Ground & Polished	Chamfered	ASTM A108	C15	91,000	Magnetic
1144 Alloy Steel	Ground & Polished	Chamfered	ASTM A311	C22	115,000	Magnetic
2024 Aluminum	Ground & Polished	Chamfered	ASTM B211	B75	68,000	Nonmagnetic

Shafts with Retaining Ring Grooves Both Ends – Inch



5/16 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHGG-312-03000-303SU	ZSHGG-312-03000-316SU	ZSHGG-312-03000-104SU	ZSHGG-312-03000-114SU	ZSHGG-312-03000-202SU
6	ZSHGG-312-06000-303SU	ZSHGG-312-06000-316SU	ZSHGG-312-06000-104SU	ZSHGG-312-06000-114SU	ZSHGG-312-06000-202SU
9	ZSHGG-312-09000-303SU	ZSHGG-312-09000-316SU	ZSHGG-312-09000-104SU	ZSHGG-312-09000-114SU	ZSHGG-312-09000-202SU
12	ZSHGG-312-12000-303SU	ZSHGG-312-12000-316SU	ZSHGG-312-12000-104SU	ZSHGG-312-12000-114SU	ZSHGG-312-12000-202SU
18	ZSHGG-312-18000-303SU	ZSHGG-312-18000-316SU	ZSHGG-312-18000-104SU	ZSHGG-312-18000-114SU	ZSHGG-312-18000-202SU
24	ZSHGG-312-24000-303SU	ZSHGG-312-24000-316SU	ZSHGG-312-24000-104SU	ZSHGG-312-24000-114SU	ZSHGG-312-24000-202SU
36	ZSHGG-312-36000-303SU	ZSHGG-312-36000-316SU	ZSHGG-312-36000-104SU	ZSHGG-312-36000-114SU	ZSHGG-312-36000-202SU
48	ZSHGG-312-48000-303SU	ZSHGG-312-48000-316SU	ZSHGG-312-48000-104SU	ZSHGG-312-48000-114SU	ZSHGG-312-48000-202SU
60	ZSHGG-312-60000-303SU	ZSHGG-312-60000-316SU	ZSHGG-312-60000-104SU	ZSHGG-312-60000-114SU	ZSHGG-312-60000-202SU
72	ZSHGG-312-72000-303SU	ZSHGG-312-72000-316SU	ZSHGG-312-72000-104SU	ZSHGG-312-72000-114SU	ZSHGG-312-72000-202SU

3/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHGG-375-03000-303SU	ZSHGG-375-03000-316SU	ZSHGG-375-03000-104SU	ZSHGG-375-03000-114SU	ZSHGG-375-03000-202SU
6	ZSHGG-375-06000-303SU	ZSHGG-375-06000-316SU	ZSHGG-375-06000-104SU	ZSHGG-375-06000-114SU	ZSHGG-375-06000-202SU
9	ZSHGG-375-09000-303SU	ZSHGG-375-09000-316SU	ZSHGG-375-09000-104SU	ZSHGG-375-09000-114SU	ZSHGG-375-09000-202SU
12	ZSHGG-375-12000-303SU	ZSHGG-375-12000-316SU	ZSHGG-375-12000-104SU	ZSHGG-375-12000-114SU	ZSHGG-375-12000-202SU
18	ZSHGG-375-18000-303SU	ZSHGG-375-18000-316SU	ZSHGG-375-18000-104SU	ZSHGG-375-18000-114SU	ZSHGG-375-18000-202SU
24	ZSHGG-375-24000-303SU	ZSHGG-375-24000-316SU	ZSHGG-375-24000-104SU	ZSHGG-375-24000-114SU	ZSHGG-375-24000-202SU
36	ZSHGG-375-36000-303SU	ZSHGG-375-36000-316SU	ZSHGG-375-36000-104SU	ZSHGG-375-36000-114SU	ZSHGG-375-36000-202SU
48	ZSHGG-375-48000-303SU	ZSHGG-375-48000-316SU	ZSHGG-375-48000-104SU	ZSHGG-375-48000-114SU	ZSHGG-375-48000-202SU
60	ZSHGG-375-60000-303SU	ZSHGG-375-60000-316SU	ZSHGG-375-60000-104SU	ZSHGG-375-60000-114SU	ZSHGG-375-60000-202SU
72	ZSHGG-375-72000-303SU	ZSHGG-375-72000-316SU	ZSHGG-375-72000-104SU	ZSHGG-375-72000-114SU	ZSHGG-375-72000-202SU

1/2 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHGG-500-03000-303SU	ZSHGG-500-03000-316SU	ZSHGG-500-03000-104SU	ZSHGG-500-03000-114SU	ZSHGG-500-03000-202SU
6	ZSHGG-500-06000-303SU	ZSHGG-500-06000-316SU	ZSHGG-500-06000-104SU	ZSHGG-500-06000-114SU	ZSHGG-500-06000-202SU
9	ZSHGG-500-09000-303SU	ZSHGG-500-09000-316SU	ZSHGG-500-09000-104SU	ZSHGG-500-09000-114SU	ZSHGG-500-09000-202SU
12	ZSHGG-500-12000-303SU	ZSHGG-500-12000-316SU	ZSHGG-500-12000-104SU	ZSHGG-500-12000-114SU	ZSHGG-500-12000-202SU
18	ZSHGG-500-18000-303SU	ZSHGG-500-18000-316SU	ZSHGG-500-18000-104SU	ZSHGG-500-18000-114SU	ZSHGG-500-18000-202SU
24	ZSHGG-500-24000-303SU	ZSHGG-500-24000-316SU	ZSHGG-500-24000-104SU	ZSHGG-500-24000-114SU	ZSHGG-500-24000-202SU
36	ZSHGG-500-36000-303SU	ZSHGG-500-36000-316SU	ZSHGG-500-36000-104SU	ZSHGG-500-36000-114SU	ZSHGG-500-36000-202SU
48	ZSHGG-500-48000-303SU	ZSHGG-500-48000-316SU	ZSHGG-500-48000-104SU	ZSHGG-500-48000-114SU	ZSHGG-500-48000-202SU
60	ZSHGG-500-60000-303SU	ZSHGG-500-60000-316SU	ZSHGG-500-60000-104SU	ZSHGG-500-60000-114SU	ZSHGG-500-60000-202SU
72	ZSHGG-500-72000-303SU	ZSHGG-500-72000-316SU	ZSHGG-500-72000-104SU	ZSHGG-500-72000-114SU	ZSHGG-500-72000-202SU

Shafts with Retaining Ring Grooves Both Ends – Inch



5/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHGG-625-03000-303SU	ZSHGG-625-03000-316SU	ZSHGG-625-03000-104SU	ZSHGG-625-03000-114SU	ZSHGG-625-03000-202SU
6	ZSHGG-625-06000-303SU	ZSHGG-625-06000-316SU	ZSHGG-625-06000-104SU	ZSHGG-625-06000-114SU	ZSHGG-625-06000-202SU
9	ZSHGG-625-09000-303SU	ZSHGG-625-09000-316SU	ZSHGG-625-09000-104SU	ZSHGG-625-09000-114SU	ZSHGG-625-09000-202SU
12	ZSHGG-625-12000-303SU	ZSHGG-625-12000-316SU	ZSHGG-625-12000-104SU	ZSHGG-625-12000-114SU	ZSHGG-625-12000-202SU
18	ZSHGG-625-18000-303SU	ZSHGG-625-18000-316SU	ZSHGG-625-18000-104SU	ZSHGG-625-18000-114SU	ZSHGG-625-18000-202SU
24	ZSHGG-625-24000-303SU	ZSHGG-625-24000-316SU	ZSHGG-625-24000-104SU	ZSHGG-625-24000-114SU	ZSHGG-625-24000-202SU
36	ZSHGG-625-36000-303SU	ZSHGG-625-36000-316SU	ZSHGG-625-36000-104SU	ZSHGG-625-36000-114SU	ZSHGG-625-36000-202SU
48	ZSHGG-625-48000-303SU	ZSHGG-625-48000-316SU	ZSHGG-625-48000-104SU	ZSHGG-625-48000-114SU	ZSHGG-625-48000-202SU
60	ZSHGG-625-60000-303SU	ZSHGG-625-60000-316SU	ZSHGG-625-60000-104SU	ZSHGG-625-60000-114SU	ZSHGG-625-60000-202SU
72	ZSHGG-625-72000-303SU	ZSHGG-625-72000-316SU	ZSHGG-625-72000-104SU	ZSHGG-625-72000-114SU	ZSHGG-625-72000-202SU

3/4 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHGG-750-03000-303SU	ZSHGG-750-03000-316SU	ZSHGG-750-03000-104SU	ZSHGG-750-03000-114SU	ZSHGG-750-03000-202SU
6	ZSHGG-750-06000-303SU	ZSHGG-750-06000-316SU	ZSHGG-750-06000-104SU	ZSHGG-750-06000-114SU	ZSHGG-750-06000-202SU
9	ZSHGG-750-09000-303SU	ZSHGG-750-09000-316SU	ZSHGG-750-09000-104SU	ZSHGG-750-09000-114SU	ZSHGG-750-09000-202SU
12	ZSHGG-750-12000-303SU	ZSHGG-750-12000-316SU	ZSHGG-750-12000-104SU	ZSHGG-750-12000-114SU	ZSHGG-750-12000-202SU
18	ZSHGG-750-18000-303SU	ZSHGG-750-18000-316SU	ZSHGG-750-18000-104SU	ZSHGG-750-18000-114SU	ZSHGG-750-18000-202SU
24	ZSHGG-750-24000-303SU	ZSHGG-750-24000-316SU	ZSHGG-750-24000-104SU	ZSHGG-750-24000-114SU	ZSHGG-750-24000-202SU
36	ZSHGG-750-36000-303SU	ZSHGG-750-36000-316SU	ZSHGG-750-36000-104SU	ZSHGG-750-36000-114SU	ZSHGG-750-36000-202SU
48	ZSHGG-750-48000-303SU	ZSHGG-750-48000-316SU	ZSHGG-750-48000-104SU	ZSHGG-750-48000-114SU	ZSHGG-750-48000-202SU
60	ZSHGG-750-60000-303SU	ZSHGG-750-60000-316SU	ZSHGG-750-60000-104SU	ZSHGG-750-60000-114SU	ZSHGG-750-60000-202SU
72	ZSHGG-750-72000-303SU	ZSHGG-750-72000-316SU	ZSHGG-750-72000-104SU	ZSHGG-750-72000-114SU	ZSHGG-750-72000-202SU

Shafts with Retaining Ring Grooves Both Ends — Inch



7/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHGG-875-03000-303SU	ZSHGG-875-03000-316SU	ZSHGG-875-03000-104SU	ZSHGG-875-03000-114SU	ZSHGG-875-03000-202SU
6	ZSHGG-875-06000-303SU	ZSHGG-875-06000-316SU	ZSHGG-875-06000-104SU	ZSHGG-875-06000-114SU	ZSHGG-875-06000-202SU
9	ZSHGG-875-09000-303SU	ZSHGG-875-09000-316SU	ZSHGG-875-09000-104SU	ZSHGG-875-09000-114SU	ZSHGG-875-09000-202SU
12	ZSHGG-875-12000-303SU	ZSHGG-875-12000-316SU	ZSHGG-875-12000-104SU	ZSHGG-875-12000-114SU	ZSHGG-875-12000-202SU
18	ZSHGG-875-18000-303SU	ZSHGG-875-18000-316SU	ZSHGG-875-18000-104SU	ZSHGG-875-18000-114SU	ZSHGG-875-18000-202SU
24	ZSHGG-875-24000-303SU	ZSHGG-875-24000-316SU	ZSHGG-875-24000-104SU	ZSHGG-875-24000-114SU	ZSHGG-875-24000-202SU
36	ZSHGG-875-36000-303SU	ZSHGG-875-36000-316SU	ZSHGG-875-36000-104SU	ZSHGG-875-36000-114SU	ZSHGG-875-36000-202SU
48	ZSHGG-875-48000-303SU	ZSHGG-875-48000-316SU	ZSHGG-875-48000-104SU	ZSHGG-875-48000-114SU	ZSHGG-875-48000-202SU
60	ZSHGG-875-60000-303SU	ZSHGG-875-60000-316SU	ZSHGG-875-60000-104SU	ZSHGG-875-60000-114SU	ZSHGG-875-60000-202SU
72	ZSHGG-875-72000-303SU	ZSHGG-875-72000-316SU	ZSHGG-875-72000-104SU	ZSHGG-875-72000-114SU	ZSHGG-875-72000-202SU

1 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHGG-1000-03000-303SU	ZSHGG-1000-03000-316SU	ZSHGG-1000-03000-104SU	ZSHGG-1000-03000-114SU	ZSHGG-1000-03000-202SU
6	ZSHGG-1000-06000-303SU	ZSHGG-1000-06000-316SU	ZSHGG-1000-06000-104SU	ZSHGG-1000-06000-114SU	ZSHGG-1000-06000-202SU
9	ZSHGG-1000-09000-303SU	ZSHGG-1000-09000-316SU	ZSHGG-1000-09000-104SU	ZSHGG-1000-09000-114SU	ZSHGG-1000-09000-202SU
12	ZSHGG-1000-12000-303SU	ZSHGG-1000-12000-316SU	ZSHGG-1000-12000-104SU	ZSHGG-1000-12000-114SU	ZSHGG-1000-12000-202SU
18	ZSHGG-1000-18000-303SU	ZSHGG-1000-18000-316SU	ZSHGG-1000-18000-104SU	ZSHGG-1000-18000-114SU	ZSHGG-1000-18000-202SU
24	ZSHGG-1000-24000-303SU	ZSHGG-1000-24000-316SU	ZSHGG-1000-24000-104SU	ZSHGG-1000-24000-114SU	ZSHGG-1000-24000-202SU
36	ZSHGG-1000-36000-303SU	ZSHGG-1000-36000-316SU	ZSHGG-1000-36000-104SU	ZSHGG-1000-36000-114SU	ZSHGG-1000-36000-202SU
48	ZSHGG-1000-48000-303SU	ZSHGG-1000-48000-316SU	ZSHGG-1000-48000-104SU	ZSHGG-1000-48000-114SU	ZSHGG-1000-48000-202SU
60	ZSHGG-1000-60000-303SU	ZSHGG-1000-60000-316SU	ZSHGG-1000-60000-104SU	ZSHGG-1000-60000-114SU	ZSHGG-1000-60000-202SU
72	ZSHGG-1000-72000-303SU	ZSHGG-1000-72000-316SU	ZSHGG-1000-72000-104SU	ZSHGG-1000-72000-114SU	ZSHGG-1000-72000-202SU

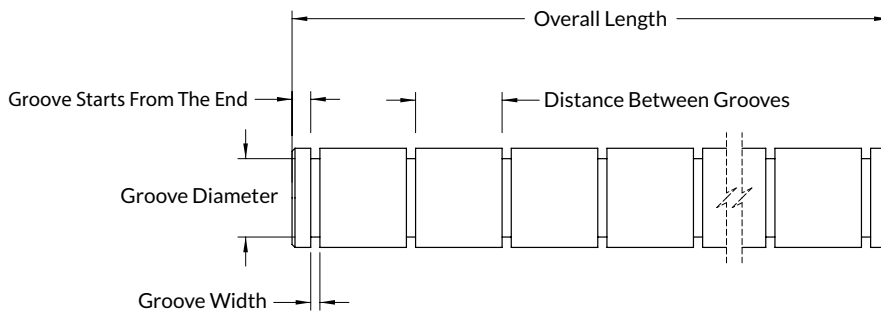
Shafts with Retaining Ring Grooves Both Ends – Metric



Product Information

Grooved Rotary shafts feature machined grooves that are specially designed to accommodate retaining rings. The retaining rings hold components such as gears or bearings in place along the shaft (Both Ends) within grooves. Their chamfered edges minimize damage to components during installation. Precision-engineered with tight tolerances, these rings are turned, ground, and polished for accuracy.

- 18-8 stainless steel shafts offer excellent corrosion resistant and can be mildly magnetic. Meets ASTM A582 Condition A. material specification.
- Type 316 stainless steel, also known as marine stainless steel, offers superior corrosion resistant than 18-8 stainless steel and maybe mildly magnetic. Meets ASTM A276 Condition A. material specification.
- C1045 Carbon Steel shafts are generally stronger than aluminum and stainless steel shafts but not as corrosion resistant. These Carbon Steel shafts offers medium strength properties making them ideal for general purpose use.
- C1045 Carbon Steel is recommended for shafts requiring higher strength and wear resistance than carbon steel and stainless steel shafts.
- 1144 Stressproof Alloy Steel has excellent strength and hardness, and is specifically treated to relieve stresses for this durable material.



Dimensions Table – Metric

Dia.	Diameter Tolerance	Groove Width	Groove Dia	# of Grooves Each End	Groove Starts From the End	Distance Btw Grooves	Straightness Tolerance	Length Tolerance
8mm	-.0635 to 0mm	0.94	7	2 & 4	1.6	6	.33mm per 300mm	+/-1.6mm
10mm	-.0635 to 0mm	1.05	8	2 & 4	1.6	6	.33mm per 300mm	+/-1.6mm
12mm	-.0635 to 0mm	1.15	9	2 & 4	3.2	10	.33mm per 300mm	+/-1.6mm
15mm	-.0635 to 0mm	1.25	10	2 & 4	3.2	10	.33mm per 300mm	+/-1.6mm
20mm	-.0635 to 0mm	1.8	19	2 & 4	3.2	12	.33mm per 300mm	+/-1.6mm
24mm	-.0635 to 0mm	1.8	19	2 & 4	3.2	12	.33mm per 300mm	+/-1.6mm
25mm	-.0635 to 0mm	2.05	24	2 & 4	3.2	12	.33mm per 300mm	+/-1.6mm

Materials Chart

Material	Mechanical Finish	Edge Type	Specs Met	Rockwell Hardness	Tensile Strength (psi)	Magnetic?
18-8 SS	Ground & Polished	Chamfered	ASTM A 582 Cond A	B83	90,000	Mildly
316 SS	Ground & Polished	Chamfered	ASTM A 276 Cond	B83	85,000	Mildly
C1045 Carbon Steel	Ground & Polished	Chamfered	ASTM A108	C15	91,000	Magnetic
1144 Alloy Steel	Ground & Polished	Chamfered	ASTM A311	C22	115,000	Magnetic

Shafts with Retaining Ring Grooves Both Ends — Metric



8mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHGG-M08-M0300-303SU	ZSHGG-M08-M0300-316SU	ZSHGG-M08-M0300-104SU	ZSHGG-M08-M0300-114SU
500	ZSHGG-M08-M0500-303SU	ZSHGG-M08-M0500-316SU	ZSHGG-M08-M0500-104SU	ZSHGG-M08-M0500-114SU
1,000	ZSHGG-M08-M1000-303SU	ZSHGG-M08-M1000-316SU	ZSHGG-M08-M1000-104SU	ZSHGG-M08-M1000-114SU
1,200	ZSHGG-M08-M1200-303SU	ZSHGG-M08-M1200-316SU	ZSHGG-M08-M1200-104SU	ZSHGG-M08-M1200-114SU
1,500	ZSHGG-M08-M1500-303SU	ZSHGG-M08-M1500-316SU	ZSHGG-M08-M1500-104SU	ZSHGG-M08-M1500-114SU
1,800	ZSHGG-M08-M1800-303SU	ZSHGG-M08-M1800-316SU	ZSHGG-M08-M1800-104SU	ZSHGG-M08-M1800-114SU

10mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHGG-M10-M0300-303SU	ZSHGG-M10-M0300-316SU	ZSHGG-M10-M0300-104SU	ZSHGG-M10-M0300-114SU
500	ZSHGG-M10-M0500-303SU	ZSHGG-M10-M0500-316SU	ZSHGG-M10-M0500-104SU	ZSHGG-M10-M0500-114SU
1,000	ZSHGG-M10-M1000-303SU	ZSHGG-M10-M1000-316SU	ZSHGG-M10-M1000-104SU	ZSHGG-M10-M1000-114SU
1,200	ZSHGG-M10-M1200-303SU	ZSHGG-M10-M1200-316SU	ZSHGG-M10-M1200-104SU	ZSHGG-M10-M1200-114SU
1,500	ZSHGG-M10-M1500-303SU	ZSHGG-M10-M1500-316SU	ZSHGG-M10-M1500-104SU	ZSHGG-M10-M1500-114SU
1,800	ZSHGG-M10-M1800-303SU	ZSHGG-M10-M1800-316SU	ZSHGG-M10-M1800-104SU	ZSHGG-M10-M1800-114SU

12mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHGG-M12-M0300-303SU	ZSHGG-M12-M0300-316SU	ZSHGG-M12-M0300-104SU	ZSHGG-M12-M0300-114SU
500	ZSHGG-M12-M0500-303SU	ZSHGG-M12-M0500-316SU	ZSHGG-M12-M0500-104SU	ZSHGG-M12-M0500-114SU
1,000	ZSHGG-M12-M1000-303SU	ZSHGG-M12-M1000-316SU	ZSHGG-M12-M1000-104SU	ZSHGG-M12-M1000-114SU
1,200	ZSHGG-M12-M1200-303SU	ZSHGG-M12-M1200-316SU	ZSHGG-M12-M1200-104SU	ZSHGG-M12-M1200-114SU
1,500	ZSHGG-M12-M1500-303SU	ZSHGG-M12-M1500-316SU	ZSHGG-M12-M1500-104SU	ZSHGG-M12-M1500-114SU
1,800	ZSHGG-M12-M1800-303SU	ZSHGG-M12-M1800-316SU	ZSHGG-M12-M1800-104SU	ZSHGG-M12-M1800-114SU

15mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHGG-M15-M0300-303SU	ZSHGG-M15-M0300-316SU	ZSHGG-M15-M0300-104SU	ZSHGG-M15-M0300-114SU
500	ZSHGG-M15-M0500-303SU	ZSHGG-M15-M0500-316SU	ZSHGG-M15-M0500-104SU	ZSHGG-M15-M0500-114SU
1,000	ZSHGG-M15-M1000-303SU	ZSHGG-M15-M1000-316SU	ZSHGG-M15-M1000-104SU	ZSHGG-M15-M1000-114SU
1,200	ZSHGG-M15-M1200-303SU	ZSHGG-M15-M1200-316SU	ZSHGG-M15-M1200-104SU	ZSHGG-M15-M1200-114SU
1,500	ZSHGG-M15-M1500-303SU	ZSHGG-M15-M1500-316SU	ZSHGG-M15-M1500-104SU	ZSHGG-M15-M1500-114SU
1,800	ZSHGG-M15-M1800-303SU	ZSHGG-M15-M1800-316SU	ZSHGG-M15-M1800-104SU	ZSHGG-M15-M1800-114SU

Shafts with Retaining Ring Grooves Both Ends — Metric



20mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHGG-M20-M0300-303SU	ZSHGG-M20-M0300-316SU	ZSHGG-M20-M0300-104SU	ZSHGG-M20-M0300-114SU
500	ZSHGG-M20-M0500-303SU	ZSHGG-M20-M0500-316SU	ZSHGG-M20-M0500-104SU	ZSHGG-M20-M0500-114SU
1,000	ZSHGG-M20-M1000-303SU	ZSHGG-M20-M1000-316SU	ZSHGG-M20-M1000-104SU	ZSHGG-M20-M1000-114SU
1,200	ZSHGG-M20-M1200-303SU	ZSHGG-M20-M1200-316SU	ZSHGG-M20-M1200-104SU	ZSHGG-M20-M1200-114SU
1,500	ZSHGG-M20-M1500-303SU	ZSHGG-M20-M1500-316SU	ZSHGG-M20-M1500-104SU	ZSHGG-M20-M1500-114SU
1,800	ZSHGG-M20-M1800-303SU	ZSHGG-M20-M1800-316SU	ZSHGG-M20-M1800-104SU	ZSHGG-M20-M1800-114SU

24mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHGG-M24-M0300-303SU	ZSHGG-M24-M0300-316SU	ZSHGG-M24-M0300-104SU	ZSHGG-M24-M0300-114SU
500	ZSHGG-M24-M0500-303SU	ZSHGG-M24-M0500-316SU	ZSHGG-M24-M0500-104SU	ZSHGG-M24-M0500-114SU
1,000	ZSHGG-M24-M1000-303SU	ZSHGG-M24-M1000-316SU	ZSHGG-M24-M1000-104SU	ZSHGG-M24-M1000-114SU
1,200	ZSHGG-M24-M1200-303SU	ZSHGG-M24-M1200-316SU	ZSHGG-M24-M1200-104SU	ZSHGG-M24-M1200-114SU
1,500	ZSHGG-M24-M1500-303SU	ZSHGG-M24-M1500-316SU	ZSHGG-M24-M1500-104SU	ZSHGG-M24-M1500-114SU
1,800	ZSHGG-M24-M1800-303SU	ZSHGG-M24-M1800-316SU	ZSHGG-M24-M1800-104SU	ZSHGG-M24-M1800-114SU

25mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHGG-M25-M0300-303SU	ZSHGG-M25-M0300-316SU	ZSHGG-M25-M0300-104SU	ZSHGG-M25-M0300-114SU
500	ZSHGG-M25-M0500-303SU	ZSHGG-M25-M0500-316SU	ZSHGG-M25-M0500-104SU	ZSHGG-M25-M0500-114SU
1,000	ZSHGG-M25-M1000-303SU	ZSHGG-M25-M1000-316SU	ZSHGG-M25-M1000-104SU	ZSHGG-M25-M1000-114SU
1,200	ZSHGG-M25-M1200-303SU	ZSHGG-M25-M1200-316SU	ZSHGG-M25-M1200-104SU	ZSHGG-M25-M1200-114SU
1,500	ZSHGG-M25-M1500-303SU	ZSHGG-M25-M1500-316SU	ZSHGG-M25-M1500-104SU	ZSHGG-M25-M1500-114SU
1,800	ZSHGG-M25-M1800-303SU	ZSHGG-M25-M1800-316SU	ZSHGG-M25-M1800-104SU	ZSHGG-M25-M1800-114SU

Ground Blank Rotary Shafts — Inch
18-8 SS, 316 SS, Steel and Aluminum

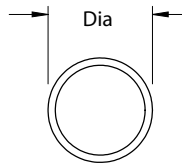
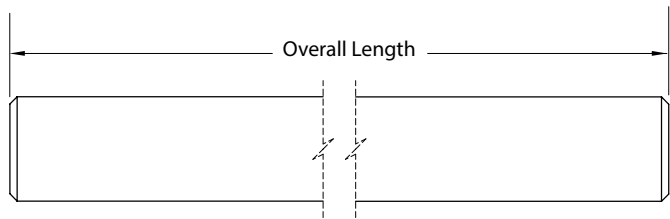


Product Information

Plain ground rotary shafts are cylindrical components precision-ground to achieve a smooth, accurate surface finish. These shafts serve as the backbone for countless mechanical systems, transmitting rotational motion. Their applications span across various industries, including automotive, aerospace, and manufacturing. From supporting gears and pulleys in power transmission systems to acting as axles in vehicles, plain ground rotary shafts are essential components that enable efficient and reliable machinery operation. Their durability, precision, and versatility make them indispensable in modern engineering.

Length tolerance is +/-0.062 and straightness tolerance is 0.012 in/ft.

- 18-8 Stainless Steel offers excellent corrosion resistant.
- 316 Stainless Steel, also known as Marine Stainless Steel, offers superior corrosion resistant than 18-8 Stainless Steel.
- Aluminum have the strength of mild steel with one third the weight.
- C1045 Carbon Steel are generally stronger than Stainless Steel and Aluminum without corrosion resistance.
- 1144 Alloy Steel is stronger than Carbon Steel and hardened for increased wear resistance.



Materials Chart						
Material	Mechanical Finish	Edge Type	Specs Met	Rockwell Hardness	Tensile Strength (psi)	Magnetic?
18-8 SS	Ground & Polished	Chamfered	ASTM A 582 Cond A	B83	90,000	Mildly
316 SS			ASTM A 276 Cond	B83	85,000	Mildly
C1045 Carbon Steel			ASTM A108	C15	91,000	Magnetic
1144 Alloy Steel			ASTM A311	C22	115,000	Magnetic
2024 Aluminum			ASTM B211	B75	68,000	Nonmagnetic

Ground Blank Rotary Shafts – Inch



5/16 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHR-312-03000-303SU	ZSHR-312-03000-316SU	ZSHR-312-03000-104SU	ZSHR-312-03000-114SU	ZSHR-312-03000-202SU
6	ZSHR-312-06000-303SU	ZSHR-312-06000-316SU	ZSHR-312-06000-104SU	ZSHR-312-06000-114SU	ZSHR-312-06000-202SU
9	ZSHR-312-09000-303SU	ZSHR-312-09000-316SU	ZSHR-312-09000-104SU	ZSHR-312-09000-114SU	ZSHR-312-09000-202SU
12	ZSHR-312-12000-303SU	ZSHR-312-12000-316SU	ZSHR-312-12000-104SU	ZSHR-312-12000-114SU	ZSHR-312-12000-202SU
18	ZSHR-312-18000-303SU	ZSHR-312-18000-316SU	ZSHR-312-18000-104SU	ZSHR-312-18000-114SU	ZSHR-312-18000-202SU
24	ZSHR-312-24000-303SU	ZSHR-312-24000-316SU	ZSHR-312-24000-104SU	ZSHR-312-24000-114SU	ZSHR-312-24000-202SU
36	ZSHR-312-36000-303SU	ZSHR-312-36000-316SU	ZSHR-312-36000-104SU	ZSHR-312-36000-114SU	ZSHR-312-36000-202SU
48	ZSHR-312-48000-303SU	ZSHR-312-48000-316SU	ZSHR-312-48000-104SU	ZSHR-312-48000-114SU	ZSHR-312-48000-202SU
60	ZSHR-312-60000-303SU	ZSHR-312-60000-316SU	ZSHR-312-60000-104SU	ZSHR-312-60000-114SU	ZSHR-312-60000-202SU
72	ZSHR-312-72000-303SU	ZSHR-312-72000-316SU	ZSHR-312-72000-104SU	ZSHR-312-72000-114SU	ZSHR-312-72000-202SU

3/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHR-375-03000-303SU	ZSHR-375-03000-316SU	ZSHR-375-03000-104SU	ZSHR-375-03000-114SU	ZSHR-375-03000-202SU
6	ZSHR-375-06000-303SU	ZSHR-375-06000-316SU	ZSHR-375-06000-104SU	ZSHR-375-06000-114SU	ZSHR-375-06000-202SU
9	ZSHR-375-09000-303SU	ZSHR-375-09000-316SU	ZSHR-375-09000-104SU	ZSHR-375-09000-114SU	ZSHR-375-09000-202SU
12	ZSHR-375-12000-303SU	ZSHR-375-12000-316SU	ZSHR-375-12000-104SU	ZSHR-375-12000-114SU	ZSHR-375-12000-202SU
18	ZSHR-375-18000-303SU	ZSHR-375-18000-316SU	ZSHR-375-18000-104SU	ZSHR-375-18000-114SU	ZSHR-375-18000-202SU
24	ZSHR-375-24000-303SU	ZSHR-375-24000-316SU	ZSHR-375-24000-104SU	ZSHR-375-24000-114SU	ZSHR-375-24000-202SU
36	ZSHR-375-36000-303SU	ZSHR-375-36000-316SU	ZSHR-375-36000-104SU	ZSHR-375-36000-114SU	ZSHR-375-36000-202SU
48	ZSHR-375-48000-303SU	ZSHR-375-48000-316SU	ZSHR-375-48000-104SU	ZSHR-375-48000-114SU	ZSHR-375-48000-202SU
60	ZSHR-375-60000-303SU	ZSHR-375-60000-316SU	ZSHR-375-60000-104SU	ZSHR-375-60000-114SU	ZSHR-375-60000-202SU
72	ZSHR-375-72000-303SU	ZSHR-375-72000-316SU	ZSHR-375-72000-104SU	ZSHR-375-72000-114SU	ZSHR-375-72000-202SU

1/2 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHR-500-03000-303SU	ZSHR-500-03000-316SU	ZSHR-500-03000-104SU	ZSHR-500-03000-114SU	ZSHR-500-03000-202SU
6	ZSHR-500-06000-303SU	ZSHR-500-06000-316SU	ZSHR-500-06000-104SU	ZSHR-500-06000-114SU	ZSHR-500-06000-202SU
9	ZSHR-500-09000-303SU	ZSHR-500-09000-316SU	ZSHR-500-09000-104SU	ZSHR-500-09000-114SU	ZSHR-500-09000-202SU
12	ZSHR-500-12000-303SU	ZSHR-500-12000-316SU	ZSHR-500-12000-104SU	ZSHR-500-12000-114SU	ZSHR-500-12000-202SU
18	ZSHR-500-18000-303SU	ZSHR-500-18000-316SU	ZSHR-500-18000-104SU	ZSHR-500-18000-114SU	ZSHR-500-18000-202SU
24	ZSHR-500-24000-303SU	ZSHR-500-24000-316SU	ZSHR-500-24000-104SU	ZSHR-500-24000-114SU	ZSHR-500-24000-202SU
36	ZSHR-500-36000-303SU	ZSHR-500-36000-316SU	ZSHR-500-36000-104SU	ZSHR-500-36000-114SU	ZSHR-500-36000-202SU
48	ZSHR-500-48000-303SU	ZSHR-500-48000-316SU	ZSHR-500-48000-104SU	ZSHR-500-48000-114SU	ZSHR-500-48000-202SU
60	ZSHR-500-60000-303SU	ZSHR-500-60000-316SU	ZSHR-500-60000-104SU	ZSHR-500-60000-114SU	ZSHR-500-60000-202SU
72	ZSHR-500-72000-303SU	ZSHR-500-72000-316SU	ZSHR-500-72000-104SU	ZSHR-500-72000-114SU	ZSHR-500-72000-202SU

Ground Blank Rotary Shafts – Inch



5/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHR-625-03000-303SU	ZSHR-625-03000-316SU	ZSHR-625-03000-104SU	ZSHR-625-03000-114SU	ZSHR-625-03000-202SU
6	ZSHR-625-06000-303SU	ZSHR-625-06000-316SU	ZSHR-625-06000-104SU	ZSHR-625-06000-114SU	ZSHR-625-06000-202SU
9	ZSHR-625-09000-303SU	ZSHR-625-09000-316SU	ZSHR-625-09000-104SU	ZSHR-625-09000-114SU	ZSHR-625-09000-202SU
12	ZSHR-625-12000-303SU	ZSHR-625-12000-316SU	ZSHR-625-12000-104SU	ZSHR-625-12000-114SU	ZSHR-625-12000-202SU
18	ZSHR-625-18000-303SU	ZSHR-625-18000-316SU	ZSHR-625-18000-104SU	ZSHR-625-18000-114SU	ZSHR-625-18000-202SU
24	ZSHR-625-24000-303SU	ZSHR-625-24000-316SU	ZSHR-625-24000-104SU	ZSHR-625-24000-114SU	ZSHR-625-24000-202SU
36	ZSHR-625-36000-303SU	ZSHR-625-36000-316SU	ZSHR-625-36000-104SU	ZSHR-625-36000-114SU	ZSHR-625-36000-202SU
48	ZSHR-625-48000-303SU	ZSHR-625-48000-316SU	ZSHR-625-48000-104SU	ZSHR-625-48000-114SU	ZSHR-625-48000-202SU
60	ZSHR-625-60000-303SU	ZSHR-625-60000-316SU	ZSHR-625-60000-104SU	ZSHR-625-60000-114SU	ZSHR-625-60000-202SU
72	ZSHR-625-72000-303SU	ZSHR-625-72000-316SU	ZSHR-625-72000-104SU	ZSHR-625-72000-114SU	ZSHR-625-72000-202SU

3/4 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHR-750-03000-303SU	ZSHR-750-03000-316SU	ZSHR-750-03000-104SU	ZSHR-750-03000-114SU	ZSHR-750-03000-202SU
6	ZSHR-750-06000-303SU	ZSHR-750-06000-316SU	ZSHR-750-06000-104SU	ZSHR-750-06000-114SU	ZSHR-750-06000-202SU
9	ZSHR-750-09000-303SU	ZSHR-750-09000-316SU	ZSHR-750-09000-104SU	ZSHR-750-09000-114SU	ZSHR-750-09000-202SU
12	ZSHR-750-12000-303SU	ZSHR-750-12000-316SU	ZSHR-750-12000-104SU	ZSHR-750-12000-114SU	ZSHR-750-12000-202SU
18	ZSHR-750-18000-303SU	ZSHR-750-18000-316SU	ZSHR-750-18000-104SU	ZSHR-750-18000-114SU	ZSHR-750-18000-202SU
24	ZSHR-750-24000-303SU	ZSHR-750-24000-316SU	ZSHR-750-24000-104SU	ZSHR-750-24000-114SU	ZSHR-750-24000-202SU
36	ZSHR-750-36000-303SU	ZSHR-750-36000-316SU	ZSHR-750-36000-104SU	ZSHR-750-36000-114SU	ZSHR-750-36000-202SU
48	ZSHR-750-48000-303SU	ZSHR-750-48000-316SU	ZSHR-750-48000-104SU	ZSHR-750-48000-114SU	ZSHR-750-48000-202SU
60	ZSHR-750-60000-303SU	ZSHR-750-60000-316SU	ZSHR-750-60000-104SU	ZSHR-750-60000-114SU	ZSHR-750-60000-202SU
72	ZSHR-750-72000-303SU	ZSHR-750-72000-316SU	ZSHR-750-72000-104SU	ZSHR-750-72000-114SU	ZSHR-750-72000-202SU

7/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHR-875-03000-303SU	ZSHR-875-03000-316SU	ZSHR-875-03000-104SU	ZSHR-875-03000-114SU	ZSHR-875-03000-202SU
6	ZSHR-875-06000-303SU	ZSHR-875-06000-316SU	ZSHR-875-06000-104SU	ZSHR-875-06000-114SU	ZSHR-875-06000-202SU
9	ZSHR-875-09000-303SU	ZSHR-875-09000-316SU	ZSHR-875-09000-104SU	ZSHR-875-09000-114SU	ZSHR-875-09000-202SU
12	ZSHR-875-12000-303SU	ZSHR-875-12000-316SU	ZSHR-875-12000-104SU	ZSHR-875-12000-114SU	ZSHR-875-12000-202SU
18	ZSHR-875-18000-303SU	ZSHR-875-18000-316SU	ZSHR-875-18000-104SU	ZSHR-875-18000-114SU	ZSHR-875-18000-202SU
24	ZSHR-875-24000-303SU	ZSHR-875-24000-316SU	ZSHR-875-24000-104SU	ZSHR-875-24000-114SU	ZSHR-875-24000-202SU
36	ZSHR-875-36000-303SU	ZSHR-875-36000-316SU	ZSHR-875-36000-104SU	ZSHR-875-36000-114SU	ZSHR-875-36000-202SU
48	ZSHR-875-48000-303SU	ZSHR-875-48000-316SU	ZSHR-875-48000-104SU	ZSHR-875-48000-114SU	ZSHR-875-48000-202SU
60	ZSHR-875-60000-303SU	ZSHR-875-60000-316SU	ZSHR-875-60000-104SU	ZSHR-875-60000-114SU	ZSHR-875-60000-202SU
72	ZSHR-875-72000-303SU	ZSHR-875-72000-316SU	ZSHR-875-72000-104SU	ZSHR-875-72000-114SU	ZSHR-875-72000-202SU

Ground Blank Rotary Shafts — Inch



15/16 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	—	—	ZSHR-937-03000-104SU	—	—
6	—	—	ZSHR-937-06000-104SU	—	—
9	—	—	ZSHR-937-09000-104SU	—	—
12	—	—	ZSHR-937-12000-104SU	—	—
18	—	—	ZSHR-937-18000-104SU	—	—
24	—	—	ZSHR-937-24000-104SU	—	—
36	—	—	ZSHR-937-36000-104SU	—	—
48	—	—	ZSHR-937-48000-104SU	—	—
60	—	—	ZSHR-937-60000-104SU	—	—
72	—	—	ZSHR-937-72000-104SU	—	—

1 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHR-1000-03000-303SU	ZSHR-1000-03000-316SU	ZSHR-1000-03000-104SU	ZSHR-1000-03000-114SU	ZSHR-1000-03000-202SU
6	ZSHR-1000-06000-303SU	ZSHR-1000-06000-316SU	ZSHR-1000-06000-104SU	ZSHR-1000-06000-114SU	ZSHR-1000-06000-202SU
9	ZSHR-1000-09000-303SU	ZSHR-1000-09000-316SU	ZSHR-1000-09000-104SU	ZSHR-1000-09000-114SU	ZSHR-1000-09000-202SU
12	ZSHR-1000-12000-303SU	ZSHR-1000-12000-316SU	ZSHR-1000-12000-104SU	ZSHR-1000-12000-114SU	ZSHR-1000-12000-202SU
18	ZSHR-1000-18000-303SU	ZSHR-1000-18000-316SU	ZSHR-1000-18000-104SU	ZSHR-1000-18000-114SU	ZSHR-1000-18000-202SU
24	ZSHR-1000-24000-303SU	ZSHR-1000-24000-316SU	ZSHR-1000-24000-104SU	ZSHR-1000-24000-114SU	ZSHR-1000-24000-202SU
36	ZSHR-1000-36000-303SU	ZSHR-1000-36000-316SU	ZSHR-1000-36000-104SU	ZSHR-1000-36000-114SU	ZSHR-1000-36000-202SU
48	ZSHR-1000-48000-303SU	ZSHR-1000-48000-316SU	ZSHR-1000-48000-104SU	ZSHR-1000-48000-114SU	ZSHR-1000-48000-202SU
60	ZSHR-1000-60000-303SU	ZSHR-1000-60000-316SU	ZSHR-1000-60000-104SU	ZSHR-1000-60000-114SU	ZSHR-1000-60000-202SU
72	ZSHR-1000-72000-303SU	ZSHR-1000-72000-316SU	ZSHR-1000-72000-104SU	ZSHR-1000-72000-114SU	ZSHR-1000-72000-202SU

1-1/8 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHR-1125-03000-303SU	ZSHR-1125-03000-316SU	ZSHR-1125-03000-104SU	ZSHR-1125-03000-114SU	—
6	ZSHR-1125-06000-303SU	ZSHR-1125-06000-316SU	ZSHR-1125-06000-104SU	ZSHR-1125-06000-114SU	—
9	ZSHR-1125-09000-303SU	ZSHR-1125-09000-316SU	ZSHR-1125-09000-104SU	ZSHR-1125-09000-114SU	—
12	ZSHR-1125-12000-303SU	ZSHR-1125-12000-316SU	ZSHR-1125-12000-104SU	ZSHR-1125-12000-114SU	—
18	ZSHR-1125-18000-303SU	ZSHR-1125-18000-316SU	ZSHR-1125-18000-104SU	ZSHR-1125-18000-114SU	—
24	ZSHR-1125-24000-303SU	ZSHR-1125-24000-316SU	ZSHR-1125-24000-104SU	ZSHR-1125-24000-114SU	—
36	ZSHR-1125-36000-303SU	ZSHR-1125-36000-316SU	ZSHR-1125-36000-104SU	ZSHR-1125-36000-114SU	—
48	ZSHR-1125-48000-303SU	ZSHR-1125-48000-316SU	ZSHR-1125-48000-104SU	ZSHR-1125-48000-114SU	—
60	ZSHR-1125-60000-303SU	ZSHR-1125-60000-316SU	ZSHR-1125-60000-104SU	ZSHR-1125-60000-114SU	—
72	ZSHR-1125-72000-303SU	ZSHR-1125-72000-316SU	ZSHR-1125-72000-104SU	ZSHR-1125-72000-114SU	—

Ground Blank Rotary Shafts — Inch



1-3/16 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHR-1187-03000-303SU	ZSHR-1187-03000-316SU	ZSHR-1187-03000-104SU	ZSHR-1187-03000-114SU	—
6	ZSHR-1187-06000-303SU	ZSHR-1187-06000-316SU	ZSHR-1187-06000-104SU	ZSHR-1187-06000-114SU	—
9	ZSHR-1187-09000-303SU	ZSHR-1187-09000-316SU	ZSHR-1187-09000-104SU	ZSHR-1187-09000-114SU	—
12	ZSHR-1187-12000-303SU	ZSHR-1187-12000-316SU	ZSHR-1187-12000-104SU	ZSHR-1187-12000-114SU	—
18	ZSHR-1187-18000-303SU	ZSHR-1187-18000-316SU	ZSHR-1187-18000-104SU	ZSHR-1187-18000-114SU	—
24	ZSHR-1187-24000-303SU	ZSHR-1187-24000-316SU	ZSHR-1187-24000-104SU	ZSHR-1187-24000-114SU	—
36	ZSHR-1187-36000-303SU	ZSHR-1187-36000-316SU	ZSHR-1187-36000-104SU	ZSHR-1187-36000-114SU	—
48	ZSHR-1187-48000-303SU	ZSHR-1187-48000-316SU	ZSHR-1187-48000-104SU	ZSHR-1187-48000-114SU	—
60	ZSHR-1187-60000-303SU	ZSHR-1187-60000-316SU	ZSHR-1187-60000-104SU	ZSHR-1187-60000-114SU	—
72	ZSHR-1187-72000-303SU	ZSHR-1187-72000-316SU	ZSHR-1187-72000-104SU	ZSHR-1187-72000-114SU	—

1-1/4 Diameter (Tolerance: -.0005" to -.0025")

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHR-1250-03000-303SU	ZSHR-1250-03000-316SU	ZSHR-1250-03000-104SU	ZSHR-1250-03000-114SU	—
6	ZSHR-1250-06000-303SU	ZSHR-1250-06000-316SU	ZSHR-1250-06000-104SU	ZSHR-1250-06000-114SU	—
9	ZSHR-1250-09000-303SU	ZSHR-1250-09000-316SU	ZSHR-1250-09000-104SU	ZSHR-1250-09000-114SU	—
12	ZSHR-1250-12000-303SU	ZSHR-1250-12000-316SU	ZSHR-1250-12000-104SU	ZSHR-1250-12000-114SU	—
18	ZSHR-1250-18000-303SU	ZSHR-1250-18000-316SU	ZSHR-1250-18000-104SU	ZSHR-1250-18000-114SU	—
24	ZSHR-1250-24000-303SU	ZSHR-1250-24000-316SU	ZSHR-1250-24000-104SU	ZSHR-1250-24000-114SU	—
36	ZSHR-1250-36000-303SU	ZSHR-1250-36000-316SU	ZSHR-1250-36000-104SU	ZSHR-1250-36000-114SU	—
48	ZSHR-1250-48000-303SU	ZSHR-1250-48000-316SU	ZSHR-1250-48000-104SU	ZSHR-1250-48000-114SU	—
60	ZSHR-1250-60000-303SU	ZSHR-1250-60000-316SU	ZSHR-1250-60000-104SU	ZSHR-1250-60000-114SU	—
72	ZSHR-1250-72000-303SU	ZSHR-1250-72000-316SU	ZSHR-1250-72000-104SU	ZSHR-1250-72000-114SU	—

1-5/16 Diameter (Tolerance: +0/-0.003)

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHR-1312-03000-303SU	ZSHR-1312-03000-316SU	ZSHR-1312-03000-104SU	ZSHR-1312-03000-114SU	—
6	ZSHR-1312-06000-303SU	ZSHR-1312-06000-316SU	ZSHR-1312-06000-104SU	ZSHR-1312-06000-114SU	—
9	ZSHR-1312-09000-303SU	ZSHR-1312-09000-316SU	ZSHR-1312-09000-104SU	ZSHR-1312-09000-114SU	—
12	ZSHR-1312-12000-303SU	ZSHR-1312-12000-316SU	ZSHR-1312-12000-104SU	ZSHR-1312-12000-114SU	—
18	ZSHR-1312-18000-303SU	ZSHR-1312-18000-316SU	ZSHR-1312-18000-104SU	ZSHR-1312-18000-114SU	—
24	ZSHR-1312-24000-303SU	ZSHR-1312-24000-316SU	ZSHR-1312-24000-104SU	ZSHR-1312-24000-114SU	—
36	ZSHR-1312-36000-303SU	ZSHR-1312-36000-316SU	ZSHR-1312-36000-104SU	ZSHR-1312-36000-114SU	—
48	ZSHR-1312-48000-303SU	ZSHR-1312-48000-316SU	ZSHR-1312-48000-104SU	ZSHR-1312-48000-114SU	—
60	ZSHR-1312-60000-303SU	ZSHR-1312-60000-316SU	ZSHR-1312-60000-104SU	ZSHR-1312-60000-114SU	—
72	ZSHR-1312-72000-303SU	ZSHR-1312-72000-316SU	ZSHR-1312-72000-104SU	ZSHR-1312-72000-114SU	—

Ground Blank Rotary Shafts — Inch



1-3/8 Diameter (Tolerance: +0/-.003)

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHR-1375-03000-303SU	ZSHR-1375-03000-316SU	ZSHR-1375-03000-104SU	ZSHR-1375-03000-114SU	—
6	ZSHR-1375-06000-303SU	ZSHR-1375-06000-316SU	ZSHR-1375-06000-104SU	ZSHR-1375-06000-114SU	—
9	ZSHR-1375-09000-303SU	ZSHR-1375-09000-316SU	ZSHR-1375-09000-104SU	ZSHR-1375-09000-114SU	—
12	ZSHR-1375-12000-303SU	ZSHR-1375-12000-316SU	ZSHR-1375-12000-104SU	ZSHR-1375-12000-114SU	—
18	ZSHR-1375-18000-303SU	ZSHR-1375-18000-316SU	ZSHR-1375-18000-104SU	ZSHR-1375-18000-114SU	—
24	ZSHR-1375-24000-303SU	ZSHR-1375-24000-316SU	ZSHR-1375-24000-104SU	ZSHR-1375-24000-114SU	—
36	ZSHR-1375-36000-303SU	ZSHR-1375-36000-316SU	ZSHR-1375-36000-104SU	ZSHR-1375-36000-114SU	—
48	ZSHR-1375-48000-303SU	ZSHR-1375-48000-316SU	ZSHR-1375-48000-104SU	ZSHR-1375-48000-114SU	—
60	ZSHR-1375-60000-303SU	ZSHR-1375-60000-316SU	ZSHR-1375-60000-104SU	ZSHR-1375-60000-114SU	—
72	ZSHR-1375-72000-303SU	ZSHR-1375-72000-316SU	ZSHR-1375-72000-104SU	ZSHR-1375-72000-114SU	—

1-7/16 Diameter (Tolerance: +0/-.003)

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHR-1437-03000-303SU	ZSHR-1437-03000-316SU	ZSHR-1437-03000-104SU	ZSHR-1437-03000-114SU	—
6	ZSHR-1437-06000-303SU	ZSHR-1437-06000-316SU	ZSHR-1437-06000-104SU	ZSHR-1437-06000-114SU	—
9	ZSHR-1437-09000-303SU	ZSHR-1437-09000-316SU	ZSHR-1437-09000-104SU	ZSHR-1437-09000-114SU	—
12	ZSHR-1437-12000-303SU	ZSHR-1437-12000-316SU	ZSHR-1437-12000-104SU	ZSHR-1437-12000-114SU	—
18	ZSHR-1437-18000-303SU	ZSHR-1437-18000-316SU	ZSHR-1437-18000-104SU	ZSHR-1437-18000-114SU	—
24	ZSHR-1437-24000-303SU	ZSHR-1437-24000-316SU	ZSHR-1437-24000-104SU	ZSHR-1437-24000-114SU	—
36	ZSHR-1437-36000-303SU	ZSHR-1437-36000-316SU	ZSHR-1437-36000-104SU	ZSHR-1437-36000-114SU	—
48	ZSHR-1437-48000-303SU	ZSHR-1437-48000-316SU	ZSHR-1437-48000-104SU	ZSHR-1437-48000-114SU	—
60	ZSHR-1437-60000-303SU	ZSHR-1437-60000-316SU	ZSHR-1437-60000-104SU	ZSHR-1437-60000-114SU	—
72	ZSHR-1437-72000-303SU	ZSHR-1437-72000-316SU	ZSHR-1437-72000-104SU	ZSHR-1437-72000-114SU	—

1-1/2 Diameter (Tolerance: +0/-.003)

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHR-1500-03000-303SU	ZSHR-1500-03000-316SU	ZSHR-1500-03000-104SU	ZSHR-1500-03000-114SU	—
6	ZSHR-1500-06000-303SU	ZSHR-1500-06000-316SU	ZSHR-1500-06000-104SU	ZSHR-1500-06000-114SU	—
9	ZSHR-1500-09000-303SU	ZSHR-1500-09000-316SU	ZSHR-1500-09000-104SU	ZSHR-1500-09000-114SU	—
12	ZSHR-1500-12000-303SU	ZSHR-1500-12000-316SU	ZSHR-1500-12000-104SU	ZSHR-1500-12000-114SU	—
18	ZSHR-1500-18000-303SU	ZSHR-1500-18000-316SU	ZSHR-1500-18000-104SU	ZSHR-1500-18000-114SU	—
24	ZSHR-1500-24000-303SU	ZSHR-1500-24000-316SU	ZSHR-1500-24000-104SU	ZSHR-1500-24000-114SU	—
36	ZSHR-1500-36000-303SU	ZSHR-1500-36000-316SU	ZSHR-1500-36000-104SU	ZSHR-1500-36000-114SU	—
48	ZSHR-1500-48000-303SU	ZSHR-1500-48000-316SU	ZSHR-1500-48000-104SU	ZSHR-1500-48000-114SU	—
60	ZSHR-1500-60000-303SU	ZSHR-1500-60000-316SU	ZSHR-1500-60000-104SU	ZSHR-1500-60000-114SU	—
72	ZSHR-1500-72000-303SU	ZSHR-1500-72000-316SU	ZSHR-1500-72000-104SU	ZSHR-1500-72000-114SU	—

Ground Blank Rotary Shafts — Inch



1-5/8 Diameter (Tolerance: +0/-.003)

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHR-1625-03000-303SU	ZSHR-1625-03000-316SU	ZSHR-1625-03000-104SU	ZSHR-1625-03000-114SU	—
6	ZSHR-1625-06000-303SU	ZSHR-1625-06000-316SU	ZSHR-1625-06000-104SU	ZSHR-1625-06000-114SU	—
9	ZSHR-1625-09000-303SU	ZSHR-1625-09000-316SU	ZSHR-1625-09000-104SU	ZSHR-1625-09000-114SU	—
12	ZSHR-1625-12000-303SU	ZSHR-1625-12000-316SU	ZSHR-1625-12000-104SU	ZSHR-1625-12000-114SU	—
18	ZSHR-1625-18000-303SU	ZSHR-1625-18000-316SU	ZSHR-1625-18000-104SU	ZSHR-1625-18000-114SU	—
24	ZSHR-1625-24000-303SU	ZSHR-1625-24000-316SU	ZSHR-1625-24000-104SU	ZSHR-1625-24000-114SU	—
36	ZSHR-1625-36000-303SU	ZSHR-1625-36000-316SU	ZSHR-1625-36000-104SU	ZSHR-1625-36000-114SU	—
48	ZSHR-1625-48000-303SU	ZSHR-1625-48000-316SU	ZSHR-1625-48000-104SU	ZSHR-1625-48000-114SU	—
60	ZSHR-1625-60000-303SU	ZSHR-1625-60000-316SU	ZSHR-1625-60000-104SU	ZSHR-1625-60000-114SU	—
72	ZSHR-1625-72000-303SU	ZSHR-1625-72000-316SU	ZSHR-1625-72000-104SU	ZSHR-1625-72000-114SU	—

1-3/4 Diameter (Tolerance: +0/-.003)

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHR-1750-03000-303SU	ZSHR-1750-03000-316SU	ZSHR-1750-03000-104SU	ZSHR-1750-03000-114SU	—
6	ZSHR-1750-06000-303SU	ZSHR-1750-06000-316SU	ZSHR-1750-06000-104SU	ZSHR-1750-06000-114SU	—
9	ZSHR-1750-09000-303SU	ZSHR-1750-09000-316SU	ZSHR-1750-09000-104SU	ZSHR-1750-09000-114SU	—
12	ZSHR-1750-12000-303SU	ZSHR-1750-12000-316SU	ZSHR-1750-12000-104SU	ZSHR-1750-12000-114SU	—
18	ZSHR-1750-18000-303SU	ZSHR-1750-18000-316SU	ZSHR-1750-18000-104SU	ZSHR-1750-18000-114SU	—
24	ZSHR-1750-24000-303SU	ZSHR-1750-24000-316SU	ZSHR-1750-24000-104SU	ZSHR-1750-24000-114SU	—
36	ZSHR-1750-36000-303SU	ZSHR-1750-36000-316SU	ZSHR-1750-36000-104SU	ZSHR-1750-36000-114SU	—
48	ZSHR-1750-48000-303SU	ZSHR-1750-48000-316SU	ZSHR-1750-48000-104SU	ZSHR-1750-48000-114SU	—
60	ZSHR-1750-60000-303SU	ZSHR-1750-60000-316SU	ZSHR-1750-60000-104SU	ZSHR-1750-60000-114SU	—
72	ZSHR-1750-72000-303SU	ZSHR-1750-72000-316SU	ZSHR-1750-72000-104SU	ZSHR-1750-72000-114SU	—

1-7/8 Diameter (Tolerance: +0/-.003)

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHR-1875-03000-303SU	ZSHR-1875-03000-316SU	ZSHR-1875-03000-104SU	ZSHR-1875-03000-114SU	—
6	ZSHR-1875-06000-303SU	ZSHR-1875-06000-316SU	ZSHR-1875-06000-104SU	ZSHR-1875-06000-114SU	—
9	ZSHR-1875-09000-303SU	ZSHR-1875-09000-316SU	ZSHR-1875-09000-104SU	ZSHR-1875-09000-114SU	—
12	ZSHR-1875-12000-303SU	ZSHR-1875-12000-316SU	ZSHR-1875-12000-104SU	ZSHR-1875-12000-114SU	—
18	ZSHR-1875-18000-303SU	ZSHR-1875-18000-316SU	ZSHR-1875-18000-104SU	ZSHR-1875-18000-114SU	—
24	ZSHR-1875-24000-303SU	ZSHR-1875-24000-316SU	ZSHR-1875-24000-104SU	ZSHR-1875-24000-114SU	—
36	ZSHR-1875-36000-303SU	ZSHR-1875-36000-316SU	ZSHR-1875-36000-104SU	ZSHR-1875-36000-114SU	—
48	ZSHR-1875-48000-303SU	ZSHR-1875-48000-316SU	ZSHR-1875-48000-104SU	ZSHR-1875-48000-114SU	—
60	ZSHR-1875-60000-303SU	ZSHR-1875-60000-316SU	ZSHR-1875-60000-104SU	ZSHR-1875-60000-114SU	—
72	ZSHR-1875-72000-303SU	ZSHR-1875-72000-316SU	ZSHR-1875-72000-104SU	ZSHR-1875-72000-114SU	—

Ground Blank Rotary Shafts — Inch



1-7/8 Diameter (Tolerance: +0/-.0035)

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHR-1937-03000-303SU	ZSHR-1937-03000-316SU	ZSHR-1937-03000-104SU	ZSHR-1937-03000-114SU	—
6	ZSHR-1937-06000-303SU	ZSHR-1937-06000-316SU	ZSHR-1937-06000-104SU	ZSHR-1937-06000-114SU	—
9	ZSHR-1937-09000-303SU	ZSHR-1937-09000-316SU	ZSHR-1937-09000-104SU	ZSHR-1937-09000-114SU	—
12	ZSHR-1937-12000-303SU	ZSHR-1937-12000-316SU	ZSHR-1937-12000-104SU	ZSHR-1937-12000-114SU	—
18	ZSHR-1937-18000-303SU	ZSHR-1937-18000-316SU	ZSHR-1937-18000-104SU	ZSHR-1937-18000-114SU	—
24	ZSHR-1937-24000-303SU	ZSHR-1937-24000-316SU	ZSHR-1937-24000-104SU	ZSHR-1937-24000-114SU	—
36	ZSHR-1937-36000-303SU	ZSHR-1937-36000-316SU	ZSHR-1937-36000-104SU	ZSHR-1937-36000-114SU	—
48	ZSHR-1937-48000-303SU	ZSHR-1937-48000-316SU	ZSHR-1937-48000-104SU	ZSHR-1937-48000-114SU	—
60	ZSHR-1937-60000-303SU	ZSHR-1937-60000-316SU	ZSHR-1937-60000-104SU	ZSHR-1937-60000-114SU	—
72	ZSHR-1937-72000-303SU	ZSHR-1937-72000-316SU	ZSHR-1937-72000-104SU	ZSHR-1937-72000-114SU	—

2 Diameter (Tolerance: +0/-.0035)

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHR-2000-03000-303SU	ZSHR-2000-03000-316SU	ZSHR-2000-03000-104SU	ZSHR-2000-03000-114SU	—
6	ZSHR-2000-06000-303SU	ZSHR-2000-06000-316SU	ZSHR-2000-06000-104SU	ZSHR-2000-06000-114SU	—
9	ZSHR-2000-09000-303SU	ZSHR-2000-09000-316SU	ZSHR-2000-09000-104SU	ZSHR-2000-09000-114SU	—
12	ZSHR-2000-12000-303SU	ZSHR-2000-12000-316SU	ZSHR-2000-12000-104SU	ZSHR-2000-12000-114SU	—
18	ZSHR-2000-18000-303SU	ZSHR-2000-18000-316SU	ZSHR-2000-18000-104SU	ZSHR-2000-18000-114SU	—
24	ZSHR-2000-24000-303SU	ZSHR-2000-24000-316SU	ZSHR-2000-24000-104SU	ZSHR-2000-24000-114SU	—
36	ZSHR-2000-36000-303SU	ZSHR-2000-36000-316SU	ZSHR-2000-36000-104SU	ZSHR-2000-36000-114SU	—
48	ZSHR-2000-48000-303SU	ZSHR-2000-48000-316SU	ZSHR-2000-48000-104SU	ZSHR-2000-48000-114SU	—
60	ZSHR-2000-60000-303SU	ZSHR-2000-60000-316SU	ZSHR-2000-60000-104SU	ZSHR-2000-60000-114SU	—
72	ZSHR-2000-72000-303SU	ZSHR-2000-72000-316SU	ZSHR-2000-72000-104SU	ZSHR-2000-72000-114SU	—

2-1/8 Diameter (Tolerance: +0/-.0035)

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHR-2125-03000-303SU	ZSHR-2125-03000-316SU	ZSHR-2125-03000-104SU	ZSHR-2125-03000-114SU	—
6	ZSHR-2125-06000-303SU	ZSHR-2125-06000-316SU	ZSHR-2125-06000-104SU	ZSHR-2125-06000-114SU	—
9	ZSHR-2125-09000-303SU	ZSHR-2125-09000-316SU	ZSHR-2125-09000-104SU	ZSHR-2125-09000-114SU	—
12	ZSHR-2125-12000-303SU	ZSHR-2125-12000-316SU	ZSHR-2125-12000-104SU	ZSHR-2125-12000-114SU	—
18	ZSHR-2125-18000-303SU	ZSHR-2125-18000-316SU	ZSHR-2125-18000-104SU	ZSHR-2125-18000-114SU	—
24	ZSHR-2125-24000-303SU	ZSHR-2125-24000-316SU	ZSHR-2125-24000-104SU	ZSHR-2125-24000-114SU	—
36	ZSHR-2125-36000-303SU	ZSHR-2125-36000-316SU	ZSHR-2125-36000-104SU	ZSHR-2125-36000-114SU	—
48	ZSHR-2125-48000-303SU	ZSHR-2125-48000-316SU	ZSHR-2125-48000-104SU	ZSHR-2125-48000-114SU	—
60	ZSHR-2125-60000-303SU	ZSHR-2125-60000-316SU	ZSHR-2125-60000-104SU	ZSHR-2125-60000-114SU	—
72	ZSHR-2125-72000-303SU	ZSHR-2125-72000-316SU	ZSHR-2125-72000-104SU	ZSHR-2125-72000-114SU	—

Ground Blank Rotary Shafts — Inch



2-3/16 Diameter (Tolerance: +0/-0.0035)

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHR-2187-03000-303SU	ZSHR-2187-03000-316SU	ZSHR-2187-03000-104SU	ZSHR-2187-03000-114SU	—
6	ZSHR-2187-06000-303SU	ZSHR-2187-06000-316SU	ZSHR-2187-06000-104SU	ZSHR-2187-06000-114SU	—
9	ZSHR-2187-09000-303SU	ZSHR-2187-09000-316SU	ZSHR-2187-09000-104SU	ZSHR-2187-09000-114SU	—
12	ZSHR-2187-12000-303SU	ZSHR-2187-12000-316SU	ZSHR-2187-12000-104SU	ZSHR-2187-12000-114SU	—
18	ZSHR-2187-18000-303SU	ZSHR-2187-18000-316SU	ZSHR-2187-18000-104SU	ZSHR-2187-18000-114SU	—
24	ZSHR-2187-24000-303SU	ZSHR-2187-24000-316SU	ZSHR-2187-24000-104SU	ZSHR-2187-24000-114SU	—
36	ZSHR-2187-36000-303SU	ZSHR-2187-36000-316SU	ZSHR-2187-36000-104SU	ZSHR-2187-36000-114SU	—
48	ZSHR-2187-48000-303SU	ZSHR-2187-48000-316SU	ZSHR-2187-48000-104SU	ZSHR-2187-48000-114SU	—
60	ZSHR-2187-60000-303SU	ZSHR-2187-60000-316SU	ZSHR-2187-60000-104SU	ZSHR-2187-60000-114SU	—
72	ZSHR-2187-72000-303SU	ZSHR-2187-72000-316SU	ZSHR-2187-72000-104SU	ZSHR-2187-72000-114SU	—

2-3/8 Diameter (Tolerance: +0/-0.0035)

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHR-2375-03000-303SU	ZSHR-2375-03000-316SU	ZSHR-2375-03000-104SU	ZSHR-2375-03000-114SU	—
6	ZSHR-2375-06000-303SU	ZSHR-2375-06000-316SU	ZSHR-2375-06000-104SU	ZSHR-2375-06000-114SU	—
9	ZSHR-2375-09000-303SU	ZSHR-2375-09000-316SU	ZSHR-2375-09000-104SU	ZSHR-2375-09000-114SU	—
12	ZSHR-2375-12000-303SU	ZSHR-2375-12000-316SU	ZSHR-2375-12000-104SU	ZSHR-2375-12000-114SU	—
18	ZSHR-2375-18000-303SU	ZSHR-2375-18000-316SU	ZSHR-2375-18000-104SU	ZSHR-2375-18000-114SU	—
24	ZSHR-2375-24000-303SU	ZSHR-2375-24000-316SU	ZSHR-2375-24000-104SU	ZSHR-2375-24000-114SU	—
36	ZSHR-2375-36000-303SU	ZSHR-2375-36000-316SU	ZSHR-2375-36000-104SU	ZSHR-2375-36000-114SU	—
48	ZSHR-2375-48000-303SU	ZSHR-2375-48000-316SU	ZSHR-2375-48000-104SU	ZSHR-2375-48000-114SU	—
60	ZSHR-2375-60000-303SU	ZSHR-2375-60000-316SU	ZSHR-2375-60000-104SU	ZSHR-2375-60000-114SU	—
72	ZSHR-2375-72000-303SU	ZSHR-2375-72000-316SU	ZSHR-2375-72000-104SU	ZSHR-2375-72000-114SU	—

2-7/16 Diameter (Tolerance: +0/-0.0035)

O'all Lg (inch)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number	2024 Aluminum Part Number
3	ZSHR-2437-03000-303SU	ZSHR-2437-03000-316SU	ZSHR-2437-03000-104SU	ZSHR-2437-03000-114SU	—
6	ZSHR-2437-06000-303SU	ZSHR-2437-06000-316SU	ZSHR-2437-06000-104SU	ZSHR-2437-06000-114SU	—
9	ZSHR-2437-09000-303SU	ZSHR-2437-09000-316SU	ZSHR-2437-09000-104SU	ZSHR-2437-09000-114SU	—
12	ZSHR-2437-12000-303SU	ZSHR-2437-12000-316SU	ZSHR-2437-12000-104SU	ZSHR-2437-12000-114SU	—
18	ZSHR-2437-18000-303SU	ZSHR-2437-18000-316SU	ZSHR-2437-18000-104SU	ZSHR-2437-18000-114SU	—
24	ZSHR-2437-24000-303SU	ZSHR-2437-24000-316SU	ZSHR-2437-24000-104SU	ZSHR-2437-24000-114SU	—
36	ZSHR-2437-36000-303SU	ZSHR-2437-36000-316SU	ZSHR-2437-36000-104SU	ZSHR-2437-36000-114SU	—
48	ZSHR-2437-48000-303SU	ZSHR-2437-48000-316SU	ZSHR-2437-48000-104SU	ZSHR-2437-48000-114SU	—
60	ZSHR-2437-60000-303SU	ZSHR-2437-60000-316SU	ZSHR-2437-60000-104SU	ZSHR-2437-60000-114SU	—
72	ZSHR-2437-72000-303SU	ZSHR-2437-72000-316SU	ZSHR-2437-72000-104SU	ZSHR-2437-72000-114SU	—

Ground Blank Rotary Shafts – Metric

18-8 SS, 316 SS and Steel

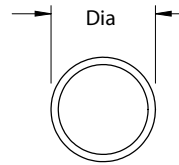
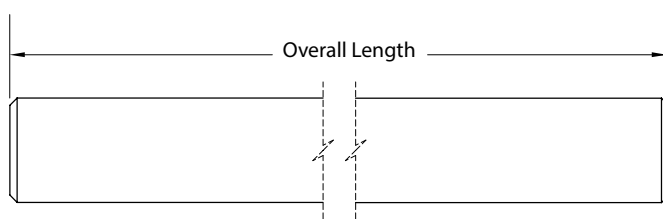


Product Information

Plain ground rotary shafts are cylindrical components precision-ground to achieve a smooth, accurate surface finish. These shafts serve as the backbone for countless mechanical systems, transmitting rotational motion. Their applications span across various industries, including automotive, aerospace, and manufacturing. From supporting gears and pulleys in power transmission systems to acting as axles in vehicles, plain ground rotary shafts are essential components that enable efficient and reliable machinery operation. Their durability, precision, and versatility make them indispensable in modern engineering.

Length tolerance is $\pm 1.6\text{mm}$ and straightness tolerance is $.33\text{mm}$ per 300mm.

- 18-8 Stainless Steel offers excellent corrosion resistant.
- 316 Stainless Steel, also known as Marine Stainless Steel, offers superior corrosion resistant than 18-8 Stainless Steel.
- Aluminum have the strength of mild steel with one third the weight.
- C1045 Carbon Steel are generally stronger than Stainless Steel and Aluminum without corrosion resistance.
- 1144 Alloy Steel is stronger than Carbon Steel and hardened for increased wear resistance.



Materials Chart

Material	Mechanical Finish	Edge Type	Specs Met	Rockwell Hardness	Tensile Strength (psi)	Magnetic?
18-8 SS	Ground & Polished	Chamfered	ASTM A 582 Cond A	B83	90,000	Mildly
316 SS			ASTM A 276 Cond	B83	85,000	Mildly
C1045 Carbon Steel			ASTM A108	C15	91,000	Magnetic
1144 Alloy Steel			ASTM A311	C22	115,000	Magnetic



8mm Diameter (Tolerance: $\pm 0.0635\text{mm}$)

O'all Lg (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHR-M08-M0300-303SU	ZSHR-M08-M0300-316SU	ZSHR-M08-M0300-104SU	ZSHR-M08-M0300-114SU
500	ZSHR-M08-M0500-303SU	ZSHR-M08-M0500-316SU	ZSHR-M08-M0500-104SU	ZSHR-M08-M0500-114SU
1,000	ZSHR-M08-M1000-303SU	ZSHR-M08-M1000-316SU	ZSHR-M08-M1000-104SU	ZSHR-M08-M1000-114SU
1,200	ZSHR-M08-M1200-303SU	ZSHR-M08-M1200-316SU	ZSHR-M08-M1200-104SU	ZSHR-M08-M1200-114SU
1,500	ZSHR-M08-M1500-303SU	ZSHR-M08-M1500-316SU	ZSHR-M08-M1500-104SU	ZSHR-M08-M1500-114SU
1,800	ZSHR-M08-M1800-303SU	ZSHR-M08-M1800-316SU	ZSHR-M08-M1800-104SU	ZSHR-M08-M1800-114SU

Ground Blank Rotary Shafts — Metric



10mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHR-M10-M0300-303SU	ZSHR-M10-M0300-316SU	ZSHR-M10-M0300-104SU	ZSHR-M10-M0300-114SU
500	ZSHR-M10-M0500-303SU	ZSHR-M10-M0500-316SU	ZSHR-M10-M0500-104SU	ZSHR-M10-M0500-114SU
1,000	ZSHR-M10-M1000-303SU	ZSHR-M10-M1000-316SU	ZSHR-M10-M1000-104SU	ZSHR-M10-M1000-114SU
1,200	ZSHR-M10-M1200-303SU	ZSHR-M10-M1200-316SU	ZSHR-M10-M1200-104SU	ZSHR-M10-M1200-114SU
1,500	ZSHR-M10-M1500-303SU	ZSHR-M10-M1500-316SU	ZSHR-M10-M1500-104SU	ZSHR-M10-M1500-114SU
1,800	ZSHR-M10-M1800-303SU	ZSHR-M10-M1800-316SU	ZSHR-M10-M1800-104SU	ZSHR-M10-M1800-114SU

12mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHR-M12-M0300-303SU	ZSHR-M12-M0300-316SU	ZSHR-M12-M0300-104SU	ZSHR-M12-M0300-114SU
500	ZSHR-M12-M0500-303SU	ZSHR-M12-M0500-316SU	ZSHR-M12-M0500-104SU	ZSHR-M12-M0500-114SU
1,000	ZSHR-M12-M1000-303SU	ZSHR-M12-M1000-316SU	ZSHR-M12-M1000-104SU	ZSHR-M12-M1000-114SU
1,200	ZSHR-M12-M1200-303SU	ZSHR-M12-M1200-316SU	ZSHR-M12-M1200-104SU	ZSHR-M12-M1200-114SU
1,500	ZSHR-M12-M1500-303SU	ZSHR-M12-M1500-316SU	ZSHR-M12-M1500-104SU	ZSHR-M12-M1500-114SU
1,800	ZSHR-M12-M1800-303SU	ZSHR-M12-M1800-316SU	ZSHR-M12-M1800-104SU	ZSHR-M12-M1800-114SU

15mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHR-M15-M0300-303SU	ZSHR-M15-M0300-316SU	ZSHR-M15-M0300-104SU	ZSHR-M15-M0300-114SU
500	ZSHR-M15-M0500-303SU	ZSHR-M15-M0500-316SU	ZSHR-M15-M0500-104SU	ZSHR-M15-M0500-114SU
1,000	ZSHR-M15-M1000-303SU	ZSHR-M15-M1000-316SU	ZSHR-M15-M1000-104SU	ZSHR-M15-M1000-114SU
1,200	ZSHR-M15-M1200-303SU	ZSHR-M15-M1200-316SU	ZSHR-M15-M1200-104SU	ZSHR-M15-M1200-114SU
1,500	ZSHR-M15-M1500-303SU	ZSHR-M15-M1500-316SU	ZSHR-M15-M1500-104SU	ZSHR-M15-M1500-114SU
1,800	ZSHR-M15-M1800-303SU	ZSHR-M15-M1800-316SU	ZSHR-M15-M1800-104SU	ZSHR-M15-M1800-114SU

20mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHR-M20-M0300-303SU	ZSHR-M20-M0300-316SU	ZSHR-M20-M0300-104SU	ZSHR-M20-M0300-114SU
500	ZSHR-M20-M0500-303SU	ZSHR-M20-M0500-316SU	ZSHR-M20-M0500-104SU	ZSHR-M20-M0500-114SU
1,000	ZSHR-M20-M1000-303SU	ZSHR-M20-M1000-316SU	ZSHR-M20-M1000-104SU	ZSHR-M20-M1000-114SU
1,200	ZSHR-M20-M1200-303SU	ZSHR-M20-M1200-316SU	ZSHR-M20-M1200-104SU	ZSHR-M20-M1200-114SU
1,500	ZSHR-M20-M1500-303SU	ZSHR-M20-M1500-316SU	ZSHR-M20-M1500-104SU	ZSHR-M20-M1500-114SU
1,800	ZSHR-M20-M1800-303SU	ZSHR-M20-M1800-316SU	ZSHR-M20-M1800-104SU	ZSHR-M20-M1800-114SU

Ground Blank Rotary Shafts – **Metric****24mm Diameter (Tolerance: +0/-0.0635mm)**

O'all Lg (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHR-M24-M0300-303SU	ZSHR-M24-M0300-316SU	ZSHR-M24-M0300-104SU	ZSHR-M24-M0300-114SU
500	ZSHR-M24-M0500-303SU	ZSHR-M24-M0500-316SU	ZSHR-M24-M0500-104SU	ZSHR-M24-M0500-114SU
1,000	ZSHR-M24-M1000-303SU	ZSHR-M24-M1000-316SU	ZSHR-M24-M1000-104SU	ZSHR-M24-M1000-114SU
1,200	ZSHR-M24-M1200-303SU	ZSHR-M24-M1200-316SU	ZSHR-M24-M1200-104SU	ZSHR-M24-M1200-114SU
1,500	ZSHR-M24-M1500-303SU	ZSHR-M24-M1500-316SU	ZSHR-M24-M1500-104SU	ZSHR-M24-M1500-114SU
1,800	ZSHR-M24-M1800-303SU	ZSHR-M24-M1800-316SU	ZSHR-M24-M1800-104SU	ZSHR-M24-M1800-114SU

25mm Diameter (Tolerance: +0/-0.0635mm)

O'all Lg (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHR-M25-M0300-303SU	ZSHR-M25-M0300-316SU	ZSHR-M25-M0300-104SU	ZSHR-M25-M0300-114SU
500	ZSHR-M25-M0500-303SU	ZSHR-M25-M0500-316SU	ZSHR-M25-M0500-104SU	ZSHR-M25-M0500-114SU
800	ZSHR-M25-M0800-303SU	ZSHR-M25-M0800-316SU	ZSHR-M25-M0800-104SU	ZSHR-M25-M0800-114SU
1,000	ZSHR-M25-M1000-303SU	ZSHR-M25-M1000-316SU	ZSHR-M25-M1000-104SU	ZSHR-M25-M1000-114SU
1,200	ZSHR-M25-M1200-303SU	ZSHR-M25-M1200-316SU	ZSHR-M25-M1200-104SU	ZSHR-M25-M1200-114SU
1,500	ZSHR-M25-M1500-303SU	ZSHR-M25-M1500-316SU	ZSHR-M25-M1500-104SU	ZSHR-M25-M1500-114SU
1,800	ZSHR-M25-M1800-303SU	ZSHR-M25-M1800-316SU	ZSHR-M25-M1800-104SU	ZSHR-M25-M1800-114SU

40mm Diameter (Tolerance: +0/-0.076mm)

O'all Lg (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHR-M40-M0300-303SU	ZSHR-M40-M0300-316SU	ZSHR-M40-M0300-104SU	ZSHR-M40-M0300-114SU
500	ZSHR-M40-M0500-303SU	ZSHR-M40-M0500-316SU	ZSHR-M40-M0500-104SU	ZSHR-M40-M0500-114SU
1,000	ZSHR-M40-M1000-303SU	ZSHR-M40-M1000-316SU	ZSHR-M40-M1000-104SU	ZSHR-M40-M1000-114SU
1,200	ZSHR-M40-M1200-303SU	ZSHR-M40-M1200-316SU	ZSHR-M40-M1200-104SU	ZSHR-M40-M1200-114SU
1,500	ZSHR-M40-M1500-303SU	ZSHR-M40-M1500-316SU	ZSHR-M40-M1500-104SU	ZSHR-M40-M1500-114SU
1,800	ZSHR-M40-M1800-303SU	ZSHR-M40-M1800-316SU	ZSHR-M40-M1800-104SU	ZSHR-M40-M1800-114SU

50mm Diameter (Tolerance: +0/-0.076mm)

O'all Lg (mm)	18-8 SS Part Number	316 SS Part Number	C1045 Steel Part Number	1144 Steel Part Number
300	ZSHR-M50-M0300-303SU	ZSHR-M50-M0300-316SU	ZSHR-M50-M0300-104SU	ZSHR-M50-M0300-114SU
500	ZSHR-M50-M0500-303SU	ZSHR-M50-M0500-316SU	ZSHR-M50-M0500-104SU	ZSHR-M50-M0500-114SU
1,000	ZSHR-M50-M1000-303SU	ZSHR-M50-M1000-316SU	ZSHR-M50-M1000-104SU	ZSHR-M50-M1000-114SU
1,200	ZSHR-M50-M1200-303SU	ZSHR-M50-M1200-316SU	ZSHR-M50-M1200-104SU	ZSHR-M50-M1200-114SU
1,500	ZSHR-M50-M1500-303SU	ZSHR-M50-M1500-316SU	ZSHR-M50-M1500-104SU	ZSHR-M50-M1500-114SU
1,800	ZSHR-M50-M1800-303SU	ZSHR-M50-M1800-316SU	ZSHR-M50-M1800-104SU	ZSHR-M50-M1800-114SU

Flange-Mount Shaft Supports — Inch and Metric

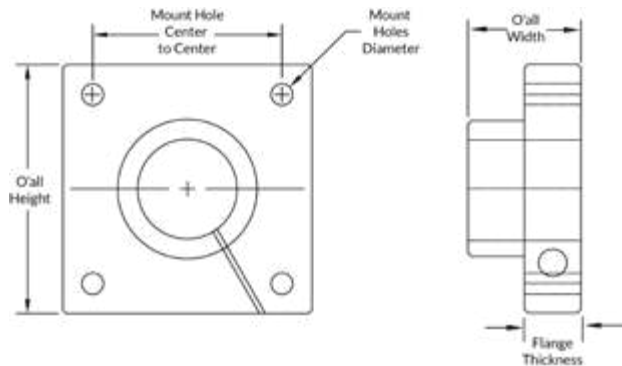
Aluminum



Product Information

For providing support to ends of linear shafts. For use with light load shafts where shaft alignment is not critical. Commonly used with closed-style linear bearings. Four bolt design.

- AMPG products are made in the USA, precision machined from DFARS compliant material, and lot traceable.
- Made from aluminum, these Flange-Mount Shaft Support are lightweight, resist corrosion in wet environments and nonmagnetic.
- Aluminum is 6061 -T6 and meets ASTM B211.



Flange Mount, Inch

For Shaft OD	O'all Length	O'all Width	O'all Height	Flange Thickness	Mount Holes Diameter	Mount Hole Center-to-Center	Clamping Screw Size	AMPG Part Number
1/4	1-1/2	3/4	1-1/2	3/8	.16	1	6-32	ZMOUNTK30
5/16	1-1/2	3/4	1-1/2	3/8	.16	1	6-32	ZMOUNTK31
3/8	1-1/2	3/4	1-1/2	3/8	.16	1	6-32	ZMOUNTK32
1/2	1-5/8	7/8	1-5/8	1/2	.18	1-1/4	8-32	ZMOUNTK21
5/8	2	7/8	2	1/2	.18	1-1/2	8-32	ZMOUNTK35
3/4	2-3/8	1	2-3/8	5/8	.21	1-3/4	10-32	ZMOUNTK22
7/8	2-1/2	1	2-1/2	5/8	.21	2	10-32	ZMOUNTK38
1	2-3/4	1-1/4	2-3/4	5/8	.27	2-1/8	1/4-20	ZMOUNTK23
1-1/8	3	1-1/4	3	3/4	.27	2-1/4	1/4-20	ZMOUNTK42
1-1/4	3-1/8	1-3/8	3-1/8	3/4	.27	2-3/8	1/4-20	ZMOUNTK24
1-1/2	3-1/2	1-5/8	3-1/2	3/4	.33	2-1/2	5/16-18	ZMOUNTK45
2	4	2	4	7/8	.33	2-7/8	5/16-18	ZMOUNTK53

Flange Mount, Metric

For Shaft OD	O'all Length	O'all Width	O'all Height	Flange Thickness	Mount Holes Diameter	Mount Hole Center-to-Center	Clamping Screw Size	AMPG Part Number
10 mm	40.00	22.00	40.00	12.00	5.00	25.00	M4	ZMOUNTM10
12 mm	40.00	22.00	40.00	12.00	5.00	25.00	M4	ZMOUNTM12
20 mm	64.00	26.00	64.00	16.00	7.00	42.00	M5	ZMOUNTM20
25 mm	70.00	32.00	70.00	16.00	8.00	50.00	M6	ZMOUNTM25
30 mm	80.00	35.00	80.00	18.00	8.00	60.00	M6	ZMOUNTM30



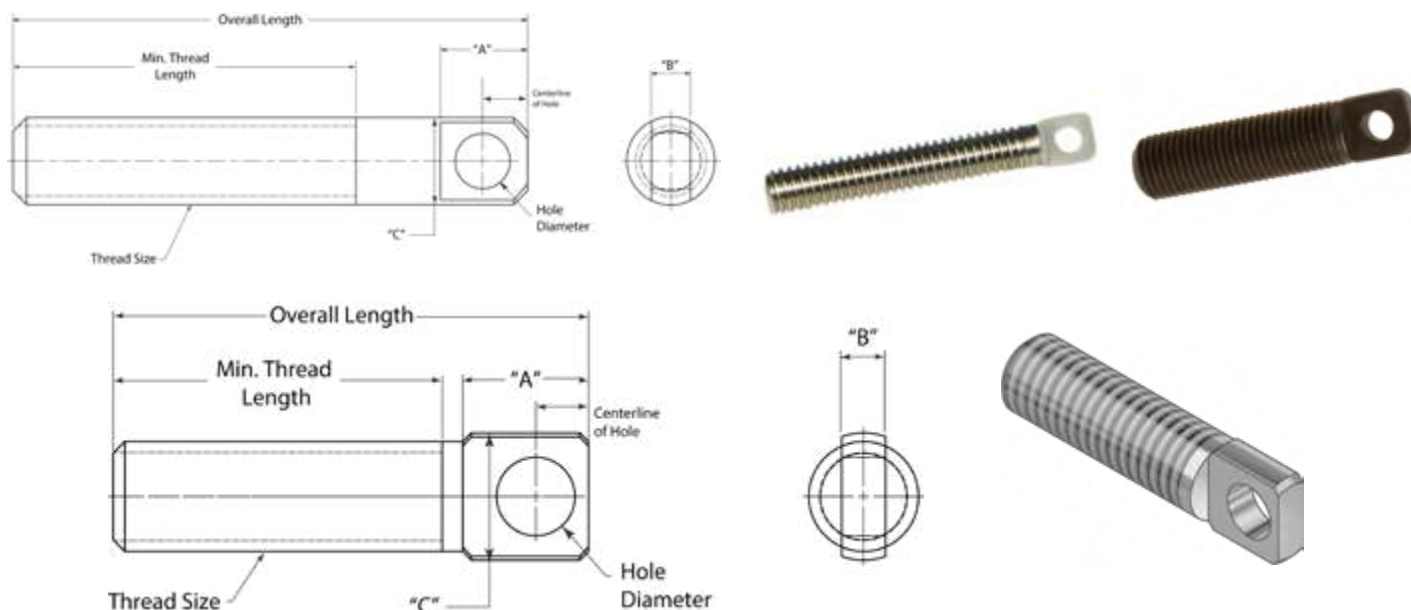
Extension Spring Stud Anchors — Inch

18-8 Stainless Steel
Steel | Black Oxide

Product Information

Attach an extension spring to a stud and then thread the stud into your part for a secure connection. Class 2A thread fit.

- AMPG products are made in the USA, precision machined from DFARS compliant material, and lot traceable.
- 18-8 stainless steel material meet ASTM A582.
- Low strength steel with a Rockwell hardness of B55.
- Made from stainless steel, these spring anchors have good chemical resistance and maybe mildly magnetic.



Extension Spring Stud Anchors, Inch

Thread Size	Overall Length	Min. Thread Lg.	Hole Dia	Centerline of Hole to Top of Head	"A"	"B"	"C"	AMPG 18-8 SS Part Number	AMPG Steel Part Number
6-32	.625	.400	.080	.070	.150	.062	.138	Z20001SS	Z20001
6-40	.625	.400	.080	.070	.150	.062	.138	Z20022SS	Z20022
6-48	.625	.400	.080	.070	.150	.062	.138	Z20002SS	Z20002
8-32	.875	.625	.100	.085	.160	.072	.164	Z20004SS	Z20004
8-36	.875	.625	.100	.085	.160	.072	.164	Z20023SS	Z20023
8-40	.875	.625	.100	.085	.160	.072	.164	Z20005SS	Z20005
10-24	1.125	.750	.120	.098	.190	.085	.190	Z20024SS	Z20024
10-32	1.125	.750	.120	.098	.190	.085	.190	Z20025SS	Z20025
1/4-20	1.250	.875	.150	.130	.250	.120	.250	Z20010SS	Z20010
1/4-20	1.250	.875	.268	.180	.350	.120	.120	Z20026SS*	Z20026*
1/4-28	1.250	.875	.150	.130	.250	.120	.250	Z20011SS	Z20011
3/8-16	1.625	1.125	.220	.180	.360	.150	.375	Z20014SS	Z20014
3/8-16	1.625	1.125	.268	.180	.430	.150	.375	Z20028SS*	Z20028*
3/8-24	1.625	1.125	.220	.180	.360	.150	.375	Z20015SS	Z20015

*Head Width is wider than Diameter

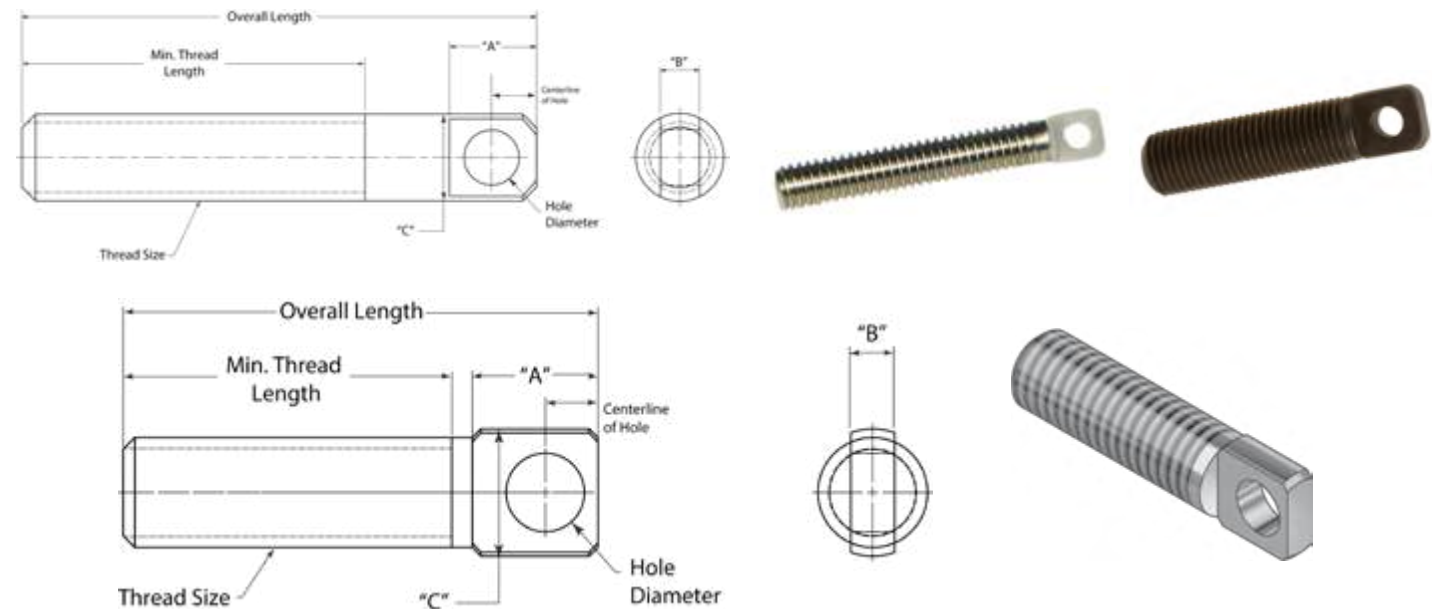
Extension Spring Stud Anchors — Metric
18-8 Stainless Steel
Steel | Black Oxide



Product Information

Attach an extension spring to a stud and then thread the stud into your part for a secure connection. Class 6g thread fit.

- AMPG products are made in the USA, precision machined from DFARS compliant material, and lot traceable.
- 18-8 stainless steel material meet ASTM A582.
- Low strength steel has a Rockwell hardness of B55.



Extension Spring Stud Anchors, Metric

Thread Size	Overall Length	Min. Thread Lg.	Hole Dia	Centerline of Hole to Top of Head	"A"	"B"	"C"	AMPG 18-8 SS Part Number	AMPG Steel Part Number
M3.5	16.00	10.00	2.00	1.80	3.80	1.60	3.50	Z2000M3.5SS	Z2000M3.5
M4	22.00	16.00	2.50	2.10	4.10	1.80	4.00	Z2000M4SS	Z2000M4
M5	28.00	19.00	3.00	2.60	4.80	2.20	5.00	Z2000M5SS	Z2000M5
M6	32.00	22.00	4.00	2.60	6.30	2.70	6.00	Z2000M6SS	Z2000M6
M8	38.00	25.00	5.00	4.20	7.90	3.60	8.00	Z2000M8SS	Z2000M8
M10	41.00	28.00	6.00	4.80	9.10	4.00	10.00	Z2000M10SS	Z2000M10

Z-Swivel Spring Anchors — Inch

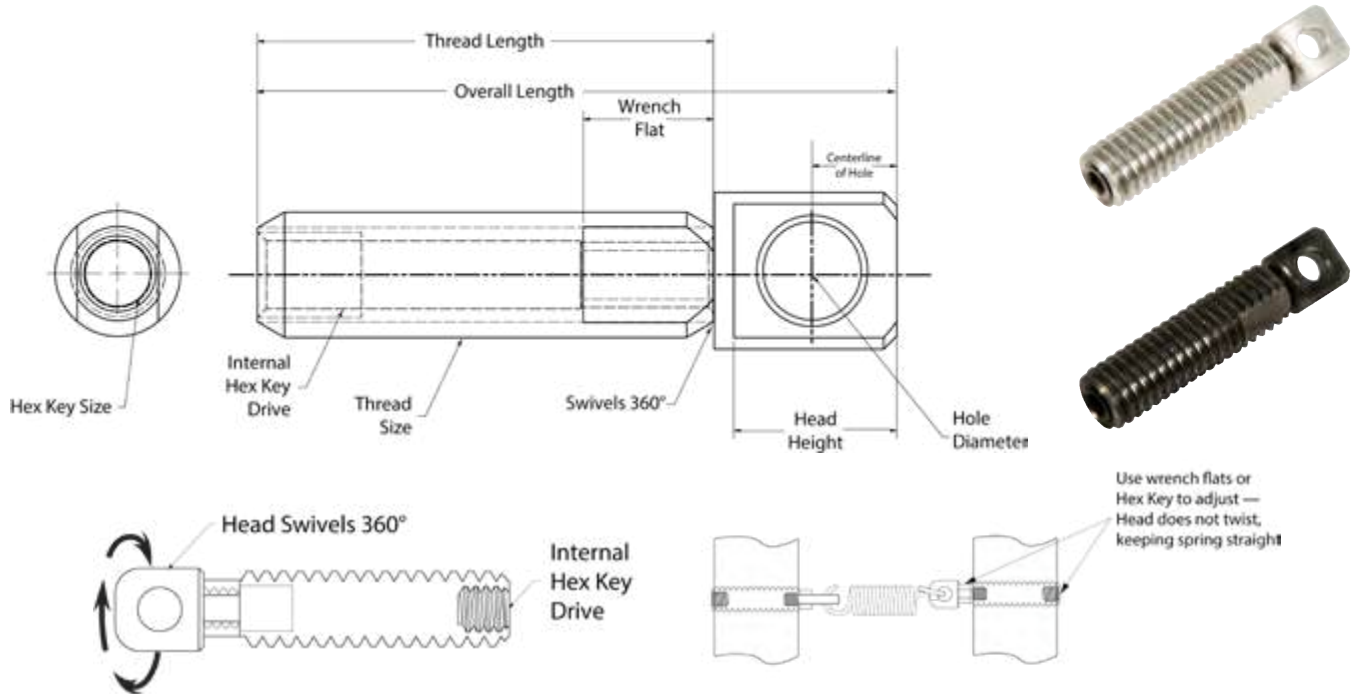
18-8 Stainless Steel
Steel | Black Oxide



Product Information

AMPG's Z Swivel Spring Anchors allow for the adjustment of tension on the spring, without twisting it. The attachment point to the spring is on a swivel, allowing the spring to be drawn tighter, without changing or twisting the spring position.

They are two ways to adjust the anchor, with a hex key from the bottom of the anchor, or by using the wrench flats on the top of the anchor. Class 2A thread fit. Overall length tolerance is $\pm .080$ inch. Hole size tolerance is $\pm .005$ inch.



Z-Swivel Spring Stud Anchors, Inch

Thread Size	Min. Thread Length	Nominal Overall Length	Min. Overall Length	Max. Overall Length	Head Height	Diameter	Hole Dia	Centerline of Hole to Top of Head	Hex Key Size	AMPG 18-8 SS Part Number	AMPG Steel Part Number
6-32	.400	0.625	0.545	0.705	.150	.138	.080	.070	.035	Z20050SS	Z20050
6-40	.400	0.625	0.545	0.705	.150	.138	.080	.070	.035	Z20051SS	Z20051
8-32	.625	.875	0.795	0.955	.160	.164	.100	.085	.035	Z20054SS	Z20054
8-36	.625	.875	0.795	0.955	.160	.164	.100	.085	.050	Z20055SS	Z20055
10-24	.750	1.128	1.048	1.208	.190	.190	.120	.098	.050	Z20068SS	Z20068
10-32	.750	1.128	1.048	1.208	.190	.190	.120	.098	.062	Z20069SS	Z20069
1/4-20	.875	1.250	1.170	1.330	.250	.250	.150	.130	.078	Z20058SS	Z20058
1/4-28	.875	1.250	1.170	1.330	.250	.250	.150	.130	.078	Z20059SS	Z20059
3/8-16	1.125	1.625	1.545	1.705	.360	.375	.220	.180	.125	Z20065SS	Z20065
3/8-24	1.125	1.625	1.545	1.705	.360	.375	.220	.180	.125	Z20066SS	Z20066

Z-Swivel Spring Anchor — Metric

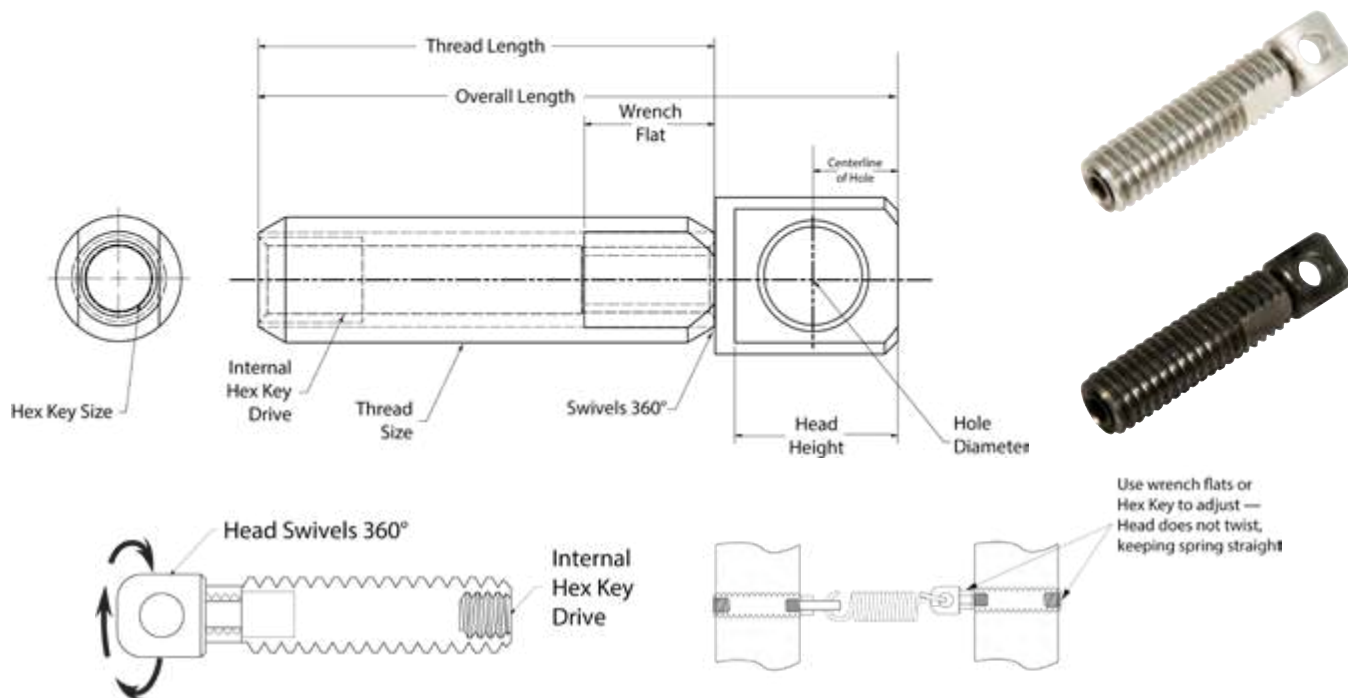
18-8 Stainless Steel
Steel | Black Oxide



Product Information

AMPG's Z Swivel Spring Anchors allow for the adjustment of tension on the spring, without twisting it. The attachment point to the spring is on a swivel, allowing the spring to be drawn tighter, without changing or twisting the spring position.

There are two ways to adjust the anchor, with a hex key from the bottom of the anchor, or by using the wrench flats on the top of the anchor. Class 6g thread fit. Overall length tolerance is $\pm 2\text{mm}$. Hole size tolerance is $\pm .12\text{mm}$.



Z-Swivel Spring Stud Anchors, Metric

Thread Size	Thread Pitch	Min. Thread Length	Nominal Overall Length	Min. Overall Length	Max. Overall Length	Head Height	Dia.	Hole Dia.	Centerline of Hole to Top of Head	Hex Key Size	AMPG 18-8 SS Part Number	AMPG Steel Part Number
M3.5	.06	10.00	16.00	14.00	18.00	3.80	3.50	2.00	1.80	0.9	Z2001M3.5SS	Z2001M3.5
M4	.07	16.00	22.00	20.00	24.00	4.10	4.00	2.50	2.10	1.3	Z2001M4SS	Z2001M4
M5	.08	19.00	28.00	26.00	30.00	4.80	5.00	3.00	2.60	1.5	Z2001M5SS	Z2001M5
M6	1.00	22.00	32.00	30.00	34.00	6.30	6.00	4.00	3.10	2	Z2001M6SS	Z2001M6
M8	1.25	25.00	38.00	36.00	40.00	7.90	8.00	5.00	4.20	2.5	Z2001M8SS	Z2001M8
M10	1.50	28.00	41.00	39.00	43.00	9.10	10.00	6.00	4.80	3	Z2001M10SS	Z2001M10

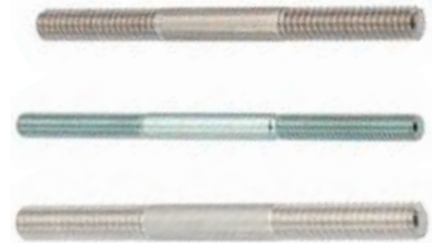
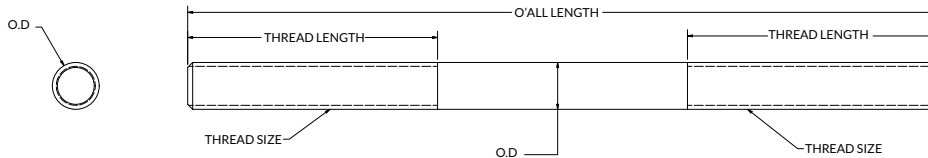
External Threaded Connecting Rods — Inch



18-8 Stainless Steel
12L14 Plain Carbon Steel
Aluminum

Product Information

Designed for use with right-hand threaded rod ends, these rods have right-hand threads on both ends. Use them for remote valve operators, throttle controllers, shifting mechanisms, and virtually any push/pull assembly.



3" O'all Length

Thread Size	Thread Spacing	O'all Length	Thread Length	OD	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
10-24	Coarse	3	1	3/16	LINK21903E-188	LINK21903E	LINK21903EA
10-32	Fine	3	1	3/16	LINK21803E-188	LINK21803EZ	LINK21803EA
1/4-20	Coarse	3	1	1/4	LINK25103E-188	LINK25103E	LINK25103EA
1/4-28	Fine	3	1	1/4	LINK25003E-188	LINK25003EZ	LINK25003EA
5/16-18	Coarse	3	1	5/16	LINK31303E-188	LINK31303E	LINK31303EA
5/16-24	Fine	3	1	5/16	LINK31203E-188	LINK31203EZ	LINK31203EA
3/8-16	Coarse	3	1	3/8	LINK37603E-188	LINK37603E	LINK37603EA
3/8-24	Fine	3	1	3/8	LINK37503E-188	LINK37503E	LINK37503EA
7/16-20	Fine	3	1	7/16	LINK43703E-188	LINK43703E	LINK43703EA
1/2-20	Fine	3	1	1/2	LINK50003E-188	LINK50003E	LINK50003EA

6" O'all Length

Thread Size	Thread Spacing	O'all Length	Thread Length	OD	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
10-24	Coarse	6	1-3/16	3/16	LINK21906E-188	LINK21906E	LINK21906EA
10-32	Fine	6	1-3/16	3/16	LINK21806E-188	LINK21806EZ	LINK21806EA
1/4-20	Coarse	6	1-1/2	1/4	LINK251016E-188	LINK25106E	LINK25106EA
1/4-28	Fine	6	1-1/2	1/4	LINK25006E-188	LINK25006EZ	LINK25006EA
5/16-18	Coarse	6	1-5/8	5/16	LINK31306E-188	LINK31306E	LINK31306EA
5/16-24	Fine	6	1-5/8	5/16	LINK31206E-188	LINK31206EZ	LINK31206EA
3/8-16	Coarse	6	2	3/8	LINK37606E-188	LINK37606E	LINK37606EA
3/8-24	Fine	6	2	3/8	LINK37506E-188	LINK37506E	LINK37506EA
7/16-20	Fine	6	2	7/16	LINK43706E-188	LINK43706E	LINK43706EA
1/2-13	Coarse	6	2	1/2	LINK50106E-188	LINK50106E	LINK50106EA
1/2-20	Fine	6	2	1/2	LINK50006E-188	LINK50006E	LINK50006EA

External Threaded Connecting Rod – Inch



9" O'all Length

Thread Size	Thread Spacing	O'all Length	Thread Length	OD	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
10-24	Coarse	9	1-3/16	3/16	LINK21909E-188	LINK21909E	LINK21909EA
10-32	Fine	9	1-3/16	3/16	LINK21809E-188	LINK21809EZ	LINK21809EA
1/4-20	Coarse	9	1-1/2	1/4	LINK25109E-188	LINK25109E	LINK25109EA
1/4-28	Fine	9	1-1/2	1/4	LINK25009E-188	LINK25009EZ	LINK25009EA
5/16-18	Coarse	9	1-5/8	5/16	LINK31309E-188	LINK31309E	LINK31309EA
5/16-24	Fine	9	1-5/8	5/16	LINK31209E-188	LINK31209EZ	LINK31209EA
3/8-16	Coarse	9	2	3/8	LINK37609E-188	LINK37609E	LINK37609EA
3/8-24	Fine	9	2	3/8	LINK37509E-188	LINK37509E	LINK37509EA
7/16-20	Fine	9	2	7/16	LINK43709E-188	LINK43709E	LINK43709EA
1/2-13	Coarse	9	2	1/2	LINK50109E-188	LINK50109E	LINK50109EA
1/2-20	Fine	9	2	1/2	LINK50009E-188	LINK50009E	LINK50009EA

12" O'all Length

Thread Size	Thread Spacing	O'all Length	Thread Length	OD	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
10-24	Coarse	12	1-3/16	3/16	LINK21912E-188	LINK21912E	LINK21912EA
10-32	Fine	12	1-3/16	3/16	LINK21812E-188	LINK21812EZ	LINK21812EA
1/4-20	Coarse	12	1-1/2	1/4	LINK25112E-188	LINK25112E	LINK25112EA
1/4-28	Fine	12	1-1/2	1/4	LINK25012E-188	LINK25012EZ	LINK25012EA
5/16-18	Coarse	12	1-5/8	5/16	LINK31312E-188	LINK31212E	LINK31312EA
5/16-24	Fine	12	1-5/8	5/16	LINK31212E-188	LINK31212EZ	LINK31212EA
3/8-16	Coarse	12	2	3/8	LINK37612E-188	LINK37612E	LINK37612EA
3/8-24	Fine	12	2	3/8	LINK37512E-188	LINK37512E	LINK37512EA
7/16-20	Fine	12	2	7/16	LINK43712E-188	LINK43712E	LINK43712EA
1/2-13	Coarse	12	2	1/2	LINK50112E-188	LINK50112E	LINK50112EA
1/2-20	Fine	12	2	1/2	LINK50012E-188	LINK50012E	LINK50012EA
5/8-11	Coarse	12	3-5/8	5/8	LINK62612E-188	LINK62612E	LINK62612EA
5/8-18	Fine	12	3-5/8	5/8	LINK62512E-188	LINK62512E	LINK62512EA

External Threaded Connecting Rod – Inch



18" O'all Length

Thread Size	Thread Spacing	O'all Length	Thread Length	OD	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
1/4-28	Fine	18	1-1/2	1/4	LINK25018E-188	LINK25018EZ	LINK25018EA
5/16-24	Fine	18	1-5/8	5/16	LINK31218E-188	LINK31218EZ	LINK31218EA
3/8-24	Fine	18	2	3/8	LINK37518E-188	LINK37518E	LINK37518EA
7/16-20	Fine	18	2	7/16	LINK43718E-188	LINK43718E	LINK43718EA
1/2-13	Coarse	18	2	1/2	LINK50118E-188	LINK50118E	LINK50118EA
1/2-20	Fine	18	2	1/2	LINK50018E-188	LINK50018E	LINK50018EA
5/8-11	Coarse	18	3-5/8	5/8	LINK62618E-188	LINK62618E	LINK62618EA
5/8-18	Fine	18	3-5/8	5/8	LINK62518E-188	LINK62518E	LINK62518EA
3/4-10	Coarse	18	3-5/8	3/4	LINK75118E-188	LINK75118E	LINK75118EA
3/4-16	Fine	18	3-5/8	3/4	LINK75018E-188	LINK75018E	LINK75018EA

24" O'all Length

Thread Size	Thread Spacing	O'all Length	Thread Length	OD	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
5/16-24	Fine	24	1-5/8	5/16	LINK31224E-188	LINK31224EZ	LINK31224EA
3/8-24	Fine	24	2	3/8	LINK37524E-188	LINK37524E	LINK37524EA
7/16-20	Fine	24	2	7/16	LINK43724E-188	LINK43724E	LINK43724EA
1/2-13	Coarse	24	2	1/2	LINK50124E-188	LINK50124E	LINK50124EA
1/2-20	Fine	24	2	1/2	LINK50024E-188	LINK50024E	LINK50024EA
5/8-11	Coarse	24	3-5/8	5/8	LINK62624E-188	LINK62624E	LINK62624EA
5/8-18	Fine	24	3-5/8	5/8	LINK62524E-188	LINK62524E	LINK62524EA
3/4-10	Coarse	24	3-5/8	3/4	LINK75124E-188	LINK75124E	LINK75124EA
3/4-16	Fine	24	3-5/8	3/4	LINK75024E-188	LINK75024E	LINK75024EA

30" O'all Length

Thread Size	Thread Spacing	O'all Length	Thread Length	OD	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
3/8-24	Fine	30	2	3/8	LINK37530E-188	LINK37530E	LINK37530EA
7/16-20	Fine	30	2	7/16	LINK43730E-188	LINK43730E	LINK43730EA
1/2-20	Fine	30	2	1/2	LINK50030E-188	LINK50030E	LINK50030EA
5/8-11	Coarse	30	3-5/8	5/8	—	—	LINK62630EA
5/8-18	Fine	30	3-5/8	5/8	LINK62530E-188	LINK62530E	LINK62530EA
3/4-16	Fine	30	3-5/8	3/4	LINK75030E-188	LINK75030E	LINK75030EA

36" O'all Length

Thread Size	Thread Spacing	O'all Length	Thread Length	OD	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
7/16-20	Fine	36	2	7/16	LINK43736E-188	LINK43736E	LINK43736EA
1/2-20	Fine	36	2	1/2	LINK50036E-188	LINK50036E	LINK50036EA
5/8-18	Fine	36	3-5/8	5/8	LINK62536E-188	LINK62536E	LINK62536EA
3/4-16	Fine	36	3-5/8	3/4	LINK75036E-188	LINK75036E	LINK75036EA

External Threaded Connecting Rod – Metric

18-8 Stainless Steel
12L14 Plain Carbon Steel
Aluminum



75mm O'all Length

Thread Size	O'all Length	Thread Length	OD	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
M3 x 0.5	75	25	3	Coarse	LINKM3X75E-188	LINKM3X75E	LINKM3X75E-ALUM
M4 x 0.7	75	25	4	Coarse	LINKM4X75E-188	LINKM4X75E	LINKM4X75E-ALUM
M5 x 0.8	75	25	5	Coarse	LINKM5X75E-188	LINKM5X75E	LINKM5X75E-ALUM
M6 x 1	75	25	6	Coarse	LINKM6X75E-188	LINKM6X75E	LINKM6X75E-ALUM
M8 x 1.25	75	25	8	Coarse	LINKM8X75E-188	LINKM8X75E	LINKM8X75E-ALUM
M10 x 1.5	75	25	10	Coarse	LINKM10X75E-188	LINKM10X75E	LINKM10X75E-ALUM
M12 x 1.75	75	25	12	Coarse	LINKM12X75E-188	LINKM12X75E	LINKM12X75E-ALUM

150mm O'all Length

Thread Size	O'all Length	Thread Length	OD	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
M4 x 0.7	150	25	4	Coarse	LINKM4X150E-188	LINKM4X150E	LINKM4X150E-ALUM
M5 x 0.8	150	30	5	Coarse	LINKM5X150E-188	LINKM5X150E	LINKM5X150E-ALUM
M6 x 1	150	35	6	Coarse	LINKM6X150E-188	LINKM6X150E	LINKM6X150E-ALUM
M8 x 1.25	150	40	8	Coarse	LINKM8X150E-188	LINKM8X150E	LINKM8X150E-ALUM
M10 x 1.5	150	50	10	Coarse	LINKM10X150E-188	LINKM10X150E	LINKM10X150E-ALUM
M12 x 1.75	150	50	12	Coarse	LINKM12X150E-188	LINKM12X150E	LINKM12X150E-ALUM

225mm O'all Length

Thread Size	O'all Length	Thread Length	OD	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
M5 x 0.8	225	30	5	Coarse	LINKM5X225E-188	LINKM5X225E	LINKM5X225E-ALUM
M6 x 1	225	35	6	Coarse	LINKM6X225E-188	LINKM6X225E	LINKM6X225E-ALUM
M8 x 1.25	225	40	8	Coarse	LINKM8X225E-188	LINKM8X225E	LINKM8X225E-ALUM
M10 x 1.5	225	50	10	Coarse	LINKM10X225E-188	LINKM10X225E	LINKM10X225E-ALUM
M12 x 1.75	225	50	12	Coarse	LINKM12X225E-188	LINKM12X225E	LINKM12X225E-ALUM

External Threaded Connecting Rod – **Metric**

305mm O'all Length

Thread Size	O'all Length	Thread Length	OD	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
M5 x 0.8	225	30	5	Coarse	LINKM5X225E-188	LINKM5X305E	LINKM5X305E-ALUM
M6 x 1	225	35	6	Coarse	LINKM6X225E-188	LINKM6X305E	LINKM6X305E-ALUM
M8 x 1.25	225	40	8	Coarse	LINKM8X225E-188	LINKM8X305E	LINKM8X305E-ALUM
M10 x 1.5	225	50	10	Coarse	LINKM10X225E-188	LINKM10X305E	LINKM10X305E-ALUM
M12 x 1.75	225	50	12	Coarse	LINKM12X225E-188	LINKM12X305E	LINKM12X305E-ALUM
M14 x 2	305	50	14	Coarse	—	LINKM14X305E	LINKM14X305E-ALUM
M16 x 2	305	75	16	Coarse	—	LINKM16X305E	LINKM16X305E-ALUM

455mm O'all Length

Thread Size	O'all Length	Thread Length	OD	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
M6 x 1	455	35	6	Coarse	LINKM6X455E-188	LINKM6X455E	LINKM6X455E-ALUM
M8 x 1.25	455	40	8	Coarse	LINKM8X455E-188	LINKM8X455E	LINKM8X455E-ALUM
M10 x 1.5	455	50	10	Coarse	LINKM10X455E-188	LINKM10X455E	LINKM10X455E-ALUM
M12 x 1.75	455	50	12	Coarse	LINKM12X455E-188	LINKM12X455E	LINKM12X455E-ALUM
M14 x 2	455	50	14	Coarse	LINKM14X455E-188	LINKM14X455E	LINKM14X455E-ALUM
M16 x 2	455	75	16	Coarse	LINKM16X455E-188	LINKM16X455E	LINKM16X455E-ALUM
M20 x 2.5	455	75	20	Coarse	LINKM20X455E-188	LINKM20X455E	LINKM20X455E-ALUM

610mm O'all Length

Thread Size	O'all Length	Thread Length	OD	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
M8 x 1.25	610	40	8	Coarse	LINKM8X610E-188	LINKM8X610E	LINKM8X610E-ALUM
M10 x 1.5	610	50	10	Coarse	LINKM10X610E-188	LINKM10X610E	LINKM10X610E-ALUM
M12 x 1.75	610	50	12	Coarse	LINKM12X610E-188	LINKM12X610E	LINKM12X610E-ALUM
M14 x 2	610	50	14	Coarse	LINKM14X610E-188	LINKM14X610E	LINKM14X610E-ALUM
M16 x 2	610	75	16	Coarse	LINKM16X610E-188	LINKM16X610E	LINKM16X610E-ALUM
M20 x 2.5	610	75	20	Coarse	LINKM20X610E-188	LINKM20X610E	LINKM20X610E-ALUM

Internal Thread Connecting Rods — Inch



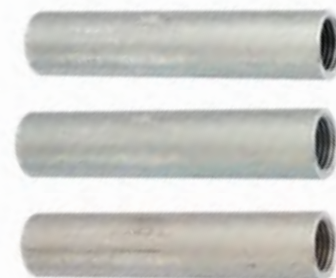
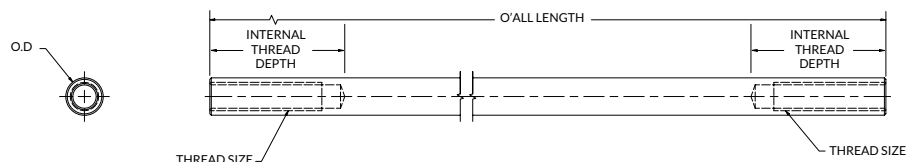
18-8 Stainless Steel

12L14 Plain Carbon Steel | Zinc Plated

Aluminum

Product Information

Designed for use with right-hand thread rod ends, these rods have right-hand threads on both ends. Use them for remote valve operators, throttle controllers, shifting mechanisms, and virtually any push/pull assembly.



3" O'all Length

Thread Size	Thread Spacing	O'all Length	Internal Thread Depth	OD	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
10-24	Coarse	3	3/4	1/4	LINK21903I-188	LINK21903I	LINK21903IA
10-32	Fine	3	3/4	1/4	LINK21803I-188	LINK21803IZ	LINK21803IA
1/4-20	Coarse	3	1	3/8	LINK25103I-188	LINK25103I	LINK25103IA
1/4-28	Fine	3	1	3/8	LINK25003I-188	LINK25003IZ	LINK25003IA
5/16-18	Coarse	3	1 1/4	7/16	LINK31303I-188	LINK31303I	LINK31303IA
5/16-24	Fine	3	1 1/4	7/16	LINK31203I-188	LINK31203IZ	LINK31203IA
3/8-16	Coarse	3	1 1/4	7/16	LINK37603I-188	LINK37603I	LINK37603IA
3/8-24	Fine	3	1 1/4	7/16	LINK37503I-188	LINK37503I	LINK37503IA
1/2-20	Fine	3	1 1/4	5/8	LINK50003I-188	LINK50003I	LINK50003IA

6" O'all Length

Thread Size	Thread Spacing	O'all Length	Internal Thread Depth	OD	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
10-24	Coarse	6	3/4	1/4	LINK21906I-188	LINK21906I	LINK21906IA
10-32	Fine	6	3/4	1/4	LINK21806I-188	LINK21806IZ	LINK21806IA
1/4-20	Coarse	6	1	3/8	LINK25106I-188	LINK25106I	LINK25106IA
1/4-28	Fine	6	1	3/8	LINK25006I-188	LINK25006IZ	LINK25006IA
5/16-18	Coarse	6	1 1/4	7/16	LINK31306I-188	LINK31306I	LINK31306IA
5/16-24	Fine	6	1 1/4	7/16	LINK31206I-188	LINK31206IZ	LINK31206IA
3/8-16	Coarse	6	1 1/4	7/16	LINK37606I-188	LINK37606I	LINK37606IA
3/8-24	Fine	6	1 1/4	7/16	LINK37506I-188	LINK37506I	LINK37506IA
7/16-20	Fine	6	1 3/8	9/16	LINK43706I-188	LINK43706I	LINK43706IA
1/2-20	Fine	6	1 1/2	5/8	LINK50006I-188	LINK50006I	LINK50006IA

Internal Thread Connecting Rod – Inch



9" O'all Length

Thread Size	Thread Spacing	O'all Length	Internal Thread Depth	OD	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
10-24	Coarse	9	3/4	1/4	LINK21909I-188	LINK21909I	LINK21909IA
10-32	Fine	9	3/4	1/4	LINK21809I-188	LINK21809IZ	LINK21809IA
1/4-20	Coarse	9	1	3/8	LINK25109I-188	LINK25109I	LINK25109IA
1/4-28	Fine	9	1	3/8	LINK25009I-188	LINK25009IZ	LINK25009IA
5/16-18	Coarse	9	1 1/4	7/16	LINK31309I-188	LINK31309I	LINK31309IA
5/16-24	Fine	9	1 1/4	7/16	LINK31209I-188	LINK31209IZ	LINK31209IA
3/8-16	Coarse	9	1 1/4	7/16	LINK37609I-188	LINK37609I	LINK37609IA
3/8-24	Fine	9	1 1/4	7/16	LINK37509I-188	LINK37509I	LINK37509IA
7/16-20	Fine	9	1 1/4	9/16	LINK43709I-188	LINK43709I	LINK43709IA
1/2-20	Fine	9	1 1/4	5/8	LINK50009I-188	LINK50009I	LINK50009IA

12" O'all Length

Thread Size	Thread Spacing	O'all Length	Internal Thread Depth	OD	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
10-24	Coarse	12	3/4	1/4	LINK21912I-188	LINK21912I	LINK21912IA
10-32	Fine	12	3/4	1/4	LINK21812I-188	LINK21812IZ	LINK21812IA
1/4-20	Coarse	12	1	3/8	LINK25112I-188	LINK25112I	LINK25112IA
1/4-28	Fine	12	1	3/8	LINK25012I-188	LINK25012IZ	LINK25012IA
5/16-18	Coarse	12	1 1/4	7/16	LINK31312I-188	LINK31312I	LINK31312IA
5/16-24	Fine	12	1 1/4	7/16	LINK31212I-188	LINK31212IZ	LINK31212IA
3/8-16	Coarse	12	1 1/4	7/16	LINK37612I-188	LINK37612I	LINK37612IA
3/8-24	Fine	12	1 1/4	7/16	LINK37512I-188	LINK37512I	LINK37512IA
7/16-20	Fine	12	1 3/8	9/16	LINK43712I-188	LINK43712I	LINK43712IA
1/2-20	Fine	12	1 1/2	5/8	LINK50012I-188	LINK50012I	LINK50012IA
5/8-18	Fine	12	1 5/8	3/4	LINK62512I-188	LINK62512I	LINK62512IA

18" O'all Length

Thread Size	Thread Spacing	O'all Length	Internal Thread Depth	OD	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
1/4-28	Fine	18	1	3/8	LINK25018I-188	LINK25018IZ	LINK25018IA
5/16-24	Fine	18	1 1/4	7/16	LINK31218I-188	LINK31218IZ	LINK31218IA
3/8-24	Fine	18	1 1/4	7/16	LINK37518I-188	LINK37518I	LINK37518IA
7/16-20	Fine	18	1 3/8	9/16	LINK43718I-188	LINK43718I	LINK43718IA
1/2-20	Fine	18	1 1/2	5/8	LINK50018I-188	LINK50018I	LINK50018IA
5/8-18	Fine	18	1 5/8	3/4	LINK62518I-188	LINK62518I	LINK62518IA
3/4-16	Fine	18	1 3/4	7/8	LINK75018I-188	LINK75018I	LINK75018IA

Internal Thread Connecting Rod – Inch



24" O'all Length

Thread Size	Thread Spacing	O'all Length	Internal Thread Depth	OD	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
5/16-24	Fine	24	1 1/4	7/16	LINK31224I-188	LINK31224IZ	LINK31224IA
3/8-24	Fine	24	1 1/4	7/16	LINK37524I-188	LINK37524I	LINK37524IA
7/16-20	Fine	24	1 3/8	9/16	LINK43724I-188	LINK43724I	LINK43724IA
1/2-20	Fine	24	1 1/2	5/8	LINK50024I-188	LINK50024I	LINK50024IA
5/8-18	Fine	24	1 5/8	3/4	LINK62524I-188	LINK62524I	LINK62524IA
3/4-16	Fine	24	1 3/4	7/8	LINK75024I-188	LINK75024I	LINK75024IA

30" O'all Length

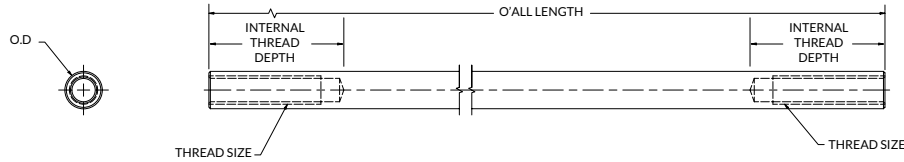
Thread Size	Thread Spacing	O'all Length	Internal Thread Depth	OD	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
3/8-24	Fine	30	1 1/4	7/16	LINK37530I-188	LINK37530I	LINK37530IA
7/16-20	Fine	30	1 3/8	9/16	LINK43730I-188	LINK43730I	LINK43730IA
1/2-20	Fine	30	1 1/2	5/8	LINK50030I-188	LINK50030I	LINK50030IA
5/8-18	Fine	30	1 5/8	3/4	LINK62530I-188	LINK62530I	LINK62530IA
3/4-16	Fine	30	1 3/4	7/8	LINK75030I-188	LINK75030I	LINK75030IA

36" O'all Length

Thread Size	Thread Spacing	O'all Length	Internal Thread Depth	OD	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
7/16-20	Fine	36	1 3/8	9/16	LINK43736I-188	LINK43736I	LINK43736IA
1/2-20	Fine	36	1 1/2	5/8	LINK50036I-188	LINK50036I	LINK50036IA
5/8-18	Fine	36	1 5/8	3/4	LINK62536I-188	LINK62536I	LINK62536IA
3/4-16	Fine	36	1 3/4	7/8	LINK75036I-188	LINK75036I	LINK75036IA

Internal Thread Connecting Rods — **Metric**

18-8 Stainless Steel
12L14 Plain Carbon Steel
Aluminum



75mm O'all Length

Thread Size	O'all Length	Internal Thread Depth	OD	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
M3 x 0.5	75	12	6.3	Coarse	LINKM3X75I-188	LINKM3X75I	LINKM3X75I-ALUM
M4 x 0.7	75	12	6.3	Coarse	LINKM4X75I-188	LINKM4X75I	LINKM4X75I-ALUM
M5 x 0.8	75	12	6.3	Coarse	LINKM5X75I-188	LINKM5X75I	LINKM5X75I-ALUM
M6 x 1	75	16	9.5	Coarse	LINKM6X75I-188	LINKM6X75I	LINKM6X75I-ALUM
M8 x 1.25	75	20	11	Coarse	LINKM8X75I-188	LINKM8X75I	LINKM8X75I-ALUM
M10 x 1.5	75	25	12.5	Coarse	LINKM10X75I-188	LINKM10X75I	LINKM10X75I-ALUM
M12 x 1.75	75	25	15.8	Coarse	LINKM12X75I-188	LINKM12X75I	LINKM12X75I-ALUM

150mm O'all Length

Thread Size	O'all Length	Internal Thread Depth	OD	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
M5 x 0.8	150	12	6.3	Coarse	LINKM5X150I-188	LINKM5X150I	LINKM5X150I-ALUM
M6 x 1	150	16	9.5	Coarse	LINKM6X150I-188	LINKM6X150I	LINKM6X150I-ALUM
M8 x 1.25	150	20	11	Coarse	LINKM8X150I-188	LINKM8X150I	LINKM8X150I-ALUM
M10 x 1.5	150	25	12.5	Coarse	LINKM10X150I-188	LINKM10X150I	LINKM10X150I-ALUM
M12 x 1.75	150	25	15.8	Coarse	LINKM12X150I-188	LINKM12X150I	LINKM12X150I-ALUM

225mm O'all Length

Thread Size	O'all Length	Internal Thread Depth	OD	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
M5 x 0.8	225	12	6.3	Coarse	LINKM5X225I-188	LINKM5X225I	LINKM5X225I-ALUM
M6 x 1	225	16	9.5	Coarse	LINKM6X225I-188	LINKM6X225I	LINKM6X225I-ALUM
M8 x 1.25	225	20	11	Coarse	LINKM8X225I-188	LINKM8X225I	LINKM8X225I-ALUM
M10 x 1.5	225	25	12.5	Coarse	LINKM10X225I-188	LINKM10X225I	LINKM10X225I-ALUM
M12 x 1.75	225	25	15.8	Coarse	LINKM12X225I-188	LINKM12X225I	LINKM12X225I-ALUM

Internal Thread Connecting Rod – Metric



305mm O'all Length

Thread Size	O'all Length	Internal Thread Depth	OD	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
M5 x 0.8	305	12	6.3	Coarse	LINKM5X305I-188	LINKM5X305I	LINKM5X305I-ALUM
M6 x 1	305	16	9.5	Coarse	LINKM6X305I-188	LINKM6X305I	LINKM6X305I-ALUM
M8 x 1.25	305	20	11	Coarse	LINKM8X305I-188	LINKM8X305I	LINKM8X305I-ALUM
M10 x 1.5	305	25	12.5	Coarse	LINKM10X305I-188	LINKM10X305I	LINKM10X305I-ALUM
M12 x 1.75	305	25	15.8	Coarse	LINKM12X305I-188	LINKM12X305I	LINKM12X305I-ALUM
M16 x 2	305	40	19	Coarse	LINKM16X305I-188	LINKM16X305I	LINKM16X305I-ALUM

455mm O'all Length

Thread Size	O'all Length	Internal Thread Depth	OD	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
M6 x 1	455	16	9.5	Coarse	LINKM6X455I-188	LINKM6X455I	LINKM6X455I-ALUM
M8 x 1.25	455	20	11	Coarse	LINKM8X455I-188	LINKM8X455I	LINKM8X455I-ALUM
M10 x 1.5	455	25	12.5	Coarse	LINKM10X455I-188	LINKM10X455I	LINKM10X455I-ALUM
M12 x 1.75	455	25	15.8	Coarse	LINKM12X455I-188	LINKM12X455I	LINKM12X455I-ALUM
M16 x 2	455	40	19	Coarse	LINKM16X455I-188	LINKM16X455I	LINKM16X455I-ALUM
M20 x 2.5	455	45	22.2	Coarse	LINKM20X455I-188	LINKM20X455I	LINKM20X455I-ALUM

610mm O'all Length

Thread Size	O'all Length	Internal Thread Depth	OD	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
M8 x 1.25	610	20	11	Coarse	LINKM8X610I-188	LINKM8X610I	LINKM8X610I-ALUM
M10 x 1.5	610	25	12.5	Coarse	LINKM10X610I-188	LINKM10X610I	LINKM10X610I-ALUM
M12 x 1.75	610	25	15.8	Coarse	LINKM12X610I-188	LINKM12X610I	LINKM12X610I-ALUM
M16 x 2	610	40	19	Coarse	LINKM16X610I-188	LINKM16X610I	LINKM16X610I-ALUM
M20 x 2.5	610	45	22.2	Coarse	LINKM20X610I-188	LINKM20X610I	LINKM20X610I-ALUM

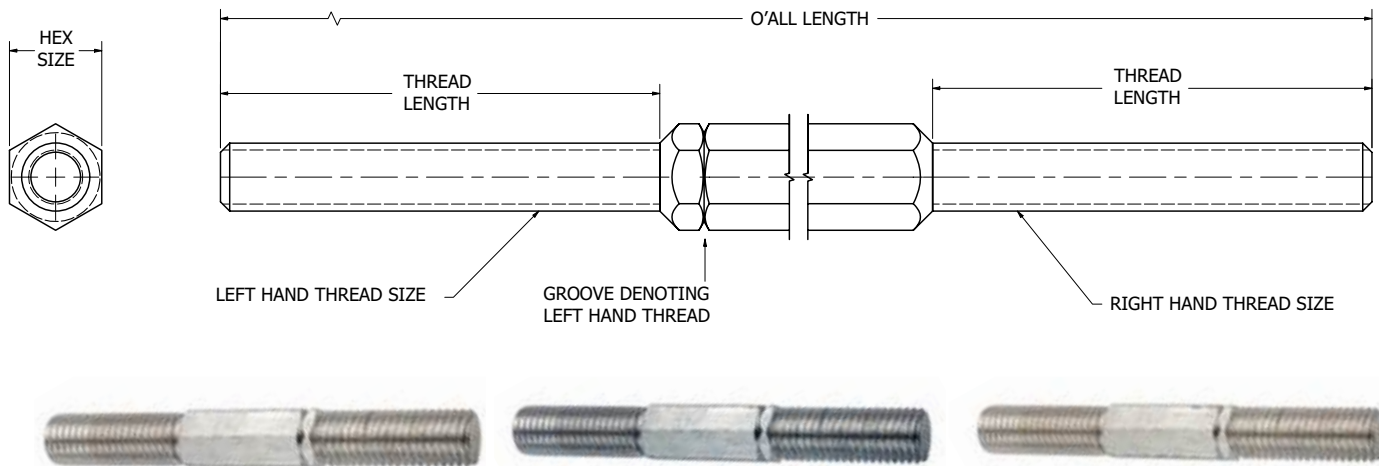
RH/LH External Thread Turnbuckle Rods — Inch



18-8 Stainless Steel
12L14 Plain Carbon Steel
Aluminum

Product Information

Similar to turnbuckles, these rods have right-hand threads on one end and left-hand threads on the other so you can make a linkage that adjusts for tension. Add right- and left-hand threaded rod ends to build your linkages. Rods have a hex-shaped body so you can adjust them with a wrench. Groove indicates Left-Hand thread side. Thread Class is 6H.



2" O'all Length

Thread Length	O'all Length	Thread Length	Hex Size	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
6-32	2	1/2	3/16	Coarse	LINKH001-188	LINKH001-STL	LINKH001
10-32	2	3/4	1/4	Fine	LINKH004-188	LINKH004-STL	LINKH004
1/4-28	2	3/4	1/4	Fine	LINKH006-188	LINKH006-STL	LINKH006
5/16-24	2	3/4	5/16	Fine	LINKH010-188	LINKH010-STL	LINKH010
3/8-24	2	3/4	3/8	Fine	LINKH014-188	LINKH014-STL	LINKH014
1/2-20	2	3/4	1/2	Fine	LINKH018-188	LINKH018-STL	LINKH018

3" O'all Length

Thread Length	O'all Length	Thread Length	Hex Size	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
6-32	3	1/2	3/16	Coarse	LINKH023-188	LINKH023-STL	LINKH023
10-32	3	3/4	1/4	Fine	LINKH026-188	LINKH026-STL	LINKH026
1/4-28	3	3/4	1/4	Fine	LINKH030-188	LINKH030-STL	LINKH030
5/16-24	3	3/4	5/16	Fine	LINKH034-188	LINKH034-STL	LINKH034
3/8-24	3	1	3/8	Fine	LINKH038-188	LINKH038-STL	LINKH038
1/2-20	3	1	1/2	Fine	LINKH042-188	LINKH042-STL	LINKH042

RH/LH External Thread Turnbuckle Rod – Inch



4" O'all Length

Thread Length	O'all Length	Thread Length	Hex Size	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
6-32	4	1	3/16	Coarse	LINKH047-188	LINKH047-STL	LINKH047
10-32	4	1	1/4	Fine	LINKH050-188	LINKH050-STL	LINKH050
1/4-20	4	1	1/4	Coarse	—	—	LINKH052
1/4-28	4	1	1/4	Fine	LINKH054-188	LINKH054-STL	LINKH054
5/16-18	4	1 1/4	5/16	Coarse	—	—	LINKH056
5/16-24	4	1 1/4	5/16	Fine	LINKH058-188	LINKH058-STL	LINKH058
5/16-24	4	1 1/4	3/8	Fine	—	—	LINKH060
3/8-24	4	1 1/4	3/8	Fine	LINKH062-188	LINKH062-STL	LINKH062
7/16-20	4	1 1/4	7/16	Fine	LINKH063-188	LINKH063-STL	LINKH063
1/2-13	4	1 1/2	1/2	Coarse	—	—	LINKH064
1/2-20	4	1 1/2	1/2	Fine	LINKH066-188	LINKH066-STL	LINKH066
3/4-10	4	1 3/4	3/4	Coarse	—	—	LINKH068
3/4-16	4	1 3/4	3/4	Fine	LINKH070-188	LINKH070-STL	LINKH070
5/8-18	4	1 3/4	5/8	Fine	LINKH074-188	LINKH074-STL	LINKH074

6" O'all Length

Thread Length	O'all Length	Thread Length	Hex Size	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
6-32	6	1	3/16	Coarse	LINKH092-188	LINKH092-STL	LINKH092
10-32	6	1 3/16	1/4	Fine	LINKH102-188	LINKH102-STL	LINKH102
1/4-20	6	1 1/2	1/4	Coarse	—	—	LINKH104
1/4-28	6	1 1/2	1/4	Fine	LINKH106-188	LINKH106-STL	LINKH106
5/16-18	6	1 5/8	5/16	Coarse	—	—	LINKH108
5/16-24	6	1 5/8	5/16	Fine	LINKH110-188	LINKH110-STL	LINKH110
3/8-24	6	2	3/8	Fine	LINKH114-188	LINKH114-STL	LINKH114
7/16-20	6	2	7/16	Fine	LINKH115-188	LINKH115-STL	LINKH115
1/2-13	6	2	1/2	Coarse	—	—	LINKH116
1/2-20	6	2	1/2	Fine	LINKH118-188	LINKH118-STL	LINKH118
3/4-10	6	2	3/4	Coarse	—	—	LINKH120
3/4-16	6	2	3/4	Fine	LINKH122-188	LINKH122-STL	LINKH122
5/8-18	6	2	5/8	Fine	LINKH126-188	LINKH126-STL	LINKH126

12" O'all Length

Thread Length	O'all Length	Thread Length	Hex Size	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
6-32	12	1	3/16	Coarse	LINKH140-188	LINKH140-STL	LINKH140
10-32	12	1 3/16	1/4	Fine	LINKH150-188	LINKH150-STL	LINKH150
1/4-20	12	1 3/16	1/4	Coarse	—	—	LINKH152
1/4-28	12	1 3/16	1/4	Fine	LINKH154-188	LINKH154-STL	LINKH154
5/16-18	12	1 5/8	5/16	Coarse	—	—	LINKH156
5/16-24	12	1 5/8	5/16	Fine	LINKH158-188	LINKH158-STL	LINKH158
3/8-16	12	2	3/8	Coarse	—	—	LINKH160
3/8-24	12	2	3/8	Fine	LINKH162-188	LINKH162-STL	LINKH162
7/16-20	12	2	7/16	Fine	LINKH163-188	LINKH163-STL	LINKH163

RH/LH External Thread Turnbuckle Rod — Inch



12" O'all Length

Thread Length	O'all Length	Thread Length	Hex Size	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
1/2-13	12	2	1/2	Coarse	—	—	LINKH164
1/2-20	12	2	1/2	Fine	LINKH166-188	LINKH166-STL	LINKH166
3/4-10	12	2	3/4	Coarse	—	—	LINKH168
3/4-16	12	2	3/4	Fine	LINKH170-188	LINKH170-STL	LINKH170
5/8-18	12	2	5/8	Fine	LINKH174-188	LINKH174-STL	LINKH174

18" O'all Length

Thread Length	O'all Length	Thread Length	Hex Size	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
10-32	18	1 3/16	1/4	Fine	LINKH200-188	LINKH200-STL	LINKH200
1/4-20	18	1 1/2	1/4	Coarse	—	—	LINKH202
1/4-28	18	1 1/2	1/4	Fine	LINKH204-188	LINKH204-STL	LINKH204
5/16-18	18	1 5/8	5/16	Coarse	—	—	LINKH206
5/16-24	18	1 5/8	5/16	Fine	LINKH208-188	LINKH208-STL	LINKH208
3/8-16	18	2	3/8	Coarse	—	—	LINKH210
3/8-24	18	2	3/8	Fine	LINKH212-188	LINKH212-STL	LINKH212
7/16-20	18	2	7/16	Fine	LINKH213-188	LINKH213-STL	LINKH213
1/2-13	18	2	1/2	Coarse	—	—	LINKH214
1/2-20	18	2	1/2	Fine	LINKH216-188	LINKH216-STL	LINKH216
3/4-10	18	2	3/4	Coarse	—	—	LINKH218
3/4-16	18	2	3/4	Fine	LINKH220-188	LINKH220-STL	LINKH220
5/8-18	18	2	5/8	Fine	LINKH224-188	LINKH224-STL	LINKH224

24" O'all Length

Thread Length	O'all Length	Thread Length	Hex Size	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
10-32	24	1 3/16	1/4	Fine	LINKH250-188	LINKH250-STL	LINKH250
1/4-20	24	1 1/2	1/4	Coarse	—	—	LINKH252
1/4-28	24	1 1/2	1/4	Fine	LINKH254-188	LINKH254-STL	LINKH254
5/16-18	24	1 5/8	5/16	Coarse	—	—	LINKH256
5/16-24	24	1 5/8	5/16	Fine	LINKH258-188	LINKH258-STL	LINKH258
3/8-16	24	2	3/8	Coarse	—	—	LINKH260
3/8-24	24	2	3/8	Fine	LINKH262-188	LINKH262-STL	LINKH262
7/16-20	24	2	7/16	Fine	LINKH263-188	LINKH263-STL	LINKH263
1/2-13	24	2	1/2	Coarse	—	—	LINKH264
1/2-20	24	2	1/2	Fine	LINKH266-188	LINKH266-STL	LINKH266
3/4-10	24	2	3/4	—	—	—	LINKH268
3/4-16	24	2	3/4	Fine	LINKH270-188	LINKH270-STL	LINKH270
5/8-18	24	2	5/8	Fine	LINKH274-188	LINKH274-STL	LINKH274

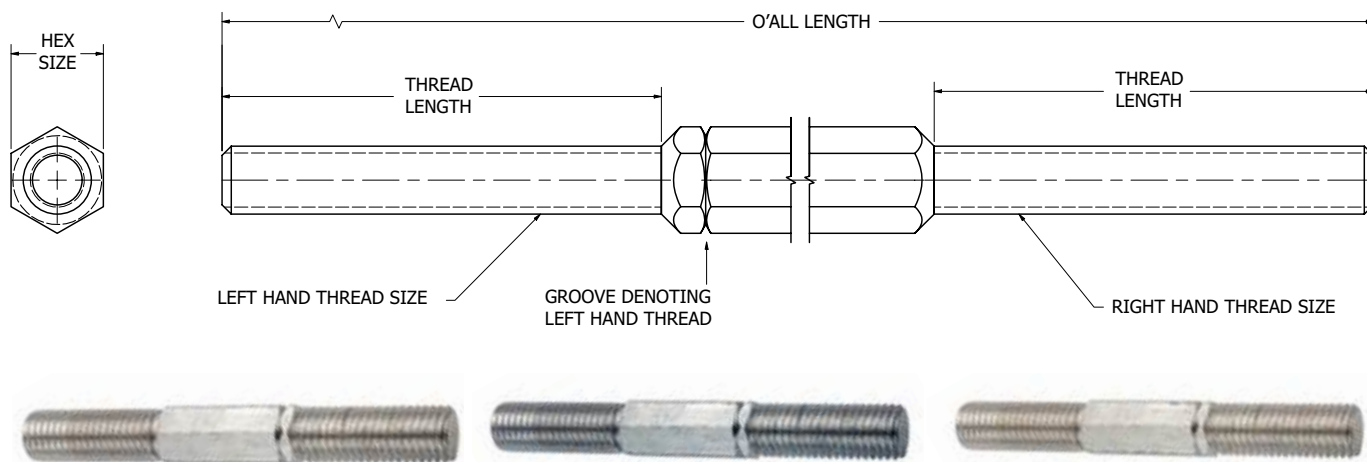
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Product Information

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50mm O'all Length

Thread Length	O'all Length	Thread Length	Hex Size	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
M5 x 0.8	50	12	5	Coarse	LINKHM5X50E-188	LINKHM5X50E	LINKHM5X50E-ALUM
M6 x 1	50	16	6	Coarse	LINKHM6X50E-188	LINKHM6X50E	LINKHM6X50E-ALUM
M8 x 1.25	50	20	8	Coarse	LINKHM8X50E-188	LINKHM8X50E	LINKHM8X50E-ALUM
M10 x 1.5	50	20	10	Coarse	LINKHM10X50E-188	LINKHM10X50E	LINKHM10X50E-ALUM
M12 x 1.75	50	20	12	Coarse	LINKHM12X50E-188	LINKHM12X50E	LINKHM12X50E-ALUM
M14 x 2	50	20	14	Coarse	LINKHM14X50E-188	LINKHM14X50E	LINKHM14X50E-ALUM
M16 x 2	50	20	16	Coarse	LINKHM16X50E-188	LINKHM16X50E	LINKHM16X50E-ALUM
M20 x 2.5	50	20	20	Coarse	LINKHM20X50E-188	LINKHM20X50E	LINKHM20X50E-ALUM

76mm O'all Length

Thread Length	O'all Length	Thread Length	Hex Size	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
M5 x 0.8	76	12	5	Coarse	LINKHM5X76E-188	LINKHM5X76E	LINKHM5X76E-ALUM
M6 x 1	76	16	6	Coarse	LINKHM6X76E-188	LINKHM6X76E	LINKHM6X76E-ALUM
M8 x 1.25	76	20	8	Coarse	LINKHM8X76E-188	LINKHM8X76E	LINKHM8X76E-ALUM
M10 x 1.5	76	25	10	Coarse	LINKHM10X76E-188	LINKHM10X76E	LINKHM10X76E-ALUM
M12 x 1.75	76	25	12	Coarse	LINKHM12X76E-188	LINKHM12X76E	LINKHM12X76E-ALUM
M14 x 2	76	25	14	Coarse	LINKHM14X76E-188	LINKHM14X76E	LINKHM14X76E-ALUM
M16 x 2	76	25	16	Coarse	LINKHM16X76E-188	LINKHM16X76E	LINKHM16X76E-ALUM
M20 x 2.5	76	25	20	Coarse	LINKHM20X76E-188	LINKHM20X76E	LINKHM20X76E-ALUM

RH/LH External Thread Turnbuckle Rod – Metric



100mm O'all Length

Thread Length	O'all Length	Thread Length	Hex Size	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
M5 x 0.8	100	25	5	Coarse	LINKHM5X100E-188	LINKHM5X100E	LINKHM5X100E-ALUM
M6 x 1	100	25	6	Coarse	LINKHM6X100E-188	LINKHM6X100E	LINKHM6X100E-ALUM
M8 x 1.25	100	30	8	Coarse	LINKHM8X100E-188	LINKHM8X100E	LINKHM8X100E-ALUM
M10 x 1.5	100	30	10	Coarse	LINKHM10X100E-188	LINKHM10X100E	LINKHM10X100E-ALUM
M12 x 1.75	100	40	12	Coarse	LINKHM12X100E-188	LINKHM12X100E	LINKHM12X100E-ALUM
M14 x 2	100	40	14	Coarse	LINKHM14X100E-188	LINKHM14X100E	LINKHM14X100E-ALUM
M16 x 2	100	40	16	Coarse	LINKHM16X100E-188	LINKHM16X100E	LINKHM16X100E-ALUM
M20 x 2.5	100	40	20	Coarse	LINKHM20X100E-188	LINKHM20X100E	LINKHM20X100E-ALUM

150mm O'all Length

Thread Length	O'all Length	Thread Length	Hex Size	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
M5 x 0.8	150	30	5	Coarse	LINKHM5X150E-188	LINKHM5X150E	LINKHM5X150E-ALUM
M6 x 1	150	40	6	Coarse	LINKHM6X150E-188	LINKHM6X150E	LINKHM6X150E-ALUM
M8 x 1.25	150	40	8	Coarse	LINKHM8X150E-188	LINKHM8X150E	LINKHM8X150E-ALUM
M10 x 1.5	150	50	10	Coarse	LINKHM10X150E-188	LINKHM10X150E	LINKHM10X150E-ALUM
M12 x 1.75	150	50	12	Coarse	LINKHM12X150E-188	LINKHM12X150E	LINKHM12X150E-ALUM
M14 x 2	150	50	14	Coarse	LINKHM14X150E-188	LINKHM14X150E	LINKHM14X150E-ALUM
M16 x 2	150	50	16	Coarse	LINKHM16X150E-188	LINKHM16X150E	LINKHM16X150E-ALUM
M20 x 2.5	150	50	20	Coarse	LINKHM20X150E-188	LINKHM20X150E	LINKHM20X150E-ALUM

305mm O'all Length

Thread Length	O'all Length	Thread Length	Hex Size	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
M5 x 0.8	305	30	5	Coarse	LINKHM5X305E-188	LINKHM5X305E	LINKHM5X305E-ALUM
M6 x 1	305	30	6	Coarse	LINKHM6X305E-188	LINKHM6X305E	LINKHM6X305E-ALUM
M8 x 1.25	305	40	8	Coarse	LINKHM8X305E-188	LINKHM8X305E	LINKHM8X305E-ALUM
M10 x 1.5	305	50	10	Coarse	LINKHM10X305E-188	LINKHM10X305E	LINKHM10X305E-ALUM
M12 x 1.75	305	50	12	Coarse	LINKHM12X305E-188	LINKHM12X305E	LINKHM12X305E-ALUM
M14 x 2	305	50	14	Coarse	LINKHM14X305E-188	LINKHM14X305E	LINKHM14X305E-ALUM
M16 x 2	305	50	16	Coarse	LINKHM16X305E-188	LINKHM16X305E	LINKHM16X305E-ALUM
M20 x 2.5	305	50	20	Coarse	LINKHM20X305E-188	LINKHM20X305E	LINKHM20X305E-ALUM

RH/LH External Thread Turnbuckle Rod – Metric



455mm O'all Length

Thread Length	O'all Length	Thread Length	Hex Size	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
M5 x 0.8	455	30	5	Coarse	LINKHM5X455E-188	LINKHM5X455E	LINKHM5X455E-ALUM
M6 x 1	455	40	6	Coarse	LINKHM6X455E-188	LINKHM6X455E	LINKHM6X455E-ALUM
M8 x 1.25	455	40	8	Coarse	LINKHM8X455E-188	LINKHM8X455E	LINKHM8X455E-ALUM
M10 x 1.5	455	50	10	Coarse	LINKHM10X455E-188	LINKHM10X455E	LINKHM10X455E-ALUM
M12 x 1.75	455	50	12	Coarse	LINKHM12X455E-188	LINKHM12X455E	LINKHM12X455E-ALUM
M14 x 2	455	50	14	Coarse	LINKHM14X455E-188	LINKHM14X455E	LINKHM14X455E-ALUM
M16 x 2	455	50	16	Coarse	LINKHM16X455E-188	LINKHM16X455E	LINKHM16X455E-ALUM
M20 x 2.5	455	50	20	Coarse	LINKHM20X455E-188	LINKHM20X455E	LINKHM20X455E-ALUM

610mm O'all Length

Thread Length	O'all Length	Thread Length	Hex Size	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
M5 x 0.8	610	30	5	Coarse	LINKHM5X610E-188	LINKHM5X610E	LINKHM5X610E-ALUM
M6 x 1	610	40	6	Coarse	LINKHM6X610E-188	LINKHM6X610E	LINKHM6X610E-ALUM
M8 x 1.25	610	40	8	Coarse	LINKHM8X610E-188	LINKHM8X610E	LINKHM8X610E-ALUM
M10 x 1.5	610	50	10	Coarse	LINKHM10X610E-188	LINKHM10X610E	LINKHM10X610E-ALUM
M12 x 1.75	610	50	12	Coarse	LINKHM12X610E-188	LINKHM12X610E	LINKHM12X610E-ALUM
M14 x 2	610	50	14	Coarse	LINKHM14X610E-188	LINKHM14X610E	LINKHM14X610E-ALUM
M16 x 2	610	50	16	Coarse	LINKHM16X610E-188	LINKHM16X610E	LINKHM16X610E-ALUM
M20 x 2.5	610	50	20	Coarse	LINKHM20X610E-188	LINKHM20X610E	LINKHM20X610E-ALUM

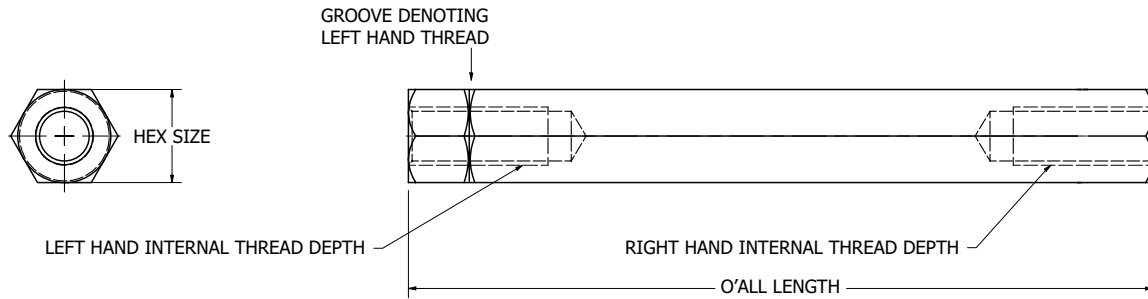
RH/LH Internal Thread Turnbuckle Rods — Inch



18-8 Stainless Steel
12L14 Plain Carbon Steel
Aluminum

Product Information

Similar to turnbuckles, these rods have right-hand threads on one end and left-hand threads on the other so you can make a linkage that adjusts for tension. Add right- and left-hand threaded rod ends to build your linkages. Rods have a hex-shaped body so you can adjust them with a wrench. Groove indicates Left-Hand thread side.



2" O'all Length

Thread Size	O'all Length	Internal Thread Depth	Hex Size	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
6-32	2	1/2	5/16	Coarse	LINKT020-188	LINKT020-STL	LINKT020
10-32	2	1/2	5/16	Fine	LINKT040-188	LINKT040-STL	LINKT040
1/4-28	2	3/4	3/8	Fine	LINKT050-188	LINKT050-STL	LINKT050
5/16-24	2	3/4	1/2	Fine	LINKT100-188	LINKT100-STL	LINKT100
3/8-24	2	3/4	1/2	Fine	LINKT120-188	LINKT120-STL	LINKT120
7/16-20	2	3/4	5/8	Fine	LINKT140-188	LINKT140-STL	LINKT140
1/2-20	2	3/4	5/8	Fine	LINKT150-188	LINKT150-STL	LINKT150
5/8-18	2	3/4	3/4	Fine	LINKT180-188	LINKT180-STL	LINKT180
3/4-16	2	3/4	1	Fine	LINKT200-188	LINKT200-STL	LINKT200

3" O'all Length

Thread Size	O'all Length	Internal Thread Depth	Hex Size	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
6-32	3	1/2	5/16	Coarse	LINKT024-188	LINKT024-STL	LINKT024
10-32	3	1/2	5/16	Fine	LINKT044-188	LINKT044-STL	LINKT044
1/4-28	3	3/4	3/8	Fine	LINKT054-188	LINKT054-STL	LINKT054
5/16-24	3	3/4	1/2	Fine	LINKT104-188	LINKT104-STL	LINKT104
3/8-24	3	1	1/2	Fine	LINKT124-188	LINKT124-STL	LINKT124
7/16-20	3	1	5/8	Fine	LINKT144-188	LINKT144-STL	LINKT144
1/2-20	3	1	5/8	Fine	LINKT154-188	LINKT154-STL	LINKT154
5/8-18	3	1	3/4	Fine	LINKT184-188	LINKT184-STL	LINKT184
3/4-16	3	1	1	Fine	LINKT204-188	LINKT204-STL	LINKT204

RH/LH Internal Thread Turnbuckle Rod – Inch



4" O'all Length

Thread Size	O'all Length	Internal Thread Depth	Hex Size	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
6-32	4	1/2	5/16	Coarse	LINKT028-188	LINKT028-STL	LINKT028
10-32	4	1/2	5/16	Fine	LINKT046-188	LINKT046-STL	LINKT046
1/4-28	4	3/4	3/8	Fine	LINKT058-188	LINKT058-STL	LINKT058
5/16-24	4	3/4	1/2	Fine	LINKT108-188	LINKT108-STL	LINKT108
3/8-24	4	1	1/2	Fine	LINKT128-188	LINKT128-STL	LINKT128
7/16-20	4	1	5/8	Fine	LINKT146-188	LINKT146-STL	LINKT146
1/2-20	4	1	5/8	Fine	LINKT158-188	LINKT158-STL	LINKT158
5/8-18	4	1	7/8	Fine	LINKT186-188	LINKT186-STL	LINKT186
3/4-16	4	1	1	Fine	LINKT208-188	LINKT208-STL	LINKT208

6" O'all Length

Thread Size	O'all Length	Internal Thread Depth	Hex Size	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
6-32	6	1/2	5/16	Coarse	LINKT034-188	LINKT034-STL	LINKT034
10-32	6	1/2	5/16	Fine	LINKT047-188	LINKT047-STL	LINKT047
1/4-28	6	3/4	3/8	Fine	LINKT064-188	LINKT064-STL	LINKT064
5/16-24	6	3/4	1/2	Fine	LINKT114-188	LINKT114-STL	LINKT114
3/8-24	6	1	1/2	Fine	LINKT134-188	LINKT134-STL	LINKT134
7/16-20	6	1	5/8	Fine	LINKT147-188	LINKT147-STL	LINKT147
1/2-20	6	1	5/8	Fine	LINKT164-188	LINKT164-STL	LINKT164
5/8-18	6	1	7/8	Fine	LINKT187-188	LINKT187-STL	LINKT187
3/4-16	6	1	1	Fine	LINKT214-188	LINKT214-STL	LINKT214

RH/LH Internal Thread Turnbuckle Rod — Inch



12" O'all Length

Thread Size	O'all Length	Internal Thread Depth	Hex Size	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
6-32	12	1/2	5/16	Coarse	LINKT036-188	LINKT036-STL	LINKT036
10-32	12	1/2	5/16	Fine	LINKT048-188	LINKT048-STL	LINKT048
1/4-28	12	3/4	3/8	Fine	LINKT070-188	LINKT070-STL	LINKT064
5/16-24	12	3/4	1/2	Fine	LINKT116-188	LINKT116-STL	LINKT114
3/8-24	12	1	1/2	Fine	LINKT136-188	LINKT136-STL	LINKT134
7/16-20	12	1	5/8	Fine	LINKT148-188	LINKT148-STL	LINKT148
1/2-20	12	1	5/8	Fine	LINKT166-188	LINKT166-STL	LINKT164
5/8-18	12	1	7/8	Fine	LINKT188-188	LINKT188-STL	LINKT188
3/4-16	12	1	1	Fine	LINKT218-188	LINKT218-STL	LINKT218

18" O'all Length

Thread Size	O'all Length	Internal Thread Depth	Hex Size	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
1/4-28	18	3/4	3/8	Fine	LINKT038-188	LINKT038-STL	LINKT038
5/16-24	18	3/4	1/2	Fine	LINKT049-188	LINKT049-STL	LINKT049
3/8-24	18	1	1/2	Fine	LINKT138-188	LINKT138-STL	LINKT138
7/16-20	18	1	5/8	Fine	LINKT149-188	LINKT149-STL	LINKT149
1/2-20	18	1	5/8	Fine	LINKT169-188	LINKT169-STL	LINKT169
5/8-18	18	1	7/8	Fine	LINKT189-188	LINKT189-STL	LINKT189
3/4-16	18	1	1	Fine	LINKT220-188	LINKT220-STL	LINKT220

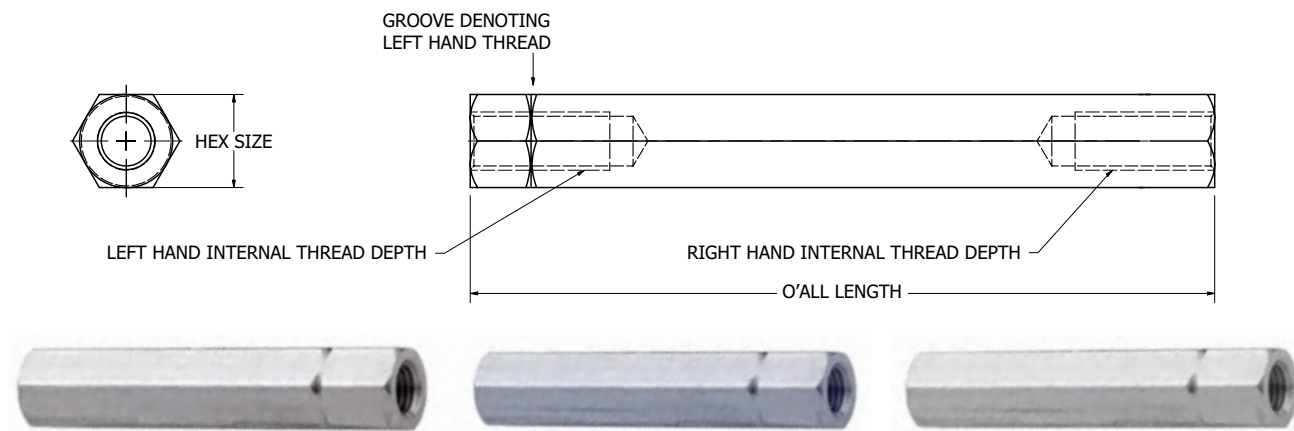


RH/LH Internal Thread Turnbuckle Rods – Metric

18-8 Stainless Steel
12L14 Plain Carbon Steel
Aluminum

Product Information

Similar to turnbuckles, these rods have right-hand threads on one end and left-hand threads on the other so you can make a linkage that adjusts for tension. Add right- and left-hand threaded rod ends to build your linkages. Rods have a hex-shaped body so you can adjust them with a wrench. Groove indicates Left-Hand thread side. Rods have a 6H Thread Class.



50mm O'all Length

Thread Size	O'all Length	Internal Thread Depth	Hex Size	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
M5 x 0.8	50	12	10	Coarse	LINKTM5X50I-188	LINKTM5X50I	LINKTM5X50I-ALUM
M6 x 1	50	16	10	Coarse	LINKTM6X50I-188	LINKTM6X50I	LINKTM6X50I-ALUM
M8 x 1.25	50	16	12	Coarse	LINKTM8X50I-188	LINKTM8X50I	LINKTM8X50I-ALUM
M10 x 1.5	50	16	17	Coarse	LINKTM10X50I-188	LINKTM10X50I	LINKTM10X50I-ALUM
M12 x 1.75	50	16	19	Coarse	LINKTM12X50I-188	LINKTM12X50I	LINKTM12X50I-ALUM
M14 x 2	50	16	22	Coarse	LINKTM14X50I-188	LINKTM14X50I	LINKTM14X50I-ALUM
M16 x 2	50	16	24	Coarse	LINKTM16X50I-188	LINKTM16X50I	LINKTM16X50I-ALUM
M20 x 2.5	50	16	30	Coarse	LINKTM20X50I-188	LINKTM20X50I	LINKTM20X50I-ALUM

76mm O'all Length

Thread Size	O'all Length	Internal Thread Depth	Hex Size	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
M5 x 0.8	76	12	10	Coarse	LINKTM5X76I-188	LINKTM5X76I	LINKTM5X76I-ALUM
M6 x 1	76	16	10	Coarse	LINKTM6X76I-188	LINKTM6X76I	LINKTM6X76I-ALUM
M8 x 1.25	76	20	12	Coarse	LINKTM8X76I-188	LINKTM8X76I	LINKTM8X76I-ALUM
M10 x 1.5	76	20	17	Coarse	LINKTM10X76I-188	LINKTM10X76I	LINKTM10X76I-ALUM
M12 x 1.75	76	20	19	Coarse	LINKTM12X76I-188	LINKTM12X76I	LINKTM12X76I-ALUM
M14 x 2	76	20	22	Coarse	LINKTM14X76I-188	LINKTM14X76I	LINKTM14X76I-ALUM
M16 x 2	76	20	24	Coarse	LINKTM16X76I-188	LINKTM16X76I	LINKTM16X76I-ALUM
M20 x 2.5	76	20	30	Coarse	LINKTM20X76I-188	LINKTM20X76I	LINKTM20X76I-ALUM

RH/LH Internal Thread Turnbuckle Rods – Metric



100mm O'all Length

Thread Size	O'all Length	Internal Thread Depth	Hex Size	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
M5 x 0.8	100	12	10	Coarse	LINKTM5X100I-188	LINKTM5X100I	LINKTM5X100I-ALUM
M6 x 1	100	16	10	Coarse	LINKTM6X100I-188	LINKTM6X100I	LINKTM6X100I-ALUM
M8 x 1.25	100	20	12	Coarse	LINKTM8X100I-188	LINKTM8X100I	LINKTM8X100I-ALUM
M10 x 1.5	100	25	17	Coarse	LINKTM10X100I-188	LINKTM10X100I	LINKTM10X100I-ALUM
M12 x 1.75	100	25	19	Coarse	LINKTM12X100I-188	LINKTM12X100I	LINKTM12X100I-ALUM
M14 x 2	100	25	22	Coarse	LINKTM14X100I-188	LINKTM14X100I	LINKTM14X100I-ALUM
M16 x 2	100	25	24	Coarse	LINKTM16X100I-188	LINKTM16X100I	LINKTM16X100I-ALUM
M20 x 2.5	100	25	30	Coarse	LINKTM20X100I-188	LINKTM20X100I	LINKTM20X100I-ALUM

150mm O'all Length

Thread Size	O'all Length	Internal Thread Depth	Hex Size	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
M5 x 0.8	150	12	10	Coarse	LINKTM5X150I-188	LINKTM5X150I	LINKTM5X150I-ALUM
M6 x 1	150	16	10	Coarse	LINKTM6X150I-188	LINKTM6X150I	LINKTM6X150I-ALUM
M8 x 1.25	150	20	12	Coarse	LINKTM8X150I-188	LINKTM8X150I	LINKTM8X150I-ALUM
M10 x 1.5	150	25	17	Coarse	LINKTM10X150I-188	LINKTM10X150I	LINKTM10X150I-ALUM
M12 x 1.75	150	25	19	Coarse	LINKTM12X150I-188	LINKTM12X150I	LINKTM12X150I-ALUM
M14 x 2	150	25	22	Coarse	LINKTM14X150I-188	LINKTM14X150I	LINKTM14X150I-ALUM
M16 x 2	150	25	24	Coarse	LINKTM16X150I-188	LINKTM16X150I	LINKTM16X150I-ALUM
M20 x 2.5	150	25	30	Coarse	LINKTM20X150I-188	LINKTM20X150I	LINKTM20X150I-ALUM

305mm O'all Length

Thread Size	O'all Length	Internal Thread Depth	Hex Size	Thread Spacing	18-8 SS Part Number	Steel Part Number	Aluminum Part Number
M5 x 0.8	305	12	10	Coarse	LINKTM5X305I-188	LINKTM5X305I	LINKTM5X305I-ALUM
M6 x 1	305	16	10	Coarse	LINKTM6X305I-188	LINKTM6X305I	LINKTM6X305I-ALUM
M8 x 1.25	305	20	12	Coarse	LINKTM8X305I-188	LINKTM8X305I	LINKTM8X305I-ALUM
M10 x 1.5	305	25	17	Coarse	LINKTM10X305I-188	LINKTM10X305I	LINKTM10X305I-ALUM
M12 x 1.75	305	25	19	Coarse	LINKTM12X305I-188	LINKTM12X305I	LINKTM12X305I-ALUM
M14 x 2	305	25	22	Coarse	LINKTM14X305I-188	LINKTM14X305I	LINKTM14X305I-ALUM
M16 x 2	305	25	24	Coarse	LINKTM16X305I-188	LINKTM16X305I	LINKTM16X305I-ALUM
M20 x 2.5	305	25	30	Coarse	LINKTM20X305I-188	LINKTM20X305I	LINKTM20X305I-ALUM

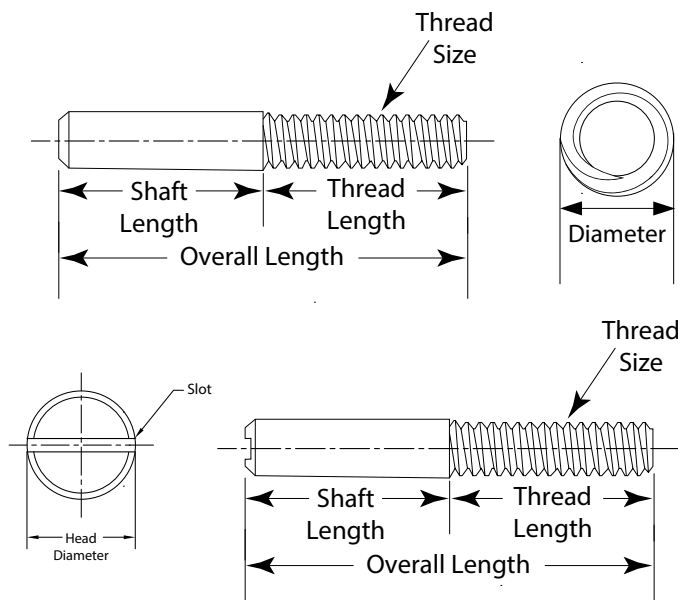
Partially Threaded Studs — Inch 18-8 SS & 316 SS



Product Information

Use a single-end stud where a threaded connection is needed on one side, while the unthreaded end can be act as a pivot point, hinge, shaft, locator pin, etc. Slotted Drive facilitates installation & making adjustments. Made from Type 304 stainless steel. This grade of 18-8 Stainless steel offers excellent corrosion & chemical resistance. May be mildly magnetic. Studs have a Thread Class of 2A. Shaft Tolerance is $\pm 0.005"$. Thread length tolerance is $\pm 0.015"$. AMPG products are precision machined from DFARS compliant material, lot traceable and made in the USA. 304 SS (18-8) meets ASTM A582. Tensile Strength of 90,000 psi & Rockwell Hardness of B83. 316 SS meets ASTM 276. Tensile Strength of 85,000 psi & Rockwell Hardness of B83.

- AMPG products are made in the USA, precision machined from DFARS compliant material, and lot traceable.
- Studs meet AMPG 2020 SSE.01.
- 18-8 stainless steel material meets ASTM A582.
- 316 stainless steel material meets ASTM 276.
- Made from stainless steel, these studs have good chemical resistance and maybe mildly magnetic.



Partially Threaded Studs — Inch

18-8 SS & 316 SS



6-32 Thread Size

O'all Length	Thread Length	Shaft Length	Shaft Dia.	18-8 SS Unslotted Part Number	18-8 SS Slotted Part Number	316 SS Slotted Part Number
1	1/2	1/2	.138	STUDSE06C16-304	STUDSES06C16-304	STUDSES06C16-316
1-1/2	3/4	3/4	.138	STUDSE06C24-304	STUDSES06C24-304	STUDSES06C24-316
2	3/4	1-1/4	.138	STUDSE06C32-304	STUDSES06C32-304	STUDSES06C32-316
2-1/2	3/4	1-3/4	.138	STUDSE06C40-304	STUDSES06C40-304	STUDSES06C40-316
3	3/4	2-1/4	.138	STUDSE06C48-304	STUDSES06C48-304	STUDSES06C48-316

8-32 Thread Size

O'all Length	Thread Length	Shaft Length	Dia.	18-8 SS Unslotted Part Number	18-8 SS Slotted Part Number	316 SS Slotted Part Number
1	1/2	1/2	.164	STUDSE08C16-304	STUDSES08C16-304	STUDSES08C16-316
1-1/2	3/4	3/4	.164	STUDSE08C24-304	STUDSES08C24-304	STUDSES08C24-316
2	3/4	1-1/4	.164	STUDSE08C32-304	STUDSES08C32-304	STUDSES08C32-316
2-1/2	3/4	1-3/4	.164	STUDSE08C40-304	STUDSES08C40-304	STUDSES08C40-316
3	3/4	2-1/4	.164	STUDSE08C48-304	STUDSES08C48-304	STUDSES08C48-316

10-24 Thread Size

O'all Length	Thread Length	Shaft Length	Dia.	18-8 SS Unslotted Part Number	18-8 SS Slotted Part Number	316 SS Slotted Part Number
1	1/2	1/2	.190	STUDSE10C16-304	STUDSES10C16-304	STUDSES10C16-316
1-1/2	3/4	3/4	.190	STUDSE10C24-304	STUDSES10C24-304	STUDSES10C24-316
2	3/4	1-1/4	.190	STUDSE10C32-304	STUDSES10C32-304	STUDSES10C32-316
2-1/2	3/4	1-3/4	.190	STUDSE10C40-304	STUDSES10C40-304	STUDSES10C40-316
3	3/4	2-1/4	.190	STUDSE10C48-304	STUDSES10C48-304	STUDSES10C48-316
3-1/2	3/4	2-3/4	.190	STUDSE10C56-304	STUDSES10C56-304	STUDSES10C56-316
4	3/4	3-1/4	.190	STUDSE10C64-304	STUDSES10C64-304	STUDSES10C64-316

10-32 Thread Size

O'all Length	Thread Length	Shaft Length	Dia.	18-8 SS Unslotted Part Number	18-8 SS Slotted Part Number	316 SS Slotted Part Number
1	1/2	1/2	.190	STUDSE10F16-304	STUDSES10F16-304	STUDSES10F16-316
1-1/2	3/4	3/4	.190	STUDSE10F24-304	STUDSES10F24-304	STUDSES10F24-316
2	3/4	1-1/4	.190	STUDSE10F32-304	STUDSES10F32-304	STUDSES10F32-316
2-1/2	3/4	1-3/4	.190	STUDSE10F40-304	STUDSES10F40-304	STUDSES10F40-316
3	3/4	2-1/4	.190	STUDSE10F48-304	STUDSES10F48-304	STUDSES10F48-316
3-1/2	3/4	2-3/4	.190	STUDSE10F56-304	STUDSES10F56-304	STUDSES10F56-316
4	3/4	3-1/4	.190	STUDSE10F64-304	STUDSES10F64-304	STUDSES10F64-316

Partially Threaded Studs — Inch

18-8 SS & 316 SS



1/4-20 Thread Size

O'all Length	Thread Length	Shaft Length	Dia.	18-8 SS Unslotted Part Number	18-8 SS Slotted Part Number	316 SS Slotted Part Number
1	1/2	1/2	1/4	STUDSE14C16-304	STUDSES14C16-304	STUDSES14C16-316
1-1/2	3/4	3/4	1/4	STUDSE14C24-304	STUDSES14C24-304	STUDSES14C24-316
2	3/4	1-1/4	1/4	STUDSE14C32-304	STUDSES14C32-304	STUDSES14C32-316
2-1/2	3/4	1-3/4	1/4	STUDSE14C40-304	STUDSES14C40-304	STUDSES14C40-316
3	3/4	2-1/4	1/4	STUDSE14C48-304	STUDSES14C48-304	STUDSES14C48-316
3-1/2	3/4	2-3/4	1/4	STUDSE14C56-304	STUDSES14C56-304	STUDSES14C56-316
4	3/4	3-1/4	1/4	STUDSE14C64-304	STUDSES14C64-304	STUDSES14C64-316
4-1/2	3/4	3-3/4	1/4	STUDSE14C72-304	STUDSES14C72-304	STUDSES14C72-316
5	3/4	4-1/4	1/4	STUDSE14C80-304	STUDSES14C80-304	STUDSES14C80-316
5-1/2	3/4	4-3/4	1/4	STUDSE14C88-304	STUDSES14C88-304	STUDSES14C88-316
6	3/4	5-1/4	1/4	STUDSE14C96-304	STUDSES14C96-304	STUDSES14C96-316

1/4-28 Thread Size

O'all Length	Thread Length	Shaft Length	Dia.	18-8 SS Unslotted Part Number	18-8 SS Slotted Part Number	316 SS Slotted Part Number
1	1/2	1/2	1/4	STUDSE14F16-304	STUDSES14F16-304	STUDSES14F16-316
1-1/2	3/4	3/4	1/4	STUDSE14F24-304	STUDSES14F24-304	STUDSES14F24-316
2	3/4	1-1/4	1/4	STUDSE14F32-304	STUDSES14F32-304	STUDSES14F32-316
2-1/2	3/4	1-3/4	1/4	STUDSE14F40-304	STUDSES14F40-304	STUDSES14F40-316
3	3/4	2-1/4	1/4	STUDSE14F48-304	STUDSES14F48-304	STUDSES14F48-316
3-1/2	3/4	2-3/4	1/4	STUDSE14F56-304	STUDSES14F56-304	STUDSES14F56-316
4	3/4	3-1/4	1/4	STUDSE14F64-304	STUDSES14F64-304	STUDSES14F64-316
4-1/2	3/4	3-3/4	1/4	STUDSE14F72-304	STUDSES14F72-304	STUDSES14F72-316
5	3/4	4-1/4	1/4	STUDSE14F80-304	STUDSES14F80-304	STUDSES14F80-316
5-1/2	3/4	4-3/4	1/4	STUDSE14F88-304	STUDSES14F88-304	STUDSES14F88-316
6	3/4	5-1/4	1/4	STUDSE14F96-304	STUDSES14F96-304	STUDSES14F96-316

5/16-18 Thread Size

O'all Length	Thread Length	Shaft Length	Dia.	18-8 SS Unslotted Part Number	18-8 SS Slotted Part Number	316 SS Slotted Part Number
1	1/2	1/2	5/16	STUDSE51C16-304	STUDSES51C16-304	STUDSES51C16-316
1-1/2	3/4	3/4	5/16	STUDSE51C24-304	STUDSES51C24-304	STUDSES51C24-316
2	3/4	1-1/4	5/16	STUDSE51C32-304	STUDSES51C32-304	STUDSES51C32-316
2-1/2	3/4	1-3/4	5/16	STUDSE51C40-304	STUDSES51C40-304	STUDSES51C40-316
3	3/4	2-1/4	5/16	STUDSE51C48-304	STUDSES51C48-304	STUDSES51C48-316
3-1/2	3/4	2-3/4	5/16	STUDSE51C56-304	STUDSES51C56-304	STUDSES51C56-316
4	3/4	3-1/4	5/16	STUDSE51C64-304	STUDSES51C64-304	STUDSES51C64-316
4-1/2	3/4	3-3/4	5/16	STUDSE51C72-304	STUDSES51C72-304	STUDSES51C72-316
5	3/4	4-1/4	5/16	STUDSE51C80-304	STUDSES51C80-304	STUDSES51C80-316
5-1/2	3/4	4-3/4	5/16	STUDSE51C88-304	STUDSES51C88-304	STUDSES51C88-316
6	3/4	5-1/4	5/16	STUDSE51C96-304	STUDSES51C96-304	STUDSES51C96-316

Partially Threaded Studs — Inch

18-8 SS & 316 SS



5/16-24 Thread Size

O'all Length	Thread Length	Shaft Length	Dia.	18-8 SS Unslotted Part Number	18-8 SS Slotted Part Number	316 SS Slotted Part Number
1	1/2	1/2	5/16	STUDSE51F16-304	STUDSES51F16-304	STUDSES51F16-316
1-1/2	3/4	3/4	5/16	STUDSE51F24-304	STUDSES51F24-304	STUDSES51F24-316
2	3/4	1-1/4	5/16	STUDSE51F32-304	STUDSES51F32-304	STUDSES51F32-316
2-1/2	3/4	1-3/4	5/16	STUDSE51F40-304	STUDSES51F40-304	STUDSES51F40-316
3	3/4	2-1/4	5/16	STUDSE51F48-304	STUDSES51F48-304	STUDSES51F48-316
3-1/2	3/4	2-3/4	5/16	STUDSE51F56-304	STUDSES51F56-304	STUDSES51F56-316
4	3/4	3-1/4	5/16	STUDSE51F64-304	STUDSES51F64-304	STUDSES51F64-316
4-1/2	3/4	3-3/4	5/16	STUDSE51F72-304	STUDSES51F72-304	STUDSES51F72-316
5	3/4	4-1/4	5/16	STUDSE51F80-304	STUDSES51F80-304	STUDSES51F80-316
5-1/2	3/4	4-3/4	5/16	STUDSE51F88-304	STUDSES51F88-304	STUDSES51F88-316
6	3/4	5-1/4	5/16	STUDSE51F96-304	STUDSES51F96-304	STUDSES51F96-316

3/8-16 Thread Size

O'all Length	Thread Length	Shaft Length	Dia.	18-8 SS Unslotted Part Number	18-8 SS Slotted Part Number	316 SS Slotted Part Number
1	1/2	1/2	3/8	STUDSE38C16-304	STUDSES38C16-304	STUDSES38C16-316
1-1/2	5/8	3/4	3/8	STUDSE38C24-304	STUDSES38C24-304	STUDSES38C24-316
2	3/4	1-1/4	3/8	STUDSE38C32-304	STUDSES38C32-304	STUDSES38C32-316
2-1/2	3/4	1-3/4	3/8	STUDSE38C40-304	STUDSES38C40-304	STUDSES38C40-316
3	3/4	2-1/4	3/8	STUDSE38C48-304	STUDSES38C48-304	STUDSES38C48-316
3-1/2	3/4	2-3/4	3/8	STUDSE38C56-304	STUDSES38C56-304	STUDSES38C56-316
4	1	3	3/8	STUDSE38C64-304	STUDSES38C64-304	STUDSES38C64-316
4-1/2	1	3-1/2	3/8	STUDSE38C72-304	STUDSES38C72-304	STUDSES38C72-316
5	2	3	3/8	STUDSE38C80-304	STUDSES38C80-304	STUDSES38C80-316
5-1/2	2	3-1/2	3/8	STUDSE38C88-304	STUDSES38C88-304	STUDSES38C88-316
6	1-1/2	4-1/2	3/8	STUDSE38C96-304	STUDSES38C96-304	STUDSES38C96-316

3/8-24 Thread Size

O'all Length	Thread Length	Shaft Length	Dia.	18-8 SS Unslotted Part Number	18-8 SS Slotted Part Number	316 SS Slotted Part Number
1	1/2	1/2	3/8	STUDSE38F16-304	STUDSES38F16-304	STUDSES38F16-316
1-1/2	5/8	3/4	3/8	STUDSE38F24-304	STUDSES38F24-304	STUDSES38F24-316
2	3/4	1-1/4	3/8	STUDSE38F32-304	STUDSES38F32-304	STUDSES38F32-316
2-1/2	3/4	1-3/4	3/8	STUDSE38F40-304	STUDSES38F40-304	STUDSES38F40-316
3	3/4	2-1/4	3/8	STUDSE38F48-304	STUDSES38F48-304	STUDSES38F48-316
3-1/2	3/4	2-3/4	3/8	STUDSE38F56-304	STUDSES38F56-304	STUDSES38F56-316
4	1	3	3/8	STUDSE38F64-304	STUDSES38F64-304	STUDSES38F64-316
4-1/2	1	3-1/2	3/8	STUDSE38F72-304	STUDSES38F72-304	STUDSES38F72-316
5	1	4	3/8	STUDSE38F80-304	STUDSES38F80-304	STUDSES38F80-316
5-1/2	2	3-1/2	3/8	STUDSE38F88-304	STUDSES38F88-304	STUDSES38F88-316
6	1-1/2	4-1/2	3/8	STUDSE38F96-304	STUDSES38F96-304	STUDSES38F96-316

Partially Threaded Studs – Inch

18-8 SS & 316 SS



1/2-13 Thread Size

O'all Length	Thread Length	Shaft Length	Dia.	18-8 SS Unslotted Part Number	18-8 SS Slotted Part Number	316 SS Slotted Part Number
1-1/2	5/8	3/4	1/2	STUDSE12C24-304	STUDSES12C24-304	STUDSES12C24-316
2	3/4	1-1/4	1/2	STUDSE12C32-304	STUDSES12C32-304	STUDSES12C32-316
2-1/2	3/4	1-3/4	1/2	STUDSE12C40-304	STUDSES12C40-304	STUDSES12C40-316
3	3/4	2-1/4	1/2	STUDSE12C48-304	STUDSES12C48-304	STUDSES12C48-316
3-1/2	3/4	2-3/4	1/2	STUDSE12C56-304	STUDSES12C56-304	STUDSES12C56-316
4	1	3	1/2	STUDSE12C64-304	STUDSES12C64-304	STUDSES12C64-316
4-1/2	1-1/4	3-1/4	1/2	STUDSE12C72-304	STUDSES12C72-304	STUDSES12C72-316
5	1-1/4	3-3/4	1/2	STUDSE12C80-304	STUDSES12C80-304	STUDSES12C80-316
5-1/2	1-1/4	4-1/4	1/2	STUDSE12C88-304	STUDSES12C88-304	STUDSES12C88-316
6	1-1/2	4-1/2	1/2	STUDSE12C96-304	STUDSES12C96-304	STUDSES12C96-316

5/8-11 Thread Size

O'all Length	Thread Length	Shaft Length	Dia.	18-8 SS Unslotted Part Number	18-8 SS Slotted Part Number	316 SS Slotted Part Number
1-1/2	5/8	3/4	5/8	STUDSE58C24-304	STUDSES58C24-304	STUDSES58C24-316
2	3/4	1-1/4	5/8	STUDSE58C32-304	STUDSES58C32-304	STUDSES58C32-316
2-1/2	3/4	1-3/4	5/8	STUDSE58C40-304	STUDSES58C40-304	STUDSES58C40-316
3	3/4	2-1/4	5/8	STUDSE58C48-304	STUDSES58C48-304	STUDSES58C48-316
3-1/2	3/4	2-3/4	5/8	STUDSE58C56-304	STUDSES58C56-304	STUDSES58C56-316
4	1	3	5/8	STUDSE58C64-304	STUDSES58C64-304	STUDSES58C64-316
4-1/2	1-1/2	3	5/8	STUDSE58C72-304	STUDSES58C72-304	STUDSES58C72-316
5	1-1/2	3-1/2	5/8	STUDSE58C80-304	STUDSES58C80-304	STUDSES58C80-316
5-1/2	1-1/2	4	5/8	STUDSE58C88-304	STUDSES58C88-304	STUDSES58C88-316
6	1-1/2	4-1/2	5/8	STUDSE58C96-304	STUDSES58C96-304	STUDSES58C96-316

3/4-10 Thread Size

O'all Length	Thread Length	Shaft Length	Dia.	18-8 SS Unslotted Part Number	18-8 SS Slotted Part Number	316 SS Slotted Part Number
2	3/4	1-1/4	3/4	STUDSE34C32-304	STUDSES34C32-304	STUDSES34C32-316
2-1/2	3/4	1-3/4	3/4	STUDSE34C40-304	STUDSES34C40-304	STUDSES34C40-316
3	3/4	2-1/4	3/4	STUDSE34C48-304	STUDSES34C48-304	STUDSES34C48-316
3-1/2	1	2-1/2	3/4	STUDSE34C56-304	STUDSES34C56-304	STUDSES34C56-316
4	1	3	3/4	STUDSE34C64-304	STUDSES34C64-304	STUDSES34C64-316
4-1/2	1-1/2	3	3/4	STUDSE34C72-304	STUDSES34C72-304	STUDSES34C72-316
5	1-1/2	3-1/2	3/4	STUDSE34C80-304	STUDSES34C80-304	STUDSES34C80-316
5-1/2	1-1/2	4	3/4	STUDSE34C88-304	STUDSES34C88-304	STUDSES34C88-316
6	1-1/2	4-1/2	3/4	STUDSE34C96-304	STUDSES34C96-304	STUDSES34C96-316

Partially Threaded Studs — Inch

18-8 SS & 316 SS



7/8-9 Thread Size

O'all Length	Thread Length	Shaft Length	Dia.	18-8 SS Unslotted Part Number	18-8 SS Slotted Part Number	316 SS Slotted Part Number
3	2	1	7/8	STUDSE78C48-304	STUDSES78C48-304	STUDSES78C48-316
4	2	2	7/8	STUDSE78C64-304	STUDSES78C64-304	STUDSES78C64-316
5	2	3	7/8	STUDSE78C80-304	STUDSES78C80-304	STUDSES78C80-316
6	2	4	7/8	STUDSE78C96-304	STUDSES78C96-304	STUDSES78C96-316

1-8 Thread Size

O'all Length	Thread Length	Shaft Length	Dia.	18-8 SS Unslotted Part Number	18-8 SS Slotted Part Number	316 SS Slotted Part Number
3	2-1/4	3/4	1	STUDSE01C48-304	STUDSES01C48-304	STUDSES01C48-316
3-1/2	2-1/4	1-1/4	1	STUDSE01C56-304	STUDSES01C56-304	STUDSES01C56-316
4	2-1/4	1-3/4	1	STUDSE01C64-304	STUDSES01C64-304	STUDSES01C64-316
4-1/2	2-1/4	2-1/4	1	STUDSE01C72-304	STUDSES01C72-304	STUDSES01C72-316
5	2-1/4	2-3/4	1	STUDSE01C80-304	STUDSES01C80-304	STUDSES01C80-316
5-1/2	2-1/4	3-1/4	1	STUDSE01C88-304	STUDSES01C88-304	STUDSES01C88-316
6	2-1/4	3-3/4	1	STUDSE01C96-304	STUDSES01C96-304	STUDSES01C96-316

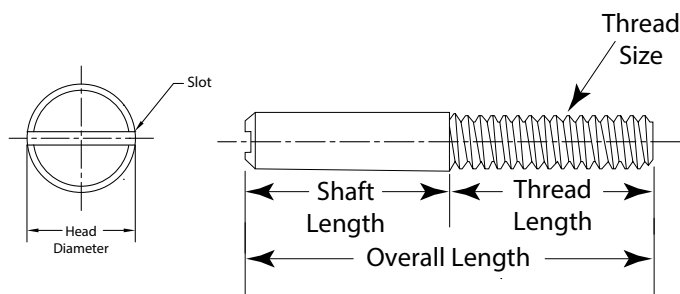
Slotted Partially Threaded Studs – Metric

18-8 SS, 316 SS, 12L14 Steel

Product Information

Also called a grub screw, partial thread set screw, partial thread stud. Screw the threaded end of these studs into a tapped hole, and use the unthreaded end as a pivot point, hinge, shaft, or locator pin. Steel—These studs are steel for strength and wear resistance. They're best for dry environments since moisture will cause them to rust. All meet ISO 2342 (formerly DIN 427), an international standard for fastener dimensions. Thread Fit 6g. Shaft Tolerance is $\pm .005"$ ($\pm .127\text{mm}$). Thread Length tolerance is $\pm .015"$ ($\pm .381\text{mm}$). 304 SS (18-8) meets ASTM A582. Tensile Strength of 90,000 psi & Rockwell Hardness of B83. 316 SS meets ASTM 276. Tensile Strength of 85,000 psi & Rockwell Hardness of B83. Steel 12L14 meets ASTM A108. Tensile Strength of 78,000 psi & Rockwell Hardness of B84. All studs made in the USA.

- AMPG products are made in the USA, precision machined from DFARS compliant material, and lot traceable.
- Studs meet ISO 2342, DIN 427.
- 18-8 stainless steel material meets ASTM A582.
- 316 stainless steel material meets ASTM 276.
- Steel 12L14 meets ASTM A108.



M3 × 0.5 Thread Size

O'all Length	Thread Length	Shaft Length	Shaft Dia.	18-8 SS Part Number	316 SS Part Number	Steel Part Number
6	3.6	2.4	3	STUDSESM3CX6-304	STUDSESM3CX6-316	STUDSESM3CX6-STEEL
10	3.6	6.4	3	STUDSESM3CX10-304	STUDSESM3CX10-316	STUDSESM3CX10-STEEL
12	3.6	8.4	3	STUDSESM3CX12-304	STUDSESM3CX12-316	STUDSESM3CX12-STEEL
16	3.5	12.5	3	STUDSESM3CX16-304	STUDSESM3CX16-316	STUDSESM3CX16-STEEL
18	3.5	14.5	3	STUDSESM3CX18-304	STUDSESM3CX18-316	STUDSESM3CX18-STEEL

M4 × 0.7 Thread Size

O'all Length	Thread Length	Shaft Length	Shaft Dia.	18-8 SS Part Number	316 SS Part Number	Steel Part Number
8	4.8	3.2	4	STUDSESM4CX8-304	STUDSESM4CX8-316	STUDSESM4CX8-STEEL
10	4.8	5.2	4	STUDSESM4CX10-304	STUDSESM4CX10-316	STUDSESM4CX10-STEEL
12	4.8	7.2	4	STUDSESM4CX12-304	STUDSESM4CX12-316	STUDSESM4CX12-STEEL
16	4.8	11.2	4	STUDSESM4CX16-304	STUDSESM4CX16-316	STUDSESM4CX16-STEEL
18	4.8	13.2	4	STUDSESM4CX18-304	STUDSESM4CX18-316	STUDSESM4CX18-STEEL
20	4.8	15.2	4	STUDSESM4CX20-304	STUDSESM4CX20-316	STUDSESM4CX20-STEEL
25	4.8	20.2	4	STUDSESM4CX25-304	STUDSESM4CX25-316	STUDSESM4CX25-STEEL

Slotted Partially Threaded Studs — Metric

18-8 SS, 316 SS, 12L14 Steel



M5 × 0.8 Thread Size

O'all Length	Thread Length	Shaft Length	Dia.	18-8 SS Part Number	316 SS Part Number	Steel Part Number
8	6	2	5	STUDSESM5CX8-304	STUDSESM5CX8-316	STUDSESM5CX8-STEEL
10	6	4	5	STUDSESM5CX10-304	STUDSESM5CX10-316	STUDSESM5CX10-STEEL
12	6	6	5	STUDSESM5CX12-304	STUDSESM5CX12-316	STUDSESM5CX12-STEEL
16	6	10	5	STUDSESM5CX16-304	STUDSESM5CX16-316	STUDSESM5CX16-STEEL
18	6	12	5	STUDSESM5CX18-304	STUDSESM5CX18-316	STUDSESM5CX18-STEEL
20	6	14	5	STUDSESM5CX20-304	STUDSESM5CX20-316	STUDSESM5CX20-STEEL
25	6	19	5	STUDSESM5CX25-304	STUDSESM5CX25-316	STUDSESM5CX25-STEEL
30	6	24	5	STUDSESM5CX30-304	STUDSESM5CX30-316	STUDSESM5CX30-STEEL

M6 × 1 Thread Size

O'all Length	Thread Length	Shaft Length	Dia.	18-8 SS Part Number	316 SS Part Number	Steel Part Number
10	7.2	2.8	6	STUDSESM6CX10-304	STUDSESM6CX10-316	STUDSESM6CX10-STEEL
12	7.2	4.8	6	STUDSESM6CX12-304	STUDSESM6CX12-316	STUDSESM6CX12-STEEL
16	7.2	8.8	6	STUDSESM6CX16-304	STUDSESM6CX16-316	STUDSESM6CX16-STEEL
18	7.2	10.8	6	STUDSESM6CX18-304	STUDSESM6CX18-316	STUDSESM6CX18-STEEL
20	7.2	12.8	6	STUDSESM6CX20-304	STUDSESM6CX20-316	STUDSESM6CX20-STEEL
25	7.2	17.8	6	STUDSESM6CX25-304	STUDSESM6CX25-316	STUDSESM6CX25-STEEL
30	7.2	22.8	6	STUDSESM6CX30-304	STUDSESM6CX30-316	STUDSESM6CX30-STEEL

M8 × 1.25 Thread Size

O'all Length	Thread Length	Shaft Length	Dia.	18-8 SS Part Number	316 SS Part Number	Steel Part Number
16	9.6	6.4	8	STUDSESM8CX16-304	STUDSESM8CX16-316	STUDSESM8CX16-STEEL
18	9.6	8.4	8	STUDSESM8CX18-304	STUDSESM8CX18-316	STUDSESM8CX18-STEEL
20	9.6	10.4	8	STUDSESM8CX20-304	STUDSESM8CX20-316	STUDSESM8CX20-STEEL
25	9.6	15.4	8	STUDSESM8CX25-304	STUDSESM8CX25-316	STUDSESM8CX25-STEEL
30	9.6	20.4	8	STUDSESM8CX30-304	STUDSESM8CX30-316	STUDSESM8CX30-STEEL
35	9.6	25.4	8	STUDSESM8CX35-304	STUDSESM8CX35-316	STUDSESM8CX35-STEEL
40	9.6	30.4	8	STUDSESM8CX40-304	STUDSESM8CX40-316	STUDSESM8CX40-STEEL

Slotted Partially Threaded Studs – Metric

18-8 SS, 316 SS, 12L14 Steel



M10 × 1.5 Thread Size

O'all Length	Thread Length	Shaft Length	Dia.	18-8 SS Part Number	316 SS Part Number	Steel Part Number
16	12	4	10	STUDSESM10CX16-304	STUDSESM10CX16-316	STUDSESM10CX16-STEEL
20	12	8	10	STUDSESM10CX20-304	STUDSESM10CX20-316	STUDSESM10CX20-STEEL
25	12	13	10	STUDSESM10CX25-304	STUDSESM10CX25-316	STUDSESM10CX25-STEEL
30	12	18	10	STUDSESM10CX30-304	STUDSESM10CX30-316	STUDSESM10CX30-STEEL
35	12	23	10	STUDSESM10CX35-304	STUDSESM10CX35-316	STUDSESM10CX35-STEEL
40	12	28	10	STUDSESM10CX40-304	STUDSESM10CX40-316	STUDSESM10CX40-STEEL
50	12	38	10	STUDSESM10CX50-304	STUDSESM10CX50-316	STUDSESM10CX50-STEEL

M12 × 1.75 Thread Size

O'all Length	Thread Length	Shaft Length	Dia.	18-8 SS Part Number	316 SS Part Number	Steel Part Number
25	14	11	12	STUDSESM12CX25-304	STUDSESM12CX25-316	STUDSESM12CX25-STEEL
30	16	14	12	STUDSESM12CX30-304	STUDSESM12CX30-316	STUDSESM12CX30-STEEL
35	14	21	12	STUDSESM12CX35-304	STUDSESM12CX35-316	STUDSESM12CX35-STEEL
40	14	26	12	STUDSESM12CX40-304	STUDSESM12CX40-316	STUDSESM12CX40-STEEL

M16 × 2 Thread Size

O'all Length	Thread Length	Shaft Length	Dia.	18-8 SS Part Number	316 SS Part Number	Steel Part Number
30	18	12	16	STUDSESM16CX30-304	STUDSESM16CX30-316	STUDSESM16CX30-STEEL
35	18	17	16	STUDSESM16CX35-304	STUDSESM16CX35-316	STUDSESM16CX35-STEEL

Tight Fit Clevis Pins — Inch

316 Stainless Steel

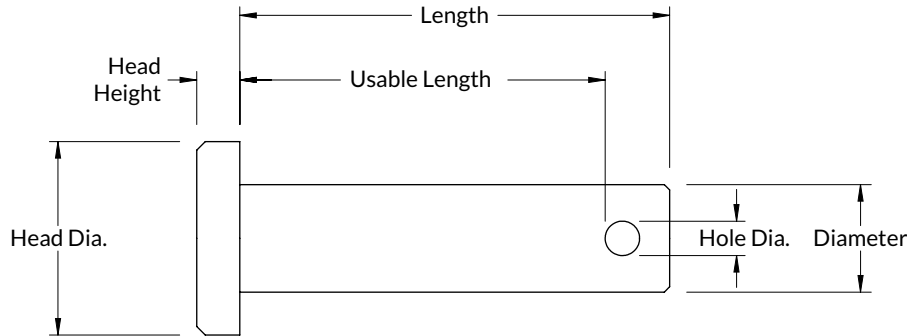
18-8 Stainless Steel | Black Oxide

17-4 PH Stainless Steel



Product Information

These pins combine the locking capabilities of a clevis pin with the precision diameter of a dowel pin for a tight fit. Easier to install and remove than bolts or rivets, they lock in place with a cotter pin (sold separately). Diameter Tolerance is $-0.002''$ to $-0.004''$, Head Diameter Tolerance is $-0.015''$ to $0''$ and Head Height Tolerance is $-0.015''$ to $0''$. These pins have a flat head type.



Tight Fit Clevis Pins, Inch

Dia.	Length	Usable Length	Head Dia.	Head Ht.	Hole Dia.	For Max Cotter Pin Dia.	316 SS Part Number	18-8 SS Part Number	18-8 SS, Black Oxide Part Number	17-4 PH SS Part Number
1/8	1/2	5/16	1/4	1/16	3/32	3/64	PIN3021808	PIN3011808	PIN3011808-BX	PIN7441808
	5/8	7/16	5/16	1/16	3/32	1/16	PIN3021810	PIN3011810	PIN3011810-BX	PIN7441810
	3/4	9/16	1/4	1/16	3/32	3/64	PIN3021812	PIN3011812	PIN3011812-BX	PIN7441812
	7/8	11/16	5/16	1/16	3/32	1/16	PIN3021814	PIN3011814	PIN3011814-BX	PIN7441814
1/8	1	13/16	1/4	1/16	3/32	3/64	PIN3021816	PIN3011816	PIN3011816-BX	PIN7441816
	1 1/8	15/16	5/16	1/16	3/32	1/16	PIN3021818	PIN3011818	PIN3011818-BX	PIN7441818
	1 1/4	1 1/16	1/4	1/16	3/32	3/64	PIN3021820	PIN3011820	PIN3011820-BX	PIN7441820
3/16	1/2	5/16	5/16	1/16	3/32	1/16	PIN3023108	PIN3013108	PIN3013108-BX	PIN7443108
	5/8	7/16	5/16	1/16	3/32	1/16	PIN3023110	PIN3013110	PIN3013110-BX	PIN7443110
	3/4	9/16	5/16	1/16	3/32	1/16	PIN3023112	PIN3013112	PIN3013112-BX	PIN7443112
	7/8	11/16	5/16	1/16	3/32	1/16	PIN3023114	PIN3013114	PIN3013114-BX	PIN7443114
3/16	1	13/16	5/16	1/16	3/32	1/16	PIN3023116	PIN3013116	PIN3013116-BX	PIN7443116
	1 1/8	15/16	5/16	1/16	3/32	1/16	PIN3023118	PIN3013118	PIN3013118-BX	PIN7443118
	1 1/4	1 1/16	5/16	1/16	3/32	1/16	PIN3023120	PIN3013120	PIN3013120-BX	PIN7443120
	1 3/8	1 3/16	5/16	1/16	3/32	1/16	PIN3023122	PIN3013122	PIN3013122-BX	PIN7443122
3/16	1 1/2	1 5/16	5/16	1/16	3/32	1/16	PIN3023124	PIN3013124	PIN3013124-BX	PIN7443124
	1 5/8	1 7/16	5/16	1/16	3/32	1/16	PIN3023126	PIN3013126	PIN3013126-BX	PIN7443126
	1 3/4	1 9/16	5/16	1/16	3/32	1/16	PIN3023128	PIN3013128	PIN3013128-BX	PIN7443128
	1 7/8	1 11/16	5/16	1/16	3/32	1/16	PIN3023130	PIN3013130	PIN3013130-BX	PIN7443130

Tight Fit Clevis Pins – Inch



Dia.	Length	Usable Length	Head Dia.	Head Ht.	Hole Dia.	For Max Cotter Pin Dia.	316 SS Part Number	18-8 SS Part Number	18-8 SS, Black Oxide Part Number	17-4 PH SS Part Number
3/16	2	1 13/16	5/16	1/16	3/32	1/16	PIN3023132	PIN3013132	PIN3013132-BX	PIN7443132
	2 1/8	1 15/16	5/16	1/16	3/32	1/16	PIN3023134	PIN3013134	PIN3013134-BX	PIN7443134
	2 1/4	2 1/16	5/16	1/16	3/32	1/16	PIN3023136	PIN3013136	PIN3013136-BX	PIN7443136
	2 3/8	2 3/16	5/16	1/16	3/32	1/16	PIN3023138	PIN3013138	PIN3013138-BX	PIN7443138
3/16	2 1/2	2 5/16	5/16	1/16	3/32	1/16	PIN3023140	PIN3013140	PIN3013140-BX	PIN7443140
	2 3/4	2 9/16	5/16	1/16	3/32	1/16	PIN3023144	PIN3013144	PIN3013144-BX	PIN7443144
	3	2 13/16	5/16	1/16	3/32	1/16	PIN3023148	PIN3013148	PIN3013148-BX	PIN7443148
1/4	1/2	5/16	3/8	3/32	3/32	1/16	PIN3021408	PIN3011408	PIN3011408-BX	PIN7441408
	5/8	7/16	3/8	3/32	3/32	1/16	PIN3021410	PIN3011410	PIN3011410-BX	PIN7441410
	3/4	9/16	3/8	3/32	3/32	1/16	PIN3021412	PIN3011412	PIN3011412-BX	PIN7441412
	7/8	11/16	3/8	3/32	3/32	1/16	PIN3021414	PIN3011414	PIN3011414-BX	PIN7441414
1/4	1	13/16	3/8	3/32	3/32	1/16	PIN3021416	PIN3011416	PIN3011416-BX	PIN7441416
	1 1/8	15/16	3/8	3/32	3/32	1/16	PIN3021418	PIN3011418	PIN3011418-BX	PIN7441418
	1 1/4	1 1/16	3/8	3/32	3/32	1/16	PIN3021420	PIN3011420	PIN3011420-BX	PIN7441420
	1 3/8	1 3/16	3/8	3/32	3/32	1/16	PIN3021422	PIN3011422	PIN3011422-BX	PIN7441422
1/4	1 1/2	1 5/16	3/8	3/32	3/32	1/16	PIN3021424	PIN3011424	PIN3011424-BX	PIN7441424
	1 5/8	1 7/16	3/8	3/32	3/32	1/16	PIN3021426	PIN3011426	PIN3011426-BX	PIN7441426
	1 3/4	1 9/16	3/8	3/32	3/32	1/16	PIN3021428	PIN3011428	PIN3011428-BX	PIN7441428
	1 7/8	1 11/16	3/8	3/32	3/32	1/16	PIN3021430	PIN3011430	PIN3011430-BX	PIN7441430
1/4	2	1 13/16	3/8	3/32	3/32	1/16	PIN3021432	PIN3011432	PIN3011432-BX	PIN7441432
	2 1/8	1 15/16	3/8	3/32	3/32	1/16	PIN3021434	PIN3011434	PIN3011434-BX	PIN7441434
	2 1/4	2 1/16	3/8	3/32	3/32	1/16	PIN3021436	PIN3011436	PIN3011436-BX	PIN7441436
	2 3/8	2 3/16	3/8	3/32	3/32	1/16	PIN3021438	PIN3011438	PIN3011438-BX	PIN7441438
1/4	2 1/2	2 5/16	3/8	3/32	3/32	1/16	PIN3021440	PIN3011440	PIN3011440-BX	PIN7441440
	2 3/4	2 9/16	3/8	3/32	3/32	1/16	PIN3021444	PIN3011444	PIN3011444-BX	PIN7441444
	3	2 13/16	3/8	3/32	3/32	1/16	PIN3021448	PIN3011448	PIN3011448-BX	PIN7441448
	3 1/2	3 5/16	3/8	3/32	3/32	1/16	PIN3021456	PIN3011456	PIN3011456-BX	PIN7441456
1/4	4	3 13/16	3/8	3/32	3/32	1/16	PIN3021464	PIN3011464	PIN3011464-BX	PIN7441464
5/16	1/2	1/4	7/16	3/32	9/64	1/8	PIN3025108	PIN3015108	PIN3015108-BX	PIN7445108
	3/4	1/2	7/16	3/32	9/64	1/8	PIN3025112	PIN3015112	PIN3015112-BX	PIN7445112
	7/8	5/8	7/16	3/32	9/64	1/8	PIN3025114	PIN3015114	PIN3015114-BX	PIN7445114
	1	3/4	7/16	3/32	9/64	1/8	PIN3025116	PIN3015116	PIN3015116-BX	PIN7445116
5/16	1 1/8	7/8	7/16	3/32	9/64	1/8	PIN3025118	PIN3015118	PIN3015118-BX	PIN7445118
	1 1/4	1	7/16	3/32	9/64	1/8	PIN3025120	PIN3015120	PIN3015120-BX	PIN7445120
	1 3/8	1 1/8	7/16	3/32	9/64	1/8	PIN3025122	PIN3015122	PIN3015122-BX	PIN7445122
	1 1/2	1 1/4	7/16	3/32	9/64	1/8	PIN3025124	PIN3015124	PIN3015124-BX	PIN7445124

Tight Fit Clevis Pins — Inch



Dia.	Length	Usable Length	Head Dia.	Head Ht.	Hole Dia.	For Max Cotter Pin Dia.	316 SS Part Number	18-8 SS Part Number	18-8 SS, Black Oxide Part Number	17-4 PH SS Part Number
5/16	1 5/8	1 3/8	7/16	3/32	9/64	1/8	PIN3025126	PIN3015126	PIN3015126-BX	PIN7445126
	1 3/4	1 1/2	7/16	3/32	9/64	1/8	PIN3025128	PIN3015128	PIN3015128-BX	PIN7445128
	1 7/8	1 5/8	7/16	3/32	9/64	1/8	PIN3025130	PIN3015130	PIN3015130-BX	PIN7445130
	2	1 3/4	7/16	3/32	9/64	1/8	PIN3025132	PIN3015132	PIN3015132-BX	PIN7445132
5/16	2 1/8	1 7/8	7/16	3/32	9/64	1/8	PIN3025134	PIN3015134	PIN3015134-BX	PIN7445134
	2 1/4	2	7/16	3/32	9/64	1/8	PIN3025136	PIN3015136	PIN3015136-BX	PIN7445136
	2 3/8	2 1/8	7/16	3/32	9/64	1/8	PIN3025138	PIN3015138	PIN3015138-BX	PIN7445138
	2 1/2	2 1/4	7/16	3/32	9/64	1/8	PIN3025140	PIN3015140	PIN3015140-BX	PIN7445140
5/16	2 5/8	2 3/8	7/16	3/32	9/64	1/8	PIN3025142	PIN3015142	PIN3015142-BX	PIN7445142
	2 3/4	2 1/2	7/16	3/32	9/64	1/8	PIN3025144	PIN3015144	PIN3015144-BX	PIN7445144
	3	2 3/4	7/16	3/32	9/64	1/8	PIN3025148	PIN3015148	PIN3015148-BX	PIN7445148
	3 1/2	3 1/4	7/16	3/32	9/64	1/8	PIN3025156	PIN3015156	PIN3015156-BX	PIN7445156
5/16	4	3 3/4	7/16	3/32	9/64	1/8	PIN3025164	PIN3015164	PIN3015164-BX	PIN7445164
3/8	3/4	1/2	1/2	1/8	5/32	1/8	PIN3023812	PIN3013812	PIN3013812-BX	PIN7443812
	7/8	5/8	1/2	1/8	5/32	1/8	PIN3023814	PIN3013814	PIN3013814-BX	PIN7443814
	1	3/4	1/2	1/8	5/32	1/8	PIN3023816	PIN3013816	PIN3013816-BX	PIN7443816
	1 1/8	7/8	1/2	1/8	5/32	1/8	PIN3023818	PIN3013818	PIN3013818-BX	PIN7443818
3/8	1 1/4	1	1/2	1/8	5/32	1/8	PIN3023820	PIN3013820	PIN3013820-BX	PIN7443820
	1 3/8	1 1/8	1/2	1/8	5/32	1/8	PIN3023822	PIN3013822	PIN3013822-BX	PIN7443822
	1 1/2	1 1/4	1/2	1/8	5/32	1/8	PIN3023824	PIN3013824	PIN3013824-BX	PIN7443824
	1 5/8	1 3/8	1/2	1/8	5/32	1/8	PIN3023826	PIN3013826	PIN3013826-BX	PIN7443826
3/8	1 3/4	1 1/2	1/2	1/8	5/32	1/8	PIN3023828	PIN3013828	PIN3013828-BX	PIN7443828
	1 7/8	1 5/8	1/2	1/8	5/32	1/8	PIN3023830	PIN3013830	PIN3013830-BX	PIN7443830
	2	1 3/4	1/2	1/8	5/32	1/8	PIN3023832	PIN3013832	PIN3013832-BX	PIN7443832
	2 1/8	1 7/8	1/2	1/8	5/32	1/8	PIN3023834	PIN3013834	PIN3013834-BX	PIN7443834
3/8	2 1/4	2	1/2	1/8	5/32	1/8	PIN3023836	PIN3013836	PIN3013836-BX	PIN7443836
	2 3/8	2 1/8	1/2	1/8	5/32	1/8	PIN3023838	PIN3013838	PIN3013838-BX	PIN7443838
	2 1/2	2 1/4	1/2	1/8	5/32	1/8	PIN3023840	PIN3013840	PIN3013840-BX	PIN7443840
	2 5/8	2 3/8	1/2	1/8	5/32	1/8	PIN3023842	PIN3013842	PIN3013842-BX	PIN7443842
3/8	2 3/4	2 1/2	1/2	1/8	5/32	1/8	PIN3023844	PIN3013844	PIN3013844-BX	PIN7443844
	3	2 3/4	1/2	1/8	5/32	1/8	PIN3023848	PIN3013848	PIN3013848-BX	PIN7443848
	3 1/2	3 1/4	1/2	1/8	5/32	1/8	PIN3023856	PIN3013856	PIN3013856-BX	PIN7443856
	4	3 3/4	1/2	1/8	5/32	1/8	PIN3023864	PIN3013864	PIN3013864-BX	PIN7443864
3/8	4 1/2	4 1/4	1/2	1/8	5/32	1/8	PIN3023872	PIN3013872	PIN3013872-BX	PIN7443872
	5	4 3/4	1/2	1/8	5/32	1/8	PIN3023880	PIN3013880	PIN3013880-BX	PIN7443880

Tight Fit Clevis Pins – Inch



Dia.	Length	Usable Length	Head Dia.	Head Ht.	Hole Dia.	For Max Cotter Pin Dia.	316 SS Part Number	18-8 SS Part Number	18-8 SS, Black Oxide Part Number	17-4 PH SS Part Number
7/16	3/4	1/2	9/16	5/32	5/32	1/8	PIN3027112	PIN3017112	PIN3017112-BX	PIN7447112
	1	3/4	9/16	5/32	5/32	1/8	PIN3027116	PIN3017116	PIN3017116-BX	PIN7447116
	1 1/4	1	9/16	5/32	5/32	1/8	PIN3027120	PIN3017120	PIN3017120-BX	PIN7447120
	1 1/2	1 1/4	9/16	5/32	5/32	1/8	PIN3027124	PIN3017124	PIN3017124-BX	PIN7447124
7/16	1 3/4	1 1/2	9/16	5/32	5/32	1/8	PIN3027128	PIN3017128	PIN3017128-BX	PIN7447128
	2	1 3/4	9/16	5/32	5/32	1/8	PIN3027132	PIN3017132	PIN3017132-BX	PIN7447132
	2 1/4	2	9/16	5/32	5/32	1/8	PIN3027136	PIN3017136	PIN3017136-BX	PIN7447136
	2 1/2	2 1/4	9/16	5/32	5/32	1/8	PIN3027140	PIN3017140	PIN3017140-BX	PIN7447140
7/16	2 3/4	2 1/2	9/16	5/32	5/32	1/8	PIN3027144	PIN3017144	PIN3017144-BX	PIN7447144
	3	2 3/4	9/16	5/32	5/32	1/8	PIN3027148	PIN3017148	PIN3017148-BX	PIN7447148
	3 1/2	3 1/4	9/16	5/32	5/32	1/8	PIN3027156	PIN3017156	PIN3017156-BX	PIN7447156
	4	3 3/4	9/16	5/32	5/32	1/8	PIN3027164	PIN3017164	PIN3017164-BX	PIN7447164
7/16	4 1/2	4 1/4	9/16	5/32	5/32	1/8	PIN3027172	PIN3017172	PIN3017172-BX	PIN7447172
	5	4 3/4	9/16	5/32	5/32	1/8	PIN3027180	PIN3017180	PIN3017180-BX	PIN7447180
1/2	3/4	1/2	5/8	5/32	5/32	1/8	PIN3021212	PIN3011212	PIN3011212-BX	PIN7441212
	1	3/4	5/8	5/32	5/32	1/8	PIN3021216	PIN3011216	PIN3011216-BX	PIN7441216
	1 1/4	1	5/8	5/32	5/32	1/8	PIN3021220	PIN3011220	PIN3011220-BX	PIN7441220
	1 1/2	1 1/4	5/8	5/32	5/32	1/8	PIN3021224	PIN3011224	PIN3011224-BX	PIN7441224
1/2	1 3/4	1 1/2	5/8	5/32	5/32	1/8	PIN3021228	PIN3011228	PIN3011228-BX	PIN7441228
	2	1 3/4	5/8	5/32	5/32	1/8	PIN3021232	PIN3011232	PIN3011232-BX	PIN7441232
	2 1/4	2	5/8	5/32	5/32	1/8	PIN3021236	PIN3011236	PIN3011236-BX	PIN7441236
	2 1/2	2 1/4	5/8	5/32	5/32	1/8	PIN3021240	PIN3011240	PIN3011240-BX	PIN7441240
1/2	2 3/4	2 1/2	5/8	5/32	5/32	1/8	PIN3021244	PIN3011244	PIN3011244-BX	PIN7441244
	3	2 3/4	5/8	5/32	5/32	1/8	PIN3021248	PIN3011248	PIN3011248-BX	PIN7441248
	3 1/4	3	5/8	5/32	5/32	1/8	PIN3021252	PIN3011252	PIN3011252-BX	PIN7441252
	3 1/2	3 1/4	5/8	5/32	5/32	1/8	PIN3021256	PIN3011256	PIN3011256-BX	PIN7441256
1/2	4	3 3/4	5/8	5/32	5/32	1/8	PIN3021264	PIN3011264	PIN3011264-BX	PIN7441264
	4 1/2	4 1/4	5/8	5/32	5/32	1/8	PIN3021272	PIN3011272	PIN3011272-BX	PIN7441272
	5	4 3/4	5/8	5/32	5/32	1/8	PIN3021280	PIN3011280	PIN3011280-BX	PIN7441280
	6	5 3/4	5/8	5/32	5/32	1/8	PIN3021296	PIN3011296	PIN3011296-BX	PIN7441296
9/16	2	1 3/4	13/16	7/32	5/32	1/8	PIN3029132	PIN3019132	PIN3019132-BX	PIN7449132
	2 1/2	2 1/4	13/16	7/32	5/32	1/8	PIN3029140	PIN3019140	PIN3019140-BX	PIN7449140
	3	2 3/4	13/16	7/32	5/32	1/8	PIN3029148	PIN3019148	PIN3019148-BX	PIN7449148
	3 1/2	3 1/4	13/16	7/32	5/32	1/8	PIN3029156	PIN3019156	PIN3019156-BX	PIN7449156

Tight Fit Clevis Pins – Inch



Dia.	Length	Usable Length	Head Dia.	Head Ht.	Hole Dia.	For Max Cotter Pin Dia.	316 SS Part Number	18-8 SS Part Number	18-8 SS, Black Oxide Part Number	17-4 PH SS Part Number
9/16	4	3 3/4	13/16	7/32	5/32	1/8	PIN3029164	PIN3019164	PIN3019164-BX	PIN7449164
5/8	1 1/4	1	13/16	7/32	5/32	1/8	PIN3025820	PIN3015820	PIN3015820-BX	PIN7445820
	1 1/2	1 1/4	13/16	7/32	5/32	1/8	PIN3025824	PIN3015824	PIN3015824-BX	PIN7445824
	1 3/4	1 1/2	13/16	7/32	5/32	1/8	PIN3025828	PIN3015828	PIN3015828-BX	PIN7445828
	2	1 3/4	13/16	7/32	5/32	1/8	PIN3025832	PIN3015832	PIN3015832-BX	PIN7445832
	2 1/4	2	13/16	7/32	5/32	1/8	PIN3025836	PIN3015836	PIN3015836-BX	PIN7445836
5/8	2 1/2	2 1/4	13/16	7/32	5/32	1/8	PIN3025840	PIN3015840	PIN3015840-BX	PIN7445840
	2 3/4	2 1/2	13/16	7/32	5/32	1/8	PIN3025844	PIN3015844	PIN3015844-BX	PIN7445844
	3	2 3/4	13/16	7/32	5/32	1/8	PIN3025848	PIN3015848	PIN3015848-BX	PIN7445848
	3 1/4	3	13/16	7/32	5/32	1/8	PIN3025852	PIN3015852	PIN3015852-BX	PIN7445852
5/8	3 1/2	3 1/4	13/16	7/32	5/32	1/8	PIN3025856	PIN3015856	PIN3015856-BX	PIN7445856
	4	3 3/4	13/16	7/32	5/32	1/8	PIN3025864	PIN3015864	PIN3015864-BX	PIN7445864
	4 1/2	4 1/4	13/16	7/32	5/32	1/8	PIN3025872	PIN3015872	PIN3015872-BX	PIN7445872
	5	4 3/4	13/16	7/32	5/32	1/8	PIN3025880	PIN3015880	PIN3015880-BX	PIN7445880
5/8	6	5 3/4	13/16	7/32	5/32	1/8	PIN3025896	PIN3015896	PIN3015896-BX	PIN7445896
3/4	2	1 3/4	15/16	5/16	5/32	1/8	PIN3023432	PIN3013432	PIN3013432-BX	PIN7443432
	2 1/4	2	15/16	5/16	5/32	1/8	PIN3023436	PIN3013436	PIN3013436-BX	PIN7443436
	2 1/2	2 1/4	15/16	5/16	5/32	1/8	PIN3023440	PIN3013440	PIN3013440-BX	PIN7443440
	2 3/4	2 1/2	15/16	5/16	5/32	1/8	PIN3023444	PIN3013444	PIN3013444-BX	PIN7443444
3/4	3	2 3/4	15/16	5/16	5/32	1/8	PIN3023448	PIN3013448	PIN3013448-BX	PIN7443448
	3 1/4	3	15/16	5/16	5/32	1/8	PIN3023452	PIN3013452	PIN3013452-BX	PIN7443452
3/4	3 1/2	3 1/4	15/16	5/16	5/32	1/8	PIN3023456	PIN3013456	PIN3013456-BX	PIN7443456
	4	3 3/4	15/16	5/16	5/32	1/8	PIN3023464	PIN3013464	PIN3013464-BX	PIN7443464
	4 1/2	4 1/4	15/16	5/16	5/32	1/8	PIN3023472	PIN3013472	PIN3013472-BX	PIN7443472
	5	4 3/4	15/16	5/16	5/32	1/8	PIN3023480	PIN3013480	PIN3013480-BX	PIN7443480
3/4	6	5 3/4	15/16	5/16	5/32	1/8	PIN3023496	PIN3013496	PIN3013496-BX	PIN7443496
7/8	2	1 11/16	1 1/32	5/16	7/32	3/16	PIN3027832	PIN3017832	PIN3017832-BX	PIN7447832
	2 1/4	1 15/16	1 1/32	5/16	7/32	3/16	PIN3027836	PIN3017836	PIN3017836-BX	PIN7447836
	2 1/2	2 3/16	1 1/32	5/16	7/32	3/16	PIN3027840	PIN3017840	PIN3017840-BX	PIN7447840
	2 3/4	2 7/16	1 1/32	5/16	7/32	3/16	PIN3027844	PIN3017844	PIN3017844-BX	PIN7447844

Tight Fit Clevis Pins — Inch



Dia.	Length	Usable Length	Head Dia.	Head Ht.	Hole Dia.	For Max Cotter Pin Dia.	316 SS Part Number	18-8 SS Part Number	18-8 SS, Black Oxide Part Number	17-4 PH SS Part Number
7/8	3	2 11/16	1 1/32	5/16	7/32	3/16	PIN3027848	PIN3017848	PIN3017848-BX	PIN7447848
	3 1/4	2 15/16	1 1/32	5/16	7/32	3/16	PIN3027852	PIN3017852	PIN3017852-BX	PIN7447852
	3 1/2	3 3/16	1 1/32	5/16	7/32	3/16	PIN3027856	PIN3017856	PIN3017856-BX	PIN7447856
	4	3 11/16	1 1/32	5/16	7/32	3/16	PIN3027864	PIN3017864	PIN3017864-BX	PIN7447864
7/8	4 1/2	4 3/16	1 1/32	5/16	7/32	3/16	PIN3027872	PIN3017872	PIN3017872-BX	PIN7447872
	5	4 11/16	1 1/32	5/16	7/32	3/16	PIN3027880	PIN3017880	PIN3017880-BX	PIN7447880
	6	5 11/16	1 1/32	5/16	7/32	3/16	PIN3027896	PIN3017896	PIN3017896-BX	PIN7447896
1	3	2 11/16	13/16	11/32	13/64	3/16	PIN30200148	PIN30100148	PIN30100148-BX	PIN74400148
	3 1/4	2 15/16	13/16	11/32	13/64	3/16	PIN30200152	PIN30100152	PIN30100152-BX	PIN74400152
	3 1/2	3 3/16	13/16	11/32	13/64	3/16	PIN30200156	PIN30100156	PIN30100156-BX	PIN74400156
	4	3 11/16	13/16	11/32	13/64	3/16	PIN30200164	PIN30100164	PIN30100164-BX	PIN74400164
1	4 1/2	4 3/16	13/16	11/32	13/64	3/16	PIN30200172	PIN30100172	PIN30100172-BX	PIN74400172
	5	4 11/16	13/16	11/32	13/64	3/16	PIN30200180	PIN30100180	PIN30100180-BX	PIN74400180
	6	5 11/16	13/16	11/32	13/64	3/16	PIN30200196	PIN30100196	PIN30100196-BX	PIN74400196
1 1/8	3	2 3/8	13/8	11/32	1/4	3/16	PIN30201848	PIN30101848	PIN30101848-BX	PIN74401848
	4	3 3/8	1 13/32	11/32	1/4	3/16	PIN30201864	PIN30101864	PIN30101864-BX	PIN74401864
	5	4 3/8	1 13/32	11/32	1/4	3/16	PIN30201880	PIN30101880	PIN30101880-BX	PIN74401880
	6	5 3/8	1 13/32	11/32	1/4	3/16	PIN30201896	PIN30101896	PIN30101896-BX	PIN74401896
1 1/4	3	2 3/8	1 1/2	11/32	1/4	3/16	PIN30201248	PIN30101248	PIN30101248-BX	PIN74401248
	4	3 3/8	1 1/2	11/32	1/4	3/16	PIN30201264	PIN30101264	PIN30101264-BX	PIN74401264
	5	4 3/8	1 1/2	11/32	1/4	3/16	PIN30201280	PIN30101280	PIN30101280-BX	PIN74401280
	6	5 3/8	1 1/2	11/32	1/4	3/16	PIN30201296	PIN30101296	PIN30101296-BX	PIN74401296

Oversize Press Fit Clevis Pin — Inch



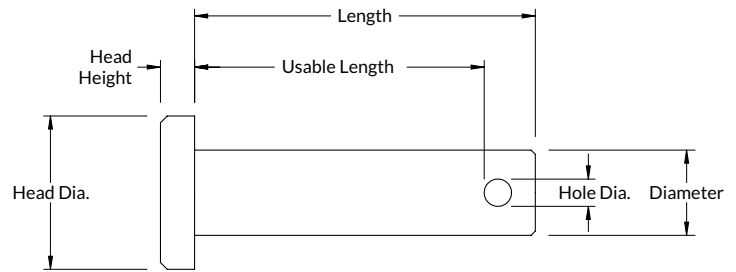
Dia.	Dia Max. to Min.	Length	Useable Length	Head Dia (min)	Head Dia (max)	Head Height (min)	Head Height (max)	18-8 SS Part Number
1/4	.2503 to .2501	3/4	9/16	.360	.380	.080	.100	PIN6002500750
	.2503 to .2501	1	13/16	.360	.380	.080	.100	PIN6002501000
	.2503 to .2501	1-1/4	1-1/16	.360	.380	.080	.100	PIN6002501250
	.2503 to .2501	1-1/2	1-5/16	.360	.380	.080	.100	PIN6002501500
3/8	.3753 to .3751	1	3/4	.490	.510	.110	.130	PIN6003751000
	.3753 to .3751	1-1/4	1	.490	.510	.110	.130	PIN6003751250
	.3753 to .3751	1-1/2	1-1/4	.490	.510	.110	.130	PIN6003751500
	.3753 to .3751	1-3/4	1-1/2	.490	.510	.110	.130	PIN6003751750
3/8	.3753 to .3751	2	1-3/4	.490	.510	.110	.130	PIN6003752000
	.3753 to .3751	3	2-3/4	.490	.510	.110	.130	PIN6003753000

Tight Fit Clevis Pins — Metric

316 Stainless Steel

18-8 Stainless Steel | Plain | Black Oxide

17-4 PH Stainless Steel



Product Information

These pins combine the locking capabilities of a clevis pin with the precision diameter of a dowel pin for a tight fit. Easier to install and remove than bolts or rivets, they lock in place with a cotter pin (sold separately). Diameter Tolerance is $-.05\text{mm}/-.10\text{mm}$, Head Diameter Tolerance is $-0.38\text{mm}/0$, Head Height Tolerance is $-0.38\text{mm}/0$ and Hole Diameter Tolerance of $+0.5\text{mm}$. These pins have a flat head type.



Tight Fit Clevis Pins, Metric

Dia.	Length	Usable Length	Head Dia.	Head Ht.	Hole Dia.	For Max Cotter Pin Dia.	316 SS Part Number	AMPG 18-8 SS Part Number	AMPG 18-8 SS, Black Oxide Part Number	17-4 PH SS Part Number
8mm	20	15	14	3	2	2	PIN3028X20	PIN301M8X20	PIN3018X20-BX	PIN7448X20
	24	19	14	3	2	2	PIN3028X24	PIN301M8X24	PIN3018X24-BX	PIN7448X24
	25	20	14	3	2	2	PIN3028X25	PIN301M8X25	PIN3018X25-BX	PIN7448X25
	30	25	14	3	2	2	PIN3028X30	PIN301M8X30	PIN3018X30-BX	PIN7448X30
8mm	35	30	14	3	2	2	PIN3028X35	PIN301M8X35	PIN3018X35-BX	PIN7448X35
	50	44	14	3	2	2	PIN3028X50	PIN301M8X50	PIN3018X50-BX	PIN7448X50
10mm	25	19	18	4	3.2	3.2	PIN30210X25	PIN301M10X25	PIN30110X25-BX	PIN74410X25
	30	24	18	4	3.2	3.2	PIN30210X30	PIN301M10X30	PIN30110X30-BX	PIN74410X30
	40	34	18	4	3.2	3.2	PIN30210X40	PIN301M10X40	PIN30110X40-BX	PIN74410X40
	50	44	18	4	3.2	3.2	PIN30210X50	PIN301M10X50	PIN30110X50-BX	PIN74410X50
10mm	60	54	18	4	3.2	3.2	PIN30210X60	PIN301M10X60	PIN30110X60-BX	PIN74410X60
	70	64	18	4	3.2	3.2	PIN30210X70	PIN301M10X70	PIN30110X70-BX	PIN74410X70
12mm	30	23	20	4	3.2	3.2	PIN30212X30	PIN301M12X30	PIN30112X30-BX	PIN74412X30
	35	28	20	4	3.2	3.2	PIN30212X35	PIN301M12X35	PIN30112X35-BX	PIN74412X35
	45	38	20	4	3.2	3.2	PIN30212X45	PIN301M12X45	PIN30112X45-BX	PIN74412X45
	50	43	20	4	3.2	3.2	PIN30212X50	PIN301M12X50	PIN30112X50-BX	PIN74412X50
12mm	60	53	20	4	3.2	3.2	PIN30212X60	PIN301M12X60	PIN30112X60-BX	PIN74412X60
16mm	40	31	25	5	4	4	PIN30216X40	PIN301M16X40	PIN30116X40-BX	PIN74416X40
	50	41	25	5	4	4	PIN30216X50	PIN301M16X50	PIN30116X50-BX	PIN74416X50
	60	51	25	5	4	4	PIN30216X60	PIN301M16X60	PIN30116X60-BX	PIN74416X60
20mm	40	29	30	5	5	5	PIN30220X40	PIN301M20X40	PIN30120X40-BX	PIN74420X40
	50	39	30	5	5	5	PIN30220X50	PIN301M20X50	PIN30120X50-BX	PIN74420X50
	60	49	30	5	5	5	PIN30220X60	PIN301M20X60	PIN30120X60-BX	PIN74420X60
	65	54	30	5	5	5	PIN30220X65	PIN301M20X65	PIN30120X65-BX	PIN74420X65

Double Drilled Clevis Pins — Inch

High Strength Aluminum (7075-T6)



Product Information

Clevis pins are useful for quick disconnect or temporary fasteners. These pins includes a steel zinc split ring and an aluminum cotter pin. All 3 components come packaged in the same bag, and comprise one complete unit. 1/4 & 3/8 Diameter Pins are packed with 1/16 X 1 Aluminum Cotter Pin. 1/2 & 3/4 Diameter Pins are packed with 1/8 X 2 Aluminum Cotter Pin. 1/4" Diameter Pins have a Steel Zinc Ring thru the head 1.100 OD X .110 Thick. 3/8, 1/2, and 3/4" Diameter Pins have a Steel Zinc Ring thru the head 1.640 OD X .168 Thick. Usable Length = From under the head to start of Cotter Pin Hole.

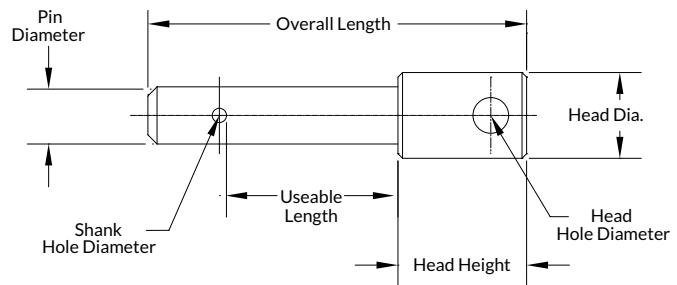
Diameter Tolerance: -0.002 to -0.007

Usable Length Tolerance: +0.015 to -0.015

Head Diameter Tolerance: +0.015 to -0.015

Head Height Tolerance: +0.015 to -0.015

Overall Length Tolerance: +0 to -0.020



Pin Dia.	O'all Length	Useable Length	Head Dia.	Head Height	Head Hole Dia.	Shank Hole Dia.	Aluminum Part Number
1/4	1-3/4	3/4	3/8	9/16	5/32	1/16	PIN500120
	2	1	3/8	9/16	5/32	1/16	PIN500122
	2-1/4	1-1/4	3/8	9/16	5/32	1/16	PIN500124
	2-1/2	1-1/2	3/8	9/16	5/32	1/16	PIN500126
3/8	2-1/4	1	1/2	3/4	1/4	1/16	PIN500130
	2-1/2	1-1/4	1/2	3/4	1/4	1/16	PIN500132
	2-3/4	1-1/2	1/2	3/4	1/4	1/16	PIN500134
	3	1-3/4	1/2	3/4	1/4	1/16	PIN500136
3/8	3-1/4	2	1/2	3/4	1/4	1/16	PIN500138
1/2	3	1-1/2	5/8	15/16	1/4	5/32	PIN500148
	3-1/4	1-3/4	5/8	15/16	1/4	5/32	PIN500150
	3-1/2	2	5/8	15/16	1/4	5/32	PIN500152
	4	2-1/2	5/8	15/16	1/4	5/32	PIN500156
1/2	4-1/4	3	5/8	15/16	1/4	5/32	PIN500158
3/4	4-1/8	2	7/8	1-5/16	1/4	5/32	PIN500165
	4-5/8	2-1/2	7/8	1-5/16	1/4	5/32	PIN500167
	5-1/8	3	7/8	1-5/16	1/4	5/32	PIN500169
	5-5/8	3-1/2	7/8	1-5/16	1/4	5/32	PIN500171
3/4	6-1/8	4	7/8	1-5/16	1/4	5/32	PIN500173

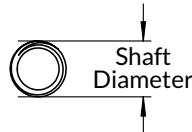
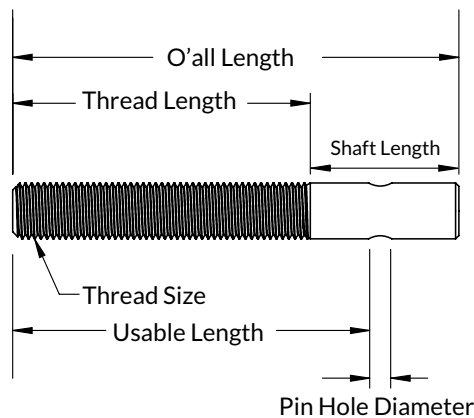
Single-End Lockable Pin — 1/8" 18-8 SS



Product Information

Also known as a single-end lockable stud connector stud & hood pin. For lighter-duty securing of access panels, hoods, covers, doors, lids, etc. The lockable pin is threaded so you can fasten it on one end and use the unthreaded end with a drilled hole to secure components. The hole can be utilized to hold components using reusable locking wires, dowel pins, cotter pins, hairpin cotters, etc. Pins have a Thread Class of 2A. Shaft tolerance is $\pm.005$ and thread length tolerance is $\pm.015$ ".

- AMPG products are made in the USA, precision machined from DFARS compliant material, and lot traceable.
- 18-8 stainless steel is manufactured from Type 304 stainless steel and meets ASTM A582.
- 18-8 Stainless steel offers excellent corrosion & chemical resistance.
- All stainless steel adhere to environmental regulations established by European Union RoHS directive.



Without Hairpin Cotter Pin



With Hairpin Cotter Pin

5/16-18 Thread Size

Shaft Diameter	O'all Length	Useable Length	Thread Length	Shaft Length	Drilled Hole Diameter	For Max. Cotter Pin Diameter	Single-End Pin w/ Hairpin Cotter Part Number	Single-End Pin Only Part Number
5/16	2	1.4	1	1	.141 (9/64)	(.125) 1/8	—	PIN70051C32-304
5/16	2-1/2	1.9	1-1/2	1	.141 (9/64)	(.125) 1/8	—	PIN70051C40-304
5/16	3	2.4	2	1	.141 (9/64)	(.125) 1/8	—	PIN70051C48-304
5/16	3-1/2	2.9	2-1/2	1	.141 (9/64)	(.125) 1/8	—	PIN70051C56-304
5/16	4	3.4	3	1	.141 (9/64)	(.125) 1/8	—	PIN70051C64-304

5/16-24 Thread Size

Shaft Diameter	O'all Length	Useable Length	Thread Length	Shaft Length	Drilled Hole Diameter	For Max. Cotter Pin Diameter	Single-End Pin w/ Hairpin Cotter Part Number	Single-End Pin Only Part Number
5/16	2	1.4	1	1	.141 (9/64)	(.125) 1/8	PIN70051F32	PIN70051F32-1
5/16	2-1/2	1.9	1-1/2	1	.141 (9/64)	(.125) 1/8	—	PIN70051F40-304
5/16	3	2.4	2	1	.141 (9/64)	(.125) 1/8	PIN70051F48	PIN70051F48-1
5/16	3-1/2	2.9	2-1/2	1	.141 (9/64)	(.125) 1/8	—	PIN70051F56-304
5/16	4	3.4	3	1	.141 (9/64)	(.125) 1/8	PIN70051F64	PIN70051F64-1

Single-End Lockable Pin — Inch 18-8 SS



3/8-16 Thread Size

Shaft Diameter	O'all Length	Useable Length	Thread Length	Shaft Length	Drilled Hole Diameter	For Max. Cotter Pin Diameter	Single-End Pin w/ Hairpin Cotter Part Number	Single-End Pin Only Part Number
3/8	2	1.4	1	1	.141 (9/64)	(.125) 1/8	—	PIN70038C32-304
3/8	2-1/2	1.9	1-1/2	1	.141 (9/64)	(.125) 1/8	—	PIN70038C40-304
3/8	3	2.4	2	1	.141 (9/64)	(.125) 1/8	—	PIN70038C48-304
3/8	3-1/2	2.9	2-1/2	1	.141 (9/64)	(.125) 1/8	—	PIN70038C56-304
3/8	4	3.4	3	1	.141 (9/64)	(.125) 1/8	—	PIN70038C64-304

3/8-24 Thread Size

Shaft Diameter	O'all Length	Useable Length	Thread Length	Shaft Length	Drilled Hole Diameter	For Max. Cotter Pin Diameter	Single-End Pin w/ Hairpin Cotter Part Number	Single-End Pin Only Part Number
3/8	2	1.4	1	1	.141 (9/64)	(.125) 1/8	PIN70038F32	PIN70038F32-1
3/8	2-1/2	1.9	1-1/2	1	.141 (9/64)	(.125) 1/8	PIN70038F40	PIN70038F40-304
3/8	3	2.4	2	1	.141 (9/64)	(.125) 1/8	PIN70038F48	PIN70038F48-1
3/8	3-1/2	2.9	2-1/2	1	.141 (9/64)	(.125) 1/8	PIN70038F56	PIN70038F56-304
3/8	4	3.4	3	1	.141 (9/64)	(.125) 1/8	PIN70038F64	PIN70038F64-1

1/2-13 Thread Size

Shaft Diameter	O'all Length	Useable Length	Thread Length	Shaft Length	Drilled Hole Diameter	For Max. Cotter Pin Diameter	Single-End Pin w/ Hairpin Cotter Part Number	Single-End Pin Only Part Number
1/2	2	1.4	1	1	.141 (9/64)	(.125) 1/8	—	PIN70012C32-304
1/2	2-1/2	1.9	1-1/2	1	.141 (9/64)	(.125) 1/8	—	PIN70012C40-304
1/2	3	2.4	2	1	.141 (9/64)	(.125) 1/8	—	PIN70012C48-304
1/2	3-1/2	2.9	2-1/2	1	.141 (9/64)	(.125) 1/8	—	PIN70012C56-304
1/2	4	3.4	3	1	.141 (9/64)	(.125) 1/8	—	PIN70012C64-304
1/2	4-1/2	3.9	3	1-1/2	.141 (9/64)	(.125) 1/8	—	PIN70012C72-304
1/2	5	4.4	3-1/2	1-1/2	.141 (9/64)	(.125) 1/8	—	PIN70012C80-304

1/2-20 Thread Size

Shaft Diameter	O'all Length	Useable Length	Thread Length	Shaft Length	Drilled Hole Diameter	For Max. Cotter Pin Diameter	Single-End Pin w/ Hairpin Cotter Part Number	Single-End Pin Only Part Number
1/2	2	1.4	1	1	.141 (9/64)	(.125) 1/8	PIN70012F32	PIN70012F32-1
1/2	2-1/2	1.9	1-1/2	1	.141 (9/64)	(.125) 1/8	—	PIN70012F40-304
1/2	3	2.4	2	1	.141 (9/64)	(.125) 1/8	PIN70012F48	PIN70012F48-1
1/2	3-1/2	2.9	2-1/2	1	.141 (9/64)	(.125) 1/8	—	PIN70012F56-304
1/2	4	3.4	3	1	.141 (9/64)	(.125) 1/8	PIN70012F64	PIN70012F64-1
1/2	4-1/2	3.9	3	1-1/2	.141 (9/64)	(.125) 1/8	—	PIN70012F72-304
1/2	5	4.4	3-1/2	1-1/2	.141 (9/64)	(.125) 1/8	—	PIN70012F80-304

Single-End Lockable Pin — 18-8 SS



5/8-11 Thread Size

Shaft Diameter	O'all Length	Useable Length	Thread Length	Shaft Length	Drilled Hole Diameter	For Max. Cotter Pin Diameter	Single-End Pin w/ Hairpin Cotter Part Number	Single-End Pin Only Part Number
5/8	2	1.4	1	1	.171 (11/64)	(.141) 9/64	—	PIN70058C32-304
5/8	2-1/2	1.9	1-1/2	1	.171 (11/64)	(.141) 9/64	—	PIN70058C40-304
5/8	3	2.4	2	1	.171 (11/64)	(.141) 9/64	—	PIN70058C48-304
5/8	3-1/2	2.9	2-1/2	1	.171 (11/64)	(.141) 9/64	—	PIN70058C56-304
5/8	4	3.4	3	1	.171 (11/64)	(.141) 9/64	—	PIN70058C64-304
5/8	4-1/2	3.9	3	1-1/2	.171 (11/64)	(.141) 9/64	—	PIN70058C72-304
5/8	5	4.4	3-1/2	1-1/2	.171 (11/64)	(.141) 9/64	—	PIN70058C80-304
5/8	5-1/2	4.9	4	1-1/2	.171 (11/64)	(.141) 9/64	—	PIN70058C88-304
5/8	6	5.4	4-1/2	1-1/2	.171 (11/64)	(.141) 9/64	—	PIN70058C96-304

3/4-10 Thread Size

Shaft Diameter	O'all Length	Useable Length	Thread Length	Shaft Length	Drilled Hole Diameter	For Max. Cotter Pin Diameter	Single-End Pin w/ Hairpin Cotter Part Number	Single-End Pin Only Part Number
3/4	3	2.4	2	1	.171 (11/64)	(.141) 9/64	—	PIN70034C48-304
3/4	3-1/2	2.9	2-1/2	1	.171 (11/64)	(.141) 9/64	—	PIN70034C56-304
3/4	4	3.4	3	1	.171 (11/64)	(.141) 9/64	—	PIN70034C64-304
3/4	4-1/2	3.9	3	1-1/2	.171 (11/64)	(.141) 9/64	—	PIN70034C72-304
3/4	5	4.4	3-1/2	1-1/2	.171 (11/64)	(.141) 9/64	—	PIN70034C80-304
3/4	5-1/2	4.9	4	1-1/2	.171 (11/64)	(.141) 9/64	—	PIN70034C88-304
3/4	6	5.4	4-1/2	1-1/2	.171 (11/64)	(.141) 9/64	—	PIN70034C96-304

7/8-9 Thread Size

Shaft Diameter	O'all Length	Useable Length	Thread Length	Shaft Length	Drilled Hole Diameter	For Max. Cotter Pin Diameter	Single-End Pin w/ Hairpin Cotter Part Number	Single-End Pin Only Part Number
1	3	2.4	2	1	.171 (11/64)	(.141) 9/64	—	PIN70078C48-304
1	4	3.4	3	1	.171 (11/64)	(.141) 9/64	—	PIN70078C64-304
1	5	4.4	4	1	.171 (11/64)	(.141) 9/64	—	PIN70078C80-304
1	6	5.4	5	1	.171 (11/64)	(.141) 9/64	—	PIN70078C96-304

1-8 Thread Size

Shaft Diameter	O'all Length	Useable Length	Thread Length	Shaft Length	Drilled Hole Diameter	For Max. Cotter Pin Diameter	Single-End Pin w/ Hairpin Cotter Part Number	Single-End Pin Only Part Number
1	3	2.4	2	1	.171 (11/64)	(.141) 9/64	—	PIN70001C48-304
1	3-1/2	2.9	2-1/2	1	.171 (11/64)	(.141) 9/64	—	PIN70001C56-304
1	4	3.4	3	1	.171 (11/64)	(.141) 9/64	—	PIN70001C64-304
1	4-1/2	3.9	3	1-1/2	.171 (11/64)	(.141) 9/64	—	PIN70001C72-304
1	5	4.4	3-1/2	1-1/2	.171 (11/64)	(.141) 9/64	—	PIN70001C80-304
1	5-1/2	4.9	4	1-1/2	.171 (11/64)	(.141) 9/64	—	PIN70001C88-304
1	6	5.4	4-1/2	1-1/2	.171 (11/64)	(.141) 9/64	—	PIN70001C96-304

Headless Clevis Pin (Extra Long) – Inch

18-8 Stainless Steel



Product Information

Lengths from 12" to 24" provide extra reach. 18-8 Stainless Steel provides corrosion resistance and strength. Two stainless steel cotter pins are included with each part.



Pin Diameter	Pin O'all Length	Useable Length	Drilled Holes	Cotter Pin Size	Cotter Pins Part Number (2 Included)	Clevis Pin Part Number
3/16 (.183 - .191)	12	11	5/64	5/64 x 3/4	PIN503010	LINKC005
	16	15	5/64	5/64 x 3/4	PIN503010	LINKC010
	20	19	5/64	5/64 x 3/4	PIN503010	LINKC015
	24	23	5/64	5/64 x 3/4	PIN503010	LINKC020
1/4 (.246 - .254)	12	11	5/64	5/64 x 3/4	PIN503010	LINKC180
	16	15	5/64	5/64 x 3/4	PIN503010	LINKC185
	20	19	5/64	5/64 x 3/4	PIN503010	LINKC190
	24	23	5/64	5/64 x 3/4	PIN503010	LINKC195
5/16 (.308 - .316)	12	11	7/64	7/64 x 3/4	PIN503015	LINKC280
	16	15	7/64	7/64 x 3/4	PIN503015	LINKC285
	20	19	7/64	7/64 x 3/4	PIN503015	LINKC290
	24	23	7/64	7/64 x 3/4	PIN503015	LINKC295
3/8 (.371 - .379)	12	11	7/64	7/64 x 3/4	PIN503015	LINKC370
	16	15	7/64	7/64 x 3/4	PIN503015	LINKC375
	20	19	7/64	7/64 x 3/4	PIN503015	LINKC380
	24	23	7/64	7/64 x 3/4	PIN503015	LINKC385
1/2 (.496 - .504)	12	11	5/32	5/32 x 1	PIN503020	LINKC460
	16	15	5/32	5/32 x 1	PIN503020	LINKC465
	20	19	5/32	5/32 x 1	PIN503020	LINKC470
	24	23	5/32	5/32 x 1	PIN503020	LINKC475

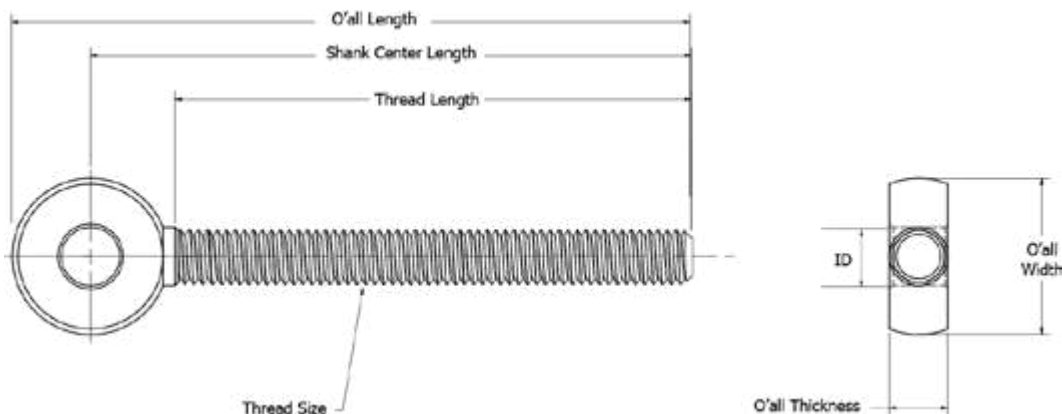
Rod End Bolts — Inch



316 Stainless Steel
18-8 Stainless Steel | Black Oxide
17-4 PH Stainless Steel
Brass
Aluminum | Red Anodized
Steel 12L14 | Black Oxide
Steel 4140 | Black Oxide

Product Information

Rod End Bolts also known as swing bolts, pivoting bolts and hinge eyebolts. These threaded bolts can be cut to length to fit.



Rod End Bolts, Inch

Thread Size	Shank Center Lg.	ID	Thread Lg.	O'all Wd.	O'all Thickness	O'all Length	316 SS Part Number	18-8 SS Part Number	18-8 SS Black Oxide Part Number	17-4 PH SS Part Number	Brass Part Number
6-32	3/4	1/8	1/2	5/16	5/32	29/32	ZEB10-316	ZEB10	ZEB10-BLACK	ZEB10-174	ZEB10-BR
	1	1/8	3/4	5/16	5/32	1-5/32	ZEB12-316	ZEB12	ZEB12-BLACK	ZEB12-174	ZEB12-BR
	1-1/2	1/8	1-1/4	5/16	5/32	1-21/32	ZEB14-316	ZEB14	ZEB14-BLACK	ZEB14-174	ZEB14-BR
	2	1/8	1-3/4	5/16	5/32	2-5/32	ZEB16-316	ZEB16	ZEB16-BLACK	ZEB16-174	ZEB16-BR
8-32	1	5/32	3/4	5/16	3/16	1-5/32	ZEB20-316	ZEB20	ZEB20-BLACK	ZEB20-174	ZEB20-BR
	1-1/2	5/32	1-1/4	5/16	3/16	1-21/32	ZEB22-316	ZEB22	ZEB22-BLACK	ZEB22-174	ZEB22-BR
	2	5/32	1-3/4	5/16	3/16	2-5/32	ZEB24-316	ZEB24	ZEB24-BLACK	ZEB24-174	ZEB24-BR
10-32	1-1/2	3/16	1	1/2	5/16	1-3/4	ZEB30-316	ZEB30	ZEB30-BLACK	ZEB30-174	ZEB30-BR
	1-1/2	3/16	1	1/2	5/16	1-3/4	—	Z0008-188	—	—	—
	2	3/16	3/4	1/2	3/16	2-1/4	Z0033-188	Z0033-316	—	—	—
	2	3/16	1-1/2	1/2	3/16	2-1/4	ZEB32-316	ZEB32	ZEB32-BLACK	ZEB32-174	ZEB32-BR
	3	3/16	3/4	1/2	3/16	3-1/4	Z0034-188	Z0034-316	—	—	—
	3	3/16	2-1/2	1/2	3/16	3-1/4	ZEB34-316	ZEB34	ZEB34-BLACK	ZEB34-174	ZEB34-BR
1/4-20	2	3/16	1-1/2	5/8	1/4	2-5/16	ZEB40-316	ZEB40	ZEB40-BLACK	ZEB40-174	ZEB40-BR
	3	3/16	2-1/2	5/8	1/4	3-5/16	ZEB42-316	ZEB42	ZEB42-BLACK	ZEB42-174	ZEB42-BR
	1-1/2	1/4	1-1/8	5/8	1/4	1-13/16	ZEB50-316	ZEB50	ZEB50-BLACK	ZEB50-174	ZEB50-BR
	2	1/4	1-1/2	5/8	1/4	2-5/16	ZEB52-316	ZEB52	ZEB52-BLACK	ZEB52-174	ZEB52-BR

Rod End Bolts — Inch



Thread Size	Shank Center Lg.	ID	Thread Lg.	O'all Wd.	O'all Thickness	O'all Length	316 SS Part Number	18-8 SS Part Number	18-8 SS Black Oxide Part Number	17-4 PH SS Part Number	Brass Part Number
1/4-20	3	1/4	2-1/2	5/8	1/4	3-5/16	ZEB54-316	ZEB54	ZEB54-BLACK	ZEB54-174	ZEB54-BR
	3-1/2	1/4	3	5/8	1/4	3-13/16	ZEB56-316	ZEB56	ZEB56-BLACK	ZEB56-174	ZEB56-BR
1/4-28	2	1/4	1-1/2	5/8	1/4	2-5/16	ZEB66-316	ZEB66	ZEB66-BLACK	ZEB66-174	ZEB66-BR
	3	1/4	2-1/2	5/8	1/4	3-5/16	ZEB68-316	ZEB68	ZEB68-BLACK	ZEB68-174	ZEB68-BR
	3-1/2	1/4	3	5/8	1/4	3-13/16	ZEB70-316	ZEB70	ZEB70-BLACK	ZEB70-174	ZEB70-BR
5/16-18	2	1/4	1-1/2	11/16	5/16	2-11/32	ZEB76-316	ZEB76	ZEB76-BLACK	ZEB76-174	ZEB76-BR
5/16-18	3	1/4	2-1/2	11/16	5/16	3-11/32	ZEB78-316	ZEB78	ZEB78-BLACK	ZEB78-174	ZEB78-BR
	1-1/2	5/16	1-1/16	11/16	5/16	1-27/32	ZEB84-316	ZEB84	ZEB84-BLACK	ZEB84-174	ZEB84-BR
	3-1/2	5/16	3-1/16	11/16	5/16	3-27/32	ZEB86-316	ZEB86	ZEB86-BLACK	ZEB86-174	ZEB86-BR
	6	5/16	5-9/16	11/16	5/16	6-11/32	ZEB88-316	ZEB88	ZEB88-BLACK	ZEB88-174	ZEB88-BR
5/16-24	2	1/4	1-1/2	11/16	5/16	2-11/32	ZEB90-316	ZEB90	ZEB90-BLACK	ZEB90-174	ZEB90-BR
	3	1/4	2-1/2	11/16	5/16	3-11/32	ZEB92-316	ZEB92	ZEB92-BLACK	ZEB92-174	ZEB92-BR
3/8-16	3	5/16	2-1/2	13/16	3/8	3-13/32	ZEB94-316	ZEB94	ZEB94-BLACK	ZEB94-174	ZEB94-BR
	4	5/16	3-1/2	13/16	3/8	4-13/32	ZEB96-316	ZEB96	ZEB96-BLACK	ZEB96-174	ZEB96-BR
	2	3/8	1-1/2	13/16	3/8	2-13/32	ZEB104-316	ZEB104	ZEB104-BLACK	ZEB104-174	ZEB104-BR
	3-1/2	3/8	3	13/16	3/8	3-29/32	ZEB106-316	ZEB106	ZEB106-BLACK	ZEB106-174	ZEB106-BR
3/8-16	5	3/8	4-1/2	13/16	3/8	5-13/32	ZEB108-316	ZEB108	ZEB108-BLACK	ZEB108-174	ZEB108-BR
	6	3/8	5-1/2	13/16	3/8	6-13/32	ZEB110-316	ZEB110	ZEB110-BLACK	ZEB110-174	ZEB110-BR
3/8-24	3-1/2	3/8	3	13/16	3/8	3-29/32	ZEB116-316	ZEB116	ZEB116-BLACK	ZEB116-174	ZEB116-BR
	5	3/8	4-1/2	13/16	3/8	5-13/32	ZEB118-316	ZEB118	ZEB118-BLACK	ZEB118-174	ZEB118-BR
1/2-13	2-1/2	1/2	1-7/8	1-1/32	1/2	3-1/64	ZEB126-316	ZEB126	ZEB126-BLACK	ZEB126-174	ZEB126-BR
	3-1/2	1/2	2-7/8	1-1/32	1/2	4-1/64	ZEB128-316	ZEB128	ZEB128-BLACK	ZEB128-174	ZEB128-BR
	5	1/2	4-3/16	1-1/32	1/2	5-33/64	ZEB130-316	ZEB130	ZEB130-BLACK	ZEB130-174	ZEB130-BR
	6	1/2	5-3/8	1-1/32	1/2	6-33/64	ZEB132-316	ZEB132	ZEB132-BLACK	ZEB132-174	ZEB132-BR
1/2-20	3-1/2	1/2	2-7/8	1-1/32	1/2	4-1/64	ZEB138-316	ZEB138	ZEB138-BLACK	ZEB138-174	ZEB138-BR
	5	1/2	4-3/16	1-1/32	1/2	5-33/64	ZEB140-316	ZEB140	ZEB140-BLACK	ZEB140-174	ZEB140-BR
5/8-11	3-1/2	5/8	2-3/4	1-5/16	5/8	4-5/32	ZEB146-316	ZEB146	ZEB146-BLACK	ZEB146-174	ZEB146-BR
	5	5/8	4-1/4	1-5/16	5/8	5-21/32	ZEB148-316	ZEB148	ZEB148-BLACK	ZEB148-174	ZEB148-BR
	6	5/8	5-1/4	1-5/16	5/8	6-21/32	ZEB150-316	ZEB150	ZEB150-BLACK	ZEB150-174	ZEB150-BR
5/8-24	3-1/2	5/8	2-3/4	1-5/16	5/8	4-5/32	ZEB156-316	ZEB156	ZEB156-BLACK	ZEB156-174	ZEB156-BR
	5	5/8	4-1/4	1-5/16	5/8	5-21/32	ZEB158-316	ZEB158	ZEB158-BLACK	ZEB158-174	ZEB158-BR
3/4-10	3-1/2	3/4	2-5/8	1-9/16	3/4	4-9/32	ZEB164-316	ZEB164	ZEB164-BLACK	ZEB164-174	ZEB164-BR
	5	3/4	4-1/8	1-9/16	3/4	5-25/32	ZEB166-316	ZEB166	ZEB166-BLACK	ZEB166-174	ZEB166-BR
	6	3/4	5-1/8	1-9/16	3/4	6-25/32	ZEB168-316	ZEB168	ZEB168-BLACK	ZEB168-174	ZEB168-BR
3/4-16	5	3/4	4-1/8	1-9/16	3/4	5-25/32	ZEB174-316	ZEB174	ZEB174-BLACK	ZEB174-174	ZEB174-BR
	6	3/4	5-1/8	1-9/16	3/4	6-25/32	ZEB176-316	ZEB176	ZEB176-BLACK	ZEB176-174	ZEB176-BR

Rod End Bolts – Inch



Rod End Bolts, Inch

Thread Size	Shank Center Lg.	ID	Thread Lg.	O'all Wd.	O'all Thickness	O'all Length	316 SS Part Number	18-8 SS Part Number	18-8 SS Black Oxide Part Number	17-4 PH SS Part Number	Brass Part Number
7/8-9	5	7/8	3-13/16	1-7/8	7/8	5-15/16	ZEB180-316	ZEB180	ZEB180-BLACK	ZEB180-174	ZEB180-BR
	6	7/8	4-13/16	1-7/8	7/8	6-15/16	ZEB182-316	ZEB182	ZEB182-BLACK	ZEB182-174	ZEB182-BR
1-8	6	1	4-3/4	2-3/32	1	7-3/64	ZEB186-316	ZEB186	ZEB186-BLACK	ZEB186-174	ZEB186-BR
	8	1	6	2-3/32	1	9-3/64	ZEB188-316	ZEB188	ZEB188-BLACK	ZEB188-174	ZEB188-BR
1-1/4-7	6	1-1/4	4-1/4	2-21/32	1-1/4	7-21/64	ZEB192-316	ZEB192	ZEB192-BLACK	ZEB192-174	ZEB192-BR
	8	1-1/4	6	2-21/32	1-1/4	9-21/64	ZEB194-316	ZEB194	ZEB194-BLACK	ZEB194-174	ZEB194-BR
1-1/2-6	6	1-1/2	4	3-3/32	1-1/2	7-35/64	ZEB198-316	ZEB198	ZEB198-BLACK	ZEB198-174	ZEB198-BR
	8	1-1/2	6	3-3/32	1-1/2	9-35/64	ZEB200-316	ZEB200	ZEB200-BLACK	ZEB200-174	ZEB200-BR



Rod End Bolts, Inch

Thread Size	Shank Center Lg.	ID	Thread Lg.	O'all Wd.	O'all Thickness	O'all Length	4140 Steel, Black Oxide Part Number	12L14 Steel Black Oxide Part Number
6-32	3/4	1/8	1/2	5/16	5/32	29/32	ZEB10-ALLOY-BX	—
6-32	1	1/8	3/4	5/16	5/32	1-5/32	ZEB12-ALLOY-BX	—
6-32	1-1/2	1/8	1-1/4	5/16	5/32	1-21/32	ZEB14-ALLOY-BX	—
6-32	2	1/8	1-3/4	5/16	5/32	2-5/32	ZEB16-ALLOY-BX	—
8-32	1	5/32	3/4	5/16	3/16	1-5/32	ZEB20-ALLOY-BX	—
8-32	1-1/2	5/32	1-1/4	5/16	3/16	1-21/32	ZEB22-ALLOY-BX	—
8-32	2	5/32	1-3/4	5/16	3/16	2-5/32	ZEB24-ALLOY-BX	—
10-32	1-1/2	3/16	1	1/2	5/16	1-3/4	Z0008-414	Z0008-12L
10-32	2	3/16	1-1/2	1/2	3/16	2-1/4	ZEB32-ALLOY-BX	—
10-32	3	3/16	3/4	1/2	3/16	3-1/4	Z0034-414	—
10-32	3	3/16	2-1/2	1/2	3/16	3-1/4	ZEB34-ALLOY-BX	—
1/4-20	2	3/16	1-1/2	5/8	1/4	2-5/16	ZEB40-ALLOY-BX	—
1/4-20	3	3/16	2-1/2	5/8	1/4	3-5/16	ZEB42-ALLOY-BX	—
1/4-20	2	1/4	1-1/2	5/8	1/4	2-5/16	ZEB52-ALLOY-BX	—
1/4-20	3	1/4	2-1/2	5/8	1/4	3-5/16	ZEB54-ALLOY-BX	—
1/4-28	2	1/4	1-1/2	5/8	1/4	2-5/16	ZEB66-ALLOY-BX	—
1/4-28	3	1/4	2-1/2	5/8	1/4	3-5/16	ZEB68-ALLOY-BX	—
5/16-18	2	1/4	1-1/2	11/16	5/16	2-11/32	ZEB76-ALLOY-BX	—
5/16-18	3	1/4	2-1/2	11/16	5/16	3-11/32	ZEB78-ALLOY-BX	—

Rod End Bolts – Inch



Rod End Bolts, Inch

Thread Size	Shank Center Lg.	ID	Thread Lg.	O'all Wd.	O'all Thickness	O'all Length	4140 Steel, Black Oxide Part Number	12L14 Steel Black Oxide Part Number
5/16-24	2	1/4	1-1/2	11/16	5/16	2-11/32	ZEB90-ALLOY-BX	—
5/16-24	3	1/4	2-1/2	11/16	5/16	3-11/32	ZEB92-ALLOY-BX	—
3/8-16	3	5/16	2-1/2	13/16	3/8	3-13/32	ZEB94-ALLOY-BX	—
3/8-16	4	5/16	3-1/2	13/16	3/8	4-13/32	ZEB96-ALLOY-BX	—
3/8-16	2	3/8	1-1/2	13/16	3/8	2-13/32	ZEB104-ALLOY-BX	—
3/8-24	5	3/8	4-1/2	13/16	3/8	5-13/32	ZEB118-ALLOY-BX	—
1/2-13	2-1/2	1/2	1-7/8	1-1/32	1/2	3-1/64	ZEB126-ALLOY-BX	—



Rod End Bolts, Inch

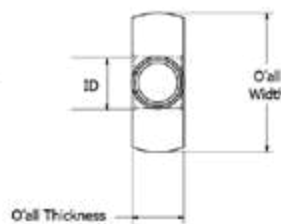
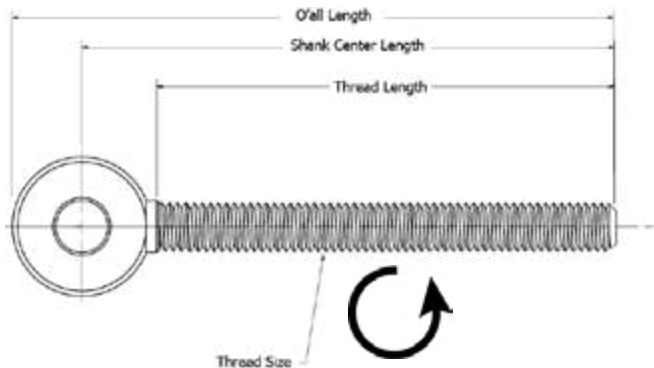
Thread Size	Shank Center Lg.	ID	Thread Lg.	O'all Wd.	O'all Thickness	O'all Length	Aluminum, Red Andodized Part Number
1/4-20	2	3/16	3/4	1/2	9/32	2-1/4	Z0010
1/4-20	4	3/16	3/4	1/2	9/32	4-1/4	Z0011
5/16-18	3	1/4	1-1/2	5/8	11/32	3-5/16	Z0013
5/16-18	4	1/4	1-1/2	5/8	11/32	4-5/16	Z0014
3/8-16	3	3/8	1-1/2	3/4	7/16	3-3/8	Z0016
3/8-16	4	3/8	1-1/2	3/4	7/16	4-3/8	Z0017
3/8-16	5	3/8	1-1/2	3/4	7/16	5-3/8	Z0018
1/2-13	3-3/4	3/8	1-1/2	1	9/16	4-1/4	Z0020
1/2-13	4	3/8	1-1/2	1	9/16	4-1/2	Z0021
1/2-13	5	3/8	1-1/2	1	9/16	5-1/2	Z0022
5/8-11	4-1/2	5/8	2	1-1/4	11/16	5-1/8	Z0025
5/8-11	5	5/8	2	1-1/4	11/16	5-5/8	Z0026
5/8-11	6	5/8	2	1-1/4	11/16	6-5/8	Z0027
3/4-10	4-1/2	3/4	2	1-1/2	13/16	5-1/4	Z0030
3/4-10	5	5/8	1-3/4	1-1/2	13/16	5-3/4	Z0031
3/4-10	6	3/4	2-1/2	1-1/2	13/16	6-3/4	Z0032

Left Hand Rod End Bolts — Inch 18-8 Stainless Steel



Product Information

Rod End Bolts also known as swing bolts, pivoting bolts and hinge eyebolts. These threaded bolts can be cut to length to fit your application. Left-hand threads tightens when turned counterclockwise. Class 2A-UNC. Made from DFARS & RoHs compliant 303 stainless steel.



Left Hand Rod End Bolts, Inch

Thread Size	Shank Center Lg.	ID	Thread Lg.	O'all Wd.	O'all Thickness	O'all Length	18-8 SS Part Number
6-32	3/4	1/8	1/2	5/16	5/32	29/32	ZEB10-LH
6-32	1	1/8	3/4	5/16	5/32	1-5/32	ZEB12-LH
6-32	1-1/2	1/8	1-1/4	5/16	5/32	1-21/32	ZEB14-LH
6-32	2	1/8	1-3/4	5/16	5/32	2-5/32	ZEB16-LH
8-32	1	5/32	3/4	5/16	3/16	1-5/32	ZEB20-LH
8-32	1-1/2	5/32	1-1/4	5/16	3/16	1-21/32	ZEB22-LH
8-32	2	5/32	1-3/4	5/16	3/16	2-5/32	ZEB24-LH
10-32	1-1/2	3/16	1	1/2	5/16	1-3/4	ZEB30-LH
10-32	2	3/16	1-1/2	1/2	3/16	2-1/4	ZEB32-LH
10-32	3	3/16	2-1/2	1/2	3/16	3-1/4	ZEB34-LH
1/4-20	2	3/16	1-1/2	5/8	1/4	2-5/16	ZEB40-LH
1/4-20	3	3/16	2-1/2	5/8	1/4	3-5/16	ZEB42-LH
1/4-20	1-1/2	1/4	1-1/8	5/8	1/4	1-27/32	ZEB50-LH
1/4-20	2	1/4	1-1/2	5/8	1/4	2-5/16	ZEB52-LH
1/4-20	3	1/4	2-1/2	5/8	1/4	3-5/16	ZEB54-LH
1/4-20	3-1/2	1/4	3	5/8	1/4	3-13/16	ZEB56-LH
1/4-20	5	1/4	4-1/2	5/8	1/4	5-5/16	ZEB58-LH
1/4-20	6	1/4	5-5/8	5/8	1/4	6-5/16	ZEB60-LH
1/4-28	2	1/4	1-1/2	5/8	1/4	2-5/16	ZEB66-LH
1/4-28	3	1/4	2-1/2	5/8	1/4	3-5/16	ZEB68-LH
1/4-28	3-1/2	1/4	3	5/8	1/4	3-13/16	ZEB70-LH
5/16-18	2	1/4	1-1/2	11/16	5/16	2-11/32	ZEB76-LH
5/16-18	3	1/4	2-1/2	11/16	5/16	3-11/32	ZEB78-LH

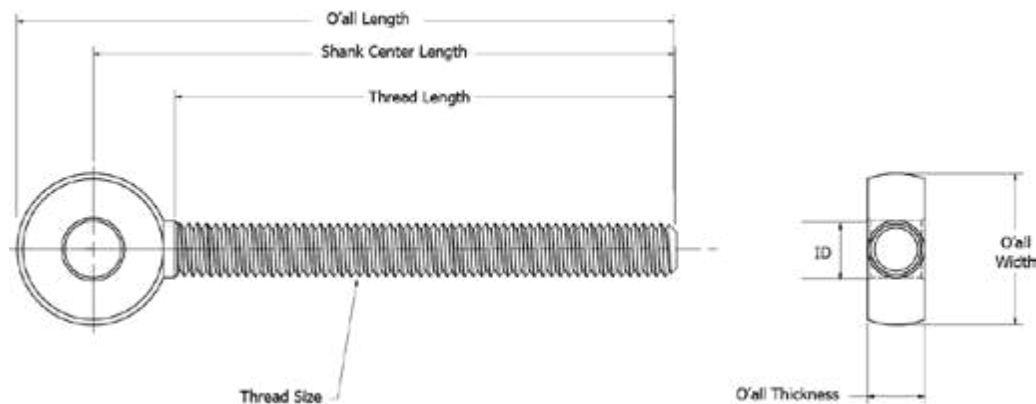
Left Hand Rod End Bolts — Inch



Thread Size	Shank Center Lg.	ID	Thread Lg.	O'all Wd.	O'all Thickness	O'all Length	18-8 SS Part Number
5/16-18	1-1/2	5/16	1-1/16	11/16	5/16	1-27/32	ZEB84-LH
5/16-18	3-1/2	5/16	3-1/16	11/16	5/16	3-27/32	ZEB86-LH
5/16-18	6	5/16	5-9/16	11/16	5/16	6-11/32	ZEB88-LH
5/16-24	2	1/4	1-1/2	11/16	5/16	2-11/32	ZEB90-LH
5/16-24	3	1/4	2-1/2	11/16	5/16	3-11/32	ZEB92-LH
3/8-16	3	5/16	2-1/2	13/16	3/8	3-13/32	ZEB94-LH
3/8-16	4	5/16	3-1/2	13/16	3/8	4-13/32	ZEB96-LH
3/8-16	2	3/8	1-1/2	13/16	3/8	2-13/32	ZEB104-LH
3/8-16	3-1/2	3/8	3	13/16	3/8	3-29/32	ZEB106-LH
3/8-16	5	3/8	4-1/2	13/16	3/8	5-13/32	ZEB108-LH
3/8-16	6	3/8	5-1/2	13/16	3/8	6-13/32	ZEB110-LH
3/8-24	3-1/2	3/8	3	13/16	3/8	3-29/32	ZEB116-LH
3/8-24	5	3/8	4-1/2	13/16	3/8	5-13/32	ZEB118-LH
1/2-13	2-1/2	1/2	1-7/8	1-1/32	1/2	3-1/64	ZEB126-LH
1/2-13	3-1/2	1/2	2-7/8	1-1/32	1/2	4-1/64	ZEB128-LH
1/2-13	5	1/2	4-3/16	1-1/32	1/2	5-33/64	ZEB130-LH
1/2-13	6	1/2	5-3/8	1-1/32	1/2	6-33/64	ZEB132-LH
1/2-20	3-1/2	1/2	2-7/8	1-1/32	1/2	4-1/64	ZEB138-LH
1/2-20	5	1/2	4-3/16	1-1/32	1/2	5-33/64	ZEB140-LH
5/8-11	3-1/2	5/8	2-3/4	1-5/16	5/8	4-5/32	ZEB146-LH
5/8-11	5	5/8	4-1/4	1-5/16	5/8	5-21/32	ZEB148-LH
5/8-11	6	5/8	5-1/4	1-5/16	5/8	6-21/32	ZEB150-LH
5/8-24	3-1/2	5/8	2-3/4	1-5/16	5/8	4-5/32	ZEB156-LH
5/8-24	5	5/8	4-1/4	1-5/16	5/8	5-21/32	ZEB158-LH
3/4-10	3-1/2	3/4	2-5/8	1-9/16	3/4	4-9/32	ZEB164-LH
3/4-10	5	3/4	4-1/8	1-9/16	3/4	5-25/32	ZEB166-LH
3/4-10	6	3/4	5-1/8	1-9/16	3/4	6-25/32	ZEB168-LH
3/4-16	5	3/4	4-1/8	1-9/16	3/4	5-25/32	ZEB174-LH
3/4-16	6	3/4	5-1/8	1-9/16	3/4	6-25/32	ZEB176-LH
7/8-9	5	7/8	3-13/16	1-7/8	7/8	5-15/16	ZEB180-LH
7/8-9	6	7/8	4-13/16	1-7/8	7/8	6-15/16	ZEB182-LH
1-8	6	1	4-3/4	2-3/32	1	7-3/64	ZEB186-LH
1-8	8	1	6	2-3/32	1	9-3/64	ZEB188-LH
1-1/4-7	6	1-1/4	4-1/4	2-21/32	1-1/4	7-21/64	ZEB192-LH
1-1/4-7	8	1-1/4	6	2-21/32	1-1/4	9-21/64	ZEB194-LH
1-1/2-6	6	1-1/2	4	3-3/32	1-1/2	7-35/64	ZEB198-LH
1-1/2-6	8	1-1/2	6	3-3/32	1-1/2	9-35/64	ZEB200-LH

Rod End Bolts — Metric

316 Stainless Steel
18-8 Stainless Steel | Plain | Black Oxide
17-4 PH Stainless Steel
Brass



Rod End Bolts, Metric

Thread Size	Shank Center Lg.	ID	Thread Lg. (min.)	O'all Wd.	O'all Thickness	O'all Length	AMPG 316 SS Part Number	18-8 SS Part Number
M5 x 0.8	25	5	16	12	6	31	ZEBM5X25-316	ZEBM5X25
	30	5	16	12	6	36	ZEBM5X30-316	ZEBM5X30
	35	5	21	12	6	41	ZEBM5X35-316	ZEBM5X35
	40	5	26	12	6	46	ZEBM5X40-316	ZEBM5X40
M5 x 0.8	45	5	31	12	6	51	ZEBM5X45-316	ZEBM5X45
	50	5	36	12	6	56	ZEBM5X50-316	ZEBM5X50
	60	5	46	12	6	66	ZEBM5X60-316	ZEBM5X60
M6 x 1	70	6	56	14	7	77	ZEBM6X70-316	—
	80	6	66	14	7	87	ZEBM6X80-316	—
M10 x 1.5	75	10	57	20	12	85	ZEBM10X75-316	ZEBM10X75
M12 x 1.75	130	12	107	25	14	143	ZEBM12X130-316	ZEBM12X130
M16 x 2	150	16	118	32	17	166	ZEBM16X150-316	ZEBM16X150
	160	16	133	32	17	176	ZEBM16X160-316	—
M20 x 2.5	110	18	78	40	22	130	ZEBM20X110-316	ZEBM20X110
	130	18	98	40	22	150	ZEBM20X130-316	ZEBM20X130
	150	18	118	40	22	170	ZEBM20X150-316	ZEBM20X150
M24 x 3	90	22	58	45	25	113	ZEBM24X90-316	ZEBM24X90
	100	22	68	45	25	123	ZEBM24X100-316	ZEBM24X100
	120	22	88	45	25	143	ZEBM24X120-316	ZEBM24X120
	140	22	108	45	25	163	ZEBM24X140-316	ZEBM24X140
M24 x 3	150	22	118	45	25	173	ZEBM24X150-316	ZEBM24X150
	160	22	128	45	25	183	ZEBM24X160-316	ZEBM24X160

Rod End Bolts — **Metric**

Thread Size	Shank Center Lg.	ID	Thread Lg. (min)	O'all Wd.	O'all Thick.	O'all Length	18-8 SS, Black Oxide Part Number	17-4 PH SS Part Number	AMPG Brass Part Number	Steel Black Oxide Part Number
M5 x 0.8	25	5	16	12	6	31	ZEBM5X25-BLACK	ZEBM5X25-174	ZEBM5X25-BR	ZEBM5X25-STL-BX
	30	5	16	12	6	36	ZEBM5X30-BLACK	ZEBM5X30-174	ZEBM5X30-BR	ZEBM5X30-STL-BX
	35	5	21	12	6	41	ZEBM5X35-BLACK	ZEBM5X35-174	ZEBM5X35-BR	ZEBM5X35-STL-BX
	40	5	26	12	6	46	ZEBM5X40-BLACK	ZEBM5X40-174	ZEBM5X40-BR	ZEBM5X40-STL-BX
M5 x 0.8	45	5	31	12	6	51	ZEBM5X45-BLACK	ZEBM5X45-174	ZEBM5X45-BR	ZEBM5X45-STL-BX
M5 x 0.8	50	5	36	12	6	56	ZEBM5X50-BLACK	ZEBM5X50-174	ZEBM5X50-BR	ZEBM5X50-STL-BX
	60	5	46	12	6	66	ZEBM5X60-BLACK	ZEBM5X60-174	ZEBM5X60-BR	ZEBM5X60-STL-BX
M6 x 1	30	6	18	14	7	37	ZEBM6X30-BLACK	ZEBM6X30-174	ZEBM6X30-BR	ZEBM6X30-STL-BX
	35	6	22	14	7	42	ZEBM6X35-BLACK	ZEBM6X35-174	ZEBM6X35-BR	ZEBM6X35-STL-BX
	40	6	26	14	7	47	ZEBM6X40-BLACK	ZEBM6X40-174	ZEBM6X40-BR	ZEBM6X40-STL-BX
	45	6	31	14	7	52	ZEBM6X45-BLACK	ZEBM6X45-174	ZEBM6X45-BR	ZEBM6X45-STL-BX
M6 x 1	50	6	36	14	7	57	ZEBM6X50-BLACK	ZEBM6X50-174	ZEBM6X50-BR	—
	60	6	46	14	7	67	ZEBM6X60-BLACK	ZEBM6X60-174	ZEBM6X60-BR	—
	70	6	56	14	7	77	ZEBM6X70-BLACK	ZEBM6X70-174	ZEBM6X70-BR	ZEBM6X70-STL-BX
	80	6	66	14	7	87	ZEBM6X80-BLACK	ZEBM6X80-174	ZEBM6X80-BR	—
8 x 1.25	30	8	22	18	9	39	ZEBM8X30-BLACK	ZEBM8X30-174	ZEBM8X30-BR	ZEBM8X30-STL-BX
	35	8	22	18	9	44	ZEBM8X35-BLACK	ZEBM8X35-174	ZEBM8X35-BR	ZEBM8X35-STL-BX
	40	8	24	18	9	49	ZEBM8X40-BLACK	ZEBM8X40-174	—	ZEBM8X40-STL-BX
	45	8	29	18	9	54	ZEBM8X45-BLACK	ZEBM8X45-174	ZEBM8X45-BR	ZEBM8X45-STL-BX
8 x 1.25	50	8	34	18	9	59	ZEBM8X50-BLACK	ZEBM8X50-174	—	—
	60	8	44	18	9	69	ZEBM8X60-BLACK	ZEBM8X60-174	—	ZEBM8X60-STL-BX
	70	8	54	18	9	79	ZEBM8X70-BLACK	ZEBM8X70-174	—	ZEBM8X70-STL-BX
	80	8	64	18	9	89	ZEBM8X80-BLACK	ZEBM8X80-174	—	—
8 x 1.25	90	8	74	18	9	99	ZEBM8X90-BLACK	ZEBM8X90-174	ZEBM8X90-BR	ZEBM8X90-STL-BX
	100	8	84	18	9	109	ZEBM8X100-BLACK	ZEBM8X100-174	ZEBM8X100-BR	—
M10 x 1.5	40	10	26	20	12	50	ZEBM10X40-BLACK	ZEBM10X40-174	ZEBM10X40-BR	ZEBM10X40-STL-BX
	45	10	26	20	12	55	ZEBM10X45-BLACK	ZEBM10X45-174	ZEBM10X45-BR	ZEBM10X45-STL-BX
	50	10	32	20	12	60	ZEBM10X50-BLACK	ZEBM10X50-174	—	—
	60	10	42	20	12	70	ZEBM10X60-BLACK	ZEBM10X60-174	—	ZEBM10X60-STL-BX
M10 x 1.5	70	10	52	20	12	80	ZEBM10X70-BLACK	ZEBM10X70-174	—	ZEBM10X70-STL-BX
	75	10	57	20	12	85	ZEBM10X75-BLACK	ZEBM10X75-174	ZEBM10X75-BR	ZEBM10X75-STL-BX
	80	10	62	20	12	90	ZEBM10X80-BLACK	ZEBM10X80-174	—	—
	90	10	72	20	12	100	ZEBM10X90-BLACK	ZEBM10X90-174	—	ZEBM10X90-STL-BX
M10 x 1.5	100	10	82	20	12	110	ZEBM10X100-BLACK	ZEBM10X100-174	—	—
	110	10	92	20	12	120	ZEBM10X110-BLACK	ZEBM10X110-174	ZEBM10X110-BR	ZEBM10X110-STL-BX
	120	10	102	20	12	130	ZEBM10X120-BLACK	ZEBM10X120-174	ZEBM10X120-BR	ZEBM12X120-STL-BX

Rod End Bolts — Metric



Thread Size	Shank Center Lg.	ID	Thread Lg. (min)	O'all Wd.	O'all Thick.	O'all Length	18-8 SS, Black Oxide Part Number	17-4 PH SS Part Number	AMPG Brass Part Number	Steel Black Oxide Part Number
M12 x 1.75	50	12	30	25	14	63	ZEBM12X50-BLACK	ZEBM12X50-174	ZEBM12X50-BR	—
	60	12	37	25	14	73	ZEBM12X60-BLACK	ZEBM12X60-174	—	—
	70	12	47	25	14	83	ZEBM12X70-BLACK	ZEBM12X70-174	—	—
	80	12	57	25	14	93	ZEBM12X80-BLACK	ZEBM12X80-174	—	—
M12 x 1.75	90	12	67	25	14	103	ZEBM12X90-BLACK	ZEBM12X90-174	—	—
	100	12	77	25	14	113	ZEBM12X100-BLACK	ZEBM12X100-174	—	—
	110	12	87	25	14	123	ZEBM12X110-BLACK	ZEBM12X110-174	ZEBM12X110-BR	—
	120	12	97	25	14	133	ZEBM12X120-BLACK	ZEBM12X120-174	—	—
M12 x 1.75	130	12	107	25	14	143	ZEBM12X130-BLACK	ZEBM12X130-174	—	—
M16 x 2	60	16	38	32	17	76	ZEBM16X60-BLACK	ZEBM16X60-174	ZEBM16X160-BR	ZEBM16X60-STL-BX
	70	16	43	32	17	86	ZEBM16X70-BLACK	ZEBM16X70-174	—	—
	80	16	53	32	17	96	ZEBM16X80-BLACK	ZEBM16X80-174	—	ZEBM16X80-STL-BX
	90	16	63	32	17	106	ZEBM16X90-BLACK	ZEBM16X90-174	—	ZEBM16X90-STL-BX
M16 x 2	100	16	73	32	17	116	ZEBM16X100-BLACK	ZEBM16X100-174	—	—
	110	16	83	32	17	126	ZEBM16X110-BLACK	ZEBM16X110-174	—	ZEBM16X110-STL-BX
	120	16	93	32	17	136	ZEBM16X120-BLACK	ZEBM16X120-174	—	ZEBM16X120-STL-BX
	130	16	103	32	17	146	ZEBM16X130-BLACK	ZEBM16X130-174	—	ZEBM16X130-STL-BX
M16 x 2	140	16	113	32	17	156	ZEBM16X140-BLACK	ZEBM16X140-174	—	—
	150	16	118	32	17	166	ZEBM16X150-BLACK	ZEBM16X150-174	—	ZEBM16X150-STL-BX
	160	16	133	32	17	176	ZEBM16X160-BLACK	ZEBM16X160-174	—	—
M20 x 2.5	70	18	38	40	22	90	ZEBM20X70-BLACK	ZEBM20X70-174	ZEBM20X70-BR	ZEBM20X70-STL-BX
	80	18	48	40	22	100	ZEBM20X80-BLACK	ZEBM20X80-174	—	ZEBM20X80-STL-BX
	90	18	58	40	22	110	ZEBM20X90-BLACK	ZEBM20X90-174	—	ZEBM20X90-STL-BX
	100	18	68	40	22	120	ZEBM20X100-BLACK	ZEBM20X100-174	—	—
M20 x 2.5	110	18	78	40	22	130	ZEBM20X110-BLACK	ZEBM20X110-174	—	ZEBM20X110-STL-BX
M20 x 2.5	120	18	88	40	22	140	ZEBM20X120-BLACK	ZEBM20X120-174	—	—
	130	18	98	40	22	150	ZEBM20X130-BLACK	ZEBM20X130-174	—	ZEBM20X130-STL-BX
	140	18	108	40	22	160	ZEBM20X140-BLACK	ZEBM20X140-174	—	—
	150	18	118	40	22	170	ZEBM20X150-BLACK	ZEBM20X150-174	ZEBM20X150-BR	ZEBM20X150-STL-BX
M20 x 2.5	160	18	128	40	22	180	ZEBM20X160-BLACK	ZEBM20X160-174	ZEBM20X160-BR	—
M24 x 3	90	22	58	45	25	113	ZEBM24X90-BLACK	ZEBM24X90-174	ZEBM24X90-BR	ZEBM24X90-STL-BX
	100	22	68	45	25	123	ZEBM24X100-BLACK	ZEBM24X100-174	ZEBM24X100-BR	ZEBM24X100-STL-BX
	120	22	88	45	25	143	ZEBM24X120-BLACK	ZEBM24X120-174	ZEBM24X120-BR	ZEBM24X120-STL-BX
	140	22	108	45	25	163	ZEBM24X140-BLACK	ZEBM24X140-174	ZEBM24X140-BR	ZEBM24X140-STL-BX
M24 x 3	150	22	118	45	25	173	ZEBM24X150-BLACK	ZEBM24X150-174	ZEBM24X150-BR	ZEBM24X150-STL-BX
	160	22	128	45	25	183	ZEBM24X160-BLACK	ZEBM24X160-174	ZEBM24X160-BR	ZEBM24X160-STL-BX

Left Hand Rod End Bolts — Metric

18-8 Stainless Steel | Black Oxide
Steel 12L14 | Black Oxide

Left Hand Rod End Bolts, Metric

Thread Size	Thread Direction	Shank Center Lg.	ID	Thread Lg. (min)	O'all Wd.	O'all Thickness	O'all Length	AMPG 18-8 SS, Left Hand Threads Part Number	Steel, Black Oxide Part Number
M5 x 0.8	Left	25	5	16	12	6	31	ZEBM5X25-LH	ZEBM5X25LH-STL-BX
		30	5	16	12	6	36	ZEBM5X30-LH	ZEBM5X30LH-STL-BX
		35	5	21	12	6	41	ZEBM5X35-LH	ZEBM5X35LH-STL-BX
		40	5	26	12	6	46	ZEBM5X40-LH	ZEBM5X40LH-STL-BX
M5 x 0.8	Left	45	5	31	12	6	51	ZEBM5X45-LH	ZEBM5X45LH-STL-BX
		50	5	36	12	6	56	ZEBM5X50-LH	ZEBM5X50LH-STL-BX
		60	5	46	12	6	66	ZEBM5X60-LH	ZEBM5X60LH-STL-BX
M6 x 1	Left	30	6	18	14	7	37	ZEBM6X30-LH	ZEBM6X30LH-STL-BX
		35	6	22	14	7	42	ZEBM6X35-LH	ZEBM6X35LH-STL-BX
		40	6	26	14	7	47	ZEBM6X40-LH	ZEBM6X40LH-STL-BX
		45	6	31	14	7	52	ZEBM6X45-LH	ZEBM6X45LH-STL-BX
M6 x 1	Left	50	6	36	14	7	57	ZEBM6X50-LH	ZEBM6X50LH-STL-BX
		60	6	46	14	7	67	ZEBM6X60-LH	ZEBM6X60LH-STL-BX
		70	6	56	14	7	77	ZEBM6X70-LH	ZEBM6X70LH-STL-BX
		80	6	66	14	7	87	ZEBM6X80-LH	ZEBM6X80LH-STL-BX
8 x 1.25	Left	30	8	22	18	9	39	ZEBM8X30-LH	ZEBM8X30LH-STL-BX
		35	8	22	18	9	44	ZEBM8X35-LH	ZEBM8X35LH-STL-BX
		40	8	24	18	9	49	ZEBM8X40-LH	ZEBM8X40LH-STL-BX
		45	8	29	18	9	54	ZEBM8X45-LH	ZEBM8X45LH-STL-BX
8 x 1.25	Left	50	8	34	18	9	59	ZEBM8X50-LH	ZEBM8X50LH-STL-BX
		60	8	44	18	9	69	ZEBM8X60-LH	ZEBM8X60LH-STL-BX
		70	8	54	18	9	79	ZEBM8X70-LH	ZEBM8X70LH-STL-BX
		80	8	64	18	9	89	ZEBM8X80-LH	ZEBM8X80LH-STL-BX
8 x 1.25	Left	90	8	74	18	9	99	ZEBM8X90-LH	ZEBM8X90LH-STL-BX
		100	8	84	18	9	109	ZEBM8X100-LH	ZEBM8X100LH-STL-BX
M10 x 1.5	Left	40	10	26	20	12	50	ZEBM10X40-LH	ZEBM10X40LH-STL-BX
		45	10	26	20	12	55	ZEBM10X45-LH	ZEBM10X45LH-STL-BX
		50	10	32	20	12	60	ZEBM10X50-LH	ZEBM10X50LH-STL-BX
		60	10	42	20	12	70	ZEBM10X60-LH	ZEBM10X60LH-STL-BX
M10 x 1.5	Left	70	10	52	20	12	80	ZEBM10X70-LH	ZEBM10X70LH-STL-BX
		75	10	57	20	12	85	ZEBM10X75-LH	ZEBM10X75LH-STL-BX
		80	10	62	20	12	90	ZEBM10X80-LH	ZEBM10X80LH-STL-BX
		90	10	72	20	12	100	ZEBM10X90-LH	ZEBM10X90LH-STL-BX
M10 x 1.5	Left	100	10	82	20	12	110	ZEBM10X100-LH	ZEBM10X100LH-STL-BX
		110	10	92	20	12	120	ZEBM10X110-LH	ZEBM10X110LH-STL-BX
		120	10	102	20	12	130	ZEBM10X120-LH	ZEBM10X120LH-STL-BX

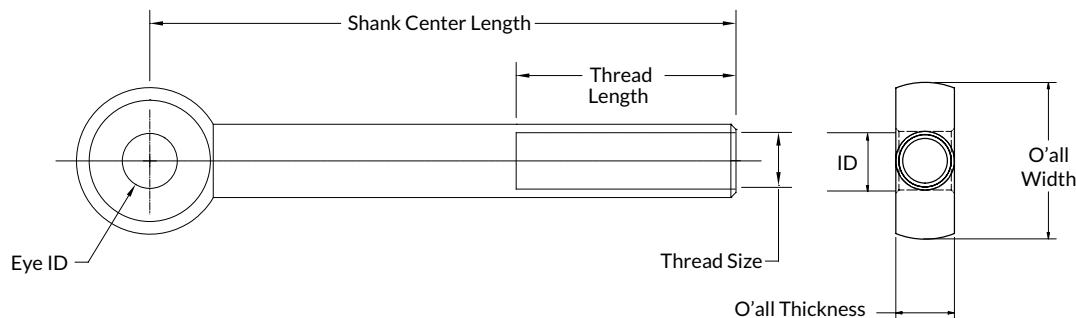
Internally Threaded Solid Rod Ends — Inch

18-8 Stainless Steel | Black Oxide
Steel 12L14 | Black Oxide



Product Information

Rod End Bolts also known as swing bolts, pivoting bolts and hinge eyebolts. These have an internal thread.



Stainless Internally Threaded Rod Ends, Inch

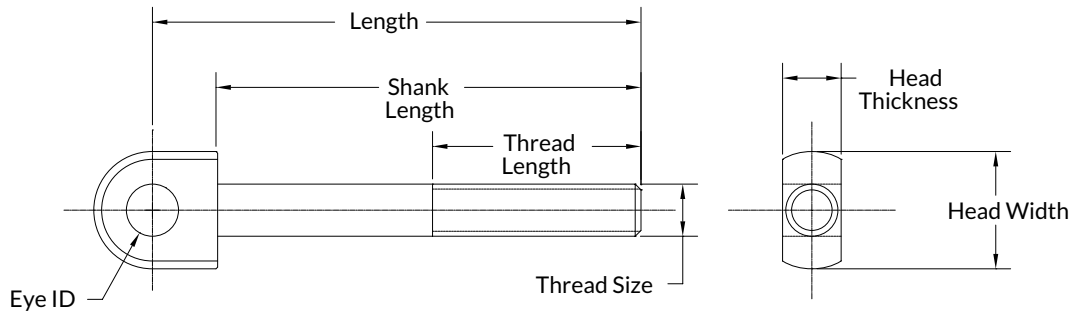
Thread Size	Shank Outside Diameter	Shank Center Length	Eye ID	O'all Width	O'all Thickness	O'all Length	Thread Length	18-8 SS Part Number
1/4-20	3/8	2	3/16	1/2	9/32	2-1/4	3/4	Z0040SS
3/8-16	5/8	3	3/8	3/4	7/16	3-3/8	1	Z0041SS
1/2-13	3/4	3-3/4	3/8	1	9/16	4-1/4	1	Z0042SS
1/2-13	3/4	4	3/8	1	9/16	4-1/2	1	Z0043SS
5/8-11	7/8	4-1/2	5/8	1-1/4	11/16	5-1/8	1	Z0044SS
5/8-11	7/8	5	5/8	1-1/4	11/16	5-5/8	1	Z0045SS
5/8-11	7/8	6	5/8	1-1/4	11/16	6-5/8	1-1/2	Z0046SS
3/4-10	1	4-1/2	3/4	1-1/2	13/16	5-1/4	1	Z0047SS

Steel Internally Threaded Rod Ends, Inch

Thread Size	Shank Outside Diameter	Shank Center Length	Eye ID	O'all Width	O'all Thickness	O'all Length	Thread Length	Steel, Black Oxide Part Number
1/4-20	3/8	2	3/16	1/2	9/32	2-1/4	3/4	Z0040
1/4-20	3/8	2	1/4	1/2	9/32	2-1/4	3/4	Z0038
3/8-16	5/8	3	3/8	3/4	7/16	3-3/8	1	Z0041
1/2-13	3/4	3-3/4	3/8	1	9/16	3-1/4	1	Z0042
1/2-13	3/4	3-3/4	1/2	1	9/16	3-1/4	1	Z0039
1/2-13	3/4	4	3/8	1	9/16	4-1/2	1	Z0043
5/8-11	7/8	4-1/2	5/8	1-1/4	11/16	5-1/8	1	Z0044
5/8-11	7/8	5	5/8	1-1/4	11/16	5-5/8	1	Z0045
5/8-11	7/8	6	5/8	1-1/4	11/16	6-5/8	1-1/2	Z0046
3/4-10	1	4-1/2	3/4	1-1/2	13/16	5-1/4	1	Z0047

Externally Threaded Latch Bolts – Metric

Steel 12L14 | Black Oxide



Latch Bolts, Metric

Thread Size	Length	Eye ID	Head Width	Head Thickness	Thread Length	Shank Length	Steel, Black Oxide Part Number
M8	75	8	18	9	32	65	Z0050
M8	100	8	18	9	32	90	Z0051
M10	75	10	20	12	40	64	Z0053
M10	100	10	20	12	40	89	Z0054
M16	75	16	32	17	40	57	Z0056
M16	100	16	32	17	40	83	Z0057

Pull Dowels – Inch

Low Carbon Steel | Case Hardened



Product Information

Designed with a flat on the side to release trapped air in blind holes. Case Hardened to .005-.010 Depth. O.D. Tolerance: +.0001"– +.0003".



Pull Dowels, Inch

Diameter	Length	Thread Size	Thread Depth	Steel Part Number
1/4	3/4	8-32	3/8	Z1258
	1			Z1260
	1-1/4			Z1262
	1-1/2			Z1264
1/4	2	8-32	3/8	Z1266
	3/4			Z1250
5/16	1	10-32	1/4	Z1200
	1-1/4			Z1202
	1-1/2			Z1204
	2			Z1252
3/8	1	10-32	3/8	Z1206
	1-1/4			Z1208
	1-1/2			Z1210
	2			Z1212
3/8	2-1/2	10-32	3/8	Z1254
	3			Z1214
7/16	1-1/2	1/4-20	3/8	Z1216

Diameter	Length	Thread Size	Thread Depth	Steel Part Number
7/16	2	1/4-20	3/8	Z1218
	1			Z1220
1/2	1-1/4	1/4-20	1/2	Z1222
	1-1/2			Z1224
	1-3/4			Z1256
	2			Z1226
1/2	2-1/2	1/4-20	1/2	Z1228
	3			Z1230
	1-1/2			Z1232
	2			Z1234
5/8	2-1/2	5/16-18	1/2	Z1236
	3			Z1238
	2			Z1240
3/4	2-1/2	3/8-16	1/2	Z1242
	3			Z1244
	2-1/2			Z1246
1	3	3/8-16	1/2	Z1248
	3			Z1248

Threaded Rods and Studs — Inch

18-8 SS, 316 SS, 17-4 PH SS, Alloy 20 SS, 410 SS, Aluminum, Brass, Silicon Bronze, NI Alloy, CU NI

Product Information

AMPG's Threaded Rods and Studs are versatile fasteners designed for anchoring, connecting, and hanging components in various applications. A fully threaded stud is a fastener with threads along its entire length, and a fully threaded rod is a long, continuous bar with threads from end to end. These fasteners are crucial for joining or supporting components and are used in applications ranging from mounting I-beams to suspending light fixtures. Thread Fit is 2A with right hand threads.

Stainless Steel

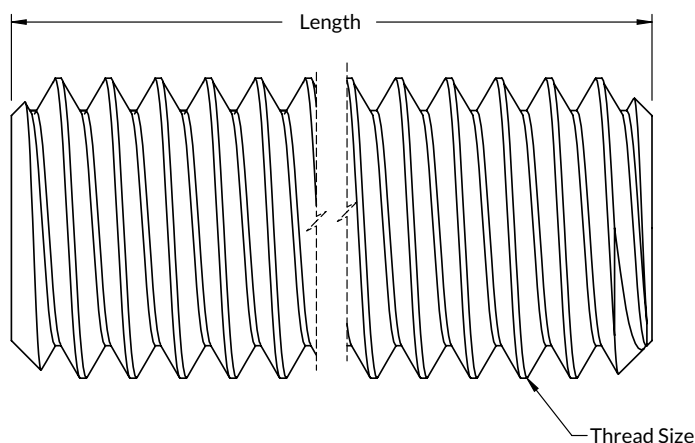
- Corrosion Resistant 18-8 SS
- Superior-Corrosion Resistant 316 SS
- Ultra-Corrosion Resistant Alloy 20 is a nickel-iron-chromium "super" stainless steel developed to resist sulfuric acid and chloride stress corrosion cracking. Good mechanical properties at elevated temperatures, up to approx. 930°F. Applications include tanks, valve & pump parts, food processing equipment, fasteners, and fittings. May be mildly magnetic.
- Wear-Resistant 410 SS offers a good balance of high strength and hardness (which can be adjusted with heat treatment) and moderate corrosion resistance in mild environments. Often used for fasteners and valves. Wear resistant and magnetic material.
- Higher-Strength 17-4PH SS
- Higher Temperature-Resistant A286 SS

Aluminum

- Lightweight & Corrosion-Resistant Aluminum 6061

Copper-Nickel Alloys

- Corrosion-Resistant Brass is a softer material approximately two-thirds copper and one-third zinc. Provides good resistance to rust and atmospheric corrosion. Friction-resistant material is used for gears, bearings, fasteners, and valves. Brass 360 has the highest lead content of all brass alloys. Nonmagnetic.
- Saltwater-Resistant Silicon Bronze is 30% stronger than brass & provides corrosion resistance to salt water, gases, and sewage. ASTM C65100 material is an alloy noted for its braze ability, strength, corrosion resistance & electrical properties. Most weldable copper alloy and electrically conductive. Silicon bronze is used for a wide range of applications, including marine hardware, fasteners, electrical components, and architectural features. Nonmagnetic.
- Marine Grade Copper-Nickel, also known as Cupronickel, is composed of approximately 90% copper & 10% nickel exhibits excellent resistance to seawater, stress-corrosion cracking, making it a preferred choice for marine applications. Its higher thermal conductivity makes it ideal for heat exchangers, ship components and condenser tubes. Nonmagnetic.
- Chemical-Resistant Nickel-Copper 405 (Monel) is a high strength & high temperature resistant material with exceptional corrosion resistance in seawater and acidic environments. Marine industry material used for propellers, heat exchangers, components, and valves. May be mildly magnetic.



Threaded Rods and Studs — Inch



0-80 Thread Size

Lg	18-8 SS Part Number	316 SS Part Number	17-4PH SS Part Number	A286 SS Part Number	Alloy 20 SS Part Number	410 SS Part Number
1/2	STUD080X08SS-1	STUD080X08-316	STUD744080F08	STUD286080F08	STUD620080F08	STUD410080F08
3/4	STUD080X12SS-1	STUD080X12-316	STUD744080F12	STUD286080F12	STUD620080F12	STUD410080F12
1	STUD601080F16	STUD080X16-316	STUD744080F16	STUD286080F16	STUD620080F16	STUD410080F16
1-1/4	STUD601080F20	STUD602080F20	STUD744080F20	STUD286080F20	STUD620080F20	STUD410080F20
1-1/2	STUD080X24SS	STUD080X24-316	STUD744080F24	STUD286080F24	STUD620080F24	STUD410080F24

Lg	Aluminum Part Number	Brass Part Number	Silicon Bronze Part Number	NI Alloy 405 Part Number	CU NI Part Number
1/2	STUD080X08-6061	STUD080X08-BRASS	STUD798080F08	STUD710080F08	STUD590080F08
3/4	STUD720080F12	STUD550080F12	STUD798080F12	STUD710080F12	STUD590080F12
1	STUD080X16-6061	STUD080X16-BRASS	STUD798080F16	STUD710080F16	STUD590080F16
1-1/4	STUD720080F20	STUD550080F20	STUD798080F20	STUD710080F20	STUD590080F20
1-1/2	STUD720080F24	STUD550080F24	STUD798080F24	STUD710080F24	STUD590080F24

2-56 Thread Size

Lg	18-8 SS Part Number	316 SS Part Number	17-4PH SS Part Number	A286 SS Part Number	Alloy 20 SS Part Number	410 SS Part Number
1/2	STUD60102C08	STUD60202C08	STUD74402C08	STUD28602C08	STUD62002C08	STUD41002C08
3/4	STUD60102C12	STUD60202C12	STUD74402C12	STUD28602C12	STUD62002C12	STUD41002C12
1	STUD60102C16	STUD60202C16	STUD74402C16	STUD28602C16	STUD62002C16	STUD41002C16
1-1/4	STUD60102C20	STUD60202C20	STUD74402C20	STUD28602C20	STUD62002C20	STUD41002C20
1-1/2	STUD60102C24	STUD60202C24	STUD74402C24	STUD28602C24	STUD62002C24	STUD41002C24
2	STUD60102C32	STUD60202C32	STUD74402C32	STUD28602C32	STUD62002C32	STUD41002C32

Lg	Aluminum Part Number	Brass Part Number	Silicon Bronze Part Number	NI Alloy 405 Part Number	CU NI Part Number
1/2	STUD72002C08	STUD55002C08	STUD79802C08	STUD71002C08	STUD59002C08
3/4	STUD72002C12	STUD55002C12	STUD79802C12	STUD71002C12	STUD59002C12
1	STUD72002C16	STUD55002C16	STUD79802C16	STUD71002C16	STUD59002C16
1-1/4	STUD72002C20	STUD55002C20	STUD79802C20	STUD71002C20	STUD59002C20
1-1/2	STUD72002C24	STUD55002C24	STUD79802C24	STUD71002C24	STUD59002C24
2	STUD72002C32	STUD55002C32	STUD79802C32	STUD71002C32	STUD59002C32

Threaded Rods and Studs – Inch



3-48 Thread Size

Lg	18-8 SS Part Number	316 SS Part Number	17-4PH SS Part Number	A286 SS Part Number	Alloy 20 SS Part Number	410 SS Part Number
1	STUD60103C16	STUD60203C16	STUD74403C16	STUD28603C16	STUD62003C16	STUD41003C16
1-1/2	STUD60103C24	STUD60203C24	STUD74403C24	STUD28603C24	STUD62003C24	STUD41003C24
2	STUD60103C32	STUD60203C32	STUD74403C32	STUD28603C32	STUD62003C32	STUD41003C32

Lg	Aluminum Part Number	Brass Part Number	Silicon Bronze Part Number	NI Alloy 405 Part Number	CU NI Part Number
1	STUD72003C16	STUD55003C16	STUD79803C16	STUD71003C16	STUD59003C16
1-1/2	STUD72003C24	STUD55003C24	STUD79803C24	STUD71003C24	STUD59003C24
2	STUD72003C32	STUD55003C32	STUD79803C32	STUD71003C32	STUD59003C32

4-40 Thread Size

Lg	18-8 SS Part Number	316 SS Part Number	17-4PH SS Part Number	A286 SS Part Number	Alloy 20 SS Part Number	410 SS Part Number
1/2	STUD60104C08	STUD60204C08	STUD74404C08	STUD28604C08	STUD62004C08	STUD41004C08
3/4	STUD60104C12	STUD60204C12	STUD74404C12	STUD28604C12	STUD62004C12	STUD41004C12
1	STUD60104C16	STUD60204C16	STUD74404C16	STUD28604C16	STUD62004C16	STUD41004C16
1-1/4	STUD60104C20	STUD60204C20	STUD74404C20	STUD28604C20	STUD62004C20	STUD41004C20
1-1/2	STUD60104C24	STUD60204C24	STUD74404C24	STUD28604C24	STUD62004C24	STUD41004C24
2	STUD60104C32	STUD60204C32	STUD74404C32	STUD28604C32	STUD62004C32	STUD41004C32
2-1/2	STUD60104C40	STUD60204C40	STUD74404C40	STUD28604C40	STUD62004C40	STUD41004C40
3	STUD60104C48	STUD60204C48	STUD74404C48	STUD28604C48	STUD62004C48	STUD41004C48
1 Ft	ROD60104C001	ROD60204C001	ROD74404C001	ROD28604C001	ROD62004C001	ROD41004C001
3 Ft	ROD60104C003	ROD60204C003	ROD74404C003	ROD28604C003	ROD62004C003	ROD41004C003

Lg	Aluminum Part Number	Brass Part Number	Silicon Bronze Part Number	NI Alloy 405 Part Number	CU NI Part Number
1/2	STUD72004C08	STUD55004C08	STUD79804C08	STUD71004C08	STUD59004C08
3/4	STUD72004C12	STUD55004C12	STUD79804C12	STUD71004C12	STUD59004C12
1	STUD72004C16	STUD55004C16	STUD79804C16	STUD71004C16	STUD59004C16
1-1/4	STUD72004C20	STUD55004C20	STUD79804C20	STUD71004C20	STUD59004C20
1-1/2	STUD72004C24	STUD55004C24	STUD79804C24	STUD71004C24	STUD59004C24
2	STUD72004C32	STUD55004C32	STUD79804C32	STUD71004C32	STUD59004C32
2-1/2	STUD72004C40	STUD55004C40	STUD79804C40	STUD71004C40	STUD59004C40
3	STUD72004C48	STUD55004C48	STUD79804C48	STUD71004C48	STUD59004C48
1 Ft	ROD72004C001	ROD55004C001	ROD79804C001	ROD71004C001	ROD59004C001
3 Ft	ROD72004C003	ROD55004C003	ROD79804C003	ROD71004C003	ROD59004C003

Threaded Rods and Studs — Inch

5-40 Thread Size

Lg	18-8 SS Part Number	316 SS Part Number	17-4PH SS Part Number	A286 SS Part Number	Alloy 20 SS Part Number	410 SS Part Number
1	STUD60105C16	STUD60205C16	STUD74405C16	STUD28605C16	STUD62005C16	STUD41005C16
1-1/2	STUD60105C24	STUD60205C24	STUD74405C24	STUD28605C24	STUD62005C24	STUD41005C24
2	STUD60105C32	STUD60205C32	STUD74405C32	STUD28605C32	STUD62005C32	STUD41005C32
3	STUD60105C48	STUD60205C48	STUD74405C48	STUD28605C48	STUD62005C48	STUD41005C48
1 Ft	ROD60105C001	ROD60205C001	ROD74405C001	ROD28605C001	ROD62005C001	ROD41005C001
3 Ft	ROD60105C003	ROD60205C003	ROD74405C003	ROD28605C003	ROD62005C003	ROD41005C003

Lg	Aluminum Part Number	Brass Part Number	Silicon Bronze Part Number	NI Alloy 405 Part Number	CU NI Part Number
1	STUD72005C16	STUD55005C16	STUD79805C16	STUD71005C16	STUD59005C16
1-1/2	STUD72005C24	STUD55005C24	STUD79805C24	STUD71005C24	STUD59005C24
2	STUD72005C32	STUD55005C32	STUD79805C32	STUD71005C32	STUD59005C32
3	STUD72005C48	STUD55005C48	STUD79805C48	STUD71005C48	STUD59005C48
1 Ft	ROD72005C001	ROD55005C001	ROD79805C001	ROD71005C001	ROD59005C001
3 Ft	ROD72005C003	ROD55005C003	ROD79805C003	ROD71005C003	ROD59005C003

6-32 Thread Size

Lg	18-8 SS Part Number	316 SS Part Number	17-4PH SS Part Number	A286 SS Part Number	Alloy 20 SS Part Number	410 SS Part Number
1/2	STUD60106C08	STUD60206C08	STUD74406C08	STUD28606C08	STUD62006C08	STUD41006C08
3/4	STUD60106C12	STUD60206C12	STUD74406C12	STUD28606C12	STUD62006C12	STUD41006C12
1	STUD60106C16	STUD60206C16	STUD74406C16	STUD28606C16	STUD62006C16	STUD41006C16
1-1/4	STUD60106C20	STUD60206C20	STUD74406C20	STUD28606C20	STUD62006C20	STUD41006C20
1-1/2	STUD60106C24	STUD60206C24	STUD74406C24	STUD28606C24	STUD62006C24	STUD41006C24
2	STUD60106C32	STUD60206C32	STUD74406C32	STUD28606C32	STUD62006C32	STUD41006C32
2-1/2	STUD60106C40	STUD60206C40	STUD74406C40	STUD28606C40	STUD62006C40	STUD41006C40
3	STUD60106C48	STUD60206C48	STUD74406C48	STUD28606C48	STUD62006C48	STUD41006C48
4	STUD60106C64	STUD60206C64	STUD74406C64	STUD28606C64	STUD62006C64	STUD41006C64
1 Ft	ROD60106C001	ROD60206C001	ROD74406C001	ROD28606C001	ROD62006C001	ROD41006C001
3 Ft	ROD60106C003	ROD60206C003	ROD74406C003	ROD28606C003	ROD62006C003	ROD41006C003

Lg	Aluminum Part Number	Brass Part Number	Silicon Bronze Part Number	NI Alloy 405 Part Number	CU NI Part Number
1/2	STUD72006C08	STUD55006C08	STUD79806C08	STUD71006C08	STUD59006C08
3/4	STUD72006C12	STUD55006C12	STUD79806C12	STUD71006C12	STUD59006C12
1	STUD72006C16	STUD55006C16	STUD79806C16	STUD71006C16	STUD59006C16
1-1/4	STUD72006C20	STUD55006C20	STUD79806C20	STUD71006C20	STUD59006C20
1-1/2	STUD72006C24	STUD55006C24	STUD79806C24	STUD71006C24	STUD59006C24
2	STUD72006C32	STUD55006C32	STUD79806C32	STUD71006C32	STUD59006C32
2-1/2	STUD72006C40	STUD55006C40	STUD79806C40	STUD71006C40	STUD59006C40
3	STUD72006C48	STUD55006C48	STUD79806C48	STUD71006C48	STUD59006C48
4	STUD72006C64	STUD55006C64	STUD79806C64	STUD71006C64	STUD59006C64
1 Ft	ROD72006C001	ROD55006C001	ROD79806C001	ROD71006C001	ROD59006C001
3 Ft	ROD72006C003	ROD55006C003	ROD79806C003	ROD71006C003	ROD59006C003

Threaded Rods and Studs — Inch



8-32 Thread Size

Lg	18-8 SS Part Number	316 SS Part Number	17-4PH SS Part Number	A286 SS Part Number	Alloy 20 SS Part Number	410 SS Part Number
1/2	STUD60108C08	STUD60208C08	STUD74408C08	STUD28608C08	STUD62008C08	STUD41008C08
3/4	STUD60108C12	STUD60208C12	STUD74408C12	STUD28608C12	STUD62008C12	STUD41008C12
1	STUD60108C16	STUD60208C16	STUD74408C16	STUD28608C16	STUD62008C16	STUD41008C16
1-1/4	STUD60108C20	STUD60208C20	STUD74408C20	STUD28608C20	STUD62008C20	STUD41008C20
1-1/2	STUD60108C24	STUD60208C24	STUD74408C24	STUD28608C24	STUD62008C24	STUD41008C24
2	STUD60108C32	STUD60208C32	STUD74408C32	STUD28608C32	STUD62008C32	STUD41008C32
2-1/2	STUD60108C40	STUD60208C40	STUD74408C40	STUD28608C40	STUD62008C40	STUD41008C40
3	STUD60108C48	STUD60208C48	STUD74408C48	STUD28608C48	STUD62008C48	STUD41008C48
4	STUD60108C64	STUD60208C64	STUD74408C64	STUD28608C64	STUD62008C64	STUD41008C64
1 Ft	ROD60108C001	ROD60208C001	ROD74408C001	ROD28608C001	ROD62008C001	ROD41008C001
3 Ft	ROD60108C003	ROD60208C003	ROD74408C003	ROD28608C003	ROD62008C003	ROD41008C003

Lg	Aluminum Part Number	Brass Part Number	Silicon Bronze Part Number	NI Alloy 405 Part Number	CU NI Part Number
1/2	STUD72008C08	STUD55008C08	STUD79808C08	STUD71008C08	STUD59008C08
3/4	STUD72008C12	STUD55008C12	STUD79808C12	STUD71008C12	STUD59008C12
1	STUD72008C16	STUD55008C16	STUD79808C16	STUD71008C16	STUD59008C16
1-1/4	STUD72008C20	STUD55008C20	STUD79808C20	STUD71008C20	STUD59008C20
1-1/2	STUD72008C24	STUD55008C24	STUD79808C24	STUD71008C24	STUD59008C24
2	STUD72008C32	STUD55008C32	STUD79808C32	STUD71008C32	STUD59008C32
2-1/2	STUD72008C40	STUD55008C40	STUD79808C40	STUD71008C40	STUD59008C40
3	STUD72008C48	STUD55008C48	STUD79808C48	STUD71008C48	STUD59008C48
4	STUD72008C64	STUD55008C64	STUD79808C64	STUD71008C64	STUD59008C64
1 Ft	ROD72008C001	ROD55008C001	ROD79808C001	ROD71008C001	ROD59008C001
3 Ft	ROD72008C003	ROD55008C003	ROD79808C003	ROD71008C003	ROD59008C003

Threaded Rods and Studs — Inch



10-24 Thread Size

Lg	18-8 SS Part Number	316 SS Part Number	17-4PH SS Part Number	A286 SS Part Number	Alloy 20 SS Part Number	410 SS Part Number
1/2	STUD10C08SS	STUD60210C08	STUD74410C08	STUD28610C08	STUD62010C08	STUD41010C08
3/4	STUD60110C12	STUD60210C12	STUD74410C12	STUD28610C12	STUD62010C12	STUD41010C12
1	STUD10C16SS	STUD60210C16	STUD74410C16	STUD28610C16	STUD62010C16	STUD41010C16
1-1/4	STUD60110C20	STUD60210C20	STUD74410C20	STUD28610C20	STUD62010C20	STUD41010C20
1-1/2	STUD60110C24	STUD60210C24	STUD74410C24	STUD28610C24	STUD62010C24	STUD41010C24
2	STUD60110C32	STUD60210C32	STUD74410C32	STUD28610C32	STUD62010C32	STUD41010C32
2-1/2	STUD60110C40	STUD60210C40	STUD74410C40	STUD28610C40	STUD62010C40	STUD41010C40
3	STUD60110C48	STUD60210C48	STUD74410C48	STUD28610C48	STUD62010C48	STUD41010C48
3-1/2	STUD60110C56	STUD60210C56	STUD74410C56	STUD28610C56	STUD62010C56	STUD41010C56
4	STUD60110C64	STUD60210C64	STUD74410C64	STUD28610C64	STUD62010C64	STUD41010C64
4-1/2	STUD60110C72	STUD60210C72	STUD74410C72	STUD28610C72	STUD62010C72	STUD41010C72
5	STUD60110C80	STUD60210C80	STUD74410C80	STUD28610C80	STUD62010C80	STUD41010C80
6	STUD60110C96	STUD60210C96	STUD74410C96	STUD28610C96	STUD62010C96	STUD41010C96
7	STUD60110C112	STUD60210C112	STUD74410C112	STUD28610C112	STUD62010C112	STUD41010C112
8	STUD60110C128	STUD60210C128	STUD74410C128	STUD28610C128	STUD62010C128	STUD41010C128
1 Ft	ROD60110C001	ROD60210C001	ROD74410C001	ROD28610C001	ROD62010C001	ROD41010C001
3 Ft	ROD60110C003	ROD60210C003	ROD74410C003	ROD28610C003	ROD62010C003	ROD41010C003

Lg	Aluminum Part Number	Brass Part Number	Silicon Bronze Part Number	NI Alloy 405 Part Number	CU NI Part Number
1/2	STUD72010C08	STUD10C08BR	STUD79810C08	STUD71010C08	STUD59010C08
3/4	STUD72010C12	STUD55010C12	STUD79810C12	STUD71010C12	STUD59010C12
1	STUD72010C16	STUD10C16BR	STUD79810C16	STUD71010C16	STUD59010C16
1-1/4	STUD72010C20	STUD55010C20	STUD79810C20	STUD71010C20	STUD59010C20
1-1/2	STUD72010C24	STUD55010C24	STUD79810C24	STUD71010C24	STUD59010C24
2	STUD72010C32	STUD55010C32	STUD79810C32	STUD71010C32	STUD59010C32
2-1/2	STUD72010C40	STUD55010C40	STUD79810C40	STUD71010C40	STUD59010C40
3	STUD72010C48	STUD55010C48	STUD79810C48	STUD71010C48	STUD59010C48
3-1/2	STUD72010C56	STUD55010C56	STUD79810C56	STUD71010C56	STUD59010C56
4	STUD72010C64	STUD55010C64	STUD79810C64	STUD71010C64	STUD59010C64
4-1/2	STUD72010C72	STUD55010C72	STUD79810C72	STUD71010C72	STUD59010C72
5	STUD72010C80	STUD55010C80	STUD79810C80	STUD71010C80	STUD59010C80
6	STUD72010C96	STUD55010C96	STUD79810C96	STUD71010C96	STUD59010C96
7	STUD72010C112	STUD55010C112	STUD79810C112	STUD71010C112	STUD59010C112
8	STUD72010C128	STUD55010C128	STUD79810C128	STUD71010C128	STUD59010C128
1 Ft	ROD72010C001	ROD55010C001	ROD79810C001	ROD71010C001	ROD59010C001
3 Ft	ROD72010C003	ROD55010C003	ROD79810C003	ROD71010C003	ROD59010C003

Threaded Rods and Studs – Inch



10-32 Thread Size

Lg	18-8 SS Part Number	316 SS Part Number	17-4PH SS Part Number	A286 SS Part Number	Alloy 20 SS Part Number	410 SS Part Number
1/2	STUD60110F08	STUD60210F08	STUD74410F08	STUD28610F08	STUD62010F08	STUD41010F08
3/4	STUD60110F12	STUD60210F12	STUD74410F12	STUD28610F12	STUD62010F12	STUD41010F12
1	STUD60110F16	STUD60210F16	STUD74410F16	STUD28610F16	STUD62010F16	STUD41010F16
1-1/4	STUD60110F20	STUD60210F20	STUD74410F20	STUD28610F20	STUD62010F20	STUD41010F20
1-1/2	STUD60110F24	STUD60210F24	STUD74410F24	STUD28610F24	STUD62010F24	STUD41010F24
2	STUD60110F32	STUD60210F32	STUD74410F32	STUD28610F32	STUD62010F32	STUD41010F32
2-1/2	STUD60110F40	STUD60210F40	STUD74410F40	STUD28610F40	STUD62010F40	STUD41010F40
3	STUD60110F48	STUD60210F48	STUD74410F48	STUD28610F48	STUD62010F48	STUD41010F48
3-1/2	STUD60110F56	STUD60210F56	STUD74410F56	STUD28610F56	STUD62010F56	STUD41010F56
4	STUD60110F64	STUD60210F64	STUD74410F64	STUD28610F64	STUD62010F64	STUD41010F64
4-1/2	STUD60110F72	STUD60210F72	STUD74410F72	STUD28610F72	STUD62010F72	STUD41010F72
5	STUD60110F80	STUD60210F80	STUD74410F80	STUD28610F80	STUD62010F80	STUD41010F80
6	STUD60110F96	STUD60210F96	STUD74410F96	STUD28610F96	STUD62010F96	STUD41010F96
7	STUD60110F112	STUD60210F112	STUD74410F112	STUD28610F112	STUD62010F112	STUD41010F112
8	STUD60110F128	STUD60210F128	STUD74410F128	STUD28610F128	STUD62010F128	STUD41010F128
1 Ft	ROD60110F001	ROD60210F001	ROD74410F001	ROD28610F001	ROD62010F001	ROD41010F001
3 Ft	ROD60110F003	ROD60210F003	ROD74410F003	ROD28610F003	ROD62010F003	ROD41010F003

Lg	Aluminum Part Number	Brass Part Number	Silicon Bronze Part Number	NI Alloy 405 Part Number	CU NI Part Number
1/2	STUD72010F08	STUD55010F08	STUD79810F08	STUD71010F08	STUD59010F08
3/4	STUD72010F12	STUD55010F12	STUD79810F12	STUD71010F12	STUD59010F12
1	STUD72010F16	STUD55010F16	STUD79810F16	STUD71010F16	STUD59010F16
1-1/4	STUD72010F20	STUD55010F20	STUD79810F20	STUD71010F20	STUD59010F20
1-1/2	STUD72010F24	STUD55010F24	STUD79810F24	STUD71010F24	STUD59010F24
2	STUD72010F32	STUD55010F32	STUD79810F32	STUD71010F32	STUD59010F32
2-1/2	STUD72010F40	STUD55010F40	STUD79810F40	STUD71010F40	STUD59010F40
3	STUD72010F48	STUD55010F48	STUD79810F48	STUD71010F48	STUD59010F48
3-1/2	STUD72010F56	STUD55010F56	STUD79810F56	STUD71010F56	STUD59010F56
4	STUD72010F64	STUD55010F64	STUD79810F64	STUD71010F64	STUD59010F64
4-1/2	STUD72010F72	STUD55010F72	STUD79810F72	STUD71010F72	STUD59010F72
5	STUD72010F80	STUD55010F80	STUD79810F80	STUD71010F80	STUD59010F80
6	STUD72010F96	STUD55010F96	STUD79810F96	STUD71010F96	STUD59010F96
7	STUD72010F112	STUD55010F112	STUD79810F112	STUD71010F112	STUD59010F112
8	STUD72010F128	STUD55010F128	STUD79810F128	STUD71010F128	STUD59010F128
1 Ft	ROD72010F001	ROD55010F001	ROD79810F001	ROD71010F001	ROD59010F001
3 Ft	ROD72010F003	ROD55010F003	ROD79810F003	ROD71010F003	ROD59010F003

Threaded Rods and Studs — Inch

1/4-20 Thread Size

Lg	18-8 SS Part Number	316 SS Part Number	17-4PH SS Part Number	A286 SS Part Number	Alloy 20 SS Part Number	410 SS Part Number
1/2	STUD14C08SS	STUD60214C08	STUD74414C08	STUD28614C08	STUD62014C08	STUD41014C08
3/4	STUD60114C12	STUD60214C12	STUD74414C12	STUD28614C12	STUD62014C12	STUD41014C12
1	STUD60114C16	STUD60214C16	STUD74414C16	STUD28614C16	STUD62014C16	STUD41014C16
1-1/4	STUD60114C20	STUD60214C20	STUD74414C20	STUD28614C20	STUD62014C20	STUD41014C20
1-1/2	STUD14C24SS	STUD60214C24	STUD74414C24	STUD28614C24	STUD62014C24	STUD41014C24
2	STUD14C32SS	STUD60214C32	STUD74414C32	STUD28614C32	STUD62014C32	STUD41014C32
2-1/2	STUD60114C40	STUD60214C40	STUD74414C40	STUD28614C40	STUD62014C40	STUD41014C40
3	STUD14C48SS	STUD60214C48	STUD74414C48	STUD28614C48	STUD62014C48	STUD41014C48
3-1/2	STUD60114C56	STUD60214C56	STUD74414C56	STUD28614C56	STUD62014C56	STUD41014C56
4	STUD60114C64	STUD60214C64	STUD74414C64	STUD28614C64	STUD62014C64	STUD41014C64
4-1/2	STUD60114C72	STUD60214C72	STUD74414C72	STUD28614C72	STUD62014C72	STUD41014C72
5	STUD60114C80	STUD60214C80	STUD74414C80	STUD28614C80	STUD62014C80	STUD41014C80
6	STUD60114C96	STUD60214C96	STUD74414C96	STUD28614C96	STUD62014C96	STUD41014C96
7	STUD60114C112	STUD60214C112	STUD74414C112	STUD28614C112	STUD62014C112	STUD41014C112
8	STUD60114C128	STUD60214C128	STUD74414C128	STUD28614C128	STUD62014C128	STUD41014C128
9	STUD60114C144	STUD60214C144	STUD74414C144	STUD28614C144	STUD62014C144	STUD41014C144
10	STUD60114C160	STUD60214C160	STUD74414C160	STUD28614C160	STUD62014C160	STUD41014C160
1 Ft	ROD60114C001	ROD60214C001	ROD74414C001	ROD28614C001	ROD62014C001	ROD41014C001
3 Ft	ROD60114C003	ROD60214C003	ROD74414C003	ROD28614C003	ROD62014C003	ROD41014C003

Lg	Aluminum Part Number	Brass Part Number	Silicon Bronze Part Number	NI Alloy 405 Part Number	CU NI Part Number
1/2	STUD72014C08	STUD14C08BR	STUD79814C08	STUD71014C08	STUD59014C08
3/4	STUD72014C12	STUD55014C12	STUD79814C12	STUD71014C12	STUD59014C12
1	STUD72014C16	STUD14C16BR	STUD79814C16	STUD71014C16	STUD59014C16
1-1/4	STUD72014C20	STUD55014C20	STUD79814C20	STUD71014C20	STUD59014C20
1-1/2	STUD72014C24	STUD55014C24	STUD79814C24	STUD71014C24	STUD59014C24
2	STUD72014C32	STUD55014C32	STUD79814C32	STUD71014C32	STUD59014C32
2-1/2	STUD72014C40	STUD55014C40	STUD79814C40	STUD71014C40	STUD59014C40
3	STUD72014C48	STUD55014C48	STUD79814C48	STUD71014C48	STUD59014C48
3-1/2	STUD72014C56	STUD55014C56	STUD79814C56	STUD71014C56	STUD59014C56
4	STUD72014C64	STUD55014C64	STUD79814C64	STUD71014C64	STUD59014C64
4-1/2	STUD72014C72	STUD55014C72	STUD79814C72	STUD71014C72	STUD59014C72
5	STUD72014C80	STUD55014C80	STUD79814C80	STUD71014C80	STUD59014C80
6	STUD72014C96	STUD55014C96	STUD79814C96	STUD71014C96	STUD59014C96
7	STUD72014C112	STUD55014C112	STUD79814C112	STUD71014C112	STUD59014C112
8	STUD72014C128	STUD55014C128	STUD79814C128	STUD71014C128	STUD59014C128
9	STUD72014C144	STUD55014C144	STUD79814C144	STUD71014C144	STUD59014C144
10	STUD72014C160	STUD55014C160	STUD79814C160	STUD71014C160	STUD59014C160
1 Ft	ROD72014C001	ROD55014C001	ROD79814C001	ROD71014C001	ROD59014C001
3 Ft	ROD72014C003	ROD55014C003	ROD79814C003	ROD71014C003	ROD59014C003

Threaded Rods and Studs — Inch



1/4-28 Thread Size

Lg	18-8 SS Part Number	316 SS Part Number	17-4PH SS Part Number	A286 SS Part Number	Alloy 20 SS Part Number	410 SS Part Number
1/2	STUD60114F08	STUD60214F08	STUD74414F08	STUD28614F08	STUD62014F08	STUD41014F08
3/4	STUD60114F12	STUD60214F12	STUD74414F12	STUD28614F12	STUD62014F12	STUD41014F12
1	STUD60114F16	STUD60214F16	STUD74414F16	STUD28614F16	STUD62014F16	STUD41014F16
1-1/4	STUD60114F20	STUD60214F20	STUD74414F20	STUD28614F20	STUD62014F20	STUD41014F20
1-1/2	STUD60114F24	STUD60214F24	STUD74414F24	STUD28614F24	STUD62014F24	STUD41014F24
2	STUD60114F32	STUD60214F32	STUD74414F32	STUD28614F32	STUD62014F32	STUD41014F32
2-1/2	STUD60114F40	STUD60214F40	STUD74414F40	STUD28614F40	STUD62014F40	STUD41014F40
3	STUD60114F48	STUD60214F48	STUD74414F48	STUD28614F48	STUD62014F48	STUD41014F48
4	STUD60114F64	STUD60214F64	STUD74414F64	STUD28614F64	STUD62014F64	STUD41014F64
1 Ft	ROD60114F001	ROD60214F001	ROD74414F001	ROD28614F001	ROD62014F001	ROD41014F001
3 Ft	ROD60114F003	ROD60214F003	ROD74414F003	ROD28614F003	ROD62014F003	ROD41014F003

Lg	Aluminum Part Number	Brass Part Number	Silicon Bronze Part Number	NI Alloy 405 Part Number	CU NI Part Number
1/2	STUD72014F08	STUD55014F08	STUD79814F08	STUD71014F08	STUD59014F08
3/4	STUD72014F12	STUD55014F12	STUD79814F12	STUD71014F12	STUD59014F12
1	STUD72014F16	STUD55014F16	STUD79814F16	STUD71014F16	STUD59014F16
1-1/4	STUD72014F20	STUD55014F20	STUD79814F20	STUD71014F20	STUD59014F20
1-1/2	STUD72014F24	STUD55014F24	STUD79814F24	STUD71014F24	STUD59014F24
2	STUD72014F32	STUD55014F32	STUD79814F32	STUD71014F32	STUD59014F32
2-1/2	STUD72014F40	STUD55014F40	STUD79814F40	STUD71014F40	STUD59014F40
3	STUD72014F48	STUD55014F48	STUD79814F48	STUD71014F48	STUD59014F48
4	STUD72014F64	STUD55014F64	STUD79814F64	STUD71014F64	STUD59014F64
1 Ft	ROD72014F001	ROD55014F001	ROD79814F001	ROD71014F001	ROD59014F001
3 Ft	ROD72014F003	ROD55014F003	ROD79814F003	ROD71014F003	ROD59014F003

Threaded Rods and Studs — Inch

5/16-18 Thread Size

Lg	18-8 SS Part Number	316 SS Part Number	17-4PH SS Part Number	A286 SS Part Number	Alloy 20 SS Part Number	410 SS Part Number
1/2	STUD51C08SS	STUD60251C08	STUD74451C08	STUD28651C08	STUD62051C08	STUD41051C08
3/4	STUD60151C12	STUD60251C12	STUD74451C12	STUD28651C12	STUD62051C12	STUD41051C12
1	STUD60151C16	STUD60251C16	STUD74451C16	STUD28651C16	STUD62051C16	STUD41051C16
1-1/4	STUD60151C20	STUD60251C20	STUD74451C20	STUD28651C20	STUD62051C20	STUD41051C20
1-1/2	STUD51C24SS	STUD60251C24	STUD74451C24	STUD28651C24	STUD62051C24	STUD41051C24
2	STUD60151C32	STUD60251C32	STUD74451C32	STUD28651C32	STUD62051C32	STUD41051C32
2-1/2	STUD60151C40	STUD60251C40	STUD74451C40	STUD28651C40	STUD62051C40	STUD41051C40
3	STUD60151C48	STUD60251C48	STUD74451C48	STUD28651C48	STUD62051C48	STUD41051C48
3-1/2	STUD60151C56	STUD60251C56	STUD74451C56	STUD28651C56	STUD62051C56	STUD41051C56
4	STUD51C64	STUD60251C64	STUD74451C64	STUD28651C64	STUD62051C64	STUD41051C64
4-1/2	STUD60151C72	STUD60251C72	STUD74451C72	STUD28651C72	STUD62051C72	STUD41051C72
5	STUD60151C80	STUD60251C80	STUD74451C80	STUD28651C80	STUD62051C80	STUD41051C80
5-1/2	STUD60151C88	STUD60251C88	STUD74451C88	STUD28651C88	STUD62051C88	STUD41051C88
6	STUD60151C96	STUD60251C96	STUD74451C96	STUD28651C96	STUD62051C96	STUD41051C96
7	STUD60151C112	STUD60251C112	STUD74451C112	STUD28651C112	STUD62051C112	STUD41051C112
8	STUD60151C128	STUD60251C128	STUD74451C128	STUD28651C128	STUD62051C128	STUD41051C128
9	STUD60151C144	STUD60251C144	STUD74451C144	STUD28651C144	STUD62051C144	STUD41051C144
10	STUD60151C160	STUD60251C160	STUD74451C160	STUD28651C160	STUD62051C160	STUD41051C160
1 Ft	ROD60151C001	ROD60251C001	ROD74451C001	ROD28651C001	ROD62051C001	ROD41051C001
3 Ft	ROD60151C003	ROD60251C003	ROD74451C003	ROD28651C003	ROD62051C003	ROD41051C003

Lg	Aluminum Part Number	Brass Part Number	Silicon Bronze Part Number	NI Alloy 405 Part Number	CU NI Part Number
1/2	STUD72051C08	STUD51C08BR	STUD79851C08	STUD71051C08	STUD59051C08
3/4	STUD72051C12	STUD55051C12	STUD79851C12	STUD71051C12	STUD59051C12
1	STUD72051C16	STUD55051C16	STUD79851C16	STUD71051C16	STUD59051C16
1-1/4	STUD72051C20	STUD55051C20	STUD79851C20	STUD71051C20	STUD59051C20
1-1/2	STUD72051C24	STUD51C24BR	STUD79851C24	STUD71051C24	STUD59051C24
2	STUD72051C32	STUD55051C32	STUD79851C32	STUD71051C32	STUD59051C32
2-1/2	STUD72051C40	STUD55051C40	STUD79851C40	STUD71051C40	STUD59051C40
3	STUD72051C48	STUD55051C48	STUD79851C48	STUD71051C48	STUD59051C48
3-1/2	STUD72051C56	STUD55051C56	STUD79851C56	STUD71051C56	STUD59051C56
4	STUD72051C64	STUD55051C64	STUD79851C64	STUD71051C64	STUD59051C64
4-1/2	STUD72051C72	STUD55051C72	STUD79851C72	STUD71051C72	STUD59051C72
5	STUD72051C80	STUD55051C80	STUD79851C80	STUD71051C80	STUD59051C80
5-1/2	STUD72051C88	STUD55051C88	STUD79851C88	STUD71051C88	STUD59051C88
6	STUD72051C96	STUD55051C96	STUD79851C96	STUD71051C96	STUD59051C96
7	STUD72051C112	STUD55051C112	STUD79851C112	STUD71051C112	STUD59051C112
8	STUD72051C128	STUD55051C128	STUD79851C128	STUD71051C128	STUD59051C128
9	STUD72051C144	STUD55051C144	STUD79851C144	STUD71051C144	STUD59051C144
10	STUD72051C160	STUD55051C160	STUD79851C160	STUD71051C160	STUD59051C160
1 Ft	ROD72051C001	ROD55051C001	ROD79851C001	ROD71051C001	ROD59051C001
3 Ft	ROD72051C003	ROD55051C003	ROD79851C003	ROD71051C003	ROD59051C003

Threaded Rods and Studs — Inch



5/16-24 Thread Size

Lg	18-8 SS Part Number	316 SS Part Number	17-4PH SS Part Number	A286 SS Part Number	Alloy 20 SS Part Number	410 SS Part Number
1	STUD60151F16	STUD60251F16	STUD74451F16	STUD28651F16	STUD62051F16	STUD41051F16
1-1/4	STUD60151F20	STUD60251F20	STUD74451F20	STUD28651F20	STUD62051F20	STUD41051F20
1-1/2	STUD60151F24	STUD60251F24	STUD74451F24	STUD28651F24	STUD62051F24	STUD41051F24
2	STUD60151F32	STUD60251F32	STUD74451F32	STUD28651F32	STUD62051F32	STUD41051F32
2-1/2	STUD60151F40	STUD60251F40	STUD74451F40	STUD28651F40	STUD62051F40	STUD41051F40
3	STUD60151F48	STUD60251F48	STUD74451F48	STUD28651F48	STUD62051F48	STUD41051F48
4	STUD60151F64	STUD60251F64	STUD74451F64	STUD28651F64	STUD62051F64	STUD41051F64
1 Ft	ROD60151F001	ROD60251F001	ROD74451F001	ROD28651F001	ROD62051F001	ROD41051F001
3 Ft	ROD60151F003	ROD60251F003	ROD74451F003	ROD28651F003	ROD62051F003	ROD41051F003

Lg	Aluminum Part Number	Brass Part Number	Silicon Bronze Part Number	NI Alloy 405 Part Number	CU NI Part Number
1	STUD72051F16	STUD55051F16	STUD79851F16	STUD71051F16	STUD59051F16
1-1/4	STUD72051F20	STUD55051F20	STUD79851F20	STUD71051F20	STUD59051F20
1-1/2	STUD72051F24	STUD55051F24	STUD79851F24	STUD71051F24	STUD59051F24
2	STUD72051F32	STUD55051F32	STUD79851F32	STUD71051F32	STUD59051F32
2-1/2	STUD72051F40	STUD55051F40	STUD79851F40	STUD71051F40	STUD59051F40
3	STUD72051F48	STUD55051F48	STUD79851F48	STUD71051F48	STUD59051F48
4	STUD72051F64	STUD55051F64	STUD79851F64	STUD71051F64	STUD59051F64
1 Ft	ROD72051F001	ROD55051F001	ROD79851F001	ROD71051F001	ROD59051F001
3 Ft	ROD72051F003	ROD55051F003	ROD79851F003	ROD71051F003	ROD59051F003

Threaded Rods and Studs — Inch

3/8-16 Thread Size

Lg	18-8 SS Part Number	316 SS Part Number	17-4PH SS Part Number	A286 SS Part Number	Alloy 20 SS Part Number	410 SS Part Number
3/4	STUD60138C12	STUD60238C12	STUD74438C12	STUD28638C12	STUD62038C12	STUD41038C12
1	STUD60138C16	STUD60238C16	STUD74438C16	STUD28638C16	STUD62038C16	STUD41038C16
1-1/4	STUD60138C20	STUD60238C20	STUD74438C20	STUD28638C20	STUD62038C20	STUD41038C20
1-1/2	STUD60138C24	STUD60238C24	STUD74438C24	STUD28638C24	STUD62038C24	STUD41038C24
2	STUD60138C32	STUD60238C32	STUD74438C32	STUD28638C32	STUD62038C32	STUD41038C32
2-1/2	STUD60138C40	STUD60238C40	STUD74438C40	STUD28638C40	STUD62038C40	STUD41038C40
3	STUD38C48SS	STUD60238C48	STUD74438C48	STUD28638C48	STUD62038C48	STUD41038C48
3-1/2	STUD60138C56	STUD60238C56	STUD74438C56	STUD28638C56	STUD62038C56	STUD41038C56
4	STUD60138C64	STUD60238C64	STUD74438C64	STUD28638C64	STUD62038C64	STUD41038C64
4-1/2	STUD60138C72	STUD60238C72	STUD74438C72	STUD28638C72	STUD62038C72	STUD41038C72
5	STUD60138C80	STUD60238C80	STUD74438C80	STUD28638C80	STUD62038C80	STUD41038C80
5-1/2	STUD60138C88	STUD60238C88	STUD74438C88	STUD28638C88	STUD62038C88	STUD41038C88
6	STUD60138C96	STUD60238C96	STUD74438C96	STUD28638C96	STUD62038C96	STUD41038C96
7	STUD60138C112	STUD60238C112	STUD74438C112	STUD28638C112	STUD62038C112	STUD41038C112
8	STUD60138C128	STUD60238C128	STUD74438C128	STUD28638C128	STUD62038C128	STUD41038C128
9	STUD60138C144	STUD60238C144	STUD74438C144	STUD28638C144	STUD62038C144	STUD41038C144
10	STUD60138C160	STUD60238C160	STUD74438C160	STUD28638C160	STUD62038C160	STUD41038C160
1 Ft	ROD60138C001	ROD60238C001	ROD74438C001	ROD28638C001	ROD62038C001	ROD41038C001
3 Ft	ROD60138C003	ROD60238C003	ROD74438C003	ROD28638C003	ROD62038C003	ROD41038C003

Lg	Aluminum Part Number	Brass Part Number	Silicon Bronze Part Number	NI Alloy 405 Part Number	CU NI Part Number
3/4	STUD72038C12	STUD55038C12	STUD79838C12	STUD71038C12	STUD59038C12
1	STUD72038C16	STUD55038C16	STUD79838C16	STUD71038C16	STUD59038C16
1-1/4	STUD72038C20	STUD55038C20	STUD79838C20	STUD71038C20	STUD59038C20
1-1/2	STUD72038C24	STUD55038C24	STUD79838C24	STUD71038C24	STUD59038C24
2	STUD72038C32	STUD55038C32	STUD79838C32	STUD71038C32	STUD59038C32
2-1/2	STUD72038C40	STUD55038C40	STUD79838C40	STUD71038C40	STUD59038C40
3	STUD72038C48	STUD55038C48	STUD79838C48	STUD71038C48	STUD59038C48
3-1/2	STUD72038C56	STUD55038C56	STUD79838C56	STUD71038C56	STUD59038C56
4	STUD72038C64	STUD55038C64	STUD79838C64	STUD71038C64	STUD59038C64
4-1/2	STUD72038C72	STUD55038C72	STUD79838C72	STUD71038C72	STUD59038C72
5	STUD72038C80	STUD55038C80	STUD79838C80	STUD71038C80	STUD59038C80
5-1/2	STUD72038C88	STUD55038C88	STUD79838C88	STUD71038C88	STUD59038C88
6	STUD72038C96	STUD55038C96	STUD79838C96	STUD71038C96	STUD59038C96
7	STUD72038C112	STUD55038C112	STUD79838C112	STUD71038C112	STUD59038C112
8	STUD72038C128	STUD55038C128	STUD79838C128	STUD71038C128	STUD59038C128
9	STUD72038C144	STUD55038C144	STUD79838C144	STUD71038C144	STUD59038C144
10	STUD72038C160	STUD55038C160	STUD79838C160	STUD71038C160	STUD59038C160
1 Ft	ROD72038C001	ROD55038C001	ROD79838C001	ROD71038C001	ROD59038C001
3 Ft	ROD72038C003	ROD55038C003	ROD79838C003	ROD71038C003	ROD59038C003

Threaded Rods and Studs — Inch



3/8-24 Thread Size

Lg	18-8 SS Part Number	316 SS Part Number	17-4PH SS Part Number	A286 SS Part Number	Alloy 20 SS Part Number	410 SS Part Number
1	STUD60138F16	STUD60238F16	STUD74438F16	STUD28638F16	STUD62038F16	STUD41038F16
1-1/4	STUD60138F20	STUD60238F20	STUD74438F20	STUD28638F20	STUD62038F20	STUD41038F20
1-1/2	STUD60138F24	STUD60238F24	STUD74438F24	STUD28638F24	STUD62038F24	STUD41038F24
2	STUD60138F32	STUD60238F32	STUD74438F32	STUD28638F32	STUD62038F32	STUD41038F32
2-1/2	STUD60138F40	STUD60238F40	STUD74438F40	STUD28638F40	STUD62038F40	STUD41038F40
3	STUD60138F48	STUD60238F48	STUD74438F48	STUD28638F48	STUD62038F48	STUD41038F48
4	STUD60138F64	STUD60238F64	STUD74438F64	STUD28638F64	STUD62038F64	STUD41038F64
5	STUD60138F80	STUD60238F80	STUD74438F80	STUD28638F80	STUD62038F80	STUD41038F80
6	STUD60138F96	STUD60238F96	STUD74438F96	STUD28638F96	STUD62038F96	STUD41038F96
1 Ft	ROD60138F001	ROD60238F001	ROD74438F001	ROD28638F001	ROD62038F001	ROD41038F001
3 Ft	ROD60138F003	ROD60238F003	ROD74438F003	ROD28638F003	ROD62038F003	ROD41038F003

Lg	Aluminum Part Number	Brass Part Number	Silicon Bronze Part Number	NI Alloy 405 Part Number	CU NI Part Number
1	STUD72038F16	STUD55038F16	STUD79838F16	STUD71038F16	STUD59038F16
1-1/4	STUD72038F20	STUD55038F20	STUD79838F20	STUD71038F20	STUD59038F20
1-1/2	STUD72038F24	STUD55038F24	STUD79838F24	STUD71038F24	STUD59038F24
2	STUD72038F32	STUD55038F32	STUD79838F32	STUD71038F32	STUD59038F32
2-1/2	STUD72038F40	STUD55038F40	STUD79838F40	STUD71038F40	STUD59038F40
3	STUD72038F48	STUD55038F48	STUD79838F48	STUD71038F48	STUD59038F48
4	STUD72038F64	STUD55038F64	STUD79838F64	STUD71038F64	STUD59038F64
5	STUD72038F80	STUD55038F80	STUD79838F80	STUD71038F80	STUD59038F80
6	STUD72038F96	STUD55038F96	STUD79838F96	STUD71038F96	STUD59038F96
1 Ft	ROD72038F001	ROD55038F001	ROD79838F001	ROD71038F001	ROD59038F001
3 Ft	ROD72038F003	ROD55038F003	ROD79838F003	ROD71038F003	ROD59038F003

Threaded Rods and Studs — Inch

1/2-13 Thread Size

Lg	18-8 SS Part Number	316 SS Part Number	17-4PH SS Part Number	A286 SS Part Number	Alloy 20 SS Part Number	410 SS Part Number
1	STUD60112C16	STUD60212C16	STUD74412C16	STUD28612C16	STUD62012C16	STUD41012C16
1-1/4	STUD60112C20	STUD60212C20	STUD74412C20	STUD28612C20	STUD62012C20	STUD41012C20
1-1/2	STUD60112C24	STUD60212C24	STUD74412C24	STUD28612C24	STUD62012C24	STUD41012C24
2	STUD60112C32	STUD60212C32	STUD74412C32	STUD28612C32	STUD62012C32	STUD41012C32
2-1/2	STUD60112C40	STUD60212C40	STUD74412C40	STUD28612C40	STUD62012C40	STUD41012C40
3	STUD60112C48	STUD60212C48	STUD74412C48	STUD28612C48	STUD62012C48	STUD41012C48
3-1/2	STUD60112C56	STUD60212C56	STUD74412C56	STUD28612C56	STUD62012C56	STUD41012C56
4	STUD60112C64	STUD60212C64	STUD74412C64	STUD28612C64	STUD62012C64	STUD41012C64
4-1/2	STUD60112C72	STUD60212C72	STUD74412C72	STUD28612C72	STUD62012C72	STUD41012C72
5	STUD60112C80	STUD60212C80	STUD74412C80	STUD28612C80	STUD62012C80	STUD41012C80
5-1/2	STUD60112C88	STUD60212C88	STUD74412C88	STUD28612C88	STUD62012C88	STUD41012C88
6	STUD60112C96	STUD60212C96	STUD74412C96	STUD28612C96	STUD62012C96	STUD41012C96
6-1/2	STUD60112C104	STUD60212C104	STUD74412C104	STUD28612C104	STUD62012C104	STUD41012C104
7	STUD60112C112	STUD60212C112	STUD74412C112	STUD28612C112	STUD62012C112	STUD41012C112
8	STUD60112C128	STUD60212C128	STUD74412C128	STUD28612C128	STUD62012C128	STUD41012C128
9	STUD60112C144	STUD60212C144	STUD74412C144	STUD28612C144	STUD62012C144	STUD41012C144
10	STUD60112C160	STUD60212C160	STUD74412C160	STUD28612C160	STUD62012C160	STUD41012C160
1 Ft	ROD60112C001	ROD60212C001	ROD74412C001	ROD28612C001	ROD62012C001	ROD41012C001
3 Ft	ROD60112C003	ROD60212C003	ROD74412C003	ROD28612C003	ROD62012C003	ROD41012C003

Lg	Aluminum Part Number	Brass Part Number	Silicon Bronze Part Number	NI Alloy 405 Part Number	CU NI Part Number
1	STUD72012C16	STUD55012C16	STUD79812C16	STUD71012C16	STUD59012C16
1-1/4	STUD72012C20	STUD55012C20	STUD79812C20	STUD71012C20	STUD59012C20
1-1/2	STUD72012C24	STUD55012C24	STUD79812C24	STUD71012C24	STUD59012C24
2	STUD72012C32	STUD55012C32	STUD79812C32	STUD71012C32	STUD59012C32
2-1/2	STUD72012C40	STUD55012C40	STUD79812C40	STUD71012C40	STUD59012C40
3	STUD72012C48	STUD55012C48	STUD79812C48	STUD71012C48	STUD59012C48
3-1/2	STUD72012C56	STUD55012C56	STUD79812C56	STUD71012C56	STUD59012C56
4	STUD72012C64	STUD55012C64	STUD79812C64	STUD71012C64	STUD59012C64
4-1/2	STUD72012C72	STUD55012C72	STUD79812C72	STUD71012C72	STUD59012C72
5	STUD72012C80	STUD55012C80	STUD79812C80	STUD71012C80	STUD59012C80
5-1/2	STUD72012C88	STUD55012C88	STUD79812C88	STUD71012C88	STUD59012C88
6	STUD72012C96	STUD55012C96	STUD79812C96	STUD71012C96	STUD59012C96
6-1/2	STUD72012C104	STUD55012C104	STUD79812C104	STUD71012C104	STUD59012C104
7	STUD72012C112	STUD55012C112	STUD79812C112	STUD71012C112	STUD59012C112
8	STUD72012C128	STUD55012C128	STUD79812C128	STUD71012C128	STUD59012C128
9	STUD72012C144	STUD55012C144	STUD79812C144	STUD71012C144	STUD59012C144
10	STUD72012C160	STUD55012C160	STUD79812C160	STUD71012C160	STUD59012C160
1 Ft	ROD72012C001	ROD55012C001	ROD79812C001	ROD71012C001	ROD59012C001
3 Ft	ROD72012C003	ROD55012C003	ROD79812C003	ROD71012C003	ROD59012C003

Threaded Rods and Studs — Inch



1/2-20 Thread Size

Lg	18-8 SS Part Number	316 SS Part Number	17-4PH SS Part Number	A286 SS Part Number	Alloy 20 SS Part Number	410 SS Part Number
1	STUD60112F16	STUD60212F16	STUD74412F16	STUD28612F16	STUD62012F16	STUD41012F16
1-1/4	STUD60112F20	STUD60212F20	STUD74412F20	STUD28612F20	STUD62012F20	STUD41012F20
1-1/2	STUD60112F24	STUD60212F24	STUD74412F24	STUD28612F24	STUD62012F24	STUD41012F24
2	STUD60112F32	STUD60212F32	STUD74412F32	STUD28612F32	STUD62012F32	STUD41012F32
2-1/2	STUD60112F40	STUD60212F40	STUD74412F40	STUD28612F40	STUD62012F40	STUD41012F40
3	STUD60112F48	STUD60212F48	STUD74412F48	STUD28612F48	STUD62012F48	STUD41012F48
3-1/2	STUD60112F56	STUD60212F56	STUD74412F56	STUD28612F56	STUD62012F56	STUD41012F56
4	STUD60112F64	STUD60212F64	STUD74412F64	STUD28612F64	STUD62012F64	STUD41012F64
4-1/2	STUD60112F72	STUD60212F72	STUD74412F72	STUD28612F72	STUD62012F72	STUD41012F72
5	STUD60112F80	STUD60212F80	STUD74412F80	STUD28612F80	STUD62012F80	STUD41012F80
5-1/2	STUD60112F88	STUD60212F88	STUD74412F88	STUD28612F88	STUD62012F88	STUD41012F88
6	STUD60112F96	STUD60212F96	STUD74412F96	STUD28612F96	STUD62012F96	STUD41012F96
1 Ft	ROD60112F001	ROD60212F001	ROD74412F001	ROD28612F001	ROD62012F001	ROD41012F001
3 Ft	ROD60112F003	ROD60212F003	ROD74412F003	ROD28612F003	ROD62012F003	ROD41012F003

Lg	Aluminum Part Number	Brass Part Number	Silicon Bronze Part Number	NI Alloy 405 Part Number	CU NI Part Number
1	STUD72012F16	STUD55012F16	STUD79812F16	STUD71012F16	STUD59012F16
1-1/4	STUD72012F20	STUD55012F20	STUD79812F20	STUD71012F20	STUD59012F20
1-1/2	STUD72012F24	STUD55012F24	STUD79812F24	STUD71012F24	STUD59012F24
2	STUD72012F32	STUD55012F32	STUD79812F32	STUD71012F32	STUD59012F32
2-1/2	STUD72012F40	STUD55012F40	STUD79812F40	STUD71012F40	STUD59012F40
3	STUD72012F48	STUD55012F48	STUD79812F48	STUD71012F48	STUD59012F48
3-1/2	STUD72012F56	STUD55012F56	STUD79812F56	STUD71012F56	STUD59012F56
4	STUD72012F64	STUD55012F64	STUD79812F64	STUD71012F64	STUD59012F64
4-1/2	STUD72012F72	STUD55012F72	STUD79812F72	STUD71012F72	STUD59012F72
5	STUD72012F80	STUD55012F80	STUD79812F80	STUD71012F80	STUD59012F80
5-1/2	STUD72012F88	STUD55012F88	STUD79812F88	STUD71012F88	STUD59012F88
6	STUD72012F96	STUD55012F96	STUD79812F96	STUD71012F96	STUD59012F96
1 Ft	ROD72012F001	ROD55012F001	ROD79812F001	ROD71012F001	ROD59012F001
3 Ft	ROD72012F003	ROD55012F003	ROD79812F003	ROD71012F003	ROD59012F003

Threaded Rods and Studs — Inch



9/16-12 Thread Size

Lg	18-8 SS Part Number	316 SS Part Number	17-4PH SS Part Number	A286 SS Part Number	Alloy 20 SS Part Number	410 SS Part Number
4	STUD60191C64	STUD60291C64	STUD74491C64	STUD28691C64	STUD62091C64	STUD41091C64
5	STUD60191C80	STUD60291C80	STUD74491C80	STUD28691C80	STUD62091C80	STUD41091C80
6	STUD60191C96	STUD60291C96	STUD74491C96	STUD28691C96	STUD62091C96	STUD41091C96
1 Ft	ROD60191C001	ROD60291C001	ROD74491C001	ROD28691C001	ROD62091C001	ROD41091C001
3 Ft	ROD60191C003	ROD60291C003	ROD74491C003	ROD28691C003	ROD62091C003	ROD41091C003

Lg	Aluminum Part Number	Brass Part Number	Silicon Bronze Part Number	NI Alloy 405 Part Number	CU NI Part Number
4	STUD72091C64	STUD55091C64	STUD79891C64	STUD71091C64	STUD59091C64
5	STUD72091C80	STUD55091C80	STUD79891C80	STUD71091C80	STUD59091C80
6	STUD72091C96	STUD55091C96	STUD79891C96	STUD71091C96	STUD59091C96
1 Ft	ROD72091C001	ROD55091C001	ROD79891C001	ROD71091C001	ROD59091C001
3 Ft	ROD72091C003	ROD55091C003	ROD79891C003	ROD71091C003	ROD59091C003

9/16-18 Thread Size

Lg	18-8 SS Part Number	316 SS Part Number	17-4PH SS Part Number	A286 SS Part Number	Alloy 20 SS Part Number	410 SS Part Number
4	STUD60191F64	STUD60291F64	STUD74491F64	STUD28691F64	STUD62091F64	STUD41091F64
5	STUD60191F80	STUD60291F80	STUD74491F80	STUD28691F80	STUD62091F80	STUD41091F80
6	STUD60191F96	STUD60291F96	STUD74491F96	STUD28691F96	STUD62091F96	STUD41091F96
1 Ft	ROD60191F001	ROD60291F001	ROD74491F001	ROD28691F001	ROD62091F001	ROD41091F001
3 Ft	ROD60191F003	ROD60291F003	ROD74491F003	ROD28691F003	ROD62091F003	ROD41091F003

Lg	Aluminum Part Number	Brass Part Number	Silicon Bronze Part Number	NI Alloy 405 Part Number	CU NI Part Number
4	STUD72091F64	STUD55091F64	STUD79891F64	STUD71091F64	STUD59091F64
5	STUD72091F80	STUD55091F80	STUD79891F80	STUD71091F80	STUD59091F80
6	STUD72091F96	STUD55091F96	STUD79891F96	STUD71091F96	STUD59091F96
1 Ft	ROD72091F001	ROD55091F001	ROD79891F001	ROD71091F001	ROD59091F001
3 Ft	ROD72091F003	ROD55091F003	ROD79891F003	ROD71091F003	ROD59091F003

Threaded Rods and Studs — Inch



5/8-11 Thread Size

Lg	18-8 SS Part Number	316 SS Part Number	17-4PH SS Part Number	A286 SS Part Number	Alloy 20 SS Part Number	410 SS Part Number
1-1/2	STUD60158C24	STUD60258C24	STUD74458C24	STUD28658C24	STUD62058C24	STUD41058C24
2	STUD60158C32	STUD60258C32	STUD74458C32	STUD28658C32	STUD62058C32	STUD41058C32
2-1/2	STUD60158C40	STUD60258C40	STUD74458C40	STUD28658C40	STUD62058C40	STUD41058C40
3	STUD60158C48	STUD60258C48	STUD74458C48	STUD28658C48	STUD62058C48	STUD41058C48
3-1/2	STUD60158C56	STUD60258C56	STUD74458C56	STUD28658C56	STUD62058C56	STUD41058C56
4	STUD60158C64	STUD60258C64	STUD74458C64	STUD28658C64	STUD62058C64	STUD41058C64
4-1/2	STUD60158C72	STUD60258C72	STUD74458C72	STUD28658C72	STUD62058C72	STUD41058C72
5	STUD60158C80	STUD60258C80	STUD74458C80	STUD28658C80	STUD62058C80	STUD41058C80
5-1/2	STUD60158C88	STUD60258C88	STUD74458C88	STUD28658C88	STUD62058C88	STUD41058C88
6	STUD60158C96	STUD60258C96	STUD74458C96	STUD28658C96	STUD62058C96	STUD41058C96
6-1/2	STUD60158C104	STUD60258C104	STUD74458C104	STUD28658C104	STUD62058C104	STUD41058C104
7	STUD60158C112	STUD60258C112	STUD74458C112	STUD28658C112	STUD62058C112	STUD41058C112
8	STUD60158C128	STUD60258C128	STUD74458C128	STUD28658C128	STUD62058C128	STUD41058C128
9	STUD60158C144	STUD60258C144	STUD74458C144	STUD28658C144	STUD62058C144	STUD41058C144
10	STUD60158C160	STUD60258C160	STUD74458C160	STUD28658C160	STUD62058C160	STUD41058C160
1 Ft	ROD60158C001	ROD60258C001	ROD74458C001	ROD28658C001	ROD62058C001	ROD41058C001
3 Ft	ROD60158C003	ROD60258C003	ROD74458C003	ROD28658C003	ROD62058C003	ROD41058C003

Lg	Aluminum Part Number	Brass Part Number	Silicon Bronze Part Number	NI Alloy 405 Part Number	CU NI Part Number
1-1/2	STUD72058C24	STUD55058C24	STUD79858C24	STUD71058C24	STUD59058C24
2	STUD72058C32	STUD55058C32	STUD79858C32	STUD71058C32	STUD59058C32
2-1/2	STUD72058C40	STUD55058C40	STUD79858C40	STUD71058C40	STUD59058C40
3	STUD72058C48	STUD55058C48	STUD79858C48	STUD71058C48	STUD59058C48
3-1/2	STUD72058C56	STUD55058C56	STUD79858C56	STUD71058C56	STUD59058C56
4	STUD72058C64	STUD55058C64	STUD79858C64	STUD71058C64	STUD59058C64
4-1/2	STUD72058C72	STUD55058C72	STUD79858C72	STUD71058C72	STUD59058C72
5	STUD72058C80	STUD55058C80	STUD79858C80	STUD71058C80	STUD59058C80
5-1/2	STUD72058C88	STUD55058C88	STUD79858C88	STUD71058C88	STUD59058C88
6	STUD72058C96	STUD55058C96	STUD79858C96	STUD71058C96	STUD59058C96
6-1/2	STUD72058C104	STUD55058C104	STUD79858C104	STUD71058C104	STUD59058C104
7	STUD72058C112	STUD55058C112	STUD79858C112	STUD71058C112	STUD59058C112
8	STUD72058C128	STUD55058C128	STUD79858C128	STUD71058C128	STUD59058C128
9	STUD72058C144	STUD55058C144	STUD79858C144	STUD71058C144	STUD59058C144
10	STUD72058C160	STUD55058C160	STUD79858C160	STUD71058C160	STUD59058C160
1 Ft	ROD72058C001	ROD55058C001	ROD79858C001	ROD71058C001	ROD59058C001
3 Ft	ROD72058C003	ROD55058C003	ROD79858C003	ROD71058C003	ROD59058C003

Threaded Rods and Studs — Inch



5/8-18 Thread Size

Lg	18-8 SS Part Number	316 SS Part Number	17-4PH SS Part Number	A286 SS Part Number	Alloy 20 SS Part Number	410 SS Part Number
4	STUD60158F64	STUD60258F64	STUD74458F64	STUD28658F64	STUD62058F64	STUD41058F64
5	STUD60158F80	STUD60258F80	STUD74458F80	STUD28658F80	STUD62058F80	STUD41058F80
6	STUD60158F96	STUD60258F96	STUD74458F96	STUD28658F96	STUD62058F96	STUD41058F96
7	STUD60158F112	STUD60258F112	STUD74458F112	STUD28658F112	STUD62058F112	STUD41058F112
8	STUD60158F128	STUD60258F128	STUD74458F128	STUD28658F128	STUD62058F128	STUD41058F128
9	STUD60158F144	STUD60258F144	STUD74458F144	STUD28658F144	STUD62058F144	STUD41058F144
10	STUD60158F160	STUD60258F160	STUD74458F160	STUD28658F160	STUD62058F160	STUD41058F160
1 Ft	ROD60158F001	ROD60258F001	ROD74458F001	ROD28658F001	ROD62058F001	ROD41058F001
3 Ft	ROD60158F003	ROD60258F003	ROD74458F003	ROD28658F003	ROD62058F003	ROD41058F003

Lg	Aluminum Part Number	Brass Part Number	Silicon Bronze Part Number	NI Alloy 405 Part Number	CU NI Part Number
4	STUD72058F64	STUD55058F64	STUD79858F64	STUD71058F64	STUD59058F64
5	STUD72058F80	STUD55058F80	STUD79858F80	STUD71058F80	STUD59058F80
6	STUD72058F96	STUD55058F96	STUD79858F96	STUD71058F96	STUD59058F96
7	STUD72058F112	STUD55058F112	STUD79858F112	STUD71058F112	STUD59058F112
8	STUD72058F128	STUD55058F128	STUD79858F128	STUD71058F128	STUD59058F128
9	STUD72058F144	STUD55058F144	STUD79858F144	STUD71058F144	STUD59058F144
10	STUD72058F160	STUD55058F160	STUD79858F160	STUD71058F160	STUD59058F160
1 Ft	ROD72058F001	ROD55058F001	ROD79858F001	ROD71058F001	ROD59058F001
3 Ft	ROD72058F003	ROD55058F003	ROD79858F003	ROD71058F003	ROD59058F003

Threaded Rods and Studs – Inch



3/4-10 Thread Size

Lg	18-8 SS Part Number	316 SS Part Number	17-4PH SS Part Number	A286 SS Part Number	Alloy 20 SS Part Number	410 SS Part Number
2	STUD60134C32	STUD60234C32	STUD74434C32	STUD28634C32	STUD62034C32	STUD41034C32
2-1/2	STUD60134C40	STUD60234C40	STUD74434C40	STUD28634C40	STUD62034C40	STUD41034C40
3	STUD60134C48	STUD60234C48	STUD74434C48	STUD28634C48	STUD62034C48	STUD41034C48
3-1/2	STUD60134C56	STUD60234C56	STUD74434C56	STUD28634C56	STUD62034C56	STUD41034C56
4	STUD60134C64	STUD60234C64	STUD74434C64	STUD28634C64	STUD62034C64	STUD41034C64
4-1/2	STUD60134C72	STUD60234C72	STUD74434C72	STUD28634C72	STUD62034C72	STUD41034C72
5	STUD60134C80	STUD60234C80	STUD74434C80	STUD28634C80	STUD62034C80	STUD41034C80
5-1/2	STUD60134C88	STUD60234C88	STUD74434C88	STUD28634C88	STUD62034C88	STUD41034C88
6	STUD60134C96	STUD60234C96	STUD74434C96	STUD28634C96	STUD62034C96	STUD41034C96
6-1/2	STUD60134C104	STUD60234C104	STUD74434C104	STUD28634C104	STUD62034C104	STUD41034C104
7	STUD60134C112	STUD60234C112	STUD74434C112	STUD28634C112	STUD62034C112	STUD41034C112
8	STUD60134C128	STUD60234C128	STUD74434C128	STUD28634C128	STUD62034C128	STUD41034C128
9	STUD60134C144	STUD60234C144	STUD74434C144	STUD28634C144	STUD62034C144	STUD41034C144
10	STUD60134C160	STUD60234C160	STUD74434C160	STUD28634C160	STUD62034C160	STUD41034C160
1 Ft	ROD60134C001	ROD60234C001	ROD74434C001	ROD28634C001	ROD62034C001	ROD41034C001
3 Ft	ROD60134C003	ROD60234C003	ROD74434C003	ROD28634C003	ROD62034C003	ROD41034C003

Lg	Aluminum Part Number	Brass Part Number	Silicon Bronze Part Number	NI Alloy 405 Part Number	CU NI Part Number
2	STUD72034C32	STUD55034C32	STUD79834C32	STUD71034C32	STUD59034C32
2-1/2	STUD72034C40	STUD55034C40	STUD79834C40	STUD71034C40	STUD59034C40
3	STUD72034C48	STUD55034C48	STUD79834C48	STUD71034C48	STUD59034C48
3-1/2	STUD72034C56	STUD55034C56	STUD79834C56	STUD71034C56	STUD59034C56
4	STUD72034C64	STUD55034C64	STUD79834C64	STUD71034C64	STUD59034C64
4-1/2	STUD72034C72	STUD55034C72	STUD79834C72	STUD71034C72	STUD59034C72
5	STUD72034C80	STUD55034C80	STUD79834C80	STUD71034C80	STUD59034C80
5-1/2	STUD72034C88	STUD55034C88	STUD79834C88	STUD71034C88	STUD59034C88
6	STUD72034C96	STUD55034C96	STUD79834C96	STUD71034C96	STUD59034C96
6-1/2	STUD72034C104	STUD55034C104	STUD79834C104	STUD71034C104	STUD59034C104
7	STUD72034C112	STUD55034C112	STUD79834C112	STUD71034C112	STUD59034C112
8	STUD72034C128	STUD55034C128	STUD79834C128	STUD71034C128	STUD59034C128
9	STUD72034C144	STUD55034C144	STUD79834C144	STUD71034C144	STUD59034C144
10	STUD72034C160	STUD55034C160	STUD79834C160	STUD71034C160	STUD59034C160
1 Ft	ROD72034C001	ROD55034C001	ROD79834C001	ROD71034C001	ROD59034C001
3 Ft	ROD72034C003	ROD55034C003	ROD79834C003	ROD71034C003	ROD59034C003

Threaded Rods and Studs — Inch



3/4-16 Thread Size

Lg	18-8 SS Part Number	316 SS Part Number	17-4PH SS Part Number	A286 SS Part Number	Alloy 20 SS Part Number	410 SS Part Number
4	STUD60134F64	STUD60234F64	STUD74434F64	STUD28634F64	STUD62034F64	STUD41034F64
5	STUD60134F80	STUD60234F80	STUD74434F80	STUD28634F80	STUD62034F80	STUD41034F80
6	STUD60134F96	STUD60234F96	STUD74434F96	STUD28634F96	STUD62034F96	STUD41034F96
7	STUD60134F112	STUD60234F112	STUD74434F112	STUD28634F112	STUD62034F112	STUD41034F112
8	STUD60134F128	STUD60234F128	STUD74434F128	STUD28634F128	STUD62034F128	STUD41034F128
9	STUD60134F144	STUD60234F144	STUD74434F144	STUD28634F144	STUD62034F144	STUD41034F144
10	STUD60134F160	STUD60234F160	STUD74434F160	STUD28634F160	STUD62034F160	STUD41034F160
1 Ft	ROD60134F001	ROD60234F001	ROD74434F001	ROD28634F001	ROD62034F001	ROD41034F001
3 Ft	ROD60134F003	ROD60234F003	ROD74434F003	ROD28634F003	ROD62034F003	ROD41034F003

Lg	Aluminum Part Number	Brass Part Number	Silicon Bronze Part Number	NI Alloy 405 Part Number	CU NI Part Number
4	STUD72034F64	STUD55034F64	STUD79834F64	STUD71034F64	STUD59034F64
5	STUD72034F80	STUD55034F80	STUD79834F80	STUD71034F80	STUD59034F80
6	STUD72034F96	STUD55034F96	STUD79834F96	STUD71034F96	STUD59034F96
7	STUD72034F112	STUD55034F112	STUD79834F112	STUD71034F112	STUD59034F112
8	STUD72034F128	STUD55034F128	STUD79834F128	STUD71034F128	STUD59034F128
9	STUD72034F144	STUD55034F144	STUD79834F144	STUD71034F144	STUD59034F144
10	STUD72034F160	STUD55034F160	STUD79834F160	STUD71034F160	STUD59034F160
1 Ft	ROD72034F001	ROD55034F001	ROD79834F001	ROD71034F001	ROD59034F001
3 Ft	ROD72034F003	ROD55034F003	ROD79834F003	ROD71034F003	ROD59034F003

Threaded Rods and Studs – Inch



7/8-9 Thread Size

Lg	18-8 SS Part Number	316 SS Part Number	17-4PH SS Part Number	A286 SS Part Number	Alloy 20 SS Part Number	410 SS Part Number
3	STUD60178C48	STUD60278C48	STUD74478C48	STUD28678C48	STUD62078C48	STUD41078C48
3-1/2	STUD60178C56	STUD60278C56	STUD74478C56	STUD28678C56	STUD62078C56	STUD41078C56
4	STUD60178C64	STUD60278C64	STUD74478C64	STUD28678C64	STUD62078C64	STUD41078C64
4-1/2	STUD60178C72	STUD60278C72	STUD74478C72	STUD28678C72	STUD62078C72	STUD41078C72
5	STUD60178C80	STUD60278C80	STUD74478C80	STUD28678C80	STUD62078C80	STUD41078C80
5-1/2	STUD60178C88	STUD60278C88	STUD74478C88	STUD28678C88	STUD62078C88	STUD41078C88
6	STUD60178C96	STUD60278C96	STUD74478C96	STUD28678C96	STUD62078C96	STUD41078C96
6-1/2	STUD60178C104	STUD60278C104	STUD74478C104	STUD28678C104	STUD62078C104	STUD41078C104
7	STUD60178C112	STUD60278C112	STUD74478C112	STUD28678C112	STUD62078C112	STUD41078C112
8	STUD60178C128	STUD60278C128	STUD74478C128	STUD28678C128	STUD62078C128	STUD41078C128
9	STUD60178C144	STUD60278C144	STUD74478C144	STUD28678C144	STUD62078C144	STUD41078C144
10	STUD60178C160	STUD60278C160	STUD74478C160	STUD28678C160	STUD62078C160	STUD41078C160
1 Ft	ROD60178C001	ROD60278C001	ROD74478C001	ROD28678C001	ROD62078C001	ROD41078C001
3 Ft	ROD60178C003	ROD60278C003	ROD74478C003	ROD28678C003	ROD62078C003	ROD41078C003

Lg	Aluminum Part Number	Brass Part Number	Silicon Bronze Part Number	NI Alloy 405 Part Number	CU NI Part Number
3	STUD72078C48	STUD55078C48	STUD79878C48	STUD71078C48	STUD59078C48
3-1/2	STUD72078C56	STUD55078C56	STUD79878C56	STUD71078C56	STUD59078C56
4	STUD72078C64	STUD55078C64	STUD79878C64	STUD71078C64	STUD59078C64
4-1/2	STUD72078C72	STUD55078C72	STUD79878C72	STUD71078C72	STUD59078C72
5	STUD72078C80	STUD55078C80	STUD79878C80	STUD71078C80	STUD59078C80
5-1/2	STUD72078C88	STUD55078C88	STUD79878C88	STUD71078C88	STUD59078C88
6	STUD72078C96	STUD55078C96	STUD79878C96	STUD71078C96	STUD59078C96
6-1/2	STUD72078C104	STUD55078C104	STUD79878C104	STUD71078C104	STUD59078C104
7	STUD72078C112	STUD55078C112	STUD79878C112	STUD71078C112	STUD59078C112
8	STUD72078C128	STUD55078C128	STUD79878C128	STUD71078C128	STUD59078C128
9	STUD72078C144	STUD55078C144	STUD79878C144	STUD71078C144	STUD59078C144
10	STUD72078C160	STUD55078C160	STUD79878C160	STUD71078C160	STUD59078C160
1 Ft	ROD72078C001	ROD55078C001	ROD79878C001	ROD71078C001	ROD59078C001
3 Ft	ROD72078C003	ROD55078C003	ROD79878C003	ROD71078C003	ROD59078C003

Threaded Rods and Studs — Inch



7/8-14 Thread Size

Lg	18-8 SS Part Number	316 SS Part Number	17-4PH SS Part Number	A286 SS Part Number	Alloy 20 SS Part Number	410 SS Part Number
4	STUD60178F64	STUD60278F64	STUD74478F64	STUD28678F64	STUD62078F64	STUD41078F64
5	STUD60178F80	STUD60278F80	STUD74478F80	STUD28678F80	STUD62078F80	STUD41078F80
6	STUD60178F96	STUD60278F96	STUD74478F96	STUD28678F96	STUD62078F96	STUD41078F96
7	STUD60178F112	STUD60278F112	STUD74478F112	STUD28678F112	STUD62078F112	STUD41078F112
8	STUD60178F128	STUD60278F128	STUD74478F128	STUD28678F128	STUD62078F128	STUD41078F128
9	STUD60178F144	STUD60278F144	STUD74478F144	STUD28678F144	STUD62078F144	STUD41078F144
10	STUD60178F160	STUD60278F160	STUD74478F160	STUD28678F160	STUD62078F160	STUD41078F160
1 Ft	ROD60178F001	ROD60278F001	ROD74478F001	ROD28678F001	ROD62078F001	ROD41078F001
3 Ft	ROD60178F003	ROD60278F003	ROD74478F003	ROD28678F003	ROD62078F003	ROD41078F003

Lg	Aluminum Part Number	Brass Part Number	Silicon Bronze Part Number	NI Alloy 405 Part Number	CU NI Part Number
4	STUD72078F64	STUD55078F64	STUD79878F64	STUD71078F64	STUD59078F64
5	STUD72078F80	STUD55078F80	STUD79878F80	STUD71078F80	STUD59078F80
6	STUD72078F96	STUD55078F96	STUD79878F96	STUD71078F96	STUD59078F96
7	STUD72078F112	STUD55078F112	STUD79878F112	STUD71078F112	STUD59078F112
8	STUD72078F128	STUD55078F128	STUD79878F128	STUD71078F128	STUD59078F128
9	STUD72078F144	STUD55078F144	STUD79878F144	STUD71078F144	STUD59078F144
10	STUD72078F160	STUD55078F160	STUD79878F160	STUD71078F160	STUD59078F160
1 Ft	ROD72078F001	ROD55078F001	ROD79878F001	ROD71078F001	ROD59078F001
3 Ft	ROD72078F003	ROD55078F003	ROD79878F003	ROD71078F003	ROD59078F003

Threaded Rods and Studs — Inch



1-8 Thread Size

Lg	18-8 SS Part Number	316 SS Part Number	17-4PH SS Part Number	A286 SS Part Number	Alloy 20 SS Part Number	410 SS Part Number
4	STUD60101C64	STUD60201C64	STUD74401C64	STUD28601C64	STUD62001C64	STUD41001C64
4-1/2	STUD60101C72	STUD60201C72	STUD74401C72	STUD28601C72	STUD62001C72	STUD41001C72
5	STUD60101C80	STUD60201C80	STUD74401C80	STUD28601C80	STUD62001C80	STUD41001C80
5-1/2	STUD60101C88	STUD60201C88	STUD74401C88	STUD28601C88	STUD62001C88	STUD41001C88
6	STUD60101C96	STUD60201C96	STUD74401C96	STUD28601C96	STUD62001C96	STUD41001C96
6-1/2	STUD60101C104	STUD60201C104	STUD74401C104	STUD28601C104	STUD62001C104	STUD41001C104
7	STUD60101C112	STUD60201C112	STUD74401C112	STUD28601C112	STUD62001C112	STUD41001C112
8	STUD60101C128	STUD60201C128	STUD74401C128	STUD28601C128	STUD62001C128	STUD41001C128
9	STUD60101C144	STUD60201C144	STUD74401C144	STUD28601C144	STUD62001C144	STUD41001C144
10	STUD60101C160	STUD60201C160	STUD74401C160	STUD28601C160	STUD62001C160	STUD41001C160
1 Ft	ROD60101C001	ROD60201C001	ROD74401C001	ROD28601C001	ROD62001C001	ROD41001C001
3 Ft	ROD60101C003	ROD60201C003	ROD74401C003	ROD28601C003	ROD62001C003	ROD41001C003

Lg	Aluminum Part Number	Brass Part Number	Silicon Bronze Part Number	NI Alloy 405 Part Number	CU NI Part Number
4	STUD72001C64	STUD55001C64	STUD79801C64	STUD71001C64	STUD59001C64
4-1/2	STUD72001C72	STUD55001C72	STUD79801C72	STUD71001C72	STUD59001C72
5	STUD72001C80	STUD55001C80	STUD79801C80	STUD71001C80	STUD59001C80
5-1/2	STUD72001C88	STUD55001C88	STUD79801C88	STUD71001C88	STUD59001C88
6	STUD72001C96	STUD55001C96	STUD79801C96	STUD71001C96	STUD59001C96
6-1/2	STUD72001C104	STUD55001C104	STUD79801C104	STUD71001C104	STUD59001C104
7	STUD72001C112	STUD55001C112	STUD79801C112	STUD71001C112	STUD59001C112
8	STUD72001C128	STUD55001C128	STUD79801C128	STUD71001C128	STUD59001C128
9	STUD72001C144	STUD55001C144	STUD79801C144	STUD71001C144	STUD59001C144
10	STUD72001C160	STUD55001C160	STUD79801C160	STUD71001C160	STUD59001C160
1 Ft	ROD72001C001	ROD55001C001	ROD79801C001	ROD71001C001	ROD59001C001
3 Ft	ROD72001C003	ROD55001C003	ROD79801C003	ROD71001C003	ROD59001C003

Threaded Rods and Studs — Inch



1-14 Thread Size

Lg	18-8 SS Part Number	316 SS Part Number	17-4PH SS Part Number	A286 SS Part Number	Alloy 20 SS Part Number	410 SS Part Number
4	STUD60101F64	STUD60201F64	STUD74401F64	STUD28601F64	STUD62001F64	STUD41001F64
5	STUD60101F80	STUD60201F80	STUD74401F80	STUD28601F80	STUD62001F80	STUD41001F80
6	STUD60101F96	STUD60201F96	STUD74401F96	STUD28601F96	STUD62001F96	STUD41001F96
7	STUD60101F112	STUD60201F112	STUD74401F112	STUD28601F112	STUD62001F112	STUD41001F112
8	STUD60101F128	STUD60201F128	STUD74401F128	STUD28601F128	STUD62001F128	STUD41001F128
9	STUD60101F144	STUD60201F144	STUD74401F144	STUD28601F144	STUD62001F144	STUD41001F144
10	STUD60101F160	STUD60201F160	STUD74401F160	STUD28601F160	STUD62001F160	STUD41001F160
1 Ft	ROD60101F001	ROD60201F001	ROD74401F001	ROD28601F001	ROD62001F001	ROD41001F001
3 Ft	ROD60101F003	ROD60201F003	ROD74401F003	ROD28601F003	ROD62001F003	ROD41001F003

Lg	Aluminum Part Number	Brass Part Number	Silicon Bronze Part Number	NI Alloy 405 Part Number	CU NI Part Number
4	STUD72001F64	STUD55001F64	STUD79801F64	STUD71001F64	STUD59001F64
5	STUD72001F80	STUD55001F80	STUD79801F80	STUD71001F80	STUD59001F80
6	STUD72001F96	STUD55001F96	STUD79801F96	STUD71001F96	STUD59001F96
7	STUD72001F112	STUD55001F112	STUD79801F112	STUD71001F112	STUD59001F112
8	STUD72001F128	STUD55001F128	STUD79801F128	STUD71001F128	STUD59001F128
9	STUD72001F144	STUD55001F144	STUD79801F144	STUD71001F144	STUD59001F144
10	STUD72001F160	STUD55001F160	STUD79801F160	STUD71001F160	STUD59001F160
1 Ft	ROD72001F001	ROD55001F001	ROD79801F001	ROD71001F001	ROD59001F001
3 Ft	ROD72001F003	ROD55001F003	ROD79801F003	ROD71001F003	ROD59001F003

Round Pin Blanks, Dowel Pin Stock — Inch

300 Series Stainless Steel

4140 Alloy Steel



Product Information

Cut end Pin Blanks manufactured from various materials. All pins are 12" long with Chamfered Flat Ends. Ready for modifications. Length tolerance is + 0.020/- 0.125. Diameter tolerance is +/- .002".



Stainless Steel



4140 Steel

Dowel Diameter	Dowel Length	300 Series SS Part Number	Steel Part Number
1/8	12	PIN12512SS	PIN12512
5/32	12	PIN12515SS	PIN12515
3/16	12	PIN12518SS	PIN12518
1/4	12	PIN12525SS	PIN12525
5/16	12	PIN12531SS	PIN12531
3/8	12	PIN12537SS	PIN12537
7/16	12	PIN12543SS	PIN12543
1/2	12	PIN12550SS	PIN12550
9/16	12	PIN12556SS	PIN12556
5/8	12	PIN12562SS	PIN12562
3/4	12	PIN12575SS	PIN12575
1	12	PIN12501SS	PIN12501

Small Diameter Dowel Pins — Inch

18-8 Stainless Steel



Size comparison

Dowel Diameter	Dowel Length	18-8 SS Part Number
1/64	1/4	PIN602015250
1/64	3/8	PIN602015375
1/64	1/2	PIN602015500

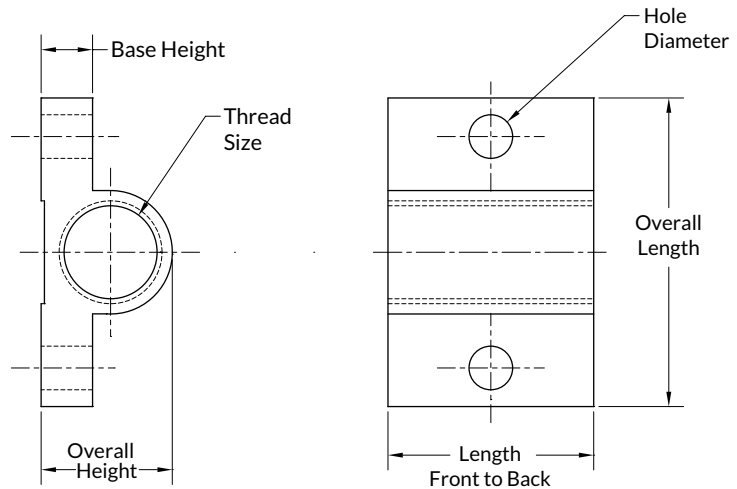
Spring Plunger Mounting Bases – Inch



18-8 Stainless Steel
Steel | Zinc

Product Information

Also known as Tooling Flanges, Full range of sizes from 8-32 thru 5/8-11. Used as mounting points for spring plungers and any spring-loaded devices. Used for horizontal applications without the need for custom designed blocks and fixtures. Spring Plunger not included.



18-8 SS



Steel, Zinc

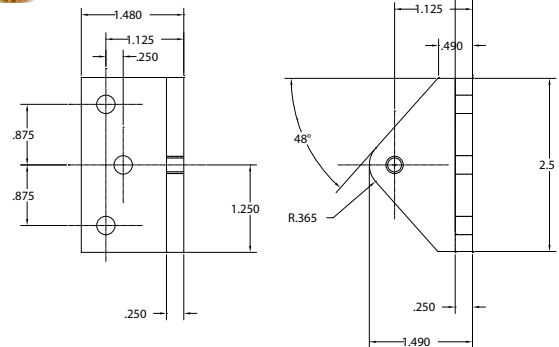
Thread Size	Overall Length	Length Front to Back	Overall Height	Base Thickness	Hole Diameter	18-8 SS Part Number	Steel, Zinc Part Number
8-32	.690	.500	.250	.090	1/8	Z0377SS	Z0377
10-32	.690	.500	.270	.130	1/8	Z0378SS	Z0378
1/4-20	.880	.690	.410	.190	9/64	Z0379SS	Z0379
5/16-18	.940	.630	.410	.188	9/64	Z0380SS	Z0380
3/8-16	1.130	.750	.470	.219	5/32	Z0381SS	Z0381
1/2-13	1.500	1.00	.630	.250	13/64	Z0382SS	Z0382
5/8-11	1.880	1.250	.800	.312	17/64	Z0383SS	Z0383

Gas Spring Attachment Points (Extra Duty)

316 Stainless Steel
18-8 Stainless Steel
Steel | Zinc

Product Information

Used as mounting points for Gas Springs where extra strength is needed. These Brackets are the thickest and strongest Brackets available from stock. Fits Gas Springs with 13MM or 16MM Ball Sockets.



Inverted Bracket

Stud Size	Thickness	Material	Part Number
13mm	1/4	Steel Zinc	FITK53
		18-8 SS	FITK53SS
		316 SS	FITK53-316SS
16mm	1/4	Steel Zinc	FITK53-16MM
		18-8 SS	FITK53SS16
		316 SS	FITK5316-316SS

90 Degree Angle Inverted Bracket,
1/4" Thick, (3) .260 mounting holes

Long Neck Brackets

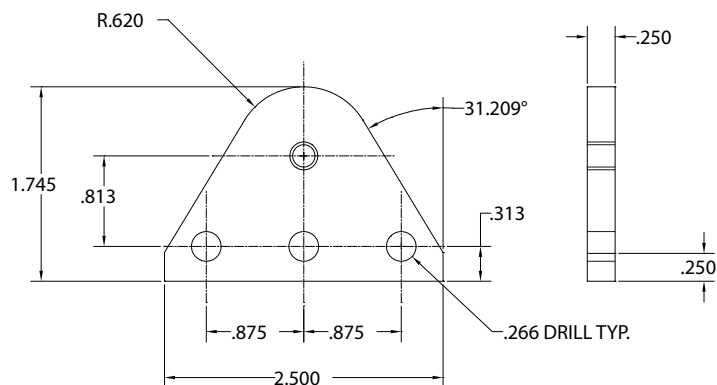
Stud Size	Thickness	Material	Part Number
13mm	1/4	Steel Zinc	FITK52
		18-8 SS	FITK52SS
		316 SS	FITK52-316SS
16mm	1/4	Steel Zinc	FITK52-16MM
		18-8 SS	FITK52SS16
		316 SS	FITK5216-316SS

90 Degree Long Neck Bracket,
1/4" Thick, (3) .260 mounting holes



Flat Brackets

316 Stainless Steel
18-8 Stainless Steel
Steel | Zinc



Stud Size	Thickness	Material	Part Number
13mm	1/4	Steel Zinc	FITK51
		18-8 SS	FITK51SS
		316 SS	FITK51-316SS
16mm	1/4	Steel Zinc	FITK51-16MM
		18-8 SS	FITK51SS16
		316 SS	FITK5116-316SS

Flat Bracket, 1/4" Thick, (3) .260 mounting holes

Gas Spring Attachment Point Blanks

Aluminum
Steel-Zinc (Ball Studs)



Product Information

These easy-to-machine aluminum brackets allow for customized gas spring mounting in any position on panels, lids, or doors. They come without pre-drilled mounting holes, so you can position them exactly as needed. Fits Gas Springs with 10MM ball stud.



Flat



90° Bend



30° Bend

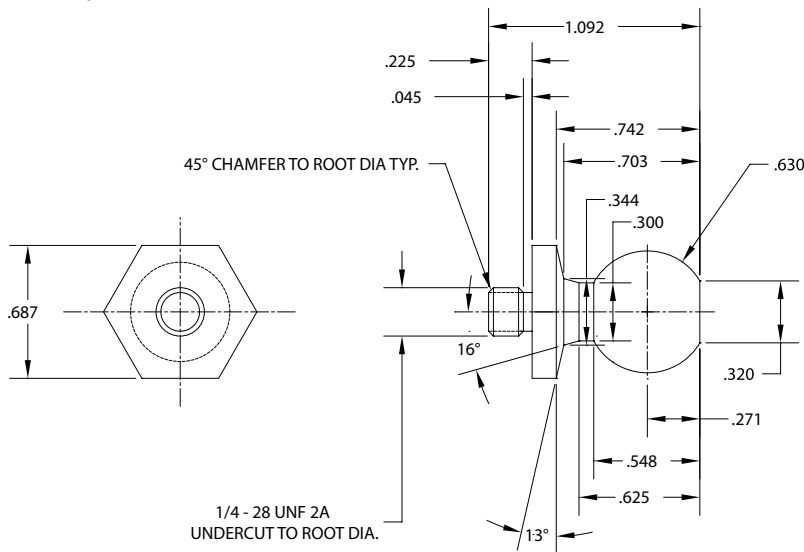


Flat 5 Sides

Stud Size	Bracket Type	Thickness	Longest Dimension	Part Number
10mm	Flat	.085	2.235	FITK-T1
10mm	90° Bend	.125	2.000	FITK-T2
10mm	90° Bend	.095	2.540	FITK-T3
10mm	30° Bend	.075	2.170	FITK-T4
10mm	90° Bend	.075	2.510	FITK-T5
10mm	Flat 5 Sides	.075	2.180	FITK-T6
10mm	Flat 5 Sides (opposite ball)	.075	2.180	FITK-T7

Ball Studs

316 Stainless Steel
18-8 Stainless Steel
Steel | Zinc



Stud Size	Material	Part Number
10mm*	Steel Zinc	FITK-T4BALL
	Steel Zinc	FITK54
13mm	18-8 SS	FITK54SS
	316 SS	FITK54-316SS
	Steel Zinc	FITK55
16mm	18-8 SS	FITK55SS
	316 SS	FITK55-316SS

*.070" thread length

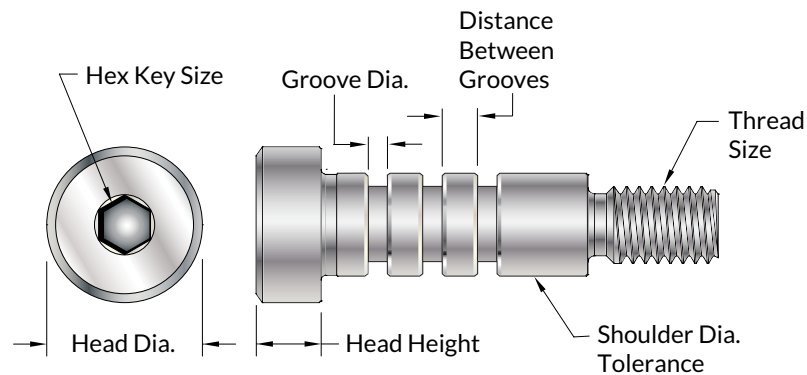
Headed Spring Anchors — Inch



18-8 Stainless Steel

Product Information

These easy to install Headed Spring Anchors have multiple grooves to allow for height adjustment after installation. The multiple grooves can accommodate two springs on a single anchor. Grooves are approx. .005" deeper than wire diameter for positive locking. Separation between each groove of approx. 3 times the wire diameter. AMPG's large variety of diameters and heights make this a versatile anchor for both prototype and production methods. Anchors have a 3A Thread Class and 3 grooves.



Designed for End Inner Diameter of	Groove Dia	Groove Height	Distance between Grooves	Shaft Dia.	Shaft Length	Head Height	Head Outer Diameter	Type of Drive	Hex Size	Thread Size	Thread Lth	18-8 SS Part Number
.070	.017	.024	.036	.078	3/8	3/32	5/32	Slot	n/a	1-72	1/8	Z202005SS
.070	.017	.024	.036	.078	1/2	3/32	5/32	Slot	n/a	1-72	1/8	Z202010SS
.070	.017	.024	.036	.078	3/4	3/32	5/32	Slot	n/a	1-72	1/8	Z202015SS
1/8	.063	.052	.078	.125	3/4	1/8	1/4	Hex	5/64	4-40	5/32	Z202020SS
1/8	.063	.052	.078	.125	1	1/8	1/4	Hex	5/64	4-40	5/32	Z202025SS
1/8	.063	.052	.078	.125	1-1/4	1/8	1/4	Hex	5/64	4-40	5/32	Z202030SS
11/64	.094	.068	.102	.172	3/4	5/32	5/16	Hex	3/32	8-32	3/16	Z202035SS
11/64	.094	.068	.102	.172	1	5/32	5/16	Hex	3/32	8-32	3/16	Z202040SS
11/64	.094	.068	.102	.172	1-1/4	5/32	5/16	Hex	3/32	8-32	3/16	Z202045SS
11/64	.094	.068	.102	.172	1-1/2	5/32	5/16	Hex	3/32	8-32	3/16	Z202050SS
3/16	.126	.052	.078	.187	3/4	5/32	5/16	Hex	3/32	8-32	3/16	Z202055SS
3/16	.126	.052	.078	.187	1	5/32	5/16	Hex	3/32	8-32	3/16	Z202060SS
3/16	.126	.052	.078	.187	1-1/4	5/32	5/16	Hex	3/32	8-32	3/16	Z202065SS
3/16	.126	.052	.078	.187	1-1/2	5/32	5/16	Hex	3/32	8-32	3/16	Z202070SS
13/64	.094	.098	.147	.203	1	5/32	5/16	Hex	3/32	8-32	3/16	Z202075SS
13/64	.094	.098	.147	.203	1-1/4	5/32	5/16	Hex	3/32	8-32	3/16	Z202080SS
13/64	.094	.098	.147	.203	1-1/2	5/32	5/16	Hex	3/32	8-32	3/16	Z202085SS
13/64	.094	.098	.147	.203	2	5/32	5/16	Hex	3/32	8-32	3/16	Z202090SS
17/64	.170	.090	.135	.270	1	7/32	3/8	Hex	1/8	10-24	3/8	Z202095SS
17/64	.170	.090	.135	.270	1-1/4	7/32	3/8	Hex	1/8	10-24	3/8	Z202100SS
17/64	.170	.090	.135	.270	1-1/2	7/32	3/8	Hex	1/8	10-24	3/8	Z202105SS

Headed Spring Anchors – Inch



Designed for End Inner Diameter of	Groove Dia	Groove Height	Distance between Grooves	Shaft Dia.	Shaft Length	Head Height	Head Outer Diameter	Type of Drive	Hex Size	Thread Size	Thread Lth	18-8 SS Part Number
17/64	.170	.090	.135	.270	2	7/32	3/8	Hex	1/8	10-24	3/8	Z202110SS
19/64	.214	.068	.102	.292	1	7/32	7/16	Hex	1/8	1/4-20	7/16	Z202115SS
19/64	.214	.068	.102	.292	1-1/4	7/32	7/16	Hex	1/8	1/4-20	7/16	Z202120SS
19/64	.214	.068	.102	.292	1-1/2	7/32	7/16	Hex	1/8	1/4-20	7/16	Z202125SS
19/64	.214	.068	.102	.292	2	7/32	7/16	Hex	1/8	1/4-20	7/16	Z202130SS
3/8	.238	.126	.189	.374	1-1/2	1/4	9/16	Hex	3/16	5/16-18	1/2	Z202135SS
3/8	.238	.126	.189	.374	1-3/4	1/4	9/16	Hex	3/16	5/16-18	1/2	Z202140SS
3/8	.238	.126	.189	.374	2	1/4	9/16	Hex	3/16	5/16-18	1/2	Z202145SS
3/8	.238	.126	.189	.374	2-1/2	1/4	9/16	Hex	3/16	5/16-18	1/2	Z202150SS
27/64	.326	.082	.123	.418	1	1/4	9/16	Hex	3/16	5/16-18	1/2	Z202155SS
27/64	.326	.082	.123	.418	1-1/4	1/4	9/16	Hex	3/16	5/16-18	1/2	Z202160SS
27/64	.326	.082	.123	.418	1-1/2	1/4	9/16	Hex	3/16	5/16-18	1/2	Z202165SS
27/64	.326	.082	.123	.418	2	1/4	9/16	Hex	3/16	5/16-18	1/2	Z202170SS
9/16	.360	.190	.285	.560	1-3/4	3/8	7/8	Hex	5/16	1/2-13	3/4	Z202175SS
9/16	.360	.190	.285	.560	2	3/8	7/8	Hex	5/16	1/2-13	3/4	Z202180SS
9/16	.360	.190	.285	.560	2-1/4	3/8	7/8	Hex	5/16	1/2-13	3/4	Z202185SS
9/16	.360	.190	.285	.560	2-1/2	3/8	7/8	Hex	5/16	1/2-13	3/4	Z202190SS
5/8	.488	.126	.189	.624	1-1/2	3/8	7/8	Hex	5/16	1/2-13	3/4	Z202195SS
5/8	.488	.126	.189	.624	1-3/4	3/8	7/8	Hex	5/16	1/2-13	3/4	Z202200SS
5/8	.488	.126	.189	.624	2	3/8	7/8	Hex	5/16	1/2-13	3/4	Z202205SS
5/8	.488	.126	.189	.624	2-1/2	3/8	7/8	Hex	5/16	1/2-13	3/4	Z202210SS
13/16	.610	.190	.285	.810	1-3/4	1/2	1	Hex	3/8	5/8-11	7/8	Z202215SS
13/16	.610	.190	.285	.810	2	1/2	1	Hex	3/8	5/8-11	7/8	Z202220SS
13/16	.610	.190	.285	.810	2-1/4	1/2	1	Hex	3/8	5/8-11	7/8	Z202225SS
13/16	.610	.190	.285	.810	2-1/2	1/2	1	Hex	3/8	5/8-11	7/8	Z202230SS
1	.700	.270	.405	.980	2-1/4	5/8	1-1/4	Hex	1/2	3/4-10	7/8	Z202235SS
1	.700	.270	.405	.980	2-1/2	5/8	1-1/4	Hex	1/2	3/4-10	1	Z202240SS
1	.700	.270	.405	.980	2-3/4	5/8	1-1/4	Hex	1/2	3/4-10	1	Z202245SS
1	.700	.270	.405	.980	3	5/8	1-1/4	Hex	1/2	3/4-10	1	Z202250SS

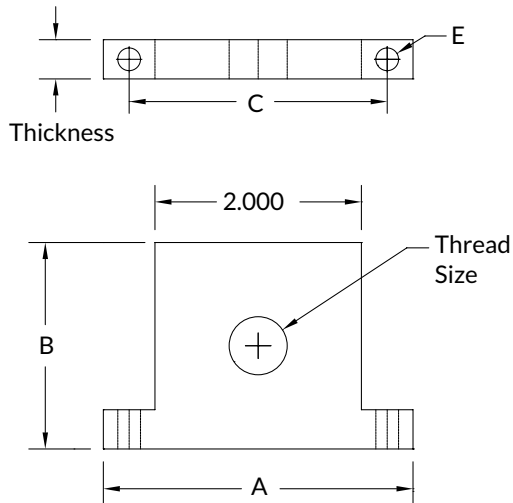


Threaded Mounting Blocks—Lug-Mount — Inch

Steel | Black Oxide

Product Information

Lug-mount blocks for mounting threaded-body shock absorbers. Use jam nut (not included) to secure in position.



A	B	C	E	Thickness	Thread Size	Steel Part Number
3	2	2.5	.220	.380	9/16-18	ZLUGK26
3	2	2.5	.220	.380	3/4-16	ZLUGK32
3	2	2.5	.220	.380	7/8-14	ZLUGK33
3	2	2.5	.220	.380	1"-12	ZLUGK34
3	2	2.5	.220	.380	1-1/4"-12	ZLUGK35
3	2	2.5	.220	.380	1-3/8"-12	ZLUGK36
3	2	2.5	.220	.380	M14 x 1.5	ZLUGK41
3	2	2.5	.220	.380	M20 x 1.5	ZLUGK42
3	2	2.5	.220	.380	M25 x 1.5	ZLUGK43
3	2	2.5	.220	.380	M33 x 1.5	ZLUGK44
3	2	2.5	.220	.380	M36 x 1.5	ZLUGK45

Brackets for Nose-Mount Gearmotors — Inch

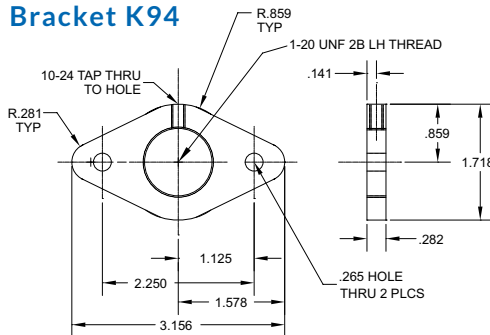
Steel | Black Oxide

Product Information

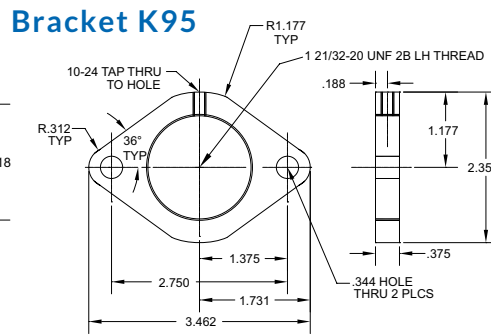
Mounting Brackets for .3 & .5 hp Nose-Mount Air-Powered Gearmotor with left-hand threads on the motor's nose.



Bracket K94



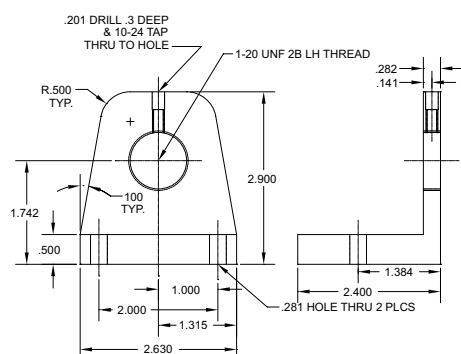
Bracket K95



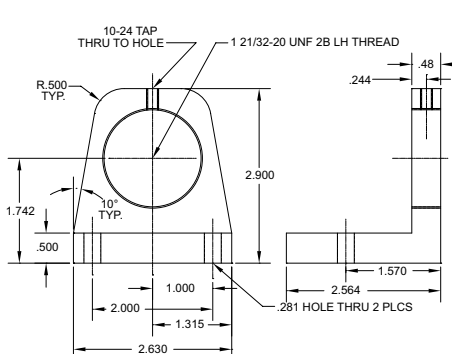
Flange-Mount Brackets, Inch

Threads	Length	Steel Part Number
1-20	3-1/8	BracketK94
1-21/32-20	3-1/2	BracketK95

Bracket K91



Bracket K92



Foot-Mount Brackets, Inch

Threads	Length	Steel Part Number
1-20	3-1/8	BracketK91
1-21/32-20	3-1/2	BracketK92





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AMPG's 163,000 square foot facility is located in the Heart of the Midwest which gives us access to high-quality machinists/employees as well as being strategically located for fast delivery.



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Our manufacturing facility operates 24/7, producing precision parts on state-of-the-art CNC Swiss Lathes. Parts are made from high quality materials with a superior machined finish.



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