

ELECTROLINE®



**END FITTINGS & SWIVELS
FOR WIRE & SYNTHETIC ROPE**

Why Electroline?

Electroline utilizes a unique method to attach end fittings to wire and synthetic rope. Instead of using swage presses or clamps, Electroline uses a three-piece system that is installable in the field with ordinary hand tools. The system includes a sleeve, plug and end fitting...simply slide the sleeve over the rope, insert a plug into the end of the rope and thread the fitting onto the sleeve. The finished assembly exceeds the rated breaking strength of most ropes.

EASY ASSEMBLY

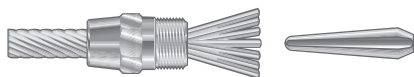
Electroline fittings are the first real advance in connecting practices since the development of wire rope. These fittings are remarkably compact, consisting of three basic components:

1. The **SLEEVE**, which slips over the end of the rope.
2. The **PLUG**, which is inserted to separate and hold the rope strands in the sleeve.
3. The covering **SOCKET**.

The combination of these three units literally locks the rope into a strong, solid assembly.



SLEEVE: Wire rope passed through sleeve.



SLEEVE & PLUG: Strands fanned out to insert plug.



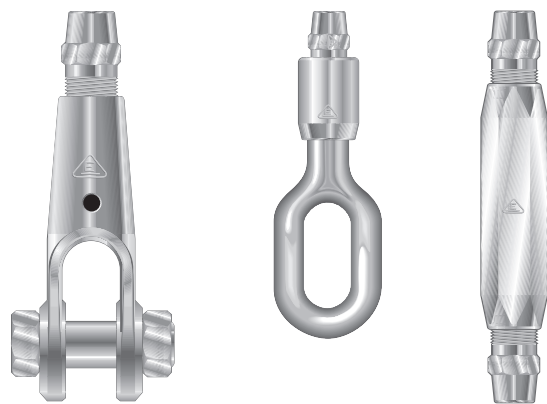
SLEEVE, PLUG & SOCKET: Plug driven in and strands closed to apply socket.



COMPLETED ASSEMBLY: With socket applied, twisted strands are visible through inspection hole.



CUT-AWAY: Showing completed assembly.



BENEFITS & FEATURES

QUICK AND EASY

- *On-site assembly can be accomplished in minutes*
- *No special tools required for installation*
- *No heat, chemicals, or pressure involved in assembly*

STRONG

- *Exceeds rated breaking strength of most ropes*
- *Manufactured in forged, cast, or machined materials*
- *Unique dampening zone for increased rope life*

RELIABLE

- *Over 60 years of proven performance in a wide variety of applications*
- *Can be conveniently inspected for proper assembly*

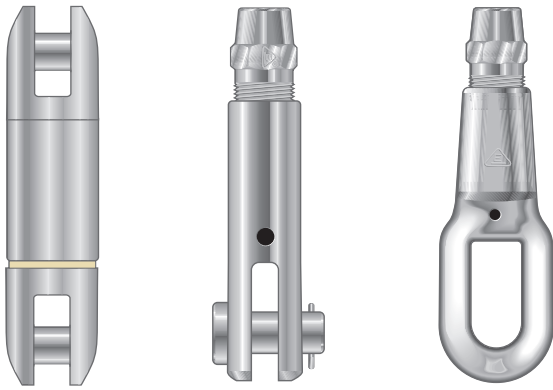
VERSATILE

- *Reusable components*
- *Various platings and finishes available*
- *Large variety of designs*
- *Custom designs available*
- *For ropes from 1/16 to 1-1/2 inches in diameter*

CUSTOM PRODUCTS

Esmet's engineering staff is available to assist with custom designs, product modifications, technical inquiries and product selection.

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Esmet is committed to providing the finest products and service while exceeding our customer's expectations. Esmet invests its resources to obtain qualified & dedicated personnel, state-of-the-art equipment and comprehensive training. Each employee is fully aware of our quality commitment, understands our quality policies and takes pride in producing the finest products in our industry.

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Stud Fitting - Pedestrian Walkway - Portland International Airport

Important Information

Rope fittings are designed for linear applications only. Never subject Electroline rope fittings to angular loads. Follow rope manufacturers' recommendations regarding the suitability of the rope on angled surfaces such as sheaves and pulleys.

The strength of an assembly greatly depends on the type of rope used. When using Electroline terminations in an assembly, the rope is often the weakest component. Therefore, it is important to follow the rope manufacturers specifications regarding use, care, and suitability of the assembly. Electroline terminations should be inspected for deformation and unusual wear every time the rope is inspected.

The rated assembly breaking strengths provided with Electroline wire rope part numbers in this catalog are typical for 6 x 19 IWRC (1 x 19 IWRC in smaller sizes) carbon steel ropes. Due to customer demand regarding dimensions, open body turnbuckles (XD series), fittings with hooks, and machined eyes (I-200 series) are rated to Improved Plow Steel (IPS) standards. These fittings can be modified to Extra Improved Plow Steel (EIPS) standards if requested. All other carbon steel fittings conform to EIPS standards.

Stainless steel fittings will hold 100% of the rope's RBS. However, if loaded to 85% of the rope RBS, the fitting will yield and deform. This may make retermination impossible.

Machined fittings are at least 1.3 times stronger than the corresponding steel rope. Forged fittings, except studs, are 2.0 times stronger.

Items specified as hot-dipped galvanized include a zinc, electro-plated sleeve.

TERMS AND CONDITIONS OF SALE:

FREIGHT CHARGES

All products are shipped F.O.B. shipping point. Unless otherwise specified, products will normally be shipped over land or water, best way.

GENERAL

Prices, terms & conditions, and warranty are subject to change without notice. Orders will be shipped using the prices, warranty, and terms & conditions in effect at the time the order was placed.

SPECIFICATIONS

All specifications shown are subject to normal manufacturing tolerances and acceptable handling and inspection procedures prior to and during installation and subsequent use of the product. Designs and dimensions are subject to change without notice.

CANCELLATION

An order once placed and accepted by Esmet can be cancelled only with Esmet's consent and under terms which indemnify Esmet against loss. Orders for specials or standard goods in quantities larger than normal inventory may not be cancelled.

CREDIT AND PAYMENT TERMS

Normal terms are net 30 days. Open accounts will be extended to qualified customers with an initial order of \$500.00 or more. MasterCard, Visa, C.O.D., and C.I.A. terms are available for customers not on open account and ordering less than \$500.00.

CLAIMS

Damage or loss during shipment must be reported to the freight carrier and Esmet within 15 days of receipt. Esmet will assist in replacing products and filing claims. All other discrepancies must be reported to Esmet within 15 days.

RETURNS

Returned products must have a returned material authorization (RMA) number issued by Esmet within 90 days of delivery. A 25% re-stocking charge will be made on stock items. Goods must be received in the same condition as when shipped from Esmet. Special products may not be returnable. All returns must be prepaid.

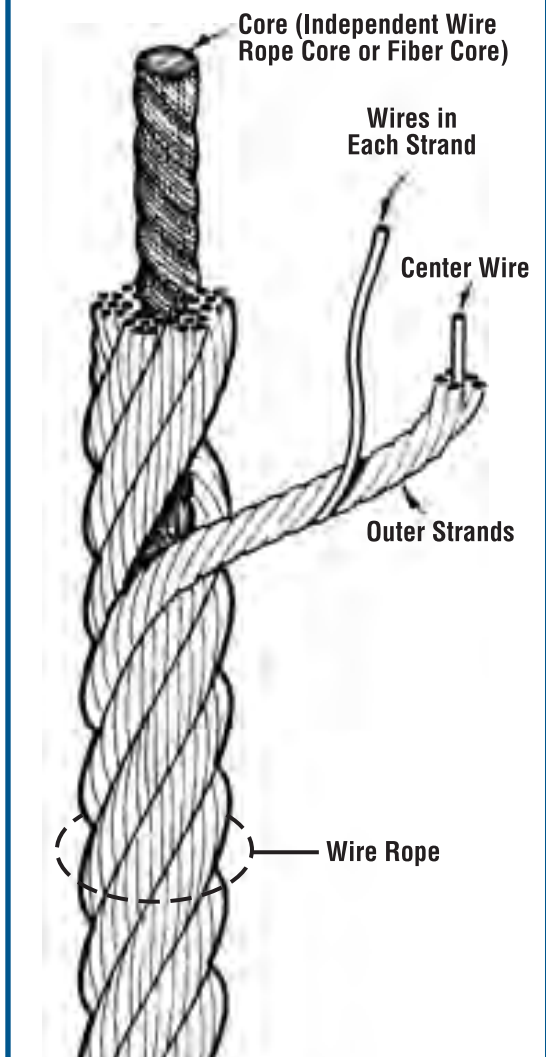
MINIMUM ORDERS

Orders less than \$100.00 will be assessed a \$25.00 processing and handling fee.

WARRANTY

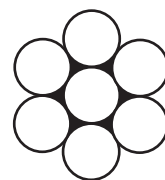
Products manufactured by Esmet, Inc. are warranted to be of good workmanship and material for a period of one year from date of delivery. This warranty applies only to products that are used as intended by the manufacturer. At Esmet's option, any product or parts claimed to be defective must be returned to Esmet. Esmet is responsible for freight charges on defective parts or products returned at Esmet's request. This warranty is limited to the replacement or repair of the products or parts but does not include labor or installation. There are no warranties expressed or implied (and specifically no warranty of fitness or merchantability). Esmet shall not be liable for any other claim or damage and shall not be liable for incidental or consequential damages.

Basic Components of Wire Rope*

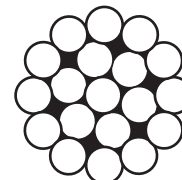


Types Of Wire Rope

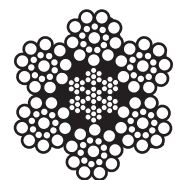
TYPICAL CROSS SECTIONS*



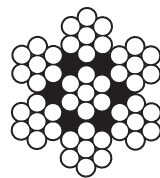
1X7



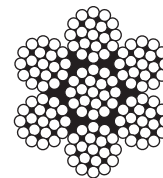
1X19



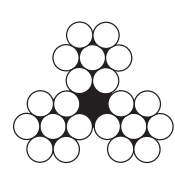
6X19 IWRC



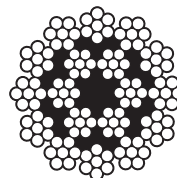
7X7



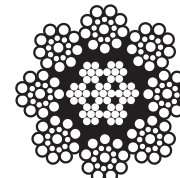
7X19



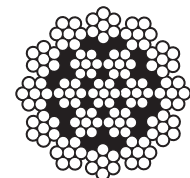
3X7



18X7

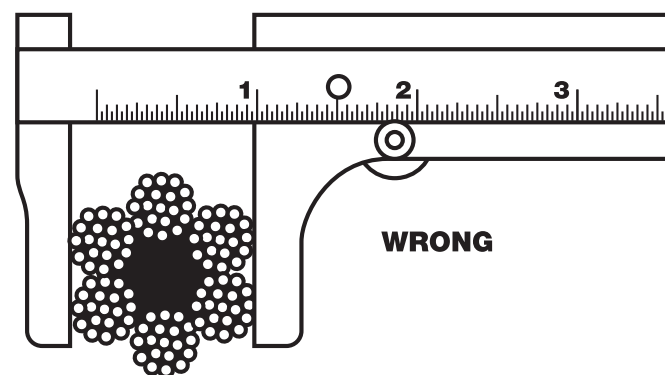
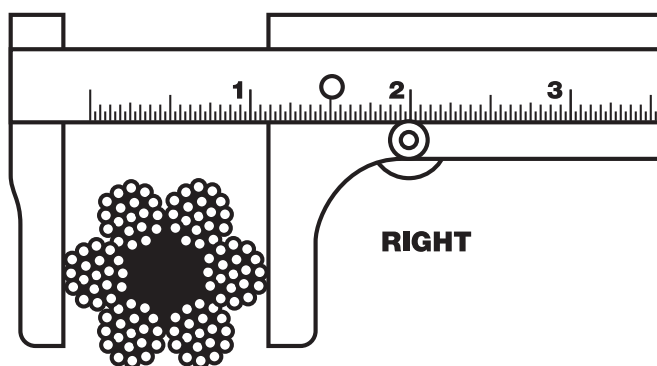


8XS(19) IWRC



19X7

ROPE SIZE DETERMINATION*



*Wire Rope Users Manual, Third Edition

Clevis Fittings

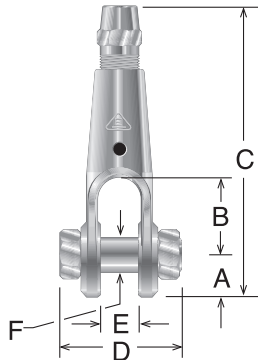
- See page 4 for additional info on breaking strength
- See page 16 for assembly kits
- Call technical service for custom designs



Clevis Fitting - Backstop Netting - Progressive Field - Cleveland, OH

FORGED SERIES: Clevis Socket Fittings

Dimensions in inches

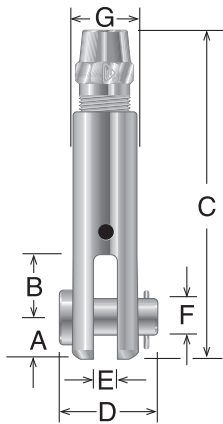


Rope Size	Self-Colored Steel	Zinc Plated Steel	Galvanized Steel	A	B	C	D	E	F	EIPS Breaking Strength*
1/4	IGD-125-N*	IGD-125-V*	-	9/16	1-3/8	4-1/4	1-23/32	17/32	1/2	6,800#
5/16	IGD-131-N*	IGD-131-V*	-	13/16	1-1/2	5-5/16	2-5/32	11/16	5/8	10,540#
3/8	IGD-137-N*	IGD-137-V*	-	13/16	1-1/2	5-5/16	2-5/32	11/16	5/8	15,100#
7/16	GD-143-N	-	GD-143-X	1-1/16	2	7-3/16	2-31/32	1	7/8	20,400#
1/2	GD-150-N	-	GD-150-X	1-1/16	2	7-3/16	2-31/32	1	7/8	26,600#
9/16	GD-156-N	-	GD-156-X	1-1/4	2-1/2	8-5/8	3-7/16	1-1/4	1	33,600#
5/8	GD-162-N	-	GD-162-X	1-1/4	2-1/2	8-5/8	3-7/16	1-1/4	1	41,200#
3/4	GD-175-N	-	GD-175-X	1-7/16	3	10-3/16	4	1-1/2	1-1/8	58,800#
7/8	GD-187-N	-	GD-187-X	1-5/8	2-5/8	11	4-3/8	1-17/32	1-1/4	79,600#
1	GD-199-N	-	GD-199-X	1-15/16	2-7/8	12-11/16	4-7/8	1-7/8	1-1/2	103,400#
1-1/8	GD-1112-N	-	GD-1112-X	2-3/16	3-5/16	17	5-5/8	1-7/8	1-13/16	130,000#
1-1/4	GD-1125-N	-	GD-1125-X	2-3/16	3-5/16	17	5-5/8	1-7/8	1-13/16	159,800#

*Machined parts

MACHINED SERIES: Clevis Socket Fittings

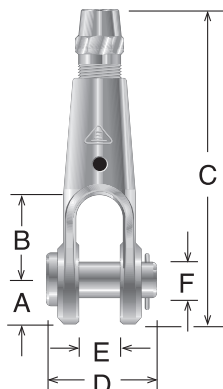
Dimensions in inches



Rope Size	Self-Colored Steel	Zinc Plated Steel	Stainless Steel	A	B	C	D	E	F	G	EIPS Breaking Strength*
1/16	ID-106-N	ID-106-V	IS-106	17/64	3/8	2-1/16	45/64	3/16	3/16	1/2	480#
3/32	ID-109-N	ID-109-V	IS-109	5/16	1/2	2-7/16	57/64	1/4	1/4	5/8	920#
1/8	ID-112-N	ID-112-V	IS-112	5/16	1/2	2-7/16	57/64	1/4	1/4	5/8	1,700#
5/32	ID-115-N	ID-115-V	IS-115	3/8	5/8	2-31/32	1-1/8	5/16	5/16	3/4	2,400#
3/16	ID-118-N	ID-118-V	IS-118	3/8	5/8	2-31/32	1-1/8	5/16	5/16	3/4	3,700#
7/32	ID-121-N	ID-121-V	IS-121	15/32	3/4	3-23/32	1-11/32	3/8	3/8	15/16	4,800#
1/4	ID-125-N	ID-125-V	IS-125	15/32	3/4	3-23/32	1-11/32	3/8	3/8	15/16	6,800#
9/32	ID-128-N	ID-128-V	IS-128	17/32	7/8	4-1/4	1-1/2	3/8	7/16	1-1/16	8,000#
5/16	ID-131-N	ID-131-V	IS-131	17/32	7/8	4-1/4	1-1/2	3/8	7/16	1-1/16	10,540#
3/8	ID-137-N	ID-137-V	IS-137	5/8	1	4-27/32	1-45/64	7/16	1/2	1-3/16	15,100#
7/16	ID-143-N	ID-143-V	IS-143	51/64	1-3/8	6-11/32	2-5/32	1/2	11/16	1-9/16	20,400#
1/2	ID-150-N	ID-150-V	IS-150	51/64	1-3/8	6-11/32	2-5/32	1/2	11/16	1-9/16	26,600#
9/16	ID-156-N	ID-156-V	IS-156	1-3/64	1-17/32	7-19/32	2-5/8	11/16	15/16	2	33,600#
5/8	ID-162-N	ID-162-V	IS-162	1-3/64	1-17/32	7-19/32	2-5/8	11/16	15/16	2	41,200#
3/4	ID-175-N	ID-175-V	IS-175	1-15/64	1-27/32	8-29/32	3	3/4	1-1/8	2-5/16	58,800#
7/8	ID-187-N	ID-187-V	IS-187	1-7/16	1-7/8	10-3/16	3-5/16	13/16	1-1/4	2-5/8	79,600#
1	ID-199-N	ID-199-V	IS-199	1-3/4	2-1/4	12-3/16	4-11/64	15/16	1-1/2	3-1/2	103,400#
1-1/8	ID-1112-N	ID-1112-V	IS-1112	2-1/8	2-3/4	14-5/8	5-11/64	1-1/8	1-5/8	3-3/4	130,000#
1-1/4	ID-1125-N	ID-1125-V	IS-1125	2-1/4	3	16-7/8	4-7/8	1-1/4	1-3/4	4	159,800#
1-3/8	ID-1137-N	ID-1137-V	IS-1137	2-3/4	3-1/2	21-3/8	5-5/32	1-1/2	2	4-1/4	192,000#
1-1/2	ID-1150-N	ID-1150-V	IS-1150	2-3/4	3-1/2	21-3/8	5-5/16	1-3/4	2	4-1/2	228,000#

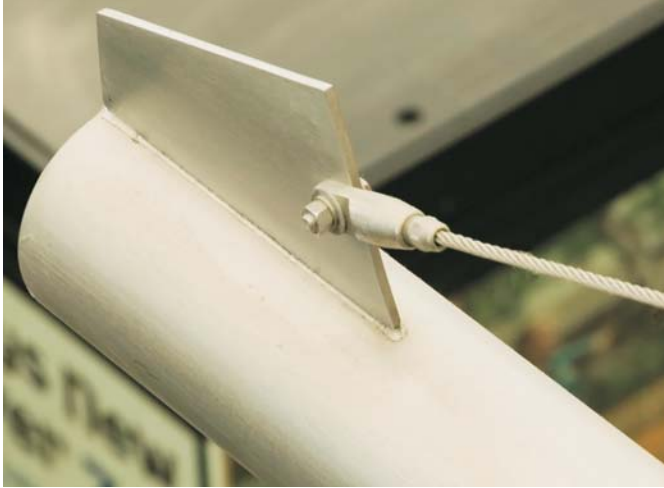
INDUSTRIAL SERIES: Clevis Socket with Pin and Cotter Pin

Dimensions in inches



Rope Size	Galvanized Steel	A	B	C	D	E	F	EIPS Breaking Strength*
7/16	PD-143-X	1-1/16	2	7-3/16	2-19/32	1	1	20,400#
1/2	PD-150-X	1-1/16	2	7-3/16	2-19/32	1	1	26,600#
9/16	PD-156-X	1-1/4	2-1/2	8-5/8	3-11/64	1-1/4	1-3/16	33,600#
5/8	PD-162-X	1-1/4	2-1/2	8-5/8	3-11/64	1-1/4	1-3/16	41,200#
3/4	PD-175-X	1-7/16	3	10-3/16	3-11/16	1-1/2	1-3/8	58,800#
7/8	PD-187-X	1-15/16	2-7/8	12-11/16	4-7/8	1-7/8	1-1/2	79,600#
1	PD-199-X	2-3/16	3-5/16	17	5-5/8	1-7/8	1-7/8	103,400#

Eye Fittings



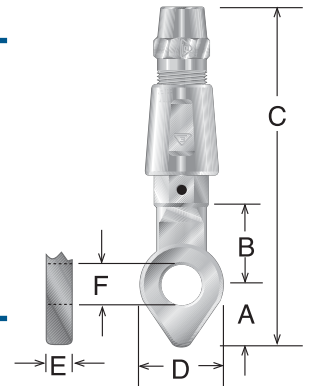
Eye Fitting - Hanging Sign Brackets - Denver International Airport

FORGED SERIES: Eye Socket Fittings

Dimensions in inches

Rope Size	Self-Colored Steel	Zinc Plated Steel	Galvanized Steel	A	B	C	D	E	F	EIPS Breaking Strength*
1/4	IGD-225-N*	-	IGD-225-X*	1-1/16	1-3/8	5-5/32	1-5/16	1/2	17/32	6,800#
5/16	IGD-231-N*	-	IGD-231-X*	1-1/16	1-3/8	5-1/2	1-5/16	9/16	21/32	10,540#
3/8	IGD-237-N*	-	IGD-237-X*	1-1/16	1-3/8	5-1/2	1-5/16	9/16	21/32	15,100#
7/16	GD-243-N	-	GD-243-X	1-5/16	1-11/16	6-7/8	1-3/4	3/4	29/32	20,400#
1/2	GD-250-N	-	GD-250-X	1-5/16	1-11/16	6-7/8	1-3/4	3/4	29/32	26,600#
9/16	GD-256-N	-	GD-256-X	1-1/2	2-9/16	9-3/16	2-1/4	7/8	1-1/32	33,600#
5/8	GD-262-N	-	GD-262-X	1-1/2	2-9/16	9-3/16	2-1/4	7/8	1-1/32	41,200#
3/4	GD-275-N	-	GD-275-X	1-11/16	2-3/8	9-1/2	2-1/4	1-1/8	1-5/32	58,800#
7/8	IGD-287-N*	IGD-287-V*	-	1-7/8	2-13/16	11-1/8	2-5/8	1-5/16	1-9/32	79,600#
1	IGD-299-N*	IGD-299-V*	-	2-1/4	3-1/4	13-7/16	3	1-9/16	1-17/32	103,400#

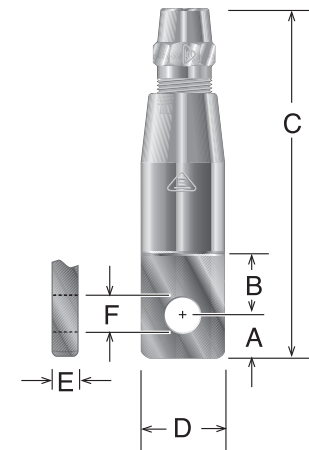
* Machined parts



MACHINED SERIES: Eye Socket Fittings

Dimensions in inches

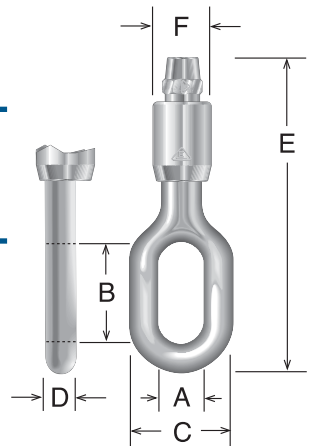
Rope Size	Self-Colored Steel	Zinc Plated Steel	Stainless Steel	A	B	C	D	E	F	IPS Breaking Strength*
1/16	ID-206-N	ID-206-V	IS-206	9/32	11/32	2-1/16	1/2	11/64	13/64	480#
3/32	ID-209-N	ID-209-V	IS-209	11/32	31/64	2-15/32	5/8	15/64	17/64	920#
1/8	ID-212-N	ID-212-V	IS-212	11/32	31/64	2-15/32	5/8	15/64	17/64	1,700#
5/32	ID-215-N	ID-215-V	IS-215	13/32	11/16	3	3/4	19/64	21/64	2,400#
3/16	ID-218-N	ID-218-V	IS-218	13/32	11/16	3-5/64	3/4	19/64	21/64	3,340#
7/32	ID-221-N	ID-221-V	IS-221	1/2	13/16	3-3/4	15/16	23/64	25/64	4,800#
1/4	ID-225-N	ID-225-V	IS-225	1/2	13/16	3-3/4	15/16	23/64	25/64	5,880#
9/32	ID-228-N	ID-228-V	IS-228	19/32	27/32	4-9/32	1-1/16	23/64	29/64	7,600#
5/16	ID-231-N	ID-231-V	IS-231	19/32	27/32	4-9/32	1-1/16	23/64	29/64	9,160#
3/8	ID-237-N	ID-237-V	IS-237	21/32	31/32	4-7/8	1-3/16	27/64	33/64	13,120#
7/16	ID-243-N	ID-243-V	IS-243	3/4	1-1/16	5-21/32	1-3/8	27/64	41/64	17,780#
1/2	ID-250-N	ID-250-V	IS-250	27/32	1-1/8	6-3/8	1-9/16	31/64	45/64	23,000#
9/16	ID-256-N	ID-256-V	IS-256	1-1/16	1-3/8	7-19/32	2	21/32	61/64	29,000#
5/8	ID-262-N	ID-262-V	IS-262	1-3/32	1-5/16	7-5/8	2	21/32	61/64	35,800#
3/4	ID-275-N	ID-275-V	IS-275	1-11/32	1-19/32	8-15/16	2-5/16	23/32	1-9/64	51,200#
7/8	ID-287-N	ID-287-V	IS-287	1-1/2	1-13/16	11-1/8	2-5/8	25/32	1-17/64	69,200#
1	ID-299-N	ID-299-V	IS-299	1-13/16	2-1/8	12-3/16	3-1/2	29/32	1-33/64	89,800#
1-1/8	ID-2112-N	ID-2112-V	IS-2112	2-1/4	2-5/8	14-5/8	3-3/4	1-3/32	1-21/32	130,000#
1-1/4	ID-2125-N	ID-2125-V	IS-2125	2-1/2	3	16-7/8	4	1-7/32	1-13/16	159,800#
1-3/8	ID-2137-N	ID-2137-V	IS-2137	3	3-1/4	21-3/8	4-1/4	1-15/32	2-1/32	167,000#
1-1/2	ID-2150-N	ID-2150-V	IS-2150	3	3-1/4	21-3/8	4-1/2	1-23/32	2-1/32	197,800#



FORGED SERIES: Towing Eye Fittings

Dimensions in inches

Rope Size	Self-Colored Steel	Galvanized Steel	A	B	C	D	E	F	EIPS Breaking Strength*
5/8	Y-2762-N	Y-2762-X	1-1/2	3-1/4	3-1/4	7/8	11-1/8	2-1/4	41,200#
3/4	Y-2775-N	Y-2775-X	1-1/2	3-1/4	3-1/4	7/8	11-1/8	2-1/4	58,800#
1-1/8	Y-27112-N	Y-27112-X	1-1/2	3-1/4	4	1-1/4	15-3/8	3-1/4	130,000#

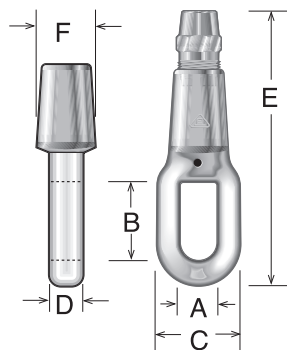


Oval Eye, Drum Socket & Coupling Fittings

- See page 4 for additional info on breaking strength
- See page 16 for assembly kits
- Call technical service for custom designs



Forged Oval Eye - Dumpster Truck



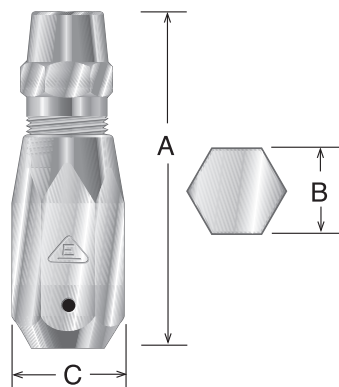
OVAL EYE SOCKET FITTINGS: Forged Series

Dimensions in inches

Rope Size	Self-Colored Steel	Galvanized Steel	A	B	C	D	E	F	EIPS Breaking Strength*
1/4	X-3325-N	X-3325-X	7/8	1-15/16	1-3/4	5/8	5-1/2	1-1/8	6,800#
5/16	X-3331-N	X-3331-X	7/8	1-15/16	1-3/4	5/8	5-11/16	1-1/8	10,540#
3/8	X-3337-N	X-3337-X	7/8	1-15/16	1-3/4	5/8	5-11/16	1-1/8	15,100#
7/16	X-3343-N	X-3343-X	1	2-1/16	2-1/8	7/8	6-7/8	1-1/2	20,400#
1/2	X-3350-N	X-3350-X	1	2-1/16	2-1/8	7/8	6-7/8	1-1/2	26,600#
9/16	X-3356-N	X-3356-X	1-5/8	3-5/8	3	1-3/16	10-1/2	2-1/4	33,600#
5/8	X-3362-N	X-3362-X	1-5/8	3-5/8	3	1-3/16	10-1/2	2-1/4	41,200#
3/4	X-3375-N	X-3375-X	1-5/8	3-5/8	3	1-3/16	10-1/2	2-1/4	58,800#
7/8	X-3387-N	X-3387-X	1-7/8	4-1/4	3-5/8	1-3/4	12-1/8	2-5/8	79,600#
1	X-3399-N	X-3399-X	2-1/8	4-3/4	4	1-3/4	14	3	103,400#
1-1/8	X-33112-N	X-33112-X	2-5/8	5-15/16	4-7/8	2-1/2	19-1/16	3-11/16	130,000#
1-1/4	X-33125-N	X-33125-X	2-5/8	5-15/16	4-7/8	2-1/4	19-1/16	3-11/16	159,800#

DRUM SOCKET FITTINGS

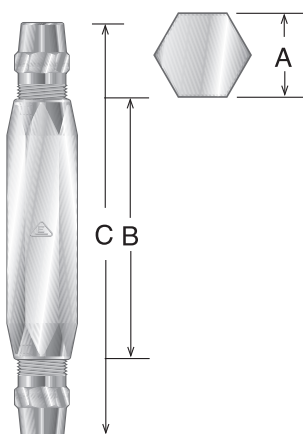
Dimensions in inches



Rope Size	Self-Colored Steel	Zinc Plated Steel	A	B	C	EIPS Breaking Strength*
1/16	Y-2206-N	Y-2206-V	1-5/16	7/16	1/2	480#
3/32	Y-2209-N	Y-2209-V	1-9/16	9/16	21/32	920#
1/8	Y-2212-N	Y-2212-V	1-9/16	9/16	21/32	1,700#
5/32	Y-2215-N	Y-2215-V	1-15/16	5/8	23/32	2,400#
3/16	Y-2218-N	Y-2218-V	1-15/16	5/8	23/32	3,700#
1/4	Y-2225-N	Y-2225-V	1-15/16	3/4	7/8	6,800#
5/16	Y-2231-N	Y-2231-V	2-3/8	7/8	1	10,540#
3/8	Y-2237-N	Y-2237-V	2-3/4	15/16	1-3/32	15,100#
7/16	Y-2243-N	Y-2243-V	3-1/4	1-1/8	1-5/16	20,400#
1/2	Y-2250-N	Y-2250-V	3-3/4	1-1/4	1-7/16	26,600#
9/16	Y-2256-N	Y-2256-V	4-3/8	1-9/16	1-13/16	33,600#
5/8	Y-2262-N	Y-2262-V	4-3/8	1-9/16	1-13/16	41,200#
3/4	Y-2275-N	Y-2275-V	5-1/8	1-13/16	2-3/32	58,800#
7/8	Y-2287-N	Y-2287-V	6	2-1/8	2-15/32	79,600#
1	Y-2299-N	Y-2299-V	7	2-1/2	2-7/8	103,400#
1-1/8	Y-22112-N	Y-22112-V	8-1/4	3	3-1/2	130,000#
1-1/4	Y-22125-N	Y-22125-V	9-1/4	3-1/4	3-3/4	159,800#
1-3/8	Y-22137-N	Y-22137-V	12-1/8	4	4	192,000#
1-1/2	Y-22150-N	Y-22150-V	12-1/8	4	4	228,000#

COUPLING FITTINGS

Dimensions in inches



Rope Size	Self-Colored Steel	Zinc Plated Steel	A	B	C	EIPS Breaking Strength*
1/16	GD-506-N	GD-506-V	7/16	1-3/4	2-5/8	480#
3/32	GD-509-N	GD-509-V	9/16	2-1/8	3-1/8	920#
1/8	GD-512-N	GD-512-V	9/16	2-1/8	3-1/8	1,700#
5/32	GD-515-N	GD-515-V	5/8	2-7/16	3-11/16	2,400#
3/16	GD-518-N	GD-518-V	5/8	2-7/16	3-11/16	3,700#
7/32	GD-521-N	GD-521-V	3/4	2-11/16	4-9/16	4,800#
1/4	GD-525-N	GD-525-V	3/4	2-11/16	4-9/16	6,800#
9/32	GD-528-N	GD-528-V	7/8	3-11/32	5-7/16	8,000#
5/16	GD-531-N	GD-531-V	7/8	3-11/32	5-7/16	10,540#
3/8	GD-537-N	GD-537-V	15/16	3-13/16	6-3/16	15,100#
7/16	GD-543-N	GD-543-V	1-1/8	4-23/32	7-1/16	20,400#
1/2	GD-550-N	GD-550-V	1-1/4	5-13/32	8	26,600#
9/16	GD-556-N	GD-556-V	1-9/16	6-13/32	9-3/4	33,600#
5/8	GD-562-N	GD-562-V	1-9/16	6-13/32	9-3/4	41,200#
3/4	GD-575-N	GD-575-V	1-13/16	7-1/2	11-3/8	58,800#
7/8	GD-587-N	GD-587-V	2-1/8	8-27/32	13-3/16	79,600#
1	GD-599-N	GD-599-V	2-1/2	10-15/32	15-9/16	103,400#
1-1/8	GD-5112-N	GD-5112-V	3	12-1/2	19-1/4	130,000#
1-1/4	GD-5125-N	GD-5125-V	3-1/2	14-1/4	22-1/2	159,800#
1-3/8	GD-5137-N	GD-5137-V	4	18-7/8	29-1/8	192,000#
1-1/2	GD-5150-N	GD-5150-V	4	18-7/8	29-1/8	228,000#

Stud Fittings

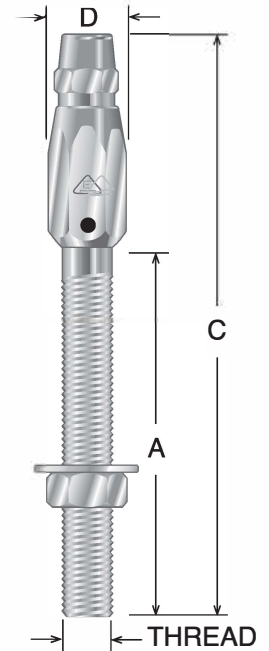


Stud Fitting - Lane Dividers and Safety Rails - Portland International Airport

COARSE THREAD: Stud Socket Fittings

Dimensions in inches

Rope Size	Self-Colored Steel	Zinc Plated Steel	Galvanized Steel	Stainless Steel	A	C	Thread	D	EIPS Breaking Strength*
1/8	IGD-312-N	IGD-312-V	-	IGS-312	2-1/2	4-1/8	1/4-20	5/8	1,700#
3/16	IGD-318-N	IGD-318-V	-	IGS-318	4-1/8	6-5/16	3/8-16	3/4	3,700#
1/4	GD-325-N	GD-325-V	GD-325-X	IGS-325	5-1/4	8	1/2-13	1	6,800#
5/16	GD-331-N	GD-331-V	GD-331-X	IGS-331	5-1/4	8	1/2-13	1	10,540#
3/8	GD-337-N	GD-337-V	GD-337-X	IGS-337	4-1/2	8-1/4	5/8-11	1-1/8	15,100#
7/16	GD-343-N	GD-343-V	GD-343-X	IGS-343	6-3/8	10-15/16	3/4-10	1-1/2	20,400#
1/2	GD-350-N	GD-350-V	GD-350-X	IGS-350	6-3/8	10-15/16	3/4-10	1-1/2	26,600#
9/16	GD-356-N	-	GD-356-X	-	7-1/2	13-7/8	7/8-9	1-3/4	33,600#
5/8	GD-362-N	-	GD-362-X	-	7-1/2	13-7/8	7/8-9	1-3/4	41,200#
3/4	GD-375-N	-	GD-375-X	-	8-5/8	16-1/8	1-1/8-7	2-3/16	58,800#
7/8	GD-387-N	-	GD-387-X	-	9	17-3/16	1-1/4-7	2-5/8	79,800#
1	GD-399-N	-	GD-399-X	-	12-1/8	22-5/16	1-1/2-6	3	103,400#

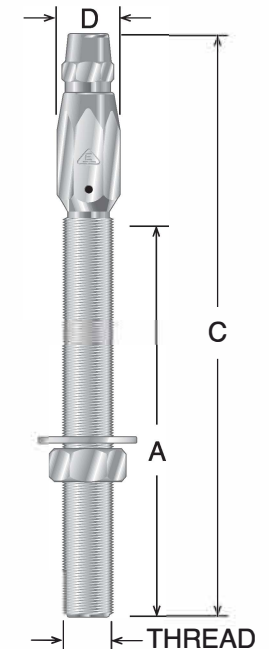


COARSE THREAD: Stud Socket Fittings

Dimensions in inches

Rope Size	Self-Colored Steel	Galvanized Steel	Stainless Steel	A	C	Thread	D	EIPS Breaking Strength*
9/16	ID-356-N	ID-356-X	IS-356	8-5/8	16-3/16	1-1/8-7	2-3/16	33,600#
5/8	ID-362-N	ID-362-X	IS-362	8-5/8	16-3/16	1-1/8-7	2-3/16	41,200#
3/4	ID-375-N	ID-375-X	IS-375	9-1/4	16-3/4	1-1/4-7	2-1/2	58,800#
7/8	ID-387-N	ID-387-X	IS-387	9-3/4	19-7/8	1-1/2-6	3	79,600#
1	ID-399-N	ID-399-X	IS-399	12-3/4	23-7/64	1-3/4-5	3	103,400#
1-1/8	ID-3112-N	ID-3112-X	IS-3112	13-1/8	25-9/16	1-3/4-5	3	130,000#
1-1/4	ID-3125-N	ID-3125-X	IS-3125	13-1/8	26-11/16	1-3/4-5	3-1/2	159,800#
1-3/8	ID-3137-N	ID-3137-X	IS-3137	16-5/8	34-7/16	2-4-1/2	4	192,000#
1-1/2	ID-3150-N	ID-3150-X	IS-3150	16-5/8	34-7/16	2-4-1/2	4	228,000#

Note: Overall length of fitting and stud diameter varies from GD Series Stud Sockets.



FINE THREAD: Stud Socket Fittings

Dimensions in inches

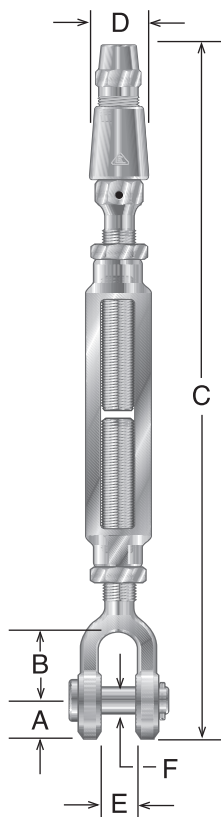
Rope Size	Self-Colored Steel	Zinc Plated Steel	Stainless Steel	A	C	Thread	D	EIPS Breaking Strength*
1/16	ID-306-N	ID-306-V	IS-306	1-19/32	3-1/32	10-32	1/2	480#
3/32	ID-309-N	ID-309-V	IS-309	1-7/8	3-1/2	1/4-28	9/16	920#
1/8	ID-312-N	ID-312-V	IS-312	1-7/8	3-1/2	1/4-28	9/16	1,700#
5/32	ID-315-N	ID-315-V	IS-315	2-3/16	4-3/16	3/8-24	3/4	2,400#
3/16	ID-318-N	ID-318-V	IS-318	2-3/16	4-3/16	3/8-24	3/4	3,700#
7/32	ID-321-N	ID-321-V	IS-321	4-9/16	7-1/16	1/2-20	7/8	4,800#
1/4	ID-325-N	ID-325-V	IS-325	4-9/16	7-1/16	1/2-20	7/8	6,800#
9/32	ID-328-N	ID-328-V	IS-328	4-9/16	7-1/2	5/8-18	1	8,000#
5/16	ID-331-N	ID-331-V	IS-331	4-9/16	7-1/2	5/8-18	1	10,540#
3/8	ID-337-N	ID-337-V	IS-337	4-15/16	8-3/16	3/4-16	1-1/8	15,100#
7/16	ID-343-N	ID-343-V	IS-343	6-15/16	11	7/8-14	1-7/16	20,400#
1/2	ID-350-N	ID-350-V	IS-350	6-15/16	11	7/8-14	1-7/16	26,600#

Open Body Turnbuckles

- See page 4 for additional information on breaking strength
- See page 16 for assembly kits
- Call technical service for custom designs



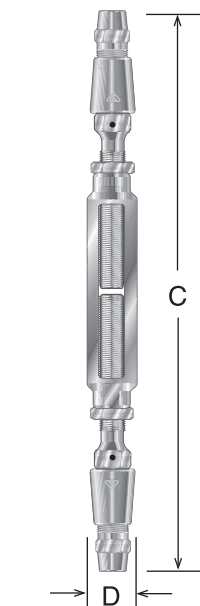
Open Body Turnbuckles - Riverwalk Railings - New Orleans, LA



FORGED SERIES: Open Body Clevis and Socket Turnbuckles

Dimensions in inches

Rope Size	Galvanized Steel	A	B	C Min.	D	E	F	Takeup	IPS Breaking Strength*
1/4	XD-4025-AX	9/16	1-1/4	14-3/8	1	5/8	7/16	6	5,880#
1/4	XD-4025-BX	9/16	1-1/4	17-3/8	1	5/8	7/16	9	5,880#
1/4	XD-4025-CX	9/16	1-1/4	20-3/8	1	5/8	7/16	12	5,880#
5/16	XD-4031-AX	9/16	1-1/4	14-11/16	1	5/8	7/16	6	9,160#
5/16	XD-4031-BX	9/16	1-1/4	17-11/16	1	5/8	7/16	9	9,160#
5/16	XD-4031-CX	9/16	1-1/4	20-11/16	1	5/8	7/16	12	9,160#
3/8	XD-4037-AX	25/32	1-9/16	16	1-1/8	3/4	1/2	6	13,120#
3/8	XD-4037-BX	25/32	1-9/16	19	1-1/8	3/4	1/2	9	13,120#
3/8	XD-4037-CX	25/32	1-9/16	22	1-1/8	3/4	1/2	12	13,120#
7/16	XD-4043-AX	31/32	1-13/16	17-5/16	1-1/2	15/16	5/8	6	17,780#
7/16	XD-4043-BX	31/32	1-13/16	20-5/16	1-1/2	15/16	5/8	9	17,780#
7/16	XD-4043-CX	31/32	1-13/16	23-5/16	1-1/2	15/16	5/8	12	17,780#
1/2	XD-4050-AX	31/32	1-13/16	18	1-1/2	15/16	5/8	6	23,000#
1/2	XD-4050-BX	31/32	1-13/16	21	1-1/2	15/16	5/8	9	23,000#
1/2	XD-4050-CX	31/32	1-13/16	24	1-1/2	15/16	5/8	12	23,000#
9/16	XD-4056-CX	1-3/32	2-1/8	25-1/2	1-3/4	1-1/8	3/4	12	29,000#
9/16	XD-4056-DX	1-3/32	2-1/8	31-1/2	1-3/4	1-1/8	3/4	18	29,000#
5/8	XD-4062-CX	1-3/32	2-1/8	25-1/2	1-3/4	1-1/8	3/4	12	35,800#
5/8	XD-4062-DX	1-3/32	2-1/8	31-1/2	1-3/4	1-1/8	3/4	18	35,800#
3/4	XD-4075-CX	1-17/32	3-3/8	33-7/16	2-5/8	1-3/4	1-1/8	12	51,200#
3/4	XD-4075-DX	1-17/32	3-3/8	39-7/16	2-5/8	1-3/4	1-1/8	18	51,200#
3/4	XD-4075-EX	1-17/32	3-3/8	45-7/16	2-5/8	1-3/4	1-1/8	24	51,200#
7/8	XD-4087-CX	1-17/32	3-3/8	33-7/16	2-5/8	1-3/4	1-1/8	12	69,200#
7/8	XD-4087-DX	1-17/32	3-3/8	39-7/16	2-5/8	1-3/4	1-1/8	18	69,200#
7/8	XD-4087-EX	1-17/32	3-3/8	45-7/16	2-5/8	1-3/4	1-1/8	24	69,200#
1	XD-4099-CX	1-25/32	3-1/2	36-1/2	3	2-1/16	1-3/8	12	89,800#
1	XD-4099-DX	1-25/32	3-1/2	42-1/2	3	2-1/16	1-3/8	18	89,800#
1	XD-4099-EX	1-25/32	3-1/2	48-1/2	3	2-1/16	1-3/8	24	89,800#
1-1/8	XD-40112-DX	2-1/16	4-3/16	48-1/16	3	2-3/8	1-5/8	18	113,000#
1-1/8	XD-40112-EX	2-1/16	4-3/16	54-1/16	3	2-3/8	1-5/8	24	113,000#
1-1/4	XD-40125-DX	2-1/16	4-3/16	48-1/16	3-1/2	2-3/8	1-5/8	18	138,800#
1-1/4	XD-40125-EX	2-1/16	4-3/16	54-1/16	3-1/2	2-3/8	1-5/8	24	138,800#
1-3/8	XD-40137-EX	2-17/32	4-5/16	60-5/16	4	2-1/2	2	24	167,000#
1-1/2	XD-40150-EX	2-17/32	4-5/16	60-5/16	4	2-1/2	2	24	197,800#



FORGED SERIES: Open Body Double Socket Turnbuckles

Dimensions in inches

Rope Size	Galvanized Steel	C Min.	D	Takeup	IPS Breaking Strength*
1/4	XD-5425-AX	14-9/16	1	6	5,880#
1/4	XD-5425-BX	17-9/16	1	9	5,880#
1/4	XD-5425-CX	20-9/16	1	12	5,880#
5/16	XD-5431-AX	15-3/8	1	6	9,160#
5/16	XD-5431-BX	18-3/8	1	9	9,160#
5/16	XD-5431-CX	21-3/8	1	12	9,160#
3/8	XD-5437-AX	19-3/4	1-1/8	6	13,120#
3/8	XD-5437-BX	19-3/4	1-1/8	9	13,120#
3/8	XD-5437-CX	22-3/4	1-1/8	12	13,120#
7/16	XD-5443-AX	17-3/4	1-1/2	6	17,780#
7/16	XD-5443-BX	20-3/4	1-1/2	9	17,780#
7/16	XD-5443-CX	23-3/4	1-1/2	12	17,780#
1/2	XD-5450-AX	19-1/4	1-1/2	6	23,000#
1/2	XD-5450-BX	22-1/4	1-1/2	9	23,000#
1/2	XD-5450-CX	25-1/4	1-1/2	12	23,000#
9/16	XD-5456-CX	27-7/8	1-13/16	12	29,000#
9/16	XD-5456-DX	33-7/8	1-13/16	18	29,000#

Rope Size	Galvanized Steel	C Min.	D	Takeup	IPS Breaking Strength*
5/8	XD-5462-CX	27-7/8	1-3/4	12	35,800#
5/8	XD-5462-DX	33-7/8	1-3/4	18	35,800#
3/4	XD-5475-CX	33-3/8	2-5/8	12	51,200#
3/4	XD-5475-DX	39-3/8	2-5/8	18	51,200#
3/4	XD-5475-EX	45-3/8	2-5/8	24	51,200#
7/8	XD-5487-CX	33-7/8	2-5/8	12	69,200#
7/8	XD-5487-DX	39-7/8	2-5/8	18	69,200#
7/8	XD-5487-EX	45-3/8	2-5/8	24	69,200#
1	XD-5499-CX	37-1/2	3	12	89,800#
1	XD-5499-DX	43-1/2	3	18	89,800#
1	XD-5499-EX	49-1/2	3	24	89,800#
1-1/8	XD-54112-DX	51-7/8	3	18	113,000#
1-1/8	XD-54112-EX	57-7/8	3	24	113,000#
1-1/4	XD-54125-DX	51-7/8	3-1/2	18	138,800#
1-1/4	XD-54125-EX	57-7/8	3-1/2	24	138,800#
1-3/8	XD-54137-EX	66-5/8	4	24	167,000#
1-1/2	XD-54150-EX	66-5/8	4	24	197,800#

Closed Body Turnbuckles

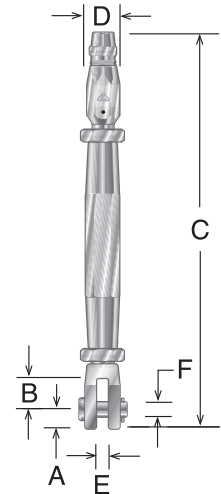


Closed Body Turnbuckles - Foul Ball Backstop - Progressive Field - Cleveland, OH

MACHINED SERIES: Closed Body Clevis and Socket Turnbuckles

Dimensions in inches

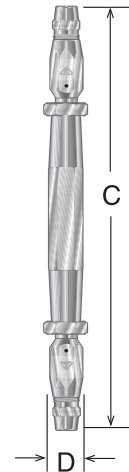
Rope Size	Self-Colored Steel	Zinc Plated Steel	Stainless Steel	A	B	C Min.	D	E	F	Takeup	EIPS Breaking Strength*
1/16	ID-406-N	ID-406-V	IS-406	17/64	3/8	6-5/16	1/2	3/16	3/16	2-1/2	480#
3/32	ID-409-N	ID-409-V	IS-409	5/16	1/2	7-11/16	9/16	1/4	1/4	2-7/8	920#
1/8	ID-412-N	ID-412-V	IS-412	5/16	1/2	7-11/16	9/16	1/4	1/4	2-7/8	1,700#
5/32	ID-415-N	ID-415-V	IS-415	3/8	5/8	9-1/2	3/4	5/16	5/16	3-1/8	2,400#
3/16	ID-418-N	ID-418-V	IS-418	3/8	5/8	9-1/2	3/4	5/16	5/16	3-1/8	3,700#
7/32	ID-421-N	ID-421-V	IS-421	15/32	3/4	10-15/16	7/8	3/8	3/8	4-13/16	4,800#
1/4	ID-425-N	ID-425-V	IS-425	15/32	3/4	10-15/16	7/8	3/8	3/8	4-13/16	6,800#
9/32	ID-428-N	ID-428-V	IS-428	17/32	7/8	11-11/16	1	3/8	7/16	4-9/16	8,000#
5/16	ID-431-N	ID-431-V	IS-431	17/32	7/8	11-11/16	1	3/8	7/16	4-9/16	10,540#
3/8	ID-437-N	ID-437-V	IS-437	5/8	1	13-1/4	1-1/16	7/16	1/2	5-5/16	15,100#
7/16	ID-443-N	ID-443-V	IS-443	23/32	1-1/4	17-7/32	1-5/16	7/16	5/8	8-1/16	20,400#
1/2	ID-450-N	ID-450-V	IS-450	51/64	1-1/4	17-3/4	1-7/8	1/2	11/16	8-1/16	26,600#
9/16	ID-456-N	ID-456-V	IS-456	1-1/16	1-17/32	24	2	11/16	15/16	9-1/2	33,600#
5/8	ID-462-N	ID-462-V	IS-462	1-1/16	1-17/32	24	2	11/16	15/16	9-1/2	41,200#
3/4	ID-475-N	ID-475-V	IS-475	1-15/64	1-27/32	27-5/16	2-1/4	3/4	1-1/8	8-1/8	58,800#



MACHINED SERIES: Closed Body Double Socket Turnbuckles

Dimensions in inches

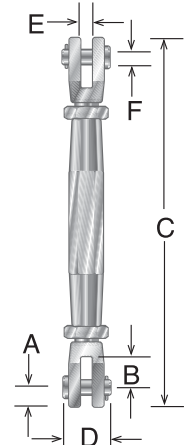
Rope Size	Self-Colored Steel	Zinc Plated Steel	Stainless Steel	C Min.	D	Takeup	EIPS Breaking Strength*
1/16	ID-5506-N	ID-5506-V	IS-5506	6-3/8	1/2	2-1/2	480#
3/32	ID-5509-N	ID-5509-V	IS-5509	7-1/4	9/16	2-7/8	920#
1/8	ID-5512-N	ID-5512-V	IS-5512	7-1/4	9/16	2-7/8	1,700#
5/32	ID-5515-N	ID-5515-V	IS-5515	8-5/8	3/4	3-1/8	2,400#
3/16	ID-5518-N	ID-5518-V	IS-5518	8-5/8	3/4	3-1/8	3,700#
7/32	ID-5521-N	ID-5521-V	IS-5521	11-7/8	7/8	4-13/16	4,800#
1/4	ID-5525-N	ID-5525-V	IS-5525	11-7/8	7/8	4-13/16	6,800#
9/32	ID-5528-N	ID-5528-V	IS-5528	12-7/8	1	4-9/16	8,000#
5/16	ID-5531-N	ID-5531-V	IS-5531	12-7/8	1	4-9/16	10,540#
3/8	ID-5537-N	ID-5537-V	IS-5537	14-1/2	1-1/16	5-5/16	15,100#
7/16	ID-5543-N	ID-5543-V	IS-5543	18-5/8	1-5/16	8-1/16	20,400#
1/2	ID-5550-N	ID-5550-V	IS-5550	19-1/4	1-7/16	8-1/16	26,600#
9/16	ID-5556-N	ID-5556-V	IS-5556	25-5/8	2	11-1/2	33,600#
5/8	ID-5562-N	ID-5562-V	IS-5562	25-5/8	2	11-1/2	41,200#



MACHINED SERIES: Closed Body Double Clevis Turnbuckles

Dimensions in inches

Rope Size	Self-Colored Steel	Zinc Plated Steel	Stainless Steel	A	B	C Min.	D	E	F	Takeup	EIPS Breaking Strength*
1/16	IJD-406-N	IJD-406-V	IJS-406	17/64	3/8	5-13/16	21/32	3/16	3/16	2-1/2	480#
3/32	IJD-409-N	IJD-409-V	IJS-409	5/16	1/2	7-5/16	13/16	1/4	1/4	2-7/8	920#
1/8	IJD-412-N	IJD-412-V	IJS-412	5/16	1/2	7-5/16	13/16	1/4	1/4	2-7/8	1,700#
5/32	IJD-415-N	IJD-415-V	IJS-415	3/8	5/8	8-7/8	15/16	5/16	5/16	3-1/8	2,400#
3/16	IJD-418-N	IJD-418-V	IJS-418	3/8	5/8	8-7/8	15/16	5/16	5/16	3-1/8	3,700#
7/32	IJD-421-N	IJD-421-V	IJS-421	15/32	3/4	10-3/16	1-1/8	3/8	3/8	4-13/16	4,800#
1/4	IJD-425-N	IJD-425-V	IJS-425	15/32	3/4	10-3/16	1-1/8	3/8	3/8	4-13/16	6,800#
9/32	IJD-428-N	IJD-428-V	IJS-428	17/32	7/8	10-11/16	1-5/16	3/8	7/16	4-9/16	8,000#
5/16	IJD-431-N	IJD-431-V	IJS-431	17/32	7/8	10-11/16	1-5/16	3/8	7/16	4-9/16	10,540#
3/8	IJD-437-N	IJD-437-V	IJS-437	5/8	1	12-9/16	1-7/16	7/16	1/2	5-5/16	15,100#
7/16	IJD-443-N	IJD-443-V	IJS-443	23/32	1-1/4	16-1/8	1-5/8	7/16	5/8	8-1/16	20,400#
1/2	IJD-450-N	IJD-450-V	IJS-450	51/64	1-3/8	16-9/16	1-7/8	1/2	11/16	8-1/16	26,600#
3/4	IJD-475-N	IJD-475-V	IJS-475	1-15/16	1-27/32	24-15/16	2-5/15	3/4	1-1/8	11-1/2	58,800#

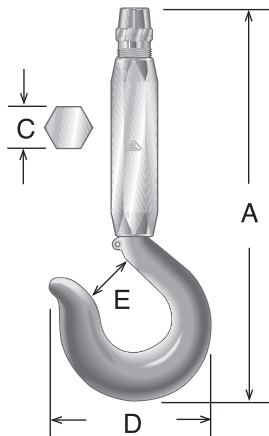


Hooks and Eye Swivels

- See page 4 for additional information on breaking strength
- See page 16 for assembly kits
- Call technical service for custom designs



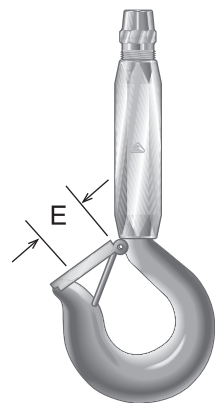
Swivel Hook - Submersible Research Vehicle Rigging



SWIVEL AND NON-SWIVEL HOOKS

Dimensions in inches

Rope Size	Swivel Self-Colored Steel	Swivel Zinc Plated Steel	Non-Swivel Self-Colored Steel	Non-Swivel Zinc Plated Steel	A Swivel	A Non-Swivel	C	D	E	IPS Breaking Strength*
3/16	Y-2518-N	Y-2518-V	Y-2618-N	Y-2618-V	6-19/32	5-5/16	3/4	2-7/8	1	3,340#
1/4	Y-2525-N	Y-2525-V	Y-2625-N	Y-2625-V	7-7/16	5-7/8	15/16	3-3/16	1-1/16	5,880#
5/16	Y-2531-N	Y-2531-V	Y-2631-N	Y-2631-V	8-1/4	6-21/32	15/16	3-5/8	1-1/8	9,160#
3/8	Y-2537-N	Y-2537-V	Y-2637-N	Y-2637-V	9-5/16	7-19/32	1-1/8	4-3/32	1-1/4	13,120#
7/16	Y-2543-N	Y-2543-V	Y-2643-N	Y-2643-V	10-5/8	8-5/16	1-1/4	4-3/32	1-1/4	17,780#
1/2	Y-2550-N	Y-2550-V	Y-2650-N	Y-2650-V	11-13/16	9-23/32	1-7/16	4-15/16	1-1/2	23,000#
9/16	Y-2556-N	Y-2556-V	Y-2656-N	Y-2656-V	13-11/16	12	1-9/16	6-1/2	1-7/8	29,000#
5/8	Y-2562-N	Y-2562-V	Y-2662-N	Y-2662-V	14-3/4	12	1-3/4	6-1/2	1-7/8	35,800#
3/4	Y-2575-N	Y-2575-V	Y-2675-N	Y-2675-V	17-1/4	14-1/2	2	7-9/16	2-1/4	51,200#
7/8	Y-2587-N	Y-2587-V	Y-2687-N	Y-2687-V	19-7/16	16-15/32	2-1/8	8-11/16	2-1/2	69,200#
1	Y-2599-N	Y-2599-V	Y-2699-N	Y-2699-V	21-15/16	19-3/16	2-1/2	11	3-3/8	89,800#

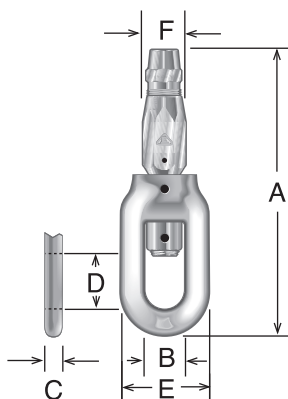


SAFETY LATCH KITS

Dimensions in inches

Fitting Size(in)	S Kit Number	SS Kit Number	Throat Size (E Dim.)
3/16	L-227		1
1/4	L-227A	L-490A	1-1/16
5/16	L-227B	L-490B	1-1/8
3/8	L-227B	L-490B	1-1/4
7/16	L-227B	L-490C	1-1/4
1/2	L-227E	L-490C	1-1/2
9/16	L-227F	L-490D	1-7/8
5/8	L-227F	L-490D	1-7/8
3/4	L-227G	L-490E	2-1/4
7/8	L-227G	L-490E	2-1/2
1	L-227J	L-490F	3-3/8

Electroline hook assemblies are available with a single ("S") or double-action ("SS") spring latch. The double kit includes an upper latch to prevent loss of the load due to looping of the cable when the load is slackened. Safety latches will be factory installed if "S" or "SS" is added to the catalog number suffix. For field installation, order the kit numbers listed here.



OVAL EYE SWIVELS (NO BALL BEARINGS)

Dimensions in inches

Rope Size	Self-Colored Steel	Zinc Plated Steel	A	B	C	D	E	F	IPS Breaking Strength*
7/16	Y-1143-N	Y-1143-V	10-9/32	1-5/8	1-3/16	2-3/4	3	1-1/2	17,780#
1/2	Y-1150-N	Y-1150-V	10-9/32	1-5/8	1-3/16	2-3/4	3	1-1/2	23,000#
9/16	Y-1156-N	Y-1156-V	11-1/8	1-5/8	1-3/16	2-3/4	3	1-7/8	29,000#
5/8	Y-1162-N	Y-1162-V	11-1/8	1-5/8	1-3/16	2-5/8	3	1-7/8	35,800#
3/4	Y-1175-N	Y-1175-V	12-1/2	1-7/8	1-3/4	3-1/4	3-5/8	2-3/16	51,200#
7/8	Y-1187-N	Y-1187-V	13-1/2	1-7/8	1-3/4	3-1/4	3-5/8	2-5/8	69,200#
1	Y-1199-N	Y-1199-V	15-7/16	2-1/8	1-3/4	3-3/8	4	2-7/8	89,800#
1-1/8	Y-11112-N	Y-11112-V	20-1/16	2-5/8	2-1/4	4-5/16	4-7/8	3-3/4	113,000#
1-1/4	Y-11125-N	Y-11125-V	21-1/2	2-5/8	2-1/4	4-5/16	4-7/8	4-1/16	138,800#
1-3/8	Y-11137-N	Y-11137-V	27-1/16	4	3	4-1/2	7	4-3/8	167,000#

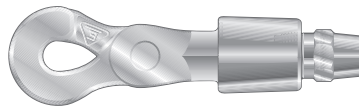


Life Line Fitting - US Navy - Battleship Deck Railing

Life Line Fittings

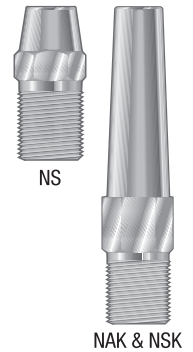
CLEVIS FITTINGS WITH SISTER HOOKS

Rope Size	Stainless Steel	Aluminum
FOR WIRE ROPE		
7/16	NS-4843	-
1/2	NS-4850	-
9/16	NS-4856	-
5/8	NS-4862	-
FOR PULTRUDED ROD		
7/16	NSF-4843	NAF-4843
9/16	NSF-4856	NAF-4856
FOR MYLAR AND NYLON ROPE		
9/16	NSM-4856	NAM-4856
5/8	NSM-4862	NAM-4862
FOR KEVLAR		
1/2		NAK-4850



REPLACEMENT SLEEVES

Rope Size	Stainless Steel	Aluminum
FOR WIRE ROPE		
7/16	NS-943	-
1/2	NS-950	-
9/16	NS-956	-
5/8	NS-962	-
FOR PULTRUDED ROD		
7/16	NSF-943	NAF-943
9/16	NSF-956	NAF-956
FOR MYLAR AND NYLON ROPE		
9/16	NSM-956	NAM-956
5/8	NSM-962	NAM-962
FOR KEVLAR		
3/8	NSK-937	NAK-937
1/2	NSK-950	NAK-950



CLEVIS FITTINGS WITHOUT SISTER HOOKS

Rope Size	Stainless Steel	Aluminum
FOR KEVLAR ROPE		
3/8	NSK-137B	NAK-137B
1/2	NSK-150B	NAK-150B



CLOSED BODY TURNBUCKLES WITH SISTER HOOKS

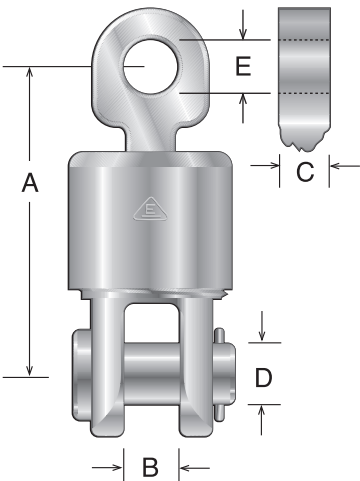
Rope Size	Stainless Steel	Aluminum
FOR WIRE ROPE		
7/16	NS-4943	-
1/2	NS-4950	-
9/16	NS-4956	-
5/8	NS-4962	-
FOR PULTRUDED ROD		
7/16	NSF-4943	NAF-4943
9/16	NSF-4956	NAF-4956
FOR MYLAR AND NYLON ROPE		
1/2	NSM-4950	NAM-4950
9/16	NSM-4956	NAM-4956
5/8	NSM-4962	NAM-4962
FOR KEVLAR		
1/2		NAK-4950



Life Line Fittings



Life Line Fitting - US Coast Guard - Life Lines

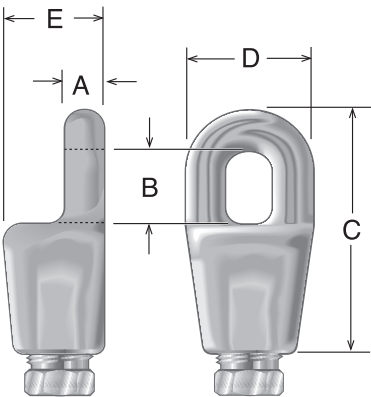


LIFE LINE INSULATOR

Dimensions in inches

Rope Size	Stainless Steel	A	B	C	D Pin	E
7/16-5/8	SP-558	3-1/8	5/8	1/2	5/8	5/8

Approved by NAVSEA. Naval Sea Systems Command drawing: 803-5184149.



LIFE LINE OFFSET EYE

Dimensions in inches

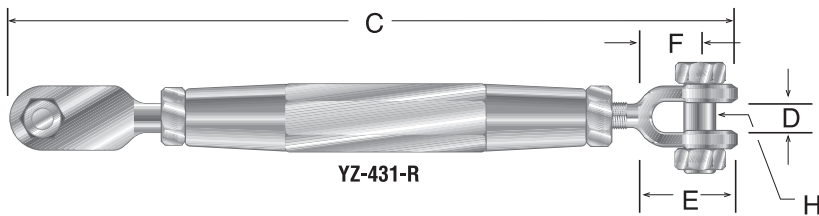
Rope Size	Bronze	A	B	C	D	E
3/16	X-3418	1/4	5/8	2-3/8	1-1/8	3/4

Sockets made of manganese bronze. Balance naval brass.



Antenna Fitting - US Navy Ship Communications Tower

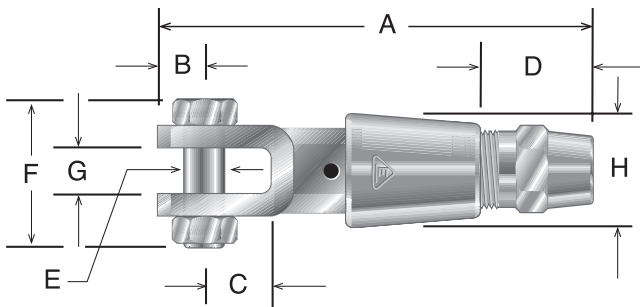
Antenna Fittings



CLOSED BODY DOUBLE CLEVIS TURNBUCKLES - Naval Bronze

Dimensions in inches

Rope Size	Catalog Number	Bureau of Ships Number	Type	TakeUp	C Max.	C min.	D	E	F	H
5/16	YZ-431-R	MX-1176-U	9CT9C	4-9/16	16-1/16	11-1/2	5/8	1-5/8	1-1/16	1/2



RADIO ANTENNA OPEN END FITTING - Naval Bronze

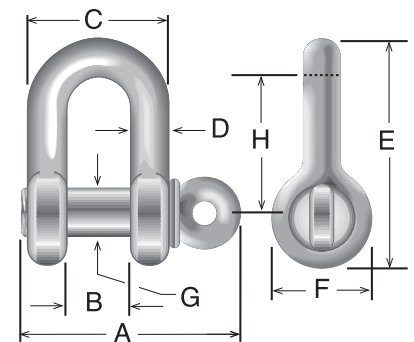
Dimensions in inches

Rope Size	Part Number	A	B	C	D	E	F	G	H
5/16	X-31-131-R	4-13/16	9/16	1-1/16	1	1/2	1-25/32	5/8	1-1/32

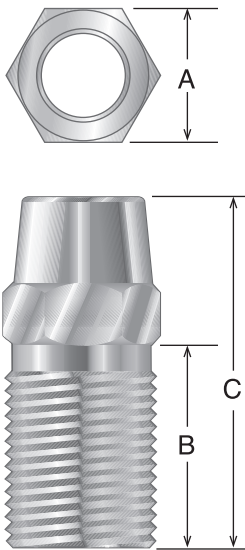
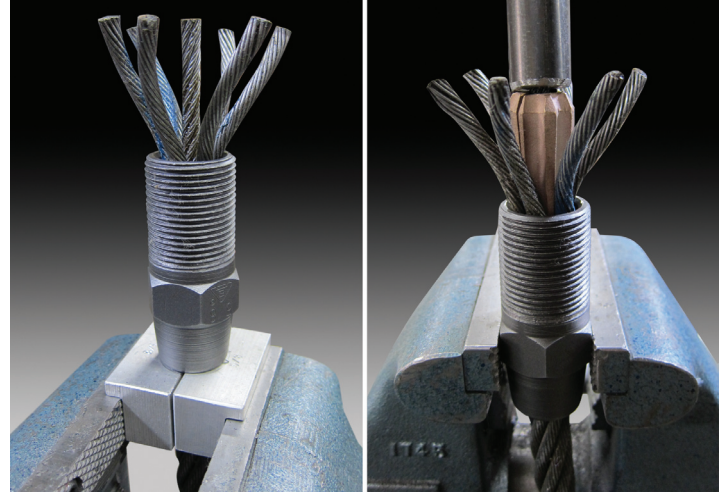
SHACKLE & PIN ASSEMBLY - Naval Bronze

Dimensions in inches

Rope Size	Part Number	A	B	C	D	E	F	G	H
7/16	X-2843-R	2-11/32	23/32	1-19/32	7/16	2-21/32	1-1/16	1/2	1-5/8



Wire Rope Sleeves & Assembly Kits

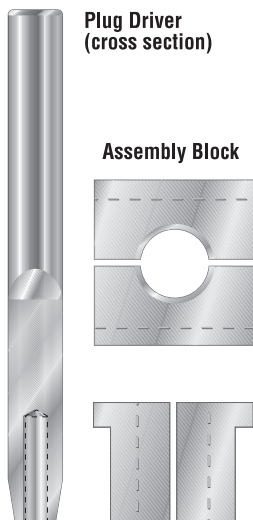


SLEEVE SELECTION TABLE

Dimensions in inches

Rope Size	Self-Colored Steel	Zinc Plated Steel	Stainless Steel	A	B	C
1/16	ID-906-N	ID-906-V	IS-906	3/8	1/2	7/8
3/32	ID-909-N	ID-909-V	IS-909	3/8	9/16	15/16
1/8	ID-912-N	ID-912-V	IS-912	3/8	9/16	15/16
5/32	ID-915-N	ID-915-V	IS-915	1/2	21/32	1-7/32
3/16	ID-918-N	ID-918-V	IS-918	1/2	21/32	1-7/32
7/32	ID-921-N	ID-921-V	IS-921	9/16	13/16	1-3/8
1/4	ID-925-N	ID-925-V	IS-925	9/16	13/16	1-3/8
9/32	ID-928-N	ID-928-V	IS-928	11/16	1	1-11/16
5/16	ID-931-N	ID-931-V	IS-931	3/4	1	1-11/16
3/8	ID-937-N	ID-937-V	IS-937	3/4	1-1/8	1-7/8
7/16	ID-943-N	ID-943-V	IS-943	7/8	1-5/16	2-1/4
1/2	ID-950-N	ID-950-V	IS-950	1	1-1/2	2-9/16
9/16	ID-956-N	ID-956-V	IS-956	1-1/4	1-5/8	3-1/8
5/8	ID-962-N	ID-962-V	IS-962	1-1/4	1-5/8	3-1/8
3/4	ID-975-N	ID-975-V	IS-975	1-1/2	1-7/8	3-5/8
7/8	ID-987-N	ID-987-V	IS-987	1-3/4	2-1/4	4-1/4
1	ID-999-N	ID-999-V	IS-999	2	2-3/4	5-1/8
1-1/8	ID-9112-N	ID-9112-V	IS-9112	2-1/2	3-1/8	6-1/4
1-1/4	ID-9125-N	ID-9125-V	IS-9125	2-3/4	3-5/8	7-1/2
1-3/8	ID-9137-N	ID-9137-V	IS-9137	3-1/2 Flats on 4" Round	5-1/8	10
1-1/2	ID-9150-N	ID-9150-V	IS-9150	3-1/2 Flats on 4" Round	5-1/8	10

Note: All galvanized fittings include zinc electroplated sleeves.



ASSEMBLY KITS FOR INDIVIDUAL WIRE ROPE

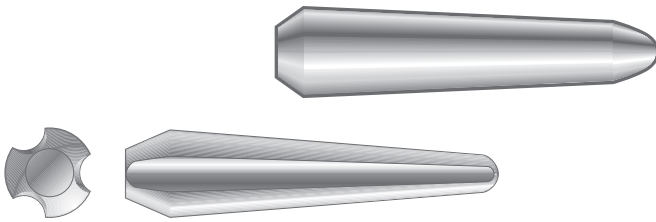
Dimensions in inches

Rope Size	Kit#	Assembly Block	Plug Driver
1/16-3/32	SP-307-D	SP307-1D	SP307-2AA
1/8-5/32	SP-307-E	SP307-1E	SP307-2A
3/16-7/32	SP-307-F	SP307-1F	SP307-2A
1/4-9/32	SP-307-G	SP307-1G	SP307-2A
5/16	SP-307-H	SP307-1H	SP307-2B
3/8	SP-307-J	SP307-1J	SP307-2B
7/16	SP-307-K	SP307-1K	SP307-2C
1/2	SP-307-L	SP307-1L	SP307-2C
9/16	SP-307-M	SP307-1M	SP307-2C
5/8	SP-307-N	SP307-1N	SP307-2D
3/4	SP-307-P	SP307-1P	SP307-2D
7/8	SP-307-Q	SP307-1Q	SP307-2E
1	SP-307-R	SP307-1R	SP307-2E
1-1/8	SP-307-S	SP307-1S	SP307-2F
1-1/4	SP-307-T	SP307-1T	SP307-2F
1-3/8	SP-307-V	SP307-1V	SP307-2G
1-1/2	SP-307-W	SP307-1W	SP307-2G

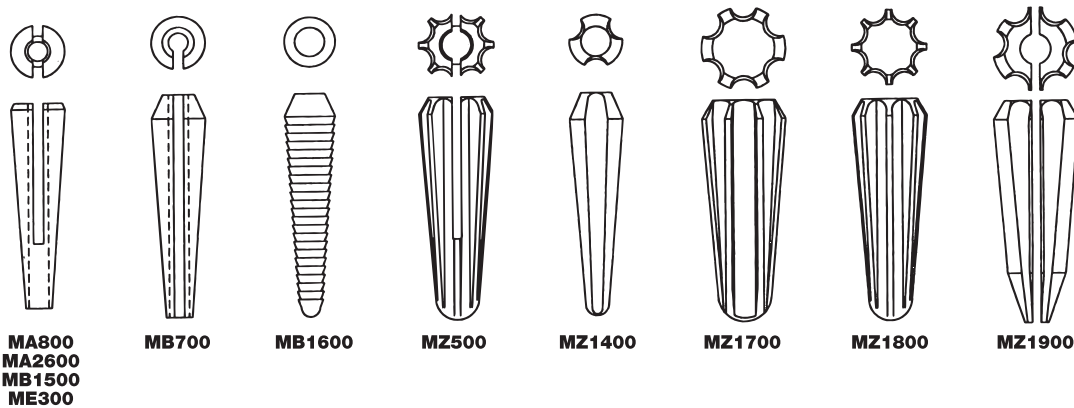
For easier, more efficient assembly of Electroline Wire Rope Fittings, it is suggested that Assembly Kits be used.

The assembly blocks prevent the wires of the rope strands from being nicked by the jaws of the vise. The blocks also protect the lay of the strand and hold all of the wires in the strand firmly so that the plug can be driven into a solid seat.

Wire Rope Plugs



The key to the positive grip of Electroline terminations is in the plug design. The plugs are designed and manufactured using specific materials to maximize the holding power of different types and constructions of rope. Plugs for the more common wire rope constructions are represented here. However, our engineers have developed other configurations for ropes not listed. Contact Esmet for answers to your rope termination questions.



To order a plug, first locate the vertical column, under **WIRE ROPE CONSTRUCTION**, that lists the wire rope construction for which the replacement plug is to be used.

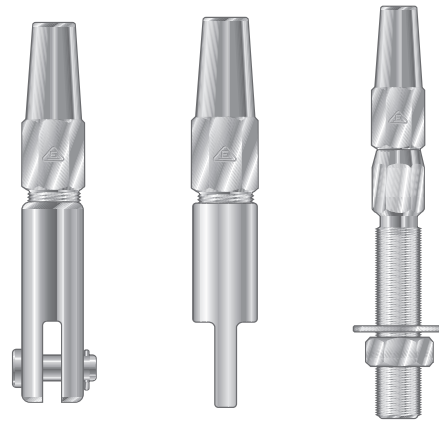
Second, where the row showing your **ROPE SIZE** (in column at lower left) intersects with the **WIRE ROPE CONSTRUCTION** column, the correct replacement plug is listed.

WIRE ROPE CONSTRUCTION

		6 x 19 (IWRC) 6 x 21 (IWRC) 6 x 25 (IWRC) 6 x 31 (IWRC) 6 x 36 (IWRC) 6 x 37 (IWRC) 6 x 41 (IWRC) 6 x 46 (IWRC) 6 x 49 (IWRC) 7 x 7 7 x 19	6 x 7 (FC) 6 x 19 (FC) 6 x 21 (FC) 6 x 25 (FC) 6 x 31 (FC) 6 x 36 (FC) 6 x 37 (FC) 6 x 43 (FC) 6 x 46 (FC)	1 x 7 (steel only)	1 X19	8 x 9 (FC) 8 x 25 (FC) 8 x 19 (FC)	18 x 7 (IWRC) 19 x 7 19 x 19 Flex 19	7 - Flex	7 x 7 7 x 19 Aircraft Cable	3 x 7 3 x 19 3 x 37	8 x 19 (IWRC)
ROPE SIZE (inches)		PLUG PART NUMBERS									
1/16	MB-1609	MB-1609	MB-1609	ME-306	MB-1609				MB-1609		
3/32	MB-709	MB-709	MB-1609	ME-309	MB-1609				MB-709		
1/8	MB-712	MB-712	MB-1612	ME-312	MB-712	ME-312			MB-712	MB-1612	
5/32	MB-715	MB-715	MB-1615	ME-315	MB-715	ME-315			MB-715		
3/16	MB-718	MB-718	MB-1518	ME-318	MB-718	ME-318			MB-718	MB-1618	
7/32	MB-721	MB-721	MB-1521	ME-321	MB-721	ME-321			MB-721		
1/4	MB-725	MB-725	MB-1525	ME-325	MB-725	MA-2625			MB-725	MB-1618	
9/32	MB-728	MB-728	MB-1528	ME-328	MB-728	ME-328			MB-728		
5/16	MB-731	MB-731	MB-1531	ME-331	MB-731	ME-331	MA-831		MB-731	MB-1625	
3/8	MB-737	MB-737	MB-1537	ME-337	MB-737	MA-2637	MA-837		MB-737	MZ-1437	MZ-537
7/16	MB-743*	MB-743*	MB-1543	ME-343	MZ-1843	MA-2643	MA-843		MB-743*	MZ-1437	MZ-543
1/2	MB-750*	MB-750*	MB-1550	ME-350	MZ-1850	MA-2650	MA-850		MB-750*	MZ-1437	MZ-550
9/16	MZ-1956	MB-1756	MB-1556	ME-356	MZ-1856	MA-2656	MA-856			MZ-1443	MZ-556
5/8	MZ-1962	MZ-1762	MB-1562	ME-362	MZ-1862	MA-2662	MA-862			MZ-1450	MZ-562
3/4	MZ-1975	MZ-1775	MB-1575	ME-375*	MZ-1875	MA-2675	MA-875			MZ-1462	MZ-575
7/8	MZ-1987	MZ-1787	MB-1587	ME-387*	MZ-1887	MA-2687	MA-887				MZ-587
1	MZ-1999	MZ-1799	MB-1599	ME-399*	MZ-1899	MA-2699	MA-899				MZ-599
1-1/8	MZ-19112	MZ-17112			MZ-18112	MA-26112	MA-8112				MZ-5112
1-1/4	MZ-19125	MZ-17125			MZ-18125		MA-8125				
1-3/8	MZ-19137	MZ-17137									
1-1/2	MZ-19150	MZ-17150									

- Plug part numbers marked with (*) are significantly different from the drawings shown above.
- For other rope constructions, please consult the factory or your distributor.
- See page 5 for rope width determination and rope identification.

Synthetic Rope Fittings Introduction



SYNTHETIC ROPE FITTINGS

Like wire ropes, synthetic ropes are offered in a variety of configurations. However, the similarity quickly ends with the multitude of materials and jackets available for synthetic ropes in today's market. The following pages describe fittings for the most common synthetic ropes. Esmet also has designs for terminations that fit ropes not mentioned in this catalog. Esmet is ready to design fittings to meet your particular rope specifications and is just a phone call away.

Synthetic Rope Fittings Using Wire Rope Terminations

US Patent #5,136,755

Electroline Synthetic Rope Plugs are designed to be used with the Wire Rope Fittings shown in the front section of this catalog. These plugs are suitable for the following rope materials:

Nylon
Mylar
Dacron
Polyester
Polypropylene

and the following types of rope construction:

Braid (single or double)
Plaited
Three Strand

The rated strength of each of the ropes tested varies between different manufacturers. It is recommended that specific test results be consulted in cases where the strength of the termination is critical. Such test results are available upon request from Esmet, Inc.

ORDERING INFORMATION:

Identify the required fitting (style and material) from the selection of wire rope fittings available in this catalog. Specify the required plug from the following chart.

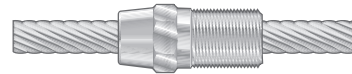
SYNTHETIC ROPE FITTINGS

Rope Size (inches)	Three Strand	Braided or Plaited
Plug Part Number		
1/8	MB-1612	SD-1012
3/16	MB-1618	SD-1018
1/4	MB-1625	SD-1025
5/16	MB-1631	SD-1031
3/8	MZ-1437	SD-1037
7/16	MZ-1443	SD-1043
1/2	MZ-1450	SD-1050
9/16	MZ-1456	SD-1056
5/8	MZ-1462	SD-1062
3/4	MZ-1475	SD-1075
7/8		SD-1087
1		SD-1099
1-1/8		SD-10112
1-1/4		SD-10125
1-3/8		SD-10137
1-1/2		SD-10150

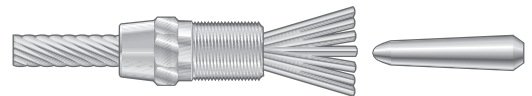
EXAMPLE:

The correct part number for a forged, galvanized clevis for use with 1/2" double braid synthetic rope would be GD-150-X Clevis (from pg. 8) with SD-1050 plug.

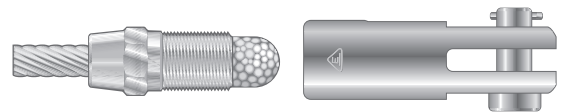
TYPICAL ASSEMBLY:



SLEEVE: Synthetic rope passed through sleeve.



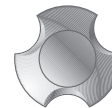
SLEEVE & PLUG: Rope braids fanned out to insert plug.



SLEEVE, PLUG & SOCKET: Plug driven in and rope braids ends melted together to apply socket.

SAMPLE PLUGS

1400 SERIES PLUG



S-1000 SERIES PLUG



Kevlar® Rope Fittings Extruded Jacket

US Patent #4,509,233 • #5,308,026

Electroline synthetic rope fittings for Kevlar with extruded jackets excel in meeting the need for a quick, reliable end termination. The fittings perform on the following jacket materials:

**Polyurethane
Nylon II
Hytrell**

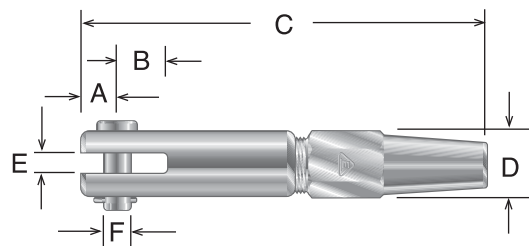
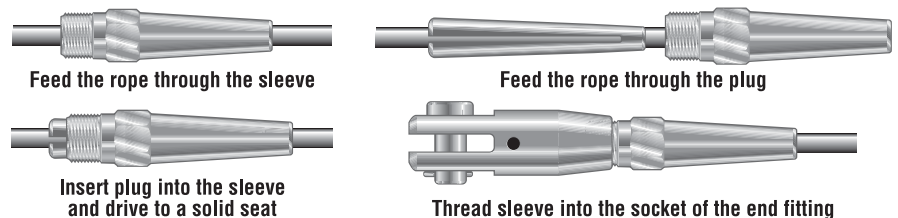
and the following types of rope construction:

**Standard wire rope constructions
Contra-Helical
Parallel
Electro-Mechanical**



Clevis Kevlar Rope Fitting - Canopy Zip Line - Belize, Central America

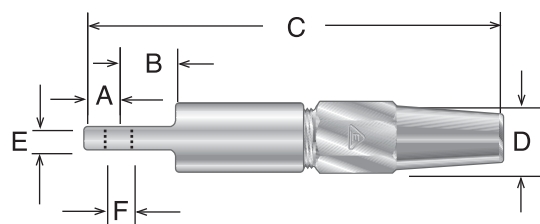
TYPICAL ASSEMBLY:



CLEVIS SOCKET FITTINGS

Dimensions in inches

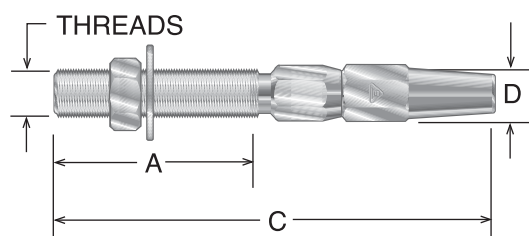
Rope Diameter	Aluminum	A	B	C	D	E	F
3/16	KA-118	1/2	3/4	4-15/16	15/16	3/8	3/8
1/4	KA-125	19/32	7/8	6	1-1/16	3/8	7/16
5/16	KA-131	21/32	1	7-9/16	1-3/16	7/16	1/2
3/8	KA-137	3/4	1-1/4	8-1/2	1-3/8	7/16	5/8
7/16	KA-143	27/32	1-3/8	11	1-9/16	1/2	11/16
1/2	KA-150	27/32	1-3/8	11-1/8	1-3/4	5/8	11/16
9/16	KA-156	1-5/32	1-17/32	12-3/4	2	11/16	15/16
5/8	KA-162	1-11/32	1-17/32	14-5/8	2-3/8	3/4	1-1/8
3/4	KA-175	1-1/2	1-7/8	16-5/16	2-5/8	13-16	1-1/4



EYE SOCKET FITTINGS

Dimensions in inches

Rope Diameter	Aluminum	A	B	C	D	E	F
3/16	KA-218	1/2	13/16	4-15/16	15/16	23/64	25/64
1/4	KA-225	19/32	27/32	6	1-1/16	23/64	29/64
5/16	KA-231	21/32	31/32	7-9/16	1-3/16	27/64	33/64
3/8	KA-237	3/4	1-1/16	8-1/2	1-3/8	27/64	41/64
7/16	KA-243	27/32	1-1/8	11	1-9/16	31/64	45/64
1/2	KA-250	27/32	1-1/8	11-1/8	1-3/4	31/64	45/64
9/16	KA-256	1-3/32	1-3/8	12-3/4	2	21/32	61/64
5/8	KA-262	1-11/32	1-19/32	14-5/8	2-3/8	23/32	1-9/64
3/4	KA-275	1-1/2	1-13/16	16-5/16	2-5/8	25/32	1-17/64



STUD SOCKET FITTINGS

Dimensions in inches

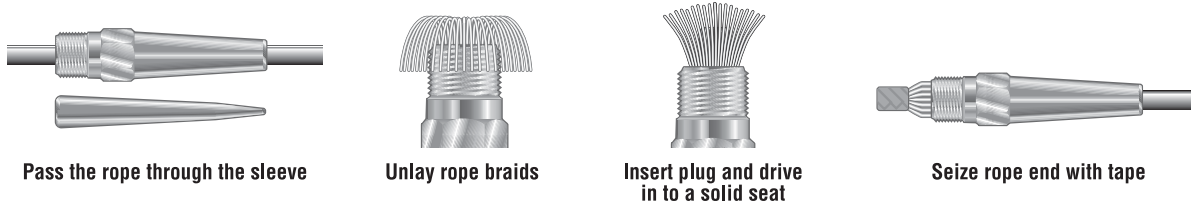
Rope Diameter	Aluminum	A	C	D	THREAD
3/16	KA-318	4-3/4	8-3/8	15/16	1/2-13
1/4	KA-325	4-3/4	9-3/8	1	5/8-11
5/16	KA-331	5	10-7/8	1-1/8	3/4-10
3/8	KA-337	5-1/8	11-7/8	1-1/4	3/4-10
7/16	KA-343	6	15	1-1/2	7/8-9
1/2	KA-350	6-3/4	16-1/8	1-3/4	1-8
9/16	KA-356	7-1/8	17-1/2	2	1-1/8-7
5/8	KA-362	7-1/8	18-7/8	2-1/8	1-1/4-7
3/4	KA-375	8	21	2-1/2	1-1/2-6

Kevlar® Rope Fittings Braided Jacket

US Patent #5,351,366

Electroline synthetic rope fittings for Kevlar rope with braided jackets excel in meeting the need for a quick, reliable end termination. These fittings are of the internal taper pin style and are selected for both the rope size and the rope rated strength. This product is available in aluminum and stainless steel. Please call for stainless steel part numbers and pricing.

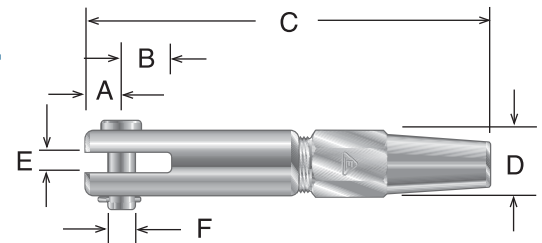
TYPICAL ASSEMBLY:



CLEVIS SOCKET FITTINGS

*Dimensions in inches**

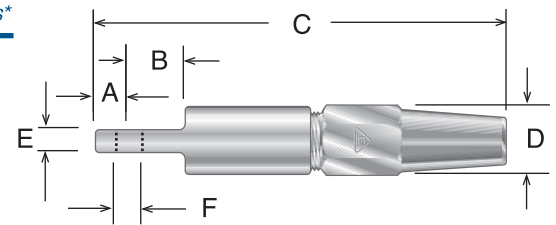
Rope Diameter	Aluminum	RBS Tons	A	B	C	D	E	F
3/16	IKA-118	1.2-2.2	1/2	57/64	5-11/16	1	3/8	3/8
1/4	IKA-125	2.2-3.0	19/32	59/64	6-3/4	1-1/8	3/8	7/16
5/16	IKA-131	3.0-4.5	21/32	1-5/64	7-9/16	1-1/2	7/16	1/2
3/8	IKA-137	4.5-6.5	21/32	1-5/64	8-9/16	1-1/2	7/16	1/2
1/2	IKA-150	8.0-11.0	27/32	1-1/4	11-1/2	1-3/4	5/8	11/16
5/8	IKA-162	14.0-18.5	1-15/64	1-27/32	14-11/32	2-1/2	3/4	1-1/8
3/4	IKA-175	17.5-31.5	1-3/4	2-1/4	16-3/4	3	15/16	1-3/8



EYE SOCKET FITTINGS

*Dimensions in inches**

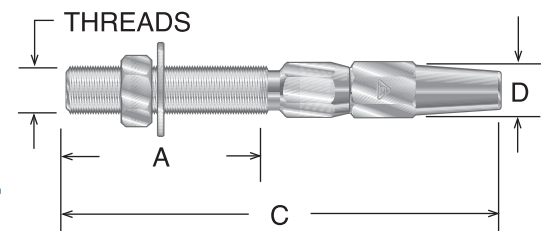
Rope Diameter	Aluminum	RBS Tons	A	B	C	D	E	F
3/16	IKA-218	1.2-2.2	1/2	13/16	5-9/16	1	23/64	25/64
1/4	IKA-225	2.2-3.0	19/32	27/32	6-7/8	1-1/8	23/64	29/64
5/16	IKA-231	3.0-4.5	21/32	31/32	7-15/16	1-1/2	27/64	33/64
3/8	IKA-237	4.5-6.5	21/32	1-1/16	8-15/16	1-1/2	31/64	41/64
1/2	IKA-250	8.0-11.0	27/32	1-3/8	11-1/4	1-3/4	3/4	61/64
5/8	IKA-262	14.0-18.5	1-1/2	2	14-3/4	2-1/2	1-1/4	1-5/32
3/4	IKA-275	17.5-31.5	2	2-1/2	17-1/4	3	1-3/8	1-13/32



STUD SOCKET FITTINGS

*Dimensions in inches**

Rope Diameter	Aluminum	RBS Tons	A	C	D	THREAD
3/16	IKA-318	1.2-2.2	3	7-5/16	1	1/2-13
1/4	IKA-325	2.2-3.0	4-3/4	10	1-1/8	5/8-11
5/16	IKA-331	3.0-4.5	5-1/8	11	1-3/8	3/4-10
3/8	IKA-337	4.5-6.5	5-1/8	12	1-1/2	7/8-9
1/2	IKA-350	8.0-11.0	7-1/8	16	2	1-1/4-7
5/8	IKA-362	14.0-18.5	7-1/8	17	2	1-1/4-7
3/4	IKA-375	17.5-31.5	10	21-3/4	3	1-3/4-5



NOTE: Other sizes available upon request

*Dimensions may vary

Kernmantle Rope Fittings Low Stretch Synthetic Rope

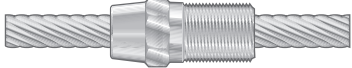
US Patent #5,022,780

Electroline synthetic rope fittings for Kernmantle rope are supplied with the SAR1000 series internal plug. The sleeve has no exposed threads when assembled and is retained in the socket with a set screw.

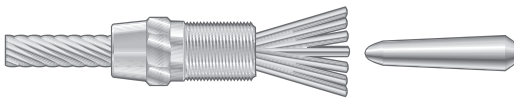


Clevis Fitting - Skycam - 1996 Olympic Games - Atlanta, GA

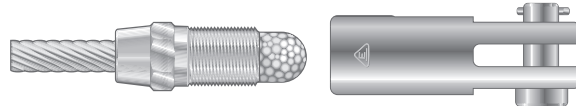
TYPICAL ASSEMBLY:



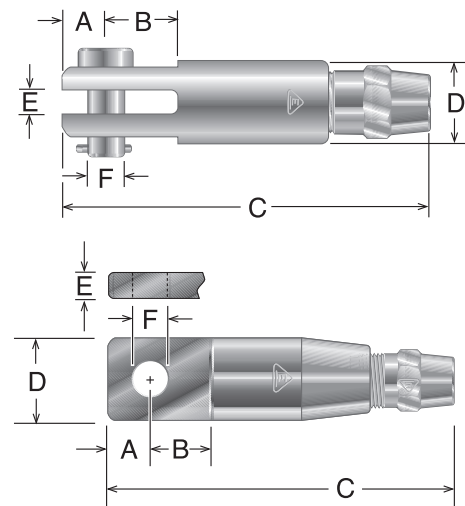
SLEEVE: Synthetic rope passed through sleeve.



SLEEVE & PLUG: Rope braids fanned out to insert plug.



SLEEVE, PLUG & SOCKET: Plug driven in and rope braids ends melted together to apply socket.



MACHINED SERIES: Clevis Socket Fittings

Dimensions in inches

Rope Diameter	Anodized Aluminum	A	B	C	D	E	F
3/8-7/16	YAR-143	5/8	1	5-13/16	1-1/4	7/16	1/2
1/2	YAR-150	23/32	1-1/4	6-1/2	1-3/8	1/2	5/8
5/8	YAR-162	51/64	1-3/8	7-1/8	1-1/2	5/8	11/16

MACHINED SERIES: Eye Socket Fittings

Dimensions in inches

Rope Size	Anodized Aluminum	A	B	C	D	E	F
3/8-7/16	YAR-243	7/16	29/32	6-3/16	1-1/2	3/4	3/4
1/2	YAR-250	7/16	29/32	6-3/16	1-1/2	3/4	29/32
5/8	YAR-262	1/2	1-1/16	6-11/16	1-7/8	1	7/8

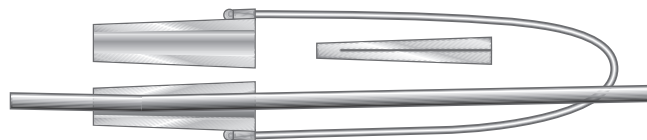
Optical Kevlar “Ok” Fittings

For All Dielectric Self-supporting, Free-span, Aerial and Oceanographic Cables

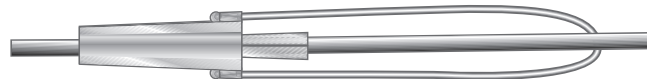
US Patent #4,509,233 • #5,308,026 • UK #2,141,527

Designed for mid-span applications on all dielectric self-supporting fiber optic cables. Installed loads not to exceed 1000 lbs. The fitting is manufactured using non-corrosive materials. The flexible bail is made from 1x19 SS strand.

TYPICAL ASSEMBLY:



Place the bail fitting over the cable, laying the cable in the tapered groove on one side.



Squeeze the fitting together so the edge on one taper plate slides into the rolled edge of the other.

While holding the fitting together, place the two-piece plugs over the cable and then pull the bail fitting back over the collets.



Pull on the cable, by hand, to further seat the collets. The fitting is now ready to use.

Mid span plug



Cable Diameter		Part Number	Overall Length
MM	Inches		
12-13	.46-.52	OKS148	15
12-13	.46-.52	OKS150	15

Electro-Mechanical Cable Fittings

Electroline fittings have proven to be a superior method of terminating steel, (single, double or triple-armored) conductor core cable. Most Electroline wire rope fittings can be modified for E-M cable. Please consult Esmet for special requirements.

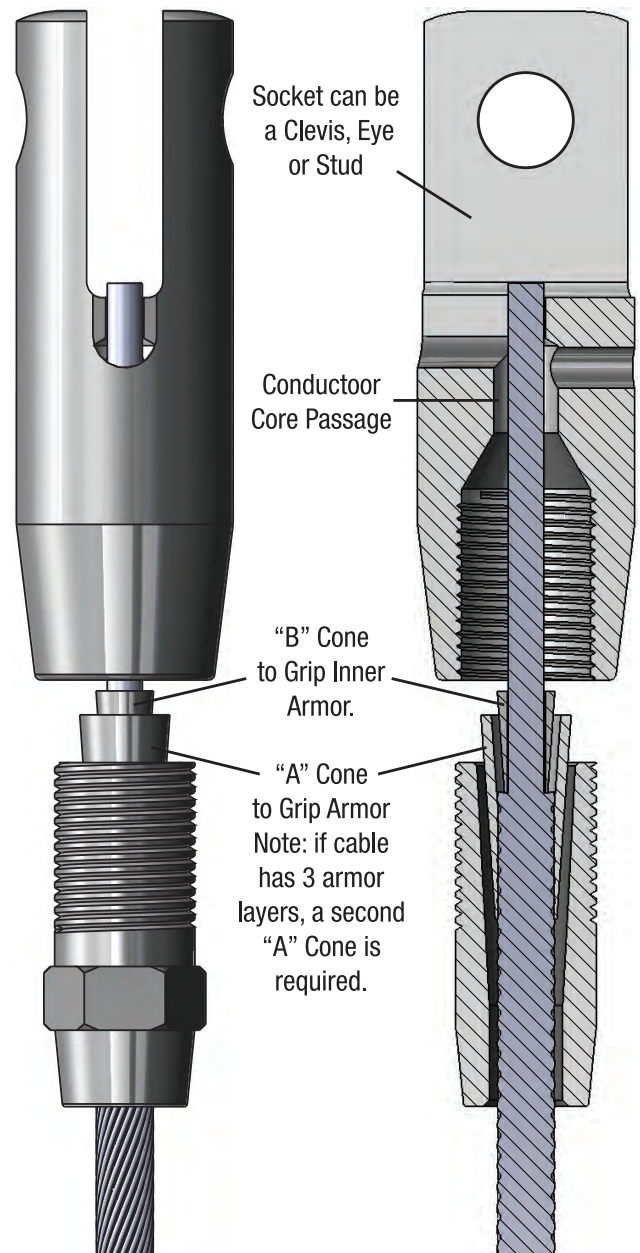
Assembly of the termination utilizes the same wedging principle employed by the Electroline wire rope terminations. Therefore, assembly is quick and easy, and provides holding strength unsurpassed by other cable terminations.

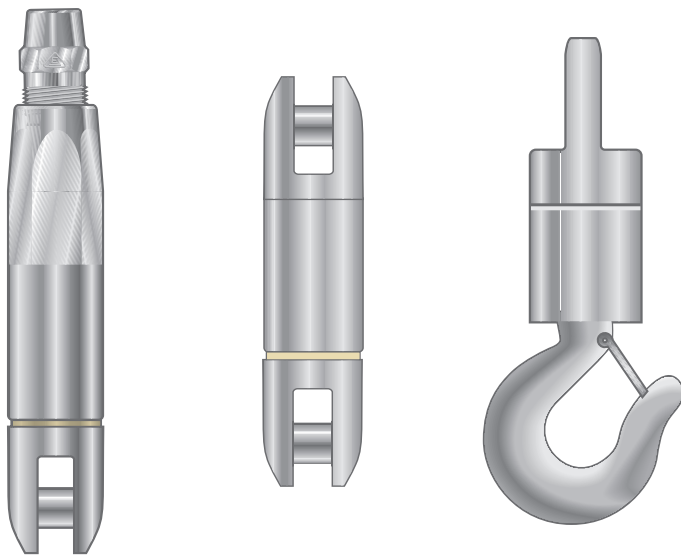
Cones are manufactured from 316 grade stainless steel and passivated for superior corrosion resistance.

To order, just add a "C" to any part number from the selection of wire rope fittings available in this catalog. For example, the correct part number for a forged, galvanized clevis for use with 1/2" E-M cable would be GDC-150-X (from pg. 6).



E-M Cable Fitting - Oceanographic Data Collection System - Antarctica





Electroline swivels neutralize torque energy and extend rope life.

RELIABILITY IS BUILT-IN...

- *Produced by state-of-the-art equipment in the United States.*
- *Quality control programs to ISO-9001 standards assure consistent performance.*
- *All swivels are proof-tested to 2x the SWL.*
- *Made of high strength alloy or 316 grade stainless steel.*
- *Available with exclusive Electroline-wire/synthetic (including KEVLAR®) connectors.*
- *Swivels can be custom-designed and manufactured for unique applications.*
- *3 year warranty against defects in materials and workmanship on Esmet Gold Band Swivels.*
- *Swivels identified by a quality control number for traceability.*

SWIVEL SELECTION CHART

Part Number	3000	6000	SS*	SSP**
Rotation Resistance	High	Low	Low	Low
Corrosion Resistance	Moderate	Moderate	High	High
Water Pressure Resistance	Moderate	Moderate	Moderate	High
Impact Resistant	No	No	No	No
Cost	\$	\$\$	\$\$\$	\$\$\$\$

* The SS swivel is a stainless steel version of the 6000 series swivel with seals to resist external contaminants.

** The SSP swivel is a stainless steel version of the 6000 series swivel with additional features to neutralize pressure in deep water applications.

Swivels Introduction

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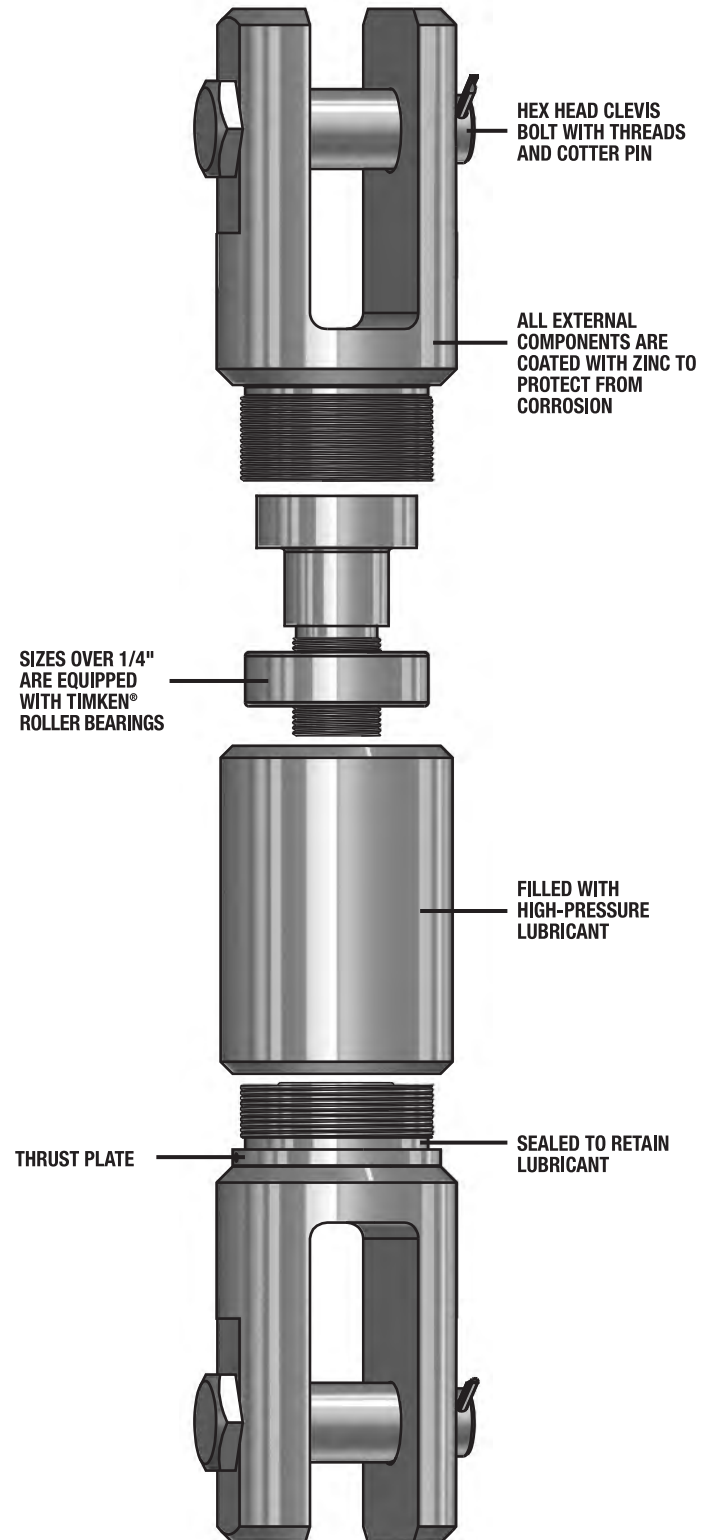


Gold Band Swivel - Parachute Guidance System

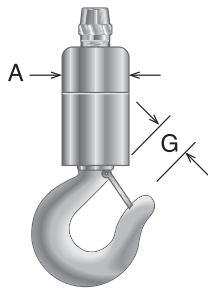
3000 Series Roller Bearing Swivels

HIGH PERFORMANCE AT LOWER COST

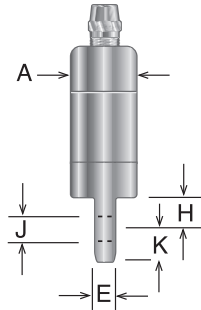
- Economically priced, these swivels contain a single roller bearing that accommodates shorter rope lengths such as those used with lifting equipment. (These applications do not require the exceptionally low torque capability provided by ball bearing-equipped swivels.)
- Models with rope diameters of more than 1/4" are equipped with Timken® tapered roller bearings.
- Made of alloy steel to exacting tolerances, these swivels are zinc plated for corrosion resistance. They provide an ultimate strength of 5 to 1 over SWL (Safe Working Loads).



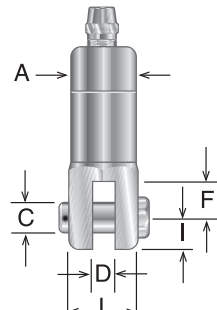
3000 Series Roller Bearing Swivels with Electroline Rope Termination



MODEL 30



MODEL 33



MODEL 34

MODEL 30 - ELECTROLINE/HOOK SWIVEL

Dimensions in inches

P/N	SWL Lbs (5:1)	Wire Rope Size	A	G	Length (To inside of hook)
3031	3,000	5/16	1-7/8	1	7
3037	4,000	3/8	1-7/8	1-1/16	7-7/8
3043	6,000	7/16	2-3/8	1-11/32	10-3/16
3050	6,000	1/2	2-3/8	1-11/32	10-3/16
3056	10,000	9/16	3-1/4	1-11/16	12-5/8
3062	10,000	5/8	3-1/4	1-11/16	12-5/8
3075	17,000	3/4	3-5/8	2-1/16	14-5/8
3087	20,000	7/8	3-3/4	2-1/4	16-11/16
3099	30,000	1	4-1/8	2-3/4	18-5/8

MODEL 33 - ELECTROLINE/EYE SWIVEL

Dimensions in inches

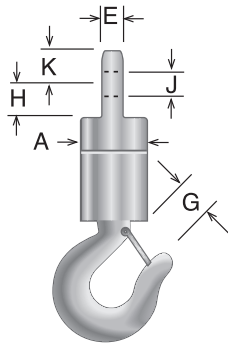
P/N	SWL Lbs (5:1)	Wire Rope Size	A	E	H	J Hole Dia.	K	Overall Length
3312	1,000	1/8	7/8	.234	1/2	1/4	3/8	3-7/8
3318	1,240	3/16	1	.297	9/16	5/16	1/2	4-1/2
3325	1,500	1/4	1-1/8	.359	5/8	3/8	5/8	5-1/8
3331	3,000	5/16	1-7/8	11/16	1	13/16	15/16	7-13/16
3337	4,000	3/8	1-7/8	11/16	1	13/16	15/16	8-1/4
3343	6,000	7/16	2-3/8	3/4	1-3/16	1	1-1/8	10-5/8
3350	6,000	1/2	2-3/8	3/4	1-3/16	1	1-1/8	10-5/8
3356	10,000	9/16	3-1/4	1	1-1/2	1-1/4	1-1/2	13-1/8
3362	10,000	5/8	3-1/4	1	1-1/2	1-1/4	1-1/4	13-1/8
3375	17,000	3/4	3-5/8	1-1/4	1-5/8	1-3/8	1-5/8	15
3387	20,000	7/8	3-3/4	1-7/16	2-3/8	1-5/8	1-13/16	16-11/16
3399	30,000	1	4-1/8	1-7/8	2-3/8	2	2-1/8	18-5/8

MODEL 34 - ELECTROLINE/CLEVIS SWIVEL

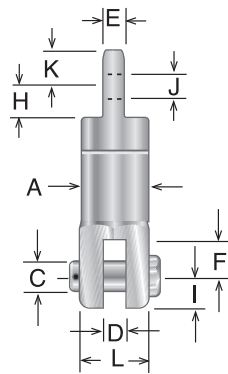
Dimensions in inches

P/N	SWL Lbs (5:1)	Wire Rope Size	A	C Pin Dia.	D	F	I	L Hex Flat	Overall Length
3412	1,000	1/8	7/8	1/4	1/4	1/2	7/16	-	3-15/16
3418	1,240	3/16	1	5/16	5/16	5/8	1/2	-	4-9/16
3425	1,500	1/4	1-1/8	3/8	3/8	3/4	9/16	-	5-3/16
3431	3,000	5/16	1-7/8	3/4	13/16	1-3/8	1	2	7-7/16
3437	4,000	3/8	1-7/8	3/4	13/16	1-3/8	1	2	7-15/16
3443	6,000	7/16	2-3/8	3/4	1	1-3/8	1-1/8	2-1/4	9-1/2
3450	6,000	1/2	2-3/8	3/4	1	1-3/8	1-1/8	2-1/4	9-1/2
3456	10,000	9/16	3-1/4	1	1-1/8	1-3/4	1-1/4	3	11-11/16
3462	10,000	5/8	3-1/4	1	1-1/8	1-3/4	1-1/4	3	11-11/16
3475	17,000	3/4	3-5/8	1-1/8	1-9/16	2-1/8	1-1/2	3-1/4	13-5/8
3487	20,000	7/8	3-3/4	1-1/4	1-3/4	3-1/8	1-7/8	3-1/2	16-1/2
3499	30,000	1	4-1/8	1-3/8	1-3/4	3-1/8	1-7/8	4	17-15/16

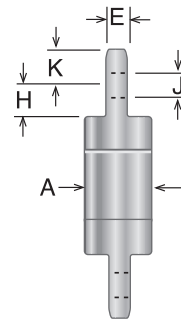
3000 Series Roller Bearing Swivels with Eye



MODEL 31



MODEL 35



MODEL 36

MODEL 31 - EYE/HOOK SWIVEL

Dimensions in inches

P/N	SWL Lbs (5:1)	A	E	G	H	J Hole Dia.	K	Length (To inside of hook)
3131	3,000	1-7/8	11/16	1	1	13/16	15.16	7-13/16
3137	4,000	1-7/8	11/16	1-1/16	1	13/16	15/16	8-1/4
3143	6,000	2-3/8	3/4	1-11/32	1-3/16	1	1-1/8	10-5/8
3150	6,000	2-3/8	3/4	1-11/32	1-3/16	1	1-1/8	10-5/8
3156	10,000	3-1/4	1	1-11/16	1-1/2	1-1/4	1-1/2	13-1/8
3162	10,000	3-1/4	1	1-11/16	1-1/2	1-1/4	1-1/4	13-1/8
3175	17,000	3-5/8	1-1/4	2-1/16	1-5/8	1-3/8	1-5/8	15
3187	20,000	3-3/4	1-7/16	2-1/4	2-3/8	1-5/8	1-13/16	16-11/16
3199	30,000	4-1/8	1-7/8	3	2-3/8	2	2-1/8	18-5/8

MODEL 35 - EYE/CLEVIS SWIVEL

Dimensions in inches

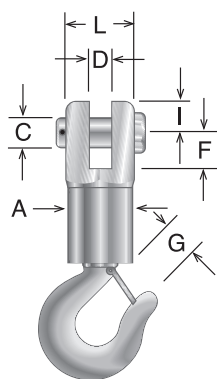
P/N	SWL Lbs (5:1)	A	C Pin Dia.	D	E	F	H	I	J Hole Dia.	K	L Hex Flat	Overall Length
3512	1,000	7/8	1/4	1/4	.234	1/2	1/2	7/16	1/4	3/8	-	3-1/2
3518	1,240	1	5/16	5/16	.297	5/8	9/16	1/2	5/16	1/2	-	3-15/16
3525	1,500	1-1/8	3/8	3/8	.359	3/4	5/8	9/16	3/8	5/8	-	4-7/16
3531	3,000	1-7/8	3/4	13/16	11/16	1-3/8	1	1	13/16	15.16	2	8-3/8
3537	4,000	1-7/8	3/4	13/16	11/16	1-3/8	1	1	13/16	15/16	2	8-9/16
3543	6,000	2-3/8	3/4	1	3/4	1-3/8	1-3/16	1-1/8	1	1-1/8	2-1/4	10-9/16
3550	6,000	2-3/8	3/4	1	3/4	1-3/8	1-3/16	1-1/8	1	1-1/8	2-1/4	10-9/16
3556	10,000	3-1/4	1	1-1/8	1	1-3/4	1-1/2	1-1/4	1-1/4	1-1/2	3	12-7/16
3562	10,000	3-1/4	1	1-1/8	1	1-3/4	1-1/2	1-1/4	1-1/4	1-1/4	3	12-7/16
3575	17,000	3-5/8	1-1/8	1-9/16	1-1/4	2-1/8	1-5/8	1-1/2	1-3/8	1-5/8	3-1/4	14-1/8
3587	20,000	3-3/4	1-1/4	1-3/4	1-7/16	3-1/8	2-3/8	1-7/8	1-5/8	1-13/16	3-1/2	16-13/16
3599	30,000	4-1/8	1-3/8	1-3/4	1-7/8	3-1/8	2-3/8	1-7/8	2	2-1/8	4	18-3/16

MODEL 36 - EYE/EYE SWIVEL

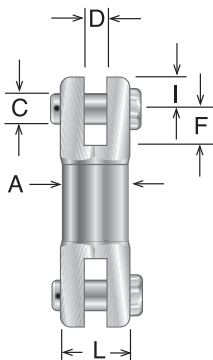
Dimensions in inches

P/N	SWL Lbs (5:1)	A	E	H	J Hole Dia.	K	Overall Length
3612	1,000	7/8	.234	1/2	1/4	3/8	3-7/16
3618	1,240	1	.297	9/16	5/16	1/2	3-7/8
3625	1,500	1-1/8	.359	5/8	3/8	5/8	4-3/8
3631	3,000	1-7/8	11/16	1	13/16	15.16	8-3/8
3637	4,000	1-7/8	11/16	1	13/16	15/16	8-9/16
3643	6,000	2-3/8	3/4	1-3/16	1	1-1/8	10-5/8
3650	6,000	2-3/8	3/4	1-3/16	1	1-1/8	10-5/8
3656	10,000	3-1/4	1	1-1/2	1-1/4	1-1/2	12-3/4
3662	10,000	3-1/4	1	1-1/2	1-1/4	1-1/4	12-3/4
3675	17,000	3-5/8	1-1/4	1-5/8	1-3/8	1-5/8	13-15/16
3687	20,000	3-3/4	1-7/16	2-3/8	1-5/8	1-13/16	16-1/2
3699	30,000	4-1/8	1-7/8	2-3/8	2	2-1/8	18-5/8

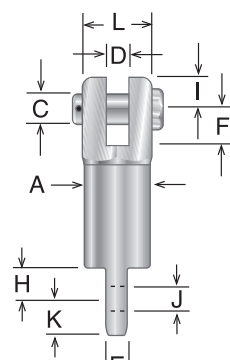
3000 Series Roller Bearing Swivels with Clevis



MODEL 32



MODEL 37



MODEL 38

MODEL 32 - CLEVIS/HOOK SWIVEL

Dimensions in inches

P/N	SWL Lbs (5:1)	A	C Pin Dia.	D	F	G	I	L Hex Flat	Length (To inside of hook)
3231	3,000	1-7/8	3/4	13/16	1-3/8	1	1	2	7-13/16
3237	4,000	1-7/8	3/4	13/16	1-3/8	1-1/16	1	2	8-3/8
3243	6,000	2-3/8	3/4	1	1-3/8	1-11/32	1-1/8	2-1/4	10-3/8
3250	6,000	2-3/8	3/4	1	1-3/8	1-11/32	1-1/8	2-1/4	10-3/8
3256	10,000	3-1/4	1	1-1/8	1-3/4	1-11/16	1-1/4	3	12-13/16
3262	10,000	3-1/4	1	1-1/8	1-3/4	1-11/16	1-1/4	3	12-13/16
3275	17,000	3-5/8	1-1/8	1-9/16	2-1/8	2-1/16	1-1/2	3-1/4	14-11/16
3287	20,000	3-3/4	1-1/4	1-3/4	3-1/8	2-1/4	1-7/8	3-1/2	16-5/16
3299	30,000	4-1/8	1-3/8	1-3/4	3-1/8	3	1-7/8	4	18-1/2

MODEL 37 - CLEVIS/CLEVIS SWIVEL

Dimensions in inches

P/N	SWL Lbs (5:1)	A	C Pin Dia.	D	F	I	L Hex Flat	Overall Length
3712	1,000	7/8	1/4	1/4	1/2	7/16	-	3-9/16
3718	1,240	1	5/16	5/16	5/8	1/2	-	4
3725	1,500	1-1/8	3/8	3/8	3/4	9/16	-	4-1/2
3731	3,000	1-7/8	3/4	13/16	1-3/8	1	2	8-3/8
3737	4,000	1-7/8	3/4	13/16	1-3/8	1	2	8-9/16
3743	6,000	2-3/8	3/4	1	1-3/8	1-1/8	2-1/4	10-1/8
3750	6,000	2-3/8	3/4	1	1-3/8	1-1/8	2-1/4	10-1/8
3756	10,000	3-1/4	1	1-1/8	1-3/4	1-1/4	3	12-1/8
3762	10,000	3-1/4	1	1-1/8	1-3/4	1-1/4	3	12-1/2
3775	17,000	3-5/8	1-1/8	1-9/16	2-1/8	1-1/2	3-1/4	14
3787	20,000	3-3/4	1-1/4	1-3/4	3-1/8	1-7/8	3-1/2	17-1/8
3799	30,000	4-1/8	1-3/8	1-3/4	3-1/8	1-7/8	4	18-1/16

MODEL 38 - CLEVIS/EYE SWIVEL

Dimensions in inches

P/N	SWL Lbs (5:1)	A	C Pin Dia.	D	E	F	H	I	J Hole Dia.	K	L Hex Flat	Overall Length
3812	1,000	7/8	1/4	1/4	.234	1/2	1/2	7/16	1/4	3/8	-	3-1/2
3818	1,240	1	5/16	5/16	.297	5/8	9/16	1/2	5/16	1/2	-	3-15/16
3825	1,500	1-1/8	3/8	3/8	.359	3/4	5/8	9/16	3/8	5/8	-	4-7/16
3831	3,000	1-7/8	3/4	13/16	11/16	1-3/8	1	1	13/16	15/16	2	8-3/8
3837	4,000	1-7/8	3/4	13/16	11/16	1-3/8	1	1	13/16	15/16	2	8-9/16
3843	6,000	2-3/8	3/4	1	3/4	1-3/8	1-3/16	1-1/8	1	1-1/8	2-1/4	10-9/16
3850	6,000	2-3/8	3/4	1	3/4	1-3/8	1-3/16	1-1/8	1	1-1/8	2-1/4	10-9/16
3856	10,000	3-1/4	1	1-1/8	1	1-3/4	1-1/2	1-1/4	1-1/4	1-1/2	3	12-7/16
3862	10,000	3-1/4	1	1-1/8	1	1-3/4	1-1/2	1-1/4	1-1/4	1-1/4	3	12-7/16
3875	17,000	3-5/8	1-1/8	1-9/16	1-1/4	2-1/8	1-5/8	1-1/2	1-3/8	1-5/8	3-1/4	14-1/8
3887	20,000	3-3/4	1-1/4	1-3/4	1-7/16	3-1/8	2-3/8	1-7/8	1-5/8	1-13/16	3-1/2	16-13/16
3899	30,000	4-1/8	1-3/8	1-3/4	1-7/8	3-1/8	2-3/8	1-7/8	2	2-1/8	4	18-3/16

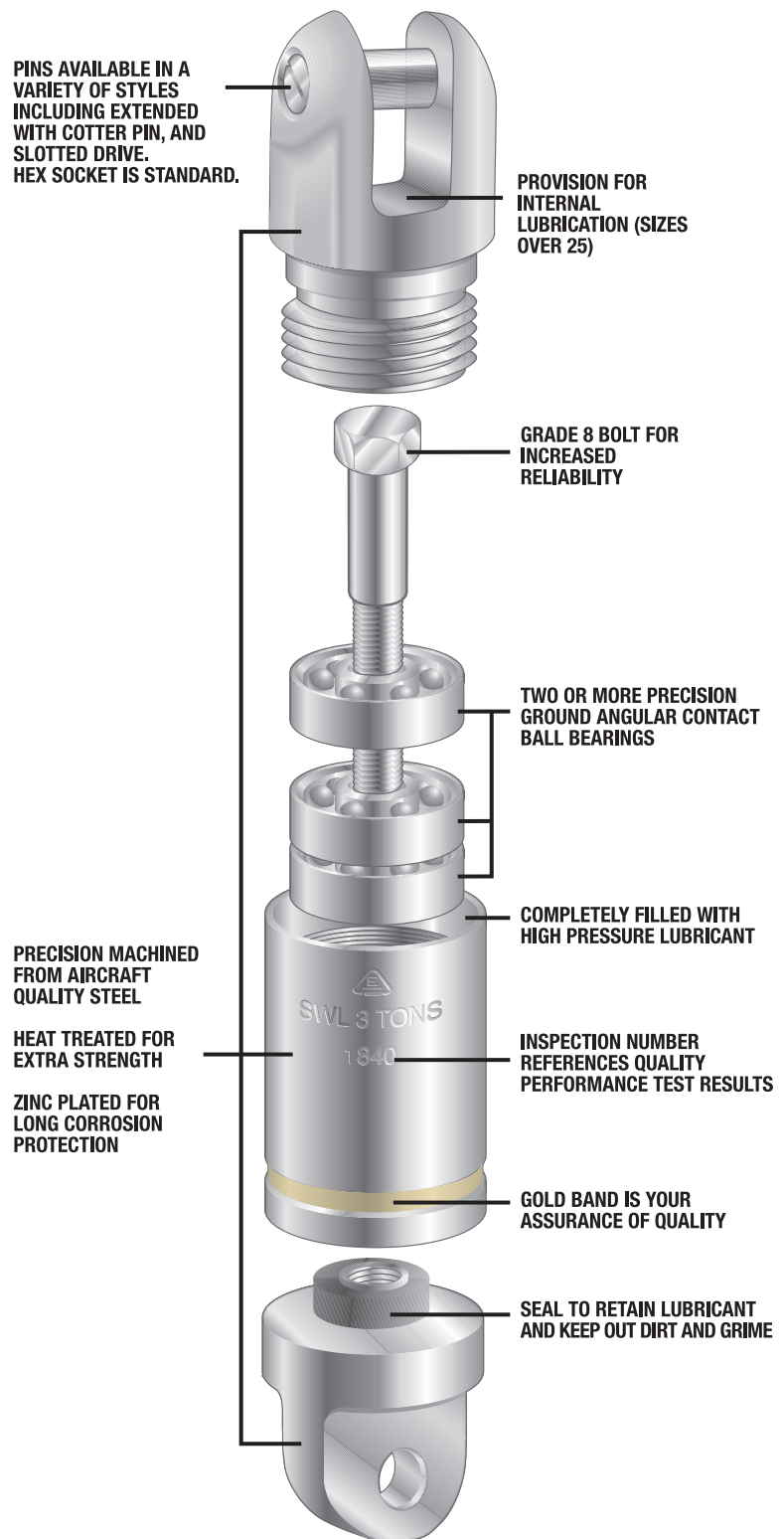
6000 Series Gold Band™ Swivels

STREAMLINED DESIGN AND MAXIMUM PERFORMANCE

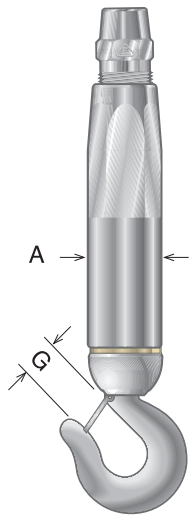
- Designed for high rotational speeds, these models react to low operational torque.
- They are the perfect swivel for longer ropes and cables.
- Manufactured with two or more flush ground angular contact ball bearings.
- Bearings are permanently lubricated with high-pressure grease and are sealed at the factory.
- Flush pins are used to accommodate overhead and underground electrical line stringing applications. Swivel ends are shaped to prevent snagging on sheaves and other potential obstructions.
- Heat treated high strength alloy steel (zinc plated for corrosion resistance), provides the strongest yet lightest swivel available. Ultimate strength is minimum 5 to 1 over SWL (Safe Working Load).
- All swivels proof-tested and certified to 2x SWL and stamped with a traceable identification number.



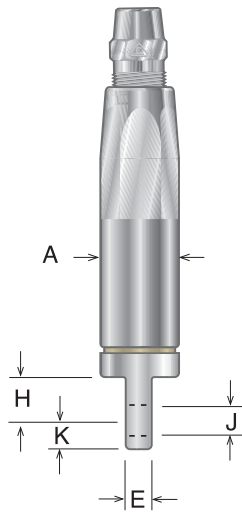
6000 Series Swivel - Directional Drilling - Dayton, WA



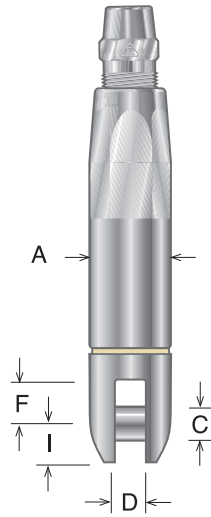
6000 Series Gold Band™ Swivels with Electroline Rope Termination



MODEL 60



MODEL 63



MODEL 64

MODEL 60 - ELECTROLINE/HOOK SWIVEL

Dimensions in inches

P/N	SWL Lbs (5:1)	SWL Lbs (3:1)	Wire Rope Size	A	G	Length (To inside of hook)
6012	1,380	2,300	1/8	7/8	7/8	5-5/16
6025	3,000	5,000	1/4	1-1/4	31/32	8-5/16
6037	4,800	8,000	3/8	1-1/2	1	9-1/2
6050	6,900	11,500	1/2	1-7/8	1-11/32	12-15/16
6062	11,100	18,500	5/8	2-7/16	1-11/16	17-9/16
6075	18,900	31,500	3/4	2-7/8	2-1/4	21-1/8
6081	18,900	31,500	3/4	2-7/8	2-1/4	21-1/8
6087	20,000	33,333	7/8	3-5/8	3	25-15/16
6099	30,000	50,000	1	3-5/8	3	27-13/16
60125	50,000	83,333	1-1/4	4-1/2	4	40-9/16
60150	70,000	116,667	1-1/2	5-3/8	4-1/4	48-1/8

MODEL 63 - ELECTROLINE/EYE SWIVEL

Dimensions in inches

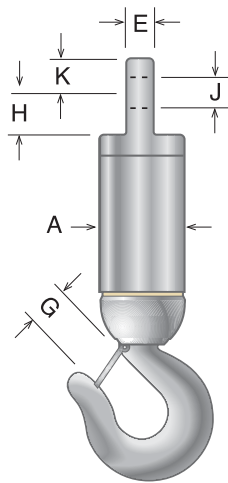
P/N	SWL Lbs (5:1)	SWL Lbs (3:1)	Wire Rope Size	A	E	H	J Hole Dia.	K	Overall Length
6312	1,380	2,300	1/8	7/8	1/4	3/8	1/4	3/8	3-7/8
6325	3,000	5,000	1/4	1-1/4	5/16	1/2	3/8	7/16	5-7/8
6337	4,800	8,000	3/8	1-1/2	1/2	23/32	5/8	5/8	6-13/16
6350	6,900	11,500	1/2	1-7/8	3/4	15/16	7/8	15/16	9-1/8
6362	11,100	18,500	5/8	2-7/16	1	1-5/16	1-1/4	1-3/16	12-12/16
6375	18,900	31,500	3/4	2-7/8	1-1/4	1-5/8	1-3/8	1-1/2	14-11/16
6381	18,900	31,500	3/4	2-7/8	1-1/4	1-5/8	1-3/8	1-1/2	14-11/16
6387	20,000	33,333	7/8	3-5/8	1-23/32	2-27/32	1-5/8	1-13/16	18
6399	30,000	50,000	1	3-5/8	2	2-25/32	2	2-1/8	19-7/8
63125	50,000	83,333	1-1/4	4-1/2	2-1/8	2-7/8	2-1/4	2-3/8	27-1/2
63150	70,000	116,667	1-1/2	5-3/8	2-1/4	3-1/8	2-1/4	2-3/8	31

MODEL 64 - ELECTROLINE/CLEVIS SWIVEL

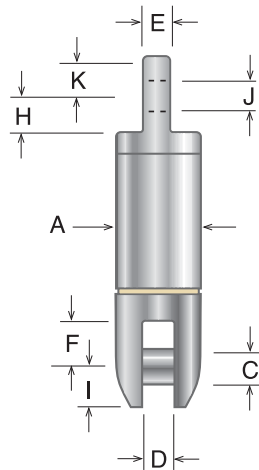
Dimensions in inches

P/N	SWL Lbs (5:1)	SWL Lbs (3:1)	Wire Rope Size	A	C Pin Dia.	D	F	I	Overall Length
6412	1,380	2,300	1/8	7/8	5/16	5/16	15/32	3/8	3-7/8
6425	3,000	5,000	1/4	1-1/4	3/8	19/32	11/16	7/16	5-7/8
6437	4,800	8,000	3/8	1-1/2	7/16	19/32	13/16	9/16	6-13/16
6450	6,900	11,500	1/2	1-7/8	5/8	3/4	15/16	13/16	9-1/8
6462	11,100	18,500	5/8	2-7/16	7/8	1	1-9/16	1-1/8	12-3/4
6475	18,900	31,500	3/4	2-7/8	1	1-9/32	2-1/8	1-1/4	14-11/16
6481	18,900	31,500	3/4	2-7/8	1-1/8	1-9/16	2-1/8	1-1/4	14-11/16
6487	20,000	33,333	7/8	3-5/8	1-1/2	1-3/4	3-1/2	1-3/4	18
6499	30,000	50,000	1	3-5/8	1-1/2	1-3/4	3-1/2	1-3/4	19-7/8
64125	50,000	83,333	1-1/4	4-1/2	1-7/8	2	3-11/16	2-3/8	27-1/2
64150	70,000	116,667	1-1/2	5-3/8	2	2	3-11/16	2-3/8	31

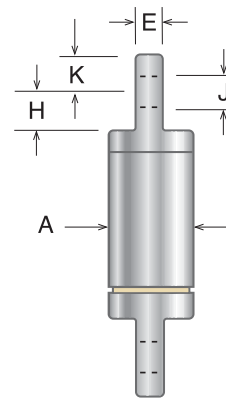
6000 Series Gold Band™ Swivels with Eye



MODEL 61



MODEL 65



MODEL 66

MODEL 61 - EYE/HOOK SWIVEL

Dimensions in inches

P/N	SWL Lbs (5:1)	SWL Lbs (3:1)	A	E	G	H	J Hole Dia.	K	Length (To inside of hook)
6112	1,380	2,300	7/8	1/4	7/8	3/8	1/4	3/8	5-3/8
6125	3,000	5,000	1-1/4	5/16	31/32	1/2	3/8	7/16	7-1/16
6137	4,800	8,000	1-1/2	1/2	1	23/32	5/8	5/8	7-7/8
6150	6,900	11,500	1-7/8	3/4	1-11/32	15/16	7/8	15/16	10-13/16
6162	11,100	18,500	2-7/16	1	1-11/16	1-5/16	1-1/4	1-3/16	15-1/4
6175	18,900	31,500	2-7/8	1-1/4	2-1/4	1-5/8	1-3/8	1-1/2	18-7/8
6181	18,900	31,500	2-7/8	1-1/4	2-1/4	1-5/8	1-3/8	1-1/2	18-7/8
6187	20,000	33,333	3-5/8	1-23/32	3	2-27/32	1-5/8	1-13/16	24-15/16
6199	30,000	50,000	3-5/8	2	3	2-25/32	2	2-1/8	25-11/16
61125	50,000	83,333	4-1/2	2-1/8	4	2-7/8	2-1/4	2-3/8	33-13/16
61150	70,000	116,667	5-3/8	2-1/4	4-1/4	3-1/8	2-1/4	2-3/8	39-5/8

MODEL 65 - EYE/CLEVIS SWIVEL

Dimensions in inches

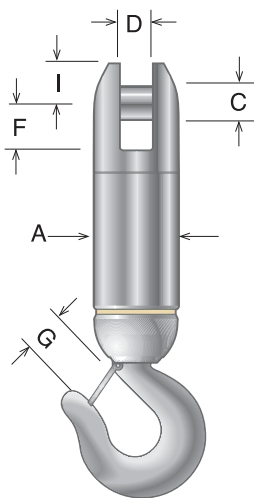
P/N	SWL Lbs (5:1)	SWL Lbs (3:1)	A	C Pin Dia.	D	E	F	H	I	J Hole Dia.	K	Overall Length
6512	1,380	2,300	7/8	5/16	5/16	1/4	15/32	3/8	3/8	1/4	3/8	3-1/8
6525	3,000	5,000	1-1/4	3/8	19/32	5/16	11/16	1/2	7/16	3/8	7/16	4-9/16
6537	4,800	8,000	1-1/2	7/16	19/32	1/2	13/16	23/32	9/16	5/8	5/8	5-1/8
6550	6,900	11,500	1-7/8	5/8	3/4	3/4	15/16	15/16	13/16	7/8	15/16	7-1/8
6562	11,100	18,500	2-7/16	7/8	1	1	1-9/16	1-5/16	1-1/8	1-1/4	1-3/16	10-1/2
6575	18,900	31,500	2-7/8	1	1-9/32	1-1/4	2-1/8	1-5/8	1-1/4	1-3/8	1-1/2	12-7/16
6581	18,900	31,500	2-7/8	1-1/8	1-9/16	1-1/4	2-1/8	1-5/8	1-1/4	1-3/8	1-1/2	12-7/16
6587	20,000	33,333	3-5/8	1-1/2	1-3/4	1-23/32	3-1/2	2-27/32	1-3/4	1-5/8	1-13/16	17
6599	30,000	50,000	3-5/8	1-1/2	1-3/4	2	3-1/2	2-25/32	1-3/4	2	2-1/8	17-3/4
65125	50,000	83,333	4-1/2	1-7/8	2	2-1/8	3-11/16	2-7/8	2-3/8	2-1/4	2-3/8	20-5/16
65150	70,000	116,667	5-3/8	2	2	2-1/4	3-11/16	3-1/8	2-3/8	2-1/4	2-3/8	21-9/16

MODEL 66 - EYE/EYE SWIVEL

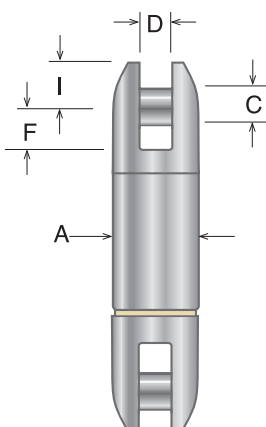
Dimensions in inches

P/N	SWL Lbs (5:1)	SWL Lbs (3:1)	A	E	H	J Hole Dia.	K	Overall Length
6612	1,380	2,300	7/8	1/4	3/8	1/4	3/8	3-1/8
6625	3,000	5,000	1-1/4	5/16	1/2	3/8	7/16	4-9/16
6637	4,800	8,000	1-1/2	1/2	23/32	5/8	5/8	5-9/16
6650	6,900	11,500	1-7/8	3/4	15/16	7/8	15/16	7-1/8
6662	11,100	18,500	2-7/16	1	1-5/16	1-1/4	1-3/16	10-1/2
6675	18,900	31,500	2-7/8	1-1/4	1-5/8	1-3/8	1-1/2	12-7/16
6681	18,900	31,500	2-7/8	1-1/4	1-5/8	1-3/8	1-1/2	12-7/16
6687	20,000	33,333	3-5/8	1-23/32	2-27/32	1-5/8	1-13/16	17
6699	30,000	50,000	3-5/8	2	2-25/32	2	2-1/8	17-3/4
66125	50,000	83,333	4-1/2	2-1/8	2-7/8	2-1/4	2-3/8	20-5/16
66150	70,000	116,667	5-3/8	2-1/4	3-1/8	2-1/4	2-3/8	21-9/16

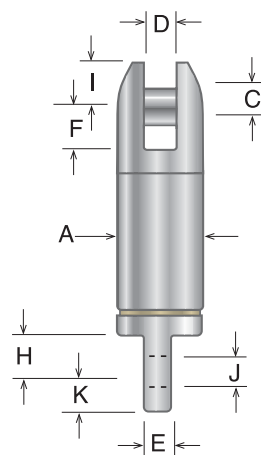
6000 Series Gold Band™ Swivels with Clevis



MODEL 62



MODEL 67



MODEL 68

MODEL 62 - CLEVIS/HOOK SWIVEL

Dimensions in inches

P/N	SWL Lbs (5:1)	SWL Lbs (3:1)	A	C Pin Dia.	D	F	G	I	Length (To inside of hook)
6212	1,380	2,300	7/8	5/16	5/16	15/32	7/8	3/8	5-3/8
6225	3,000	5,000	1-1/4	3/8	19/32	11/16	31/32	7/16	7-1/8
6237	4,800	8,000	1-1/2	7/16	19/32	13/16	1	9/16	7-13/16
6250	6,900	11,500	1-7/8	5/8	3/4	15/16	1-11/32	13/16	10-15/16
6262	11,100	18,500	2-7/16	7/8	1	1-9/16	1-11/16	1-1/8	15-1/4
6275	18,900	31,500	2-7/8	1	1-9/32	2-1/8	2-1/4	1-1/4	18-7/8
6281	18,900	31,500	2-7/8	1-1/8	1-9/16	2-1/8	2-1/4	1-1/4	18-7/8
6287	20,000	33,333	3-5/8	1-1/2	1-3/4	3-1/2	3	1-3/4	24-15/16
6299	30,000	50,000	3-5/8	1-1/2	1-3/4	3-1/2	3	1-3/4	25-11/16
62125	50,000	83,333	4-1/2	1-7/8	2	3-11/16	4	2-3/8	34
62150	70,000	116,667	5-3/8	2	2	3-11/16	4-1/4	2-3/8	40

MODEL 67 - CLEVIS/CLEVIS SWIVEL

Dimensions in inches

P/N	SWL Lbs (5:1)	SWL Lbs (3:1)	A	C Pin Dia.	D	F	I	Overall Length
6712	1,380	2,300	7/8	5/16	5/16	15/32	3/8	3-1/16
6725	3,000	5,000	1-1/4	3/8	19/32	11/16	7/16	4-1/2
6737	4,800	8,000	1-1/2	7/16	19/32	13/16	9/16	5-15/32
6750	6,900	11,500	1-7/8	5/8	3/4	15/16	13/16	7-1/8
6762	11,100	18,500	2-7/16	7/8	1	1-9/16	1-1/8	10-1/2
6775	18,900	31,500	2-7/8	1	1-9/32	2-1/8	1-1/4	12-7/16
6781	18,900	31,500	2-7/8	1-1/8	1-9/16	2-1/8	1-1/4	12-7/16
6787	20,000	33,333	3-5/8	1-1/2	1-3/4	3-1/2	1-3/4	17
6799	30,000	50,000	3-5/8	1-1/2	1-3/4	3-1/2	1-3/4	17-3/4
67125	50,000	83,333	4-1/2	1-7/8	2	3-11/16	2-3/8	20-5/16
67150	70,000	116,667	5-3/8	2	2	3-11/16	2-3/8	21-9/16

MODEL 68 - CLEVIS/EYE SWIVEL

Dimensions in inches

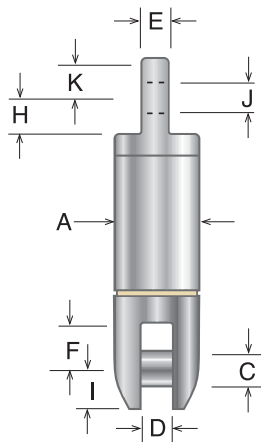
P/N	SWL Lbs (5:1)	SWL Lbs (3:1)	A	C Pin Dia.	D	E	F	H	I	J Hole Dia.	K	Overall Length
6812	1,380	2,300	7/8	5/16	5/16	1/4	15/32	3/8	3/8	1/4	3/8	3-1/8
6825	3,000	5,000	1-1/4	3/8	19/32	5/16	11/16	1/2	7/16	3/8	7/16	4-9/16
6837	4,800	8,000	1-1/2	7/16	19/32	1/2	13/16	23/32	9/16	5/8	5/8	5-1/8
6850	6,900	11,500	1-7/8	5/8	3/4	3/4	15/16	15/16	13/16	7/8	15/16	7-1/8
6862	11,100	18,500	2-7/16	7/8	1	1	1-9/16	1-5/16	1-1/8	1-1/4	1-3/16	10-1/2
6875	18,900	31,500	2-7/8	1	1-9/32	1-1/4	2-1/8	1-5/8	1-1/4	1-3/8	1-1/2	12-7/16
6881	18,900	31,500	2-7/8	1-1/8	1-9/16	1-1/4	2-1/8	1-5/8	1-1/4	1-3/8	1-1/2	12-7/16
6887	20,000	33,333	3-5/8	1-1/2	1-3/4	1-23/32	3-1/2	2-27/32	1-3/4	1-5/8	1-13/16	17
6899	30,000	50,000	3-5/8	1-1/2	1-3/4	2	3-1/2	2-25/32	1-3/4	2	2-1/8	17-3/4
68125	50,000	83,333	4-1/2	1-7/8	2	2-1/8	3-11/16	2-7/8	2-3/8	2-1/4	2-3/8	20-5/16
68150	70,000	116,667	5-3/8	2	2	2-1/4	3-11/16	3-1/8	2-3/8	2-1/4	2-3/8	21-9/16

Gold Band® Oceanographic & Specialty Swivels

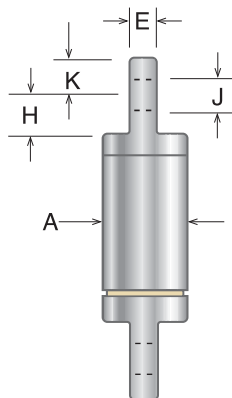
Specialty Swivels, built using the same high-quality standards of Esmet Gold Band Swivels, include extra features for specific applications.

ESMET STAINLESS STEEL SEALED SWIVELS (SS)

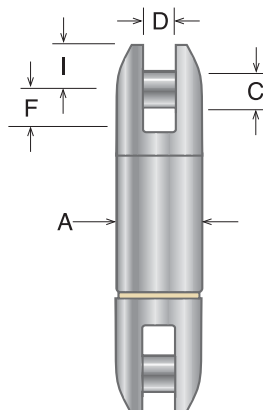
Designed for ocean surface applications. These swivels are grease filled and sealed to prevent entry of sea water. They also contain angular contact ball bearings. All external components are of 316 stainless steel. Available in Gold Band swivel models 65, 66, 67 and 68 only. See tables below for dimensions.



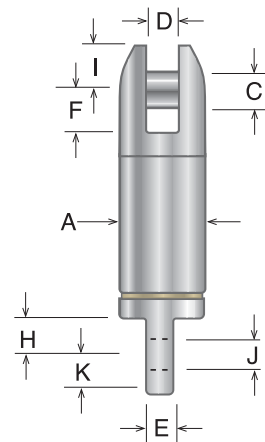
MODEL SS-65



MODEL SS-66



MODEL SS-67



MODEL SS-68

MODEL SS-65 - EYE/CLEVIS STAINLESS STEEL - SEALED SWIVEL

Dimensions in inches

P/N	SWL Lbs (5:1)	A	C Pin Dia.	D	E	F	H	I	J Hole Dia.	K	Overall Length
SS-6525	1,500	1-1/4	3/8	19/32	5/16	11/16	1/2	7/16	3/8	7/16	5
SS-6537	3,000	1-1/2	7/16	19/32	1/2	13/16	23/32	9/16	5/8	5/8	5-7/8
SS-6550	6,000	1-7/8	5/8	3/4	3/4	15/16	15/16	13/16	7/8	15/16	7-1/2
SS-6562	10,000	2-7/16	7/8	1	1	1-9/16	1-5/16	1-1/8	1-1/4	1-3/16	11

MODEL SS-66 - EYE/EYE STAINLESS STEEL - SEALED SWIVEL

Dimensions in inches

P/N	SWL Lbs (5:1)	A	E	H	J Hole Dia.	K	Overall Length
SS-6625	1,500	1-1/4	5/16	1/2	3/8	7/16	5
SS-6637	3,000	1-1/2	1/2	23/32	5/8	5/8	5-7/8
SS-6650	6,000	1-7/8	3/4	15/16	7/8	15/16	7-1/2
SS-6662	10,000	2-7/16	1	1-5/16	1-1/4	1-3/16	11

MODEL SS-67 - CLEVIS/CLEVIS STAINLESS STEEL - SEALED SWIVEL

Dimensions in inches

P/N	SWL Lbs (5:1)	A	C Pin Dia.	D	F	I	Overall Length
SS-6725	1,500	1-1/4	3/8	19/32	11/16	7/16	5
SS-6737	3,000	1-1/2	7/16	19/32	13/16	9/16	5-7/8
SS-6750	6,000	1-7/8	5/8	3/4	15/16	13/16	7-1/2
SS-6762	10,000	2-7/16	7/8	1	1-9/16	1-1/8	11

MODEL SS-68 - CLEVIS/EYE STAINLESS STEEL - SEALED SWIVEL

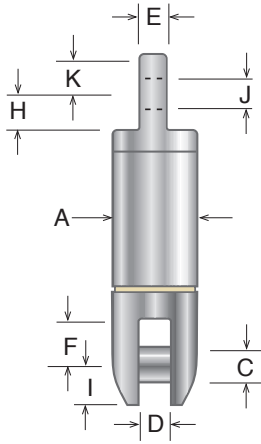
Dimensions in inches

P/N	SWL Lbs (5:1)	A	C Pin Dia.	D	E	F	H	I	J Hole Dia.	K	Overall Length
SS-6825	1,500	1-1/4	3/8	19/32	5/16	11/16	1/2	7/16	3/8	7/16	5
SS-6837	3,000	1-1/2	7/16	19/32	1/2	13/16	23/32	9/16	5/8	5/8	5-7/8
SS-6850	6,000	1-7/8	5/8	3/4	3/4	15/16	15/16	13/16	7/8	15/16	7-1/2
SS-6862	10,000	2-7/16	7/8	1	1	1-9/16	1-5/16	1-1/8	1-1/4	1-3/16	11

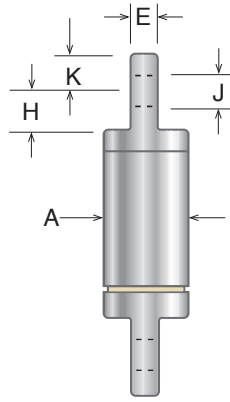
Gold Band® Oceanographic & Specialty Swivels

ESMET STAINLESS STEEL PRESSURE COMPENSATED SWIVELS (SSP)

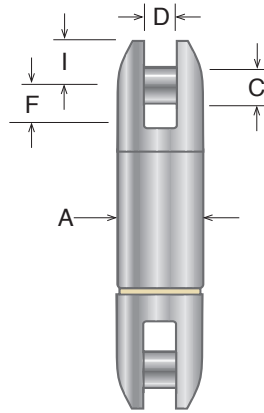
Designed for deep ocean applications, these swivels are oil filled and include a diaphragm for pressure compensation. They also contain angular contact ball bearings. Available in Gold Band swivel models 65, 66, 67 and 68 only. See tables below for dimensions.



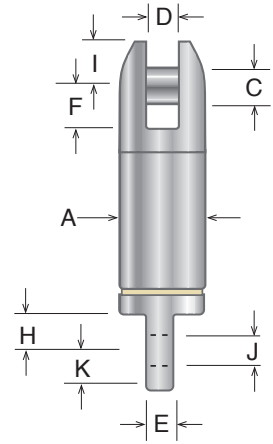
MODEL SSP-65



MODEL SSP-66



MODEL SSP-67



MODEL SSP-68

MODEL SSP-65 - EYE/CLEVIS STAINLESS STEEL - PRESSURE COMPENSATED SWIVEL

P/N	SWL Lbs (3:1)	A	C Pin Dia.	D	E	F	H	I	J Hole Dia.	K	Overall Length
SSP-6525	1,500	1-1/4	3/8	19/32	5/16	11/16	1/2	7/16	3/8	7/16	5
SSP-6537	3,000	1-1/2	7-1/16	19/32	1/2	13/16	23/32	9/16	5/8	5/8	5-5/8
SSP-6550	6,000	1-7/8	5/8	3/4	3/4	15/16	15/16	13/16	7/8	15/16	7-3/4
SSP-6562	10,000	2-7/16	7/8	1	1	1-9/16	1-5/16	1-1/8	1-1/4	1-3/16	11-3/8
SSP-6575	16,000	3-1/4	1-1/8	1-9/16	1-1/4	2-1/8	1-5/8	1-1/4	1-3/8	1-1/2	13-7/16
SSP-6587	20,000	3-5/8	1-1/2	1-3/4	1-1/2	3-1/2	2-27/32	1-3/4	1-1/2	1-13/16	17-1/2
SSP-6599	28,000	3-5/8	1-1/2	1-3/4	2	3-1/2	2-25/32	1-3/4	2	2-1/8	18-7/8

MODEL SSP-66 - EYE/EYE STAINLESS STEEL - PRESSURE COMPENSATED SWIVEL

Dimensions in inches

P/N	SWL Lbs (3:1)	A	E	H	J Hole Dia.	K	Overall Length
SSP-6625	1,500	1-1/4	5/16	1/2	3/8	7/16	5
SSP-6637	3,000	1-1/2	1/2	23/32	5/8	5/8	5-5/8
SSP-6650	6,000	1-7/8	3/4	15/16	7/8	15/16	7-3/4
SSP-6662	10,000	2-7/16	1-1/4	1-5/16	1	1-3/16	11-3/8
SSP-6675	16,000	3-1/4	1-3/8	1-5/8	1-3/8	1-1/2	13-7/16
SSP-6687	20,000	3-5/8	1-1/2	2-27/32	1-1/2	1-13/16	17-1/2
SSP-6699	28,000	3-5/8	2	2-25/32	2	2-1/8	18-7/8

MODEL SSP-67 - CLEVIS/CLEVIS STAINLESS STEEL - PRESSURE COMPENSATED SWIVEL

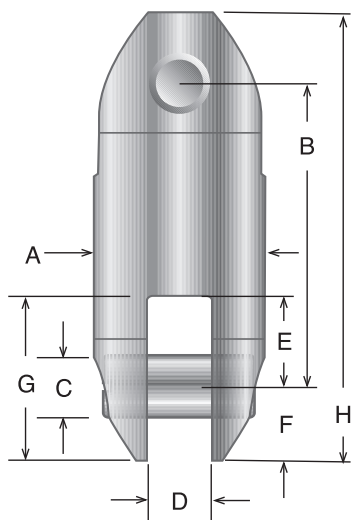
Dimensions in inches

P/N	SWL Lbs (3:1)	A	C Pin Dia.	D	F	I	Overall Length
SSP-6725	1,600	1-1/4	3/8	19/32	11/16	7/16	5
SSP-6737	3,000	1-1/2	7-1/6	19/32	13/16	9/16	5-5/8
SSP-6750	6,000	1-7/8	5/8	3/4	15/16	13/16	7-3/4
SSP-6762	10,000	2-7/16	7/8	1	1-9/16	1-1/8	11-3/8
SSP-6775	16,000	3-1/4	1-1/8	1-9/16	2-1/8	1-1/4	13-7/16
SSP-6787	20,000	3-5/8	1-1/2	1-3/4	3-1/2	1-3/4	17-1/2
SSP-6799	28,000	3-5/8	1-1/2	1-3/4	3-1/2	1-3/4	18-7/8

MODEL SSP-68 - CLEVIS/EYE STAINLESS STEEL - PRESSURE COMPENSATED SWIVEL

P/N	SWL Lbs (3:1)	A	C Pin Dia.	D	E	F	H	I	J Hole Dia.	K	Overall Length
SSP-6825	1,500	1-1/4	3/8	19/32	5/16	11/16	1/2	7/16	3/8	7/16	5
SSP-6837	3,000	1-1/2	7-1/16	19/32	1/2	13/16	23/32	9/16	5/8	5/8	5-5/8
SSP-6850	6,000	1-7/8	5/8	3/4	3/4	15/16	15/16	13/16	7/8	15/16	7-3/4
SSP-6862	10,000	2-7/16	7/8	1	1	1-9/16	1-5/16	1-1/8	1-1/4	1-3/16	11-3/8
SSP-6875	16,000	3-1/4	1-1/8	1-9/16	1-1/4	2-1/8	1-5/8	1-1/4	1-3/8	1-1/2	13-7/16
SSP-6887	20,000	3-5/8	1-1/2	1-3/4	1-1/2	3-1/2	2-27/32	1-3/4	1-1/2	1-13/16	17-1/2
SSP-6899	28,000	3-5/8	1-1/2	1-3/4	2	3-1/2	2-25/32	1-3/4	2	2-1/8	18-7/8

7200 Series 90-Degree Connectors (Non-Swiveling)



7200 SERIES 90-DEGREE CONNECTORS - CLEVIS/CLEVIS *Dimensions in inches*

P/N	SWL Lbs	A	B	C Pin Dia	D	E	F	G	H
7212	2,300	7/8	1-9/16	5/16	5/16	15/32	3/8	27/32	2-5/16
7225	5,000	1-1/4	2	3/8	19/32	11/16	7/16	1-1/8	2-7/8
7237	8,000	1-1/2	2-1/8	7/16	19/32	13/16	9/16	1-3/8	3-1/4
7250	11,500	1-7/8	2-1/2	5/8	3/4	15/16	13/16	1-3/4	4-1/8
7262	18,500	2-7/16	3-7/8	7/8	1	1-9/16	1-1/8	2-11/16	6-1/8
7275	31,500	2-1/2	4	7/8	1	1-9/16	1-1/8	2-11/16	6-1/4

Ultimate Strength is minimum 3 to 1 over Safe Working Load (SWL).

Rope Thimble for Clevis Swivels

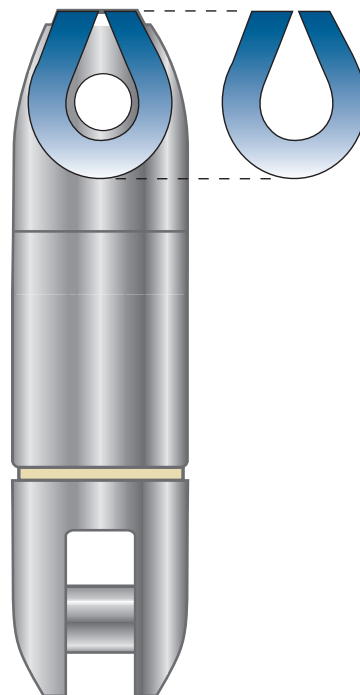
ROPE THIMBLE FOR CLEVIS SWIVELS

Attaching a wire or synthetic rope to a swivel can be accomplished by using the Electroline wire rope fitting (see page 2 for assembly procedures). This is the best method of attachment and is available on models 60, 63, and 64. (See page 31.)

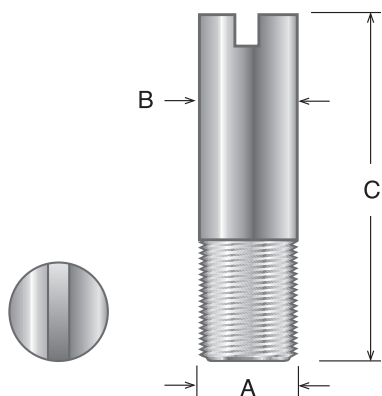
If thimbles with clips are desired, the solid core thimbles shown here are recommended. The cast-steel thimbles are zinc plated and are designed to limit rope wear by preventing the rope from extending beyond the diameter of the swivel.

ROPE THIMBLES FOR CLEVIS SWIVELS

Rope Size	P/N
1/2	L713-4
3/4	L713-9
7/8	L713-8
1	L713-8



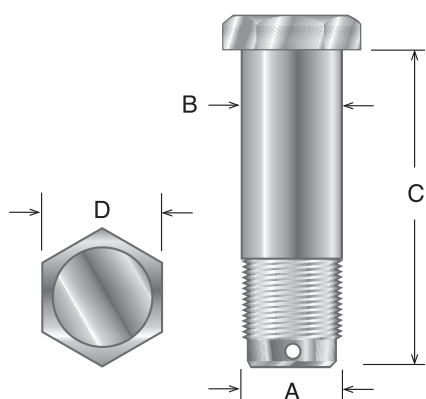
Replacement Clevis Pins



3000 SERIES CLEVIS PIN WITH SLOT

Dimensions in inches

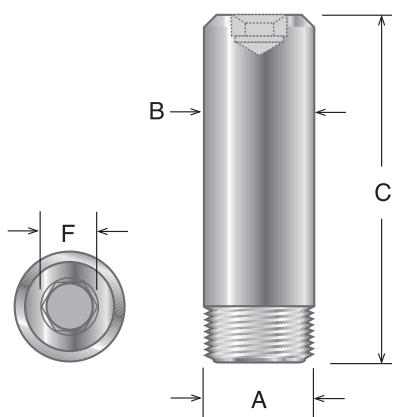
Swivel Size	P/N	A Thread	B	C
-12	LS-410K	1/4-28	1/4	3/4
-18	LS-410L	5/16-24	5/16	7/8
-25	LS-410M	3/8-24	3/8	1-1/8



3000 SERIES CLEVIS PIN WITH HEX HEAD

Dimensions in inches

Swivel Size	P/N	A Thread	B	C	D
-31	L-640A	3/4-10	3/4	2-9/32	1
-37	L-640A	3/4-10	3/4	2-9/32	1
-43	L-640B	3/4-10	3/4	2-17/32	1
-50	L-640B	3/4-10	3/4	2-17/32	1
-56	L-640C	1-8	1	3-5/16	1-1/4
-62	L-640C	1-8	1	3-5/16	1-1/4
-75	L-640D	1-1/8-7	1-1/8	3-19/32	1-3/8
-87	L-640E	1-1/4-7	1-1/4	3-27/32	1-1/2
-99	L-640F	1-3/8-6	1-3/8	4-11/32	1-5/8



6000 SERIES CLEVIS PIN WITH BROACHED HEX

Dimensions in inches

Swivel Size	P/N	A Thread	B	C	F
-12	LD-733A	5/16-24	5/16	25/32	5/32
-25	LD-733B	3/8-24	3/8	1-1/8	3/16
-37	LD-733C	7/16-20	7/16	1-13/32	1/4
-50	LD-733D	5/8-18	5/8	1-23/32	3/8
-62	LD-733E	7/8-14	7/8	2-1/8	1/2
-75	LD-733G	1-12	1	2-19/32	1/2
-81	LD-733H	1-1/8-12	1-1/8	2-5/8	1/2
-87	LD-733F	1-1/2-12	1-1/2	3-5/16	1/2
-89	LD-733F	1-1/2-12	1-1/2	3-5/16	1/2
-125	LD-733K	1-7/8-12	1-7/8	4-1/4	1/2
-150	LD-733J	2-12	2	5	1/2

Safe-Line Clamps

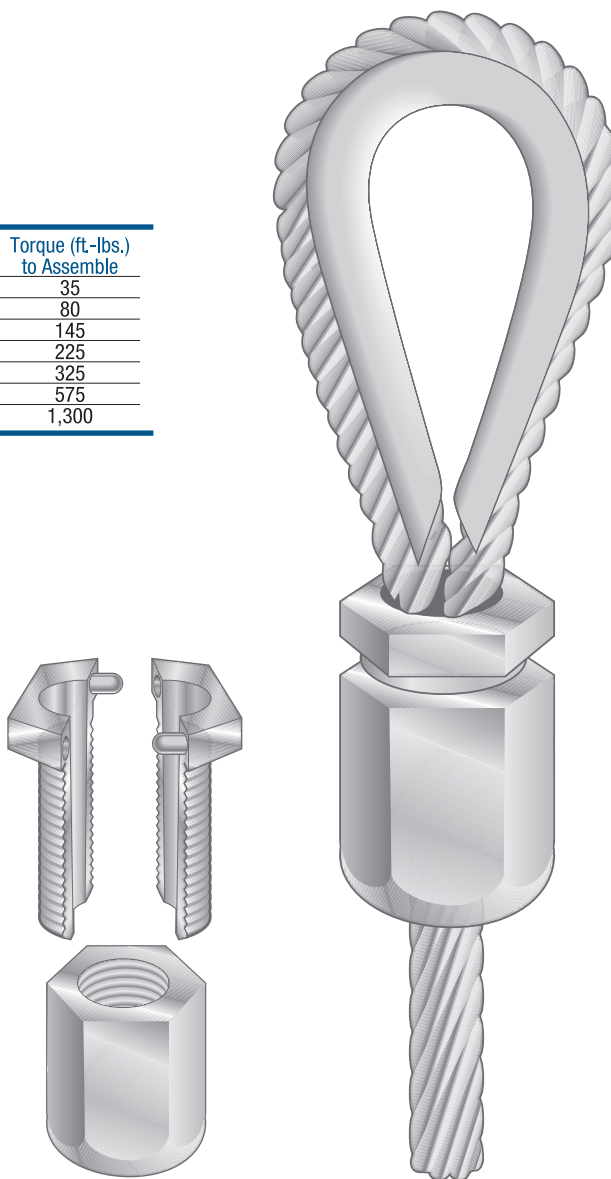
The Safe-Line Wire Rope Clamps are ideal for field installations that require quick, easily thimbled rope terminations, with the reliability that wire rope clips cannot provide. Designed only for 6 x 19 IWRC or 7 x 19 right regular-lay wire rope sizes 1/8" thru 3/4", the cadmium plated Safe-Line Clamp assembly includes a two-piece plug and cold-finish bar-steel socket.

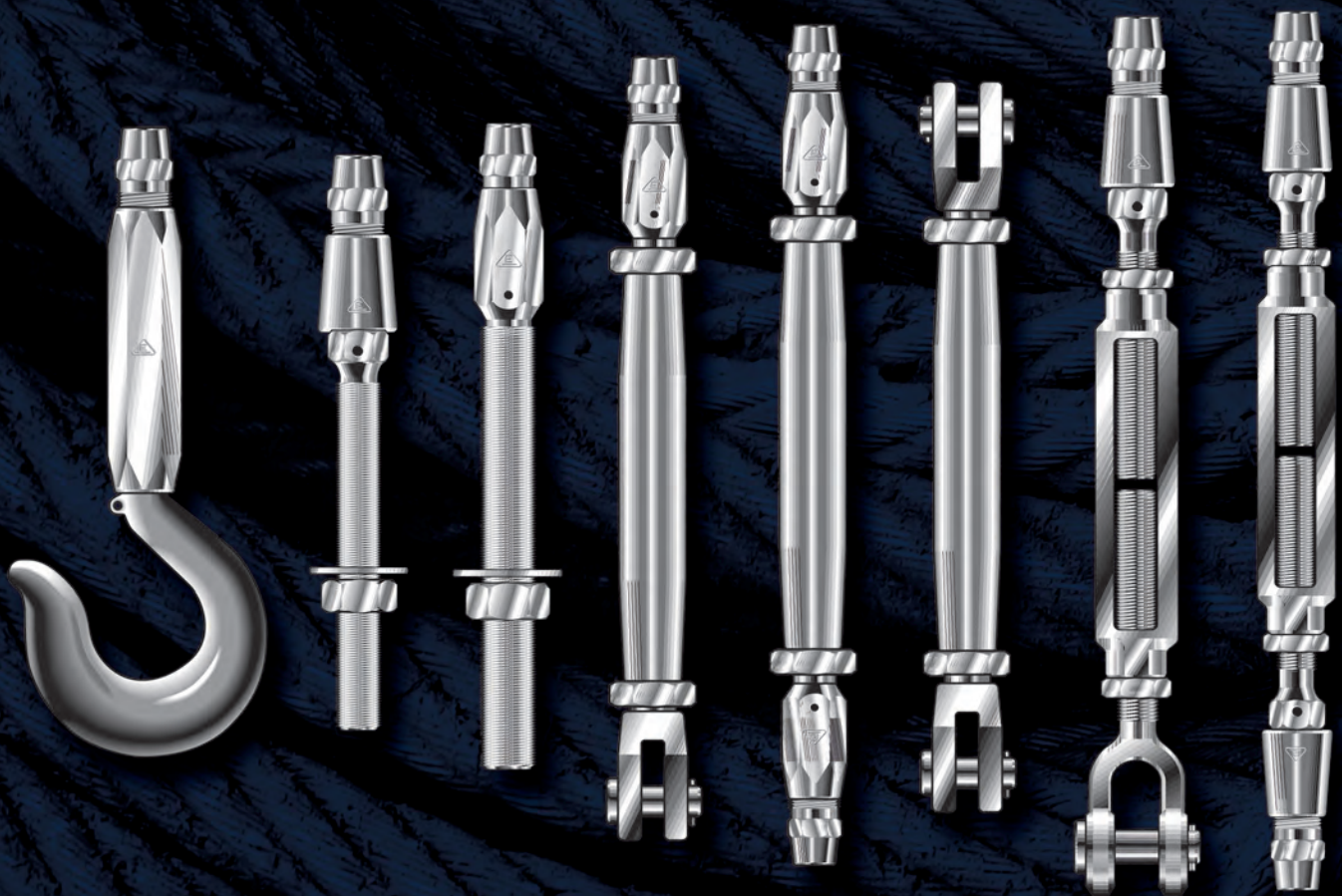
The finished assembly provides a neat, clean profile (similar to a swage fitting) with no sharp edges or loose ends to snag. And they hold! The Safe-Line Clamp is rated with an efficiency of over 90% of rated wire rope strength. The clamp meets or exceeds all requirements for Military Standard MS-16843 and conforms to Federal Spec. FF-C-450. They are warranted for one year.*

**See warranty information on page 4.*

SAFE-LINE CLAMPS

Rope Size	Catalog No.	Torque (ft.-lbs.) to Assemble
1/8	AC-1012Y	35
3/16	AC-1018Y	80
1/4	AC-1025Y	145
5/16	AC-1031Y	225
3/8	AC-1037Y	325
1/2	AC-1050Y	575
3/4	AC-1075Y	1,300





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