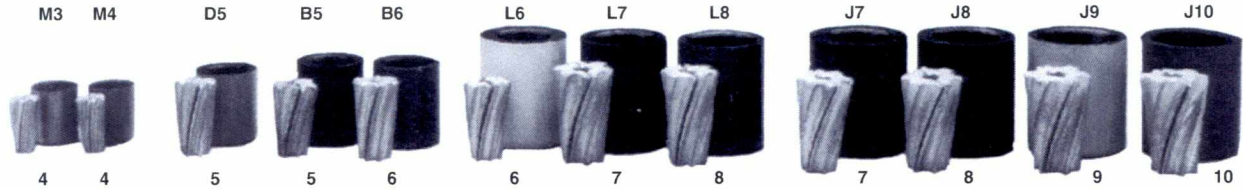


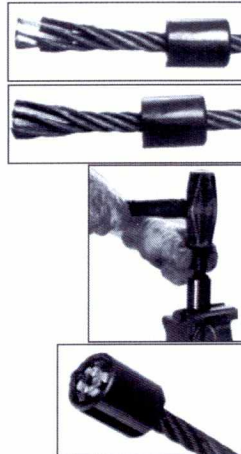
Wire Rope Assembly & Fittings

Ferrules/Positive Grip Wire Rope Fittings

Wedge-Type Ferrules



3
Wire Rope Assembly and Fittings



1. Insert cable through the ferrule and spread the strands to insert wedge halves over the core of the wire rope.
2. Position individual strands into the proper grooves around the wedge halves and tap wedges until they are flush with strand ends.
3. Slide the ferrule back over the wedge and drive the wedge into the ferrule with a hammer and short pipe which fits inside the strands and over the core.
4. Installation is complete. The first load will seat the cable and wedge securely in the ferrule.

ESCO's machined wedge-type ferrules let you make up or repair chokers and winchlines in minutes: No molten socket metal or swaging equipment is required.
Ferrules are made of high strength alloy steel which resists splitting or cracking under severe loads. The two-piece wedges are rifled to provide more gripping surface on the wire rope strands for greater holding power.

IMPORTANT: Wedge-type ferrules are intended only for use with new 6x19 or 6x37 Class, right regular lay, EIP, IWRC or FC wire rope made to U.S. specifications.

Rope Size (in)	Wedge Size	Ferrule Size	Color	Outside Dia. (in)	Length (in)	Wt. (lbs)
3/8, 7/16	No. 4	M3 Midget	Silver	1-1/8	1-3/8	0.25
1/2, 9/16	No. 4	M4 Midget	Lt. Blue	1-1/8	1-3/8	0.25
9/16, 5/8	No. 5	D5 Dwarf	Pink	1-1/2	1-3/4	0.5
9/16, 5/8	No. 5	B5 Bantam	Maroon	1-5/8	2	0.75
3/4	No. 6	B6 Bantam	Grey	1-5/8	2	0.75
3/4	No. 6	L6 Light	White	2-1/8	2-5/8	1.75
7/8	No. 7	L7 Light	Black	2-1/8	2-5/8	1.75
1	No. 8	L8 Light	Green	2-1/8	2-5/8	1.5
7/8	No. 7	J7 Junior	Red	2-3/8	2-3/4	2.75
1	No. 8	J8 Junior	Navy	2-3/8	2-3/4	2.0
1-1/8	No. 9	J9 Junior	Yellow	2-3/8	2-3/4	2.0
1-1/4	No. 10	J10 Junior	Orange	2-3/8	2-3/4	2.0

WARNING

Strands should project above the wedge about 1/4" & should not finish below the end of the wedge.
Wedge type ferrules do not develop 100% holding power (efficiency). Read & understand manufacturer's Installation Instructions prior to use Pull testing is recommended prior to use whenever the possibility of personal injury or property damage exists.

POSITIVE GRIP WIRE ROPE ASSEMBLIES/FITTINGS

Ordering Information for Positive Grip Fittings

O N E

Rope Size Determination

Because fittings are built to close tolerances, and to insure your complete satisfaction with the product, be certain rope sizes are correctly determined before selecting fitting sizes to match.

The correct and incorrect points for wire rope measurements are shown in these illustrations. With any type of rope, always measure at the points that will register the widest diameter.

T W O

Specify Rope Construction

Each type of rope requires a specific type of plug to insure positive grip by the fitting. Plug selection made at the factory on receipt of your order specifying rope construction. There is also a chart in this catalog of the most common wire rope plugs. As a guide, here is a listing of some of the common rope constructions:

Wire Rope

6 x 19, 8 x 19, etc.

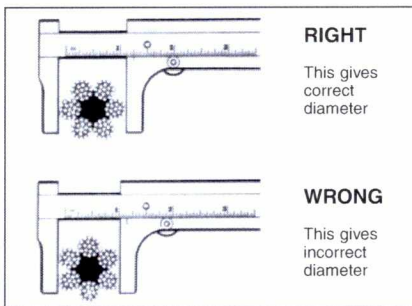
Independent Wire Rope Core (IWRC) or Hemp Center (HC), Fiber Center (FC)

Synthetic Rope

Braided (single or double) Plaited or three strand, Jacketed, and Contrahelical

Electro-Mechanical (Conductor Core)

Armor wire diameters
Core diameter



T H R E E

Specify Material

Wire Rope • IPS, EIP, EEIP, etc.

Synthetic Rope Nylon, Polyester, Fiberglass, Kevlar, Technora, etc.

F O U R

Machined vs. Forged Fittings

Standard forged-steel clevis and oval eye fittings are used where extra strength is required. Rated

at 2 times the rated breaking strength of I.P. rope, these fittings are available unplated or galvanized. Other steel forged fittings are rated higher than I.P. rope.

Forging tolerances may vary slightly from dimensions listed in this catalog. Please contact the factory for dimensions requiring close tolerances.

Machined fittings, available in carbon steel, stainless, aluminum and bronze, are rated at 1.3 times the rated breaking strength of the I.P. rope and provide finer adjustment, better aesthetics and corrosion resistance.

NOTE: Stainless, with its lower yield strength, may deform at lower loads than steel fittings.

F I V E

Plating

Steel fittings are manufactured with a variety of finishes. It is important to specify the finish desired by means of the suffix or last letter of the part number.

For example:

N • Natural finish, no plating

V • Zinc electroplated

X • Hot dipped galvanized

NOTE: All sleeves will be zinc electroplated where the assembly plating is specified "X".

Wire Rope Assembly & Fittings

Positive Grip Wire Rope Assemblies & Fittings

Typical Wire Rope Fitting Assembly

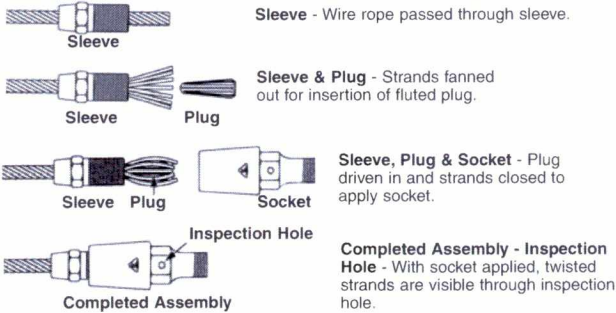
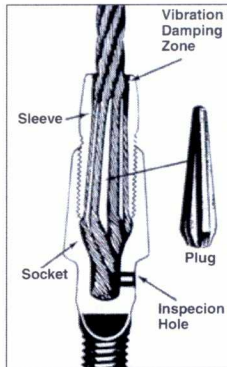
These fittings are the first real advance in connecting practices since the development of wire rope. These fittings are remarkably compact assemblies of three basic units:

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.

SAFE WORKING LOADS

These terminations, when properly assembled, will hold the "normal" or "rated" breaking strength of IPS wire rope. They are certified by the "Underwriters Laboratory, Inc." (Safety Appliance No. 799) to hold no less than 85% of the rated breaking strength of the rope. Fittings are designed for linear loads only.

Terminations are NOT marked with safe working load (SWL) as the termination is a component of an assembly which includes the wire rope. Due to the many different types of ropes with which our termination may be used, the safe working load is dependent upon the type of rope and the usage. Electroline terminations are designed to have a breaking strength greater than 6 x 19 IPS IWRC wire rope of the corresponding size. Our safety factor is 1.3 for the steel machined fittings, and 2.0 for the forged steel clevis and eye assemblies. However, the rope is the weakest component of the assembly, and these safety factors cannot be used to determine the SWL of the assembly.

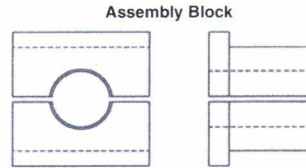


Wire Rope Assembly Kits

For easier, more efficient assembly of 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, protect the lay of the strand, and hold all of the wires of the strand firmly so that the plug can be driven to a solid seat.

Assembly kits, as illustrated here, are available in many sizes. For ordering information, see chart.



Hole Diameter is 1/32 Smaller than Cable Diameter

Rope Size (in)	Kit No.	Vise Jaws	Tube Driver
1/16 - 3/32	SP-307-D	SP-307-1D	SP-307-2AA
1/8 - 5/32	SP-307-E	SP-307-1E	SP-307-2A
3/16 - 7/32	SP-307-E	SP-307-1E	SP-307-2A
1/4 - 9/32	SP-307-G	SP-307-1F	SP-307-2A
5/16	SP-307-H	SP-307-1F	SP-307-2B
3/8	SP-307-J	SP-307-1G	SP-307-2B
7/16	SP-307-K	SP-307-1G	SP-307-2C
1/2	SP-307-L	SP-307-1H	SP-307-2C
9/16	SP-307-L	SP-307-1H	SP-307-2C
5/8	SP-307-N	SP-307-1J	SP-307-2D
3/4	SP-307-P	SP-307-1K	SP-307-2D
7/8	SP-307-Q	SP-307-1L	SP-307-2E
1	SP-307-R	SP-307-1M	SP-307-2E
1-1/8	SP-307-S	SP-307-1N	SP-307-2F
1-1/4	SP-307-T	SP-307-1P	SP-307-2F
1-3/8	SP-307-V	SP-307-1Q	SP-307-2G
1-1/2	SP-307-W	SP-307-1R	SP-307-2G



Tube Driver

3
Wire Rope Assembly and Fittings

Wire Rope Plugs

The key to the positive grip of Electroline terminations is in the plug design. Depending on the type of rope, each plug is shaped and manufactured from specific materials to maximize holding power. Plugs for the more common wire rope constructions are represented here. However, our engineers have developed other configurations for ropes not listed. Please call, for answers to your rope termination problems.

To order a plug, first locate the vertical column, under Wire Rope Construction, that lists the TYPE of wire rope for which the replacement plug is to be used.

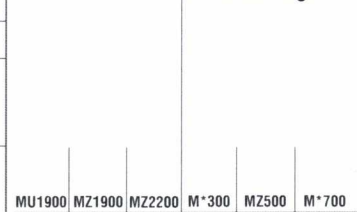
Second, where the row showing your rope size (in column at lower left) intersects with the rope TYPE column, the correct replacement plug for that type and size wire is listed. Please call for other rope constructions.

PLUG SELECTION TABLE									
Rope Size	Wire Rope Construction								
	6 x 19 (IWRC)	6 x 7 (HC)	1x7	1 x 19	8 x 9 (HC)	18 x 7 (IWRC)	7 - Flex	7x7 7 x 19	3x7
6 x 21 (IWRC)	6 x 21 (HC)	(steel only)		8 x 25 (HC)	19x7	Aircraft Cable		3 x 19	
6 x 31 (IWRC)	6 x 25 (HC)			8 x 19 (HC)	19 x 19			3 x 37	
6 x 36 (IWRC)	6 x 31 (HC)				Flex 19				
6 x 37 (IWRC)	6 x 36 (HC)								
6 x 41 (IWRC)	6 x 37 (HC)								
6 x 46 (IWRC)	6 x 43 (HC)								
6 x 49 (IWRC)	6 x 46 (HC)								
7x7 7x19									
Plug Catalog Number									
1/16	MB-1606	MB-1606	MB-1606	MB-306	MB-1606				MB-1606
3/32	MB-709	MB-1609	MB-1609	MB-309	MB-1609			MB-709	MB-1612
1/8	MB-712	MB-1612	MB-1612	MB-312	MB-1612	MB-312		MB-712	MB-1612
5/32	MB-715	MB-1615	MB-1615	MB-315	MB-1615	MB-315		MB-715	MB-1612
3/16	MB-718	MB-1718	MB-1518	MB-318	MB-1718	MB-318		MB-718	MB-1618
7/32	MB-721	MB-1721	MB-1521	MB-321	MB-1721	MB-321		MB-721	MB-1618
1/4	MU-1925	MB-1725	MB-1525	MB-325	MB-1725	MA-2625		MB-725	MB-1618
9/32	MB-728	MB-1728	MB-1528	MB-328	MB-1728	MB-328		MB-728	MB-1618
5/16	MU-1931	MB-1731	MB-1531	MB-331	MB-1831	MB-331		MB-731	MB-1625
3/8	MU-1937	MZ-1737	MC-1537	MB-337	MB-1837	MA-2637	MA-837	MB-737	MZ-1437
7/16	MU-1943	MZ-1743	MC-1543	MB-343	MZ-1843	MA-2643	MA-843	MB-743	MZ-1437
1/2	MU-1950	MZ-1750	MC-1550	MB-350	MZ-1850	MA-2650	MA-850	MB-750	MZ-1437
9/16	MZ-1956	MZ-1756	MC-1556	MB-356	MZ-1856	MA-2656	MA-856		MZ-1443
5/8	MZ-1962	MZ-1762	MC-1562	MB-362	MZ-1862	MA-2662	MA-862		MZ-1450
3/4	MZ-1975	MZ-1775	MC-1575	MB-375	MZ-1875	MA-2675	MZ-875		MZ-1462
7/8	MZ-1987	MZ-1787	MC-1587	MB-387	MZ-1887	MA-2687	MA-887		MZ-2275
1	MZ-1999	MZ-1799	MC-1599	MB-399	MZ-1899	MA-2699	MA-899		MZ-2275
1-1/8	MZ-19112	MZ-17112		MC-15112-19	MZ-18112	MA-26112	MA-8112		
1-1/4	MZ-19125	MZ-17125		MC-15125-19	MZ-18125	MA-26125			
1-3/8	MZ-19137	MZ-17137		MC-15137-19		MA-26137			
1-1/2	MZ-19150	MZ-17150		MC-15150-19		MA-26150			

A Series Plugs



B Series Plugs

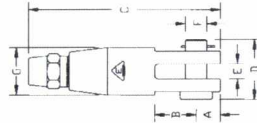


Wire Rope Assembly & Fittings

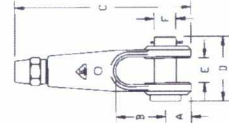
Positive Grip Fittings

CLEVIS ASSEMBLIES

**Forged Series:
Clevis Socket Assembly**



**Extra Strength Series:
Clevis Socket with Pin &
Cotter Pin**



Rope Size (in)	Catalog Numbers		Dimensions (in)					
	Self-Colored Steel	Galvanized Steel	A	B	C	D	E	F
			1/4	GD-125-N	GD-125-X	11/16	1-1/4	4-1/2
5/16	GD-131-N	GD-131-X	13/16	1-1/2	5-3/8	2-1/32	11/16	9/16
3/8	GD-137-N	GD-137-X	13/16	1-1/2	5-1/2	2-5/32	11/16	5/8
7/16	GD-143-N	GD-143-X	1-1/16	2	7-3/16	2-29/32	1	3/4
1/2	GD-150-N	GD-150-X	1-1/16	2	7-3/16	2-31/32	1	7/8
9/16	GD-156-N	GD-156-X	1-1/4	2-1/2	8-5/8	3-7/16	1-1/4	1
5/8	GD-162-N	GD-162-X	1-1/4	2-1/2	8-5/8	3-7/16	1-1/4	1
3/4	GD-175-N	GD-175-X	1-7/16	3	10-3/16	4	1-1/2	1-1/8
7/8	GD-187-N	GD-187-X	1-5/8	2-5/8	11	4-3/8	1-9/16	1-1/4
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
1-1/8	GD-1112-N	GD-1112-X	2-3/16	3-5/16	16-1/4	5-1/2	1-15/16	1-3/4
1-1/4	GD-1125-N	GD-1125-X	2-3/16	3-5/16	17	5-5/8	1-15/16	1-13/16

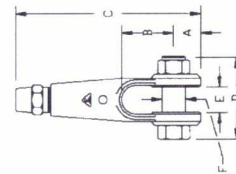
Rope Size (in)	Catalog Numbers		Dimensions (in)					
	Self-Colored Steel	Galv. Steel	A	B	C	D	E	F
			7/16	PD-143-N	PD-143-X	1-1/16	2	7-3/16
1/2	PD-150-N	PD-150-X	1-1/16	2	7-3/16	2-19/32	1	1
9/16	PD-156-N	PD-156-X	1-1/4	2-1/2	8-5/8	3-11/64	1-1/4	1-3/16
5/8	PD-162-N	PD-162-X	1-1/4	2-1/2	8-5/8	3-11/64	1-1/4	1-3/16
3/4	PD-175-N	PD-175-X	1-7/16	3	10-3/16	3-11/16	1-1/2	1-3/8
7/8	PD-187-N	PD-187-X	1-15/16	2-7/8	12-11/16	4-7/8	1-7/8	1-1/2
1	PD-199-N	PD-199-X	2-3/16	3-5/16	17	5-5/8	1-15/16	1-13/16

NOTE: Extra Strength Fittings rated at 100% RBS of Extra-Improved Plow Steel Wire Rope. Larger Sizes Available - call for more information.

3
Wire Rope Assembly and Fittings

Machined Series: Clevis Socket Assembly

Rope Size (in)	Catalog Numbers				Dimensions (in)						
	Self-Colored Steel	Zinc Plated Steel	Stainless Steel	Bronze	A	B	C	D	E	F	G
					1/16	ID-106-N	ID-106-V	IS-106	IZ-106	17/64	3/8
3/32	ID-109-N	ID-109-V	IS-109	IZ-109	5/16	1/2	2-7/16	13/16	1/4	1/4	5/8
1/8	ID-112-N	ID-112-V	IS-112	IZ-112	5/16	1/2	2-7/16	13/16	1/4	1/4	5/8
5/32	ID-115-N	ID-115-V	IS-115	IZ-115	3/8	5/8	2-31/32	63/64	5/16	5/16	3/4
3/16	ID-118-N	ID-118-V	IS-118	IZ-118	3/8	5/8	2-31/32	63/64	5/16	5/16	3/4
7/32	ID-121-N	ID-121-V	IS-121	IZ-121	15/32	3/4	3-23/32	1-9/64	3/8	3/8	15/16
1/4	ID-125-N	ID-125-V	IS-125	IZ-125	15/32	3/4	3-23/32	1-9/64	3/8	3/8	15/16
9/32	ID-128-N	ID-128-V	IS-128	IZ-128	17/32	7/8	4-1/4	1-19/64	3/8	7/16	1-1/16
5/16	ID-131-N	ID-131-V	IS-131	IZ-131	17/32	7/8	4-1/4	1-19/64	3/8	7/16	1-1/16
3/8	ID-137-N	ID-137-V	IS-137	IZ-137	5/8	1	4-27/32	1-31/64	7/16	1/2	1-3/16
7/16	ID-143-N	ID-143-V	IS-143	IZ-143	23/32	1-1/4	5-5/8	1-11/16	7/16	5/8	1-3/8
1/2	ID-150-N	ID-150-V	IS-150	IZ-150	51/64	1-3/8	6-11/32	1-59/64	1/2	11/16	1-9/16
9/16	ID-156-N	ID-156-V	IS-156	IZ-156	1-3/64	1-17/32	7-19/32	2-5/32	11/16	15/16	2
5/8	ID-162-N	ID-162-V	IS-162	IZ-162	1-3/64	1-17/32	7-19/32	2-5/32	11/16	15/16	2
3/4	ID-175-N	ID-175-V	IS-175	IZ-175	1-15/64	1-27/32	8-29/32	2-7/16	3/4	1-1/8	2-5/16
7/8	ID-187-N	ID-187-V	IS-187	IZ-187	1-7/16	1-7/8	10-3/16	2-47/64	13/16	1-1/4	2-5/8
1	ID-199-N	ID-199-V	IS-199	IZ-199	1-3/4	2-1/4	12	3-7/64	15/16	1-1/2	3



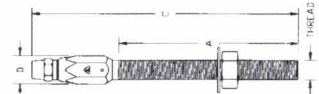
STUD ASSEMBLIES

Forged Series - Stud Socket Assembly

Rope Size (in)	Catalog Number		Dimensions (in)			
	Self-Colored Steel	Galv. Steel	A*	C	Thread	D
			1/4	GD-325-N	GD-325-X	4-3/16
5/16	GD-331-N	GD-331-X	4-3/16	7-9/16	1/2-13	1
3/8	GD-337-N	GD-337-X	4-1/2	8-1/4	5/8-11	1-1/8
7/16	GD-343-N	GD-343-X	6-3/8	10-15/16	3/4-10	1-1/2
1/2	GD-350-N	GD-350-X	6-3/8	10-15/16	3/4-10	1-1/2
9/16	GD-356-N	GD-356-X	8-1/8	13-7/8	7/8-9	1-13/16
5/8	GD-362-N	GD-362-X	8-1/8	13-7/8	7/8-9	1-13/16
3/4	GD-375-N	GD-375-X	8-5/8	15-1/4	1-1/8-7	2-1/4
7/8	GD-387-N	GD-387-X	9	16-5/8	1-1/4-7	2-5/8
1	GD-399-N	GD-399-X	12-1/8	21-5/16	1-1/2-6	3

NOTE: *Please call for other stud dimensions.

Machined Series - Stud Socket Assembly



Rope Size (in)	Catalog Numbers			Dimensions (in)				
	Self-Colored Steel	Zinc Plated Steel	Stainless Steel	Bronze	A*	C	Thread	D
				1/16	ID-306-N	ID-306-V	IS-306	IZ-306
3/32	ID-309-N	ID-309-V	IS-309	IZ-309	1-7/8	3-1/2	1/4-28	9/16
1/8	ID-312-N	ID-312-V	IS-312	IZ-312	1-7/8	3-1/2	1/4-28	9/16
5/32	ID-315-N	ID-315-V	IS-315	IZ-315	2-3/16	4-3/16	3/8-24	11/16
3/16	ID-318-N	ID-318-V	IS-318	IZ-318	2-3/16	4-3/16	3/8-24	11/16
7/32	ID-321-N	ID-321-V	IS-321	IZ-321	4-9/16	7-1/16	1/2-20	7/8
1/4	ID-325-N	ID-325-V	IS-325	IZ-325	4-9/16	7-1/16	1/2-20	7/8
9/32	ID-328-N	ID-328-V	IS-328	IZ-328	4-9/16	7-1/2	5/8-18	1
5/16	ID-331-N	ID-331-V	IS-331	IZ-331	4-9/16	7-1/2	5/8-18	1
3/8	ID-337-N	ID-337-V	IS-337	IZ-337	4-15/16	8-3/16	3/4-16	1-1/8
7/16	ID-343-N	ID-343-V	IS-343	IZ-343	6-15/16	10-11/16	7/8-14	1-5/16
1/2	ID-350-N	ID-350-V	IS-350	IZ-350	6-15/16	11	7/8-14	1-1/2
9/16	ID-356-N	ID-356-V	IS-356	IZ-356	8-5/8	15-5/64	1-1/8-7	1-11/16
5/8	ID-362-N	ID-362-V	IS-362	IZ-362	8-5/8	15-5/64	1-1/8-7	1-11/16
3/4	ID-375-N	ID-375-V	IS-375	IZ-375	9-1/4	16-3/4	1-1/4-7	2
7/8	ID-387-N	ID-387-V	IS-387	IZ-387	9-3/4	18-35/64	1-1/2-6	2-1/4
1	ID-399-N	ID-399-V	IS-399	IZ-399	12-3/4	23-7/64	1-3/4-5	2-5/8
1-1/8	IGD-3112-N	IGD-3112-V	IGS-3112	IGZ-3112	13-1/8	25-1/16	1-3/4-5	3
1-1/4	IGD-3125-N	IGD-3125-V	IGS-3125	IGZ-3125	13-1/8	26-11/16	1-3/4-5	3-1/2
1-3/8	IGD-3137-N	IGD-3137-V	IGS-3137	IGZ-3137	16-5/8	34-7/16	2-4-1/2	4
1-1/2	IGD-3150-N	IGD-3150-V	IGS-3150	IGZ-3150	16-5/8	34-7/16	2-4-1/2	4

NOTE: * Please call for other stud dimensions.

Wire Rope Assembly & Fittings

Positive Grip Fittings/Swaged Fittings

TURNBUCKLES:

Forged Series: Open Body Double Clevis & Socket Turnbuckle

Rope Size (in)	Catalog Numbers		Dimensions (in)		Take-up* (in)
	Self-Colored Steel	Galv. Steel	C Min.	D	
1/4	XD-5425-AN	XD-5425-AX	14-9/16	1	6
1/4	XD-5425-BN	XD-5425-BX	17-9/16	1	9
1/4	XD-5425-CN	XD-5425-CX	20-9/16	1	12
5/16	XD-5431-AN	XD-5431-AX	15-3/8	1	6
5/16	XD-5431-BN	XD-5431-BX	18-3/8	1	9
5/16	XD-5431-CN	XD-5431-CX	21-3/8	1	12
3/8	XD-5437-AN	XD-5437-AX	19-3/4	1-1/8	6
3/8	XD-5437-BN	XD-5437-BX	19-3/4	1-1/8	9
3/8	XD-5437-CN	XD-5437-CX	22-3/4	1-1/8	12
7/16	XD-5443-AN	XD-5443-AX	17-3/4	1-1/2	6
7/16	XD-5443-BN	XD-5443-BX	20-3/4	1-1/2	9
7/16	XD-5443-CN	XD-5443-CX	23-3/4	1-1/2	12
1/2	XD-5450-AN	XD-5450-AX	19-1/4	1-1/2	6
1/2	XD-5450-BN	XD-5450-BX	22-1/4	1-1/2	9
1/2	XD-5450-CN	XD-5450-CX	25-1/4	1-1/2	12
9/16	XD-5456-AN	XD-5456-AX	27-7/8	1-13/16	12
9/16	XD-5456-BN	XD-5456-BX	33-7/8	1-13/16	18
5/8	XD-5462-AN	XD-5462-AX	27-7/8	1-13/16	12
5/8	XD-5462-BN	XD-5462-BX	33-7/8	1-13/16	18
3/4	XD-5475-AN	XD-5475-AX	33-3/8	2-5/8	12
3/4	XD-5475-BN	XD-5475-BX	39-3/8	2-5/8	18
3/4	XD-5475-CN	XD-5475-CX	45-3/8	2-5/8	24
7/8	XD-5487-AN	XD-5487-AX	33-7/8	2-5/8	12
7/8	XD-5487-BN	XD-5487-BX	39-7/8	2-5/8	18
7/8	XD-5487-CN	XD-5487-CX	45-7/8	2-5/8	24
1	XD-5499-AN	XD-5499-AX	37-1/2	3	12
1	XD-5499-BN	XD-5499-BX	43-1/2	3	18
1	XD-5499-CN	XD-5499-CX	49-1/2	3	24
1-1/8	XD-54112-DN	XD-54112-DX	51-7/8	3-11/16	18
1-1/8	XD-54112-EN	XD-54112-EX	57-7/8	3-11/16	24
1-1/4	XD-54125-DN	XD-54125-DX	51-7/8	3-11/16	18
1-1/4	XD-54125-EN	XD-54125-EX	57-7/8	3-11/16	24
1-3/8	XD-54137-EN	XD-54137-EX	66-5/8	4-11/32	24
1-1/2	XD-54150-EN	XD-54150-EX	66-5/8	4-11/32	24

NOTE: *Please contact a representative for more information regarding longer takeup on 1-1/8" thru 1-1/2" sizes.

SWAGED FITTINGS



Copper Oval Sleeves

Cable Size (in)	Nicopress Oval Sleeve Stock No.		Nicopress Hand Tool Stock No.	Approx. Wt. Per 1000 Sleeves (lbs)	Sleeve Length Before Compressed Approx. (in)	Sleeve Length Before Compressed Approx. (in)
	Plain Copper	Zinc-Plated Copper				
1/32	17-1-B	27-1-B	*17-BA	0.6	1/4	5/16
3/64	18-11-B4	28-11-B4	51-B4-887	2	3/8	7/16
1/16	18-1-C	28-1-C	51-C-887	3	3/8	7/16
3/32	18-2-G	28-2-G	51-G-887	5	3/8	7/16
1/8	18-3-M	28-3-M	51-M-850	17	9/16	3/4
5/32	18-4-P	28-4-P	51-P-850	23	5/8	7/8
3/16	18-6-X	28-6-X	51-X-850	49	15/16	1-3/16
7/32	18-8-F2	28-8-F2	51-F2-850	56	7/8	1-1/16
1/4	18-10-F6	28-10-F6	3-F6-950	80	1-1/8	1-1/2
5/16	18-13-G9	28-13-G9	3-G9-950	114	1-1/16	1-3/8
No. 635 Hydraulic Tool Dies						
3/8	18-23-H5	28-23-H5	Oval H5	153	1-1/4	1-5/8
7/16	18-24-J8	28-24-J8	Oval J8	302	1-3/4	2-5/16
1/2	18-25-K8	28-25-K8	Oval K8	410	1-7/8	2-1/2
9/16	18-27-M1	28-27-M1	Oval M1	551	2	2-5/8
5/8	18-28-N5	28-28-N5	Oval N5	802	2-3/8	3-1/8

Copper Stop Sleeves

Cable Size (in)	Nicopress Stop Sleeve Stock No.	Nicopress Hand Tool Stock No.	Outside Dia. of Sleeves (in)	Approx. Wt. Per 1000 Sleeves (lbs)	Sleeve Length Before Compressed Approx. (in)	**Typical Holding Strength of Stop Sleeve (lbs)
1/32	871-32-B	*17-BA	1/8	3/4	1/4	120
3/64	871-12-B4	51-B4-887	11/64	1-1/2	7/32	240
1/16	871-1-C	51-C-887	13/64	2	7/32	430
1/16	***871-1-Q	51-Q-929	1/4	2	5/32	425
3/32	871-17-J (Yellow)	51-MJ	21/64	8	5/16	600
3/32	***871-3-Q	51-Q-929	1/4	2	5/32	550
1/8	871-18-J (Red)	51-MJ	21/64	8	5/16	900
5/32	871-19-M	51-MJ	27/64	13	5/16	1,200
3/16	871-20-M (Black)	51-MJ	27/64	12	5/16	1,600
7/32	871-22-M	51-MJ	7/16	20	5/8	2,500
1/4	871-23-F6	3-F6-950	21/32	60	11/16	3,500
5/16	871-26-F6	3-F6-950	21/32	60	11/16	4,000

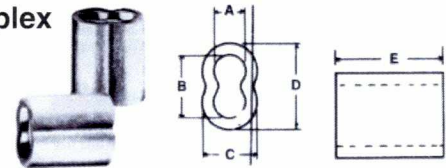
*Formerly 17-1 Tool. **Holding strengths shown are based on use galvanized aircraft cable. ***Electro Galvanized Steel Sleeves.

Tin Plated Copper Oval Sleeves

The 428 Series oval sleeves are made from special materials and are specifically designed for use with stainless steel aircraft cable. The tin plating gives this Nicopress sleeve a distinctive appearance.

Cable Size (in)	Oval Sleeve Stock No.	Single Groove Hand Tool Stock No.	Multi-Groove Hand Tool Stock No.	No. 635 Hydraulic Tool Die	Wt. (lbs) Per 1000 Sleeves Approx.	Sleeve Length Before Compression Approx. (in)	Sleeve Length Before Compression Approx. (in)
3/64	428-1-5-VB4	51-B4-887	33V-CGB4	Oval B4	2	3/8	7/16
1/16	428-2-VC	51-C-887	33V-CGB4 64-CGMP	Oval C	3	3/8	7/16
3/32	428-3-VG	51-G-887	33V-CGB4 64-CGMP	Oval G	6	3/8	7/16
1/8	428-4-VM	51-M-850	64-CGMP 63-XPM	Oval M	17	9/16	3/4
5/32	428-5-VP	51-P-850	64-CGMP 63-XPM	Oval P	23	5/8	7/8
3/16	428-6-VX	51-X-850	63-XPM	Oval X	49	15/16	1-3/16
7/32	428-7-VF2	51-F2-850		Oval F2	59	7/8	1-1/16
1/4	428-8-VF6	3-F6-950		Oval F6	81	1	1-3/8
5/16	428-10-VG9	3-G9-950		Oval G9	120	1-1/16	1-3/8
3/8	428-12-VH5			Oval H5	155	1-3/16	1-1/2
7/16	428-14-VJ8			Oval J8	310	1-3/4	2-5/16
1/2	428-16-VK8			Oval K8	420	1-7/8	2-9/16
9/16	428-18-VM1			Oval M1	565	2	2-13/16
5/8	428-20-VN5			Oval N5	822	2-3/8	3-1/4

Copper Duplex Sleeves



EXTRUDED COPPER DUPLEX SLEEVES, ZINC PLATED COPPER SLEEVES and COPPER BUTTONS have efficient cold forming properties, and are ideal for non-rusting permanent splices. These sleeves and buttons are 99% pure copper, and the mass of copper provides excellent holding strength.

Return eye splice using COPPER DUPLEX SLEEVES will attain 95% of Improved Plow wire rope catalog -strength when properly swaged.

CAUTION: Return eye slings using copper duplex sleeves must be properly swaged to attain strength.

Rope Size (in)	Approx. Dimensions (in)					No. Presses	After Swage O.D.	Wt. Per 100
	A	B	C	D	E			
1/32	3/64	3/32	3/32	9/64	1/4	1	.100	.045
3/64	1/16	1/8	9/64	13/64	3/8	2	.154	.2
1/16	3/32	11/64	11/64	1/4	25/64	3	.190	.3
3/32	7/64	1/4	15/64	3/8	29/64	3	.265	.65
1/8	5/32	21/64	21/64	1/2	9/16	3	.353	1.6
5/32	3/16	27/64	3/8	19/32	5/8	3	.390	2.3
3/16	7/32	7/16	7/16	43/64	7/8	4	.475	5.1
7/32	1/4	33/64	15/32	23/32	7/8	4	.510	4.6
1/4	9/32	19/32	13/16	1/2	1-1/8	4	.585	7.5
5/16	3/8	23/32	21/32	1-1/64	1-1/8	4	.730	11.8
3/8	7/16	13/16	23/32	1-1/8	1-1/2	4	.795	17
1/2	9/32	17/64	31/32	1-15/32	1-7/8	4	1.000	38.4

*After swage O.D. & numbers of presses recommended are approximate. They will vary according to dies & type of swaging tool used.