

WIRE ROPE ACCESSORIES



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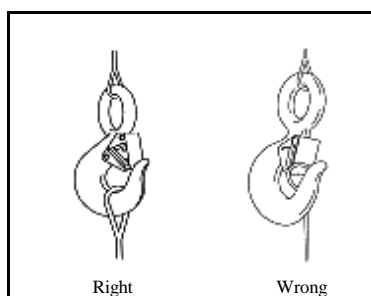
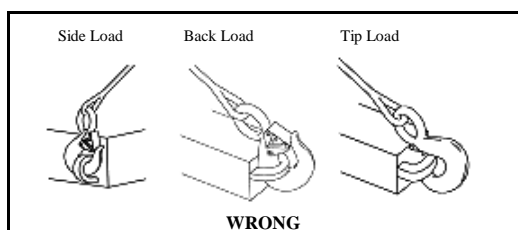


WIRE ROPE ACCESSORIES

Hoist hook

WARNING AND APPLICATION INSTRUCTIONS

- A visual periodic inspection for cracks, nicks, wear, gouges and deformation as part of a comprehensive documented inspection program, should be conducted by trained personnel in compliance with the schedule in ANSI B30. 10.
- For hooks used in frequent load cycles or pulsating loads, the hook and threads should be periodically inspected by Magnetic Particle or Dye Penetrant. (Note: Some disassembly may be required.)
- Never use a hook whose throat opening has been increased, or whose tip has been bent more than 10 degrees out of plane from the hook body, or is in any other way distorted or bent.
- Remove from service any hook with a crack, nick, or gouge. Hooks with a crack, nick, or gouge shall be repaired by grinding lengthwise, following the contour of the hook.
- Never repair, alter, rework, or reshape a hook by welding, heating, burning, or bending.
- Never side load, back load, or tip load a hook.
- Eye hooks, shank hooks and swivel hooks are designed to be used with wire rope or chain. Efficiency of assembly may be reduced when used with synthetic material.
- Always make sure the hook supports the load. The latch must never support the load.
- When placing two sling legs in hook, make sure the angle from the vertical to the outermost leg is not greater than 45 degrees, and the included angle between the legs does not exceed 90 degrees.
- See ANSI/ASME B30.10 “Hooks” for additional information.



WARNING !

Loads may disengage from hook if proper procedures are not followed.

A failing load may cause serious injury or death.

Threads may corrode and/or strip and drop the load.

Hook must always support the load. The load must never be supported by the latch.

Never apply more force than the hook's assigned Working Load Limit rating.

Read and understand these instructions before using hook.

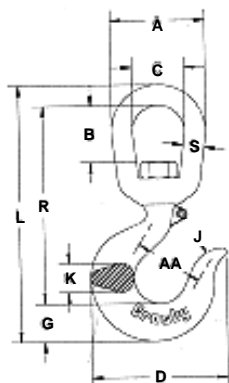
WIRE ROPE ACCESSORIES

Swivel hooks

S-322



- ◆ Forged - quenched and tempered.
- ◆ Proper design, careful forging, and precision controlled quench and tempering gives maximum strength without excessive weight and bulk.
- ◆ Every hoist hook has a pre-drilled cam which can be equipped with a latch.
- ◆ Load rating codes stamped on each hook.
- ◆ Deformation indicators : two strategically placed marks, one just below the shank or eye and the other on the hook tip which allows for measurement to determine if the throat has changed, thus indicating abuse or overload.



Swivel hook dimensions with PL latch assembled

See application and warning information p 57

Working Load Limit (tons)		Stock No.	Stock No.	Weight each (lbs.)	Dimensions (in.)													Deformation Indicator AA
322 C	322 A	322 C	322 A		A	B	C	D	G	J	K	L	O	R	S	T		
3/4	1	1025303	1025508	.75	2.00	.94	1.25	2.88	.73	.94	.56	5.56	.88	4.47	.38	.81	1.50	
1	1 1/2	1025321	1025526	1.25	2.50	1.31	1.50	3.19	.84	1.02	.63	6.62	.97	5.28	.50	.81	1.50	
1 1/2	2	1025349	1025544	2.25	3.00	1.62	1.75	3.62	1.00	1.06	.75	7.62	1.00	6.00	.62	.84	2.00	
2	3	1025367	1025562	2.57	3.00	1.56	1.75	4.09	1.13	1.22	.84	8.12	1.12	6.38	.62	1.19	2.00	
3	4 1/2	1025385	1025580	4.75	3.50	1.75	2.00	4.94	1.44	1.50	1.13	9.59	1.06	7.41	.75	1.38	2.50	
5	7	1025401	1025606	10.29	4.50	2.31	2.50	6.50	1.81	1.88	1.38	12.41	1.50	9.59	1.00	1.78	3.00	
7 1/2	11	1025429	1025624	16.25	5.00	2.38	2.75	7.56	2.25	2.28	1.63	14.50	1.75	11.12	1.12	2.12	4.00	
10	15	1025447	1025642	23.25	5.62	2.69	3.12	8.69	2.59	2.50	1.94	15.88	1.91	12.03	1.25	2.56	4.00	
—	22	—	1025660	49.75	7.00	4.19	4.00	11.00	3.00	3.41	2.38	21.06	2.75	16.56	1.50	2.88	5.00	
—	30	—	1025688	70.50	7.00	4.19	4.00	13.62	3.66	4.00	2.86	23.22	3.25	18.06	1.50	3.44	6.50	

322C : Carbon Steel
 322A : Hook and Bail-Alloy Steel

Note : Proof load is 2 times Working Load Limit. All carbon swivel hooks - average straightening load (ultime load) is 5 times Working Load Limit. All alloy swivel hooks - average straightening load (ultime load) is 4.5 times the Working Load Limit.

This hook is a positioning device and is not intended to rotate under load. For swivel hooks designed to rotate under load see pages 70 and 71.

WIRE ROPE ACCESSORIES

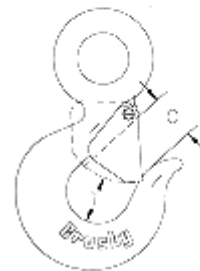
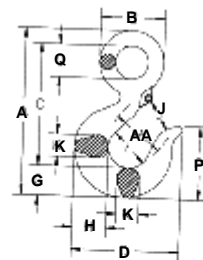
Eye hooks



S-320

- ◆ The most complete line of eye hoist hooks. Available 3/4 to 60 tons.
- ◆ Proper design, careful forging and precision controlled quench and tempering give maximum strength without excessive weight and bulk.
- ◆ Every eye hook has a pre-drilled cam which can be equipped with a latch. Even years after purchase of the original hook, latch assemblies can be added.
- ◆ Eye hooks are load rated.
- ◆ Available in carbon steel and alloy steel.

See application and warning information p 57



Working Load Limit*			Eye Hooks			
(tons)			Stock No.			Weight Each (lbs)
Carbon	Alloy	Bronze	Carbon S-320-C S.C.	Carbon G-320-C Galv.	Alloy S-320-A S.C.	
3/4	1	.5	1023109	1023118	1023369	.55
1	1.5	.6	1023127	1023136	1023387	.75
1.5	2	1	1023145	1023154	1023403	1.25
2	3	1.4	1023163	1023172	1023421	1.70
3	4.5	2	1023181	1023190	1023449	3.60
5	7	3.5	1023207	1023216	1023467	7.08
7.5	11	5	1023225	1023234	1023485	13.00
10	15	6.5	1023243	1023252	1023500	18.50
15	22	10	1023261	1023270	1023528	33.80
20	30	—	1023289	—	1023546	60.00
20	30	—	—	—	—	—
25	37	—	1023305	—	1023564	105.00
25	37	—	—	—	—	—
30	45	—	1023323	—	1023582	148.00
30	45	—	—	—	—	—
40	60	—	1023341	—	1023608	228.00
40	60	—	—	—	—	—
50‡	75‡	—	—	—	—	—
50‡	75‡	—	—	—	—	—
—	100‡	—	—	—	—	—
—	100‡	—	—	—	—	—
—	150‡	—	—	—	—	—
—	200‡	—	—	—	—	—
—	300‡	—	—	—	—	—

320A : Alloy steel
320C : Carbon steel

* Dimensions shown are for 4055 latch kits.
Dimensions for sizes 3 ton carbon and larger are for PL latch kits
‡ Shank hooks only.

Note : Proof load is 2 times Working Load Limit. All carbon hooks - average straightening load (ultimate load) is 5 times Working Load Limit. Alloy eye hooks 1 ton through 22 ton - average straightening load (ultimate load) is 5 times Working Load Limit. Alloy eye hooks 30 tons through 60 tons - average straightening load (ultimate load) is 4.5 times Working Load Limit. All alloy shank hooks - average straightening load (ultimate load) is 4.5 times the Working Load Limit. All bronze hooks - average straightening load (ultimate load) is 4 times Working Load Limit.

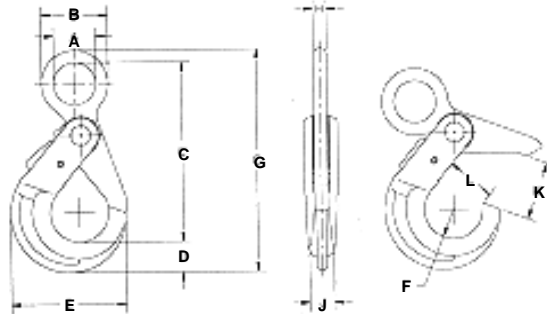
WIRE ROPE ACCESSORIES

Shur-Loc eye hook with positive locking latch



S-316-A

- ◆ Positive lock latch is self-locking when hook is loaded.
- ◆ Forged alloy steel - quenched and tempered.
- ◆ Rated for both wire rope and grade 8 chain.
- ◆ Meets new NACM and proposed ASTM and Euronorm standards for grade 8 chain fittings.
- ◆ G-414 heavy thimble should be used with wire rope slings.
- ◆ Individually proof tested to 2½ times Working Load Limit with certification.
- ◆ Fatigue rated.
- ◆ The Shur-Loc hook, if properly installed and locked, can be used for personnel lifting applications.



Chain Size		S-316A Stock No.	Grade 8 Alloy Chain Working Load Limit (lbs.) 4:1	Wire Rope XIP IWRC Mechanical Splice		Weight each (lbs)
(in.)	(mm)			(in.)	Working Load Limit (lbs.) 5:1	
—	6	1097918	2500	5/16	2000	.87
1/4 - 5/16	7-8	1097820	4500	7/16	3800	1.81
3/8	10	1097921	7100	1/2	5000	3.24
1/2	13	1097922	12000	5/8	7800	5.96
5/8	16	1097926	18100	7/8	15200	15.05

* Ultimate load is 4 times Working Load Limit based on Grade 8 chain.

Size		S-316A Stock No.	Dimensions (in.)										
(in.)	(mm)		A	B	C	D	E	F	G	H	J	K	L
—	6	1097918	.79	1.42	3.95	.79	2.60	.67	5.06	.31	.63	1.34	1.14
1/4 - 5/16	7-8	1097920	1.10	1.89	5.24	1.10	3.50	.87	5.64	.39	.81	1.71	1.46
3/8	10	1097921	1.30	2.44	6.63	1.15	4.35	1.10	8.30	.51	.94	2.20	1.87
1/2	13	1097922	1.81	3.15	8.31	1.66	5.45	1.26	10.63	.67	1.16	2.64	2.11
5/8	16	1097926	2.20	3.94	10.06	2.05	6.56	1.50	12.97	.87	1.50	3.15	2.49

WIRE ROPE ACCESSORIES

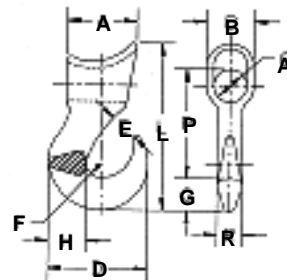
Sliding choker hooks



A-350

- ◆ Forged alloy steel - quenched and tempered.

* Ultimate Load is 5 times the Working Load Limit.
 ** When ordering, eye diameter "C" should be specified.



Single part Rope size (in.)	Eight part Rope Size (in.)	A-350 Stock No. S.C	Working Load Limit * (lbs.)	Weight Each (lbs.)	Dimensions (in)										
					A	B	C	D	E	F	G	H	L	P	R
3/8	—	1028042	2500	.75	2.06	1.13	.63	2.41	.63	.38	.84	.91	4.28	2.59	.63
1/2	1/8	1028060	3300	1.25	2.25	1.31	.75	2.97	.78	.50	.97	1.06	4.97	3.09	.75
5/8 **	3/16	1028088	5000	3.10	3.06	1.63	.75	3.56	.94	.56	1.13	1.31	6.38	3.88	1.00
5/8 **	3/16	1028104	5000	2.75	3.06	1.63	1.00	3.56	.94	.56	1.13	1.31	6.38	4.00	1.13
3/4 **	1/4	1028122	8000	5.17	3.38	2.13	1.00	4.25	1.16	.63	1.44	1.63	7.66	4.56	1.13
3/4 **	1/4	1028140	8000	5.00	3.38	2.13	1.44	4.25	1.16	.63	1.44	1.63	7.66	4.78	1.13

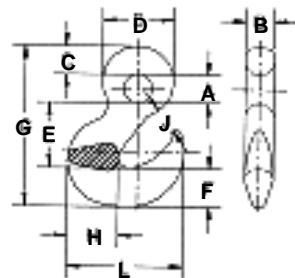
Sling hook



A-3311

- Forged alloy steel - quenched and tempered.

* Ultimate Load is 5 times the Working Load Limit.



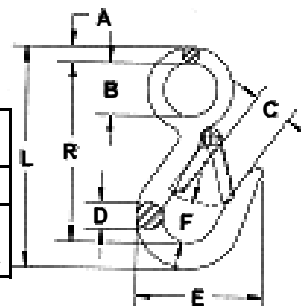
Inside diameter of eye (in.)	Stock No. A-3311 S.C	Working Load Limit * (tons)	Weight Each (lbs.)	Dimensions (in.)										
				A	B	C	D	E	F	G	H	J	L	
1	1028284	2	2.60	1.00	1.00	1.50	2.50	3.34	1.38	5.72	1.44	.88	3.75	



G-3315

- Forged carbon steel - quenched and tempered.
- Pressed steel latches and stainless steel springs, bolts and nuts.

Hook Size (in.)	G-3315 Stock No. Galv.	Working Load Limit * (lbs.)	Weight Each (lbs.)	Dimensions (in)							
				A	B	C	D	E	F	L	R
7/16	1023056	750	.25	.25	.75	.75	.44	2.25	.75	3.94	3.25
9/16	1023074	1000	.50	.34	1.12	.81	.56	2.69	.88	4.75	3.84



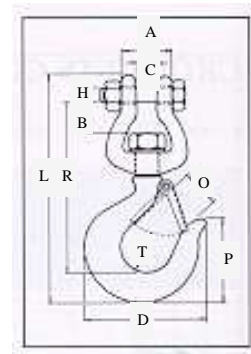
* Ultimate Load is 4 times the Working Load Limit.

WIRE ROPE ACCESSORIES

Replacement hooks



- Easily attached to any chain and electric hoist with welded link load chain, roller chain or wire rope with suitable end fitting.
- Swivel jaw is forged.



Working Load Limit* (tons)	S-3316 Stock No. S.C.	Weight Each (lbs.)	Dimensions (in.)										Stock No. Replacement Latch kit No.
			A	B	C	D	H	L	O	P	R	T	
1/2	1023029	1.25	1.31	.88	.56	3.19	.38	6.12	.97	2.25	4.59	.81	1090045
1	1023047	2.50	1.56	1.00	.69	4.09	.44	7.69	1.12	2.84	5.81	1.19	1090063

* Ultimate load is 5 times the Working Load Limit.

Cargo hooks

PORTLAND PATTERN

Size	1021 Stock Number S.C.	Working Load Limit * (t)	Weight Each (lbs)
22	890307	10	16.50

* Ultimate load is 4 times the Working Load Limit.



1021

NEW YORK PATTERN

Size	1022 Stock Number S.C.	Working Load Limit * (t)	Weight Each (lbs)
12	890343	5	25.00
13	890361	10	31.50

* Ultimate load is 4 times the Working Load Limit.



1022

SEATTLE PATTERN

Size	1023 Stock Number S.C.	Working Load Limit * (t)	Weight Each (lbs)
42	890423	5	44.00
43	890441	10	72.00

* Ultimate load is 4 times the Working Load Limit.



1023

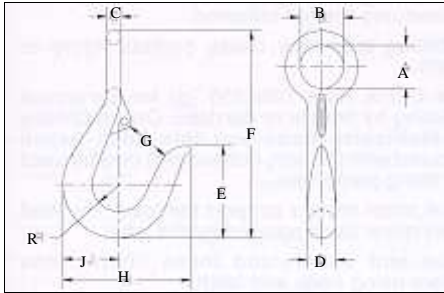
WIRE ROPE ACCESSORIES

Hooks



ROUND REVERSE EYE

- ◆ Forged carbon steel - galvanized



Size (in.)	Stock No. Galv.	Working Load Limit * (lbs.)	Weight Each (lbs.)	Latch No.	Dimensions (in.)									
					A	B	C	D	E	F	G	H	J	R
1/2	919019	300	0.4	1090027	.81	1.38	.28	.50	1.62	4.00	.75	2.25	.97	.47
5/8	919037	400	0.7	1090027	.94	1.56	.31	.62	2.00	4.50	.94	2.75	1.22	.59
3/4	919055	700	1.1	1090045	1.12	1.88	.38	.75	2.25	5.25	1.06	3.00	1.44	.69
7/8	919073	1200	1.2	1090063	1.19	2.06	.44	.88	3.00	6.50	1.25	3.38	1.63	.75
1 - 1 1/8	919091	1800	2.4	1090081	1.50	2.75	.62	1.12	3.50	8.00	1.50	4.38	2.00	.94
1 1/4 - 1 3/8	919135	2700	5.3	1090081	1.88	3.50	.81	1.38	4.00	9.12	1.62	5.00	2.38	1.06

* Ultimate Load is 4 times the Working Load Limit

BARREL HOOKS



- ◆ Forged carbon steel - galvanized
- ◆ Meets the requirements of Federal Specification RR-C-271D, type V, class 6

Stock No. (Per Pair)		Working Load Limit * Per Pair (tons)	Weight Each Per Pair (lbs.)	Dimensions (in.)			
G-377 Galv.	S-377 S.C.			I.D. of Eye	O.D. of Eye	Overall Length	Width of Lip
1028239	1028248	1	3.13	1.56	2.81	5.00	2.88

* Ultimate Load is 4 times the Working Load Limit

SORTING HOOK



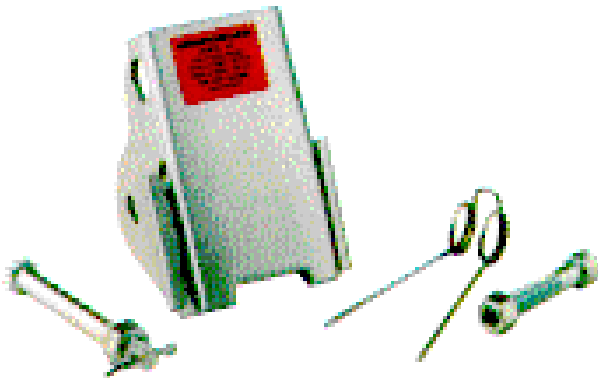
- ◆ Forged alloy steel - quenched and tempered
- ◆ Deep straight throat permits efficient handling of flat plates or large cylindrical shapes
- ◆ The long tapered point allows easy grab in rings, pear links, eye bolts or lifting holes

Working Load Limit * at tip of the hook (tons)	Working Load Limit * at the bottom of the hook (tons)	A-378 Stock No. S.C.	Weight Each (lbs.)	Dimensions (in.)			
				I.D. of Eye	Overall Length	Opening at top of hook	Radius at bottom of hook
2	7 1/2	1028024	6.25	1.38	9.69	2.81	.625

* Ultimate Load is 5 times the Working Load Limit

WIRE ROPE ACCESSORIES

Latches



WARNING !

Loads may disengage from hook if proper procedures are not followed.

A falling load may cause serious injury or death.

See OSHA Rule 1926.550 (g) for personnel hoisting by crane or derricks.

Hook must always support the load. The load must never be supported by the latch.

Read and understand these instructions before using hook and latch.

WARNING AND APPLICATION INSTRUCTIONS

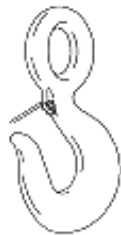
- Always inspect hook and latch before using.
- Never use a latch that is distorted or bent.
- Always make sure hook supports the load. The latch must never support the load.
- When placing two sling legs in hook, make sure the angle between the legs is less than 90° and if the hook or load is tilted, nothing bears against the bottom of this latch.
- Latches are intended to retain loose sling or devices under slack conditions.
- Latches are not intended to be anti-fouling device.

Instructions for Assembling Model PL Latch on Hooks



Step 1

Place hook at approximately a 45 degree angle with the cam up.



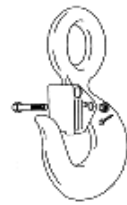
Step 2

Position coils of spring over cam with legs of spring pointing toward point of hook and loop of spring positioned down and lying against the hook.



Step 3

Position latch to side of hook points. Slide latch onto spring legs between lockplate and latch body until latch is partially over hook cam. Then depress latch and spring until latch clears point of hook



Steps 4, 5 & 6

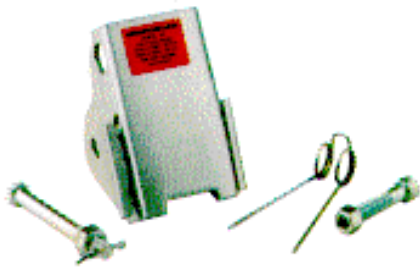
4. Line up holes in latch with hook cam

5. Insert bolt through latch, spring and cam.

6. Tighten self-locking nut on one end of bolt.

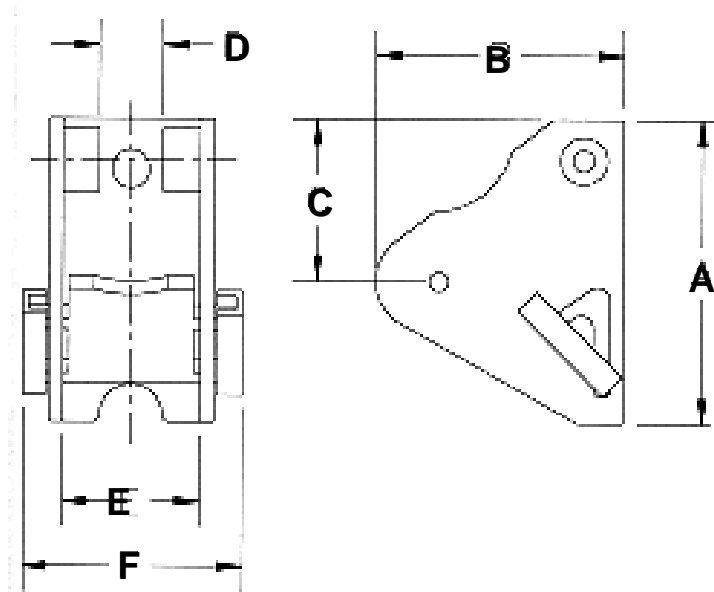
WIRE ROPE ACCESSORIES

Heavy duty hook latches



PL Latch
(Patented in U.S.A & Canada)

- Heavy duty latch with easy operating features.
- Hot dip galvanized.
- Flapper lever indicates locked or unlocked position.
- Assembly instructions included with each latch.
- Meets the intent of OSHA rule 1926.550 (g) (when secured with the bolt, nut and pin) for lifting personnel.



Latch ordering instructions

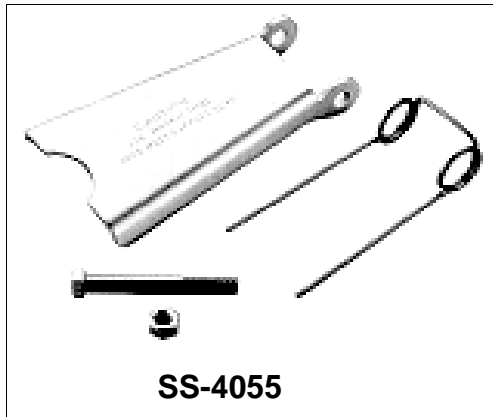
1. Specify PL latch kit stock number from chart below.
2. Specify capacity of hook to which latch will be assembled.
3. Specify hook material (carbon or alloy).

See application and warning information on previous page

Hook Size (tons)		PL Latch Kit Stock No.	Weight Each (lbs.)	Dimensions (in.)					
Carbon	Alloy			A	B	C	D	E	F
3	4.5	1093711	.50	2.57	2.34	1.94	.56	1.13	2.00
5	7	1093712	.63	3.00	2.34	2.00	.63	1.38	2.22
7.5	11	1093713	1.00	3.63	2.77	2.38	.63	1.63	2.38
10	15	1093714	1.25	4.00	3.22	2.69	.63	1.88	3.38
15	22	1093715	2.88	5.31	4.00	2.91	.84	2.38	3.44
20	30	1093716	4.00	6.00	4.44	3.19	1.06	2.88	4.25
25	37	1093717	8.63	7.00	6.63	4.06	2.24	4.50	6.12
30	45	1093718	10.00	6.75	7.00	4.03	2.24	4.75	6.38
40	60	1093719	14.25	8.00	7.66	4.38	3.46	5.50	7.25
50	75	1093720	27.00	9.88	8.19	5.13	3.38	6.50	8.88
—	100 - 150	1093721	33.25	10.88	11.06	6.38	3.38	7.50	10.00
—	200	1093723	45.00	11.88	11.19	6.38	3.38	8.75	11.25
—	300	1093724	55.00	12.50	12.19	8.00	3.38	9.75	13.00

WIRE ROPE ACCESSORIES

Hook latches



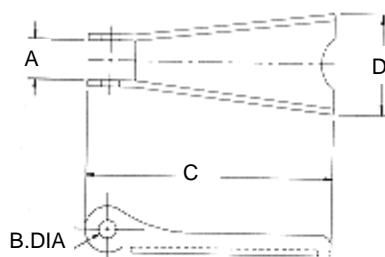
- ◆ Stainless steel construction with cadmium plated steel nuts.
- ◆ Shipped packaged and unassembled.
- ◆ Instructions included for easy field assembly.

Latch ordering instructions

- 1 - Specify latch kit stock number.
- 2 - Specify capacity of hook to which latch will be assembled.

Hook size (tons)			Stock No.	Weight Each (lbs.)	Dimensions (in.)			
Carbon	Alloy	Bronze			SS-4055	A	B	C
3/4	1	.5	1093426	.02	.38	.16	1.44	.59
1	1 1/2	.6	1093444	.02	.38	.16	1.60	.59
1 1/2 - 2	2 - 3	1.0 - 1.4	1093462	.03	.47	.19	1.84	.82
3	4 1/2	2.0	1093480	.06	.56	.17	2.41	1.00
5	7	3.5	1093505	.11	.58	.20	2.97	1.21
7 1/2 - 10	11 - 15	5.0 - 6.5	1093523	.17	.59	.27	3.66	1.50
15	22	10.0	1093541	.37	.83	.39	4.94	1.90
20	30	—	1093569	.73	.94	.52	5.88	2.56
25 - 30	37 - 45	—	1093587	.94	2.19	.39	6.50	3.84
40	60	—	1093603	1.60	3.31	.52	7.88	4.12

Alloy hook latch kit



Hook chain size (in.)	No. Stock S-4088	Weight each (lbs.)	Dimensions (in.)			
			A	B	C	D
9/32 (1/4)	1090250	0.03	.78	.16	2.03	.94
3/8	1090251	0.04	1.06	.19	2.62	1.25
1/2	1090252	0.05	1.06	.19	2.94	1.25
5/8	1090253	0.06	1.06	.19	3.09	1.25
3/4	1090254	0.06	1.31	.26	4.12	1.62
7/8	1090255	0.07	1.56	.26	4.56	1.75

To be used A-327 et A-339 grade 8 sling hooks.

Latch kits shipped unassembled and individually packaged with instructions.

WIRE ROPE ACCESSORIES

Chain swivels

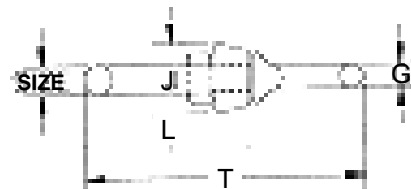
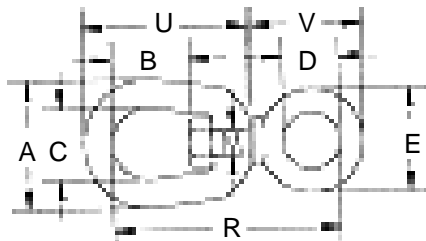


G-401 Chain Swivel

- ◆ Hot dip galvanized - quenched & tempered.

401 swivels are positioning devices and are not intended to rotate under load. For load swivels see page 70 and 71.

G-401



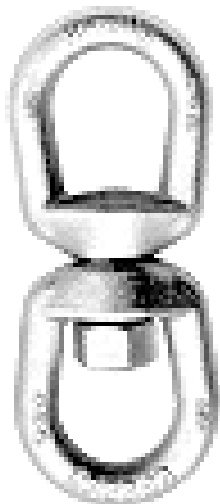
Size (in.)	G-401 Galv. Stock No.	Working Load Limit* (lbs.)	Weight Each (lbs.)	Dimensions (in.)											
				A	B	C	D	E	G	J	M	R	T	U	V
1/4	1016233	850	.13	1.25	.69	.75	.62	1.12	.25	.69	.31	2.25	2.75	1.69	1.25
5/16	1016251	1250	.25	1.63	.81	1.00	.75	1.38	.31	.81	.38	2.72	3.34	2.06	1.47
3/8	1016279	2500	.61	2.00	.94	1.25	1.00	1.75	.38	1.00	.50	3.44	4.19	2.50	1.88
1/2	1016297	3600	1.12	2.50	1.31	1.50	1.25	2.25	.50	1.31	.63	4.25	5.25	3.19	2.44
5/8	1016313	5200	1.75	3.00	1.56	1.75	1.50	2.75	.62	1.50	.75	5.13	6.31	3.88	2.94
3/4	1016331	7200	3.09	3.50	1.75	2.00	1.75	3.25	.75	1.88	.88	5.78	7.22	4.94	3.46

* Ultimate Load is 5 times the Working Load Limit

WIRE ROPE ACCESSORIES

Regular swivel

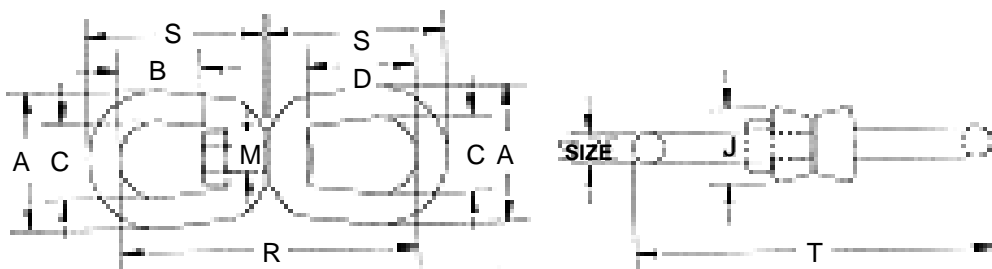
Regular Swivel G-402



- ◆ Hot dip galvanized - quenched & tempered.
- ◆ Meets the requirements of Federal Specifications RR-C-271D, Type VII, class 2.

G-402

402 swivels are positioning devices and are not intended to rotate under load.
For load swivels see page 70 and 71.



Size (in.)	Stock No. G-402 Galv.	Working Load Limit* (lbs.)	Weight each (lbs.)	Dimensions (in.)								
				A	B	C	D	J	M	R	S	T
1/4	1016019	850	.21	1.25	.69	.75	1.06	.69	.31	2.94	1.69	3.44
5/16	1016037	1250	.39	1.63	.81	1.00	1.25	.81	.38	3.56	2.06	4.19
3/8	1016055	2250	.75	2.00	.94	1.25	1.50	1.00	.50	4.31	2.50	5.06
1/2	1016073	3600	1.43	2.50	1.31	1.50	2.00	1.31	.63	5.44	3.19	6.44
5/8	1016091	5200	2.50	3.00	1.56	1.75	2.38	1.50	.75	6.56	3.88	7.81
3/4	1016117	7200	4.13	3.50	1.75	2.00	2.63	1.88	.88	7.19	4.31	8.69
7/8	1016135	10000	6.25	4.00	2.06	2.25	3.06	2.13	1.00	8.38	5.00	10.13
1	1016153	12500	9.00	4.50	2.31	2.50	3.50	2.38	1.13	9.63	5.75	11.63
1 1/4	1016199	18000	16.37	5.63	2.69	3.13	3.69	3.00	1.38	11.13	6.75	13.36
1 1/2	1016215	45200	49.06	7.00	4.19	4.00	4.19	4.00	2.25	17.13	10.00	20.13

* Ultimate Load is 5 times the Working Load Limit.

WIRE ROPE ACCESSORIES

Jaw end swivels

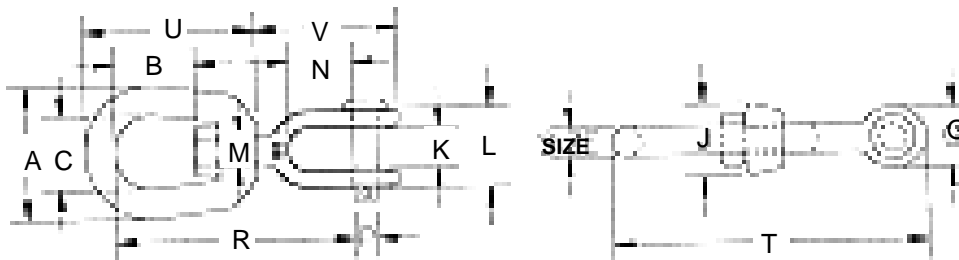


G-403

G-403 Jaw end swivels

- ◆ Hot Dip Galvanized - Quenched and Tempered.
- ◆ Meets the requirements of Federal Specifications RR-C-271D, Type VII, Class 3.

403 swivels are positioning devices and are not intended to rotate under load. For load swivels see page 70 and 71.



Size (in.)	G-403 Stock No. Galv.	Working Load Limit* (lbs.)	Weight each (lbs.)	Dimensions (in.)													
				A	B	C	G	J	K	L	M	N	P	R	T	U	V
1/4	1016395	850	.25	1.25	.69	.75	.69	.69	.47	1.03	.31	.88	.25	2.63	3.38	1.69	1.69
5/16	1016411	1250	.37	1.63	1.00	1.00	.81	.81	.50	1.13	.38	.88	.31	2.94	3.88	2.06	1.81
3/8	1016439	2250	.70	2.00	1.25	1.25	1.00	1.00	.63	1.41	.50	1.06	.38	3.63	4.75	2.50	2.25
1/2	1016457	3600	1.43	2.50	1.50	1.50	1.31	1.31	.75	1.75	.63	1.31	.50	4.50	6.06	3.19	2.88
5/8	1016475	5200	2.48	3.00	1.75	1.75	1.63	1.50	.94	2.06	.75	1.50	.63	5.31	7.31	3.88	3.44
3/4	1016493	7200	3.88	3.50	2.00	2.00	1.88	1.88	1.13	2.53	.88	1.75	.75	6.06	8.31	4.31	4.00
7/8	1016518	10000	5.75	4.00	2.25	2.25	2.13	2.13	1.19	2.75	1.00	2.06	.88	7.00	9.53	5.00	4.53
1	1016536	12500	10.25	4.50	2.50	2.50	2.63	2.38	1.75	3.72	1.13	2.81	1.13	8.56	11.69	5.75	5.94
1 1/4	1016572	18000	15.75	5.69	3.13	3.13	3.13	3.00	2.06	4.31	1.50	2.81	1.38	9.44	13.13	6.75	6.38
1 1/2	1016590	45200	54.75	7.00	4.00	4.00	5.63	4.00	2.88	6.00	2.25	4.44	2.25	14.74	20.84	10.00	10.84

* Ultimate Load is 5 times the Working Load Limit

WIRE ROPE ACCESSORIES

Swivels equipped with tapered roller thrust bearing



S-1
Jaw and Hook



S-2
Jaw and Jaw



S-3
Jaw and Eye



S-4
Eye and Jaw



S-5
Eye and Eye



S-6
Eye and Hook

Swivel number (Type)	Stock No. S.C	Working Load Limit* (metric tons)	Wire Rope Size (in.)	Weight each (lbs.)
3-S-1	297011	3	1/2	9.50
3-S-2	297020	3	1/2	9.25
3-S-3	297039	3	1/2	9.00
3-S-4	297048	3	1/2	9.00
3-S-5	297057	3	1/2	8.50
3-S-6	297066	3	1/2	9.00
5-S-1	297217	5	5/8	16.50
5-S-2	297226	5	5/8	14.25
5-S-3	297235	5	5/8	13.50
5-S-4	297244	5	5/8	13.75
5-S-5	297253	5	5/8	12.25
5-S-6	297262	5	5/8	15.25
8½-S-1	297413	8½	3/4	33.50
8½-S-2	297422	8½	3/4	29.25
8½-S-3	297431	8½	3/4	29.25
8½-S-4	297440	8½	3/4	29.00
8½-S-5	297459	8½	3/4	29.25
8½-S-6	297468	8½	3/4	32.00
10-S-1	297618	10	7/8	46.75
10-S-2	297627	10	7/8	45.75
10-S-3	297636	10	7/8	43.50
10-S-4	297645	10	7/8	44.00
10-S-5	297654	10	7/8	42.00
10-S-6	297663	10	7/8	45.50
15-S-1	297814	15	1	73.75
15-S-2	297823	15	1	62.75
15-S-3	297832	15	1	61.00
15-S-4	297841	15	1	61.00
15-S-5	297850	15	1	61.00
15-S-6	297869	15	1	74.00
25-S-1	298118	25	—	140.00
25-S-2	298127	25	—	140.00
25-S-3	298136	25	—	135.00
25-S-4	298145	25	—	135.00
25-S-5	298154	25	—	130.00
25-S-6	298163	25	—	135.00
35-S-1	298216	35	—	220.00
35-S-2	298225	35	—	155.00
35-S-3	298234	35	—	150.00
35-S-4	298243	35	—	150.00
35-S-5	298252	35	—	145.00
35-S-6	298261	35	—	215.00
45-S-1	298314	45	—	250.00
45-S-2	298323	45	—	235.00
45-S-3	298332	45	—	225.00
45-S-4	298341	45	—	225.00
45-S-5	298350	45	—	215.00
45-S-6	298369	45	—	270.00

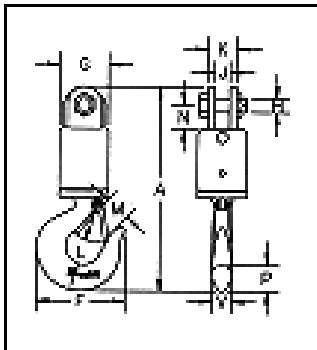
* Individually proof tested to 2 times the Working Load Limit. Ultimate load is 5 times the Working Load Limit.

WIRE ROPE ACCESSORIES

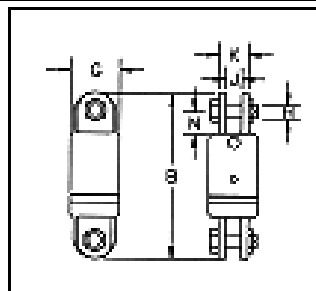
Swivels equipped with tapered roller thrust bearing

- ◆ Designed to swivel under load.
- ◆ All swivels individually proof tested with certification.
- ◆ All hooks furnished with latches assembled.
- ◆ Pressure lube fitting provided.
- ◆ Not to be used on demolition (wrecking) balls.
- ◆ Other types and capacities up to 600 tons, available to meet your requirements.

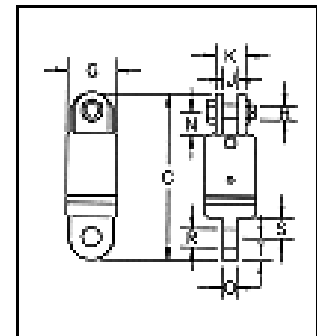
Important : Swivels should only be used with the recommended wire rope.



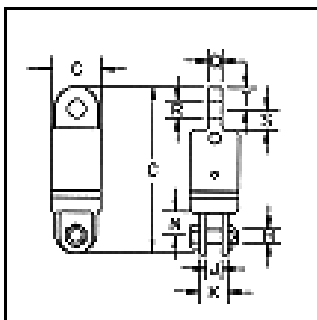
S-1
Jaw & Hook



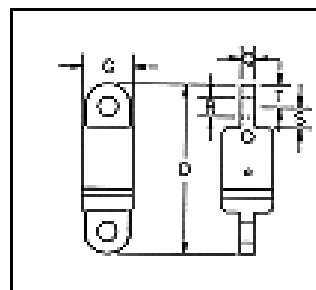
S-2
Jaw & Jaw



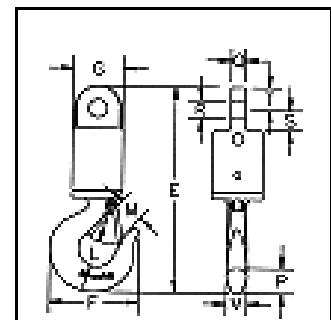
S-3
Jaw & Eye



S-4
Eye & Jaw



S-5
Eye & Eye



S-6
Eye & Hook

Working Load Limit* (Metric tons)	Dimensions (in.)																		
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	V
3	11.38	9.28	9.34	9.41	11.44	4.94	2.75	.75	.88	1.62	1.38	1.34	1.31	1.44	.75	1.03	1.12	1.25	1.12
5	13.31	10.31	10.06	9.81	13.06	6.50	3.00	.88	1.00	2.25	1.78	1.69	1.62	1.81	1.00	1.28	1.25	1.25	1.38
8½	16.44	12.62	12.25	11.88	16.06	7.56	4.00	1.00	1.56	2.81	2.12	2.06	2.12	2.25	1.25	1.41	1.62	1.50	1.62
10	19.72	16.75	16.12	15.50	19.09	8.69	4.50	1.50	1.75	3.38	2.56	2.25	3.50	2.59	1.69	1.69	2.75	1.88	1.94
15	22.00	17.12	16.75	16.38	21.62	11.00	5.00	1.50	1.75	3.38	2.88	3.00	3.50	3.00	1.94	2.03	2.75	2.12	2.38
25	26.78	20.75	21.50	22.25	27.53	13.62	6.00	2.00	2.00	4.62	3.44	3.62	3.69	3.66	2.25	2.31	3.88	2.38	3.00
35	29.94	20.75	21.50	22.25	30.69	14.06	6.50	2.00	2.00	4.62	3.88	3.75	3.69	4.56	2.25	2.31	3.88	2.38	3.19
45	35.06	25.25	25.88	26.50	35.69	15.44	7.00	2.25	2.50	5.00	4.75	4.25	4.00	5.06	2.50	2.53	4.00	3.00	3.25

* Individually proof tested to 2 times the Working Load Limit. Ultimate load is 5 times the Working Load Limit

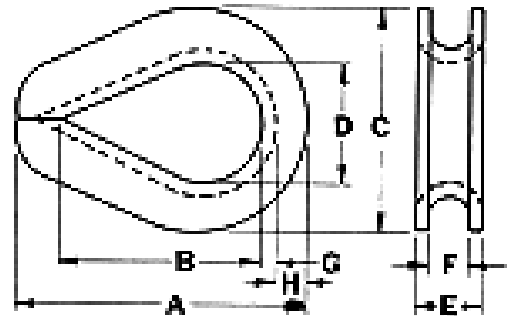
WIRE ROPE ACCESSORIES

Extra heavy wire rope thimbles

- ◆ A rugged rope thimble recommended for heavy duty service.
- ◆ Available in hot dip galvanized (G-414) or stainless steel (SS-414).



G-414 & SS-414



G-414 meets the requirements of Federal Specification FF-T-276b Type III.

Rope Dia. (in.)	Stock No.		Weight per 100 (lbs.)	Dimensions (in.)							
	G-414	SS-414		A	B	C	D	E	F	G	H
1/4*	1037639	1037960	6.75	2.19	1.63	1.50	.88	.41	.28	.06	.23
5/16*	1037657	1037988	11.25	2.50	1.88	1.81	1.06	.50	.34	.08	.28
3/8*	1037675	1038004	25.00	2.88	2.13	2.13	1.13	.63	.41	.11	.34
7/16	1037693	—	30.00	3.25	2.38	2.38	1.25	.72	.47	.13	.38
1/2*	1037719	1038022	51.00	3.63	2.75	2.75	1.50	.81	.53	.14	.41
9/16	1037737	—	51.00	3.63	2.75	2.69	1.50	.88	.59	.14	.41
5/8*	1037755	1038040	75.00	4.25	3.25	3.13	1.75	.97	.66	.16	.50
3/4*	1037773	1038068	147.00	5.00	3.75	3.81	2.00	1.22	.78	.22	.66
7/8	1037791	—	175.00	5.50	4.25	4.25	2.25	1.38	.94	.22	.75
1*	1037817	—	275.00	6.13	4.50	4.94	2.50	1.56	1.06	.25	.88
1 1/8 - 1 1/4	1037835	—	400.00	7.00	5.13	5.88	2.88	1.81	1.31	.25	1.13
1 1/4 - 1 3/8	1037853	—	817.00	9.06	6.50	6.81	3.50	2.19	1.44	.38	1.13
1 3/8 - 1 1/2	1037871	—	1175.00	9.00	6.25	7.13	3.50	2.56	1.56	.50	1.13
1 5/8	1037899	—	1700.00	11.25	8.00	8.13	4.00	2.72	1.72	.50	1.38
1 3/4	1037915	—	1775.00	12.19	9.00	8.50	4.50	2.84	1.84	.50	1.31
1 7/8 - 2	1037933	—	2500.00	15.13	12.00	10.38	6.00	3.09	2.09	.50	1.50
2 1/4	1037951	—	3950.00	17.13	14.00	11.88	3.63	3.63	2.38	.63	1.63

* SS-414 sizes are available in stainless steel type 304.

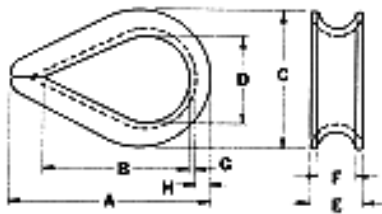
WIRE ROPE ACCESSORIES

Standard wire rope thimbles



G-411

G-411 meets the requirements of Federal specifications FF-T-276b Type II



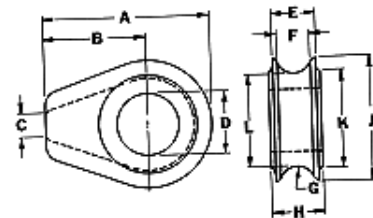
- ◆ Recommended for light duty service
- ◆ Hot dip galvanized steel

Rope Diam. (in.)	G-411 Stock No. Galv.	Weight per 100 (lbs.)	Dimensions (in.)							
			A	B	C	D	E	F	G	H
1/8	1037256	2.50	1.94	1.31	1.06	.69	.25	.16	.05	.13
3/16	1037274	2.50	1.94	1.31	1.06	.69	.31	.22	.05	.13
1/4	1037292	3.75	1.94	1.31	1.06	.69	.38	.28	.05	.13
5/16	1037318	3.75	2.13	1.50	1.25	.81	.44	.34	.05	.13
3/8	1037336	6.25	2.38	1.63	1.47	.94	.53	.41	.06	.16
1/2	1037354	12.50	2.75	1.88	1.75	1.13	.69	.53	.08	.19
5/8	1037372	25.00	3.50	2.25	2.38	1.38	.91	.66	.13	.34
3/4	1037390	50.00	3.75	2.50	2.69	1.63	1.08	.78	.14	.34
7/8	1037416	85.00	5.00	3.50	3.19	1.88	1.27	.94	.16	.44
1	1037434	100.00	5.69	4.25	3.75	2.50	1.39	1.06	.16	.41
1 1/8 - 1 1/4	1037452	175.00	6.25	4.50	4.31	2.75	1.75	1.31	.22	.50

Solid wire rope thimbles



S-412



- ◆ Fits pin for open wire rope socket, boom pendant clevis and wedge socket.

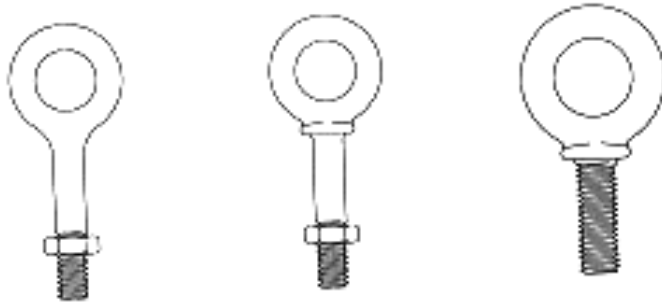
Rope Diam (in.)	S-412 Stock No. S.C	Weight Each (lbs.)	Dimensions (in.)										
			A	B	C	D	E	F	G	H	J	K	L
*1/2	1037121	.61	2.81	1.75	.25	1.06	.75	.56	.28	.88	2.13	1.63	1.56
*5/8	1037149	2.21	4.69	3.00	.38	1.31	1.06	.81	.41	1.13	3.38	2.25	2.56
*3/4	1037167	2.32	4.69	3.00	.38	1.50	1.06	.81	.41	1.38	3.38	2.25	2.56
**7/8	1037185	5.45	6.06	3.81	.50	1.75	1.38	1.06	.53	1.63	4.50	3.25	3.44
**1	1037201	5.25	6.06	3.81	.50	2.13	1.38	1.06	.53	1.81	4.50	3.25	3.44
**1 1/8	1037229	9.29	7.25	4.56	.63	2.38	1.75	1.31	.66	2.06	5.38	3.88	4.06
**1 1/4 - 1 3/8	1037247	9.81	7.25	4.56	.63	2.63	1.94	1.53	.78	2.31	5.38	3.88	4.13

* Cast Ductile Iron

** Cast Steel

WIRE ROPE ACCESSORIES

Forged eye bolt



IMPORTANT SAFETY INFORMATION

Inspection / Maintenance Safety :

- Always inspect eye bolt before use.
- Never use eye bolt that shows signs of wear or damage.
- Never use eye bolt if eye or shank is bent or elongated.
- Always be sure threads on shank and receiving holes are clean.

Assembly Safety :

- Never exceed load limits specified in Table 1
- Never use regular nut eye bolts for angular lifts.
- Always use shoulder nut eye bolts (or machinery eye bolts) for angular lifts.

Direction of pull	Adjusted Working Load
45 degrees	30% of rated working load
90 degrees	25% of rated working load

- Never undercut eye bolt to seat shoulder against the load.
- Always countersink receiving hole or use washers to seat shoulder.
- Always screw eye bolt down completely for proper seating.
- Always tighten nuts securely against the load.

WARNING !

Loads may slip or fall if proper eye bolt assembly and lifting procedures are not used.

A failing load can seriously injure or kill.

Read and understand both sides of these instructions, and follow all eye bolt safety information presented here.

Read, understand, and follow information in charts before using eye bolt.

Table 1 (In - Line Load)

Size (in.)	Working Load Limit (lbs.)
1/4	650
5/16	1,200
3/8	1,550
1/2	2,600
5/8	5,200
3/4	7,200
7/8	10,600
1	13,300
1 - 1/4	21,000
1 - 1/2	24,000

WIRE ROPE ACCESSORIES

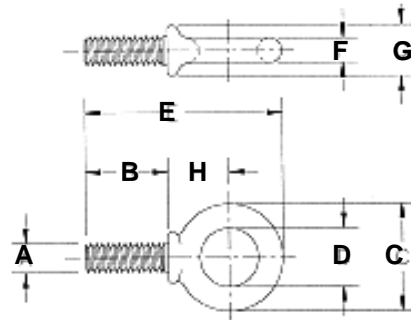
Shoulder type machinery eye bolts



S-279

- ◆ Forged steel - quenched & tempered
- ◆ Recommended for straight line pull

See application and warning information on previous page



Size (in.)	Stock No. S-279	Working Load Limit* (lbs.)	Weight per 100 (lbs.)	Dimensions (in.)							
				A	B	C	D	E	F	G	H
1/4 x 1	9900182	650	3.20	.25	1.00	.88	.50	1.94	.19	.47	.50
5/16 x 1 1/8	9900191	1200	6.20	.31	1.13	1.12	.62	2.38	.25	.56	.69
3/8 x 1 1/4	9900208	1550	12.50	.38	1.25	1.38	.75	2.72	.31	.66	.78
1/2 x 1 1/2	9900217	2600	25.00	.50	1.50	1.75	1.00	3.38	.38	.91	1.00
5/8 x 1 3/4	9900226	5200	50.00	.63	1.75	2.25	1.25	4.19	.50	1.12	1.31
3/4 x 2	9900235	7200	87.50	.75	2.00	2.75	1.50	4.94	.62	1.38	1.56
7/8 x 2 1/4	9900244	10600	150.00	.88	2.25	3.25	1.75	5.72	.75	1.56	1.84
1 x 2 1/2	9900253	13300	218.00	1.00	2.50	3.75	2.00	6.47	.88	1.81	2.09
1 1/4 x 3	9900262	21000	380.00	1.25	3.00	4.50	2.50	7.72	1.00	2.28	2.47
1 1/2 x 3 1/2	9900271	24000	700.00	1.50	3.50	5.50	3.00	9.25	1.25	2.75	3.00

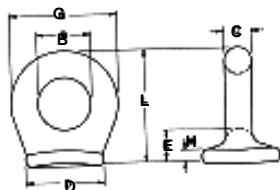
* Ultimate Load is 5 times the Working Load Limit

Pad eyes



S-264

- ◆ Forged steel - quenched and tempered.
- ◆ Forged from 1035 carbon steel.
- ◆ Excellent welding qualities.



Size N°	S-264 Stock No.	Weight per 100 (lbs.)	Dimensions (in.)						
			B	C	D	E	G	H	L
0	1090722	2.77	.25	.19	.63	.31	.63	.09	.75
1	1090740	6.94	.38	.25	.88	.41	.88	.13	1.03
1,5	1090768	10.25	.63	.25	1.00	.44	1.13	.16	1.31
2	1090786	17.25	.75	.38	1.06	.50	1.50	.19	1.63
4	1090802	50.00	1.00	.56	1.44	.78	2.13	.22	2.34
5	1090820	82.50	1.25	.69	1.75	.81	2.63	.25	2.75

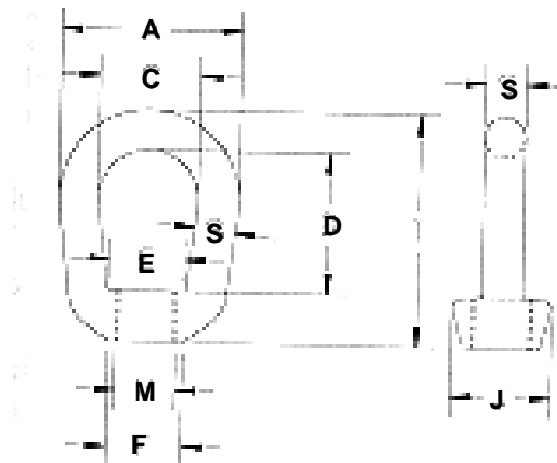
WIRE ROPE ACCESSORIES

Eye nuts



G-400

- ◆ Forged steel - quenched and tempered.
- ◆ Threaded.
- ◆ Hot dip galvanized.
- ◆ Tapped with standard UNC class 2 thread.



Size N°	Stock Size (in) S	G-400 Stock No.	Std. Tap Size	Max. Tap Size	Working Load Limit* (lbs.)	Weight Each (lbs.)	Dimensions (in.)							
							A	C	D	E	F	J	M	T
1	6.35	1090438	1/4	3/8	520	.09	1.25	.75	1.06	.66	.50	.69	.25	1.69
2	7.87	1090474	3/8	7/16	1250	.18	1.63	1.00	1.25	.75	.56	.81	.38	2.06
3A	9.65	1090517	1/2	1/2	2250	.28	2.00	1.25	1.50	1.00	.81	1.00	.50	2.50
4	12.7	1090535	5/8	3/4	3600	.58	2.50	1.50	2.00	1.19	1.00	1.31	.63	3.19
5	16.0	1090553	3/4	7/8	5200	1.00	3.00	1.75	2.38	1.38	1.13	1.50	.75	3.88
6	19.1	1090571	7/8	1	7200	1.70	3.50	2.00	2.63	1.63	1.31	1.88	.88	4.31
7	22.4	1090599	1	1 1/4	10000	2.75	4.00	2.25	3.06	1.88	1.56	2.13	1.00	5.00
8	25.4	1090633	1 1/4	1 1/2	15500	3.85	4.50	2.50	3.50	1.94	1.88	2.38	1.25	5.75
9	28.7	1090651	1 3/8	1 1/2	18500	5.00	5.00	2.75	3.75	2.00	2.00	2.56	1.38	6.25
10	31.8	1090679	1 1/2	1 3/4	22500	6.70	5.63	3.13	4.00	2.38	2.25	3.00	1.50	6.75
11	38.1	1090697	2	2 3/4	40000	18.70	7.00	4.00	6.25	4.00	3.38	4.00	2.00	10.00

* Ultimate Load is 5 times the Working Load Limit. Rating based on standard tap size.

WIRE ROPE ACCESSORIES

Turnbuckles



HG-223

Hook & Hook



HG-225

Hook & Eye



HG-226

Eye & Eye



HG-227

Jaw & Eye



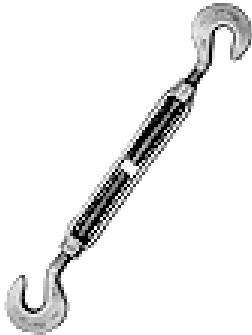
HG-228

Jaw & jaw

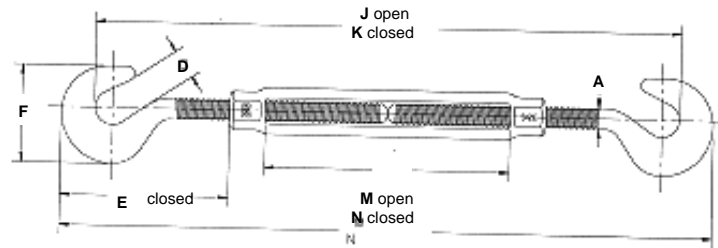
- Hot dip galvanized.
- End fittings are quenched and tempered, bodies heat treated by normalizing.
- Hooks are forged with a greater cross sectional area that results in a stronger hook with better fatigue properties.
- Modified UNJ thread for improved fatigue properties.
- Turnbuckles eyes are forged elongated, by design, to maximize easy attachment in system and minimize stress in the eye. For turnbuckles sizes 1/4" through 2 1/2", a shackle one size smaller can be reeved through eye.
- Forged jaw ends are fitted with bolts and nuts on sizes 1/4" through 5/8", and pins and cotters on sizes 3/4" through 2 3/4".
- **Turnbuckles recommended for straight or in-line pull only.**
- Lock Nuts available for all sizes.
- Quenched and tempered end fittings and normalized bodies have enhanced impact properties for greater toughness at all temperatures.
- Typical hardness levels, tensile strengths and ductility properties are available for all sizes.
- Turnbuckles can be furnished proof tested or magnaflux inspected with certificates if requested at time of order.
- Turnbuckle assembly combinations include : Eye and Eye, Hook and Hook, Hook and Eye, Jaw and Jaw, Jaw and Eye.

WIRE ROPE ACCESSORIES

Hook & hook turnbuckles



HG-223



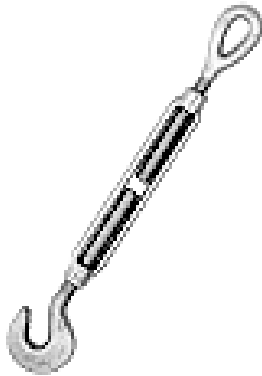
- ◆ Hot dip galvanized steel.
- ◆ End fittings are quenched and tempered, bodies heat treated by normalizing.
- ◆ Hooks are forged with a greater cross sectional area that results in a stronger hook with better fatigue properties.
- ◆ Turnbuckles recommended for straight or in-line pulls only.
- ◆ Modified UNJ thread for improved fatigue properties.
- ◆ Lock Nuts available for all sizes.

Thread Diameter & Take Up (in.)	Stock No.	Working Load Limit* (lbs.)	Weight Each (lbs.)	Dimensions (in.)								
				A	D	E closed	F	J open	K closed	M open	N closed	BB
1/4 x 4	1030011	400	.30	.25	.45	1.59	1.27	11.12	7.12	11.94	7.94	4.00
5/16 x 4 1/2	1030039	700	.47	.31	.50	1.94	1.50	12.81	8.31	13.81	9.31	4.50
3/8 x 6	1030057	1000	.75	.38	.56	2.30	1.77	16.50	10.50	17.72	11.72	6.00
1/2 x 6	1030075	1500	1.60	.50	.66	2.94	2.28	17.82	11.82	19.38	13.38	6.00
1/2 x 9	1030093	1500	1.83	.50	.66	2.94	2.28	23.82	14.82	25.38	16.38	9.00
1/2 x 12	1030119	1500	2.08	.50	.66	2.94	2.28	29.82	17.82	31.38	19.38	12.00
5/8 x 6	1030137	2250	2.75	.63	.84	3.69	2.81	19.25	13.25	21.25	15.25	6.00
5/8 x 9	1030155	2250	3.13	.63	.84	3.69	2.81	25.25	16.25	27.25	18.25	9.00
5/8 x 12	1030173	2250	3.50	.63	.84	3.69	2.81	31.25	19.25	33.25	21.25	12.00
3/4 x 6	1030191	3000	3.89	.75	.98	4.52	3.33	20.88	14.88	23.28	17.28	6.00
3/4 x 9	1030217	3000	4.61	.75	.98	4.52	3.33	26.88	17.88	29.28	20.28	9.00
3/4 x 12	1030235	3000	5.43	.75	.98	4.52	3.33	32.88	20.88	35.28	23.28	12.00
3/4 x 18	1030253	3000	7.25	.75	.98	4.52	3.33	44.88	26.88	47.28	29.28	18.00
7/8 x 12	1030271	4000	8.10	.88	1.13	5.19	3.78	34.25	22.25	37.00	25.00	12.00
7/8 x 18	1030299	4000	9.95	.88	1.13	5.19	3.78	46.25	28.25	49.00	31.00	18.00
1 x 6	1030315	5000	9.33	1.00	1.25	5.84	4.25	23.63	17.63	26.69	20.69	6.00
1 x 12	1030333	5000	11.93	1.00	1.25	5.84	4.25	35.63	23.63	38.69	26.69	12.00
1 x 18	1030351	5000	14.00	1.00	1.25	5.84	4.25	47.63	29.63	50.69	32.69	18.00
1 x 24	1030379	5000	17.25	1.00	1.25	5.84	4.25	59.63	35.63	62.69	38.69	24.00
1 1/4 x 12	1030397	5000	19.00	1.25	1.50	7.22	5.13	37.94	25.94	41.56	29.56	12.00
1 1/4 x 18	1030413	5000	23.00	1.25	1.50	7.22	5.13	49.94	31.94	53.56	35.56	18.00
1 1/4 x 24	1030431	5000	27.00	1.25	1.50	7.22	5.13	61.94	37.94	65.56	41.56	24.00
1 1/2 x 12	1030459	7500	27.50	1.50	1.88	8.34	5.75	40.94	28.94	44.44	32.44	12.00
1 1/2 x 18	1030477	7500	31.00	1.50	1.88	8.34	5.75	52.96	34.94	56.44	38.44	18.00
1 1/2 x 24	1030495	7500	37.50	1.50	1.88	8.34	5.75	64.94	40.94	68.44	44.44	24.00

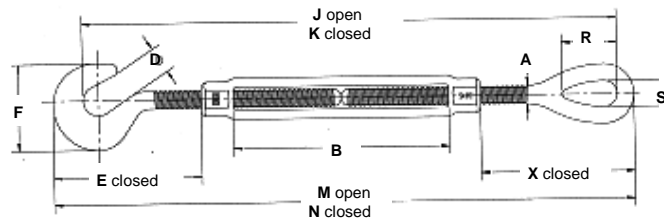
* Proof Load is 2 times Working Load Limit. Ultimate Load is 5 times Working Load Limit.

WIRE ROPE ACCESSORIES

Hook & eye turnbuckles



HG-225



- ◆ Hot dip galvanized steel.
- ◆ End fittings are quenched and tempered, bodies heat treated by normalizing.
- ◆ Turnbuckles eyes are forged elongated, by design, to maximize easy attachment in system and minimize stress in the eye.
- ◆ **Turnbuckles recommended for straight or in-line pulls only.**
- ◆ Modified UNJ thread for improved fatigue properties.
- ◆ Lock nuts available for all sizes.

Thread Diam & Take Up (in.)	Stock No.	Working Load Limit* (lbs.)	Weight Each (lbs.)	Dimensions (in.)											
				A	D	E closed	F	J open	K closed	M open	N closed	R	S	X closed	BB
1/4 x 4	1030636	400	.30	.25	.45	1.59	1.27	11.46	7.46	12.09	8.09	.78	.34	1.75	4.00
5/16 x 4 1/2	1030654	700	.47	.31	.50	1.94	1.50	13.19	8.69	13.47	9.47	.94	.44	2.09	4.50
3/8 x 6	1030672	1000	.75	.38	.56	2.30	1.77	16.98	10.98	17.94	11.94	1.12	.53	2.52	6.00
1/2 x 6	1030690	1500	1.60	.50	.66	2.94	2.28	18.45	12.45	19.67	13.67	1.44	.72	3.23	6.00
1/2 x 9	1030716	1500	1.83	.50	.66	2.94	2.28	24.45	15.45	25.67	16.67	1.44	.72	3.23	9.00
1/2 x 12	1030734	1500	2.08	.50	.66	2.94	2.28	30.45	18.45	31.67	19.67	1.44	.72	3.23	12.00
5/8 x 6	1030752	2250	2.75	.63	.84	3.69	2.81	19.96	13.96	21.47	15.47	1.75	.88	3.90	6.00
5/8 x 9	1030770	2250	3.13	.63	.84	3.69	2.81	25.96	16.96	27.47	18.47	1.75	.88	3.90	9.00
5/8 x 12	1030798	2250	3.50	.63	.84	3.69	2.81	31.96	19.96	33.47	21.47	1.75	.88	3.90	12.00
3/4 x 6	1030814	3000	3.89	.75	.98	4.52	3.33	21.63	15.63	23.45	17.45	2.09	1.00	4.69	6.00
3/4 x 9	1030832	3000	4.61	.75	.98	4.52	3.33	27.63	18.63	29.45	20.45	2.09	1.00	4.69	9.00
3/4 x 12	1030850	3000	5.43	.75	.98	4.52	3.33	33.63	21.63	35.45	23.45	2.09	1.00	4.69	12.00
3/4 x 18	1030878	3000	7.25	.75	.98	4.52	3.33	45.63	27.63	47.45	29.45	2.09	1.00	4.69	18.00
7/8 x 12	1030896	4000	8.10	.88	1.13	5.19	3.78	34.78	22.78	36.91	24.91	2.38	1.25	5.10	12.00
7/8 x 18	1030912	4000	9.95	.88	1.13	5.19	3.78	46.78	28.78	48.91	30.91	2.38	1.25	5.10	18.00
1 x 6	1030930	5000	9.33	1.00	1.25	5.84	4.25	24.80	18.80	27.20	21.20	3.00	1.44	6.36	6.00
1 x 12	1030958	5000	11.93	1.00	1.25	5.84	4.25	36.80	24.80	39.20	27.20	3.00	1.44	6.36	12.00
1 x 18	1030976	5000	14.00	1.00	1.25	5.84	4.25	48.80	30.80	51.20	33.20	3.00	1.44	6.36	18.00
1 x 24	1030994	5000	17.25	1.00	1.25	5.84	4.25	60.80	36.80	63.20	39.20	3.00	1.44	6.36	24.00
1 1/4 x 12	1031010	5000	19.00	1.25	1.50	7.22	5.13	39.13	27.13	42.06	30.06	3.56	1.81	7.72	12.00
1 1/4 x 18	1031038	5000	23.00	1.25	1.50	7.22	5.13	51.13	33.13	54.06	36.06	3.56	1.81	7.72	18.00
1 1/4 x 24	1031056	5000	27.00	1.25	1.50	7.22	5.13	63.13	39.13	66.06	42.06	3.56	1.81	7.72	24.00
1 1/2 x 12	1031074	7500	27.50	1.50	1.88	8.34	5.75	41.72	29.72	44.72	32.72	4.06	2.12	8.62	12.00
1 1/2 x 18	1031092	7500	31.00	1.50	1.88	8.34	5.75	53.72	35.72	56.72	38.72	4.06	2.12	8.62	18.00
1 1/2 x 24	1031118	7500	37.50	1.50	1.88	8.34	5.75	65.72	41.72	68.72	44.72	4.06	2.12	8.62	24.00

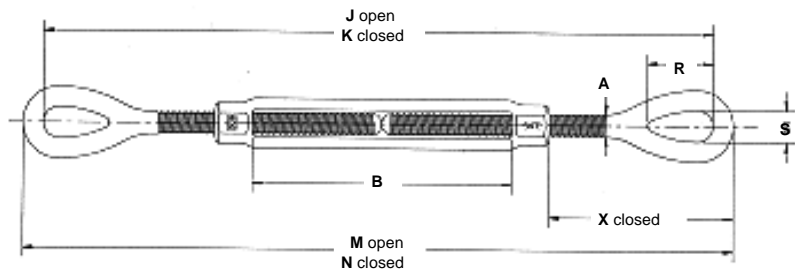
* Proof Load is 2 times Working Load Limit. Ultimate load is 5 times Working Load Limit.

WIRE ROPE ACCESSORIES

Eye & eye turnbuckles



HG-226



- ◆ Hot dip galvanized steel.
- ◆ End fittings are quenched and tempered, bodies heat treated by normalizing.
- ◆ Turnbuckle eyes are forged elongated, by design, to maximize easy attachment in system and minimize stress in the eye. For turnbuckle size 1/4" through 2 1/2", a shackle one size smaller can be reeved through eye.
- ◆ Turnbuckles recommended for straight or in-line pull only.
- ◆ Lock nuts available for all sizes.

Thread Diameter & Take Up (in.)	Stock No.	Working Load Limit* (lbs.)	Weight Each (lbs.)	Dimensions (in.)								
				A	J open	K closed	M open	N closed	R	S	X closed	BB
1/4 x 4	1031252	500	.30	.25	11.80	7.80	12.25	8.25	.78	.34	1.75	4.00
5/16 x 4 1/2	1031270	800	.47	.31	13.56	9.06	14.12	9.62	.94	.44	2.09	4.50
3/8 x 6	1031298	1200	.75	.38	17.47	11.47	18.16	12.16	1.12	.53	2.52	6.00
1/2 x 6	1031314	2200	1.60	.50	19.08	13.08	19.96	13.96	1.44	.72	3.23	6.00
1/2 x 9	1031332	2200	1.83	.50	25.08	16.08	25.96	16.96	1.44	.72	3.23	9.00
1/2 x 12	1031350	2200	2.08	.50	31.08	19.08	31.96	19.96	1.44	.72	3.23	12.00
5/8 x 6	1031378	3500	2.75	.63	20.68	14.68	21.68	15.68	1.75	.88	3.90	6.00
5/8 x 9	1031396	3500	3.13	.63	26.68	17.68	27.68	18.68	1.75	.88	3.90	9.00
5/8 x 12	1031412	3500	3.50	.63	32.68	20.68	33.68	21.68	1.75	.88	3.90	12.00
3/4 x 6	1031430	5200	3.89	.75	22.38	16.38	23.62	17.62	2.09	1.00	4.69	6.00
3/4 x 9	1031458	5200	4.61	.75	28.38	19.38	29.62	20.62	2.09	1.00	4.69	9.00
3/4 x 12	1031476	5200	5.43	.75	34.38	22.38	35.62	23.62	2.09	1.00	4.69	12.00
3/4 x 18	1031494	5200	7.25	.75	46.38	28.38	47.62	29.62	2.09	1.00	4.69	18.00
7/8 x 12	1031519	10000	8.10	.88	35.32	23.32	36.82	24.82	2.38	1.25	5.10	12.00
7/8 x 18	1031537	10000	9.95	.88	47.32	29.32	48.82	30.82	2.38	1.25	5.10	18.00
1 x 6	1031555	10000	9.33	1.00	25.97	19.97	27.72	21.72	3.00	1.44	6.36	6.00
1 x 12	1031573	10000	11.93	1.00	37.97	25.97	39.97	27.72	3.00	1.44	6.36	12.00
1 x 18	1031591	10000	14.00	1.00	49.97	31.97	51.72	33.72	3.00	1.44	6.36	18.00
1 x 24	1031617	10000	17.25	1.00	61.97	37.97	63.72	39.72	3.00	1.44	6.36	24.00
1 1/4 x 12	1031635	15200	19.00	1.25	40.31	28.31	42.56	30.56	3.56	1.81	7.72	12.00
1 1/4 x 18	1031653	15200	23.00	1.25	52.31	34.31	54.56	36.56	3.56	1.81	7.72	18.00
1 1/4 x 24	1031671	15200	27.00	1.25	64.31	40.31	66.56	42.56	3.56	1.81	7.72	24.00
1 1/2 x 12	1031699	21400	27.50	1.50	42.50	30.50	45.00	33.00	4.06	2.12	8.62	12.00
1 1/2 x 18	1031715	21400	31.00	1.50	54.50	36.50	57.00	39.00	4.06	2.12	8.62	18.00
1 1/2 x 24	1031733	21400	37.50	1.50	66.50	42.50	69.00	45.00	4.06	2.12	8.62	24.00
1 3/4 x 18	1031779	28000	52.50	1.75	57.38	39.38	60.38	42.38	4.62	2.38	10.00	18.00
1 3/4 x 24	1031797	28000	58.00	1.75	69.38	45.38	72.38	48.38	4.62	2.38	10.00	24.00
2 x 24	1031813	37000	85.25	2.00	75.69	51.69	79.19	55.19	5.75	2.69	13.09	24.00
2 1/2 x 24	1031831	60000	144.25	2.50	78.62	54.62	82.62	58.62	6.50	3.12	13.78	24.00
2 3/4 x 24	1031859	75000	194.00	2.75	81.00	57.00	85.50	61.50	7.00	3.25	15.22	24.00

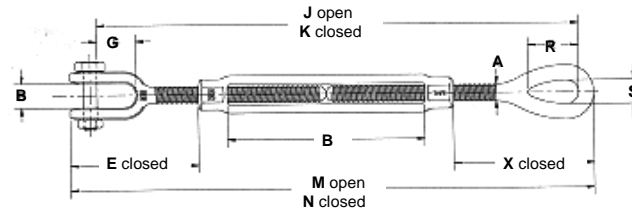
* Proof Load is 2 times the Working Load Limit. Ultimate Load is 5 times Working Load Limit.

WIRE ROPE ACCESSORIES

Jaw & eye turnbuckles



HG-227



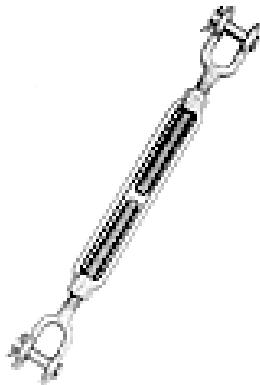
- ◆ Hot dip galvanized steel.
- ◆ End fittings are quenched and tempered, bodies heat treated by normalizing.
- ◆ Turnbuckle eyes are forged elongated, by design, to maximize easy attachment in system and minimize stress in the eye. For turnbuckle sizes 1/4" through 2 1/2", a shackle one size smaller can be reeved through eye.
- ◆ Turnbuckles recommended for straight or in-line pulls only.
- ◆ Modified UNJ thread for improved fatigue properties.
- ◆ Lock Nuts available for all sizes.

Thread Diam & Take Up (in.)	Stock No.	Working Load Limit* (lbs.)	Weight Each (lbs.)	Dimensions (in.)											
				A	B	E closed	G	J open	K closed	M open	N closed	R	S	X closed	BB
1/4 x 4	1031877	500	.32	.25	.41	1.58	.62	11.36	7.35	12.07	8.07	.78	.34	1.75	4.00
5/16 x 4 1/2	1031895	800	.47	.31	.47	1.98	.87	13.71	8.71	14.01	9.51	.94	.44	2.09	4.50
3/8 x 6	1031911	1200	.76	.38	.50	2.12	.87	16.81	10.81	17.77	11.77	1.12	.53	2.52	6.00
1/2 x 6	1031939	2200	1.53	.50	.63	2.75	1.06	18.29	12.29	19.48	13.48	1.44	.72	3.23	6.00
1/2 x 9	1031957	2200	1.71	.50	.63	2.75	1.06	24.29	15.29	25.48	16.48	1.44	.72	3.23	9.00
1/2 x 12	1031975	2200	2.06	.50	.63	2.75	1.06	30.29	18.29	31.48	19.48	1.44	.72	3.23	12.00
5/8 x 6	1031993	3500	2.35	.63	.75	3.50	1.31	19.74	13.74	21.28	15.28	1.75	.88	3.90	6.00
5/8 x 9	1032019	3500	3.06	.63	.75	3.50	1.31	25.74	16.74	27.28	18.28	1.75	.88	3.90	9.00
5/8 x 12	1032037	3500	3.78	.63	.75	3.50	1.31	31.74	19.74	33.28	21.28	1.75	.88	3.90	12.00
3/4 x 6	1032055	5200	4.00	.75	.94	4.18	1.50	21.19	15.19	23.11	17.11	2.09	1.00	4.69	6.00
3/4 x 9	1032073	5200	4.75	.75	.94	4.18	1.50	27.19	18.19	29.11	20.11	2.09	1.00	4.69	9.00
3/4 x 12	1032091	5200	5.36	.75	.94	4.18	1.50	33.19	21.19	35.11	23.11	2.09	1.00	4.69	12.00
3/4 x 18	1032117	5200	7.00	.75	.94	4.18	1.50	45.19	27.19	47.11	29.11	2.09	1.00	4.69	18.00
7/8 x 12	1032135	7200	8.00	.88	1.13	4.85	1.75	34.34	22.34	36.57	24.57	2.38	1.25	5.10	12.00
7/8 x 18	1032153	7200	9.75	.88	1.13	4.85	1.75	46.34	28.34	48.57	30.57	2.38	1.25	5.10	18.00
1 x 6	1032171	10000	8.92	1.00	1.19	5.53	2.06	24.34	18.34	26.89	20.89	3.00	1.44	6.36	6.00
1 x 12	1032199	10000	11.20	1.00	1.19	5.53	2.06	36.34	24.34	38.89	26.89	3.00	1.44	6.36	12.00
1 x 18	1032215	10000	13.30	1.00	1.19	5.53	2.06	48.34	30.34	50.89	32.89	3.00	1.44	6.36	18.00
1 x 24	1032233	10000	17.00	1.00	1.19	5.53	2.06	60.34	36.34	62.89	38.89	3.00	1.44	6.36	24.00
1 1/4 x 12	1032251	15200	20.00	1.25	1.75	7.21	2.81	38.82	26.82	42.05	30.05	3.56	1.81	7.72	12.00
1 1/4 x 18	1032279	15200	24.18	1.25	1.75	7.21	2.81	50.82	32.82	54.05	36.05	3.56	1.81	7.72	18.00
1 1/4 x 24	1032297	15200	28.50	1.25	1.75	7.21	2.81	62.82	38.82	66.05	42.05	3.56	1.81	7.72	24.00
1 1/2 x 12	1032313	21400	28.99	1.50	2.06	7.88	2.81	40.50	28.50	44.25	32.25	4.06	2.12	8.62	12.00
1 1/2 x 18	1032331	21400	35.00	1.50	2.06	7.88	2.81	52.50	34.50	56.25	38.25	4.06	2.12	8.62	18.00
1 1/2 x 24	1032359	21400	39.18	1.50	2.06	7.88	2.81	64.50	40.50	68.25	44.25	4.06	2.12	8.62	24.00
1 3/4 x 18	1032395	28000	53.75	1.75	2.38	9.40	3.38	55.38	37.38	59.78	41.78	4.62	2.38	10.00	18.00
1 3/4 x 24	1032411	28000	60.68	1.75	2.38	9.40	3.38	67.38	43.38	71.78	47.78	4.62	2.38	10.00	24.00
2 x 24	1032439	37000	89.00	2.00	2.50	11.86	3.69	72.62	48.62	77.95	53.95	5.75	2.69	13.09	24.00
2 1/2 x 24	1032457	60000	150.00	2.50	2.88	13.56	4.44	75.80	51.80	82.40	58.40	6.50	3.12	13.78	24.00
2 3/4 x 24	1032475	75000	183.00	2.75	3.50	15.22	4.19	77.88	53.88	85.50	61.50	7.00	3.25	15.22	24.00

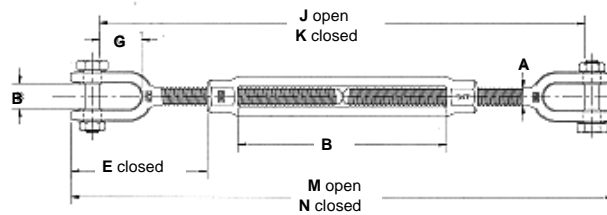
*Proof Load is 2 times the Working Load Limit. Ultimate Load is 5 times Working Load Limit

WIRE ROPE ACCESSORIES

Jaw & jaw turnbuckles



HG-228



- ◆ Hot dip galvanized steel.
- ◆ End fittings are quenched and tempered, bodies heat treated by normalizing.
- ◆ Turnbuckles recommended for straight or in-line pull only.
- ◆ Forged jaw ends are fitted with bolts and nuts for 1/4" through 5/8", and pins and cotters on 3/4" through 2 3/4" sizes.
- ◆ Modified UNJ thread for improved fatigue properties.
- ◆ Lock Nuts available for all sizes.

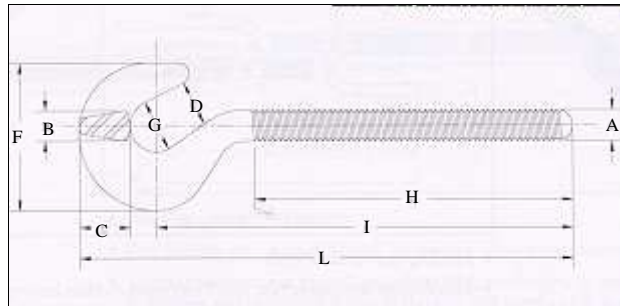
Thread Diameter & Take Up (in.)	Stock No.	Working Load Limit* (lbs.)	Weight Each (lbs.)	Dimensions (in.)								
				A	B	E closed	G	J open	K closed	M open	N closed	BB
1/4 x 4	1032493	500	.36	.25	.41	1.58	.62	10.90	6.90	11.90	7.90	4.00
5/16 x 4 1/2	1032518	800	.52	.31	.47	1.98	.87	12.36	8.36	13.90	9.40	4.50
3/8 x 6	1032536	1200	.81	.38	.50	2.12	.87	16.14	10.14	17.38	11.38	6.00
1/2 x 6	1032554	2200	1.50	.50	.63	2.75	1.06	17.50	11.50	19.00	13.00	6.00
1/2 x 9	1032572	2200	1.74	.50	.63	2.75	1.06	23.50	14.50	25.00	16.00	9.00
1/2 x 12	1032590	2200	2.40	.50	.63	2.75	1.06	29.50	17.50	31.00	19.00	12.00
5/8 x 6	1032616	3500	2.72	.63	.75	3.50	1.31	18.80	12.80	20.88	14.88	6.00
5/8 x 9	1032634	3500	3.24	.63	.75	3.50	1.31	24.80	15.80	26.88	17.88	9.00
5/8 x 12	1032652	3500	3.74	.63	.75	3.50	1.31	30.80	18.80	32.88	20.88	12.00
3/4 x 6	1032670	5200	4.11	.75	.94	4.18	1.50	20.00	14.00	22.60	16.60	6.00
3/4 x 9	1032698	5200	5.10	.75	.94	4.18	1.50	26.00	17.00	28.60	19.60	9.00
3/4 x 12	1032714	5200	5.65	.75	.94	4.18	1.50	32.00	20.00	34.60	22.60	12.00
3/4 x 18	1032732	5200	7.00	.75	.94	4.18	1.50	44.00	26.00	46.60	28.60	18.00
7/8 x 12	1032750	7200	8.17	.88	1.13	4.85	1.75	33.36	21.36	36.32	24.32	12.00
7/8 x 18	1032778	7200	9.96	.88	1.13	4.85	1.75	45.36	27.36	48.32	30.32	18.00
1 x 6	1032796	10000	8.50	1.00	1.19	5.53	2.06	22.72	16.72	26.06	20.06	6.00
1 x 12	1032812	10000	12.00	1.00	1.19	5.53	2.06	34.72	22.72	38.06	26.06	12.00
1 x 18	1032830	10000	14.00	1.00	1.19	5.53	2.06	46.72	28.72	50.06	32.06	18.00
1 x 24	1032858	10000	17.00	1.00	1.19	5.53	2.06	58.72	34.72	62.06	38.06	24.00
1 1/4 x 12	1032876	15200	21.50	1.25	1.75	7.21	2.81	37.34	25.34	41.54	29.54	12.00
1 1/4 x 18	1032894	15200	24.25	1.25	1.75	7.21	2.81	49.34	31.34	53.54	35.54	18.00
1 1/4 x 24	1032910	15200	28.00	1.25	1.75	7.21	2.81	61.34	37.34	65.54	41.54	24.00
1 1/2 x 12	1032938	21400	30.50	1.50	2.06	7.88	2.81	38.50	26.50	43.50	31.50	12.00
1 1/2 x 18	1032956	21400	36.75	1.50	2.06	7.88	2.81	50.50	32.50	55.50	37.50	18.00
1 1/2 x 24	1032974	21400	40.67	1.50	2.06	7.88	2.81	62.50	38.50	67.50	43.50	24.00
1 3/4 x 18	1033018	28000	55.04	1.75	2.38	9.40	3.38	53.38	35.38	59.18	41.18	18.00
1 3/4 x 24	1033036	28000	63.36	1.75	2.38	9.40	3.38	65.38	41.38	71.18	47.18	24.00
2 x 24	1033054	37000	94.25	2.00	2.50	11.86	3.69	69.54	45.54	76.72	52.72	24.00
2 1/2 x 24	1033072	60000	165.00	2.50	2.88	13.56	4.44	72.98	48.98	82.18	58.18	24.00
2 3/4 x 24	1033090	75000	198.00	2.75	3.50	15.22	4.19	74.75	50.75	85.50	61.50	24.00

* Proof Load is 2 times Working Load Limit. Ultimate load is 5 times Working Load Limit.

SEDRA MARINE

WIRE ROPE ACCESSORIES

HG-4037 hook end fittings

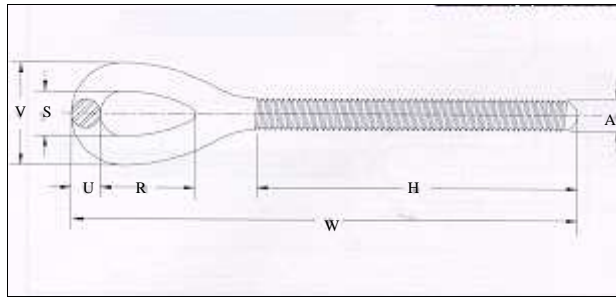


- Hot dip galvanized steel.
- Quenched and tempered.
- Hooks are forged with a greater cross sectional area that results in a stronger hook with better fatigue properties.
- Modified UNJ thread for improved fatigue properties.

Shank diameter & Take Up (in.)	RH hook Stock No. Galv.	LH hook Stock No. Galv.	Working Load Limit (lbs.)	Weight Each (lbs.)	Dimensions (in.)								
					A	B	C	D	F	G	H	I	L
1/4 x 4	1070012	1070539	400	.08	.25	.25	.41	.45	1.27	.50	2.55	3.31	3.97
5/16 x 4 1/2	1070030	1070557	700	.15	.31	.31	.50	.50	1.50	.56	2.92	3.88	4.66
3/8 x 6	1070058	1070575	1000	.25	.38	.38	.61	.56	1.77	.62	3.80	4.94	5.86
1/2 x 6	1070076	1070593	1500	.54	.50	.50	.78	.66	2.28	.81	4.05	5.50	6.69
1/2 x 9	1070094	1070619	1500	.60	.50	.50	.78	.66	2.28	.81	5.55	7.00	8.19
1/2 x 12	1070110	1070637	1500	.68	.50	.50	.78	.66	2.28	.81	7.05	8.50	9.69
5/8 x 6	1070138	1070655	2500	.90	.63	.63	1.00	.84	2.81	1.00	4.30	6.13	7.63
5/8 x 9	1070156	1070673	2250	1.03	.63	.63	1.00	.84	2.81	1.00	5.80	7.63	9.13
5/8 x 12	1070174	1070691	2250	1.16	.63	.63	1.00	.84	2.81	1.00	7.30	9.13	10.63
3/4 x 6	1070192	1070717	3000	1.55	.75	.75	1.20	.98	3.33	1.13	4.55	6.88	8.64
3/4 x 9	1070218	1070735	3000	1.73	.75	.75	1.20	.98	3.33	1.13	6.05	8.38	10.14
3/4 x 12	1070236	1070753	3000	2.20	.75	.75	1.20	.98	3.33	1.13	7.55	9.88	11.64
3/4 x 18	1070254	1070771	3000	2.50	.75	.75	1.20	.98	3.33	1.13	10.55	12.88	14.64
7/8 x 12	1070272	1070799	4000	2.50	.88	.88	1.38	1.13	3.78	1.25	7.80	10.50	12.50
7/8 x 18	1070290	1070815	4000	3.00	.88	.88	1.38	1.13	3.78	1.25	10.80	13.50	15.50
1 x 6	1070316	1070833	5000	3.45	1.00	1.00	1.53	1.25	4.25	1.38	5.05	8.13	10.34
1 x 12	1070334	1070851	5000	4.20	1.00	1.00	1.53	1.25	4.25	1.38	8.05	9.13	13.34
1 x 18	1070352	1070879	5000	4.70	1.00	1.00	1.53	1.25	4.25	1.38	11.05	14.13	16.34
1 x 24	1070370	1070897	5000	5.20	1.00	1.00	1.53	1.25	4.25	1.38	14.05	17.13	19.34
1 1/4 x 12	1070398	1070913	5000	6.50	1.25	1.25	1.81	1.50	5.13	1.75	8.28	12.09	14.78
1 1/4 x 18	1070414	1070931	5000	6.84	1.25	1.25	1.81	1.50	5.13	1.75	11.28	15.09	17.78
1 1/4 x 24	1070432	1070959	5000	9.00	1.25	1.25	1.81	1.50	5.13	1.75	14.28	18.09	20.78
1 1/2 x 12	1070450	1070977	7500	8.75	1.50	1.31	1.75	1.88	5.75	2.25	8.72	13.34	16.22
1 1/2 x 18	1070478	1070995	7500	9.95	1.50	1.31	1.75	1.88	5.75	2.25	11.72	16.34	19.22
1 1/2 x 24	1070496	1071011	7500	11.20	1.50	1.31	1.75	1.88	5.75	2.25	14.72	19.34	22.22

WIRE ROPE ACCESSORIES

HG-4037 eye end fittings

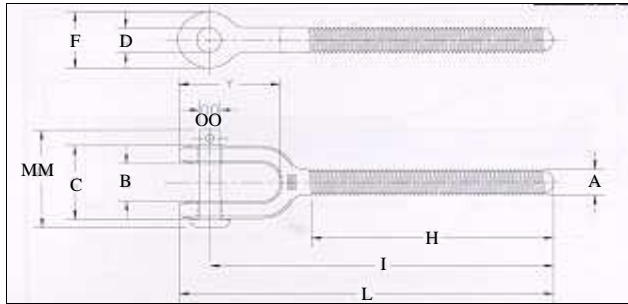


- Hot dip galvanized steel.
- Quenched and tempered.
- Turnbuckle eyes are forged elongated, by design, to maximize easy attachment in system and minimize stress in the eye. For turnbuckle sizes 1/4" through 2 1/2", a shackle one size smaller can be reeved through eye.
- Modified UNJ thread for improved fatigue properties.

Shank Diameter & Take up (in.)	RH Eye Stock No. Galv.	LH Eye Stock No. Galv.	Working Load Limit (lbs.)	Weight Each (lbs.)	Dimensions (in.)						
					A	H	R	S	U	V	W
1/4 x 4	1071057	1071672	500	.07	.25	2.55	.78	.34	.22	.78	4.12
5/16 x 4 1/2	1071075	1071690	800	.14	.31	2.92	.94	.44	.28	1.00	4.81
3/8 x 6	1071093	1071716	1200	.24	.38	3.80	1.12	.53	.34	1.22	6.08
1/2 x 6	1071119	1071734	2200	.47	.50	4.05	1.44	.72	.44	1.59	6.98
1/2 x 9	1071137	1071752	2200	.56	.50	5.55	1.44	.72	.44	1.59	8.48
1/2 x 12	1071155	1071770	2200	.64	.50	7.05	1.44	.72	.44	1.59	9.98
5/8 x 6	1071173	1071798	3500	.83	.63	4.30	1.75	.88	.50	1.88	7.84
5/8 x 9	1071191	1071814	3500	.96	.63	5.80	1.75	.88	.50	1.88	9.34
5/8 x 12	1071217	1071832	3500	1.04	.63	7.30	1.75	.88	.50	1.88	10.84
3/4 x 6	1071235	1071850	5200	1.23	.75	4.55	2.09	1.00	.62	2.25	8.81
3/4 x 9	1071253	1071878	5200	1.40	.75	6.05	2.09	1.00	.62	2.25	10.31
3/4 x 12	1071271	1071896	5200	1.60	.75	7.55	2.09	1.00	.62	2.25	11.81
3/4 x 18	1071299	1071912	5200	1.98	.75	10.55	2.09	1.00	.62	2.25	14.81
7/8 x 12	1071315	1071930	7200	2.55	.88	7.80	2.38	1.25	.75	2.75	12.41
7/8 x 18	1071333	1071958	7200	3.06	.88	10.80	2.38	1.25	.75	2.75	15.41
1 x 6	1071351	1071976	10000	3.09	1.00	5.05	3.00	1.44	.88	3.19	10.86
1 x 12	1071379	1071994	10000	3.75	1.00	8.05	3.00	1.44	.88	3.19	13.86
1 x 18	1071397	1072010	10000	4.44	1.00	11.05	3.00	1.44	.88	3.19	16.86
1 x 24	1071413	1072038	10000	4.64	1.00	14.05	3.00	1.44	.88	3.19	19.86
1 1/4 x 12	1071431	1072056	15200	6.50	1.25	8.28	3.56	1.81	1.12	4.06	15.28
1 1/4 x 18	1071459	1072074	15200	7.30	1.25	11.28	3.56	1.81	1.12	4.06	18.28
1 1/4 x 24	1071477	1072092	15200	8.30	1.25	14.28	3.56	1.81	1.12	4.06	21.18
1 1/2 x 12	1071495	1072118	21400	7.70	1.50	8.72	4.06	2.12	1.25	4.62	16.50
1 1/2 x 18	1071510	1072136	21400	13.00	1.50	11.72	4.06	2.12	1.25	4.62	19.50
1 1/2 x 24	1071538	1072154	21400	11.63	1.50	14.72	4.06	2.12	1.25	4.62	22.50
1 3/4 x 18	1071574	1072190	28000	17.25	1.75	12.16	4.62	2.38	1.50	5.38	21.19
1 3/4 x 24	1071592	1072216	28000	18.38	1.75	15.16	4.62	2.38	1.50	5.38	24.19
2 x 24	1071618	1072234	37000	31.17	2.00	15.59	5.75	2.69	1.75	6.19	27.59
2 1/2 x 24	1071636	1072252	60000	42.76	2.50	17.20	6.50	3.12	2.00	7.12	29.31
2 3/4 x 24	1071654	1072270	75000	69.88	2.75	17.33	7.00	3.25	2.25	7.75	30.75

WIRE ROPE ACCESSORIES

HG-4037 jaw end fittings

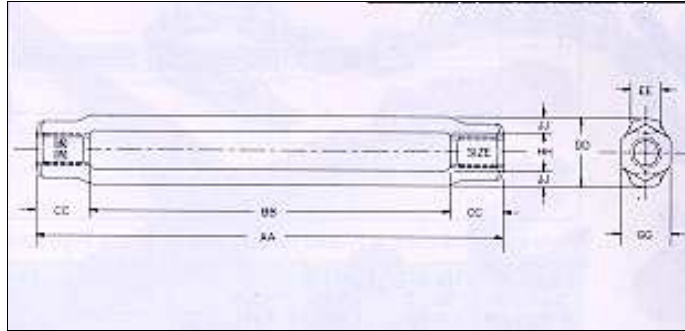


- Hot dip galvanized steel
- Quenched and tempered
- Forged jaw ends are fitted with bolts and nuts on sizes 1/4" through 5/8", and pins and cotters on sizes 3/4" through 2 3/4"
- Modified UNJ thread for improved fatigue properties

Shank Diameter & Take up (in.)	RH Jaw Stock No. Galv.	LH Jaw Stock No. Galv.	Working Load Limit (lbs.)	Weight Each (lbs.)	Dimensions (in.)										
					A	B	C	D	F	H	I	L	Y	MM	OO
1/4 x 4	1072298	1072911	500	.12	.25	.41	.90	.30	.63	2.55	3.58	3.95	1.12	1.41	.25
5/16 x 4 1/2	1072314	1072939	800	.20	.31	.47	1.00	.30	.69	2.92	4.30	4.70	1.39	1.41	.25
3/8 x 6	1072332	1072957	1200	.29	.38	.50	1.08	.36	.81	3.80	5.22	5.69	1.49	1.58	.31
1/2 x 6	1072350	1072975	2200	.57	.50	.63	1.36	.42	1.00	4.05	5.94	6.50	1.81	1.86	.38
1/2 x 9	1072378	1072993	2200	.63	.50	.63	1.36	.42	1.00	5.55	7.44	8.00	1.81	1.86	.38
1/2 x 12	1072396	1073019	2200	.71	.50	.63	1.36	.42	1.00	7.05	8.94	9.50	1.81	1.86	.38
5/8 x 6	1072412	1073037	3500	1.07	.63	.75	1.68	.55	1.31	4.30	6.64	7.44	2.35	2.44	.50
5/8 x 9	1072430	1073055	3500	1.20	.63	.75	1.68	.55	1.31	5.80	8.14	8.94	2.35	2.44	.50
5/8 x 12	1072458	1073073	3500	1.33	.63	.75	1.68	.55	1.31	7.30	9.64	10.44	2.35	2.44	.50
3/4 x 6	1072476	1073091	5200	1.72	.75	.94	1.97	.69	1.62	4.55	7.31	8.30	2.80	2.56	.62
3/4 x 9	1072494	1073117	5200	1.81	.75	.94	1.97	.69	1.62	6.05	8.81	9.80	2.80	2.56	.62
3/4 x 12	1072519	1073135	5200	2.09	.75	.94	1.97	.69	1.62	7.55	10.31	11.30	2.80	2.56	.62
3/4 x 18	1072537	1073153	5200	2.46	.75	.94	1.97	.69	1.62	10.55	13.31	14.30	2.80	2.56	.62
7/8 x 12	1072555	1073171	7200	3.31	.88	1.13	2.43	.81	1.88	7.80	11.05	12.16	3.23	3.09	.75
7/8 x 18	1072573	1073199	7200	3.81	.88	1.13	2.43	.81	1.88	10.80	14.05	15.16	3.23	3.09	.75
1 x 6	1072591	1073215	10000	3.90	1.00	1.19	2.63	.94	2.12	5.05	8.80	10.03	3.73	3.44	.88
1 x 12	1072617	1073233	10000	4.56	1.00	1.19	2.63	.94	2.12	8.05	11.80	13.03	3.73	3.44	.88
1 x 18	1072635	1073251	10000	5.16	1.00	1.19	2.63	.94	2.12	11.05	14.80	16.03	3.73	3.44	.88
1 x 24	1072653	1073279	10000	5.76	1.00	1.19	2.63	.94	2.12	14.05	17.80	19.03	3.73	3.44	.88
1 1/4 x 12	1072671	1073297	15200	7.43	1.25	1.75	3.60	1.22	2.62	8.28	13.22	14.77	4.91	4.53	1.12
1 1/4 x 18	1072699	1073313	15200	8.37	1.25	1.75	3.60	1.22	2.62	11.28	16.22	17.77	4.91	4.53	1.12
1 1/4 x 24	1072715	1013331	15200	9.46	1.25	1.75	3.60	1.22	2.62	14.28	19.22	20.77	4.91	4.53	1.12
1 1/2 x 12	1072733	1073359	21400	12.39	1.50	2.06	3.96	1.47	3.12	8.72	13.96	15.75	5.31	5.12	1.38
1 1/2 x 18	1072751	1073377	21400	13.89	1.50	2.06	3.96	1.47	3.12	11.72	16.96	18.75	5.31	5.12	1.38
1 1/2 x 24	1072779	1073395	21400	15.39	1.50	2.06	3.96	1.47	3.12	14.72	19.96	21.75	5.31	5.12	1.38
1 3/4 x 18	1072813	1073439	28000	19.74	1.75	2.38	4.66	1.72	3.50	12.16	18.49	20.59	6.28	6.00	1.62
1 3/4 x 24	1072831	1073457	28000	21.10	1.75	2.38	4.66	1.72	3.50	15.16	21.49	23.59	6.28	6.00	1.62
2 x 24	1072859	1073475	37000	36.35	2.00	2.50	5.60	2.09	4.19	15.59	23.76	26.36	7.28	6.88	2.00
2 1/2 x 24	1072877	1073493	60000	62.33	2.50	2.88	5.82	2.38	5.62	17.20	25.61	29.09	9.04	7.50	2.25
2 3/4 x 24	1072895	1073518	75000	94.64	2.75	3.50	6.56	2.88	6.12	17.35	26.75	30.75	9.56	8.44	2.75

WIRE ROPE ACCESSORIES

HG-2510 body only



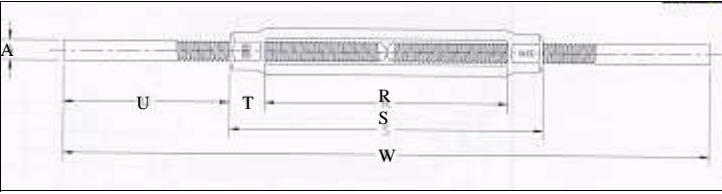
- Hot dip galvanized
- Heat treat by normalizing

Meets the requirements of Federal Specifications FF-T-791b, Type 1, Form 1- Class 2

Shank Diameter & Take up (in.)	Body Stock No. Galv.	Working Load Limit (lbs.)	Weight Each (lbs.)	Dimensions (in.)							
				AA	BB	CC	DD	EE	GG	HH	JJ
1/4 x 4	1033893	500	.15	4.75	4.00	.38	.72	.34	.50	.38	.17
5/16 x 4 1/2	1033919	800	.19	5.44	4.50	.47	.81	.38	.56	.44	.19
3/8 x 6	1033937	1200	.29	7.12	6.00	.56	.88	.38	.62	.50	.19
1/2 x 6	1033955	2200	.60	7.50	6.00	.75	1.12	.50	.81	.62	.25
1/2 x 9	1033973	2200	.68	10.50	9.00	.75	1.12	.50	.81	.62	.25
1/2 x 12	1033991	2200	1.00	13.50	12.00	.75	1.12	.50	.81	.62	.25
5/8 x 6	1034017	3500	.90	7.88	6.00	.94	1.38	.62	1.00	.75	.31
5/8 x 9	1034035	3500	1.18	10.88	9.00	.94	1.38	.62	1.00	.75	.31
5/8 x 12	1034053	3500	1.43	13.88	12.00	.94	1.38	.62	1.00	.75	.31
3/4 x 6	1034071	5200	1.30	8.25	6.00	1.12	1.69	.75	1.12	.94	.38
3/4 x 9	1034099	5200	1.75	11.25	9.00	1.12	1.69	.75	1.12	.94	.38
3/4 x 12	1034115	5200	2.08	14.25	12.00	1.12	1.69	.75	1.12	.94	.38
3/4 x 18	1034133	5200	2.50	20.25	18.00	1.12	1.69	.75	1.12	.94	.38
7/8 x 12	1034179	7200	2.70	14.62	12.00	1.31	1.94	.88	1.31	1.06	.44
7/8 x 18	1034197	7200	3.80	20.62	18.00	1.31	1.94	.88	1.31	1.06	.44
1 x 6	1034213	10000	2.48	9.00	6.00	1.50	2.25	1.00	1.50	1.25	.50
1 x 12	1034231	10000	3.93	15.00	12.00	1.50	2.25	1.00	1.50	1.25	.50
1 x 18	1034259	10000	5.28	21.00	18.00	1.50	2.25	1.00	1.50	1.25	.50
1 x 24	1034277	10000	7.38	27.00	24.00	1.50	2.25	1.00	1.50	1.25	.50
1 1/4 x 12	1034339	15200	5.25	15.12	12.00	1.56	2.62	1.25	1.88	1.50	.56
1 1/4 x 18	1034357	15200	7.75	21.12	18.00	1.56	2.62	1.25	1.88	1.50	.56
1 1/4 x 24	1034375	15200	10.17	27.12	24.00	1.56	2.62	1.25	1.88	1.50	.56
1 1/2 x 12	1034437	21400	8.75	15.75	12.00	1.88	3.00	1.50	2.25	1.75	.62
1 1/2 x 18	1034455	21400	11.00	21.75	18.00	1.88	3.00	1.50	2.25	1.75	.62
1 1/2 x 24	1034473	21400	13.69	27.75	24.00	1.88	3.00	1.50	2.25	1.75	.62
1 3/4 x 18	1034552	28000	16.38	22.38	18.00	2.19	3.62	1.75	2.62	2.12	.75
1 3/4 x 24	1034570	28000	21.25	28.38	24.00	2.19	3.62	1.75	2.62	2.12	.75
2 x 24	1034632	37000	27.60	29.00	24.00	2.50	4.12	2.00	3.00	2.38	.88
2 1/2 x 24	1034678	60000	54.00	31.06	24.00	3.5	5.62	2.75	3.88	3.12	1.25
2 3/4 x 24	1034696	75000	54.00	31.06	24.00	3.53	5.62	2.75	3.88	3.12	1.25

WIRE ROPE ACCESSORIES

Stub end turnbuckles



Meets the requirements of Federal Specifications FF-T-791b, Type 1 Form 1 - Class 3

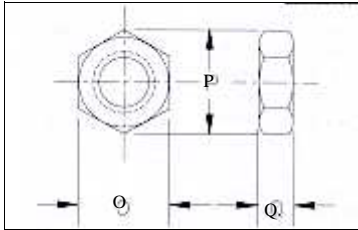
- Complete assembly is self-colored
- End fittings are quenched and tempered, bodies heat treated by normalizing
- Reference American Welding Society Specifications for proper welding procedures

Shank Diameter & Take up (in.)	HS-251 Stock No. S.C.	Working Load Limit (lbs.)	Weight Each (lbs.)	Dimensions (in.)					
				A	R	S	T	U	W
3/8 x 6	1033143	1200	.75	.38	6.00	7.13	.56	4.44	16.00
1/2 x 6	1033161	2200	1.25	.50	6.00	7.50	.75	4.25	16.00
5/8 x 6	1033223	3500	2.00	.63	6.00	7.88	.94	4.06	16.00
3/4 x 6	1033287	5200	3.25	.75	6.00	8.25	1.13	4.38	17.00
7/8 x 6	1033367	7200	4.78	.88	6.00	8.63	1.31	4.69	18.00
1 x 6	1033429	10000	6.33	1.00	6.00	9.00	1.50	5.00	19.00
1 x 12	1033447	10000	9.50	1.00	12.00	15.00	1.50	5.00	25.00
1 1/8 x 6	1033508	12400	8.88	1.13	6.00	9.13	1.56	4.94	19.00
1 1/4 x 6	1033526	15200	10.18	1.25	6.00	9.13	1.56	5.44	20.00
1 1/4 x 12	1033544	15200	14.00	1.25	12.00	15.12	1.56	5.44	26.00
1 1/2 x 12	1033642	21400	22.00	1.50	12.00	15.75	1.88	5.38	26.50

Locknuts

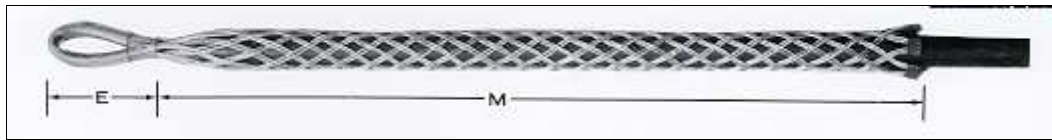
Thread Diameter (in.)	Stock No.		Weight Per 100 (lbs.)	Dimensions (in.)		
	HG-4060 Right hand	HG-4061 Left hand		O	P	Q
1/4	1075115	1075491	.80	.44	.50	.16
5/16	1075133	1075516	1.30	.50	.56	.19
3/8	1075151	1075534	2.00	.56	.64	.22
1/2	1075197	1075570	4.00	.75	.86	.31
5/8	1075213	1075598	7.00	.94	1.06	.38
3/4	1075231	1075614	11.00	1.13	1.26	.42
7/8	1075259	1075632	16.30	1.31	1.50	.48
1	1075277	1075650	23.80	1.50	1.69	.55
1 1/4	1075311	1075696	62.50	1.88	2.13	.72
1 1/2	1075357	1075730	72.00	2.25	2.53	.84
1 3/4	1075393	1075776	112.00	2.75	3.18	1.00
2	1075419	1075794	150.00	3.12	3.61	1.12
2 1/2	1075455	1075838	330.00	3.88	4.47	1.50
2 3/4	1075473	1075856	425.00	4.25	4.91	1.62

HG-4060 / HG-4061



WIRE ROPE ACCESSORIES

Standard pulling grips - Model A - single or double weave - 3/4" to 1 1/4"



Model A Pulling Grip is manufactured in both single and double weave design of Hi-Fatigue plastic coated Aircraft Strand steel cable, and is recommended wherever high strength and small size are required. Patented pulling eye is flexible stress relieving.

Size	Work Load	Weight	Weave	Mesh length	Eye
3/4" - 1 1/4"	1000 lbs.	5 1/2 oz.	Single	18"	3"
	2000 lbs.	8 1/2 oz.	Double	24"	

Standard pulling grips - Models B, C, D, E, F - triple weave - 1 1/4" to 4 7/8"

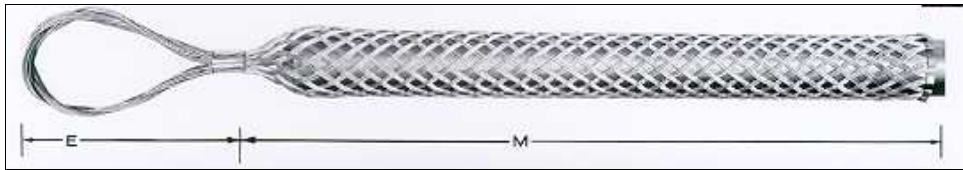


- Model B Pulling Grip is manufactured in triple weave design of Hi-Fatigue plastic coated Aircraft Strand steel cable, and is recommended wherever high strength and small size are required. Patented pulling eye is flexible stress relieving.
- Model C Pulling Grip is fabricated of the best grade Hi-Fatigue Aircraft Strand plastic coated steel. Continuous fabrication of grip from receiving end through entire mesh - including eye - provides a flexible stress relieving pulling eye.
- Models D, E and F is a heavy duty grip manufactured of Hi-Fatigue Aircraft Strand, continuous weave process with flexible stress relieving pulling eye. All strands are plastic coated, which increases the life of grip, provides a bearing surface on underground pulls and increases the ease and safety of installation and removal for workmen.

Model	Size	Work Load	Weight	Weave	Mesh length	Eye
B	1 1/4" - 2"	2500 lbs.	13 oz.	Triple	26"	3 1/4"
		3500 lbs.	1 lb. 1 oz.		32"	
C	2" - 2 3/4"	3500 lbs.	1 lb. 4 oz.		32"	3 1/2"
		4500 lbs.	1 lb. 11 oz.		38"	
D	2 3/4" - 3 1/2"	4500 lbs.	1 lb. 12 oz.		38"	3 3/4"
		5500 lbs.	2 lbs. 2 oz.		46"	
E	3 1/2" - 4 1/4"	5500 lbs.	2 lbs. 5 oz.		46"	4"
		6500 lbs.	2 lbs. 13 oz.		52"	
F	4 1/4" - 4 7/8"	6000 lbs.	2 lbs. 5 oz.		52"	4"
		7000 lbs.	2lbs. 13 oz.		58"	

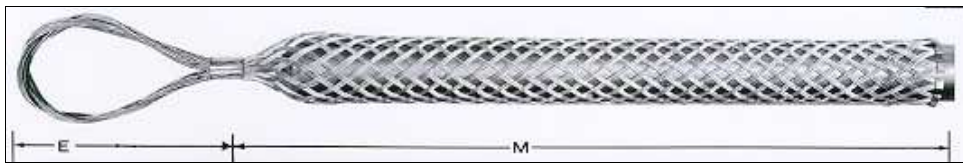
WIRE ROPE ACCESSORIES

Standard pulling grips - Models G, H, I - quad weave - 4 7/8" to 6 3/4"



Model	Size	Work Load	Weight	Weave	Mesh length	Eye
G	4 7/8" - 5 1/2"	7300 lbs.	8.8 lbs.	4 wire	58"	6" braided
		8300 lbs.	9.6 lbs.		64"	
H	5 1/2" - 6"	7300 lbs.	9.0 lbs.		58"	
		8300 lbs.	9.14 lbs.		64"	
I	6" - 6 3/4"	7300 lbs.	9.4 lbs.		58"	
		8300 lbs.	10.2 lbs.		64"	

Standard pulling grips - Model J - double weave - 4 7/8" to 6 3/4"



Size	Work Load	Weight	Weave	Mesh length	Eye
6 3/4" - 8"	9100 lbs.	9.4 lbs.	Double	58"	6" braided
	10100 lbs.	10.2 lbs.		64"	

Snake grips



The Snake Grip expands or contracts to grip different identical cable and/or rope sizes as per the customer's needs. Save time stringing up, changing and unstringing because the snake requires no special tools. The swivel and swing link go smoothly through blocks and prevent line twisting. Install new cable by using old existing cable as a pulling line. Always seize the ends of the grips by banding or taping.

Size	Regular size snakes		Special size snakes	
	U.T.S.	Work Load	U.T.S.	Work Load
Type LSG 1/4" - 1/2"	4486	1200	-	-
Type LSG 1/2" - 1"	7500	2500	-	-
Type LSG 1" - 1 1/2"	10000	3500	-	-
Type LSG 1 1/2" - 2"	12000	4000	-	-
Type LSG 2" - 2 3/4"	16000	5000	-	-
Type LSG 2 3/4" - 3 1/2"	20000	6500	-	-
Type LSG 3 1/2" - 4 1/4"	24000	8000	-	-
Type LSG 1/4" - 1 1/2"	-	-	4486/7500	1200/2500
Type LSG 1/2" - 1 1/2"	-	-	7500/10000	2500/3500
Type LSG 1/2" - 2"	-	-	7500/12000	2500/4000
Type LSG 1" - 2"	-	-	10000/12000	3500/4000
Type LSG 1 1/2" - 2 1/2"	-	-	12000/16000	4000/5000

WIRE ROPE ACCESSORIES

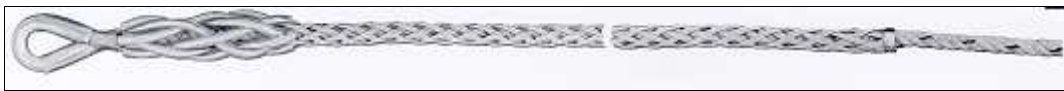
Pulling grips - Model OH



Model OH Pulling Grips, designed for the special demands of overhead stringing crews, has a basket constructed of triple woven nylon coated Aircraft Strand for maximum abrasive resistance. It has special tough plastic boots at eye-end to prevent abrasion between the conductor and pulling dollies. A steel thimble is manufactured into the eye, and is furnished without swivel or steel thimble on request. Uncoated wire gives approximately 20% more strength. Please specify when ordering.

Size	Work Load	Weight	Weave	Mesh length	Eye
1/4" - 1/2"	1500 lbs.	12 oz.	Double	24"	3"
3/0 - .336 M.C.M.	3200 lbs.	1 lb.	Triple	42"	4"
.477 - .795 M.C.M.	4100 lbs.	1 lb. 8 oz.	Triple	48"	4"
.795 - 1.000 M.C.M.	6300 lbs.	2 lbs.	5-Wire	51"	4"

Pulling grips - Model R



Model R is basically the same grip in size and basket construction as the model OH ; however, it is shorter. This grip is employed in pulling all types of ropes.

Size	Work Load	Weight	Weave	Mesh length	Eye
1/2" - 7/8"	3200 lbs.	14 oz.	Triple	36"	4"
7/8" - 1 1/4"	4100 lbs.	1 lb.	Triple	42"	4"

Split pulling grips



Rod closing
Lace closing

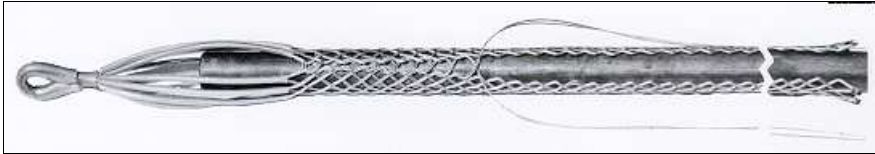
Model no.	Grip size	Work load (lbs.)
LSR-.75 / LSL-.75	3/4" - 1"	600
LSR-1.00 / LSL-1.00	1" - 1 1/4"	750
LSR-1.25 / LSL-1.25	1 1/4" - 1 1/2"	900
LSR-1.50 / LSL-1.50	1 1/2" - 1 3/4"	1100
LSR-1.75 / LSL-1.75	1 3/4" - 2"	1300
LSR-2.00 / LSL-2.00	2" - 2 1/2"	1500
LSR-2.50 / LSL-2.50	2 1/2" - 3"	1700
LSR-3.00 / LSL-3.00	3" - 3 1/2"	1700
LSR-3.50 / LSL-3.50	3 1/2" - 4"	1800
LSR-4.00 / LSL-4.00	4" - 4 1/2"	2000
LSR-4.50 / LSL-4.50	4 1/2" - 5"	2250
LSR-5.00 / LSL-5.00	5" - 5 1/2"	2500

LSR : split grip, rod closing
LSL : split grip, lace closing

Split grips - both rod and lace closing - are designed for all phases of suspension or pulling, where neither end of the conductor is available and "middle of the run" application of the grip is desired. Head variations are "DLE" 'pictured, "SE" or "U". Please specify head desired. Working loads, as listed in the table, are maximum holding power for the smallest conductor in each size

WIRE ROPE ACCESSORIES

Heavy duty split grips - Models S-1, S-2, S-3, S-4



Split grips are specially designed to pull or to support wire and cable already in place. They are manufactured of Hi-Fatigue Aircraft Strand steel cable with abrasive resistant plastic coating. All split grips are closed with plastic coated stainless steel flexible lacing cable.

Model	Size	Work Load	Weight	Weave	Mesh length	Eye
S-1	3/4" - 1 1/4"	1500 lbs.	5 oz.	Single	14"	9"
		2000 lbs.	6 oz.	Double		
S-2	1 1/4" - 1 3/4"	2000 lbs.	9 oz.	Single	18"	11"
		3000 lbs.	10 oz.	Double		
S-3	1 3/4" - 2 1/4"	2500 lbs.	12 oz.	Single	24"	13"
		4000 lbs.	15 oz.	Double		
S-4	2 1/4" - 2 3/4"	3000 lbs.	1 lb.	Single	30"	15"
		5000 lbs.	1 lb. 10 oz.	Double		

Ring and conduit riser grips

Conduit riser grips are specially designed to suspend conductor by using the conduit as a means of support. With the conductor approximately one-half inch above the "in-place" position, the grip is slipped into position and seats on the conduit edge, thus completing the installation. Ring size permits conduit couplings to be used. The ring and its components are constructed of solder dipped cast bronze. Spring pins mounted in the cast ring provide proper spacing between conduit and grip mesh. The plastic coated Aircraft Strand Cable - plus the flexibility



Conduit ring grip reducer bushings make it possible for a small grip to be used with a large conduit until an increase in service is desired - at which time the small grip and bushing are extracted for further use, while a larger grip is installed for the increased service. Foreign and other patents pending.



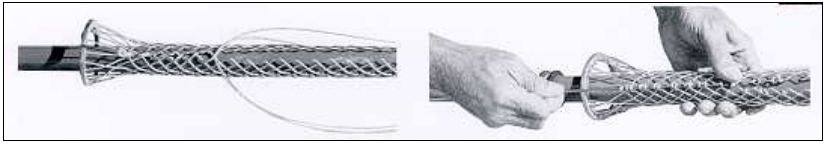
GRIP SIZE						
CONDUIT SIZE	75"	1.12"	1.62"	2.50"	3.50"	4.50"
	3/4" - 1 1/8"	1 1/8" - 1 5/8"	1 5/8" - 2 1/2"	2 1/2" - 3 1/2"	3 1/2" - 4 1/2"	4 1/2" - 5 1/2"
1 1/4"	✘					
1 1/2"	✘					
2"	✘	✘				
2 1/2"	✘	✘	✘			
3"	✘	✘	✘			
3 1/2"	✘	✘	✘	✘		
4"	✘	✘	✘	✘		
4 1/2"	✘	✘	✘	✘		
5"	✘	✘	✘	✘	✘	
6"	✘	✘	✘	✘	✘	✘



✘ Models available

WIRE ROPE ACCESSORIES

Split ring grips



Lace closing

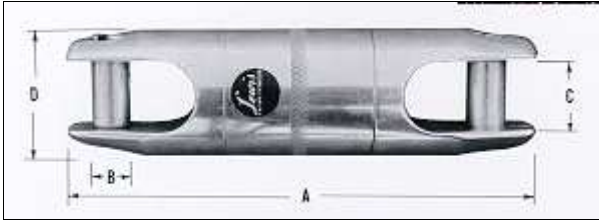
Rod closing

Split ring grips are available in either lace closing or rod closing types. Both methods of enclosure permit a grip installation to be made inside conduit without having either end of the conductor. Installation is accomplished by (a) wrapping the grip around the desired position on the conductor, and (b) by securing the basket by “shoe lacing” with the stainless steel strand or twisting rod through the closing rings on the basket.

Ask us for the sizes available

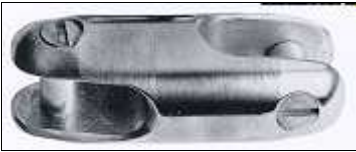
Ball Bearing swivels

Either W (regular duty) series or HD (heavy duty) series are specifically designed for tension stringing, and assure that the conductor will remain in neutral position during stringing of transmission and distribution lines. These twin race ball bearing swivel are made in high-grade pre-pressed steel. Proper placement of thrust and radial bearing allow thrust and shock loads to be absorbed without affecting rotation of swivel. Pins are screwdriver removable.



Model	Overall length	Diameter of pin	Jaw opening	Overall diameter	Working load
W-1	5 1/8"	7/16"	5/8"	1 5/16"	3000 lbs.
W-2	6 11/16"	1/2"	7/8"	1 5/8"	5400 lbs.
W-3	7 3/4"	5/8"	1"	2"	12000 lbs.
W-4	8 15/16"	3/4"	1 1/4"	2 1/4"	15000 lbs.

Model	Overall length	Diameter of pin	Jaw opening	Overall diameter	Working load
HD-00	4"	5/16"	3/8"	7/8"	1500 lbs.
HD-0	5 1/16"	7/16"	1/2"	1 1/8"	5400 lbs.
HD-1	6 3/8"	1/2"	1/2"	1 3/8"	9000 lbs.
HD-2	7"	5/8"	5/8"	1 5/8"	12000 lbs.
HD-3	8 3/4"	3/4"	3/4"	2"	21000 lbs.
HD-4	10 1/8"	7/8"	7/8"	2 3/8"	30000 lbs.



Link. A rigid link used as a connector for rope, conductor or wire line. Screwdriver removable pin provided in each end.

Model	Length A	Diam. D	Jaw C
LW-1	3 1/2"	1 1/4"	5/8"
LW-2	5"	1 9/16"	3/4"
LW-3	6"	1 7/8"	1"
LW-4	7"	2 1/8"	1 1/4"
LHD-0	3"	1 1/8"	1/2"
LHD-1	3 1/2"	1 3/8"	1/2"
LHD-2	4 1/4"	1 5/8"	5/8"
LHD-3	5 1/4"	2"	3/4"
LHD-4	6 1/4"	2 3/8"	7/8"



Swivel toggle. It is used in conjunction with our ball bearing swivel. Provides a 90° break-over when pulling through angle structures or sharp bends in

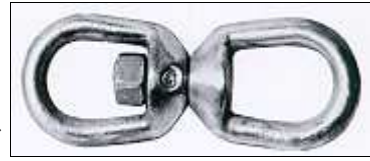
Model	Length A	Diam. D	Jaw C
TW-1	3 1/4"	1 1/4"	5/8"
TW-2	4 3/4"	1 9/16"	3/4"
TW-3	5 3/4"	1 7/8"	1"
TW-4	6 3/4"	2 1/8"	1 1/4"
THD-0	3"	1 1/8"	1/2"
THD-1	3 1/2"	1 3/8"	1/2"
THD-2	4 1/8"	1 5/8"	5/8"
THD-3	5 1/8"	2"	3/4"
THD-4	6 1/8"	2 3/8"	7/8"

WIRE ROPE ACCESSORIES

Miscellaneous hardware



⇐ Jaw and eye swivel



Eye and eye swivel ⇒

Heat treated drop forged steel swivels are available. They are forged of high quality medium carbon 1035 steel and are graphite lubricated. Stock sizes range from 1/4" to 1/2" ; other sizes will be furnished on request.

Swing link



Closed

Open

Drop forged steel swing links are fabricated from the same high quality steel as swivels. They are used for adapting swivels to grips and/or winch lines. They are available in sizes from 1/4" and 1/2" ; other sizes will be furnished on re-

Type	Length	Size of eye	Size of jaw	Metal thickness
Jaw and eye	3"	3/4"	1/2"	1/4"
	3 3/4"	15/16"	1/2"	5/16"
	4 3/4"	1 1/8"	5/8"	3/8"
	6"	1 3/8"	7/8"	1/2"
Eye and eye	3 1/4"	3/4"		1/4"
	4"	15/16"		5/16"
	4 7/8"	1 1/8"		3/8"
	6 1/4"	1 3/8"		1/2"
Swing link		3/8"		1/4"
		3/8"		5/16"
		9/16"		3/8"
		19/32"		7/16"
		5/8"		1/2"
D-102		1"		3/8"
D-103		2"		3/8"
S-302	5 3/4"	1"		3/8"
S-303	5 1/4"	2"		3/8"

"Dee" rings

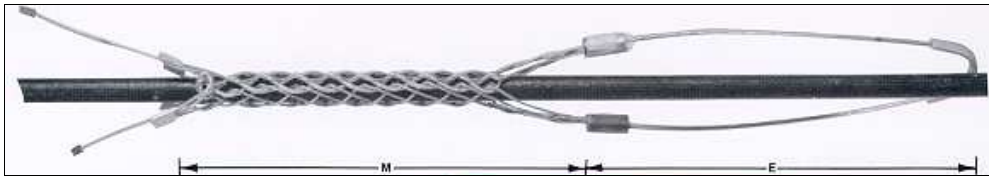


Rope snaps

The above illustrated miscellaneous hardware, drop forged, heat treated and proof load tested, is used in fabricating rope and belting items.

WIRE ROPE ACCESSORIES

Pulling collars



Split lace grip - use this grip for final adjustments and retensioning or to support or suspend wire. Patented, flexible pulling eye tends to equalize radial loads. Aircraft strand steel.

Model	M	E	Grip size	Working load	Breaking strength
FO-25-SL-U	6"	5"	1/4" - 3/8"	500 lbs.	1000 lbs.
FO-37-SL-U	6"	6"	1/4" - 1/2"	500 lbs.	1000 lbs.
FO-50-SL-U	6"	6"	1/2" - 5/8"	600 lbs.	1250 lbs.
FO-62-SL-U	6"	7"	5/8" - 3/4"	600 lbs.	1250 lbs.
FO-75-SL-U	6"	7"	3/4" - 1"	750 lbs.	1500 lbs.
FO-100-SL-U	6"	8"	1" - 1 1/4"	750 lbs.	1500 lbs.



Split rod grip - use this grip as the split lace. Patented, flexible pulling eye. Aircraft strand steel. Heavy-duty steel rod and eyelets maintain their shape for repeated threadings.

Model	M	E	Grip size	Working load	Breaking strength
FO-25-SR-U	6"	5"	1/4" - 3/8"	500 lbs.	1000 lbs.
FO-37-SR-U	6"	6"	1/4" - 1/2"	500 lbs.	1000 lbs.
FO-50-SR-U	6"	6"	1/2" - 5/8"	600 lbs.	1250 lbs.
FO-62-SR-U	6"	7"	5/8" - 3/4"	600 lbs.	1250 lbs.
FO-75-SR-U	6"	7"	3/4" - 1"	750 lbs.	1500 lbs.
FO-100-SR-U	6"	8"	1" - 1 1/4"	750 lbs.	1500 lbs.



Pulling collars - use a pulling collar to save money over buying specific multiple pulling grips. Available with one, two, three or four legs. A pulling collar allows you to attach various sized single grips together. The grips are attached to each collar head with a swing link or swivel. Collars can be ordered with built-in jaw and eye swivels, or swing links can be purchased separately.

Pulling collar series	Break load	Number legs available	Link to use	Swivel to use	Swing link
Series JL	2000 lbs.	1-4	LW-1	HD-00	5/16"
Series 1	5500 lbs.	1-4	LW-1	W-1	7/16"
Series 2	8200 lbs.	1-4	LW-1	W-1	7/16"
Series 3	9800 lbs.	1-4	LW-2	W-2	9/16"

How to order
Please specify the serie number and the number of legs.

WIRE ROPE ACCESSORIES

JL kit for electrical contractors



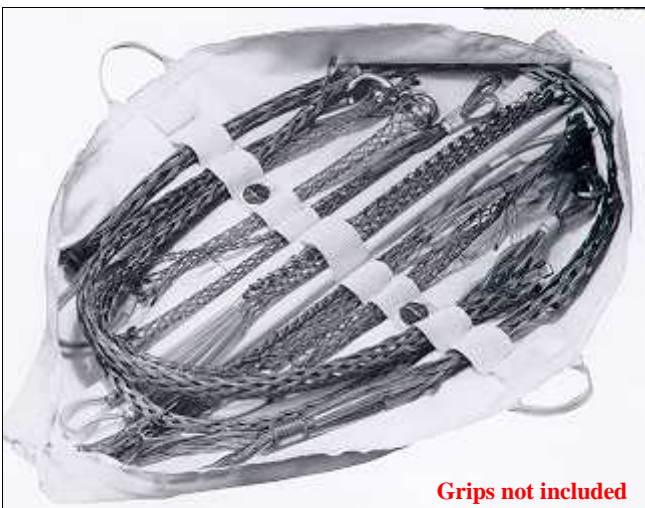
The JL kit is a timesaver for electrical contractors because it contains six special grips for speeding electrical wire pulling. Kit comes in a heavy-duty plastic coated case for years of use.

Kit contains the following : one plastic coated grip case, and the following grips, each plastic coated for greater speed and safety.

Grips may also be ordered individually.

Model	Size	Mesh	UTS	Working load
JL-25	1/4" - 3/8"	6"	1000	350
JL-37	3/8" - 1/2"	8"	1000	350
JL-50	1/2" - 5/8"	10"	1250	400
JL-62	5/8" - 3/4"	12"	1250	400
JL-75	3/4" - 1"	14"	1500	500
JL-100	1" - 1 1/4"	16"	1500	500

Heavy-duty grip and swivel case



Grips not included

Case provides a secure place to store grips and swivels. Constructed of heavy-duty plastic coated canvas with Velcro closures. Plastic lined pockets snap shut for swivels. Case in mildew and water resistant for years of use.

WIRE ROPE ACCESSORIES

Multi-purpose X-serie pulling grips

The XS, X and X-HDFE were designed to simplify the process of selecting a pulling grip. The entire X series is unique for several reasons :

- X model grips can be used overhead or for underground pulls.
- X model grips incorporate a single wire bail which, when put under pressure, conforms to even the tightest clearances. The single wire bail also connects easily with either ball bearing swivels or drop forged friction swivels.
- The reverse weave of all X models insures that the grip and cable will pass smoothly through even the tightest blocks, sheaves, bullwheels...
- The X and X heavy duty feature metal shoulders installed beneath the bail. These shoulders allow the grip to be pulled through the most abrasive conduit or other rough environments, and still be used time after time. These shoulders are color coded to ensure the correct grip size is selected when making a pull.



When a friction swivel is needed for the X-series pulling grips or any other pulling grip. Please refer to the following chart. To order a swivel built into a grip, add "W/S" to the end of the grip part number.

X or XS model	Swivel size	X or XS model	Swivel size
A	5/16"	F	3/8"
B	3/8"	G	1/2"
C	3/8"	H	1/2"
D	3/8"	I	1/2"
E	3/8"	J	1/2"



The X-series grips are color coded for quick identification and organized storage. They are plastic coated which increases the life of the grip, provides a more effective gripping surface, and reduces injuries due to frayed or mangled wire in the pulling grip itself.

This grip is designed with the ball bearing swivel user in mind. The single wire eye allows a swivel to be attached to the grip easily, and helps to alleviate any binding that may occur in the throat of the swivel during a pull. The X model grip also offers a backwards weave that adds pulling surface to the grip itself, and allows the grip to pass through even the tightest of clearances. The X series features metal sleeves near the top of the grip to eliminate wear when pulling through clay conduit, gravel, or other abrasive pulling environments. This series is constructed with galvanized wire, but can be ordered with stainless steel at additional cost.

Part #	Range	Color code	Wk. load	Ultimate tensile	Mesh	Eye
X-A-SW-18"	3/4"-1 1/4"	Light blue	1000	3000	18	5
X-A-DW-18"			1500	3500	18	5
X-A-SW-24"			1700	3400	24	5
X-A-DW-24"			2000	6000	24	5
X-B-TW-26"	1 1/4" - 2"	Red	2500	7500	26	6
X-B-TW-32"			2500	7500	32	6
X-C-TW-32"	2" - 2 3/4"	Purple	3500	10500	32	7
X-C-TW-38"			4500	13500	38	7
X-D-TW-38"	2 3/4" - 3 1/2"	Orange	4500	13500	38	7
X-D-TW-46"			5500	16500	46	7
X-E-TW-46"	3 1/2" - 4 1/4"	Green	5500	16500	46	8
X-E-TW-52"			6500	19500	52	8
X-F-TW-52"	4 1/4" - 4 7/8"	Black	6000	18000	52	9
X-F-TW-58"			7000	21000	58	9
X-G-TW-58"	4 7/8" - 5 1/2"	Yellow	15000	30000	58	10
X-G-TW-64"			15000	30000	64	10
X-H-TW-58"	5 1/2" - 6"	Brown	15000	30000	58	10
X-H-TW-64"			15000	30000	64	10
X-I-TW-58"	6" - 6 3/4"	Turquoise	15000	30000	58	10
X-I-TW-64"			15000	30000	64	10
X-J-TW-58"	6 3/4" - 8"	Aluminum	16500	33000	58	10
X-J-TW-64"			16500	33000	64	10

WIRE ROPE ACCESSORIES

Multi-purpose X-serie pulling grips



The XS series grips feature coated galvanized cable, reverse weave and a single wire bail but will not have metal shoulders. XS series grip are indentified by tags beneath the heavy duty clear tubing. The XS series is designed for normal working conditions.

Part #	Range	Wk. load	Ultimate tensile	Mesh	Eye
XS-A-SW-18"	3/4" - 1 1/4"	1000	3000	18	5
XS-A-DW-18"		1500	3500	18	5
XS-A-SW-24"		1700	3400	24	5
XS-A-DW-24"		2000	6000	24	5
XS-B-TW-26"	1 1/4" - 2"	2500	7500	26	6
XS-B-TW-32"		2500	7500	32	6
XS-C-TW-32"	2" - 2 3/4"	3500	10500	32	7
XS-C-TW-38"		4500	13500	38	7
XS-D-TW-38"	2 3/4" - 3 1/2"	4500	13500	38	7
XS-D-TW-46"		5500	16500	46	7
XS-E-TW-46"	3 1/2" - 4 1/4"	5500	16500	46	8
XS-E-TW-52"		6500	19500	52	8
XS-F-TW-52"	4 1/4" - 4 7/8"	6000	18000	52	9
XS-F-TW-58"		7000	21000	58	9
XS-G-TW-58"	4 7/8" - 5 1/2"	15000	30000	58	10
XS-G-TW-64"		15000	30000	64	10
XS-H-TW-58"	5 1/2" - 6"	15000	30000	58	10
XS-H-TW-64"		15000	30000	64	10
XS-I-TW-58"	6" - 6 3/4"	15000	30000	58	10
XS-I-TW-64"		15000	30000	64	10
XS-J-TW-58"	6 3/4" - 8"	16500	33000	58	10
XS-J-TW-64"		16500	33000	64	10



The heavy duty X model grips are designed for large work loads and rugged conditions. The following heavy duty X models incorporate the use of exceptionally strong mesh, reserve weave, single wire bail and abrasion-resistant metal shoulders. Heavy duty X models are constructed of uncoated aircraft strand galvanized wire.

Part #	Color code	Wk. load	Ultimate tensile	Mesh	Eye
X-HDFE-1/4" - 1/2"	Brown	1200	6000	22	6
X-HDFE-1/2" - 7/8"	Yellow	2400	12000	42	8
X-HDFE-7/8" - 1 3/8"	Black	5700	28800	48	9
X-HDFE-1 3/8" - 2"	Green	9600	48000	50	9
X-HDFE-2" - 2 3/4"	Orange	11500	56600	52	9
X-HDFE-2 3/4" - 3 1/2"	Purple	13500	67200	54	9
X-HDFE-3 1/2" - 4 1/4"	Red	15300	76800	56	9
X-HDFE-4 1/4" - 5"	Lt. blue	17900	86400	58	9

WIRE ROPE ACCESSORIES

Special application suspension grips - hook bail grip



SINGLE WEAVE						DOUBLE WEAVE					
Part number	Range	Wk. Ld.	UTS	Mesh	Eye	Part number	Range	Wk. Ld.	UTS	Mesh	Eye
HB-25-SW	1/4" - 3/8"	500	1000	6"	4"	HB-50-DW	1/2" - 5/8"	1000	2000	8"	4 1/2"
HB-37-SW	3/8" - 1/2"	500	1000	6"	4 1/2"	HB-62-DW	5/8" - 3/4"	1000	2000	10"	5"
HB-50-SW	1/2" - 5/8"	500	1000	8"	4 1/2"	HB-75-DW	3/4" - 1 1/8"	2000	4000	12"	5"
HB-62-SW	5/8" - 3/4"	500	1000	10"	5"	HB-100-DW	3/4" - 1 1/4"	2000	4000	14"	6"
HB-75-SW	3/4" - 1 1/8"	1000	2000	12"	5"	HB-112-DW	1 1/8" - 1 5/8"	3000	6000	14"	7"
HB-100-SW	3/4" - 1 1/4"	1000	2000	14"	6"	HB-162-DW	1 5/8" - 2 1/2"	5000	10000	16"	7"
HB-112-SW	1 1/8" - 1 5/8"	1000	2500	14"	7"	HB-250-DW	2 1/2" - 3 1/2"	6000	12000	18"	8"
HB-162-SW	1 5/8" - 2 1/2"	2250	5000	16"	7"	HB-350-DW	3 1/2" - 4 1/2"	9000	18000	20"	8"
HB-250-SW	2 1/2" - 3 1/2"	3000	6000	18"	8"	HB-450-DW	4 1/2" - 5 1/2"	12000	24000	22"	8"
HB-350-SW	3 1/2" - 4 1/2"	4500	9000	20"	8"						
HB-450-SW	4 1/2" - 5 1/2"	6000	12000	22"	8"						

The hook bail series is used when a connection can not be made with a U-bail. The hook bail series is available in split lace or split rod configurations. If a split grip is needed, add the following to the end of the part number : "SL" for split lace, "SR" for split rod. Add "SS" to the end of the part number if stainless steel mesh is desired.

Special application suspension grips - offset eye grip



SINGLE WEAVE						DOUBLE WEAVE					
Part number	Range	Wk. Ld.	UTS	Mesh	Eye	Part number	Range	Wk. Ld.	UTS	Mesh	Eye
OE-25-SW	1/4" - 3/8"	500	1000	6"	4"	OE-50-DW	1/2" - 5/8"	1000	2000	8"	4 1/2"
OE-37-SW	3/8" - 1/2"	500	1000	7"	4"	OE-62-DW	5/8" - 3/4"	1000	2000	10"	5"
OE-50-SW	1/2" - 5/8"	500	1000	8"	4 1/2"	OE-75-DW	3/4" - 1 1/8"	2000	4000	12"	5"
OE-62-SW	5/8" - 3/4"	500	1000	10"	5"	OE-100-DW	3/4" - 1 1/4"	2000	4000	14"	5 1/2"
OE-75-SW	3/4" - 1 1/8"	1000	2000	12"	5"	OE-112-DW	1 1/8" - 1 5/8"	3000	6000	14"	6"
OE-100-SW	3/4" - 1 1/4"	1000	2000	14"	5 1/2"	OE-162-DW	1 5/8" - 2 1/2"	5000	10000	16"	7"
OE-112-SW	1 1/8" - 1 5/8"	1000	2500	14"	6"	OE-250-DW	2 1/2" - 3 1/2"	6000	12000	18"	8 1/2"
OE-162-SW	1 5/8" - 2 1/2"	2250	5000	16"	7"	OE-350-DW	3 1/2" - 4 1/2"	9000	18000	20"	8 1/2"
OE-250-SW	2 1/2" - 3 1/2"	3000	6000	18"	8 1/2"	OE-450-DW	4 1/2" - 5 1/2"	12000	24000	22"	10"
OE-350-SW	3 1/2" - 4 1/2"	4500	9000	20"	8 1/2"						
OE-450-SW	4 1/2" - 5 1/2"	6000	12000	22"	10"						

The offset eye series is most commonly used in cable placement applications. Use the OE series when a DLE, U or HB model is unsuitable. The offset eye may also be used as a suspension grip. If a split grip is needed, add the following to the end of the part number : "SL" for split lace, "SR" for split rod. Add "SS" to the end of the part number if stainless steel mesh is desired.

WIRE ROPE ACCESSORIES

Special application suspension grips - dual lift eye grip



SINGLE WEAVE					
Part number	Range	Wk. Ld.	UTS	Mesh	Eye
DLE-25-SW	1/4" - 3/8"	500	1000	6"	4"
DLE-37-SW	3/8" - 1/2"	500	1000	7"	4"
DLE-50-SW	1/2" - 5/8"	500	1000	8"	4 1/2"
DLE-62-SW	5/8" - 3/4"	500	1000	10"	5"
DLE-75-SW	3/4" - 1 1/8"	1000	2000	12"	5"
DLE-100-SW	3/4" - 1 1/4"	1000	2000	14"	5 1/2"
DLE-112-SW	1 1/8" - 1 5/8"	1000	2500	14"	6"
DLE-162-SW	1 5/8" - 2 1/2"	2250	5000	16"	7"
DLE-250-SW	2 1/2" - 3 1/2"	3000	6000	18"	8 1/2"
DLE-350-SW	3 1/2" - 4 1/2"	4500	9000	20"	8 1/2"
DLE-450-SW	4 1/2" - 5 1/2"	6000	12000	22"	10"

DOUBLE WEAVE					
Part number	Range	Wk. Ld.	UTS	Mesh	Eye
DLE-50-DW	1/2" - 5/8"	1000	2000	8"	4 1/2"
DLE-62-DW	5/8" - 3/4"	1000	2000	10"	5"
DLE-75-DW	3/4" - 1 1/8"	2000	4000	12"	5"
DLE-100-DW	3/4" - 1 1/4"	2000	4000	14"	5 1/2"
DLE-112-DW	1 1/8" - 1 5/8"	3000	6000	14"	6"
DLE-162-DW	1 5/8" - 2 1/2"	5000	10000	16"	7"
DLE-250-DW	2 1/2" - 3 1/2"	6000	12000	18"	8 1/2"
DLE-350-DW	3 1/2" - 4 1/2"	9000	18000	20"	8 1/2"
DLE-450-DW	4 1/2" - 5 1/2"	12000	24000	22"	10"

The dual lift eye series is most commonly used in cable applications. Use the DLE series when a OE, U or HB model is unsuitable. The DLE may also be used as a suspension grip. If a split grip is needed, add the following to the end of the part number : "SL" for split lace, "SR" for split rod. Add "SS" to the end of the part number if stainless steel mesh is desired.

Special application suspension grips - cord cap grip

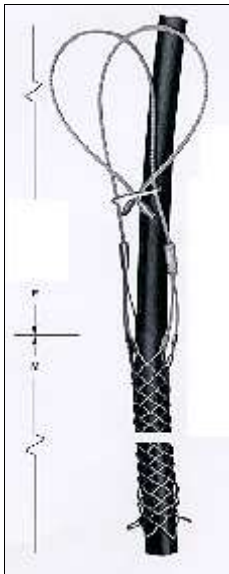


Part number	Range	Wk. Ld.	UTS	Mesh
CC-50	1/2" - 5/8"	500	1000	4 3/4"
CC-62	5/8" - 3/4"	500	1000	6"
CC-75	3/4" - 1 1/8"	1000	2000	8"
CC-100	3/4" - 1 1/4"	1000	2000	10"

These grips are used to prevent electrical cords from pulling out of cord caps.

WIRE ROPE ACCESSORIES

Special application suspension grips - loop bail grip



SINGLE WEAVE						DOUBLE WEAVE					
Part number	Range	Wk. Ld.	UTS	Mesh	Eye	Part number	Range	Wk. Ld.	UTS	Mesh	Eye
LB-25-SW	1/4" - 3/8"	500	1000	10"	18"	LB-50-DW	1/2" - 5/8"	1000	2000	12"	18"
LB-37-SW	3/8" - 1/2"	500	1000	10"		LB-62-DW	5/8" - 3/4"	1000	2000	12"	
LB-50-SW	1/2" - 5/8"	500	1000	12"		LB-75-DW	3/4" - 1 1/8"	2000	4000	14"	
LB-62-SW	5/8" - 3/4"	500	1000	12"		LB-100-DW	3/4" - 1 1/4"	2000	4000	14"	
LB-75-SW	3/4" - 1 1/8"	1000	2000	14"		LB-112-DW	1 1/8" - 1 5/8"	3000	6000	14"	
LB-100-SW	3/4" - 1 1/4"	1000	2000	14"		LB-162-DW	1 5/8" - 2 1/2"	5000	10000	18"	
LB-112-SW	1 1/8" - 1 5/8"	1000	2500	14"		LB-250-DW	2 1/2" - 3 1/2"	6000	12000	24"	
LB-162-SW	1 5/8" - 2 1/2"	2250	5000	18"		LB-350-DW	3 1/2" - 4 1/2"	9000	18000	26"	
LB-250-SW	2 1/2" - 3 1/2"	3000	6000	24"		LB-450-DW	4 1/2" - 5 1/2"	12000	24000	28"	
LB-350-SW	3 1/2" - 4 1/2"	4500	9000	26"							
LB-450-SW	4 1/2" - 5 1/2"	6000	12000	28"							

The loop bail series is used when there is a fixed attachment point. The bail cinches when weight is applied to the mesh. The bail can be disconnected so the user can attach the grip to any available attachment point. If a solid grip is needed, add the following to the end of the part number : "SL" for split lace, "SR" for split rod. Add "SS" to the end of the part number if stainless steel mesh is desired.

Special application suspension grips - U-bail grip



LIGHT DUTY						STANDARD DUTY - SINGLE WEAVE					
Part number	Range	Wk. Ld.	UTS	Mesh	Eye	Part number	Range	Wk. Ld.	UTS	Mesh	Eye
U-25-SWB-PGE	1/4" - 3/8"	500	1000	5"	5 1/2"	U-50-SWB-SW	1/2" - 5/8"	500	1000	8"	6"
U-37-SWB-PGE	3/8" - 1/2"	500	1000	6"	5 1/2"	U-62-SWB-SW	5/8" - 3/4"	500	1000	10"	7"
U-50-SWB-PGE	1/2" - 5/8"	500	1000	8"	6"	U-75-SWB-SW	3/4" - 1 1/8"	1000	2000	12"	8"
U-62-SWB-PGE	5/8" - 3/4"	500	1000	10"	7"	U-100-SWB-SW	3/4" - 1 1/4"	1000	2000	14"	9"
U-75-SWB-PGE	3/4" - 1 1/8"	1000	2000	12"	8"	U-112-SWB-SW	1 1/8" - 1 5/8"	1000	2500	14"	10"
U-100-SWB-PGE	3/4" - 1 1/4"	1000	2000	14"	9"	U-162-SWB-SW	1 5/8" - 2 1/2"	2250	5000	16"	16"
U-112-SWB-PGE	1 1/8" - 1 5/8"	1000	2500	14"	10"	U-250-SWB-SW	2 1/2" - 3 1/2"	3000	6000	18"	18"
U-162-SWB-PGE	1 5/8" - 2 1/2"	2250	5000	16"	16"	U-350-SWB-SW	3 1/2" - 4 1/2"	4500	9000	20"	20"
U-250-SWB-PGE	2 1/2" - 3 1/2"	3000	6000	18"	18"	U-450-SWB-SW	4 1/2" - 5 1/2"	6000	12000	22"	20"

HEAVY DUTY - DOUBLE WEAVE											
Part number	Range	Wk. Ld.	UTS	Mesh	Eye	Part number	Range	Wk. Ld.	UTS	Mesh	Eye
U-50-SWB-DW	1/2" - 5/8"	1000	2000	8"	6"	U-162-SWB-DW	1 5/8" - 2 1/2"	5000	10000	16"	16"
U-62-SWB-DW	5/8" - 3/4"	1000	2000	10"	7"	U-250-SWB-DW	2 1/2" - 3 1/2"	6000	12000	18"	18"
U-75-SWB-DW	3/4" - 1 1/8"	2000	4000	12"	8"	U-350-SWB-DW	3 1/2" - 4 1/2"	9000	18000	20"	20"
U-100-SWB-DW	3/4" - 1 1/4"	2000	4000	14"	9"	U-450-SWB-DW	4 1/2" - 5 1/2"	12000	24000	22"	20"
U-112-SWB-DW	1 1/8" - 1 5/8"	3000	6000	14"	10"						

These grips are constructed of galvanized wire and are used for bus drops and general suspension. The standard and heavy duty models feature plastic coated wire mesh which provides a much more dependable gripping surface.

WIRE ROPE ACCESSORIES

Special application suspension grips - riser hook bail grip



This series of grips is designed to permanently support cable in conduit. Special hooked ends hook over conduit, eliminating the need for a bushing. The LRHB series is available in split lace or split rod configurations. For split lace, add "SL" to the end of the part number. For split rod, add "SR". Split grips are used when ends of cable are not available.

SINGLE WEAVE				
Part number	Range	Wk. Ld.	UTS	Mesh
LRHB-50-SW	1/2" - 5/8"	500	1000	8"
LRHB-62-SW	5/8" - 3/4"	500	1000	10"
LRHB-75-SW	3/4" - 1 1/8"	1000	2000	12"
LRHB-100-SW	3/4" - 1 1/4"	1000	2000	14"
LRHB-112-SW	1 1/8" - 1 5/8"	1000	2500	14"
LRHB-162-SW	1 5/8" - 2 1/2"	2250	5000	16"
LRHB-250-SW	2 1/2" - 3 1/2"	3000	6000	18"
LRHB-350-SW	3 1/2" - 4 1/2"	4500	9000	20"
LRHB-450-SW	4 1/2" - 5 1/2"	6000	12000	22"

Special application suspension grips - inline horizontal support grip



CLOSED MESH				SPLIT MESH LACE CLOSING			
Part number	Range	Wk. Ld.	UTS	Part number	Range	Wk. Ld.	UTS
IH-50-SW	1/2" - 5/8"	500	1000	IH-50-SW-SL	1/2" - 5/8"	500	1000
IH-62-SW	5/8" - 3/4"	500	1000	IH-62-SW-SL	5/8" - 3/4"	500	1000
IH-75-SW	3/4" - 1 1/8"	1000	2000	IH-75-SW-SL	3/4" - 1 1/8"	1000	2000
IH-100-SW	3/4" - 1 1/4"	1000	2000	IH-100-SW-SL	3/4" - 1 1/4"	1000	2000
IH-112-SW	1 1/8" - 1 5/8"	1000	2500	IH-112-SW-SL	1 1/8" - 1 5/8"	1000	2500
IH-162-SW	1 5/8" - 2 1/2"	2250	5000	IH-162-SW-SL	1 5/8" - 2 1/2"	2250	5000
IH-250-SW	2 1/2" - 3 1/2"	3000	6000	IH-250-SW-SL	2 1/2" - 3 1/2"	3000	6000
IH-350-SW	3 1/2" - 4 1/2"	4500	9000	IH-350-SW-SL	3 1/2" - 4 1/2"	4500	9000
IH-450-SW	4 1/2" - 5 1/2"	6000	12000	IH-450-SW-SL	4 1/2" - 5 1/2"	6000	12000

These grips are designed to support horizontal industrial lines or cords and are constructed of high grade coated galvanized wire for long life and reliability. The inline series is available in closed, split rod or split lace mesh configurations. Split rod is indicated by "SR", split lace by "SL". Closed mesh has neither SL or SR included in the part number.

WIRE ROPE ACCESSORIES

Special heads

In addition to our regular grips, we illustrate some of the special purpose grips manufactured. All styles are fabricated from highest quality flexible Aircraft Strand steel with a protective plastic coating. These may be furnished from Model JL-75 through model E. All special heads available with steel lift eye, as illustrated in Model

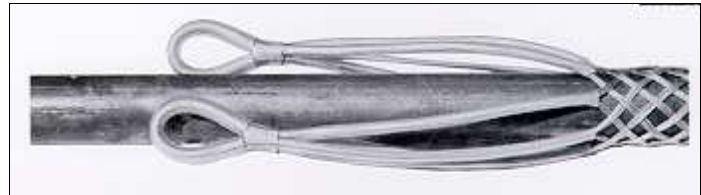
MODEL SE

Single lifting eye with dual topside opening.



MODEL DLE

Dual lift with suspension lift eyes.



MODEL TSO

Topside multiple openings with single lift steel reinforced eye.



MODEL U

Single bail top opening for bus drops and suspension.



MODEL O

For stringing overhead synthetic ropes or swivel lines where no swivel is required, or to join conductor or rope splice. Used in reaving conductor and/or rope.

WIRE ROPE ACCESSORIES

Sealed swivels, R-series grips and swivel eye grips



Sealed ball bearing directional boring swivels prevent equipment's rotational torque from interfering with the product being pulled. In a typical boring application, the swivel is attached behind the reamer head and to the pipe or cable being pulled through the bore. Permanently sealed to keep contaminants out, they never require lubrication.

Part number	Overall length A	Diameter of pin B	Jaw opening C	Overall diameter D	Working load
HD-00-S	4"	5/16"	3/8"	7/8"	1500 lbs.
HD-0-S	5 1/16"	7/16"	1/2"	1 1/8"	5400 lbs.
HD-1-S	6 3/8"	1/2"	1/2"	1 3/8"	9000 lbs.
HD-2-S	7"	5/8"	5/8"	1 5/8"	12000 lbs.
HD-3-S	8 3/4"	3/4"	3/4"	2"	21000 lbs.
HD-4-S	10 1/8"	7/8"	7/8"	2 3/8"	30000 lbs.



Part number	Size range	U.T.S.	Working load	Eye	Mesh
XS-JL-25-R	1/4" - 1/2"	1200 lbs.	600 lbs.	3 1/2"	6"
XS-JL-50-R	1/2" - 3/4"	2500 lbs.	1250 lbs.	4"	8"
XS-JL-100-R	3/4" - 1"	2800 lbs.	1400 lbs.	4 1/2"	10"
XS-JL-125-R	1" - 1 1/2"	4500 lbs.	2250 lbs.	5 1/2"	13"

The JL-R series grip is designed to be used in secondary light duty cable pulls. The neoprene cone at the front of the grip helps the grip and cable go around the tightest bends easily and smoothly. If installed properly, the cone can also help eliminate possible cable lubricant migration by sealing off the end of the cable during a pull.



The SEG series are available with hardened steel rotating eyes. These eyes are durable, compact, and streamlined and will thread through blocks and sheaves without binding. The rotating eye is not a ball bearing swivel and will not turn while under tension. It will turn to relieve pulling torque when the pulling tension is released. If a continual swivel movement is needed, a ball bearing swivel should be used.

Reference swivel usages per following 1-3 explanations :

1- HD series for overhead and high tension underground

2- W series for standard underground pulling

3- HD-S series when a high tension environment is anticipated, coupled with a need for a sealed swivel : i.e. directional boring applications.

In addition, the SEG series can be customized to meet customer specifications.

We offer the following options :

A. Special mesh lengths. When a customer would like a different mesh length than the one specified on the SEG chart.

B. Mesh available in three different types of wire for varying applications and environments : galvanized (standard), plastic coated galvanized, stainless.

All inquiries on custom made grips are given our prompt attention.

Part number	Mesh length	Size range	Working load	Breaking strength
SEG-0	24"	1/4" - 1/2"	1200	6000
SEG-1	36"	1/2" - 1"	3500	10000
SEG-2	42"	1" - 1 1/2"	9600	28800
SEG-3	48"	1 1/2" - 2"	11200	32000
SEG-4	60"	2" - 2 1/2"	16300	49000
SEG-5	60"	2 1/2" - 3"	16700	50300
SEG-6	66"	3" - 3 1/2"	16700	50300
SEG-7	72"	3 1/2" - 4"	16700	50300
SEG-8	72"	4" - 4 1/2"	23300	70000
SEG-9	72"	4 1/2" - 5"	23300	70000
SEG-10	72"	5" - 5 1/2"	23300	70000

Part number	A	B	C	D	E
SEG-0	3 1/4"	7/8"	3/8"	15/32"	17/32"
SEG-1	3 1/2"	1"	1/2"	17/32"	5/8"
SEG-2	4 5/8"	1 3/8"	1/2"	43/64"	7/8"
SEG-3	6 1/2"	1 5/8"	5/8"	55/64"	1"
SEG-4	7 1/2"	1 7/8"	21/32"	63/64"	1 3/16"
SEG-5/6/7	8"	2"	11/16"	1 1/16"	1 1/4"
SEG-8/9/10	8 1/2"	2 1/4"	13/16"	1 1/8"	1 3/8"

WIRE ROPE ACCESSORIES

Flex-eye heavy duty grip and flex-eye multi-grip



FLEX-EYE HEAVY DUTY GRIP

Here is a powerful grip for pulling big conductors and will travel smoothly through pulleys. It is made of highest quality, flexible aircraft strand steel, integrated with a new flexible eye. The eye itself is composed of braided strands (rather than being rigid) to give it maximum flexibility in going around angle pulls or through small openings. Strands of the grip are retained at the head by a stainless steel spring, eliminating a rigid compression sleeve.

Size range	U.T.S.	Wk. Ld.
1/4" - 1/2"	6000 lbs.	1200 lbs.
1/2" - 7/8"	12000 lbs.	2400 lbs.
7/8" - 1 3/8"	28800 lbs.	5700 lbs.
1 3/8" - 2"	48000 lbs.	9600 lbs.
2" - 2 3/4"	57600 lbs.	11500 lbs.
2 3/4" - 3 1/2"	67200 lbs.	13500 lbs.
3 1/2" - 4 1/4"	76800 lbs.	15300 lbs.
4 1/4" - 5"	86400 lbs.	17900 lbs.



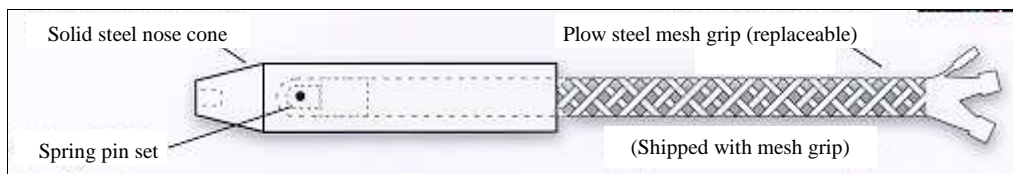
FLEX-EYE MULTI-GRIP

For support and pulling of different size cables from one flexible eye. This gives complete support for each conductor, where supporting a bundle is not desirable. If used in conjunction where severe vibration it may be encountered, i.e. mine shaft, industrial, adjacent to heavily traveled freeways.

Illustration shows :
 1-A-3/4"-1 1/4" single weave
 1-A-3/4"-1 1/4" double weave
 1-B-1 1/4"-2" triple weave

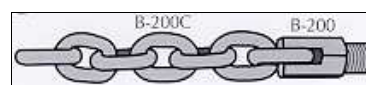
When ordering, please give sizes and number of conductors to be supported.

Maxi-grip



Maxi-grips are durable and economical tools designed for pulling underground pipe and cable with speed and ease. Maxi-grips consist of two primary components - a uniquely designed steel nose cone device and a heavy duty plastic coated galvanized steel mesh grip. Six models enable contractors to pull pipe and cable from 1/2" to 4 1/2" outside diameters. Unique nose cone design provides the user with several economic and time saving benefits not found in any other pulling device on the market today. First, each maxi-grip accommodates multiple sizes of pipe and cable, thereby minimizing contractor tooling costs. Second, the tapered nose cone provides a large, smooth compacted boring for pipe and cable to follow, thus reducing friction and allowing longer pulls. Also, the large boring eliminates cables looping when boring walkways and driveways. Third, the nose cone design eliminates the need to seal pipe opening against outside contamination. The user merely slips the pipe into the nose cone and pulls the pipe - a real time saver. Fourth, since the mesh grips are mounted inside the nose cone,

MAXI-GRIP			REPLACEMENT MESH GRIPS	PIN SET
Model No.	Pipe size	Grip range	Model No.	Model No.
MG-100A	1/2" - 3/4"	.75" - 1.25"	A-20	SP-100
MG-100B	3/4" - 1"	1.0" - 1.375"	B-24	SP-100
MG-125A	3/4" - 1 1/4"	1.0" - 1.625"	B-24	SP-125
MG-200A	1 1/2" - 2"	1.75" - 2.375"	C-26	SP-200
MG-300	2 1/2" - 3"	2.75" - 3.5"	D-38	SCS-4 (bolt)
MG-400	3 1/2" - 4"	4.0" - 4.5"	F-52	SCS-5 (bolt)



◆ Lost motion assembly LMA-100

LMA- components

Model No.	Description	Qty req'd
B-200	Bushing adapter	1
B-200 C	Chain (high-test)	1
B-200PS	Pin set	1

WIRE ROPE ACCESSORIES

Hammer type wire rope cutter



Model	Capacity (in.)	Height (in.)	Base (in.)	Weight (lbs)
1	5/8	6	3 1/2	7
1A	1 1/16	7	6 1/4	15
2	1 1/2	9	7 3/4	28

3 models are available :

- Model 1 : for casual use.
- Model 1A : for regular use.
- Model 2 : for hard working conditions.

**We also supply spare parts for these wire rope cutters :
dies, blades...**

SEDRA MARINE

WIRE ROPE ACCESSORIES

Manual hydraulic wire rope cutter



Model	Capacity (in.)	Dimensions L x W x H (in.)	Weight (lbs)
W70	3/4	12 x 3 5/8 x 6	21
P70	1 1/8	14 x 4 1/8 x 7	34
C70	1 3/4	18 1/2 x 5 x 8	66

These models will operate underwater.

**We also supply spare parts for these wire rope cutters :
dies, blades...**

SEDRA MARINE

WIRE ROPE ACCESSORIES

Socketing compound



The Wirelock cold socketing system consists of two cans : one containing a polyester resin and one containing a filler - which, when mixed together and poured into the socket, will gel in approximately 10 minutes in the ambient temperatures. Booster kits can be supplied with the standard kit to compensate for low ambient temperatures.

When ordering, please specify gel time required and local ambient temperature e.g. 10 minute gel at 70° F to 80° F.

Ø rope socket size (in.)	Quantity required (cm ³ or cc) *	Ø rope socket size (in.)	Quantity required (cm ³ or cc) *
1/4	9	1 3/4	700
5/16	17	1 7/8	700
3/8	17	2	1265
7/16	35	2 1/8	1265
1/2	35	2 1/4	1410
9/16	52	2 3/8	1410
5/8	52	2 1/2	1830
3/4	86	2 5/8	1830
7/8	125	2 3/4	2250
1	160	3	3160
1 1/8	210	3 1/4	3795
1 1/4	350	3 1/2	4290
1 3/8	350	3 3/4	5980
1 1/2	420	4	7730
1 5/8	495		

Wirelock is 100% efficient when used with steel wire rope, galvanised wire ropes and stainless steel wire ropes.

Within the gel time, more than one socket can be poured using kits of suitable total volume for the number of sockets required.

	Unit weight	
	lb	kg
100 cc	.44	.2
250 cc	1.1	.5
500 cc	2.2	1.0
1000 cc	4.4	2.0
2000 cc	8.8	4.0