

# LIFT-IT<sup>®</sup>, THE TRUSTED LEADER FOR

# INDUSTRIAL RECOVERY

PRODUCTS FOR DEMANDING PROFESSIONALS

## QUALITY

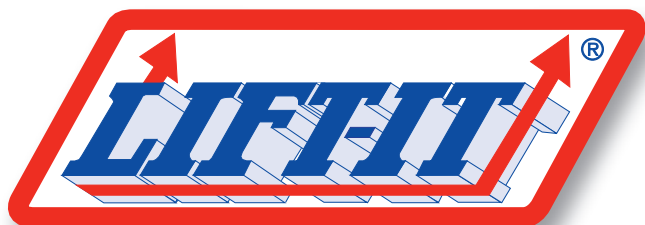
ISO 9001 / AS9100 QUALITY MANAGEMENT SYSTEM  
ALL RECOVERY PRODUCTS AND RIGGING SUPPLIED BY LIFT-IT<sup>®</sup>  
MANUFACTURING MEET OR EXCEED ASME B30.9, AND CANADIAN  
REGULATIONS SET FORTH BY THE STANDARDS COUNCIL OF CANADA  
AND/OR PROVINCIAL REQUIREMENTS SUCH AS ALBERTA  
REGULATION 191/2021 PART 21

## SERVICE

MANY CLAIM 24-7-365 SERVICE, BUT FEW DELIVER.  
WE HAVE PROVEN TIME AFTER TIME, DAY OR NIGHT,  
WE'LL TURN ON THE LIGHTS AND HELP GET YOU UNSTUCK!

## INNOVATION

INDUSTRIAL RECOVERY SYSTEMS | SOFT SHACKLES | DYNEEMA<sup>®</sup> PROTECTION  
HMPE EYE PROTECTION | CUSTOM COVER OPTIONS  
INSPECTION TRAINING | CERTIFIED RIGGER



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WWW.LIFT-IT.COM



2023 INDUSTRIAL RECOVERY



An Industrial Vehicle Recovery System is built around multiple components, each with a unique purpose.

- **Y-Bridle:** Allows pulling on dual connection points of the vehicle with a single main Recovery Rope.
- **Soft Shackle:** Connects Y-Bridle to main Recovery Rope, may be planned as the "weak link" and/or "sacrificial" component of the system.
- **Main Recovery Rope / tow line:** Attaches to pulling vehicle.

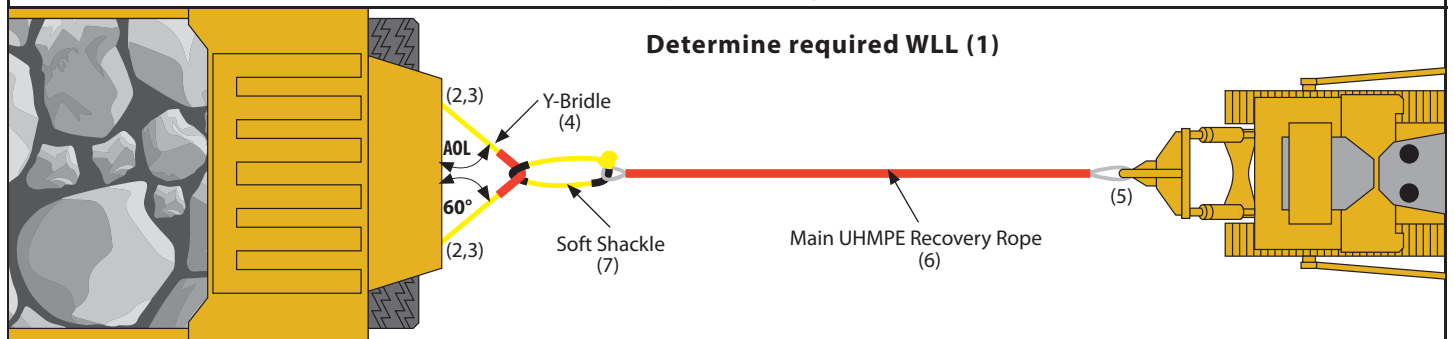
Lift-It® offers individual components as well as complete systems that are built specifically to meet your recovery needs. All of our UHMPE Recovery Rope / tow line products are built in our facility in Pomona, California by expert fabricators using quality materials and proven fabrication procedures. We have validated ratings through extensive testing utilizing our 1.3 million Lbs. SAHM Splice test bed, and all UHMPE Recovery Ropes are pulled to 20% of Straight-Line Break Strength (SLBS) to set the splices. Each Industrial Recovery Product is tagged with the SLBS, 5:1 and 3:1 Work Load Limits (WLL), length, unique serial number and other important information for the user.



5" Endless Rope being pulled to 200% Proof Test. 1.23 Million Lbs.

Mike giving perspective for the 5" Endless Rope with NO LOAD!

## Industrial Recovery Planning Considerations



When planning your Industrial Recovery activity, a qualified person must always consider the following:

1. Determine the required Work Load Limits for the recovery components based on pulling force of recovering vehicle, stuck vehicle weight and any additional resistance (see the LIFT-IT® RECOVERY PRODUCTS WLL CALCULATOR WORKSHEET on page 9).
  2. Identify connection point(s) with adequate strength, size, condition and spatial allowance for attachment to the stuck vehicle.
  3. Select appropriate attachment method, i.e., Soft Shackle, Wide Body Shackle, etc., to allow connection of the Y-Bridle to the stuck vehicle.
  4. Select Y-Bridle with an adequate strength and length that provides a **minimum** of 60° Angle of Loading (AOL) (multiply the span of the connection points x 2 to get a length that provides a 60° angle).
    - Confirm with the vehicle and/or connection point manufacturer that intended connection points are designed for angular loading and upward or downward forces, etc., that may occur during recovery activities and may affect WLL and/or proper use.
  5. Identify connection point size, adequate strength, spatial allowance and additional Recovery Rope protection needed at the pulling vehicle connection point. A qualified person must determine if the connection point, i.e., ripper shank, requires a longer length eye than standard for a proper relationship that will not cause damage to the Recovery Rope. Some prefer to use a Soft Shackle as a "sacrificial" connection.
  6. Select appropriate strength and length main UHMPE Recovery Rope.
  7. Determine proper connection of Y-Bridle to the main Recovery Rope, such as but not limited to a Soft Shackle. Ensure that all protection devices, i.e., SX Guard, CMSDF/CMQTS, etc., are positioned properly.
- During recovery activities and after the stuck vehicle is freed, care must be taken not to drive over any Recovery Product. Recovery Products may be damaged if driven over or dragged.
  - Due to the nature of synthetic fibers, Recovery Products may require rest periods between use to return to their original length. Be aware that excessive pulls on a Recovery Products over a short period of time may cause a buildup of excessive heat that could cause failure which may result in SEVERE INJURY or DEATH.

**⚠ WARNING** DO NOT shock load Recovery Products, connection points and/or other components used in the recovery activity. The additional stress caused by shock loading can exceed the Work Load Limit and damage Recovery Products, connection points and/or other components and may result in SEVERE INJURY or DEATH.

- DO NOT allow Recovery Products to slip or slide across any vehicle edges or surfaces.

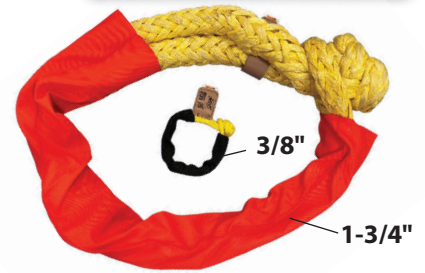
The guidelines presented are only some of the many necessary considerations that must be addressed for each recovery activity. Every recovery activity is different and has variables that cannot be anticipated by the Recovery Product manufacturer. A qualified person who is on-site must assess all factors and ensure that industrial recovery activities are performed properly and safely. **Safety is always the top priority.**



# UHMPE Soft Shackles



Lift-It® Soft Shackles can be used as a lightweight replacement for common heavy metal shackles. Each Lift-It® Soft Shackle is constructed from UHMPE rope and includes Cordura® tubular chafe protection. Lift-It® Soft Shackles are clearly labeled with Work Load Limits, won't rust and do not require three men and a small boy to carry!



**⚠ WARNING** NEVER use Lift-It® Soft Shackles for lifting.

**⚠ WARNING** Lift-It® Soft Shackles must only be used by a qualified person.

Stock Number	Rope Diameter*		Closed Length		Straight-Line Break Strength SLBS <sup>1</sup> (Lbs.)	Straight-Line Break Strength SLBS <sup>1</sup> (t)	WLL @ 5:1 (Lbs.)	WLL @ 5:1 (t)	WLL @ 3:1 (Lbs.)	WLL @ 3:1 (t)	Weight (Lbs.)
	(In.)	(MM)	(In.)	(M)							
SSIU-UHMPE-3/8X24	3/8	9	24	.61	35,000	15	7,000	3.16	11,900	5	1
SSIU-UHMPE-7/16X24	7/16	11	24	.61	40,500	18	8,100	3.66	13,500	6	1
SSIU-UHMPE-1/2X24	1/2	12	24	.61	43,000	21	8,600	3.9	14,400	7	1
SSIU-UHMPE-9/16X24	9/16	14	24	.61	67,000	30	13,400	6.06	22,300	10	1
SSIU-UHMPE-5/8X30	5/8	16	30	.76	75,000	33	15,000	6.8	25,000	11	1
SSIU-UHMPE-3/4X30	3/4	18	30	.76	91,000	42	18,200	8.24	30,000	14	1
SSIU-UHMPE-7/8X40	7/8	22	40	1.02	109,500	51	21,900	9.92	36,600	17	2
SSIU-UHMPE-1X40	1	25	60	1.52	135,000	60	27,000	12.24	45,000	20	3
SSIU-UHMPE-1-1/4X72	1-1/4	32	72	1.83	241,000	108	48,200	21.86	80,000	36	4
SSIU-UHMPE-1-1/2X72	1-1/2	38	72	1.83	370,000	168	74,000	33.56	124,000	56	9
SSIU-UHMPE-1-3/4X72	1-3/4	45	72	1.83	500,000	228	100,000	45.34	166,000	76	11
SSIU-UHMPE-2X72	2	50	72	1.83	625,000	282	125,000	56.68	208,000	94	16
SSIU-UHMPE-2-1/2X96	2-1/2	64	96	2.44	800,000	363	160,000	72.56	266,000	121	25

<sup>1</sup>SLBS is based upon destruction testing done in laboratory testing conditions which will NEVER be duplicated during your actual usage. SLBS is also based upon the product being in a NEW and UNUSED condition.

**\*Referenced Rope Diameter must not be used for determination of connection points or fitment. Finished Soft Shackle body diameter will be at least twice (2X) the Rope Diameter, and will exceed 3X the rope diameter at the base of the knot.**



## Lift-It® Soft Shackle Installation Instructions (same procedure for all sizes)

To open the Soft Shackle, hold the base of the Noose and pull the rope that forms the Noose to expand it. To disengage, Lift the Noose over the Knot.	Pass the Soft Shackle Body through the connection points. Ensure that connection points will not damage the Soft Shackle. Do not allow twists in the Body.	To close the Soft Shackle, place the Noose over the Knot (1) and cinch the Noose securely around the Body and against the base of the Knot (2).	NOOSE must always be at the base of the KNOT Always ensure that Sleeves are properly placed and that the Noose is connected at the base of the Knot. NEVER attach the base of the Noose, the Noose or the Knot to connection points. NEVER shock load Recovery Products and always remember, <b>Slow &amp; Steady!</b>



Lift-It® Synthetic Recovery Ropes / tow lines have long been the best choice to replace heavy, cumbersome wire rope slings for industrial off highway towing and recovery applications. Each Lift-It® Recovery Rope is constructed from Proline12® UHMPE rope and features abrasion resistant HMPE eye protection. Each rope body is covered with high visibility Orange Cordura® tubular chafe protection standard (Velcro® is available), and all assemblies feature durable identification tags with straight line break strength, Work Load Limits in 5:1 & 3:1 design factors and unique serial numbers for inventory management and reorder purposes.

To determine the correct size recovery rope, you must identify the weight of the vehicle being recovered, additional resistance from mud/snow/sand etc., slope resistance, any potential vehicle damage causing resistance such as locked or seized axles among many other factors (see the Estimation Worksheet). In many cases the pulling power of the recovery vehicle will be the main factor when determining the Work Load Limit requirements. Read and understand all product and warning information provided in both the Recovery Product User Guide and the Specific Product Guide, available by scanning the QR Code on many of the Lift-It® tags and labels or available at [www.lift-it.com/product-warnings-and-information](http://www.lift-it.com/product-warnings-and-information), and always follow OSHA, MSHA, ASME, federal, state, provincial, industry, corporate, association, job site specific, insurance, vehicle manufacturer, best practice and manufacturer warnings and guidelines.



Only a qualified person that has knowledge and insight into the specific details and potential hazards associated with the particular vehicle recovery activity can determine the appropriate design factor. Straight Line Break Strength (SLBS) is based upon destruction testing done in laboratory testing conditions which will NEVER be duplicated during your actual usage. SLBS is also based upon the product being in NEW and UNUSED condition. Even when used properly, recovery ropes may have experienced UV exposure, wear and may have undetected, potentially detrimental conditions that may have an impact on actual SLBS of a used rope. Visual inspection cannot accurately determine the residual strength of Recovery Ropes / tow lines connection components or protection.

## EYE & EYE UHMPE TOW / RECOVERY ROPE SPECIFICATIONS\*

Stock Number	Straight-Line Break Strength SLBS (Lbs.)	Straight-Line Break Strength SLBS (t)	WLL @ 5:1 (Lbs.)	WLL @ 5:1 (t)	WLL @ 3:1 (Lbs.)	WLL @ 3:1 (t)	Eye Length (Inches)	Eye Diameter (Inches) with SX	Rope Diameter (Inches)	Rope Diameter (MM)
TR-EESX18-UHMPE-1/2-T-O	31,300	14.19	6,260	2.83	10,433	4.7	12	3/4	1/2	12
TR-EESX18-UHMPE-5/8-T-O	51,400	23.31	10,280	4.66	17,133	7.7	12	7/8	5/8	16
TR-EESX18-UHMPE-3/4-T-O	68,500	31.07	13,700	6	22,833	10	12	1-1/8	3/4	19
TR-EESX18-UHMPE-7/8-T-O	92,500	41.96	18,500	8	30,833	14	18	1-1/4	7/8	22
TR-EESX18-UHMPE-1-T-O	110,000	49.9	22,000	10	36,667	16	18	1-1/2	1	25
TR-EESX18-UHMPE-1-1/4-T-O	165,000	74.9	33,000	15	55,000	25	18	1-3/4	1-1/4	32
TR-EESX24-UHMPE-1-1/2-T-O	221,000	100.3	44,200	20	73,667	33	24	2	1-1/2	38
TR-EESX24-UHMPE-1-5/8-T-O	291,000	132.1	58,200	26	97,000	44	24	2-1/8	1-5/8	41
TR-EESX24-UHMPE-1-3/4-T-O	314,000	142.5	62,800	28	104,667	47	24	2-1/4	1-3/4	44
TR-EESX24-UHMPE-2-T-O	355,000	161.1	71,000	32	118,333	53	24	2-1/2	2	50
TR-EESX30-UHMPE-2-1/4-T-O	481,000	218.3	96,200	44	160,333	72	30	2-3/4	2-1/4	57
TR-EESX36-UHMPE-2-1/2-T-O	530,000	240.6	106,000	48	176,667	80	36	3	2-1/2	63
TR-EESX36-UHMPE-2-3/4-T-O	660,000	299	132,000	60	220,000	100	36	3-1/4	2-3/4	68
TR-EESX36-UHMPE-3-T-O	780,000	354.0	156,000	71	260,000	118	36	3-1/2	3	76
TR-EESX36-UHMPE-3-1/4-T-O	940,000	426.3	188,000	85	313,333	142	36	3-3/4	3-1/4	82
TR-EESX36-UHMPE-3-1/2-T-O	1,108,000	502.9	221,600	101	369,333	167	36	4	3-1/2	89





Lift-It® Endless – with Formed Eye Synthetic Recovery Ropes / tow lines offer the ease of use of an Eye & Eye configuration, with the increased Work Load Limit that an Endless design provides.

Each Lift-It® Endless – Eye & Eye Recovery Rope is constructed from UHMPE rope fabricated as an endless grommet, then eyes are formed that feature abrasion resistant HMPE eye protection. Other eye treatments are available on request.



PULLING FORCE OF CAT MINE VEHICLES (LBS.)			
D-8	139,000	785D	187,300
D-9	161,000	793F	230,000
D-10	225,000	795F	295,600
D-11	330,600	797F	340,000



**ENDLESS – SEIZED EYE & EYE UHMPE TOW / RECOVERY ROPE SPECIFICATIONS\***

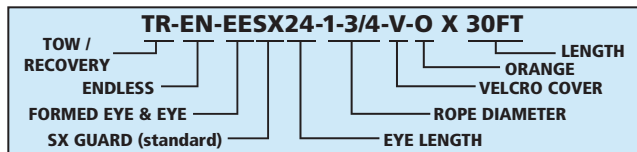
Stock Number	Straight-Line Break Strength SLBS (Lbs.)	Straight-Line Break Strength SLBS (t)	WLL @5:1 (Lbs.)	WLL @5:1 (t)	WLL @3:1 (Lbs.)	WLL @3:1 (t)	Eye Length (Inches)	Eye Diameter (Inches) with SX	Rope Diameter (Inches)	Rope Diameter (MM)
TR-EN-EESX18-UHMPE-5/8-T-O	84,810	38.46	16,962	7.69	28,270	12.8	12	7/8	5/8	16
TR-EN-EESX18-UHMPE-3/4-T-O	113,025	51.26	22,605	10	37,675	17	12	1-1/8	3/4	19
TR-EN-EESX18-UHMPE-7/8-T-O	152,790	69.3	30,558	14	50,930	23	18	1-1/4	7/8	22
TR-EN-EESX18-UHMPE-1-T-O	173,250	78.58	34,650	16	57,750	26	18	1-1/2	1	25
TR-EN-EESX18-UHMPE-1-1/4-T-O	259,050	117.5	51,810	24	86,350	39	18	1-3/4	1-1/4	32
TR-EN-EESX24-UHMPE-1-1/2-T-O	354,750	160.9	70,950	32	118,250	54	24	2	1-1/2	38
TR-EN-EESX24-UHMPE-1-5/8-T-O	404,250	183.3	80,850	37	134,750	61	24	2-1/8	1-5/8	41
TR-EN-EESX24-UHMPE-1-3/4-T-O	502,400	227.8	100,480	46	167,467	76	24	2-1/4	1-3/4	44
TR-EN-EESX24-UHMPE-2-T-O	610,335	276.8	122,067	55	203,445	92	24	2-1/2	2	50
TR-EN-EESX30-UHMPE-2-1/4-V-O	775,665	351.8	155,133	70	258,555	117	30	2-3/4	2-1/4	57
TR-EN-EESX36-UHMPE-2-1/2-V-O	939,510	426.1	187,902	85	313,170	142	36	3	2-1/2	63
TR-EN-EESX36-UHMPE-2-3/4-V-O	1,152,360	523	230,472	105	384,120	174	36	3-1/4	2-3/4	68
TR-EN-EESX36-UHMPE-3-V-O	1,351,350	612.9	270,270	123	450,450	204	36	3-1/2	3	76
TR-EN-EESX36-UHMPE-3-1/4-V-O	1,551,000	703.5	310,200	141	517,000	235	36	3-3/4	3-1/4	82
TR-EN-EESX36-UHMPE-3-1/2-V-O	1,828,200	829.8	365,640	166	609,400	276	36	4	3-1/2	89

\*Common sizes are shown, however custom eye sizes, lengths and Tow / Recovery Rope ratings are readily available.

Tubular Cordura® Sleeve (shown above) is standard, Velcro Sleeve available upon request

**HOW TO ORDER**

**1. COMPLETE STOCK NUMBER**



**2. EYE LENGTH:** Unless otherwise specified Eye Lengths will be as shown in the chart above.

**3. ROPE DIAMETER:** Unloaded diameter of the bare rope. Splices are approximately two times larger diameter.

**4. COVER (Body Sleeve):**  
 Style: V for Velcro / T for Tubular (standard)  
 Color: B for Black / O for Orange (standard)  
 (Ask a sales representative about other available options).

**5. RECOVERY ROPE LENGTH:** Unless otherwise specified: Lengths are measured as bearing to bearing.

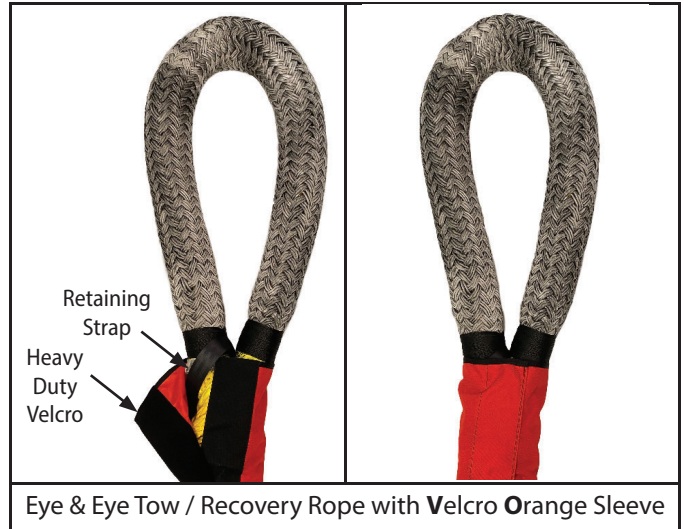
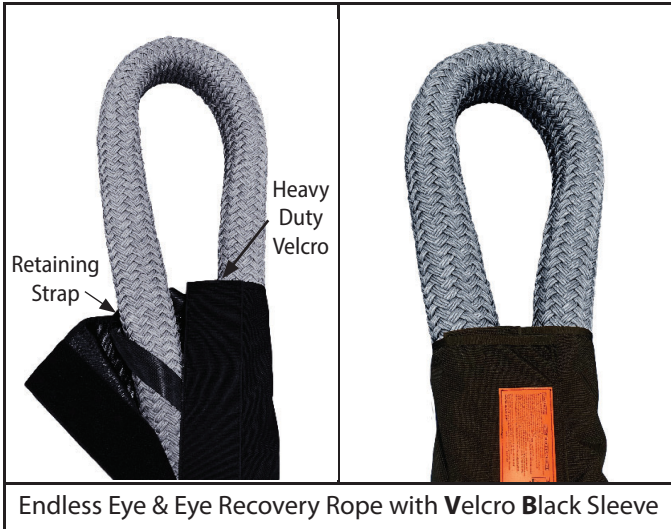


# Cordura® Body Sleeves

Recovery Rope Covers help prevent debris from entering the rope fibers, essential when recovery ropes are used in environments that may allow mud, dirt, gravel, sand and/or other environmental concerns to cause abrasion damage to your recovery ropes. Made from Cordura®, available in tubular and "quick" (Velcro®) configurations that allow for easy installation & removal in the field when spot inspections are necessary.

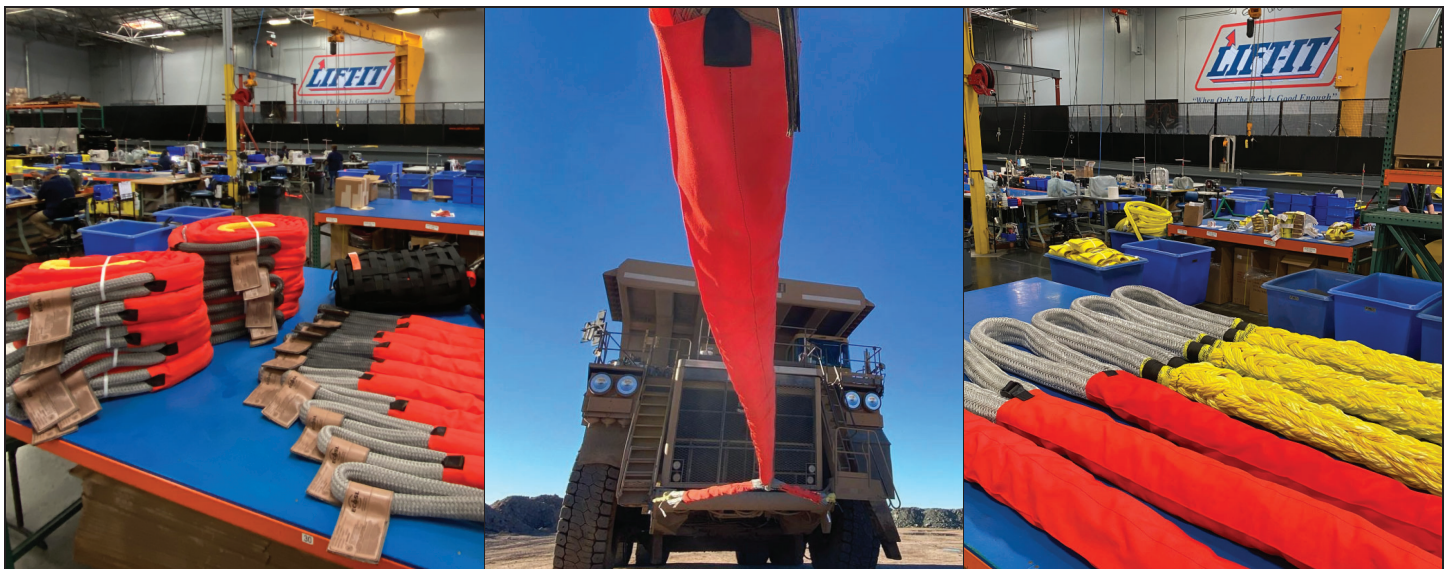
Lift-It® Recovery Rope Covers protect expensive recovery ropes from premature wear, and a clean rope is much easier to properly inspect, making for a win-win situation.

## CORDURA® BODY SLEEVE OPTIONS



REPLACEMENT COVERS – HOW TO ORDER				
Tow / Recovery Rope Type EE or EN-EE	Rope Diameter	Style	Color	Length (Ft.)
(Original S/N will expedite)	PLEASE SPECIFY	Velcro or Tubular	O = Orange B = Black	PLEASE SPECIFY
<b>Example*:</b>				
<b>EN-EE</b>	<b>2-3/4"</b>	<b>V</b>	<b>B</b>	<b>30</b>

\*The above example will provide a Black Velcro cover for a 2-3/4" x 30ft. Endless – Formed Eye & Eye Tow / Recovery Rope







## SX GUARD

Lift-It® Recovery Ropes are supplied with SX Guard in the eyes as a standard feature. SX Guard is woven from HMPE fibers that offer increased abrasion resistance over common nylon or polyester sleeves, yet fits snugly around the Recovery Rope, not dramatically increasing the overall diameter. The tight weave and seamless tubular construction offer 100% coverage around the Recovery Rope on both Eye & Eye and Endless with Formed Eye configurations.

Any damage detected in the protection may also indicate potential damage to the Recovery Rope. A qualified person must inspect Recovery Ropes prior to each use.



## CORNERMAX® QUICK TUBULAR SLEEVES – CMQTS



CornerMax® Quick Tubular Sleeves are an extremely durable product, constructed from thickly woven Dyneema® HMPE fibers, that when properly used may protect Recovery Ropes from cutting, and will offer excellent protection against severe abrasion.

**Remember that “cut proof” protection does not exist.**

Velcro® closure allows for field installation as necessary and provides easy inspection of the Recovery Rope. Any damage detected in the protection may also indicate potential damage to the Recovery Rope.

**Remember, any doubt, DON'T!**



### Cornermax® Quick Tubular Sleeve Specifications

Stock Number	Fits Rope Diameter EYE (With SX Guard)	Outside Circumference When Installed Over SX Guard		Required Opening / Diameter of Connection Point	
		Inches	CM	Inches	CM
CMQTS-6/9	1" – 1-1/4"	8-1/2	21.5	2.7	7
CMQTS-7/11	1-1/2"	9-1/2	24	3	8
CMQTS-9/13	1-5/8" – 1-3/4"	11	28	3.5	9
CMQTS-11/15	2" – 2-1/4"	12-3/4	32.5	4	10.4
CMQTS-13/17	2-1/2"	15	38	4.8	12.2
CMQTS-16/20	2-3/4" – 3"	18	46	5.6	14.6
CMQTS-20/24	3-14" – 3-1/2"	20	50	6.4	16.2

		
2" Diameter bare rope Unloaded diameter = 2"	2" Diameter Rope + SX Guard Unloaded diameter = 2-1/2"	2" Diameter Rope + SX Guard & CMQTS Unloaded diameter = 4"



# Products for "Kinetic" Recovery

Lift-It® nylon recovery products are fabricated with top shelf materials and the same first class workmanship that we use to build PROLINE12® UHMPE recovery ropes rated in excess of a million pounds.

Often referred to as kinetic ropes / straps, jerk-straps or snatch straps; nylon recovery straps are often the preferred choice when light-duty, heavy-duty and super-duty work trucks get stuck and need to be recovered efficiently. Nylon has up to eight times the elongation (kinetic energy) of UHMPE and is preferred by some for smaller vehicle recovery due to the increased elongation/elasticity, which may aid in the properly executed recovery activity. Never shock load and/or overload any recovery ropes or straps and always apply recovery force slowly and steadily. Due to the increased elongation and stored energy that may be unexpectedly released if improperly used and/or overloaded, users must be alert to risks and stay out of the path of the recovery rope / strap and/or connection points that could become deadly projectiles.

Read and understand all product and warning information provided in both the Recovery Product User Guide and the Specific Product Guide, available by scanning the QR Code on many of the Lift-It® tags and labels or available at [www.lift-it.com/product-warnings-and-information](http://www.lift-it.com/product-warnings-and-information), and always follow OSHA, MSHA, ASME, federal, state, provincial, industry, corporate, association, job site specific, insurance, vehicle manufacturer, best practice and manufacturer warnings and guidelines.



Only a qualified person that has knowledge and insight into the specific details and potential hazards associated with the particular vehicle recovery activity can determine the appropriate design factor. Straight Line Break Strength (SLBS) is based upon destruction testing done in laboratory testing conditions which will NEVER be duplicated during your actual usage. SLBS is also based upon the product being in NEW and UNUSED condition. Even when properly used, recovery ropes may have experienced UV exposure, wear and/or may have undetected, potentially detrimental conditions that may have an impact on actual SLBS of a used rope.

**Visual inspection cannot accurately determine the residual strength of Recovery Ropes / tow lines connection components or protection.**

**⚠️ WARNING Do not shock load recovery ropes / straps. Improper use may result in property damage and/or SEVERE INJURY or DEATH.**

## NYLON RECOVERY ROPES

- SLBS available in excess of 475,000 Lbs.
- Double braid construction, inner strength member with outer braided cover.
- Additional protective Cordura® eye sleeves.
- You must specify Recovery Rope length.



**Example Stock No.: DBN-RR-SE-7/8-SE-30**

Double Braid Nylon Recovery Rope — Length  
Soft Eye — Rope Diameter

Recovery range: Jeeps, Trucks, Motorhomes and light commercial equipment.

Larger options for medium sized commercial equipment available upon request.

Rope Diameter – Inches	5/8	7/8	1	1-1/4	1-1/2	2	2-1/2
Straight Line Break Strength (SLBS)	19,000	28,300	33,500	52,300	74,000	131,500	201,000
5:1 Design Factor WLL – Lbs.	3,800	5,600	6,700	10,400	14,800	26,300	40,200
3:1 Design Factor WLL – Lbs.	6,300	9,400	11,100	17,400	24,600	43,800	67,000

## NYLON WEBBING RECOVERY STRAPS

- Available in various models, custom straps are also available.
- Lift-It® Web Recovery Straps are manufactured from treated, nylon webbing.
- Eye bearing points are tapered and wrapped for ease of connection and increased durability.
- You must specify Recovery Strap length.



**Example Stock No.: RS2-902 x 20FT**

Recovery Strap — Length  
2 Ply — Heavy Duty 2" Web

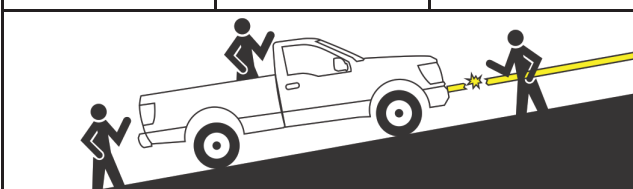
Recovery range: UTV, Jeep, Truck and SUV's.

Web Width and Material Thickness	2" – 1 Ply	2" – 2 Ply	3" – 1 Ply	3" – 2 Ply	4" – 1 Ply	4" – 2 Ply
Straight Line Break Strength (SLBS)	16,000	32,000	24,000	44,300	32,000	57,000
5:1 Design Factor WLL – Lbs.	3,200	6,400	4,800	8,800	6,400	12,800
3:1 Design Factor WLL – Lbs.	5,300	10,600	8,000	14,700	10,600	19,000

### ALWAYS STAY CLEAR OF RECOVERY ACTIVITY AND ALERT TO RISKS, ESPECIALLY IN THE DANGER ZONE

**⚠️ WARNING** Even if you consider all of the factors/issues involved in recovery activities, things can still go wrong. Therefore, all personnel must be alert to potential risks associated with the use of Recovery Products. The Danger Zone is any area where vehicle(s), broken connection points and/or recovery products such as but not limited to kinetic ropes / straps and/or Soft Shackles could travel, or anywhere an unplanned release of tension could produce deadly recoil and/or impact force. See this brochure and the Recovery Products User Guide for more information.

**NEVER UNDER NEVER ON NEVER IN-LINE**







## RECOVERY PRODUCT FACTORS AND ESTIMATION OF WORK LOAD LIMITS

**⚠ WARNING** Additional factors must be considered when evaluating the Work Load Limit (WLL) adequacy for all Recovery Products, connection points and components used in recovery activities. The Gross Vehicle Weight (GVW), including any additional cargo or accessories is ONLY a starting point. A qualified person and/or properly informed and trained consumer must consider any additional resistance created by the terrain and/or possible vehicle damage before determining the required WLL and adequacy for Recovery Products, connection points and/or components.

The Recovery Product Calculator Worksheet Total Estimated MINIMUM WLL is just that, a MINIMUM Estimate that must be evaluated by a qualified person and/or properly informed and trained consumer and must be adjusted accordingly for the specific recovery activity. ALL FIVE STEPS must be used and calculations verified to be complete and accurate. Remember, the goal in determining the MINIMUM estimated WLL is to avoid overloading ANY and ALL Recovery Products, connection points and/or other components used in recovery activities. Never exceed the WLL of any Recovery Product and always consider the "Weak Link" principle: **The maximum WLL for all Recovery Products is limited by the weakest component.**

**The Lift-It® Recovery Product WLL Calculator Worksheet may be used to estimate the MINIMUM WLL needed for ALL Recovery Products, connection points and components used during a recovery activity. Two examples are given:**

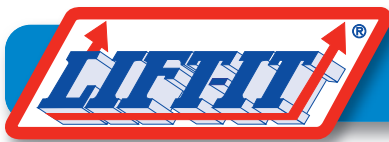
**Vehicle (A) 13,200 Lbs. GVW, stuck in Loose Dry Sand on a 30° uphill slope, with one flat tire. (Pickup Truck)**

**Vehicle (B) 440,000 Lbs. GVW, stuck in Light to Moderate Mud, on a 15° uphill slope with over half the axles seized. (Loaded Haul Truck)**

### LIFT-IT® RECOVERY PRODUCTS WLL CALCULATOR WORKSHEET

STEP 1 GVW	Enter the stuck vehicle's Gross Vehicle Weight (GVW). You must add all cargo and/or accessories weight to determine TOTAL GVW.	Total GVW	Vehicle (A) 13,200 Lbs.	Vehicle (B) 440,000 Lbs.
<b>CALCULATION WORKSHEET</b>				
STEP 2  SURFACE TERRAIN RESISTANCE	SURFACE/TERRAIN RESISTANCE			
	Surface/Terrain Type	Resistance Factor (RF)	GVW x RF	GVW x RF
	Hard (Asphalt or similar)	.04		
	Dry Earth (Grass/Compacted Dirt)	.14		
	Hard Wet Sand	.17		
	Soft Wet Sand	.20		
	Loose Dry Sand / Loose Gravel	.25		3,300
	Light to Moderate Mud	.33		146,667
	Deep Heavy Wet Mud - TIRE DEPTH (Up To the Bottom of the Rim)	.75		
	Deep/Heavy Wet Mud - WHEEL DEPTH (Up To the Middle of the Rim)	1.00		
Deep/Heavy Wet Mud - BODY DEPTH (From the Middle of the Rim and up)	1.33			
STEP 3  SLOPE RESISTANCE	SLOPE RESISTANCE			
	If the actual Angle from Horizontal is between the listed Angle from Horizontal a Qualified Person and/or Properly Informed and Trained Consumer must always ROUND UP (NEVER DOWN) to the closest Angle from Horizontal.			
	Angle from Horizontal	Slope Factor (SF)	GVW x SF	GVW x SF
	5°	.08		
	10°	.17		74,800
	15°	.25		
	20°	.34		
	25°	.42		
	30°	.50		6,600
	35°	.58		
40°	.67			
45° to 90°	1.00			
STEP 4  DAMAGE RESISTANCE	DAMAGE RESISTANCE			
	Type of Damage	Rolling Damage Factor (RDF)	GVW x RDF	GVW x RDF
	Up to half of the vehicle axles locked or seized	.33		
	Over half the vehicle axles locked or seized	.67		34,840
	Flat Tires: GVW = 8,000 Lbs. or less	Add 1,000 Lbs. per flat tire		
Flat Tires: GVW over 8,000 Lbs.	Add 2,000 Lbs. per flat tire		2,000	
SUBTOTAL = The sum of calculated values for Steps 2, 3 & 4. Do Not include GVW (Step 1) into the subtotal.			11,900	256,307
STEP 5	Error Factor	Subtotal X .25	2,975	64,077
SUBTOTAL + Step 5 = Total Estimated MINIMUM WLL for ALL Recovery Products, Connection Points and/or Components.			14,875 Lbs.	320,384 Lbs.

**Recovery Product:** Any component used for vehicle recovery activities, including but not limited to: synthetic rope, web straps, polyester or high performance roundslings, soft shackles, protection, components, connection points, etc.



## Features and benefits:



Wall or Cab Mount Bracket  
available for Handheld  
Stock Number  
SU3282

Scan the QR Code for the User Manual.



- Proprietary 2.4 GHz wireless signal
- Industry leading wireless range of 3,280 Ft. / 1,000 m
- Superior data transmission
- Environmentally sealed to IP67 / NEMA6
- 90db Audible overload alarm
- Unmatched battery life of 1200 hours
- Internal antennas on Radiolink & Handheld plus
- Handheld plus reads up to four Radiolink wireless load cells simultaneously
- Compact size
- Remote on-off
- Lightweight aluminum
- Hardened bushings at shackle connections
- 100 Hz Peak hold
- Push button tare
- Design validated by F.E.A.

## Three versions available

- Long range (3,280 Ft. / 1,000 m) - connects to SW-HHP Handheld or software applications
- Bluetooth (3,280 Ft. / 1,000 m) - connects to the free HHP app
- ATEX/IECEx (1,640 Ft. / 500 m) - connects to SW-HHP Handheld

Capable of both weighing and dynamic load monitoring, such as verifying a stuck vehicles resistance, the Radiolink plus is constructed of high-quality aircraft grade aluminum and features an advanced internal design structure. This internal design structure not only provides Radiolink plus with an unrivaled strength to weight ratio, but also allows the use of a separate internal sealed enclosure providing the load cell's electronic components with IP67 / NEMA6 environmental protection, making this industry leading dynamometer even more suitable for use in harsh environments like mining.

## RADIOLINK PLUS SPECIFICATIONS

STOCK NUMBER	RLP25T	RLP35T	RLP55T	RLP75T	RLP100T	RLP150T	RLP200T	RLP250T	RLP300T	RLP500T
Capacity - Metric Tons	25	35	55	75	100	150	200	250	300	500
Capacity - Lbs.	55,000	77,000	120,000	165,000	220,000	330,000	440,000	550,000	660,000	1,100,000
Resolution	.005 mt	.005 mt	.01 mt	.01 mt	.05 mt	.05 mt	.1 mt	.1 mt	.1 mt	.1 mt
	10 Lbs.	10 Lbs.	20 Lbs.	20 Lbs.	100 Lbs.	100 Lbs.	200 Lbs.	200 Lbs.	200 Lbs.	200 Lbs.
Unit Weight	5 Kgs.	8.6 Kgs.	13.0 Kgs.	16 Kgs.	34 Kgs.	46 Kgs.	82 Kgs.	82 Kgs.	118 Kgs.	193 Kgs.
	11 Lbs.	19 Lbs.	28.7 Lbs.	35.3 Lbs.	75 Lbs.	101.4 Lbs.	180.8 Lbs.	180.8 Lbs.	260 Lbs.	425.5 Lbs.
Shackle Pin Diameter	2"	2 - 1/4"	2 - 1/4"	2 - 3/4"	3 - 1/4"	3 - 3/4"	4 - 3/4"	5"	6"	7-7/8"



Check out our website [www.lift-it.com/dynamometers](http://www.lift-it.com/dynamometers) for more dynamometers, load indicating devices and accessories.

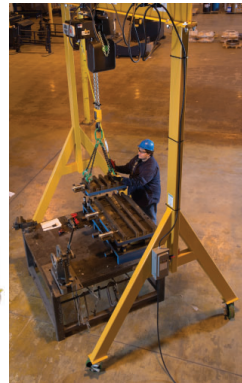
 <p><b>Wireless Load Shackle</b></p>		 <p><b>BlueLink</b></p>	 <ul style="list-style-type: none"> <li>• Wireless range 328 Ft. / 100 m</li> <li>• Multiple measurement unit options</li> <li>• Adjustable alarm for high and low values</li> <li>• Peak hold</li> <li>• Tare / reset</li> </ul>	 <p><b>Accessories</b></p>
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Lift-It® can provide all your material handling needs, whether in the field or the shop. With direct access to the most recognized manufacturer's in the industry, such as Caldwell, Modulift, M&W, SPANCO, OZ, CM, Harrington and Tandemloc we can provide the proper equipment to ensure your loads are handled efficiently.

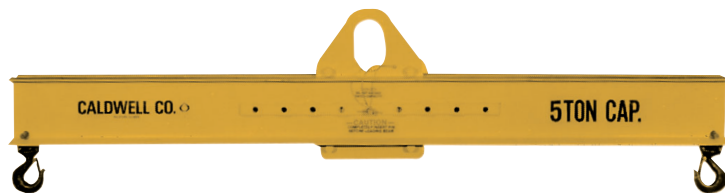
## GANTRY CRANES



## HOISTS & CLAMPS



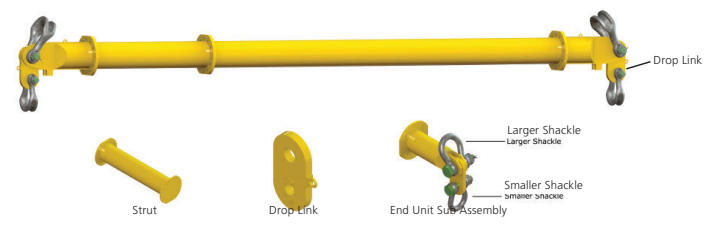
## FIXED AND ADJUSTABLE BAIL LIFTING BEAMS



## FIXED AND ADJUSTABLE SPREADER BEAMS



## MODULIFT ADJUSTABLE SPREADER BEAMS





**Stock Number:  
G-4161**

- Material: Bow and pin:  
High tensile steel, Grade 6, quenched & tempered.
- Design Factor: 6:1 when new.
- Standards: U.S. Federal Specification RR-C-271 IVA, Class 2, Grade A, ASME B30.26 and EN 13889
- Finish: Hot dip galvanized
- Temperature Range: -40°F (-40°C) to 392°F (200°C)
- Certification: manufacturer, material, proof test and CE declaration of conformity available at no additional charge.
- Additional dimensional, tolerance information and CAD drawings are available on request.

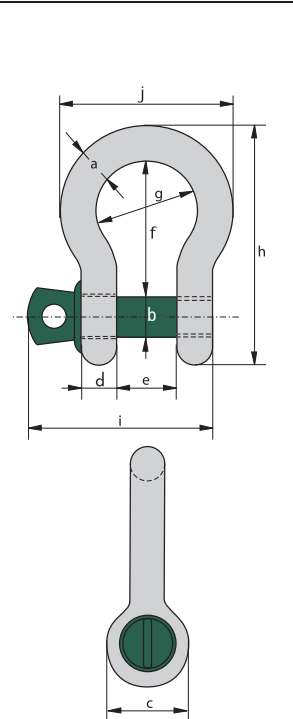


**HOW TO ORDER**

Stock Number followed by the bow size ("a" dimension).  
Example: G-4161-7/8-6.5T

**SCREW PIN ANCHOR SHACKLE SPECIFICATIONS**

Stock Number	Work Load Limit (Metric Tons)	Dimensions (Inches)										Weight (Lbs.)
		Bow a	Pin b	Eye c	Eye Width d	Inside Width e	Inside Length f	Bow Width g	Overall Length h	Bolt Length i	Overall Width j	
G-4161-1/4-.5T	.50	1/4	5/16	21/32	9/32	15/32	1-5/32	25/32	1-29/32	1-1/2	1-11/32	.11
G-4161-5/16-.75T	.75	5/16	3/8	25/32	11/32	17/32	1-1/4	7/8	2-7/32	1-27/32	1-9/16	.22
G-4161-3/8-1T	1	3/8	7/16	7/8	13/32	21/32	1-7/16	1-1/32	2-1/2	2-1/8	1-13/16	.30
G-4161-7/16-1.5T	1.5	7/16	1/2	1-1/32	7/16	3/4	1-11/16	1-5/32	2-29/32	2-11/32	2	.42
G-4161-1/2-2T	2	1/2	5/8	1-11/32	1/2	7/8	2	1-1/4	3-1/2	2-7/8	2-9/32	.79
G-4161-5/8-3.25T	3.25	5/8	3/4	1-9/16	5/8	1-1/16	2-17/32	1-11/16	4-11/32	3-1/2	2-15/16	1.38
G-4161-3/4-4.75T	4.75	3/4	7/8	1-13/16	3/4	1-7/32	3	2	5-3/32	4-1/16	3-1/2	2.22
G-4161-7/8-6.5T	6.5	7/8	1	2-1/16	7/8	1-13/32	3-9/32	2-9/32	5-21/32	4-11/16	4-1/32	3.31
G-4161-1-8.5T	8.5	1	1-1/8	2-5/16	31/32	1-11/16	3-3/4	2-11/16	6-15/32	5-13/32	4-21/32	4.86
G-4161-1-1/8-9.5T	9.5	1-1/8	1-1/4	2-19/32	1-3/32	1-27/32	4-1/4	2-15/16	7-9/32	6-1/32	5-5/32	6.97
G-4161-1-1/4-12T	12	1-1/4	1-3/8	2-27/32	1-1/4	2	4-17/32	3-9/32	7-29/32	6-11/16	5-25/32	9.49
G-4161-1-3/8-13.5T	13.5	1-3/8	1-1/2	3-5/32	1-3/8	2-1/4	5-1/4	3-5/8	8-15/16	7-5/16	6-3/8	12.24
G-4161-1-1/2-17T	17	1-1/2	1-5/8	3-15/32	1-1/2	2-3/8	5-3/4	3-29/32	9-13/16	8	6-7/8	16.37
G-4161-1-3/4-25T	25	1-3/4	2	4-1/16	1-25/32	2-29/32	7	4-31/32	11-13/16	9-9/16	8-1/2	28.31
G-4161-2-35T	35	2	2-1/4	4-3/8	1-31/32	3-9/32	7-3/4	5-7/16	13-1/32	10-23/32	9-3/8	40.01
G-4161-2-1/4-42.5T	42.5	2-1/4	2-9/16	5-1/8	2-1/4	3-3/4	8-3/4	6-5/16	14-27/32	12-7/32	10-25/32	57.96
G-4161-2-1/2-55T	55	2-1/2	2-3/4	5-23/32	2-9/16	4-1/8	10-1/4	7-3/32	17-1/16	13-17/32	12-7/32	82.89







**Stock Number:  
G-4163**

- Material: Bow and pin:  
High tensile steel, Grade 6, quenched & tempered
- Design Factor: 6:1 when new.
- Standards: U.S. Federal Specification RR-C-271 IVA, Class 2, Grade A, ASME B30.26 and EN 13889
- Finish: Hot dip galvanized
- Temperature Range: -40°F (-40°C) to 392°F (200°C)
- Certification: manufacturer, material, proof test and CE declaration of conformity available at no additional charge.
- Additional dimensional, tolerance information and CAD drawings are available on request.

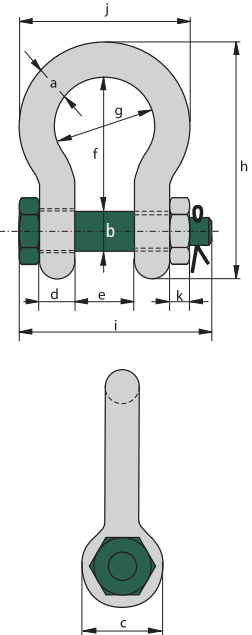


**HOW TO ORDER**

Stock Number followed by the bow size ("a" dimension).  
Example: G-4163-7/8-6.5T

## BOLT ANCHOR SHACKLE SPECIFICATIONS

Stock Number	Work Load Limit (Metric Tons)	Dimensions (Inches)											Weight (Lbs.)
		Bow a	Pin b	Eye c	Eye Width d	Inside Width e	Inside Length f	Bow Width g	Overall Length h	Bolt Length i	Overall Width j	Nut k	
G-4163-1/4-.5T	.50	1/4	5/16	21/32	9/32	15/32	1-5/32	25/32	1-29/32	1-21/32	1-11/32	5/32	.13
G-4163-5/16-.75T	.75	5/16	3/8	25/32	11/32	17/32	1-1/4	7/8	2-7/32	1-31/32	1-9/16	3/16	.25
G-4163-3/8-1T	1	3/8	7/16	7/8	13/32	21/32	1-7/16	1-1/32	2-1/2	2-3/8	1-13/16	5/16	.34
G-4163-7/16-1.5T	1.5	7/16	1/2	1-1/32	7/16	3/4	1-11/16	1-5/32	2-29/32	2-5/8	2	7/16	.48
G-4163-1/2-2T	2	1/2	5/8	1-11/32	1/2	7/8	2	1-1/4	3-1/2	3-7/32	2-9/32	1/2	.92
G-4163-5/8-3.25T	3.25	5/8	3/4	1-9/16	5/8	1-1/16	2-17/32	1-11/16	4-11/32	3-27/32	2-15/16	21/32	1.62
G-4163-3/4-4.75T	4.75	3/4	7/8	1-13/16	3/4	1-7/32	3	2	5-3/32	4-1/2	3-1/2	3/4	2.59
G-4163-7/8-6.5T	6.5	7/8	1	2-1/16	7/8	1-13/32	3-9/32	2-9/32	5-21/32	5-1/8	4-1/32	7/8	3.90
G-4163-1-8.5T	8.5	1	1-1/8	2-5/16	31/32	1-11/16	3-3/4	2-11/16	6-15/32	5-29/32	4-21/32	31/32	5.69
G-4163-1-1/8-9.5T	9.5	1-1/8	1-1/4	2-19/32	1-3/32	1-27/32	4-1/4	2-15/16	7-9/32	6-17/32	5-5/32	1-1/16	8.06
G-4163-1-1/4-12T	12	1-1/4	1-3/8	2-27/32	1-1/4	2	4-17/32	3-9/32	7-29/32	7	5-25/32	1-3/16	10.81
G-4163-1-3/8-13.5T	13.5	1-3/8	1-1/2	3-5/32	1-3/8	2-1/4	5-1/4	3-5/8	8-15/16	7-3/4	6-3/8	1-5/16	14.42
G-4163-1-1/2-17T	17	1-1/2	1-5/8	3-15/32	1-1/2	2-3/8	5-3/4	3-29/32	9-13/16	7-15/16	6-7/8	3/4	18.06
G-4163-1-3/4-25T	25	1-3/4	2	4-1/16	1-25/32	2-29/32	7	4-31/32	11-13/16	9-13/16	8-1/2	29/32	31.34
G-4163-2-35T	35	2	2-1/4	4-3/8	1-31/32	3-9/32	7-3/4	5-7/16	13-1/32	10-19/32	9-3/8	1-1/32	43.77
G-4163-2-1/4-42.5T	42.5	2-1/4	2-9/16	5-1/8	2-1/4	3-3/4	8-3/4	6-5/16	14-27/32	11-27/32	10-23/32	1-5/32	62.46
G-4163-2-1/2-55T	55	2-1/2	2-3/4	5-23/32	2-9/16	4-1/8	10-1/4	7-3/32	17-1/16	13	12-7/32	1-1/4	87.27
G-4163-3-85T	85	3	3-1/4	6-3/8	2-7/8	5	12-15/16	7-15/32	20-3/4	14-31/32	13-3/8	1-17/32	136.69





# Wide Mouth Shackles - Green Pin®



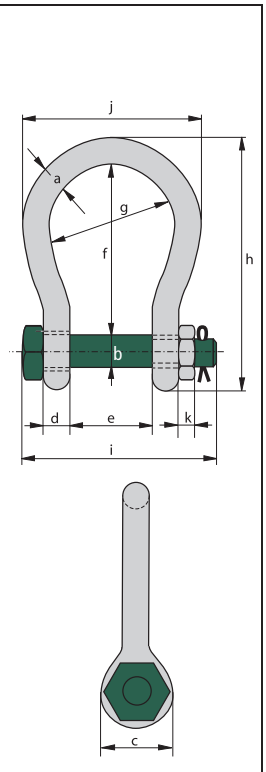
**Stock Number:  
G-4263**

- Material: Bow and pin: Alloy steel, Grade 8, quenched & tempered.
- Design Factor: 6:1 when new.
- Finish: Hot dip galvanized (175 Ton are painted)
- Temperature Range: -4°F (-20°C) to 392°F (200°C)
- Certification: manufacturer, material, proof test and CE declaration of conformity available at no additional charge.
- Additional dimensional, tolerance information and CAD drawings are available on request.

**HOW TO ORDER**  
Stock Number followed by the bow size ("a" dimension).  
Example: G-4263-2-30T

## WIDE MOUTH BOLT ANCHOR SHACKLE SPECIFICATIONS

Stock Number	Work Load Limit (Metric Tons)	Dimensions (Inches)											Weight (Lbs.)
		Bow a	Pin b	Eye c	Eye Width d	Inside Width e	Inside Length f	Bow Width g	Overall Length h	Bolt Length i	Overall Width j	Nut k	
G-4263-7/8-4.75T	4.75	7/8	1	2-1/16	7/8	2-15/32	4-13/32	3-15/32	6-13/16	6-3/16	5-3/16	7/8	4.59
G-4263-1-6.5T	6.5	1	1-1/8	2-5/16	31/32	2-15/16	5-5/16	4-1/8	8-1/32	7-7/32	6-3/32	31/32	6.92
G-4263-1-1/8-8.5T	8.5	1-1/8	1-1/4	2-19/32	1-3/32	3-7/32	5-13/16	4-17/32	8-27/32	8-1/16	6-23/32	1-1/16	9.61
G-4263-1-1/4-9.5T	9.5	1-1/4	1-3/8	2-27/32	1-1/4	3-17/32	6-3/8	4-31/32	9-3/4	8-13/16	7-15/32	1-3/16	13.12
G-4263-1-3/8-12T	12	1-3/8	1-1/2	3-1/8	1-3/8	3-15/16	7-3/32	5-1/2	10-25/32	9-21/32	8-9/32	1-5/16	17.35
G-4263-1-1/2-16T	16	1-1/2	1-5/8	3-15/32	1-1/2	4-3/16	8-1/2	6-1/4	12-9/16	9-3/4	9-1/4	3/4	27.56
G-4263-1-3/4-25T	25	1-3/4	2	4-1/16	1-25/32	5	9-3/4	6-7/8	14-9/16	11-21/32	10-7/16	29/32	36.82
G-4263-2-30T	30	2	2-1/4	4-21/32	1-31/32	5-3/4	10-3/4	8-5/32	16-3/16	13-1/16	12-3/32	1-1/32	55.12
G-4263-2-1/2-55T	55	2-1/2	2-3/4	5-23/32	2-9/16	6-1/2	12-3/8	8-3/8	19-3/16	15-5/16	13-1/2	1-1/4	105.82
G-4263-3-1/4-75T	75	3-1/4	3-1/4	6-15/32	3-9/32	7-1/4	13	10	21-5/32	17-29/32	16-17/32	1-17/32	169.76



**⚠ WARNING** NEVER use hooks, metal shackles or other metal fittings to connect Recovery Products. In the event of an unplanned release of tension, hooks, metal shackles and/or metal fittings may become deadly projectiles that may result in SEVERE INJURY or DEATH.

Always use Soft Shackles to connect multiple Recovery Products, and/or to attach Recovery Ropes or other Recovery Products to vehicles.







**Stock Number:  
P-6033**

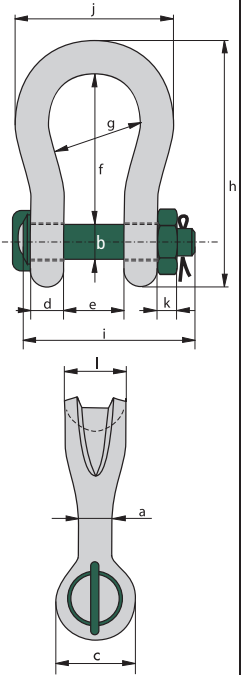
- Material: Bow and pin: Alloy steel, Grade 8, quenched & tempered.
- Design Factor: 5:1 when new.
- Finish: 7 to 55 Ton are Hot dip galvanized (75 Ton to 1550 Ton are painted, bow-silver, pin-green)
- Temperature Range: -4°F (-20°C) to 392°F (200°C)
- Certification: manufacturer, material, proof test and CE declaration of conformity available at no additional charge.
- Additional dimensional, tolerance information and CAD drawings are available on request.

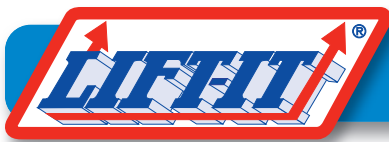


**HOW TO ORDER**  
Stock Number followed by the WLL.  
Example: P-6033-55T

## WIDE BODY SHACKLE SPECIFICATIONS

Stock Number	Work Load Limit (Metric Tons)	Dimensions (Inches)												Weight (Lbs.)
		Bow a	Pin b	Eye c	Eye Width d	Inside Width e	Inside Length f	Bow Width g	Overall Length h	Bolt Length i	Overall Width j	Nut k	Bearing Surface l	
P-6033-7T	7	7/8	7/8	1-13/16	3/4	1-9/32	3-25/32	2-17/32	6	4-17/32	4-5/16	3/4	1-5/8	4.41
P-6033-12.5T	12.5	1-1/8	1-1/8	2-3/8	1	1-3/4	4-3/4	3-1/4	7-3/4	5-15/16	5-3/4	15/16	2-1/8	8.82
P-6033-18T	18	1-3/8	1-3/8	2-23/32	1-3/16	2-1/8	5-13/16	4-1/32	9-13/32	6-7/8	7-3/32	1-5/32	2-17/32	18
P-6033-30T	30	1-9/16	1-21/32	3-17/32	1-3/8	2-23/32	6-1/2	4-31/32	10-31/32	8-5/16	7-7/8	1-11/32	3-1/8	29
P-6033-40T	40	2-5/32	2	4-9/32	1-25/32	3-5/16	7-27/32	5-1/2	13-1/32	9-29/32	9-1/4	1-1/2	3-13/16	46
P-6033-55T	55	2-3/8	2-1/4	4-17/32	2-5/32	3-17/32	9-7/16	6-5/16	15-5/16	11-25/32	10-5/8	1-25/32	3-15/16	66
P-6033-75T	75	2-11/16	2-3/4	4-29/32	2-1/8	4-11/32	11-13/32	7-9/32	18-5/8	12-15/32	12-15/32	1-9/16	4-23/32	99
P-6033-125T	125	3-11/32	3-5/32	6-1/16	3-11/32	5-13/32	14-13/32	8-21/32	22-15/16	16-1/4	15-11/32	1-9/16	5-29/32	185
P-6033-150T	150	3-11/16	3-3/4	7-1/16	3-1/2	5-25/32	15-13/32	9-31/32	25-13/32	17-17/32	17-3/32	1-31/32	6-11/16	257
P-6033-200T	200	4-11/32	4-1/8	7-27/32	3-15/16	6-7/32	18-15/16	11-1/32	29-7/8	18-29/32	18-31/32	1-31/32	8-1/16	395
P-6033-250T	250	4-31/32	4-23/32	8-15/16	4-11/32	7-1/16	21-11/32	11-13/16	33-13/16	21-1/16	20-7/8	2-3/8	9-7/16	571
P-6033-300T	300	5-5/16	5-9/32	9-21/32	4-13/16	7-11/16	23-21/32	13-25/32	37-9/32	23-7/32	24-13/32	2-3/4	10-7/16	770
P-6033-400T	400	6-5/16	6-5/16	11-17/32	5-23/32	9-3/32	22-11/16	14-9/16	38-25/32	26-9/16	27-5/32	3-5/32	12-19/32	1,279
P-6033-500T	500	6-11/16	7-3/32	12-29/32	6-5/16	10-11/32	26-13/16	17-23/32	44-17/32	29-7/16	31-3/32	3-17/32	13-11/32	1,720
P-6033-600T	600	7-15/32	7-7/8	13-11/16	6-11/16	11-3/8	29-3/16	19-9/32	48-19/32	31-27/32	34-1/16	3-15/16	14-9/16	2,161
P-6033-700T	700	7-7/8	8-15/32	1-7/16	7-15/32	12-13/32	29-9/16	21-1/4	50-9/16	34-19/32	35-15/32	3-15/16	15-3/4	2,998
P-6033-800T	800	8-19/32	9-1/16	16-17/32	7-7/8	13-15/32	33-1/2	21-13/16	56-5/32	37-3/32	37-9/32	4-11/32	16-17/32	3,153
P-6033-900T	900	9-17/32	10-1/32	18-11/32	8-21/32	14-1/2	33-1/2	22-27/32	58-19/32	40-9/32	40-9/32	4-23/32	17-5/16	3,638
P-6033-1000T	1000	10-1/4	10-5/8	19-9/32	9-7/16	15-23/32	33-1/2	24-3/16	60-5/16	43-7/16	43-19/32	4-23/32	18-1/8	6,548
P-6033-1250T	1250	11-7/32	11-13/16	20-3/32	10-1/4	17-25/32	36-21/32	25-19/32	65-19/32	48-5/16	46-17/32	5-29/32	20-7/8	8,157
P-6033-1550T	1550	11-7/32	12-19/32	21-21/32	11-1/32	19-1/32	37-13/32	26-25/32	67-5/16	51-3/16	49-11/32	5-29/32	22-1/16	8,818





# Polar Shackles - Green Pin®



**G-5163**

- Material: Bow and pin:  
Alloy steel, Grade 8, quenched and tempered
- Design Factor: 7:1 for 2T through 42.5T, 6:1 for 55T & 85T, when new.
- Standards: U.S. Federal Specification RR-C-271 IVA, Class 2, Grade A, ASME B30.26 and EN 13889
- Finish: Hot dipped galvanized
- Temperature Range: -76° F (-60°C) to 392° F (200° C)
- Certification: manufacturer, material, proof test and CE declaration of conformity available at no additional charge.
- Additional dimensional tolerance information and CAD drawings are available on request.

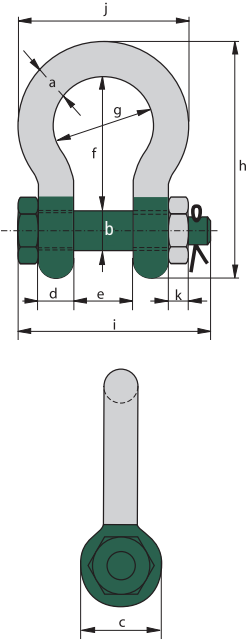


**HOW TO ORDER**

Stock Number followed by the bow size ("a" dimension).  
Example: G-5163-2-35T

## POLAR SHACKLE SPECIFICATIONS

Stock Number	Work Load Limit (Metric Tons)	Dimensions (Inches)											Weight (Lbs.)
		Bow a	Pin b	Eye c	Eye Width d	Inside Width e	Inside Length f	Bow Width g	Overall Length h	Bolt Length i	Overall Width j	Nut k	
G-5163-1/2-2T	2	1/2	5/8	1-11/32	1/2	7/8	2	1-1/4	3-17/32	3-5/32	2-5/16	1/2	.93
G-5163-5/8-3.25T	3.25	5/8	3/4	1-9/16	5/8	1-1/16	2-17/32	1-11/16	4-11/32	3-27/32	2-15/16	21/32	1.63
G-5163-3/4-4.75T	4.75	3/4	7/8	1-13/16	3/4	1-7/32	3	2	5-3/32	4-17/32	3-1/2	3/4	2.61
G-5163-7/8-6.5T	6.5	7/8	1	2-1/16	7/8	1-13/32	3-9/32	2-9/32	5-21/32	5-1/8	4-1/32	7/8	3.90
G-5163-1-8.5T	8.5	1	1-1/8	2-5/16	31/32	1-11/16	3-3/4	2-11/16	6-15/32	5-29/32	4-21/32	31/32	5.69
G-5163-1-1/8-9.5T	9.5	1-1/8	1-1/4	2-5/8	1-3/32	1-27/32	4-1/4	2-15/16	7-5/16	6-17/32	5-5/32	1-1/16	8.07
G-5163-1-1/4-12T	12	1-1/4	1-3/8	2-7/8	1-1/4	2	4-17/32	3-9/32	7-29/32	7-1/4	5-25/32	1-3/16	10.8
G-5163-1-3/8-13.5T	13.5	1-3/8	1-1/2	3-1/8	1-3/8	2-1/4	5-1/4	3-5/8	8-15/16	7-3/4	6-3/8	1-5/16	14.4
G-5163-1-1/2-17T	17	1-1/2	1-5/8	3-15/32	1-1/2	2-3/8	5-3/4	3-29/32	9-13/16	7-15/16	6-7/8	3/4	18.1
G-5163-1-3/4-25T	25	1-3/4	2	4-3/32	1-25/32	2-29/32	7	4-31/32	11-13/16	9-9/16	8-1/2	29/32	31.4
G-5163-2-35T	35	2	2-1/4	4-13/32	1-31/32	3-9/32	7-3/4	5-7/16	13-1/16	10-19/32	9-3/8	1-1/32	43.8
G-5163-2-1/4-42.5T	42.5	2-1/4	2-9/16	5-3/16	2-1/4	3-3/4	8-3/4	6-5/16	14-7/8	11-27/32	10-25/32	1-5/32	62.5
G-5163-2-1/2-55T	55	2-1/2	2-3/4	5-23/32	2-9/16	4-1/8	10-1/4	7-3/32	17-1/16	12-15/16	12-7/32	1-1/4	87.3
G-5163-3-85T	85	3	3-1/4	6-9/16	2-7/8	5	13	7-15/32	20-7/8	15	13-3/8	1-17/32	137



Scan this QR code for specifications on Shackles, such as application, maintenance, use, and inspection information.





## HAUL TRUCK DUMP BODY SLINGS

Haul Truck service repairs require the dump body to be elevated. Lift-It® Haul Truck Dump Body Slings are designed to share the load of the truck dump body while in a raised position.

There are several benefits including cost associated with using the Lift-It® Haul Truck Dump Body Sling when compared to the traditional method utilizing wire rope slings.

Improved ergonomics are realized in the handling procedures of Twin-Path® Haul Truck Dump Body Slings due to the fact they are significantly lighter and more flexible than wire rope slings. Twin-Path® Haul Truck Dump Body Slings weigh approximately 23 pounds while a wire rope sling of comparable capacity and length weighs approximately 415 pounds.

Twin-Path® Haul Truck Dump Body Slings can easily be installed by one technician in a timely manner. Try doing that with a wire rope sling and not end up with skinned knuckles or worse!



Photo courtesy of Barrick Goldstrike (One Classy Operation).

### ⚠️ WARNING

- Do not overload the sling. Inspect before each use. Do not twist or tie into knots.
- Avoid dragging the sling. Do not use a damaged sling.
- Avoid contact with hot exhaust or damaging objects/surfaces.
- Attachment points must be suitable for the application; detached connection points can become deadly projectiles. Ensure the strength and condition of the attachment points are suitable for the Haul Truck Dump Body Sling.
- Store in a cool, dark, dry location, which is free of environmental and mechanical damage.

**ALWAYS ROTATE THE SLING TO CHANGE CONNECTION POINTS.**

### HAUL TRUCK DUMP BODY SLING SPECIFICATIONS

Stock Number	Vertical Work Load (Lbs.)	Weight (Lbs./Ft.)	Width (Inches)
HTDB-2000	20,000	.51	3
HTDB-3000	30,000	.71	4
HTDB-4000	40,000	.83	4
HTDB-5000	50,000	1.14	5
HTDB-6000	60,000	1.27	5
HTDB-8500	85,000	1.65	6
HTDB-10000	100,000	1.84	6
HTDB-15000	150,000	2.66	8

Check-Fast®, Tattle Tails and/or Fiber Optics cannot be used exclusively to determine the condition of the load carrying fibers and/or sling. These patented, inspection devices must be used in conjunction with visual and tactile inspection techniques to determine sling condition. If there is any doubt, do not use this or any other rigging product and return the sling to the manufacturer for factory repair evaluation.



# Alloy Steel Chain Slings

Lift-It® Alloy Steel Chain Sling Tags include the following ASME mandatory identification information on one of the most durable tags in the industry.

- Name or Trademark of Mfg. or Repair Entity
- Rated Load for at least one hitch and the angle on which it is based
- Individual Sling Identification Serial Number (Serial No)
- Number of Legs
- Length (Reach)
- Nominal Chain Size
- Chain Grade
- Additional warnings to the user



Scan this QR code for information on Alloy Steel Chain Slings, such as assembly guidelines, inspection, removal from service criteria and other considerations.



## GrabiQ® - ALLOY STEEL CHAIN SLING TYPES

### GrabiQ® Alloy Steel Chain Sling System

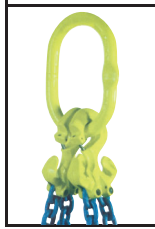
- Fewer Components
- Less Clutter
- Less Weight
- Easier Inspection

13 Fittings

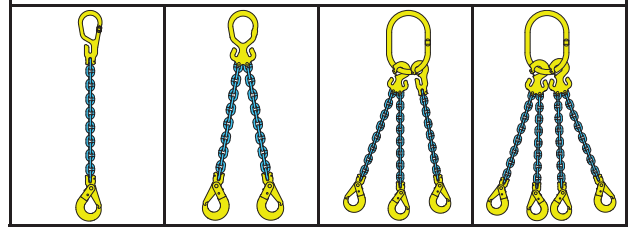


VS.

3 Fittings



### GrabiQ Alloy Steel Chain Sling Types



## ALLOY STEEL CHAIN SLINGS - STANDARD CONFIGURATIONS








SG	S00	S0S	S0SKN	S0G	S0F	S0BK	S0BKL	SGG	SSS	SSG	
<p>ASOS</p>		<p>TYPE A ADJUSTER</p>			<p>TYPE B ADJUSTER</p>		<p>SOLK (aka UPS)</p>				
Double Leg			Triple Leg				Quad Leg				
DOS	BS	TOS	TOG	QOS	QOBK	ENDLESS	ADOS	TOBK	ATOS	AQOS	BD



# Alloy Steel Chain Slings



## GR 100 ALLOY STEEL CHAIN SLING WORK LOAD LIMITS\*(Lbs.) DESIGN FACTOR OF 4/1

GUNNEBO GR 100 CHAIN SIZE		SINGLE LEG	DOUBLE LEG				TRIPLE & QUAD LEG		
									
MM	IN	90°	90° - 60°	90° - 45°	90° - 30°	90° - 60°	90° - 45°	90° - 30°	
5.5	7/32	2,700	4,700	3,800	2,700	7,000	5,700	4,000	
7	9/32	4,300	7,400	6,100	4,300	11,200	9,100	6,400	
8	5/16	5,700	9,900	8,100	5,700	14,800	12,100	8,500	
10	3/8	8,800	15,200	12,400	8,800	22,900	18,700	13,200	
13	1/2	15,000	26,000	21,200	15,000	39,000	31,800	22,500	
16	5/8	22,600	39,100	32,000	22,600	58,700	47,900	33,900	
20	3/4	35,300	61,100	49,900	35,300	91,700	74,900	53,000	
22	7/8	42,700	74,000	60,400	42,700	110,900	90,600	64,000	

## ALLOY STEEL CHAIN SLINGS – TOP LINK SPECIFICATIONS

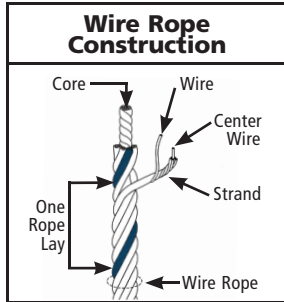
### 1, 2, 3 or 4 LEG SLINGS – MASTER LINKS (M) and MASTER LINKS WITH SUBASSEMBLIES (MT) GRADE 100

STOCK NUMBER	LINK – TRADE SIZE		SINGLE LEG – 90°			DOUBLE LEG – 60°			TRIPLE OR QUAD LEG – 60°			
			CHAIN SIZE		WLL*	CHAIN SIZE		WLL*	CHAIN SIZE		WLL*	
	IN	MM	IN	MM	(Lbs.)	IN	MM	(Lbs.)	IN	MM	(Lbs.)	
MASTER LINKS	M-6-10	3/8	11	7/32	6	3,300	—	—	—	—	—	—
	M-86-10	1/2	14	9/32	7	4,300	—	—	—	—	—	—
				5/16	8	5,700	7/32	6	5,500	—	—	—
	M-108-10	5/8	17	3/8	10	8,800	9/32	7	7,400	—	—	—
				—	—	—	5/16	8	9,900	—	—	—
	M-13-10	3/4	19	1/2	13	15,000	—	—	—	—	—	—
	M-1310-10	7/8	22	—	—	—	3/8	10	15,200	—	—	—
	M-1613-10	1	25	5/8	16	22,600	1/2	13	26,000	—	—	—
	M-19-10	1-1/4	30	3/4	20	35,300	—	—	—	—	—	—
	M-2016-10	1-3/8	34	7/8	22	42,700	5/8	16	39,100	—	—	—
	M-2220-10	1-1/2	38	—	—	—	—	—	—	—	—	—
	M-2622-10	1-5/8	40	1	26	59,700	3/4	20	61,100	—	—	—
	M-32-10	1-3/4	45	—	—	—	7/8	22	74,000	—	—	—
M-3226-10	2	50	1-1/4	32	88,160	1	26	103,100	—	—	—	
M-3632-10	2-1/4	55	—	—	—	—	—	—	—	—	—	
M-4536-10	2-1/2	60	—	—	—	1-1/4	32	152,700	—	—	—	
MASTER LINK W/SUB ASSEMBLIES	MT-6-10	3/4	19	—	—	—	—	—	—	7/32	6	8,400
	MT-8-10	7/8	22	—	—	—	—	—	—	9/32	7	11,200
				—	—	—	—	—	5/16	8	14,800	
				—	—	—	—	—	—	—	—	—
	MT-9-10	1	25	—	—	—	—	—	—	—	—	—
	MT-10-10	1-1/4	30	—	—	—	—	—	—	3/8	10	22,900
	MT-13-10	1-5/8	40	—	—	—	—	—	—	1/2	13	39,000
	MT-16-10	2	50	—	—	—	—	—	—	5/8	16	58,700
	MT-20-10	2-1/4	55	—	—	—	—	—	—	3/4	20	91,700
	MT-22-10	2-1/2	60	—	—	—	—	—	—	7/8	22	110,900
MT-26-10	2-3/4	70	—	—	—	—	—	—	1	26	155,600	
MT-32-10	3-1/4	80	—	—	—	—	—	—	1-1/4	32	229,000	

\*Work Load Limits are valid between temperatures of -40°F and 400°F.



# Wire Rope Slings



Single Body Wire Rope Slings feature either a 6 x 19 or 6 x 37 Construction, Extra Improved Plow Steel (EIPS) wire rope with an Independent Wire Rope Core (IWRC).

Single Body, Flemish Eye/Mechanical Splice, Wire Rope Slings provide additional security, superior to return loop slings should the swage sleeve become damaged during use.

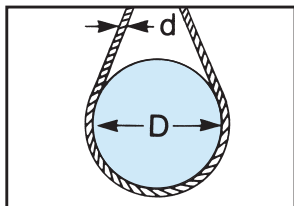
Thimbles improve sling longevity by protecting the rope at connection points.

Stainless Steel Slings, Fiber Core Slings with reduced Work Load Limits, Cable Laid Slings with galvanized finish and larger diameter slings are also available.

## SINGLE BODY SLING TYPES

Type 1- Eye & Eye	Type 8- Thimble & Thimble	Sliding Chokers
Type 2- Eye & Hook	Type 9- Thimble & Hook	
Type 3- Eye & Thimble	Type 10- Thimble & Slip-Thru Thimble	Type 14 Eye & Thimble With Sliding Choker Hook
Type 4- Eye & Slip-Thru Thimble	Type 11- Thimble & Crescent Thimble	
Type 5- Eye & Crescent Thimble	Type 12- Slip-Thru Thimble & Hook	Type 15 Eye & Eye With Sliding Choker Hook
Type 6- Crescent Thimble & Hook	Type 13- Slip-Thru Thimble - Both Ends	
Type 7- Crescent Thimbles Both Ends	Please Note: Heavy duty, galvanized thimbles are standard. Eye Hooks and Sliding Choker Hooks will be supplied with latches.	

### (D/d) Considerations



When wire rope is bent around a load, or diameter, the rope strength is decreased. The D/d ratio is diameter of the object around which the rope is bent (D), divided by the diameter (d) of the rope. D/d affects slings used in basket hitches and must be taken into consideration. When the diameter of the load is 4 times the diameter of the wire rope sling the D/d ratio is 4/1 and the sling efficiency is 75% of the Basket WLL.

D/d RATIO	Wire Rope Sling Strength Efficiencies
25/1	100%
20/1	92%
15/1	88%
10/1	86%
8/1	84%
6/1	80%
4/1	75%
2/1	65%
1/1	50%

### SINGLE BODY WIRE ROPE SPECIFICATIONS

ROPE DIA. (In.)	WORK LOAD LIMITS (TONS) D/d = 25/1 TON = 2000 LBS.			MIN. SLING LENGTH (TYPE I)	STANDARD EYE SIZE (Inches) W X L	THIMBLED EYE SIZE (Inches) W X L	EYE HOOK WLL (TONS)	CRESCENT THIMBLE EYE SIZE (Inches) W X L	SLIP-THRU THIMBLE EYE SIZE (Inches) W X L	SLIDING CHOKER HOOK (Inches)
	CHOKER	VERTICAL	90° BASKET							
1/4	.48	.65	1.3	18"	2 X 4	7/8 X 1-5/8	1	2 X 4	2-1/8 X 4-1/8	3/8
5/16	.74	1.0	2.0	21"	2-1/2 X 5	1-1/16 X 1-7/8	1	2 X 4	2-1/8 X 4-1/8	3/8
3/8	1.1	1.4	2.9	24"	3 X 6	1-1/8 X 2-1/8	1-1/2	2 X 4	2-1/8 X 4-1/8	3/8
7/16	1.4	1.9	3.9	27"	3-1/2 X 7	1-1/4 X 2-1/4	2	2 X 5	2-3/8 X 4-3/8	1/2
1/2	1.9	2.5	5.1	30"	4 X 8	1-1/2 X 2-3/4	3	2-1/4 X 6	2-3/8 X 4-3/8	1/2
9/16	2.4	3.2	6.4	33"	4-1/2 X 9	1-1/2 X 2-3/4	5	2-1/4 X 7	2-3/8 X 4-3/8	5/8
5/8	2.9	3.9	7.8	3ft	5 X 10	1-3/4 X 3-1/4	5	2-3/4 X 7	3-3/8 X 6-1/4	5/8
3/4	4.1	5.6	11	3ft-6in	6 X 12	2 X 3-3/4	7	3-1/4 X 8-1/2	3-3/8 X 6-1/4	3/4
7/8	5.6	7.6	15	4ft	7 X 14	2-1/4 X 4-1/4	11	4-1/2 X 10	3-3/4 X 7-1/8	7/8
1	7.2	9.8	20	4ft-6in	8 X 16	2-1/2 X 4-1/2	11	4-1/2 X 11-1/2	3-3/4 X 7-1/8	1
1-1/8	9.1	12	24	5ft	9 X 18	2-7/8 X 5-1/8	15	4-7/8 X 13	4-3/8 X 8-3/8	1-1/8
1-1/4	11	15	30	5ft-6in	10 X 20	3-1/2 X 6-1/2	15	5-1/2 X 14-1/2	4-3/8 X 8-3/8	1-1/4
1-3/8	13	18	36	6ft	11 X 22	3-1/2 X 6-1/4	22	6 X 16	5 X 9-1/2	1-3/8
1-1/2	16	21	42	7ft	12 X 24	3-1/2 X 6-1/4	22	6 X 17-1/2	5 X 9-1/2	1-1/2
1-3/4	21	28	57	8ft	14 X 28	4-1/2 X 9	37	7 X 20	6-3/4 X 11-3/4	—
2	28	37	73	9ft	16 X 32	6 X 12	45	7 X 23-1/2	8 X 14-1/2	—
2-1/4	35	44	89	10ft	18 X 36	7 X 14	45	8-1/2 X 26	8-1/2 X 15-1/2	—
2-1/2	42	54	109	11ft	20 X 40	—	60	8-1/2 X 29-1/2	—	—





## MULTIPLE LEG BRIDLE ASSEMBLIES

<ul style="list-style-type: none"> <li>• SINGLE PART BODY</li> <li>• THIMBLES PROTECT SLING</li> <li>• 6 X 19 OR 6 X 37 ROPE CONSTRUCTION</li> <li>• IWRC RESISTS CRUSHING</li> <li>• OTHER FITTINGS AVAILABLE</li> </ul> <p><b>DO NOT EXCEED WORK LOAD LIMITS</b></p>			<p>DOUBLE-LEG BRIDLE</p>			<p>TRIPLE-LEG BRIDLE</p>			<p>QUAD-LEG BRIDLE</p>					
			<p><b>WORK LOAD LIMITS</b> Tons = 2,000 Lbs.</p>			<p><b>WORK LOAD LIMITS</b> Tons = 2,000 Lbs.</p>			<p><b>WORK LOAD LIMITS</b> Tons = 2,000 Lbs.</p>					
			<p><b>ROPE DIAMETER (INCHES)</b></p>	<p><b>MIN. SLING LENGTH</b></p>	<p><b>EYE HOOK CAP. (TONS)</b></p>	<p>60°</p>	<p>45°</p>	<p><b>MASTER LINK STOCK DIA.</b></p>	<p>60°</p>	<p>45°</p>	<p><b>MASTER LINK STOCK DIA.</b></p>	<p>60°</p>	<p>45°</p>	<p><b>MASTER LINK STOCK DIA.</b></p>
			1/4	15"	1	1.1	.91	1/2	1.7	1.4	1/2	2.2	1.8	5/8
5/16	18"	1	1.7	1.4	1/2	2.6	2.1	1/2	3.5	2.8	3/4			
3/8	20"	1-1/2	2.5	2.0	1/2	3.7	3.0	3/4	5.0	4.1	3/4			
7/16	22"	2	3.4	2.7	3/4	5.0	4.1	3/4	6.7	5.5	1			
1/2	24"	3	4.4	3.6	3/4	6.6	5.4	1	8.8	7.1	1			
9/16	26"	5	5.5	4.5	3/4	8.3	6.8	1	11	9	1-1/4			
5/8	28"	5	6.8	5.5	1	10	8.3	1-1/4	14	11	1-1/4			
3/4	33"	7	9.7	7.9	1-1/4	15	12	1-1/2	19	16	1-3/4			
7/8	39"	11	13	11	1-1/4	20	16	1-1/2	26	21	2			
1	42"	11	17	14	1-1/2	26	21	1-3/4	34	28	2-1/4			
1-1/8	4'	15	21	17	1-1/2	31	26	1-3/4	42	34	2-3/4			
1-1/4	4'- 6"	15	26	21	1-3/4	38	31	2	51	42	2-3/4			
1-3/8	5'	22	31	25	1-3/4	46	38	2-1/4	—	—	—			
1-1/2	5'- 6"	22	37	30	2	55	45	2-1/4	—	—	—			
1-3/4	6'- 6"	30	49	40	2-1/4	74	60	3-1/4	—	—	—			
2	8'	37	63	52	2-3/4	—	—	—	—	—	—			



Scan this QR code for information on Wire Rope Slings, such as tagging, inspection, sling damage examples, removal from service criteria and other considerations.

Bridle or matched slings are +/- one rope diameter. Length tolerance for single body slings is +/- two rope diameters or +/- .5% of the sling length, whichever is greater.

### WARNING

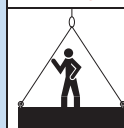
To avoid SEVERE INJURY or DEATH from equipment failure:

- Users MUST BE TRAINED on proper selection/use.
- NEVER damage, misuse or overload - observe and NEVER EXCEED the Work Load Limit (WLL).
- Properly maintain and inspect before use.

NEVER ON

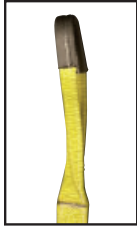
NEVER UNDER

NEVER IN-LINE





# Eye & Eye Slings



Flat Tapered Code FT



Flat No Taper Code FE

Eye and Eye slings can be used in choker, vertical and basket hitches. Slings with Half Twist (**Type 4**) eyes are furnished unless Flat (**Type 3**) eyes are specified. Sling eyes will be wrapped at the bearing point unless otherwise specified.

Tapered eyes are automatically furnished on slings over 2 inches wide to provide for a proper relationship between the sling and the lifting hardware. Eyes with no taper are available upon request.

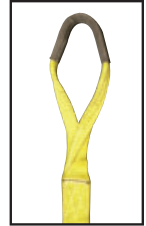
The bearing points of Half Twist (Type 4) eyes are oriented 90° to the sling body. The perpendicular relationship between the eye and body in Half Twist, Type 4 eyes results in a comparatively advantageous choke hitch, when compared to Flat (Type 3) eyes. Half Twist eyes perform equally well in vertical or basket hitches.

For **Half Twist Eyes with Taper**, specify "**HTT**" (EE1-902 **HTT**) Eye Width-1"  
 For **Half Twist Eyes with no taper**, specify "**HT**" (EE1-902 **HT**) Eye Width-2"

For **Flat Eyes with Taper**, specify "**FT**" (EE1-902 **FT**) Eye Width-1"

For **Flat Eyes with no taper**, specify "**FE**" (EE1-902 **FE**) Eye Width-2"

Eyes depicted feature standard eye protection, Order Code "J" and does not need to be added to sling stock number. Other eye treatments are available. Contact a Lift-It® sales representative for more information.



Half Twist Tapered Code HTT



Half Twist No Taper Code HT

### WORK LOAD LIMITS (Lbs.)

Width (Inches)	Stock Number	Eye Dimensions (Inches)		WORK LOAD LIMITS (Lbs.)					Sling Weight (Lbs.)		Minimum Sling Length (Ft.)
				Choker	Vertical	Basket Hitches					
		Width	Length			90°	60°	45°	Base 8 Ft.	Adder / Ft.	
1"	EE1-601P	1"	9"	900	1,200	2,400	2,070	1,690	.40	.03	4
1"	EE1-901P	1"	9"	1,200	1,600	3,200	2,770	2,260	.67	.05	4
1"	EE2-601P	1"	9"	1,900	2,400	4,800	4,150	3,390	.59	.06	3
1"	EE2-901P	1"	9"	2,500	3,200	6,400	5,540	4,520	1.00	.11	3
1"	EE4-601P	1"	12"	3,800	4,800	9,600	8,310	6,780	1.22	.13	4
1"	EE4-901P	1"	12"	5,000	6,400	12,800	11,080	9,050	2.07	.22	4
1-1/2"	EE1-915P	1-1/2"	9"	1,800	2,300	4,600	3,980	3,250	1.11	.09	4
1-1/2"	EE2-915P	1-1/2"	9"	3,600	4,600	9,200	7,960	6,500	1.67	.19	3
1-1/2"	EE4-915P	1-1/2"	12"	7,200	9,200	18,400	15,930	13,000	3.44	.37	4
2"	EE1-602P	2"	12"	1,900	2,400	4,800	4,150	3,390	.96	.08	4
2"	EE1-902P	2"	12"	2,500	3,200	6,400	5,540	4,520	1.34	.11	4
2"	EE2-602	2"	12"	3,800	4,800	9,600	8,310	6,780	1.44	.16	4
2"	EE2-902P	2"	12"	5,000	6,400	12,800	11,080	9,050	2.02	.22	4
2"	EE4-602P	2"	12"	7,000	8,860	17,720	15,340	12,530	2.96	.32	4
2"	EE4-902P	2"	12"	9,000	11,400	22,800	19,740	16,120	4.14	.40	4
3"	EE1-603P	1-1/2"	12"	2,700	3,600	7,200	6,230	5,090	1.82	.14	4
3"	EE1-903P	1-1/2"	12"	3,800	4,800	9,600	8,310	6,780	2.29	.18	4
3"	EE2-603P	1-1/2"	12"	5,300	6,600	13,200	11,430	9,330	2.52	.28	4
3"	EE2-903P	1-1/2"	12"	7,000	8,860	17,720	15,340	12,530	3.24	.35	4
3"	EE4-603P	1-1/2"	18"	9,000	11,400	22,800	19,740	16,120	5.18	.56	5
3"	EE4-903P	1-1/2"	18"	13,600	17,000	34,000	29,440	24,040	6.60	.70	5
4"	EE1-604P	1-1/2"	14"	3,800	4,800	9,600	8,310	6,780	2.24	.17	5
4"	EE1-904P	1-1/2"	14"	5,000	6,400	12,800	11,080	9,050	2.86	.22	5
4"	EE2-604P	1-1/2"	14"	7,000	8,860	17,720	15,340	12,530	3.10	.34	5
4"	EE2-904P	1-1/2"	14"	9,000	11,400	22,800	19,740	16,120	3.96	.44	5
4"	EE4-604P	2"	18"	12,000	15,000	30,000	25,980	21,210	6.54	.69	6
4"	EE4-904P	2"	18"	18,000	22,800	45,600	39,480	32,240	8.36	.88	6
5"	EE1-905P	1-3/4"	18"	6,000	8,000	16,000	13,850	11,310	3.48	.27	6
5"	EE2-905P	1-3/4"	18"	11,400	14,250	28,500	24,680	20,150	4.82	.54	6
5"	EE4-905P	2-1/2"	24"	19,000	24,000	48,000	41,560	33,940	10.18	1.07	8
6"	EE1-906P	2"	24"	7,600	9,600	19,200	16,620	13,570	4.21	.32	8
6"	EE2-906P	2"	24"	13,600	17,000	34,000	29,440	24,040	5.83	.65	8
6"	EE4-906P	3"	24"	24,000	30,000	60,000	51,960	42,420	12.31	1.30	8
8"	EE1-908P	3"	24"	10,250	12,800	25,600	22,170	18,100	6.27	.45	8
8"	EE2-908P	3"	24"	18,000	22,800	45,600	39,490	32,240	8.51	.90	8
8"	EE4-908P	4"	24"	32,000	40,000	80,000	69,280	56,560	17.47	1.79	8
10"	EE1-910P	3-1/2"	24"	12,000	15,000	30,000	25,980	21,210	8.20	.59	8
10"	EE2-910P	3-1/2"	24"	19,000	24,000	48,000	41,560	33,940	11.13	1.17	8
10"	EE4-910P	5"	30"	36,000	45,000	90,000	77,940	63,630	22.85	2.34	10
12"	EE1-912P	4"	30"	15,000	19,000	38,000	32,910	26,860	10.08	.72	10
12"	EE2-912P	4"	30"	24,000	30,000	60,000	51,960	42,420	13.68	1.44	10
12"	EE4-912P	6"	36"	43,000	53,000	106,000	91,790	74,940	28.80	2.88	12
12"	EE1-1212P	4"	30"	18,000	23,000	46,000	39,836	32,522	11.83	1.07	10
12"	EE2-1212P	4"	36"	28,000	35,000	70,000	60,620	49,490	17.18	2.14	12

Consider using High Performance Fiber Slings in applications requiring 3 and 4 ply thick slings, wider than 4 inches.

**WARNING** DO NOT EXCEED WORK LOAD LIMITS  
 Improper use and lack of proper training may result in SEVERE INJURY or DEATH due to rigging failure, the unplanned release of tension, deadly recoil and/or impact force and/or loss of load control.

# Endless Slings



Endless slings (**Type 5**) are a versatile sling as hook and load contact points can be rotated. For use in choker, vertical and basket hitches. Sling ends can be tapered and reinforced on request.



Width (Inches)	Stock Number	Optional End Taper		WORK LOAD LIMITS (Lbs.)					Sling Weight (Lbs.)		Minimum Sling Length (Ft.)
				Choker	Vertical	Basket Hitches					
		Width	Length			90°	60°	45°	Base 8 Ft.	Adder/Ft.	
1"	EN1-601	-	-	1,900	2,400	4,800	4,150	3,390	.56	.06	2
1"	EN1-901P	-	-	2,500	3,200	6,400	5,540	4,520	.95	.11	2
1"	EN2-601	-	-	3,800	4,800	9,600	8,310	6,780	1.15	.13	2
1"	EN2-901P	-	-	5,000	6,400	12,800	11,080	9,050	1.96	.22	2
1"	EN3-901P	-	-	7,600	9,600	19,200	16,620	13,570	2.97	.33	3
1-1/2"	EN1-915	-	-	3,700	4,650	9,300	8,050	6,570	1.58	.09	2
1-1/2"	EN2-915	-	-	7,400	9,300	18,600	16,100	13,150	3.26	.18	2
1-1/2"	EN3-915	-	-	11,000	13,950	27,900	24,160	19,720	4.93	.55	3
2"	EN1-602	1"	12"	3,800	4,800	9,600	8,310	6,780	1.36	.16	2
2"	EN1-902P	1"	12"	5,000	6,400	12,800	11,080	9,050	1.90	.22	2
2"	EN2-602	1"	12"	7,600	9,600	19,200	16,620	13,570	2.80	.32	2
2"	EN2-902P	1"	12"	10,000	12,500	25,000	21,650	17,670	3.92	.44	2
2"	EN3-902P	-	-	14,000	17,500	35,000	30,310	24,740	5.94	.67	3
2"	EN4-902P	-	-	18,000	23,500	47,000	40,700	33,230	7.95	.89	4
3"	EN1-603	1-1/2"	12"	5,700	7,200	14,400	12,470	10,180	2.38	.28	2
3"	EN1-903P	1-1/2"	12"	7,600	9,600	19,200	16,620	13,570	2.99	.35	2
3"	EN2-603	1-1/2"	12"	10,000	12,500	25,000	21,650	17,670	4.90	.56	2
3"	EN2-903P	1-1/2"	12"	14,000	17,500	35,000	30,310	24,740	6.16	.70	2
3"	EN3-903P	-	-	21,000	26,500	53,000	45,890	37,470	9.33	1.05	3
3"	EN4-903P	-	-	28,000	35,000	70,000	60,620	49,490	12.50	1.40	4
4"	EN1-604	1-1/2"	12"	7,600	9,600	19,200	16,620	13,570	2.92	.34	3
4"	EN1-904P	1-1/2"	12"	10,000	12,500	25,000	21,650	17,670	3.74	.44	3
4"	EN2-604P	2"	18"	14,000	17,500	35,000	30,310	24,740	6.02	.68	3
4"	EN2-904P	2"	18"	18,000	23,500	47,000	40,700	33,230	7.70	.88	3
4"	EN3-904P	-	-	28,000	35,000	70,000	60,620	49,490	11.66	1.32	4
4"	EN4-904P	-	-	36,000	46,000	92,000	79,670	65,040	15.62	1.76	4
5"	EN1-905P	1-3/4"	18"	12,800	16,000	32,000	27,710	22,620	4.56	.53	3
5"	EN2-905P	2-1/2"	18"	22,000	27,500	55,000	47,630	38,880	9.38	1.07	4
5"	EN3-905P	-	-	33,500	42,000	84,000	72,740	59,380	14.20	1.60	5
5"	EN4-905P	-	-	44,800	56,000	112,000	96,900	79,180	19.03	2.14	5
6"	EN1-906P	2"	18"	15,300	19,200	38,400	33,250	27,140	5.51	.64	3
6"	EN2-906P	3"	24"	26,000	32,500	65,000	56,290	45,950	11.34	1.29	3
6"	EN3-906P	-	-	39,000	48,900	97,800	84,690	69,140	17.17	1.94	5
6"	EN4-906P	-	-	52,000	65,000	130,000	112,580	91,910	23.00	2.59	5
8"	EN1-908P	3"	18"	20,000	25,600	51,200	44,330	36,190	7.62	.90	3
8"	EN2-908P	4"	24"	32,700	40,960	81,920	70,940	57,910	15.68	1.79	4
8"	EN3-908P	-	-	49,000	61,000	122,000	105,650	86,250	23.74	2.69	5
8"	EN4-908P	-	-	65,500	81,900	163,800	158,230	141,850	31.81	3.58	6
10"	EN1-910P	3-1/2"	24"	25,600	32,000	64,000	55,420	45,240	9.96	1.17	3
10"	EN2-910P	5"	30"	38,400	48,000	96,000	83,130	67,870	20.51	2.34	4
10"	EN3-910P	-	-	57,600	72,000	144,000	124,700	101,800	31.06	3.52	5
10"	EN4-910P	-	-	76,800	96,000	192,000	166,270	135,740	41.61	4.69	6
12"	EN1-912P	4"	30"	30,720	38,000	76,000	65,810	53,730	12.24	1.44	3
12"	EN2-912P	6"	36"	43,000	53,000	106,000	91,790	74,940	25.20	2.88	5
12"	EN3-912P	-	-	64,000	80,000	160,000	138,560	113,120	38.16	4.32	6
12"	EN4-912P	-	-	86,000	107,000	214,000	185,324	151,298	51.12	5.76	8

Consider using High Performance Fiber Slings in applications requiring 3 and 4 ply thick slings, wider than 4 inches.



Scan this QR code for information on Web Slings, such as inspection, sling damage examples, removal from service criteria and other considerations.

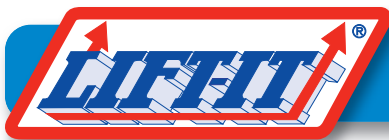
## WARNING

To avoid SEVERE INJURY or DEATH from equipment failure:

- Users MUST BE TRAINED on proper selection/use.
- NEVER damage, misuse or overload - observe and NEVER EXCEED the Work Load Limit (WLL).
- Properly maintain and inspect before use.







# Polyester Roundslings



Lift-It® polyester roundslings are made of polyester core yarn covered by a seamless, tubular double-cover. Since the core yarns are not directly in contact with the load there is no loss of strength from abrasion to the sling cover.

Endless configurations enable the user to rotate hook and load contact points, resulting in increased sling longevity, and because the sling body is soft and pliable, it will not choke lock, hindering removal.

Our domestically manufactured polyester roundslings are an economical way to handle loads up to 55 Tons vertical. Contact a Lift-It® sales representative about our import line available in our most common sizes, offering cost savings while providing the same quality and exceptional customer service that you've come to expect from Lift-It®.

## POLYESTER ROUNDSLINGS – ENDLESS CONFIGURATION

STOCK NUMBER	RS30	RS50	RS60	RS90	RS120	RS150	RS180	RS240
COLOR CODE	PURPLE	BLACK	GREEN	YELLOW	TAN	RED	WHITE	BLUE
CHOKER (WLL - LBS.)	2,120	3,200	4,240	6,720	8,500	10,560	13,400	17,000
VERTICAL (WLL - LBS.)	2,650	4,000	5,300	8,400	10,600	13,200	16,800	21,200
BASKET (WLL - LBS.) AT 90°	5,300	8,000	10,600	16,800	21,200	26,400	33,600	42,400
BASKET (WLL - LBS.) AT 60°	4,500	6,900	9,100	14,500	18,300	22,800	29,000	36,700
BASKET (WLL - LBS.) AT 45°	3,600	5,600	7,400	11,800	14,900	18,600	23,750	29,900
MINIMUM LENGTH	18"	18"	18"	3 Ft.	3 Ft.	3 Ft.	3 Ft.	3 Ft.
MINIMUM CONNECTION DIA. CHOKER or VERTICAL (Inches)	.39	.50	.59	.72	.85	.95	1.12	1.15
MINIMUM CONNECTION DIAMETER BASKET (Inches)	.54	.62	.83	1.02	1.20	1.35	1.59	1.63
WEIGHT-LBS PER FOOT (BEARING to BEARING) (Inches)	.21	.30	.32	.45	.55	.60	.75	.90
BODY DIAMETER (RELAXED) (Inches)	1.04	1.11	1.11	1.27	1.32	1.43	1.59	1.75
THICKNESS WHEN LOADED (Inches)	.20	.25	.25	.30	.38	.38	.40	.50
WIDTH WHEN LOADED (Inches)	2.00	2.00	2.00	2.75	3.00	3.00	3.00	4.00

STOCK NUMBER	RS300DCP	RS360DCP	RS400DCP	RS600DCP	RS800DCP	RS1000DCP	RS1100DCP	RS1200DCP
COLOR CODE	GRAY	GRAY	GRAY	BROWN	GREEN	BLACK	GRAY	GRAY
CHOKER (WLL - LBS.)	20,000	24,800	32,000	43,000	52,800	72,000	80,000	88,000
VERTICAL (WLL - LBS.)	25,000	31,000	40,000	53,000	66,000	90,000	100,000	110,000
BASKET (WLL - LBS.) AT 90°	50,000	62,000	80,000	106,000	132,000	180,000	200,000	220,000
BASKET (WLL - LBS.) AT 60°	43,300	53,600	69,280	91,796	114,312	155,880	173,200	190,520
BASKET (WLL - LBS.) AT 45°	35,350	43,800	56,568	74,942	93,324	127,260	141,400	155,540
MINIMUM LENGTH	3 Ft.	3 Ft.	4 Ft.	4 Ft.	4 Ft.	6 Ft.	6 Ft.	6 Ft.
MINIMUM CONNECTION DIA. CHOKER or VERTICAL (Inches)	1.25	1.41	1.60	1.90	2.05	2.46	3.50	4.00
MINIMUM CONNECTION DIAMETER BASKET (Inches)	1.77	2.00	2.26	2.69	2.90	3.50	4.00	4.50
WEIGHT PER FOOT (BEARING to BEARING) (Lbs.)	1.25	1.50	2.00	2.85	3.60	4.60	5.30	6.80
BODY DIAMETER (RELAXED) (Inches)	2.15	2.39	2.55	3.03	3.50	3.82	4.00	4.50
THICKNESS WHEN LOADED (Inches)	.50	.50	.75	.80	1.00	1.10	1.25	1.40
WIDTH WHEN LOADED (Inches)	4.00	4.25	5.00	5.25	6.00	8.00	8.00	8.00

## HOW TO ORDER

### 1. COMPLETE STOCK NUMBER

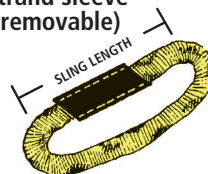


**2. SLING LENGTH:** Unless otherwise specified: Sling lengths are measured as bearing to bearing lengths. Assembly lengths are measured as bearing hardware.

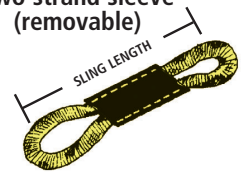
### 3. SLING PROTECTION:

Description, quantity and length of sling protection. (Ask a sales representative about available options).

One strand sleeve (non-removable)



Two strand sleeve (removable)










Lift-It® offers High Performance Yarn roundslings made with the same ISO-9001/AS9100 assured quality, skilled craftsmanship, and commitment to customer service that has made Lift-It® Manufacturing an industry leader in the fabrication of polyester roundslings for decades.

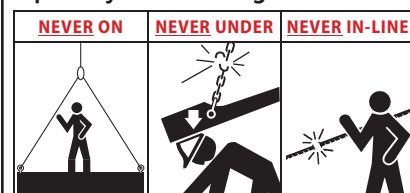
High Performance Yarn Roundslings are made from Ultra High Modulus Polyethylene (UHMPE) fibers encapsulated in a durable, double layer cover. UHMPE fiber is significantly lighter than equivalent strength polyester roundslings or wire rope, allowing for fewer riggers to perform the job in less time. With 75% less elongation than comparable polyester slings, overhead clearance is maximized in low headroom situations.

These strong, lightweight & economical slings are built to order, proof Tested to 200%, and shipped from our Pomona, California facility in days, not weeks, with 24-7-365 fabrication available to satisfy customers emergency needs.

## HIGH PERFORMANCE YARN ROUNDSLING SPECIFICATIONS

Polyester Cover	Work Load Limits (Lbs.) (5:1 Design Factor)					Approximate	
	Choker	Vertical	Basket Hitches				
	Stock Number			90° 	60° 	45° 	Weight (Lbs. / Ft.) (Bearing-Bearing)
RSHP-1000	8,000	10,000	20,000	17,320	14,140	.38	2
RSHP-1500	12,000	15,000	30,000	25,980	21,210	.48	2
RSHP-2000	16,000	20,000	40,000	34,640	28,280	.55	2
RSHP-2500	20,000	25,000	50,000	43,300	35,350	.63	3
RSHP-3000	24,000	30,000	60,000	51,960	42,420	.75	3
RSHP-4000	32,000	40,000	80,000	69,280	56,560	.88	3
RSHP-5000	40,000	50,000	100,000	86,600	70,700	1.13	4
RSHP-6000	48,000	60,000	120,000	103,920	84,840	1.25	4
RSHP-7000	56,000	70,000	140,000	121,240	98,980	1.38	4
RSHP-8500	68,000	85,000	170,000	147,220	120,190	1.75	5
RSHP-10000	80,000	100,000	200,000	173,200	141,400	2.00	5
RSHP-12500	100,000	125,000	250,000	216,500	176,750	2.50	5
RSHP-13500	108,000	135,000	270,000	233,820	190,890	3.13	7
RSHP-15000	120,000	150,000	300,000	259,800	212,100	3.50	7
RSHP-17500	140,000	175,000	350,000	303,100	247,450	4.25	7
RSHP-20000	160,000	200,000	400,000	346,400	282,800	4.75	8
RSHP-25000	200,000	250,000	500,000	433,000	353,500	5.75	8
RSHP-30000	240,000	300,000	600,000	519,600	424,200	7.00	12
RSHP-35000	280,000	350,000	700,000	606,200	494,900	8.25	14
RSHP-40000	320,000	400,000	800,000	692,800	565,600	9.75	16
RSHP-50000	400,000	500,000	1,000,000	866,000	707,000	12.00	18

**Make Sure All Personnel are Clear of Loads and Alert to Risks, Especially in the "Danger Zone".**



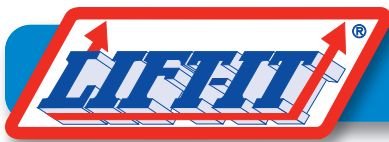
Overloaded and/or damaged slings, rigging hardware and/or sling protection may fail, and the unplanned release of tension may:

- Strike personnel with deadly recoil and/or impact force.
- Become deadly projectiles resulting in SEVERE INJURY or DEATH.








Scan this QR code for information on Roundslings, such as inspection, sling damage examples, removal from service criteria and other considerations.





**CHECK-FAST® HIGH PERFORMANCE ROUNDSLINGS**

Check-Fast® High Performance Roundslings are the only single path HP Roundslings to feature the Check-Fast®, Inspection System. Resilient K-Spec® Load Bearing Core Yarns are encapsulated by Covermax® Roundslings Covers.

Check-Fast® HP Roundslings Stock Number	WORK LOAD LIMITS (Lbs.)					Minimum Connection Diameter (Inches)	Approximate Weight (Lbs. per Ft.) (Bearing-Bearing)	Nominal Body Width (Inches)
	Choker	Vertical	Basket Hitches					
			90° 	60° 	45° 			
SP 500CF	4,000	5,000	10,000	8,660	7,070	.76	.34	2.5"
SP 1000CF	8,000	10,000	20,000	17,320	14,140	.88	.38	2.5"
SP 1500CF	12,000	15,000	30,000	25,980	21,210	1.00	.44	2.5"
SP 2000CF	16,000	20,000	40,000	34,640	28,280	1.26	.52	2.5"
SP 2500CF	20,000	25,000	50,000	43,300	35,350	1.38	.59	3"
SP 3000CF	24,000	30,000	60,000	51,960	42,420	1.50	.65	3"
SP 4000CF	32,000	40,000	80,000	69,280	56,560	1.76	.85	3"
SP 5000CF	40,000	50,000	100,000	86,600	70,700	1.76	.98	4"
SP 6000CF	48,000	60,000	120,000	103,920	84,840	2.00	1.11	4"
SP 7000CF	56,000	70,000	140,000	121,240	98,980	2.25	1.24	4"
SP 8500CF	68,000	85,000	170,000	147,220	120,190	2.50	1.63	5"
SP 10000CF	80,000	100,000	200,000	173,200	141,400	2.75	1.81	5"
SP 12500CF	100,000	125,000	250,000	216,500	176,750	3.00	2.12	5"
SP 15000CF	120,000	150,000	300,000	259,800	212,100	3.00	2.54	6"
SP 17500CF	140,000	175,000	350,000	303,100	247,450	3.50	3.09	6"
SP 20000CF	160,000	200,000	400,000	346,400	282,800	3.50	3.58	6"





# Twin-Path® Extra Slings



The first truly ergonomic sling, Twin-Path® Extra Slings are used worldwide in place of wire rope slings for heavy lifts. Twin-Path® Extra Slings weigh approximately 10% of comparable strength, steel slings. Super strong and ultra-light, Twin-Path® Extra Slings rated up to 600,000 Lbs. vertical capacity are standard items and larger capacity slings are available.

The patented Twin-Path® design provides two connections between the hook and the load for redundant, back up protection. All Twin-Path® Slings feature Check-Fast® Inspection System and Contrasting Colored Covers, with the original style Tattle Tails and Fiber Optic inspection systems available by request. No other sling has these features which separate the best from all the rest. Stretch at Work Load Limit is approximately 1%.

K-Spec® load bearing core yarn gives Twin-Path Extra® Slings their incredible strength. K-Spec® Core Yarn has been determined to be the most resilient and abrasion resistant load bearing core yarn, confirmed by independent testing. Covermax®, a bulked nylon, outer, protective cover provides superior abrasion resistance and is furnished for all Twin-Path® Slings.

K-Spec® Core Yarn durability combined with the abrasion resistance of Covermax® covers, makes Twin-Path® Extra Slings the first, repairable sling. Twin-Path® Extra Slings are definitely the slings of choice when ergonomics, productivity and safety are important considerations.

## TWIN-PATH® EXTRA SPECIFICATIONS

Polyester Cover	Covermax® Cover	Work Load Limits (Lbs.) (5/1 Design Factor)					Approximate	
		Choker	Vertical	Basket Hitches				
				90°	60°	45°	Weight (Lbs. per Ft.) (Bearing-Bearing)	Body Width (Inches) Tube/Tapered
TPXKS 1000	TUFXKS 1000	8,000	10,000	20,000	17,320	14,140	.41	3" / 1.5"
TPXKS 1500	TUFXKS 1500	12,000	15,000	30,000	25,980	21,210	.46	3" / 1.5"
TPXKS 2000	TUFXKS 2000	16,000	20,000	40,000	34,640	28,280	.52	3" / 1.5"
TPXKS 2500	TUFXKS 2500	20,000	25,000	50,000	43,300	35,350	.67	4 / 2"
TPXKS 3000	TUFXKS 3000	24,000	30,000	60,000	51,960	42,420	.73	4 / 2"
TPXKS 4000	TUFXKS 4000	32,000	40,000	80,000	69,280	56,560	.86	4 / 2"
—	TUFXKS 5000	40,000	50,000	100,000	86,600	70,700	1.07	5 / 2.5"
—	TUFXKS 6000	48,000	60,000	120,000	103,920	84,840	1.20	5 / 2.5"
—	TUFXKS 7000	56,000	70,000	140,000	121,240	98,980	1.33	5 / 2.5"
—	TUFXKS 8500	68,000	85,000	170,000	147,220	120,190	1.61	6" / 3"
—	TUFXKS 10000	80,000	100,000	200,000	173,200	141,400	1.80	6" / 3"
—	TUFXKS 12500	100,000	125,000	250,000	216,500	176,750	2.31	8" / 4"
—	TUFXKS 15000	120,000	150,000	300,000	259,800	212,100	2.64	8" / 4"
—	TUFXKS 17500	140,000	175,000	350,000	303,100	247,450	2.96	8" / 4"
—	TUFXKS 20000	160,000	200,000	400,000	346,400	282,800	3.47	10" / 5"
—	TUFXKS 25000	200,000	250,000	500,000	433,000	353,500	4.12	10" / 5"
—	TUFXKS 27500	220,000	275,000	550,000	476,300	388,850	4.61	12" / 6"
—	TUFXKS 30000	240,000	300,000	600,000	519,600	424,200	4.93	12" / 6"
—	TUFXKS 40000	320,000	400,000	800,000	692,800	565,600	6.74	14" / 7"
—	TUFXKS 50000	400,000	500,000	1,000,000	866,000	707,000	8.40	16" / 8"
—	TUFXKS 60000	480,000	600,000	1,200,000	1,039,000	848,000	10.15	18" / 9"

**Please Note:** Work Load Limits include both paths and are for one complete sling. Work Load Limits are based upon connection points that have equal or greater strength. Twin-Path® Extra Slings conform to the specifications and standards of: ASME B30-9, Chapter 6, Web Sling and Tie Down Association, WSTDA-RS-1, US Navy, NAVFAC P307, Section 14.6.4.3 and Cordage Institute Roundsling Standard, CI-1905. Current revisions.

Dimensions can vary according to the hardware or bearing points used with Twin-Path® Extra Slings.

US Patent Nos. 7,661,737, 7,926,859 and 8,322,765 Canadian Patent Nos. 2,547,632 and 2,696,805  
Japanese Patent No. 4864965 Australian Patent No. 2,006,251,754 New Zealand Patent No. 560567

Scan this QR code for information on Twin-Path Slings, such as inspection, sling damage examples, removal from service criteria and other considerations.





# Web Bridle Assemblies

Lift-It® Bridle Assemblies feature combinations of links, fabric eyes and web hooks for the efficient handling of loads with fixed lifting points. Synthetic Bridle Assemblies are lightweight and easy to handle when compared to wire and chain bridles.

Lift-It® Bridle Assemblies feature hardware that is substantially larger than provided by other manufacturers. We take into account not only the strength requirements, but the spatial relationship between sling attachment points and interfacing hardware.

Lift-It® Bridle Assembly capacities are lower than our competitors. (MLB3) Three Leg Bridle Assembly capacities are based upon 2-1/2 legs for the assigned capacity. (MLB4) Four Leg Bridle Assembly capacities are based on three legs for the assigned capacity.

Lower capacities and more expensive, larger hardware will never allow us to be the successful, low bidder. Our conservative approach is respected by conscientious users and appreciated by sophisticated purchasers. In this instance, spending more for less provides for improved safety and longer sling service.

Standard Master links are welded. Forged (non-welded) master links are available upon request. All hooks are supplied with latches.

Bottom fittings are placed in the same plane as the top lifting fixture, unless otherwise specified. All fittings are alloy steel and other types of materials and attachments are available.

Endless bridle slings allow for sling rotation. Do not place load bearing splices or tags in contact points with bridle master links or fittings.

		EYE & EYE					ENDLESS					
<b>SINGLE LEG BRIDLES (SLB)</b>												
		Stock Number	Web Width	Sling Type	Web Ply	Work Load Limits (Lbs.)		Top Master Link (Dia.)	BOTTOM ATTACHMENTS			Sling Weight** (Lbs.)
				Vertical	Basket		Eye Dimensions W" X L" (Code E)	Web Hook (Tons) (Code W)	Bottom Link Diameter (Code L)	Base 8 Ft.	Adder Per Ft.	
SLB-EE2901P	1"	Eye & Eye	2	3,200	6,400	1/2"	1" X 9"	1.5t*	1/2"	1.82	.11	4
SLB-EE2902P	2"	Eye & Eye	2	6,000	12,000	5/8"	1" X 9"	3.0t*	5/8"	3.54	.22	4
SLB-EE2903P	3"	Eye & Eye	2	8,800	17,600	3/4"	1-1/2" X 12"	5.0t*	3/4"	5.31	.35	5
SLB-EN1901P	1"	Endless	1	3,200	6,400	1/2"	—	1.5t*	1/2"	1.77	.11	3
SLB-EN2901P	1"	Endless	2	6,400	12,800	5/8"	—	N/A	5/8"	3.48	.22	3
SLB-EN2902P	2"	Endless	2	12,500	25,000	1"	—	N/A	1"	8.77	.44	4

		EYE & EYE					ENDLESS					
<b>MULTI-LEG BRIDLES (MLB2)</b>												
		Stock Number	Web Width	Sling Type	Web Ply	Work Load Limits (Lbs.)		Top Master Link (Dia.)	BOTTOM ATTACHMENTS			Sling Weight** (Lbs.)
				Angle of Loading			Eye Dimensions W" X L" (Code E)	Web Hook (Tons) (Code W)	Bottom Link Diameter (Code L)	Base 8 Ft.	Adder Per Ft.	
MLB2-EE1901P	1"	Eye & Eye	1	2,700	2,200	3/4"	1" X 9"	1.5t*	1/2"	3.41	.11	4
MLB2-EE2901P	1"	Eye & Eye	2	5,400	4,400	3/4"	1" X 9"	1.5t*	1/2"	4.07	.22	4
MLB2-EE2902P	2"	Eye & Eye	2	10,300	8,400	1"	1" X 9"	3.0t*	5/8"	8.89	.44	4
MLB2-EE2903P	3"	Eye & Eye	2	15,000	12,500	1"	1-1/2" X 12"	5.0t*	3/4"	11.33	.70	5
MLB2-EE2904P	4"	Eye & Eye	2	19,000	15,500	1"	1-1/2" X 14"	***	3/4"	13	.88	6
MLB2-EE4903P	3"	Eye & Eye	4	29,400	24,000	1-1/4"	1-1/2" X 18"	***	1"	21	1.40	6
MLB2-EE4904P	4"	Eye & Eye	4	39,400	32,200	1-1/2"	2" X 18"	***	1"	36	1.76	8
MLB2-EN1901P	1"	Endless	1	5,500	4,500	3/4"	—	1.5t*	1/2"	3.97	.22	3
MLB2-EN2901P	1"	Endless	2	11,000	9,000	1-1/4"	—	5.0t*	5/8"	8.77	.44	4
MLB2-EN2902P	2"	Endless	2	21,000	17,000	1-1/4"	—	***	1"	17.41	.88	4

\*t = Metric ton  
 \*\*Bottom attachment weight must be added to base weight for total assembly weight. Base (8ft) assembly weights and minimum lengths are based upon Masterlinks. Weights and minimum lengths for Master Sub-Assemblies must be calculated.  
 \*\*\* Requires the use of appropriate size Weblok and alloy hook  
 Polyester webbing is standard, also available in nylon.  
 For Polyester Max Edge™ webbing add letters "PME" to Stock Number.  
 (Example: MLB2-EE2902-PME-WW)

<b>⚠ WARNING</b>			
To avoid SEVERE INJURY or DEATH from equipment failure:			
<ul style="list-style-type: none"> <li>Users MUST BE TRAINED on proper selection/use.</li> <li>NEVER damage, misuse or overload - observe and NEVER EXCEED the Work Load Limit (WLL).</li> <li>Properly maintain and inspect before use.</li> </ul>	<b>NEVER ON</b> 	<b>NEVER UNDER</b> 	<b>NEVER IN-LINE</b> 

# Web Bridle Assemblies



		EYE & EYE						ENDLESS					
<b>MULTI LEG BRIDLES (MLB3)</b>													
		3E		3L		3W		EN		3L		3W	
Stock Number	Web Width	Sling Type	Web Ply	Work Load Limits (Lbs.)		Top Master Link (Dia.)	Master Sub Assembly (Top Dia.)	BOTTOM ATTACHMENTS			Sling Weight** (Lbs.)		Minimum Bridle Length (Code E) (Ft.)
				Angle of Loading				Eye Dimensions W" X L" (Code E)	Web Hook (Tons) (Code W)	Bottom Link Diameter (Code L)	Base 8 Ft.	Adder Per Ft.	
MLB3-EE2901P	1"	EE	2	6,900	5,600	1"	3/4"	1" X 9"	1.5t*	1/2"	7.85	.34	4
MLB3-EE2902P	2"	EE	2	12,900	10,600	1-1/4"	1"	1" X 9"	3.0t*	5/8"	15.63	.66	5
MLB3-EE2903P	3"	EE	2	19,000	15,600	1-1/2"	1-1/4"	1-1/2" X 12"	5.0t*	3/4"	26.00	1.05	5
MLB3-EE2904P	4"	EE	2	23,800	19,400	1-1/2"	1-1/2"	1-1/2" X 14"	5.0t*	3/4"	28.00	1.32	6
MLB3-EE4903P	3"	EE	4	36,800	30,000	1-1/2"	1-3/4"	1-1/2" X 18"	***	1"	31.00	2.10	6
MLB3-EE4904P	4"	EE	4	49,300	40,300	2"	2"	2" X 18"	***	1"	68.00	2.64	8
MLB3-EN1901P	1"	EN	1	6,900	5,600	1"	3/4"	—	1.5t*	1/2"	7.70	.34	3
MLB3-EN2901P	1"	EN	2	13,800	11,300	1"	1"	—	5.0t*	5/8"	10.73	.66	3

		EYE & EYE						ENDLESS					
<b>MULTI LEG BRIDLES (MLB4)</b>													
		4E		4L		4W		EN		4L		4W	
Stock Number	Web Width	Sling Type	Web Ply	Work Load Limits (Lbs.)		Top Master Link (Dia.)	Master Sub Assembly (Top Dia.)	BOTTOM ATTACHMENTS			Sling Weight** (Lbs.)		Minimum Bridle Length (Code E) (Ft.)
				Angle of Loading				Eye Dimensions W" X L" (Code E)	Web Hook (Tons) (Code W)	Bottom Link Diameter (Code L)	Base 8 Ft.	Adder Per Ft.	
MLB4-EE2901P	1"	EE	2	8,300	6,700	1-1/4"	1"	1" X 12"	1.5t*	1/2"	13.62	.45	4
MLB4-EE2902P	2"	EE	2	15,500	12,700	1-1/4"	1-1/4"	1" X 12"	3.0t*	5/8"	17.70	.88	5
MLB4-EE2903P	3"	EE	2	23,000	18,700	1-1/2"	1-1/4"	1-1/2" X 12"	5.0t*	3/4"	29.28	1.40	5
MLB4-EE2904P	4"	EE	2	28,600	23,300	2"	1-1/2"	1-1/2" X 14"	5.0t*	3/4"	54.00	1.76	6
MLB4-EE4903P	3"	EE	4	44,100	36,000	2"	2"	1-1/2" X 18"	***	1"	66.00	2.80	6
MLB4-EE4904P	4"	EE	4	59,200	48,300	2-3/4"	2-1/4"	2" X 18"	***	1"	115.00	3.50	8

\*t = Metric ton

\*\*Bottom attachment weight must be added to base weight for total sling weight. Base (8ft) assembly weights and minimum lengths are based upon master links. Weights and minimum lengths for Master Sub-Assemblies must be calculated.

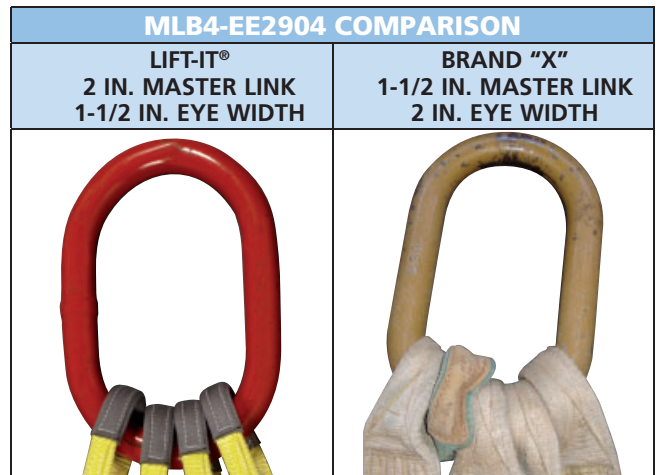
\*\*\* Requires the use of appropriate size Weblok and alloy hook

**WARNING** Work Load Limits for Multi-Leg Bridle Assemblies are based on the following conditions:

1. Even load weight distribution on all legs.
2. Bridle legs being same length. If the legs are not sharing the load equally, the assembly design factor is reduced.
3. All bridle legs used at the same horizontal angle.
4. All bridle legs attached at the same level. If the conditions of the lift vary from those above, Work Load Limits must be recalculated.

Lift-It® Bridle Sling fittings are substantially larger than those offered by our competitors. Larger fittings provide for a proper, spatial relationship, minimizing crowding and bunching at sling connection points. Consider using Master links with Subassemblies (MSA) for Bridles with more than two legs.

Scan this QR code for information on sling-to-load angles, Center of Gravity (CG), sling tension and other considerations.



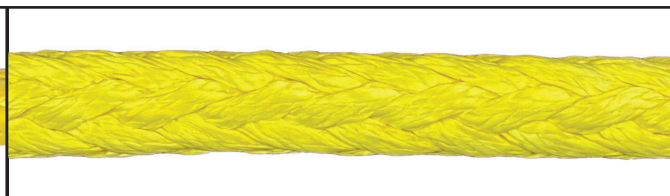




# UHMPE PROLINE12® - Eye & Eye Rope Slings



**UHMPE 12 Strand Construction:  
Up to 1-1/2" Diameter**



**UHMPE 12x12 Strand Construction:  
1-5/8" Diameter & Larger**

When compared to Wire Rope Slings, Lift-It® PROLINE12® UHMPE Synthetic Rope Slings offer:

- Superior strength-to-weight ratio.
- Excellent bending fatigue.
- Similar elongation properties at approximately 1%.
- Will not sink, UHMPE Slings float!
- 1/7 the weight of Wire Rope Slings.
- Non corrosive, do not require lubrication.
- Easy to inspect.

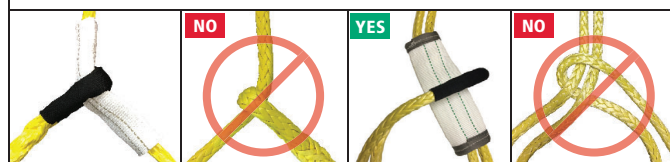
UHMPE Rope is treated to provide protection against abrasion and UV light degradation.

**⚠ WARNING** Do not use Lift-It® PROLINE12® UHMPE Rope Slings in contact with objects or at temperatures above 140°F (60°C) or below -40°F (-40°C).

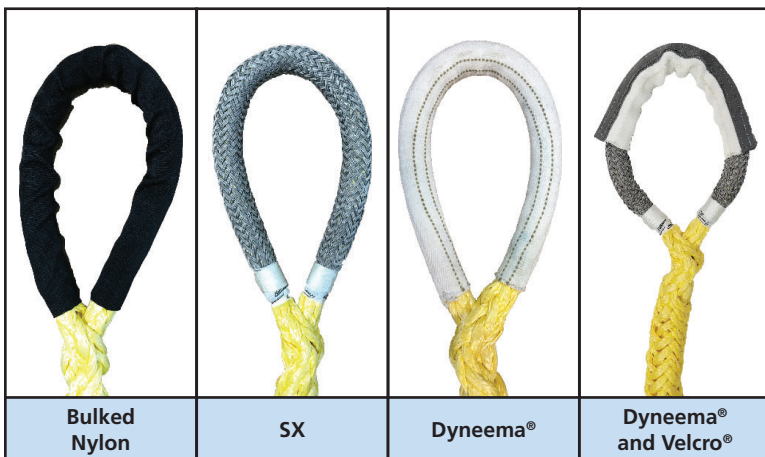
### ⚠ WARNING

Choke point protection for UHMPE Rope Slings is MANDATORY! When UHMPE Rope Slings are used in a choker hitch, protection MUST be properly placed at the choke point to reduce friction and prevent rope-on-rope damage. Endless UHMPE Rope Slings will require additional or larger protection devices to cover all rope components at the choke point.

The protection must always be of sufficient strength, thickness and construction, such as but not limited to CornerMax® Sleeve (depicted). A qualified person and/or properly informed and trained consumer must determine protection adequacy.



## EYE SLEEVES



Bulked Nylon (Cordura®) Eye Sleeves are provided at no additional charge on all PROLINE12® Sling eyes.

### ⚠ WARNING

**Abrasion resistant covers provide no protection against cutting.**

SX Eye Sleeves are provided for an additional charge and combine the light weight and non-absorbing UHMPE properties into a braided sleeve.

Dyneema® Eye Sleeves are available for an additional charge and are more cut resistant than Cordura® and/or SX Eye Sleeves.

## BODY COVERS

Body covers are provided for an additional charge and may prevent abrasion damage and the penetration of dirt and debris into the rope fibers. YKK® No. 10c Heavy Duty Marine Grade Zipper closure enables easy installation and removal, streamlining sling inspection. Body Covers are captivated at each sling end by Retainer Straps which prevent the cover from shifting.

All covers feature tags, which include stock number and serial number for ease of identification and re-ordering.

### MATERIAL CHOICES:

- Cordura® Fabric
- Cordura® with Inner Vinyl






Color options vary with material choice



**⚠ WARNING** See the User Guide that accompanies PROLINE12® slings for Important Safety, Use and Inspection Information.

# UHMPE PROLINE12® Eye & Eye Rope Sling Specifications



Rope Diameter (Inches)	Rope Diameter (mm)	Stock Number	Work Load Limits (Lbs.)			Minimum Length Weight (Lbs.)	Adder / Ft. Weight (Lbs.)	Bearing (Feet-Inches)
			Choker* 	Vertical 	Basket @ 90 			
1/4"	6 mm	EE-UHMPE-1/4	1,120	1,600	3,200	0.1	0.02	2'-2"
5/16"	8 mm	EE-UHMPE-5/16	1,630	2,300	4,600	0.2	0.03	2'-10"
3/8"	9 mm	EE-UHMPE-3/8	2,450	3,500	7,000	0.2	0.04	3'-4"
7/16"	11 mm	EE-UHMPE-7/16	2,940	4,200	8,400	0.2	0.04	3'-10"
1/2"	12 mm	EE-UHMPE-1/2	4,380	6,200	12,400	0.5	0.06	4'-5"
9/16"	14 mm	EE-UHMPE-9/16	5,300	7,500	15,000	0.6	0.08	5'
5/8"	16 mm	EE-UHMPE-5/8	7,190	10,200	20,400	1.1	0.11	5'-7"
3/4"	18 mm	EE-UHMPE-3/4	9,590	13,700	27,400	1.4	0.13	6'-7"
13/16"	20 mm	EE-UHMPE-13/16	10,300	14,800	29,600	2.1	0.16	7'-2"
7/8"	22 mm	EE-UHMPE-7/8	12,900	18,500	37,000	2.8	0.20	7'-10"
1"	24 mm	EE-UHMPE-1	15,400	22,000	44,000	3.5	0.23	8'-10"
1-1/16"	26 mm	EE-UHMPE-1-1/16	18,000	25,800	51,600	4.2	0.28	9'-5"
1-1/8"	28 mm	EE-UHMPE-1-1/8	20,500	29,400	58,800	5.1	0.32	10'-1"
1-1/4"	30 mm	EE-UHMPE-1-1/4	23,100	33,000	66,000	6.8	0.36	11'
1-5/16"	32 mm	EE-UHMPE-1-5/16	27,400	39,200	78,400	8.4	0.42	11'-7"
1-1/2"	36 mm	EE-UHMPE-1-1/2	30,900	44,200	88,400	11.4	0.52	13'-2"
1-5/8"	40 mm	EE-UHMPE-1-5/8	40,700	58,000	116,000	15.8	0.66	14'-6"
1-3/4"	44 mm	EE-UHMPE-1-3/4	43,900	62,000	124,000	20.3	0.78	15'-8"
2"	48 mm	EE-UHMPE-2	49,700	71,000	142,000	26.4	0.91	17'-7"
2-1/8"	52 mm	EE-UHMPE-2-1/8	59,900	85,000	170,000	33.8	1.1	18'-11"
2-1/4"	56 mm	EE-UHMPE-2-1/4	67,300	96,000	192,000	40.3	1.2	20'-1"
2-1/2"	60 mm	EE-UHMPE-2-1/2	74,200	106,000	212,000	54.8	1.5	22'-1"
2-5/8"	64 mm	EE-UHMPE-2-5/8	83,400	119,000	238,000	71.8	1.7	23'-4"
2-3/4"	68 mm	EE-UHMPE-2-3/4	92,400	132,000	264,000	91.6	1.9	24'-6"
3"	72 mm	EE-UHMPE-3	109,200	156,000	312,000	119.8	2.1	26'-6"
3-1/8"	76 mm	EE-UHMPE-3-1/8	119,000	170,000	340,000		2.4	27'-8"
3-1/4"	80 mm	EE-UHMPE-3-1/4	131,600	188,000	376,000		2.6	28'-11"
3-1/2"	84 mm	EE-UHMPE-3-1/2	155,100	221,000	442,000		3.0	30'-11"
3-5/8"	88 mm	EE-UHMPE-3-5/8	175,000	250,000	500,000		3.2	32'-1"
3-3/4"	92 mm	EE-UHMPE-3-3/4	184,300	263,000	526,000		3.4	33'-4"
4"	96 mm	EE-UHMPE-4	212,800	304,000	608,000		3.9	35'-4"
4-1/8"	100 mm	EE-UHMPE-4-1/8	227,000	324,000	648,000		4.6	36'-6"
4-1/4"	104 mm	EE-UHMPE-4-1/4	237,500	339,000	678,000		5.1	37'-10"
4-1/2"	108 mm	EE-UHMPE-4-1/2	255,700	365,000	730,000		5.3	39'-8"
4-5/8"	112 mm	EE-UHMPE-4-5/8	263,200	376,000	752,000		5.5	40'-11"
4-3/4"	116 mm	EE-UHMPE-4-3/4	269,700	385,000	770,000		5.9	42'-2"
5"	120 mm	EE-UHMPE-5	289,700	413,000	826,000		6.1	44'-1"
5-1/8"	124 mm	EE-UHMPE-5-1/8	309,600	442,000	884,000		6.6	45'-5"
5-1/4"	128 mm	EE-UHMPE-5-1/4	329,700	471,000	942,000		7.0	46'-7"
5-1/2"	132 mm	EE-UHMPE-5-1/2	349,600	499,000	998,000		7.5	48'-6"
5-5/8"	136 mm	EE-UHMPE-5-5/8	369,600	528,000	1,056,000		8.1	49'-10"
5-3/4"	140 mm	EE-UHMPE-5-3/4	389,500	556,000	1,112,000		8.7	51'-0"
6"	144 mm	EE-UHMPE-6	409,000	585,000	1,170,000		9.3	52'-11"
6-1/8"	148 mm	EE-UHMPE-6-1/8	429,000	613,000	1,226,000		9.9	54'-2"
6-1/4"	152 mm	EE-UHMPE-6-1/4	449,000	640,000	1,280,000		10.4	55'-5"
6-1/2"	156 mm	EE-UHMPE-6-1/2	469,000	670,000	1,340,000		11.0	57'-5"
6-5/8"	160 mm	EE-UHMPE-6-5/8	489,000	690,000	1,380,000		11.6	58'-7"
6-3/4"	164 mm	EE-UHMPE-6-3/4	509,000	720,000	1,440,000		12.3	59'-10"
7"	168 mm	EE-UHMPE-7	529,000	750,000	1,500,000		12.8	61'-10"
7-1/8"	172 mm	EE-UHMPE-7-1/8	554,000	790,000	1,580,000		13.3	63'-0"
7-1/4"	176 mm	EE-UHMPE-7-1/4	569,000	810,000	1,620,000		13.9	64'-2"
7-1/2"	180 mm	EE-UHMPE-7-1/2	589,000	840,000	1,680,000		14.5	66'-2"
7-5/8"	184 mm	EE-UHMPE-7-5/8	609,000	870,000	1,740,000		15.3	67'-5"
7-3/4"	188 mm	EE-UHMPE-7-3/4	629,000	890,000	1,780,000		15.9	68'-7"
8"	192 mm	EE-UHMPE-8	649,000	920,000	1,840,000		16.5	70'-7"
8-1/8"	196 mm	EE-UHMPE-8-1/8	669,000	950,000	1,900,000		17.3	71'-10"
8-1/4"	200 mm	EE-UHMPE-8-1/4	689,000	980,000	1,960,000		18.0	73'-1"



# PROLINE12™ UHMPE Adjustable Rope Slings

PROLINE12™ UHMPE Adjustable Rope Slings replace multiple, “non-adjustable” slings by accommodating a range of dimensional requirements with infinite adjustability. Available in single, double, three and four leg configurations, PROLINE12™ UHMPE Adjustable Rope Slings are made from single braid, twelve strand, low elongation high performance synthetic rope. Stock lengths are shown below, however custom lengths and adjustment ranges are readily available.

UHMPE Adjustable Rope Slings provide higher Work Load Limits than standard, polyester adjustable rope slings. PROLINE12™ UHMPE Adjustable Rope Slings are treated with a coating to enhance abrasion and UV degradation resistance.

Lift-It® PROLINE12™ UHMPE Adjustable Rope Slings feature wear protection sleeves in the lift and connection eyes.

PROLINE12™ UHMPE Adjustable Rope Slings are labeled with the information currently required by the various regulatory agencies. Please review the User Guide that accompanies each PROLINE12™ UHMPE Adjustable Rope Sling for information on proper use and inspection.

UHMPE SINGLE LEG – UHMPE ADJUSTABLE ROPE SLINGS				
ROPE DIAMETER Inches	STOCK NUMBER	Work Load Limit (WLL) Lbs.		ADJUSTMENT RANGE
		VERTICAL	BASKET*	O.A.L. – Inches
5/16	EE-ADJ-UHMPE-5/16-49-72	1,800	3,600	49 – 72
3/8	EE-ADJ-UHMPE-3/8-56-72	2,800	5,600	56 – 72
1/2	EE-ADJ-UHMPE-1/2-73-96	5,000	10,000	73 – 96
5/8	EE-ADJ-UHMPE-5/8-85-120	8,200	16,400	85 – 120
3/4	EE-ADJ-UHMPE-3/4-100-144	10,900	21,800	100 – 144
7/8	EE-ADJ-UHMPE-7/8-118-168	14,800	29,600	118 – 168
1	EE-ADJ-UHMPE-1-131-180	17,600	35,200	131 – 180
1-1/4	EE-ADJ-UHMPE-1-1/4-161-216	26,400	52,800	161 – 216
1-1/2	EE-ADJ-UHMPE-1-1/2-193-241	35,300	70,600	193 – 241
1-3/4	EE-ADJ-UHMPE-1-3/4-225-273	50,200	100,400	225 – 273
2	EE-ADJ-UHMPE-2-256-304	56,800	113,600	256 – 304
2-1/4	EE-ADJ-UHMPE-2-1/4-292-370	76,960	153,920	292 – 370
2-1/2	EE-ADJ-UHMPE-2-1/2-328-420	84,800	169,600	328 – 420

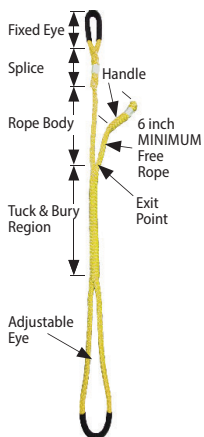


\*WLL when the D/d ratio is 25:1. If basket D/d around the load is less than 25:1, WLL MUST be reduced. See UHMPE D/d Chart and Figure below.



DOUBLE LEG – UHMPE ADJUSTABLE ROPE SLINGS				
ROPE DIAMETER Inches	STOCK NUMBER	WLL (Lbs.)		ADJUSTMENT RANGE
		60°	45°	O.A.L. – Inches
5/16	MLB2-EE-ADJ-UHMPE-5/16-36-72	3,110	2,450	36 – 72
3/8	MLB2-EE-ADJ-UHMPE-3/8-46-96	4,850	3,950	46 – 96
1/2	MLB2-EE-ADJ-UHMPE-1/2-51-108	8,600	7,000	51 – 108
5/8	MLB2-EE-ADJ-UHMPE-5/8-61-120	14,200	11,600	61 – 120
3/4	MLB2-EE-ADJ-UHMPE-3/4-71-120	18,900	15,400	71 – 120
7/8	MLB2-EE-ADJ-UHMPE-7/8-81-132	25,600	20,900	81 – 132
1	MLB2-EE-ADJ-UHMPE-1-89-144	30,400	24,800	89 – 144
1-1/4	MLB2-EE-ADJ-UHMPE-1-1/4-107-144	45,700	37,300	107 – 144
1-1/2	MLB2-EE-ADJ-UHMPE-1-1/2-130-180	61,200	49,990	130 – 180
1-3/4	MLB2-EE-ADJ-UHMPE-1-3/4-150-198	87,000	71,000	150 – 198
2	MLB2-EE-ADJ-UHMPE-2-170-218	98,300	80,300	170 – 218

## Considerations for Lift-It® PROLINE12™ UHMPE Rope Slings



- During use in basket hitches, ANY CONTACT with Adjustable UHMPE Rope Slings must be on the ROPE BODY between the Fixed Eye splice and Tuck & Bury Region.
- During use, NEVER allow the Tuck & Bury Region, also known as the Adjustable Splice, to contact the load and/or connection/suspension points.
- During use, The Handle must NEVER contact the Exit Point of the Tuck & Bury Region.
- During use, the Free Rope must extend a MINIMUM of 6 inches from the Exit Point.
- Slings shall not be shortened or lengthened by knotting or twisting and/or be joined by knotting.
- Twisting and kinking MUST be avoided.
- Twists MUST be removed before applying tension.

**UHMPE D/d**

When D/d ratios in the body are less than 25:1, Lift-It® UHMPE Adjustable Rope Sling Basket Work Load Limits must be reduced. (See Chart).

UHMPE Adjustable Rope Sling basket hitch Work Load Limits are significantly affected by the D/d ratio between the load Diameter and the nominal rope diameter. WLL must be reduced if less than a 25:1 D/d

UHMPE BASKET D/d REDUCTIONS	
D/d	Basket Efficiency Factors
25:1	100%
8:1	82%
5:1	80%
3:1	75%
2:1	72%
1:1	65%





Lift-It® Three and Four Leg PROLINE12™ UHMPE Adjustable Rope Slings feature a Top Lifting Link. Depending upon your selection, based on Work Load, you must determine whether a Masterlink or Masterlink with Subassemblies makes the most sense from a fitting weight perspective. With either option, heavy duty thimbles are attached at the connection points to the Top Lifting Link.

PROLINE12™ UHMPE Adjustable Rope Slings with Top Lifting Links feature hardware that is not only based on the WLL, but also the correct size. We take into account not only the strength requirements, but the spatial relationship between sling attachment points and interfacing hardware.

Generally, Lift-It® Bridle Assembly capacities are lower than our competitors. Three leg capacities are based on 2-1/2 legs, while Four Leg Bridle Assembly capacities are based on three legs carrying the assigned capacity.



Lower capacities and more expensive, larger hardware will never allow us to be the successful, low bidder. Our conservative approach is respected by conscientious users and appreciated by sophisticated purchasers. In this instance, spending more for less provides for increased safety and longer sling service.

Lifts can be made with any two or three legs of the four leg, PROLINE12™ UHMPE Adjustable Rope Sling, if it has a Master Link or Master Link with subassemblies. If three of the four legs are used, the assembly Work Load Limit must be reduced by 33% and is effectively the same as the rating for a two leg (double) sling.





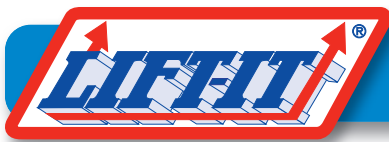
1-1/2" UHMPE 4-leg adjustable bridle rated @ 91,800 Lbs.

**UHMPE THREE LEG – ADJUSTABLE ROPE SLINGS WITH TOP LINK**

ROPE DIAMETER	STOCK NUMBER	WORK LOAD LIMIT (Lbs.)		MASTER LINK			ADJ. RANGE
				DIA.	STOCK NO.	WEIGHT	O.A.L. Inches
5/16	MLB3-EE-ADJ-UHMPE-5/16-53-84-TL	3,890	3,180	3/4"	ML075	2.1	53 – 84
3/8	MLB3-EE-ADJ-UHMPE-3/8-60-96-TL	6,000	4,900	3/4"	ML075	2.1	60 – 96
1/2	MLB3-EE-ADJ-UHMPE-1/2-79-120-TL	10,800	8,800	1"	ML100	4.9	79 – 120
5/8	MLB3-EE-ADJ-UHMPE-5/8-94-133-TL	17,800	14,500	1-1/4"	ML125	9.6	94 – 133
3/4	MLB3-EE-ADJ-UHMPE-3/4-109-146-TL	23,700	19,300	1-1/2"	ML150	16.2	109 – 146
7/8	MLB3-EE-ADJ-UHMPE-7/8-129-164-TL	32,000	26,100	1-3/4"	ML175	25.1	129 – 164
1	MLB3-EE-ADJ-UHMPE-1-142-177-TL	38,100	31,100	1-3/4"	ML175	25.1	142 – 177
1-1/4	MLB3-EE-ADJ-UHMPE-1-1/4-178-209-TL	57,100	46,600	2-1/4"	ML225	54.6	178 – 209
1-1/2	MLB3-EE-ADJ-UHMPE-1-1/2-205-237-TL	76,500	62,500	2-1/2"	AMW2500	67.8	205 – 237
1-3/4	MLB3-EE-ADJ-UHMPE-1-3/4-237-269-TL	108,700	88,800	2-1/2"	AMW2500	67.8	237 – 269
2 In.	MLB3-EE-ADJ-UHMPE-2-266-300-TL	122,900	100,300	2-3/4"	AMW2750	87.7	266 – 300

**UHMPE FOUR LEG – UHMPE ADJUSTABLE ROPE SLINGS WITH TOP LINK**

ROPE DIAMETER	STOCK NUMBER	WORK LOAD LIMIT (Lbs.)		MASTER LINK			ADJ. RANGE
				DIAMETER	STOCK NO.	WEIGHT	O.A.L. Inches
5/16	MLB4-EE-ADJ-UHMPE-5/16-53-84-TL	4,670	3,800	3/4"	ML075	2.1	53 – 84
3/8	MLB4-EE-ADJ-UHMPE-3/8-60-102-TL	7,200	5,900	3/4"	ML075	2.1	60 – 96
1/2	MLB4-EE-ADJ-UHMPE-1/2-79-120-TL	13,000	10,600	1"	ML100	4.9	79 – 120
5/8	MLB4-EE-ADJ-UHMPE-5/8-96-133-TL	21,300	17,400	1-1/2"	ML150	16.2	94 – 133
3/4	MLB4-EE-ADJ-UHMPE-3/4-111-146-TL	28,400	23,200	1-3/4"	ML175	25.1	109 – 146
7/8	MLB4-EE-ADJ-UHMPE-7/8-131-164-TL	38,400	31,400	2"	ML200	41.0	129 – 164
1	MLB4-EE-ADJ-UHMPE-1-131-178-TL	45,700	37,300	2"	ML200	41.0	142 – 177
1-1/4	MLB4-EE-ADJ-UHMPE-1-1/4-177-209-TL	68,500	55,900	2-1/2"	AMW2500	67.8	178 – 209
1-1/2	MLB4-EE-ADJ-UHMPE-1-1/2-205-237-TL	91,800	74,900	2-1/2"	AMW2500	67.8	205 – 237
1-3/4	MLB4-EE-ADJ-UHMPE-1-3/4-237-269-TL	130,500	106,500	2-3/4"	AMW2750	87.7	237 – 269
2	MLB4-EE-ADJ-UHMPE-2-284-300-TL	147,500	120,400	3"	AMW3000	115.0	266 – 300



# Rope Recovery Product Inspection

**WARNING** REFER TO THE SPECIFIC PRODUCT SAFETY BULLETIN (CURRENT REV) FOR IMPORTANT, ADDITIONAL INSPECTION CRITERIA. For slings and rigging hardware refer to OSHA, ASME and manufacturer's inspection and removal information.

The use of damaged Recovery Products, slings, rigging hardware and/or protection may result in **SEVERE INJURY** or **DEATH**. The strength and performance of Recovery Products, slings, rigging hardware and/or protection is affected by use, wear and/or damage. It is critically important that users employ a three stage inspection procedure: Initial, Frequent and Periodic, performed by a qualified person.

If damage is identified during an inspection, damaged items must be **immediately** removed from service and not be returned until approved by a qualified person.

You may have encountered removal from service criteria for specific rope slings and rigging hardware permitting continued use at an acceptable level of wear and/or damage, provided it does not exceed specific limits. Quantifying an acceptable level of loss based on the original size may be difficult, especially in the field. **Always consider the cost of failure and determine if the use of any item with "acceptable levels" of damage is worth the risk, given the potentially damaging and/or deadly consequences.** Always ask yourself, "What's the cost of failure?"

Visual inspection cannot accurately determine the residual strength of Recovery Products, slings, rigging hardware and/or protection. Contact your Lift-It® professional for more information on inspection training. A viable inspection program not only saves lives, but will enable personnel to make informed decisions that will enhance safety and Recovery Product performance.

Read and understand all product and warning information provided in this brochure, included with all products, contained in our catalog, viewed at [www.lift-it.com/product-warnings-and-information](http://www.lift-it.com/product-warnings-and-information) or scan this QR code to link to our product warnings page:



**Always follow OSHA, MSHA, ASME, federal, state, provincial, industry, association, corporate, job site specific, insurance and manufacturer warnings and guidelines.**

## Removal from Service Criteria

The following removal criteria must be used when inspecting Lift-It® Recovery Products. **Immediately** remove from service if any of these conditions are present:

- Missing or illegible Recovery Product identification.
  - Recovery Products must be identified or labeled with the following information:
    - name or trademark of manufacturer, or if repaired, the entity performing repairs
    - manufacturer's code or stock number
    - rated load for at least one hitch type and the angle upon which it is based (i.e., straight-line / vertical)
    - type of fiber material
    - SLBS (Straight Line Break Strength) and Design Factors; 5:1 & 3:1
- Cuts, gouges, areas of extensive fiber breakage along the length and abraded areas on the rope.
- Any damage that is estimated to have reduced the effective diameter of the rope. (What's the cost of failure?)
- Uniform fiber breakage along the major part of the length of the rope such that the entire rope appears covered with fuzz or whiskers.
- Inside the rope, fiber breakage, fused or melted fiber (observed by prying or twisting to open the strands) involving damage of the fiber in any strand or the rope as a whole. (What's the cost of failure?)
- Discoloration, brittle fibers and hard or stiff areas that may indicate chemical damage, ultraviolet damage or heat damage.
- Dirt and grit in the interior of the rope structure.
- Foreign matter that has permeated the rope and makes it difficult to handle and may attract and hold grit.
- Kinks or distortion in the rope structure, particularly if caused by forcibly pulling on loops (known as hockles).
- Melted, hard, or charred areas. (What's the cost of failure?)
- Poor condition of thimbles or other components manifested by corrosion, cracks, distortion, sharp edges, or localized wear.
- Modifications to any item done by someone other than the Original Equipment Manufacturer (OEM) shall not be done.
- Lock Stitch Thread and/or Whipping Thread that is broken, cut or damaged.
- Damaged Eye Splices: Broken Strands at the leg juncture, surface wear in the eye, flattening, and/or splice slippage.
- Other conditions including visible damage that cause doubt as to the continued use of the Recovery Products
- For slings, removal criteria as stated in ASME B30.9.
- For hooks, removal criteria as stated in ASME B30.10.
- For rigging hardware, removal criteria as stated in ASME B30.26.

**Qualified person:** A person, who by possession of a recognized degree or certificate of professional standing in an applicable field, or who, by extensive knowledge, training and experience, has successfully demonstrated the ability to solve or resolve problems relating to the subject matter and work.





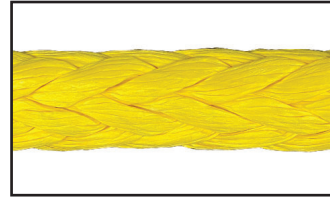
# Rope Recovery Product Inspection



**⚠ WARNING** If you identify any of the following types of damage, **IMMEDIATELY REMOVE RECOVERY / TOW ROPES FROM SERVICE**, even if the damage you see is not as extensive as shown in the following pictures. These are extreme examples provided only for illustration purposes. Recovery Products, slings and rigging hardware must be inspected according to OSHA, ASME, and manufacturer's information by trained personnel. Any damage detected in the Recovery Product cover or protection may also indicate potential damage to the Recovery / Tow Rope. **Remember, any doubt, DON'T!** Any hazardous condition detected in slings, rigging hardware, sling protection, and/or sleeves during inspection must lead to further investigation, possible replacement and/or corrective action by a qualified person.



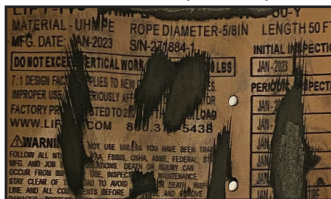
Internal abrasion may be determined by pulling one strand away from other strands to inspect for powder, broken filaments or volume reduction.



Like New External



Like New Internal



Illegible Tag



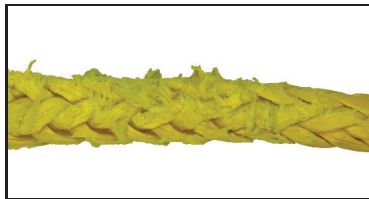
Cuts



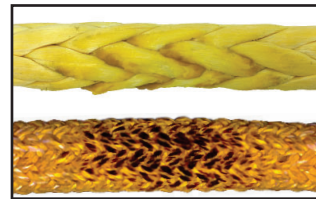
Excessive External Abrasion



Excessive Internal Abrasion



Excessive Wear & Abrasion



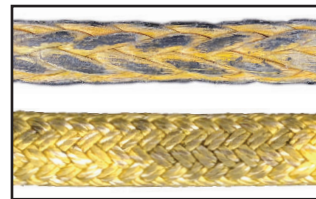
Heat Damage - Melting/Charring



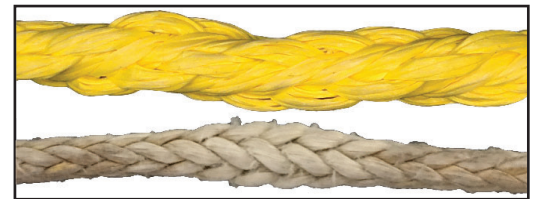
Fiber Breakage



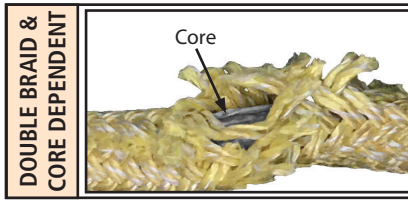
Excessive Dirt/Grit



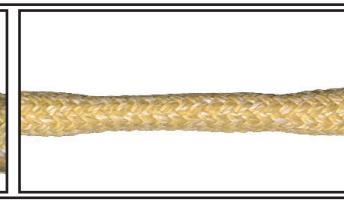
Discoloration



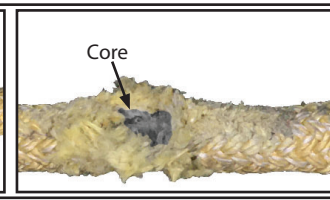
Other Conditions That Cause Doubt.



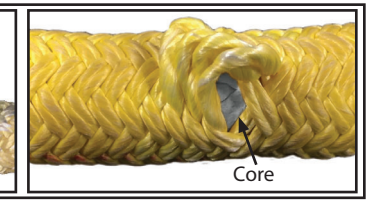
Cover Cuts - Exposed Core



Inconsistent Diameter/Volume Reduction

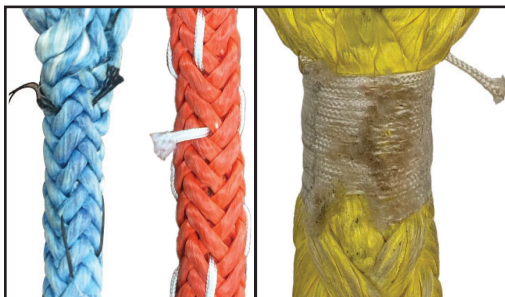


Localized Abrasion - Exposed Core



Double-Braid: Snagged Strand on Cover

## Lock Stitching & Whipping



Broken Lock Stitching

Damaged Whipping

## Soft Shackles



Illegible Tag



Cuts



Damage to the Knot

Lift-It® Soft Shackles must be inspected to the same removal criteria as Recovery Ropes, with the additional requirement that the portion of the rope that forms the Noose must be pulled out enough to facilitate proper inspection of 100% of the Rope Body.





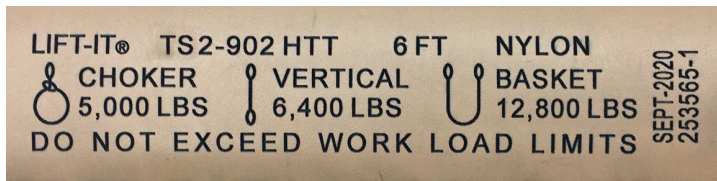
## ASME B30.9-5 – WEB SLING / RECOVERY STRAP REMOVAL CRITERIA

Web Slings shall be removed from service if any of the following conditions are present:

- Missing or illegible Sling identification
- Acid or caustic burns.
- Melting or charring of any part of the Sling.
- Holes, tears, cuts or snags.
- Broken or worn stitching in the Load Bearing Splices.
- Excessive abrasive wear.
- Knots in any part of the Sling.
- Discoloration and brittle or stiff areas on any part of the Sling, which may indicate chemical or ultraviolet/sunlight damage.
- Fittings that are pitted, corroded, cracked, bent, twisted, gouged or broken.
- For Hooks, removal criteria as stated in ASME B30.10.
- For Rigging Hardware, removal criteria as stated in ASME B30.26.
- Other conditions, including visible damage, that cause doubt as to the continued use of the Sling.

## ASME B30.9-5 – WEB SLING / RECOVERY STRAP REMOVAL CRITERIA

Web Sling tags must include the following mandatory information. If any of the mandatory information is missing or illegible the Web Sling must be **immediately** removed from service. Web Sling Tags shall be permanently marked with the following information.



- Name or trademark of manufacturer
- If repaired, the entity performing repairs
- Manufacturer code or stock number
- Rated load for at least one hitch
- Angle upon which it (hitch) is based
- Type of synthetic material
- Number of legs if more than one

**⚠ WARNING** Photographs depict relatively extreme examples of damage and are provided for illustration purposes only. If damage is detected and it is not as extreme as depicted in the photographs, or if you are unsure if a Web Sling and/or Recovery Strap is safe to use, **immediately** remove it from service, and **DO NOT USE** it for any purpose!

<b>MISSING OR ILLEGIBLE TAG</b>	<b>CUTS</b>	
<b>HOLES – TEARS – SNAGS</b>	<b>BROKEN OR WORN STITCHING IN LOAD BEARING SPLICE</b>	<b>KNOTS</b>
<b>ULTRAVIOLET LIGHT DEGRADATION</b>	<b>ACID OR CAUSTIC BURNS</b>	<b>MELTING OR CHARRING</b>
<b>EXCESSIVE ABRASION</b>	<b>WELD SPATTER</b>	<b>OTHER DAMAGE THAT CAUSES DOUBT AS TO THE CONTINUED USE</b>



## RECOVERY PRODUCTS – PROPER USE

The best plan is to not get stuck in the first place, but if a vehicle becomes stuck you must be properly trained to handle the situation. Once a vehicle becomes stuck a recovery plan must be developed and successfully executed. By developing and properly executing a recovery plan, potentially hazardous situations must be addressed and avoided. If you rush into a recovery activity, with a “grab and go” approach, what are generally considered avoidable hazards may result in SEVERE INJURY or DEATH.

Many important variables must be considered by using a systematic approach based on training for all recovery activities. This guide is intended to offer general information on the safe and proper use of Lift-It® Recovery Products, however a qualified person and/or properly informed and trained consumer must determine what products to use and how to properly use them, based upon the specific details and potential hazards associated with the particular recovery activity. The safety and well-being of all parties is a paramount consideration.

Consider the importance of your decisions and actions. If you plan for and mitigate hazards associated with recovery operations, each and every time, your chances of going home, safe and sound to loved ones is dramatically increased. When haste, fatigue, frustration and/or ego take precedence over safety, lives may be lost, injuries may occur, and property destroyed. Always take the time to make safe and informed decisions or spend the rest of your life regretting poor choices.

- A hazard assessment must be done to ensure that vehicle damage will NOT hinder the recovery activity and/or cause damage to Recovery Products.
- All personnel must realize that recovery activities are extremely dynamic, potentially dangerous and that conditions may change quickly.
- Do not allow haste, frustration or ego to lead you into bad decisions and/or actions.
- **Do not perform recovery activities if you are mentally or physically unfit and/or under the influence of drugs and/or alcohol.** ALWAYS refer to the Specific Product Guide that accompanied the specific product being used as a Recovery Product for important use information and inspection requirements and use that information in conjunction with the information provided in this Recovery Products User Guide.
- Do not drag Recovery Products prior to assembly, during use and/or after the recovery activity. Embedded materials and snagging may damage Recovery Products.

**⚠ WARNING** NEVER shock load Recovery Products, connection points and/or other components used in recovery activities. The additional stress caused by shock loading may exceed the Work Load Limit (WLL) and damage Recovery Products, connection points and/or other components resulting in SEVERE INJURY or DEATH. DO NOT allow Recovery Products to slip or slide over and/or across any vehicle edges or surfaces.

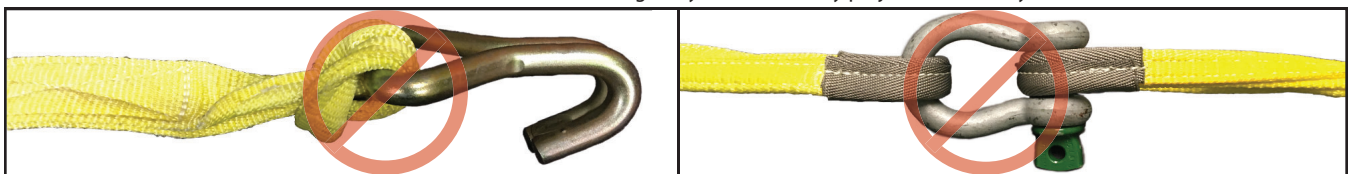
**⚠ WARNING** Recovery Products and/or connection points may fail if damaged, misused or overloaded, resulting in SEVERE INJURY or DEATH.

- ALL Parking brake(s) must be disengaged during recovery activities. The increased resistance from an engaged parking brake may overload the Recovery Products and may result in SEVERE INJURY or DEATH.
- Always begin recovery activities with the least amount of momentum necessary from the pulling vehicle that DOES NOT result in shock loading. The pulling vehicle acceleration must be slow and steady. DO NOT over accelerate which may shock load Recovery Products, connection points and/or other components. Shock loading radically affects the strength of all Recovery Products, connection points and/or other components and may result in failure. Failure of ANY component used in the recovery activity may result in SEVERE INJURY or DEATH. **Remember, Slow and Steady may not win the race, but it gets the job done!**
- If the stuck vehicle does not come loose after the first attempt, slightly increase the momentum of the pulling vehicle in a controlled manner. NEVER shock load. Maintain a slow and steady rate of acceleration. **Remember, Slow and Steady!**
- If the stuck vehicle is not free after the second attempt, DO NOT increase the acceleration. A qualified person and/or properly informed and trained consumer must now re-evaluate the situation and adjust the recovery plan as necessary. **Safety is always the top priority.**
- Due to the characteristics of the synthetic fibers used to make Recovery Products, rest periods between use are required to allow them to return to their original length. Be aware that an excessive number of uses over a short period of time may build up heat and damage Recovery Products resulting in SEVERE INJURY or DEATH.
- During recovery activities and after the stuck vehicle is freed, care must be taken not to drive over and/or drag Recovery Products. Recovery Products may be damaged if driven over or dragged.
- Only when both vehicles are stationary and secured should the Recovery Products be removed.
- Nylon Recovery Products lose approximately 15% of their strength when wet and/or saturated.
- Always refer to the Recovery Product Capacity Tag to determine Recovery Product Work Load Limits (WLL) and only use Recovery Products, connection points and/or components that have legible tags and/or markings. NEVER EXCEED Work Load Limits (WLL) for any Recovery Product, connection point and/or component!
- Prior to use inspect all Recovery Products, connection points and other components used in recovery activities. You must refer to the appropriate section in the Specific Product Guide that was included with the Recovery Product for important information regarding inspection and removal criteria, proper use, protection, etc.
- DO NOT use damaged Recovery Products, connection points and/or components for any purpose. **Remember, any doubt, DON'T!**

**The guidelines in this Recovery Products User Guide are only some of the necessary considerations that must be addressed at a minimum. Every recovery activity is different and has specific details and potential hazards that cannot be anticipated by the Recovery Product manufacturer. A qualified person and/or properly informed and trained consumer must evaluate specific details and potential hazards and ensure that recovery activities are performed properly and safely.**

## RECOVERY PRODUCT CONNECTION CONSIDERATIONS

**⚠ WARNING** DO NOT attach hooks, metal shackles and/or other metal fittings to Lift-It® Recovery Products. NEVER use hooks, metal shackles or other metal fittings to connect Recovery Products. In the event of an unplanned release of tension, hooks, metal shackles and/or metal fittings may become deadly projectiles that may result in SEVERE INJURY or DEATH.



**To join Recovery Products, a Soft Shackle of appropriate size/strength must be used. See page 3.**





## VEHICLE CONNECTION CONSIDERATIONS

**⚠ WARNING** NEVER CONNECT OR ATTACH RECOVERY PRODUCTS TO: TOW BALLS, BUMPERS, HITCHES, BULL BARS, TIE DOWN EYES OR ANY SUSPENSION AND/OR STEERING PART OR COMPONENT. The use of improper connection points may result in SEVERE INJURY or DEATH.



- Refer to the owner's manual or contact the vehicle manufacturer for recommended recovery connection points.
- A proper connection point must always be used for Recovery Products. Connection points must be specifically designed by the manufacturer for use in recovery activities and determined to be suitable by a qualified person and/or properly informed and trained consumer for the application. If you are unsure if your connection points have an adequate WLL, or if they are approved for recovery activities you must contact the manufacturer.
- Verify that all connection points for all vehicles are acceptable for use, securely welded, properly bolted and/or attached to the vehicle's chassis/frame by methods approved by the Original Equipment Manufacturer.

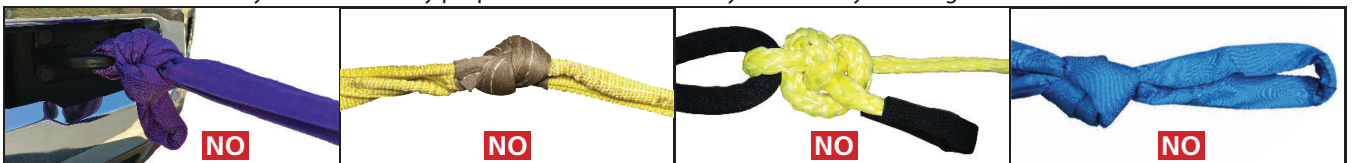
### Original Equipment Manufacturer Connection Points Designed for Vehicle Recovery.



- Ensure that the connection points are free from any/all damaging surfaces, edges, nicks, gouges, rust, etc. that may potentially damage Recovery Products, protection and/or components.
- Prior to using Recovery Products, a Qualified Person and/or Properly Informed and Trained Consumer must evaluate side loading hazards. Do not allow pulling in any direction that would side load connection points and/or other components unless connection points and/or other components were designed with the intent of allowing side loading.
- A recovery receiver hitch connection point must only be used IN-LINE (90° Angle of Loading, see the Lift-It® Specific Product Guide). NEVER side load recovery receiver hitch connection points and always follow the manufacturer's warnings and instructions for use.
- DO NOT attach Recovery Products near or allow contact with hot exhaust systems or other hot surfaces and/or objects.
- During use, consider all Recovery Products, protection and/or components conductive, energized or "hot".

## OTHER IMPORTANT CONSIDERATIONS

- Additional precautions must be taken to protect the drivers of vehicles involved in recovery activities from an unplanned release of tension that may result in SEVERE INJURY or DEATH. Additional measures may include but are not limited to placing a protective barrier between the pulling vehicle driver and their back window and/or any other area that would prevent the deadly impact force of broken Recovery Products, connection points and/or other components from striking the driver of the pulling vehicle and/or essential personnel involved in the recovery activity.
- Do not tie knots in Recovery Products for any purpose or connect Recovery Products by knotting.



- Always use an appropriate Recovery Product Damper, which must be a SOFT/weighted object positioned on the Recovery Product to dissipate energy in the event that the Recovery Product, connection point(s) and/or other components fail. Dampers must be placed in the center of the Recovery Product, as well as at both ends to reduce the recoil and potentially deadly impact force of Recovery Products, connection points and/or other components in the event of an unplanned release of tension. There are several commercially available damper products specifically designed for vehicle recovery or they may be improvised by using multiple blankets, sleeping bags, heavy jackets, or other SOFT items. During recovery activities, NEVER touch or adjust Dampers. Remember, NEVER IN-LINE!
- NEVER use solid objects as a Recovery Product damper. In the event that the Recovery Product, connection point(s) and/or other components fail, solid objects may become deadly projectiles, striking with deadly impact force resulting in SEVERE INJURY or DEATH.

**⚠ WARNING** Dampers will ONLY lessen recoil but WILL NOT PREVENT ALL of the recoil from an unplanned release of tension. Safety is of prime importance. ALWAYS consider hazards present in the Danger Zone and take corrective action to mitigate hazards.

**⚠ WARNING** Connecting Recovery Products together with and/or attaching hooks, metal shackles, and/or other metal fittings to Lift-it® Recovery Products is extremely dangerous. If unintended overloading and/or shock loading occurs, hooks, metal shackles, and/or other metal fittings may break and become deadly projectiles striking with deadly impact force resulting in SEVERE INJURY or DEATH.

- Soft Shackles must be properly used to connect Recovery Products. Soft Shackles may also be used to attach Recovery Products to proper vehicle connection points. See page 3.





## THE DYNAMICS OF RECOVERY AND THE "DANGER ZONE"

**⚠️ WARNING** Recovery activities differ from load handling activities in a number of ways. Vehicles may be damaged and/or may be snagged or hung up in soil, sand, mud, snow, and/or by other obstacles, including, but not limited to rocks, outcroppings, shrubs, etc. In addition, vehicles may shift during recovery and certain situations such as, but not limited to hillside or water recovery will require additional planning, precautions and/or hazard recognition and abatement (which are not covered in this guide). Additionally, dynamic factors, such as, but not limited to: damaged and/or hung up vehicles, vehicles shifting during the recovery activity, combined with the tension necessary to free stuck vehicles and/or the deadly recoil and/or impact force of broken Recovery Products may greatly increase the size of the Danger Zone. See Figure 1, below. If there is an unplanned release of tension even the estimates provided by the RPx2 Radius Length may not be adequate to prevent SEVERE INJURY or DEATH. Deadly projectiles traveling at hundreds of feet per second may have devastating effects. The following information may be used to establish a MINIMUM size for the Danger Zone. A qualified person and/or properly informed and trained consumer MUST consider all the unique variables and potential hazards present in all recovery activities and based upon those specific variables determine the appropriate Danger Zone size.

### ⚠️ WARNING To The Users of Lift-It® Recovery Products

**⚠️ WARNING** Even if you consider all of the factors/issues involved in recovery activities, things can still go wrong. Therefore, all personnel must be alert to potential risks associated with the use of Recovery Products. **Make Sure All Personnel are Clear of Loads and Alert to Risks, especially in the "Danger Zone".**

The Danger Zone is any area where vehicle(s), broken connection points and/or Recovery Products may travel, or anywhere an unplanned release of tension may produce deadly recoil and/or impact force. The Danger Zone for recovery activities is made up of two Separate "Rings of Fire". To determine the Radius Length for each of the two separate Rings of Fire, double the Recovery Product Length (RP x 2). Place the RPx2 Radius Length at the Vehicle 1 connection point and rotate 360°.

The area inside the 360° rotation may enable one to estimate the MINIMUM size for Ring of Fire I. Repeat the process for Vehicle 2 to estimate the MINIMUM size for Ring of Fire II. You must always consider BOTH of the TWO Rings of Fire to estimate the MINIMUM size of the Danger Zone. See Figure 1.

- All personnel involved in the recovery activity must stand clear of vehicles and never be under, never on, and/or never in-line during recovery activity. An unplanned release of tension may strike personnel with deadly recoil and/or impact force.
- NEVER ride on vehicles during recovery activities.
- Personnel must not stand in-line with or next to Recovery Products under tension. An unplanned release of tension from broken Recovery Products, connection points and/or other components may strike personnel with deadly recoil force.
- Have all bystanders stay clear of the Danger Zone and made aware of the recovery activity. All bystanders MUST stay out of the Danger Zone (see Figure 1), preferably uphill, not in-line and away from the intended vehicle travel path.
- Communication must be established and maintained between all parties involved in the recovery activity. Bystanders MUST never be in the Danger Zone. Communication with personnel who are not involved in the recovery activity but are close by should be established and maintained to alert them when recovery activities begin and end.
- Once vehicle recovery activity begins, users must NEVER place any part of the body between the Recovery Product and/or other components and the vehicle(s), or between the Recovery Product and connection point and/or vehicle(s).

- Personnel must be alert to the potential for the Recovery Products and/or vehicle(s) to become snagged or hung-up. When these conditions occur, Recovery Products may become overloaded. If the Recovery Products and/or stuck vehicle become snagged or hung-up, recovery activity must be stopped and corrective action taken to mitigate hazards.

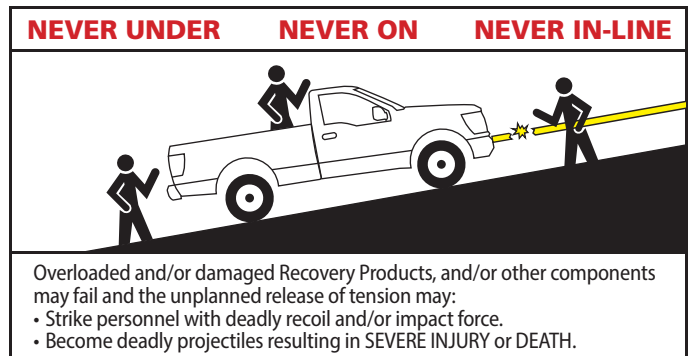
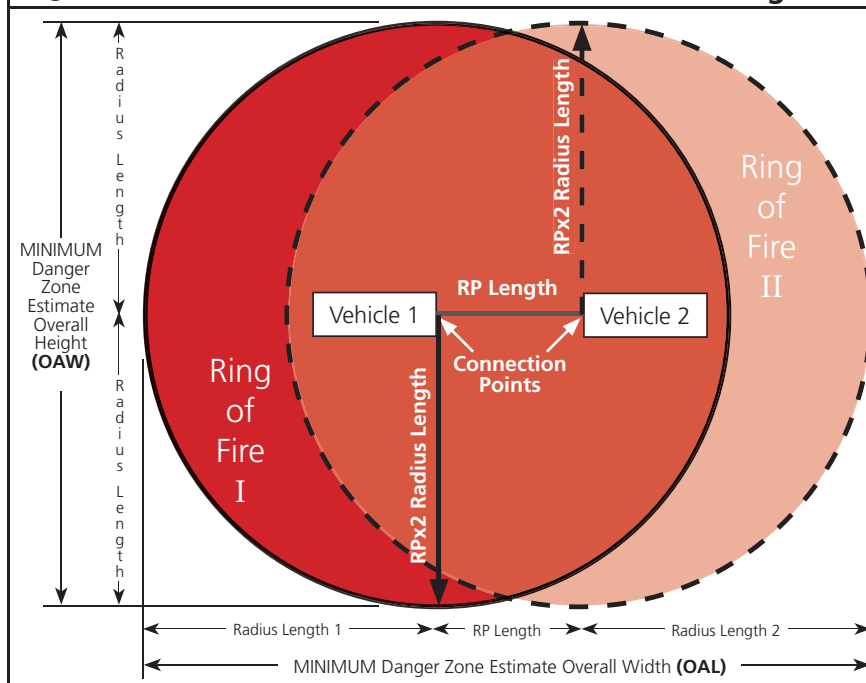


Figure 1 (Over View)

### RPx2 Radius Length & Danger Zone Size Estimation



During recovery activities ONLY essential personnel directly involved in the activity shall be in the Danger Zone. NEVER allow non-essential persons in the Danger Zone.

To determine the Radius Length for each of the two separate Rings of Fire, double the Recovery Product Length (RP x 2). Place the RPx2 Radius Length at the Vehicle 1 connection point and rotate 360°. The area inside the 360° rotation may enable one to estimate the MINIMUM size for Ring of Fire I. Repeat the process for Vehicle 2 to estimate the MINIMUM size for Ring of Fire II. You must always consider BOTH of the TWO Rings of Fire to estimate the MINIMUM size of the Danger Zone.

- 30 Ft. RP Length: RPx2 (30x2) = 60 Ft. Radius Length  
Danger Zone **OAW** = Radius Length 1 + Radius Length 2 = 120 Ft.  
Minimum **OAW** Estimate = RP Length x 4
- 30 Ft. RP Length: RPx2 (30x2) = 60 Ft. Radius Length  
Danger Zone **OAL** = Radius Length 1 + RP Length + Radius Length 2 = 150 Ft.  
Minimum **OAL** Estimate = RP Length x 5

MINIMUM Danger Zone Size Estimate Examples	
Recovery Product Length	Danger Zone (Width & Length)
20 Ft.	80 Ft. x 100 Ft.
30 Ft.	120 Ft. x 150 Ft.
40 Ft.	160 Ft. x 200 Ft.
50 Ft.	200 Ft. x 250 Ft.

**⚠️ WARNING** Always know the Gross Vehicle Weight (GVW) of both vehicles. Never attempt to recover a vehicle with an unknown GVW and always add the additional weight of any accessories and/or cargo to determine the Total GVW.



- UHMPE Recovery Ropes**
- Soft Shackles**
- Cordura® Covers**
- Complete Recovery Systems**
- Custom Products**
- Inspection**
- Radiolink Dynamometers**
- Nylon Recovery Straps**
- Rigging Hardware**
- Twin-Path® Slings**
- Roundslings**
- Shackles**
- Synthetic Rope**
- Training**
- Web Slings**
- Bridle Slings**
- Wire Rope Slings**
- Dump Body Slings**
- Alloy Steel Chain Slings**



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President**

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