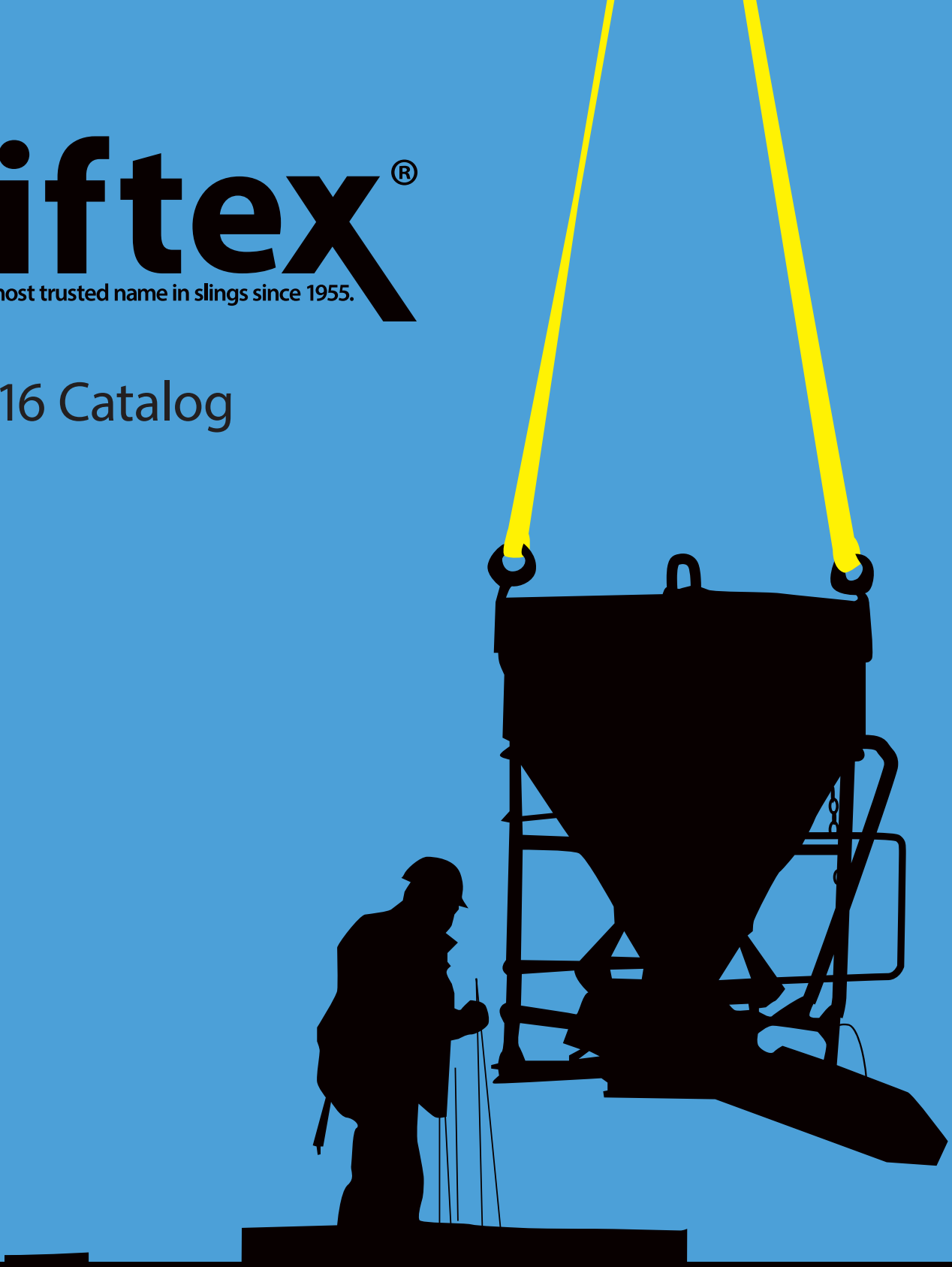
liftex®

The most trusted name in slings since 1955.

2016 Catalog



Quality Products. Superior Service. Distributor Driven.

liftex® Past, Present and Future

Known industry wide as the originator of the synthetic web sling, liftex® offers an extensive line of lifting slings and cargo control solutions to the industrial supply and rigging industries.

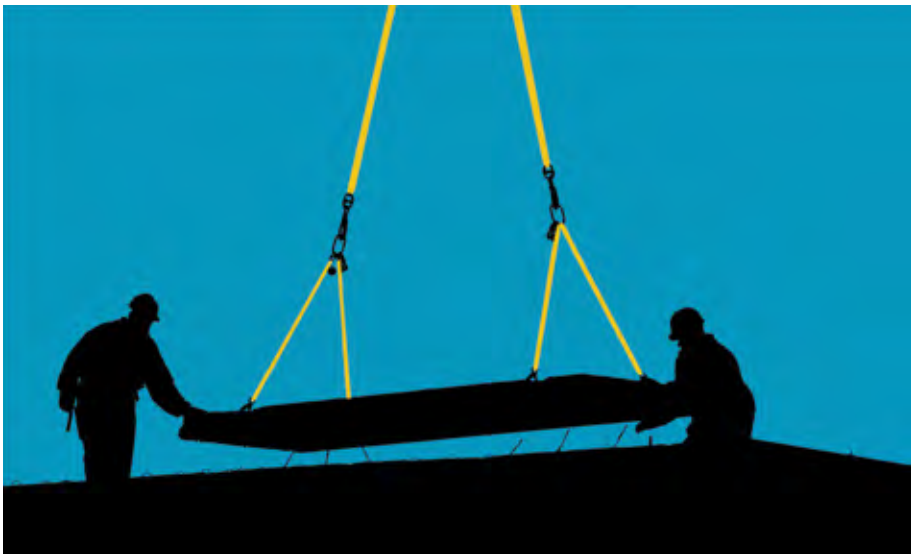
Backed by over 60 years of experience in manufacturing the highest quality slings available anywhere, and with 5 manufacturing facilities and over 300 distributors across the country and around the globe, Liftex® offers you fast and efficient service when and where you need it.

From our humble beginnings with our Philadelphia and Chicago locations in 1955, Liftex® has expanded across the country and around the world. With the addition of wholly owned manufacturing and warehousing facilities in Houston, TX, Seattle, WA and Kunshan, PRC — Liftex® has established and implemented procedures and protocols across all of our facilities to meet or exceed industry standards.

Over the last half century we have kept our goals simple: We exist to serve the lifting industry with dedication to service, quality and performance.

Whether your need is a standard product or a "special" sling designed to meet a specific application, Liftex® is your primary source. Service, quality and performance are the Liftex® guarantees.

Synthetic web, roundslings, chain slings, specialty slings, wire rope slings, engineering and design services — whatever your lifting application, when you are looking for a lifting sling solution, make certain that it has the Liftex® tag.



WARNING **PROTECT SLINGS FROM CUTTING:** Failure to protect sling from cutting may result in damage, injury or death. Contact us to discuss sling protection options.

Contact Information

liftex® exists to serve the lifting industry and our customers with products and services developed in an environment that places maximum focus on safety, quality, innovation, performance, integrity, and value. It is with these core traits as pillars that we have built our history and our success, and on which we will continue to build our position as the industry leading source for lifting solutions.

Sling Selection

Which sling type is best for your application?
All slings manufactured or provided by **liftex**® meet or exceed OSHA, WSTDA standards and regulations. With a very few limited exceptions (primarily due to hardware/fitting marking requirements) **liftex**® products are also compliant with ASME B30.9 standards and regulations.

PRO-EDGE® WEB SLINGS:
- Soft and flexible — will not mar, scratch or deface "sensitive" loads
- Light weight, easy to handle and store
- Adjusts to load contour providing tight, non-slip grip
- Non-sparking

ROUNDUP™ ROUNDSLINGS:
All the attributes of Web Slings plus:
- Soft and flexible — ideal for choker hitch applications
- Cover abrasion will not reduce capacity
- Provides a strong grip on loads
- Capacities are color coded

PAC-LINK® ALLOY CHAIN SLINGS:
- Best combination of handling, strength and durability
- For use in high abrasion, high cut-potential, high temperature applications

PAC-FLEX™ ALLOY CHAIN MESH SLINGS:
All the attributes of PAC-Link® — plus:
- Mesh construction provides a larger capacity and wider load-bearing surface for increased load control and stability in a basket hitch
- PAC-Flex™ Chain mesh provides greater capacity and better performance than wire mesh slings

⚠ WARNING **PROTECT SLINGS FROM CUTTING:** Failure to protect sling from cutting may result in damage, injury or death. Contact us to discuss sling protection options.

Table of Contents

Lifting and Safety Info Resources

All slings manufactured or provided by **liftex®** meet or exceed OSHA, WSTDA standards and regulations. With a very few limited exceptions (primarily due to hardware/ fitting marking requirements) **liftex®** products are also compliant with ASME B30.9 standards and regulations.

RESOURCES FOR SLING SAFETY/USE INFORMATION:

- U.S. Department of Labor O.S.H.A.: (800)-321-OSHA (6742)
- National Safety Council: (800) 621-7615
- Commercial Vehicle Safety Association: (301)-830-6143
- American Society of Mechanical Engineers: (800) 843-2763 (U.S./Canada)
- Associated Wire Rope Fabricators: (800) 444-2973
- Web Sling & Tie Down Association: (443) 640-1070 ext. 110

Additional Resources

Additional resources to ensure that you are properly trained and knowledgable regarding the safety and use of synthetic slings include, but are not limited to:

- WSTDA-WS-1: Recommended Standard Specifications for Synthetic Web Slings
- WSTDA-RS-1: Recommended Standard for Synthetic Polyester Roundslings
- WSTDA-T-1: Recommended Standard for Synthetic Web Tie Downs
- ASME B30.9: Synthetic Webbing Slings: Selection, Use and Maintenance
- OSHA 29 CFR 1910.184 — Slings
- Rigging Handbooks
- OSHA Guidance on Safe Sling Use.
- Formal training provided by manufacturer or outside entities.

liftex® Warranty Information

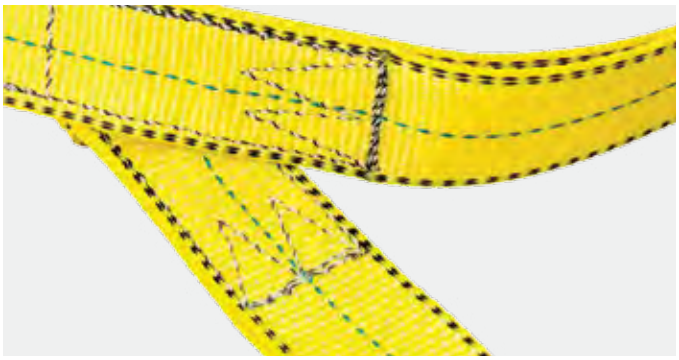
LIFTEX CORPORATION LIMITED WARRANTY & LIABILITY STATEMENT

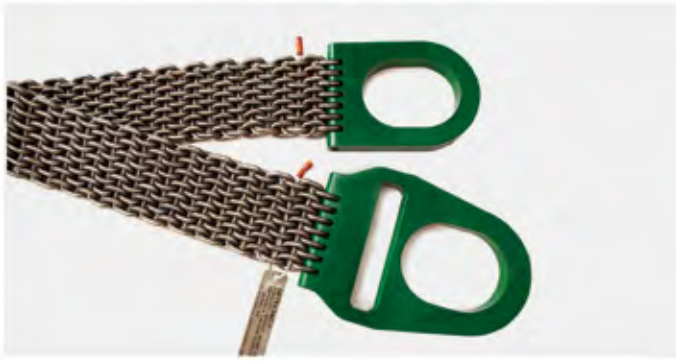
LIFTEX CORPORATION WARRANTS, TO THE ORIGINAL PURCHASER OR OWNER ONLY, THAT ANY PRODUCT MANUFACTURED AND SOLD BY LIFTEX CORPORATION WILL BE SUBSTANTIALLY FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP WHEN NEW . THIS LIMITED WARRANTY IS VOID AND LIFTEX CORPORATION SHALL NOT BE LIABLE FOR ANY DAMAGES OR HELD RESPONSIBLE FOR THE QUALITY, PERFORMANCE OR SAFETY OF PRODUCTS THAT HAVE BEEN REPAIRED, ALTERED OR TAMPERED WITH OUTSIDE OF LIFTEX CORPORATION FACILITIES OR WHICH HAVE BEEN INTERMIXED (USED WITHIN A SYSTEM) WITH PRODUCTS OR MATERIALS NOT APPROVED BY LIFTEX CORPORATION OR HAVE BEEN SUBJECTED TO ACCIDENT, NEGLIGENCE, MISUSE OR ABUSE.

LIFTEX CORPORATION'S SOLE OBLIGATION (AND THE SOLE AND EXCLUSIVE REMEDY OF THE PURCHASER OR OWNER OF THE PRODUCT) WITH RESPECT TO ANY PRODUCTS WHICH ARE PROVEN TO BE DEFECTIVE, SHALL BE THE REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCTS, AT THE SOLE OPTION OF LIFTEX CORPORATION. RETURNED PRODUCTS WILL NOT BE ACCEPTED UNLESS LIFTEX CORPORATION IS NOTIFIED AND AUTHORIZES THE RETURN, PRIOR TO SHIPMENT. LIFTEX CORPORATION SHALL NOT BE LIABLE FOR ANY DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE DEFECTIVE PRODUCTS, AND UNDER NO CIRCUMSTANCES SHALL LIFTEX CORPORATION BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL, SPECIAL OR PUNITIVE DAMAGES.

THIS LIMITED WARRANTY IS EXCLUSIVE AND LIFTEX CORPORATION MAKES NO OTHER WARRANTIES WITH RESPECT OF ITS PRODUCTS, EXPRESSED OR IMPLIED, INCLUDING NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE.

WARNING **PROTECT SLINGS FROM CUTTING:** Failure to protect sling from cutting may result in damage, injury or death. Contact us to discuss sling protection options.





Safety First

At **liftex®** safety is our top priority and the paramount consideration involved in manufacturing **liftex®** slings. It is the responsibility of the user of our slings to establish appropriate safety practices prior to using our slings. Users of slings shall have knowledge on proper methods of rigging and lifting and how they will react under abnormal situations.

All slings manufactured or provided by liftex® meet or exceed OSHA, WSTDA standards and regulations. With a very few limited exceptions (primarily due to hardware/fitting marking requirements) liftex® products are also compliant ASME B30.9 standards and regulations.

NEVER USE A SLING WITHOUT TRAINING:
OSHA regulations require responsible work practice. Employee training should include information given in OSHA training literature, ASME B30.9 "Slings" and ASME B30.10 "Hooks" safety standard stating that sling users shall be trained in the selection, inspection, cautions to personnel, effects of the environment, and rigging practices.

ALWAYS COMPLY WITH APPLICABLE FEDERAL AND LOCAL REGULATIONS:
Understand all governing laws and safety standards before use of Liftex Slings. OSHA 1910.184; OSHA 1910.5 (c) (1); ASME B 30.9 "Sling" Safety Standards provide important information.

ALWAYS INFORM YOURSELF:
Ask your employer for all sling safe use instruction.

NEVER USE ANY SLING IN EXTREME TEMPERATURES:
Please refer to www.liftex.com for more details on how extreme heat may affect slings. All sling materials have different tolerance. Be sure to find the correct temperatures for your particular sling.

NEVER OVERLOAD A SLING:
Understand work load limits and rated capacities. Rated capacities are based on a 5:1 design factor for synthetics and 4:1 for chain slings. Lift dynamics, duty cycle and hitch type may require an increased design factor, hence a reduced WLL. Sling WLL depends on sling leg angle. The WLL for a sling is reduced as the sling leg angle with the horizontal gets smaller. This fact applies to all multi-leg and basket slings and must not be ignored. Pages 16 and 17 illustrate the effect of sling leg angle on WLL for a single basket and 2-leg sling. The WLL of a sling with a 30 degree leg angle is 50% of the WLL for the same sling with a 90 degree leg angle. Pay attention to the effect of the sling leg angle which can result in sling overload. When using chain sling as opposed to synthetics the WLL must be reduced in accordance to page 43 when chain is rigged over an edge radius (R) less than 2x the chain rod diameter (d).

ALWAYS KNOW THE LOAD WEIGHT:
Avoid sling failure. Utilize table on pages 17 and 43 to determine proper sling configuration and work load limits.

ALWAYS BE AWARE OF CHEMICALLY ACTIVE ENVIRONMENTS:
Chemically active environments can affect the strength of webbing and chain in varying degrees, ranging from little to total degradation. Before ordering and/or using slings that will be used in a chemically active environment, contact a Liftex® representative. We will be pleased to recommend the right sling for the application.

⚠ WARNING **PROTECT SLINGS FROM CUTTING:** Failure to protect sling from cutting may result in damage, injury or death. Contact us to discuss sling protection options.

ACIDS:
Nylon is subject to degradation in acids, ranging from little to total degradation. Polyester is resistant to many acids, but is subject to degradation, ranging from little to moderate in some acids. Chain is subject to degradation in acids. Degradation may or may not be visible. If chain has been exposed to acids it should be removed from service.

Each application shall be evaluated, taking into consideration the following:

- Type of Acid
- Exposure Conditions
- Concentration
- Temperature

ALKALIS:
Nylon is resistant to many alkalis, but is subject to degradation ranging from little to moderate in some alkalis. Polyester is subject to degradation in alkalis, ranging from little to total degradation. Chain is subject to degradation in alkalis. Degradation may or may not be visible. If chain has been exposed to alkalis it should be removed from service.

Each application shall be evaluated, taking into consideration the following:

- Type of Alkali
- Exposure Conditions
- Concentration
- Temperature

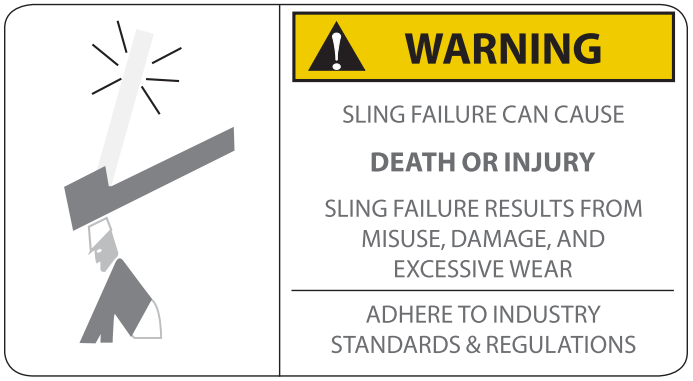
NEVER RIDE A SLING OR LOAD:
Additionally synthetic slings should never be used to rig personnel platforms.

NEVER RIG A SLING TO LOAD IMPROPERLY:
- Avoid dropped loads or sling damage:
- Sling leg angle shall not be less than 30 degrees from the horizontal
- Chain Slings shall be shortened with a shortening hook only — NO KNOTS, BOLTS, ETC.
- Synthetic Slings are not to be shortened at all — if a shorter sling is needed for a job use a different sling that is properly suited for the application
- Sling legs shall not be kinked, twisted or tied
- Sling hooks shall not be point loaded
- Slings used in a basket hitch shall have loads properly balanced
- Slings shall be securely attached to lifting point
- Slings in contact with edges, corners, protrusions, or abrasive surfaces shall be protected with a material of sufficient strength, thickness, and construction to prevent damage
- Sling shall be rigged to prevent chain from sliding over load edge radius

NEVER USE A WORN OUT OR DAMAGED SLING:
Remove slings from service if any of the following are present:
- Missing or illegible identification
- Wear, nicks, bends, cracks, gouges, or stretching in any hardware or chain
- Weld splatter on any part of the sling or hardware attachments
- Excessive wear at bearing points
- Discoloration from excessive temperatures
- Chain links should hinge freely with adjacent links
- End attachments, including hooks, that are cracked, deformed, elongated, or obviously worn
- Other conditions, including visible damage, that cause doubt as to the continued use of the sling

NEVER USE A SLING WITHOUT A LEGIBLE IDENTIFICATION TAG:
Sling identification is required to insure proper sling selection. Rated capacity is the maximum working load for a specified working range. Slings with missing or illegible tags should be removed from service. Sling working range includes sling leg angles from 90 degrees to specified maximum.

CAUTIONS TO PERSONNEL:
All portions of the human body shall be kept from between the sling and the load, and from between the sling and the crane hook or hoist hook. Personnel should never stand in line with or next to the leg(s) of a sling that is under tension. Personnel shall not stand or pass under a suspended load. Personnel shall not ride the sling. Synthetic slings shall not be used to support suspended personnel platforms.



General Inspection Procedure

GENERAL OVERVIEW – SLING INSPECTIONS:
All inspections shall be performed by a designated person. Any deficiency identified shall be examined and a determination made by a qualified person as to whether it constitutes a hazard.

Initial Inspection
Prior to use, all new, altered, modified, or repaired slings shall be inspected to verify compliance with the applicable provisions of this Chapter. Written records are not required for initial inspection.

Frequent Inspection
(a) A visual inspection for damage shall be performed each day or shift the sling is used.
(b) Slings found with conditions such as those listed in Removal Criteria shall be removed from service. Slings shall not be returned to service until approved by a qualified person.
(c) Written records are not required for frequent inspections.

Periodic Inspection
(a) A complete inspection of the sling shall be performed. Inspection shall be conducted on the entire length including splices and fittings. Slings found with conditions such as those listed in Removal Criteria shall be removed from service. Slings shall not be returned to service until approved by a qualified person.
(b) Periodic Inspection Frequency. Periodic inspection intervals shall not exceed 1 year. The frequency of periodic inspections should be based on:
  (1) frequency of sling use
  (2) severity of service conditions
  (3) nature of load handling activities
  (4) experience gained on the service life of slings used in similar circumstances
(c) Guidelines for the time intervals are:
  (1) normal service — yearly
  (2) severe service — monthly to quarterly
  (3) special service — as recommended by a qualified person
(d) Documentation that the most recent periodic inspection was performed shall be maintained.
(e) Inspection records of individual slings are not required.

REPAIRS:
Liftex® strongly advises that slings displaying damage and subject to repair be evaluated by the manufacturer for suitability of said repairs. Damaged flat web slings should never be repaired. Hardware from damaged web or round-slings may, subject to inspection of said hardware, may be salvaged and re-webbed. Damaged components, sections or links of chain slings often times can be replaced and the sling put back into service. Any repairs shall be evaluated and performed by the manufacturer. Any repaired sling shall be proof-tested and documented prior to being put back into service.

GENERAL REJECTION CRITERIA PER ASME B30.9 — APPLIES TO ALL SLING TYPES
- Missing or illegible sling identification
- Evidence of heat damage
- Slings that are knotted
- Fittings that are pitted, corroded, bent, twisted or broken
- Any visible characteristic that would indicate damage or cause doubt as to functionality and/or integrity of the sling

SEE PAGES 56–59 FOR BLANK INSPECTION FORMS.

WARNING **PROTECT SLINGS FROM CUTTING:** Failure to protect sling from cutting may result in damage, injury or death. Contact us to discuss sling protection options.

Specific Removal Criteria for Flat Web Slings

The web sling shall be removed from service if any of the following are visible:

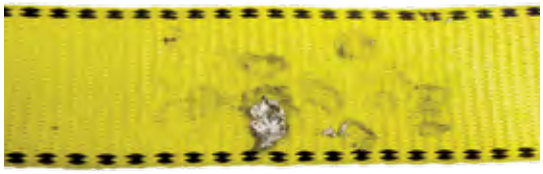
- Missing or illegible identification
- Acid or caustic burns
- Melting or charring of any part of the sling
- Holes, tears, cuts, snags or embedded articles
- Broken or worn stitching in load bearing splices
- Excessive abrasive wear
- Knots in any part of the sling
- Discoloration and brittle or stiff areas on any part of the sling, which may indicate chemical or ultraviolet/sunlight damage
- Fittings that display excessive pitting, corrosion, or are cracked, bent, twisted, gouged or broken
- For hooks — see ASME B30.10 for removal criteria
- For fittings — see ASME B30.26 for removal criteria
- Other conditions and/or visible damage that cause doubt as to the continued use of the sling.

EXAMPLES OF WEB SLINGS TO BE REMOVED FROM SERVICE:

See page 56 for inspection form.

SLING KNOT

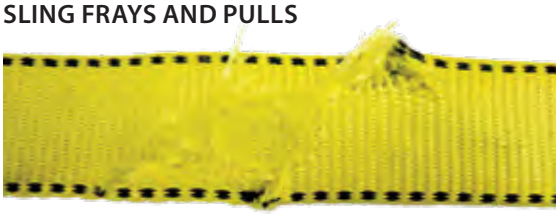
SLING WELD SPLATTERS



SLING CUTS

SLING ABRASION

SLING FRAYS AND PULLS



SLING ACID BURN

* CONTACT A LIFTEX® REPRESENTATIVE OR DISTRIBUTOR WITH ANY SAFETY CONCERNS PRIOR TO USE. EACH IMAGE IS ONLY ONE EXAMPLE OF EACH TYPE OF DAMAGE.

Specific Removal Criteria for RoundSlings

The roundsling shall be removed from service if any of the following are visible:

- Missing or illegible tag
- Acid or caustic burns
- Evidence of heat damage
- Melting, charring or weld spatters are present on any part of the roundsling
- Holes, tears, cuts, snags or embedded articles
- Broken or worn stitching in the cover which exposes core fibers
- Broken or damaged core yarn
- Excessive abrasive wear
- Knots in any part of the sling
- Discoloration, brittle or stiff areas on any part of the sling, which may indicate chemical, heat, or ultraviolet/sunlight damage
- Fittings that display excessive pitting, corrosion, or are cracked, bent, twisted, gouged or broken
- For hooks — see ASME B30.10 for removal criteria
- For fittings — see ASME B30.26 for removal criteria
- Other conditions and/or visible damage that cause doubt as to the continued use of the sling

EXAMPLE OF ROUNDSLINGS TO BE REMOVED FROM SERVICE:

See page 56 for inspection form.

ROUNDSLING CUTS

ROUNDSLING ABRASION

ROUNDSLING TEARS AND PULLS

ROUNDSLING ACID BURN

ROUNDSLING WELD SPLATTER

ROUNDSLING KNOT

* EACH IMAGE IS ONLY ONE EXAMPLE OF EACH TYPE OF DAMAGE.

⚠ WARNING **PROTECT SLINGS FROM CUTTING:** Failure to protect sling from cutting may result in damage, injury or death. Contact us to discuss sling protection options.

Specific Removal Criteria for Chain Slings

The chain sling shall be removed from service if any of the following are visible:

- Missing or illegible tag
- Cracked or broken links or hardware
- Excessive wear, nicks or gouges
- Stretched links or fittings
- Bent, twisted or deformed links or fittings
- Excessive pitting or corrosion
- Lack of ability of chain or components to hinge freely
- Weld splatter
- Knots in any part of the sling
- Discoloration on any part of the sling, which may indicate chemical damage
- Fittings that display excessive pitting, corrosion, or are cracked, bent, twisted, gouged or broken
- For hooks — see ASME B30.10 for removal criteria
- For fittings — see ASME B30.26 for removal criteria
- Other conditions and/or visible damage that cause doubt as to the continued use of the sling

EXAMPLES OF CHAIN SLINGS TO BE REMOVED FROM SERVICE:

See pages 57 and 58 for inspection forms.

WORN LINKS

GOUGED LINKS

BENT LINKS

STRETCHED LINKS

* ANY REPAIRS TO DAMAGED SLINGS SHOULD ONLY BE PERFORMED BY ORIGINAL MANUFACTURER.

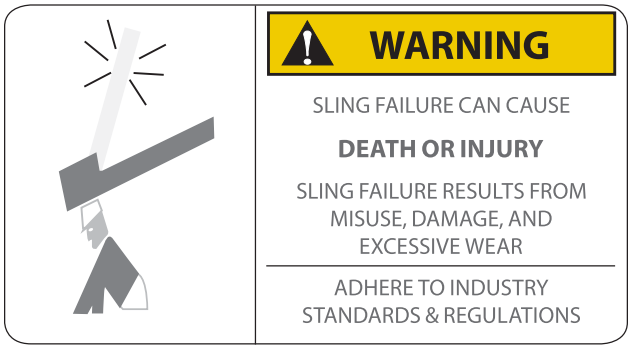
Recommended Operating Practices

- All users must be trained and knowledgeable in sling selection, use and inspection of slings, cautions to personnel, environmental factors and rigging practices.
- Know the weight of your load.
- Use a sling with characteristics meant for the type of load, hitch and environment with which you are working.
- Never ride a sling or load.
- Never load a sling in excess of its rated capacity. Always consider working load limit reduction factors such as angle and/or tension.
- Never tie or knot a sling, or use a sling with a knot in it.
- Protect the sling from being cut by corners, edges and abrasive surfaces by using wear pads or sleeves of sufficient strength to prevent damage to sling.
- Make sure the sling is securely attached to the lifting point.
- Do not stand near or under a suspended load and keep it clear of other obstructions.
- Do not drag a sling across the floor, over abrasive surfaces, or from under a load.
- Don't shock (jerk) load when lifting.
- Take damaged slings out of service immediately.
- Liftex® always recommends synthetic slings be protected by appropriate wear protection:
  - Sewn-On Wear Pads
  - Sliding Sleeves
  - Quick Sleeves
  - Edge Wrap
  - Eye Buffers
  - Pro-Corner
- Protection can come in the following materials:
  - Buffer Web
  - Heavy Duty Sling Web
  - Leather
  - Super Pad Felt
  - PVC Belting
  - Pro-Corner

LIFTEX® SLING PRODUCTION LENGTH TOLERANCE AND DESIGN FACTOR

Sling Type	Tolerance (Greater of)	Design Factor
Pro-Edge® 1 & 2 Ply Web Slings	+/- 1" or 2%	5:1
Pro-Edge® 3 & 4 Ply Web Slings	+/- 2" or 4%	5:1
RoundUp™ RoundSlings	+/- 1" or 2%	5:1
RoundUp™ Braided RoundSlings	+/- 4" or 5%	5:1
PAC-Flex™ & PAC-Link® Chain Slings	+/- 2 Links	4:1
Ratchet Assembly & Tie Downs	n/a	3:1

In Slings specified as matched sets at time of order, length tolerance will not exceed 1/2 the standard indicated above. (Individual legs of a multi-leg bridle sling should be considered "matched set".)



Additional Resources

Additional resources to ensure that you are properly trained and knowledgable regarding the safety and use of synthetic slings include, but are not limited to:

- WSTDA-WS-1: Recommended Standard Specifications for Synthetic Web Slings
- WSTDA-RS-1: Recommended Standard for Synthetic Polyester Roundslings
- WSTDA-T-1: Recommended Standard for Synthetic Web Tie Downs
- ASME B30.9: Synthetic Webbing Slings: Selection, Use and Maintenance
- OSHA 29 CFR 1910.184 — Slings
- Rigging Handbooks
- OSHA Guidance on Safe Sling Use.
- Formal training provided by manufacturer or outside entities.

WARNING **PROTECT SLINGS FROM CUTTING:** Failure to protect sling from cutting may result in damage, injury or death. Contact us to discuss sling protection options.

Factors Affecting Synthetic Sling Performance

CUTTING:
The most common cause for a sling being taken out of service. All synthetic slings are subject to cutting when lifting items with edges. Edges that come in contact with the sling should be padded with material of sufficient strength to prevent damage to the sling. Wear pads give extra protection to the sling where the most wear occurs. Please refer to our page on wear pads and sleeves for all of your options. Regardless of location or type of cut — anytime a sling is cut in any way, shape or form — it must be removed from service.

HOLES, TEARS, ABRASION, ETC.:
Any violation of the integrity of the sling construction can and will reduce the performance of the sling. Always use appropriate padding and wear protectors; avoid dragging slings across floors; avoid pulling slings from under loads.

ULTRAVIOLET EXPOSURE:
- Environments in which synthetic webbing slings are continuously exposed to ultraviolet light can affect the strength of synthetic webbing slings in varying degrees from little to total degradation.
- Suggested procedures to minimize the effects of ultraviolet light and sun light:
  - Store slings in a cool, dry and dark place when not being used for prolonged periods of time.
  - Inspect slings weekly or even more frequently depending on sling use.
- Visual indications of ultraviolet degradation are:
  - Bleaching out of sling color
  - Increased stiffness of sling material
  - Surface abrasion in areas not normally in contact with the load
  - Slings used in environments where they are subject to continuous exposure to ultraviolet light should be proof tested to two times rated capacity annually, or more frequently depending on severity of exposure.

IMPROPER LOADING:
Overloading, imbalanced loading, shock loading, failure to consider hitch, angle and tension effect on rated capacity reduction — all of these issues can reduce the functionality, safety and integrity of the sling. Always adhere to rated capacities; always take into consideration hitch, angle and tension in calculating working load limit; build and rig loads such that they are properly balanced and always avoid shock-loading.

SLING LENGTH:
The selected sling must be of sufficient length to accommodate the load when factoring in the sling to load angle. Failure to consider sling length in conjunction with sling to load angle can result in an overloaded sling.

FOREIGN MATTER:
Dirt, grease, grit, metal chips — any foreign matter can damage the sling. Make all efforts to keep slings clean and free of foreign materials.

TEMPERATURE:
Typical synthetic slings (flat/web slings and roundslings) are not specified for use in temperatures exceeding 194°F/90°C or below -40°F (-40°C). For information on lifting solutions in environments beyond these parameters, contact Liftex®.

CHEMICALLY ACTIVE ENVIRONMENTS:
Chemically active environments can affect the strength of slings in varying degrees, ranging from little to total degradation. Before ordering slings that are to be used in a chemically active environment, give us a call. We would be pleased to recommend the right sling for your application.

ALKALIS:
Nylon is resistant to many alkalis, but is subject to degradation ranging from little to moderate in some alkalis. Polyester is subject to degradation in alkalis, ranging from little to total degradation.

ACIDS:
Nylon is subject to degradation in acids ranging from little to total degradation. Polyester is resistant to many acids, but is subject to degradation ranging from little to moderate in some acids.

Each application must be evaluated, taking into consideration the following:

- Type of acid, alkali or other chemical
- Exposure conditions
- Concentration
- Temperature

PROPER CARE AND STORAGE:
Slings should be stored in a clean, dry environment. Slings should be hung from a rack. For maximum ultraviolet protection — store slings in a dark area.

WARNING

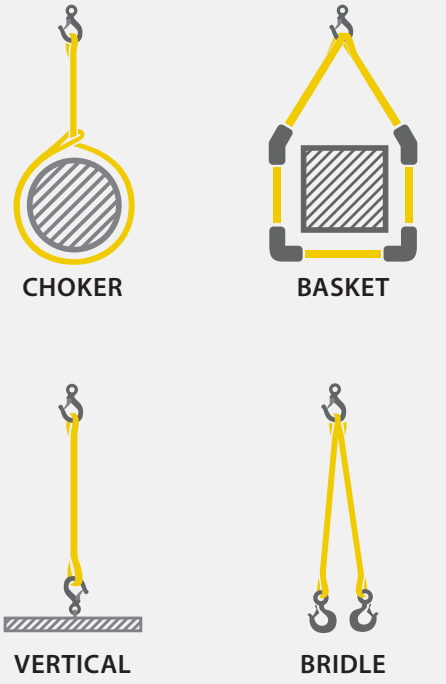
Hitches

CHOKER HITCH:
The sling is passed around the load and through one eye. The remaining eye is engaged to the hook. Note that the angle of choke can result in a reduction to the rated capacity for that operation. See chart titled "Choker Hitch Adjustment".

BASKET HITCH:
The sling surrounds the load while each eye is engaged to the hook (or hooks) above. Note that a basket hitch can be used in either a single or double hook configuration. Note that the sling-to-load angle can result in a reduction to the rated capacity for that operation. See chart titled "Sling Angle — Reduction Factor". Additionally, the sling-to-load angle can result in increased tension. This increased tension should be factored into sling selection. See chart titled "Sling Angle — Tension Factor".

VERTICAL HITCH:
One eye is engaged directly to the load while the other eye is engaged to the hook.

BRIDLE HITCH:
Two or more legs coming from one collection point.

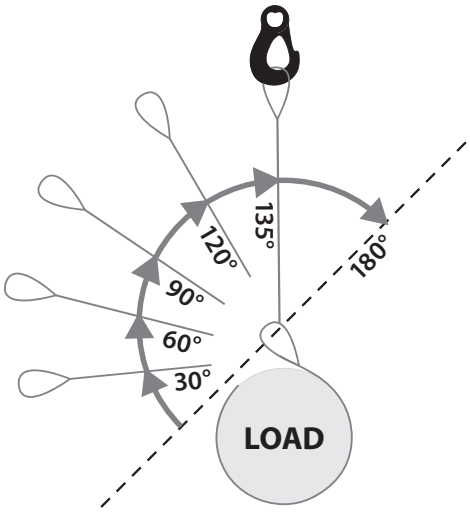


FOR CHOKER HITCHES

When a load is rigged using a choker hitch — if the choke angle is less than 120°, then the rated capacity of the sling must be reduced.

1) Calculate the angle of choke (see illustration).
2) Determine the associated reduction factor (see chart).
3) Multiply the rated capacity for the choker hitch as indicated on the sling tag by the reduction factor.
4) The result is the safe capacity rating for that sling in the rigging configuration.

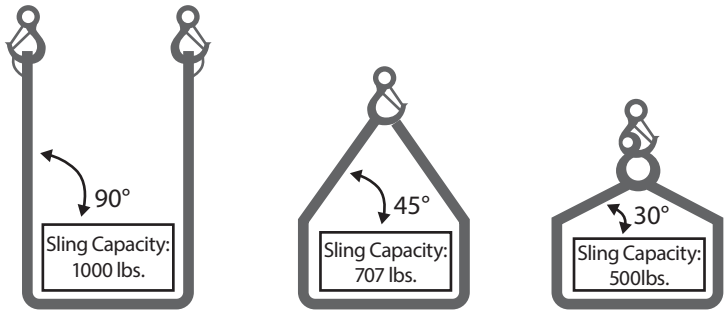
Angle of Choke Degree	Rated Capacity %
Over 120	100
90–120	87
60–89	74
30–59	62
0–29	49



SLING STRENGTH RELATIVE TO CONNECTIVE HARDWARE: AS STATED BY WSTDA, SLING STRENGTH IS AFFECTED BY THE SIZE OF THE CONNECTION HARDWARE. REFER TO WSTDA STANDARDS FOR INFORMATION PERTAINING TO APPROPRIATE CONNECTION HARDWARE SIZES.

WARNING **PROTECT SLINGS FROM CUTTING:** Failure to protect sling from cutting may result in damage, injury or death. Contact us to discuss sling protection options.

Sling to Load Angle



When selecting a sling to carry a given load, it is important to consider the angle at which the sling will be used. As an example, one sling in a basket hitch or two slings attached to one crane hook are different applications involving different sling angles. The degree of the angle will determine how much capacity will be reduced. To determine if a particular sling will have the capacity required, take the angle between the sling leg and the horizontal, then multiply the sling's rating by the factor provided in the accompanying table.

Sling Angle Reduction Factor & Tension Factor

FOR BASKET & BRIDLE HITCHES

METHOD 1 — DETERMINE REDUCTION TO RATED CAPACITY

1) Calculate the Sling to Load Angle (see below — Sling To Load Angle).
2) Determine the associated reduction factor (see chart).
3) Multiply the rated capacity for the basket hitch as indicated on the sling tag by the reduction factor.
4) The result is the safe capacity designation for that sling in that rigging configuration.

Method 1 Reduction Factor	1.000	0.996	0.985	0.966	0.940	0.906	0.866	0.819	0.766	0.707	0.643	0.574	0.500
Sling to Load Angle	90°	85°	80°	75°	70°	65°	60°	55°	50°	45°	40°	35°	30°
Method 2 Tension Factor	1.000	1.004	1.015	1.035	1.064	1.104	1.155	1.221	1.305	1.414	1.555	1.742	2.000

METHOD 2 — DETERMINE INCREASED TENSION/EFFECTIVE WEIGHT OF THE LOAD

1) Calculate the Sling to Load Angle (see below — Sling To Load Angle).
2) Determine the associated tension factor (see chart).
3) Multiply the load weight by the tension factor.
4) The result is the "Effective Weight" of the load in that rigging configuration — be sure to select a sling with adequate capacity. (A longer sling will increase the Sling to Load angle, thereby reducing the tension factor/effective weight of the load.)

Synthetic Sling Features

LOAD PROTECTION:
Will not mar, deface, or scratch the most highly polished metal surface and is equally gentle to non-metallic loads.

STRENGTH:
Tensile strength is outstanding.

CONVENIENCE:
Lightweight and extremely flexible; they are easily and quickly handled and adjusted to the load.

VARIED SLING WIDTHS:
With widths from 1" to 24" (or even wider) there is a synthetic sling to accommodate every lifting application.

SAFETY:
Adjusts to load contour and holds it with a tight, slip resistant grip. Non-sparking.

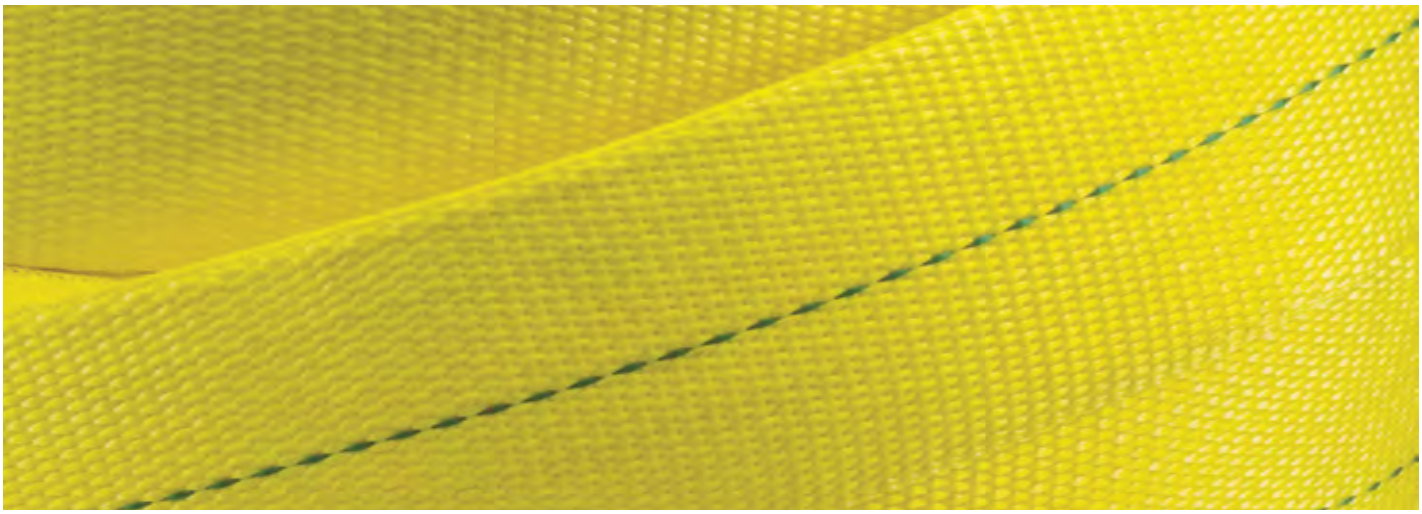
LONG LIFE:
Unaffected by mildew, rot, or bacteria, and have excellent abrasion resistance. All Liftex® Pro-Edge® slings, whether in nylon or polyester, are treated to repel moisture and dirt, and to reduce the effects of abrasion.

ECONOMY:
Low initial cost plus long service life.

INDICATION CORE:
Most flat web slings have RED indicator core yarns to help assist in determining sling wear or damage. If these red core yarns are visible the slings should be removed from service immediately. (WARNING: A sling may still need to be removed from service immediately even if the red core yarns are not visible. In some applications slings may become very dirty making the red yarns not as visible. Also even if the red core yarns are not visible there could still be damage in other areas of the sling. All slings should be carefully inspected before every use.)

⚠ WARNING **PROTECT SLINGS FROM CUTTING:** Failure to protect sling from cutting may result in damage, injury or death. Contact us to discuss sling protection options.

Synthetic Sling Performance Characteristics



Before ordering slings that are going to be used in a chemically active environment, contact Liftex® Customer Service, to recommend the right sling for the application.

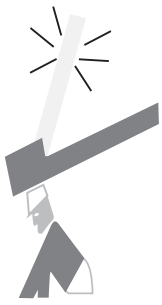
ENVIRONMENTAL DATA:
Recommended Substance Uses For Nylon & Polyester

• can be used
× not to be used

SUBSTANCE	NYLON	POLYESTER
Acids	×	*
Alcohols	•	•
Aldehydes	•	×
Strong Alkalis	•	**
Bleaching Agents	×	•
Dry Cleaning Solvents	•	•
Ethers	•	×
Halogenated Hydrocarbons	•	•
Hydrocarbons	•	•
Ketones	•	•
Oils, Crude	•	•
Oils, Lubricating	•	•
Soap and detergents	•	•
Water and Seawater	•	•
Weak Alkalis	•	•

*This is a general guideline only. *Disintegrated by concentrated Sulfuric Acid.*
***Degraded by strong Alkalis at elevated temperatures.*

PRO EDGE® Tougher. Stronger. Better.®



WARNING

SLING FAILURE CAN CAUSE

DEATH OR INJURY

SLING FAILURE RESULTS FROM MISUSE, DAMAGE, AND EXCESSIVE WEAR

ADHERE TO INDUSTRY STANDARDS & REGULATIONS

Standard Web Sling Types

HARDWARE (CHOKER & BASKET):

TYPE 1
Choker Hardware (CH) slings are made with a triangle fitting on one end and a slotted triangle choker fitting on the other end. The CH configuration provides the most efficient and effective method of choke hitching of all sling types and configurations. This sling type can also be used in a vertical and basket hitch. Fittings can be of aluminum or alloy steel.
See page: 34

TYPE 2
Basket Hardware (BH) slings are made with a triangle fitting on both ends. The BH configuration can be used in the vertical or basket hitch only and cannot be used in a choker hitch. Fitting can be of aluminum or alloy steel.
See page: 35

EYE & EYE:

TYPE 3
Eye and Eye (EE) slings are made with a flat loop eye on each end with a loop eye opening on the same plane as the sling body. This type of sling is sometimes called: flat eye & eye; eye & eye or double eye sling. Versatile and flexible, this sling can be used in all three hitches (vertical, basket and choker).
See pages: 28–29

TYPE 4
Twisted Eye (TE) slings are made with a loop eye on each end that is a at a right angle to the plane of the sling body. This type of sling is commonly referred to as a “twisted eye” sling. This sling is suitable for all hitches, but is recommended particularly for choker hitch application.
See pages: 28–29

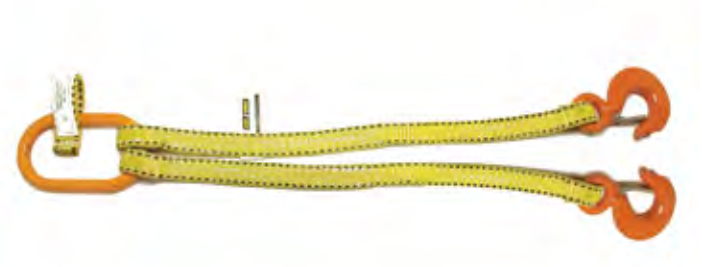
⚠ WARNING **PROTECT SLINGS FROM CUTTING:** Failure to protect sling from cutting may result in damage, injury or death. Contact us to discuss sling protection options.

ENDLESS:

TYPE 5
Endless (EN) slings are made with a continuous loop formed by joining ends of the webbing together with a load-bearing splice. Extremely versatile as the design allows for rotation of bearing points, avoiding one constant bearing point and thereby increasing useful life. Suitable for use with all three hitches: vertical, basket and choker.
See pages: 30–31

REVERSED EYE:

TYPE 6
Reversed Eye (RE) slings are formed by using multiple widths of webbing held edge to edge. A wear pad is attached on both sides of the web sling body, and on both sides of the loop eyes to form a loop eye at each end, which is at a right angle to the plane of the web sling body. The Reversed Eye sling can be used with all three hitch types, but is particularly well suited to the choker hitch due to the "twisted eye".
See page: 32



BRIDLE/MULTI-LEG SLINGS
These slings are special purpose slings with various combinations of legs, rings, hooks, etc.
See page: 36

WIDE BODY SLINGS- BASKET HITCH ONLY

Cargo Integral Eye (CIE)

For maximum load stability and protection.
See page: 33

Cargo Bridle Eye (CBE)

Same use as Integral eye; more economical and for use with lower load weights.
See page 33

Product Groups

The **liftex®** commitment to superior products and service has positioned us as an industry leader. We manufacture a complete line of lifting slings and cargo control products. With our Pro-Edge® flat web slings, our RoundUp™ Roundslings, and our Pac-Flex™ alloy chain mesh slings, we will provide a superior solution for all of your lifting needs.

WEB SLINGS
A flat sling made of nylon or polyester webbing. These high-quality, economical slings are lighter for easier handling.
See pages: 24-36

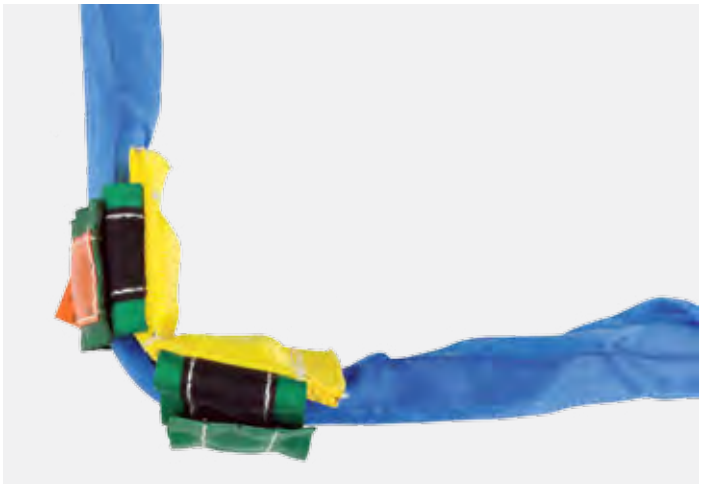
ROUNDSLINGS
RoundUp™ RoundSlings have a double jacket construction that protects its load-bearing core.
See pages: 37-41

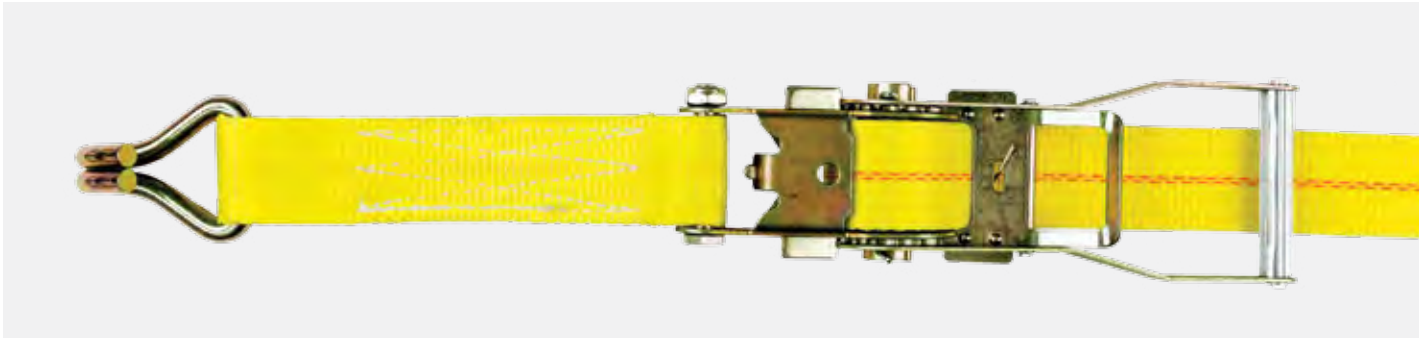
CHAIN SLINGS
Chain slings are made of alloy steel, which allows for operation under high temperature or rugged conditions.
See pages: 42-45

TIE DOWNS & RECOVERY PRODUCTS
Liftex® web tie-down assemblies and towing products fill a wide variety of material handling needs.
See pages: 52-55

SLING PROTECTION
Liftex® wear pads, Pro-Corner pads, sliding Sling Protection sleeves, and quick sleeves give a sling extra protection where it needs it most.
See pages: 50–51

⚠ WARNING **PROTECT SLINGS FROM CUTTING:** Failure to protect sling from cutting may result in damage, injury or death. Contact us to discuss sling protection options.





Pro-Edge®: Premium edge for longest life.
Superior performance is built-in.

Pro-Edge® is different from most other premium edge slings in that the edge protection is structural — it is built into the sling. Pro-Edge® features edge reinforcement with twisted tire cord yarns — for the same reason that these yarns are used in tires — they provide maximum resistance to wear and abrasion. Additionally, the twisting of these yarns provides an enhanced degree of resistance to abrasion as compared to non-twisted yarns. Longer life means reduced cost per use.

Most other premium edge products are made with non-twisted yarns and with vinyl or polymer edge coatings — coatings that can wear off over time and leave the end-user with a simple "standard" edge sling.

TOUGHER.
Pro-Edge® is 50% tougher than standard webbing. The edges are made with high tenacity twisted tire-cord yarns. It is a scientific fact that twisted yarns are more resistant to abrasion than untwisted yarns. Since these twists are part of the yarn construction, the abrasion resistance properties of the yarn will not fade away after standard wear. This contrasts with other premium "edge" products, which use untwisted yarns with chemical coatings. When chemical coatings wear off… the consumer is left with ordinary yarns… without realizing they've lost edge protection.

STRONGER.
When submitted to repeated surface and edge abrasion, Pro-Edge® maintains its strength far better than most other webbing products on the market. Pro-Edge® maintains 50% more of its strength than standard webbing when submitted to 2500 cycles of surface abrasion. Superior abrasion resistance is achieved by controlling the shrink process through a special heat-setting process. This is the same process that produces exceptional abrasion resistance in the manufacture of seat belts.

As a standard practice, and even though LIFTEX® Pro-Edge® provides added protection, it's important to understand that load edges in contact with ANY type of synthetic sling must be "protected" with materials of sufficient thickness or strength to prevent sling damage. Liftex® offers a complete selection of wear pads and sleeves- see catalog and price list.

LIFTEX® POCKET TAG

WHY IS THIS TAG THE BEST?

Our Liftex® Pocket Tag is our new Premium tagging system. It offers the strongest combination of:

- Maximizing "tag life"— thereby reducing the necessity to take slings out of service due to damaged or illegible tag.
- A professional look with laser printed content (as opposed to hand-writing serial # and product info).
- Private labeling capabilities.

PVC Pocket continuously sewn for maximum protection and durability.

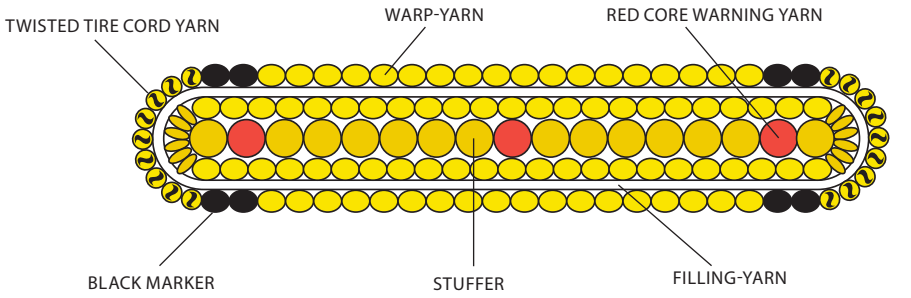
Laser printing black on white for maximum clarity and legibility.

ADVANTAGES OF PRO-EDGE®

- A webbing of double-ply construction with stuffers, made out of high-tenacity yarns.
- The edges consist of twisted tire-cord yarns.
- The webbing is dyed and impregnated with a high-quality mix of various binders which enhance abrasion resistance.
- Pro-Edge® slings are available in nylon or polyester.

PRO EDGE®
Tougher. Stronger. Better.®

PRO-EDGE® SLING WEBBING CROSS SECTION



For more information about Pro-Edge® please visit www.proedgeslings.com

WARNING **PROTECT SLINGS FROM CUTTING:** Failure to protect sling from cutting may result in damage, injury or death. Contact us to discuss sling protection options.

Pro-Edge® — At a Glance

PRO EDGE®
Tougher. Stronger. Better.®

PRO-EDGE® — PREMIUM EDGE FOR LONGEST LIFE

- Everyday use in good to rugged lifting conditions
- Structural edge reinforcement and abrasion resistance provides maximum sling service life
- Tapered eyes (3" and greater width)
- Available in polyester or nylon
- Liftex® Pocket Tag — the most durable tagging system

	PRO-EDGE®
Polyester	Yes
Nylon	Optional
Usage type	General Daily
Usage conditions	Good to Rugged
Red Core Warning Yarns	Yes
Design Factor (New/Unused Sling)	5:1
Tag	Liftex® Pocket Tag
Treated Web — Abrasion Resistance	Yes
Eye Protection	Optional
Premium Edge Construction	Yes
RFID Chip	Optional

Domestic vs. Import:
The choice is yours.

Liftex® Import product is produced by Liftex® at our wholly-owned, ISO 9001 Certified, Liftex® overseas facility, by Liftex® employees under Liftex® management and utilizing Liftex® quality standards.

LIFTEX® DOMESTIC AND LIFTEX® IMPORT — WHAT IS THE DIFFERENCE?

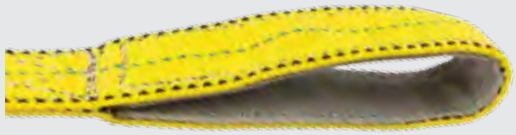
LIFTEX® DOMESTIC OR LIFTEX® IMPORT?	PRODUCTION FACILITY				
It is all Liftex® from start to finish. The only difference is price	**Liftex® PA**	**Liftex® IL**	**Liftex® TX**	**Liftex® WA**	**Liftex® Import**
Production facility is wholly owned by Liftex®?	✔	✔	✔	✔	✔
Management are Liftex® employees?	✔	✔	✔	✔	✔
Fabricators are Liftex® employees?	✔	✔	✔	✔	✔
Product is built to Liftex® quality standards and specs?	✔	✔	✔	✔	✔
Parallel supply chain with all materials to Liftex® spec?	✔	✔	✔	✔	✔
Liftex® warranty & product liability insurance in effect?	✔	✔	✔	✔	✔

All Liftex® product, domestic or import, is produced to the same performance and quality standards that have been the guiding principle at Liftex® for over 60 years. With Liftex®, you can be confident that choosing between "domestic" or "import" does not mean choosing between "price" and "quality".

liftex®
The most trusted name in slings since 1955.

WARNING **PROTECT SLINGS FROM CUTTING:** Failure to protect sling from cutting may result in damage, injury or death. Contact us to discuss sling protection options.

Web Sling Eye Treatments

TYPE 3 — FLAT EYES "EE"	TYPE 4 — TWISTED EYES "TE"
STANDARD	
	
LINED — BEARING POINT	
	
LINED — FULL	
	
WRAPPED — BEARING POINT	
	
WRAPPED — FULL	
	

Eye & Eye (EE- TYPE III / TE- TYPE IV)

Eye & Eye "EE" Web slings are made with a loop, or eye, on each end of the body. Eyes vary depending on the application but may be ordered as follows:

TYPE III
"EE" Web sling made with a flat loop eye on each end with loop eye opening on same plane as the sling body. This type of sling is sometimes called: flat eye & eye; eye & eye or double eye sling. Versatile and flexible, this sling can be used in all three hitches (vertical, basket and choker).

TYPE IV
"TE" Web sling made with a loop eye on each end that is a at a right angle to the plane of the sling body. This type of sling is commonly referred to as a "twisted eye" sling. This sling is suitable for all hitches, but is recommended particularly for choker hitch application.

HOW TO ORDER INSTRUCTIONS

EE 2 9 2 x 10 P D

- D = Domestic; I = Import*
- P = Polyester Pro-Edge®; N = Nylon Pro-Edge®
- Sling type: EE for Flat Eye; TE for Twist Eye
- # of plies: 1, 2, 3, or 4
- Web Strength: 9 = 9800# per inch of width
- Sling Width: 1"–12"
- Sling Length: measured bearing point to bearing point

* Subject to availability

WARNING **PROTECT SLINGS FROM CUTTING:** Failure to protect sling from cutting may result in damage, injury or death. Contact us to discuss sling protection options.

EYE & EYE WEB SLING CAPACITY CHART

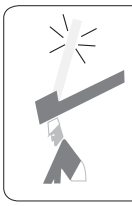
			Rated Capacity (lbs.)			Eye Dimensions		Approximate Sling Weight (lbs.)		
	Part Number	Web Width (inches)	Vertical	Choker	Vertical Basket	Width (inches)	Length (inches)	Min. Standard Length (ft)	Base	Adder/ft.
One Ply	EE191	1	1,600	1,250	3,200	1	9	3	.4	.06
	EE192	2	3,200	2,560	6,400	2	9	4	.9	.12
	EE193	3	4,800	3,840	9,600	1 1/2	9	4	1.4	.18
	EE194	4	6,400	5,120	12,800	2	12	4	1.9	.24
	EE196	6	9,600	7,680	19,200	2	14	5	3.4	.36
	EE198	8	12,800	10,240	25,600	3	18	6	5.3	.48
	EE1910	10	16,000	12,800	32,000	4	22	8	8.0	.60
	EE1912	12	19,200	15,360	38,400	5	26	8	9.8	.72
Two Ply	EE291	1	3,200	2,560	6,400	1	9	3	.4	.13
	EE292	2	6,400	5,120	12,800	2	9	3	.9	.25
	EE293	3	9,300	7,440	18,600	1 1/2	12	4	1.7	.38
	EE294	4	11,500	9,200	23,000	2	12	4	2.3	.50
	EE296	6	16,500	13,200	33,000	2	14	6	4.9	.76
	EE298	8	22,750	18,200	45,500	3	18	6	6.5	1.0
	EE2910	10	28,400	22,720	56,800	4	22	7	9.4	1.3
	EE2912	12	34,100	27,280	68,200	5	26	8	13	1.5
Three Ply	EE391	1	4,100	3,280	8,200	1	12	4	1.0	.20
	EE392	2	8,300	6,640	16,600	2	12	4	2.1	.40
	EE393	3	12,500	10,000	25,000	1 1/2	18	5	3.7	.59
	EE394	4	16,000	12,800	32,000	2	18	5	5.0	.79
	EE396	6	23,000	18,400	46,000	3	20	5	7.6	1.2
	EE398	8	30,700	24,560	61,400	4	24	7	13	1.6
	EE3910	10	36,800	29,440	73,600	5	28	7	16	2.0
	EE3912	12	44,000	35,200	88,000	6	32	7	20	2.4
Four Ply	EE491	1	6,200	4,960	12,400	1	12	4	1.1	.26
	EE492	2	12,400	9,920	24,800	2	12	4	2.2	.53
	EE493	3	17,000	13,600	34,000	1 1/2	18	5	4.1	.79
	EE494	4	22,000	17,600	44,000	2	18	5	5.5	1.1
	EE496	6	33,000	26,400	66,000	3	20	5	8.3	1.6
	EE498	8	44,000	35,200	88,000	4	24	7	15	2.1
	EE4910	10	55,000	44,000	110,000	5	28	7	19	2.6
	EE4912	12	66,000	52,800	132,000	6	32	7	23	3.2

** Before ordering slings that are going to be used in a chemically active environment, contact Liftex® Customer Service, to recommend the right sling for the right usage.*

Chemically Active Environments can affect the strength of webbing slings in varying degrees, ranging from little to total degradation.

Available in:

PRO EDGE® Tougher. Stronger. Better.®



WARNING

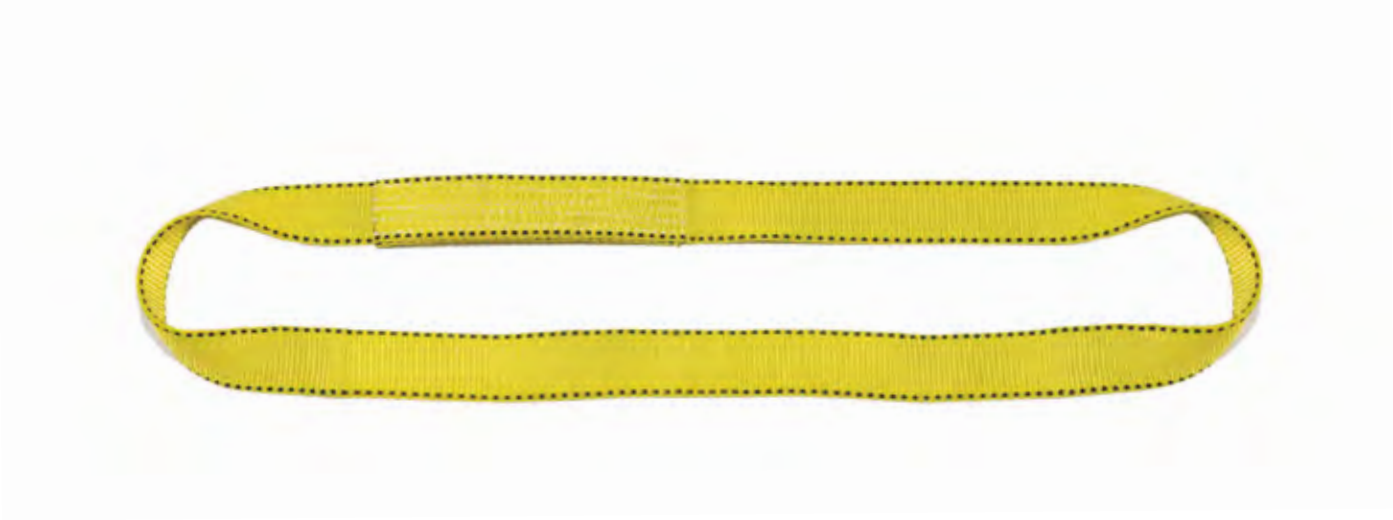
SLING FAILURE CAN CAUSE **DEATH OR INJURY**

SLING FAILURE RESULTS FROM MISUSE, DAMAGE, AND EXCESSIVE WEAR

ADHERE TO INDUSTRY STANDARDS & REGULATIONS

Endless (EN – TYPE V)

"EN" Web slings are a continuous loop formed by joining ends of the webbing together with a load-bearing splice. They are extremely versatile as the design allows for rotation of bearing points, avoiding one constant bearing point and thereby increasing useful life. They are suitable for use with all three hitches: vertical, basket and choker.



HOW TO ORDER INSTRUCTIONS

EN 2 9 2 x 10 P I

- EN 2 — Sling type: EN for Endless
- 9 — Web Strength: 9 = 9800# per inch of width
- 2 — # of plies: 1, 2, 3, or 4
- 10 — Sling Width: 1"–12"
- P — P = Polyester Pro-Edge®, N = Nylon Pro-Edge®
- I — Sling Length: measured bearing point to bearing point; D = Domestic, I = Import*

* Subject to availability

WARNING **PROTECT SLINGS FROM CUTTING:** Failure to protect sling from cutting may result in damage, injury or death. Contact us to discuss sling protection options.

ENDLESS WEB SLING CAPACITY CHART

			Rated Capacity (lbs.)			Approximate Sling Weight (lbs.)		
	Part Number	Web Width (inches)	Vertical	Choker	Vertical Basket	Min. Standard Length (ft)	Base	Adder/ft.
One Ply	EN191	1	3,200	2,500	6,400	3	.40	.12
	EN192	2	6,400	5,000	12,800	3	.80	.25
	EN193	3	8,600	6,900	17,200	3	1.30	.35
	EN194	4	11,500	9,200	23,000	3	1.70	.48
	EN196	6	16,300	13,000	32,600	3	2.50	.70
	EN198	8	19,200	15,400	38,400	3	3.40	.95
	EN1910	10	22,400	17,900	44,800	3	4.20	1.20
	EN1912	12	26,900	21,500	53,800	3	5.0	1.40
Two Ply	EN291	1	6,200	4,900	12,400	3	.80	.25
	EN292	2	12,200	9,800	24,400	3	1.60	.50
	EN293	3	16,300	13,000	32,600	3	2.50	.75
	EN294	4	20,700	16,500	41,400	3	3.30	1.10
	EN296	6	28,600	23,000	57,200	3	4.90	1.50
	EN298	8	30,700	24,500	61,400	3	6.60	2.00
	EN2910	10	33,600	26,800	67,200	3	8.20	2.50
	EN2912	12	37,600	30,000	75,200	3	9.90	3.00
Three Ply	EN391	1	8,000	6,400	16,000	3	1.20	.38
	EN392	2	16,000	12,800	32,000	3	2.40	.75
	EN393	3	21,500	17,200	43,000	3	3.60	1.10
	EN394	4	28,700	23,000	57,400	3	4.80	1.50
	EN396	6	40,700	32,500	81,400	3	7.20	2.30
	EN398	8	46,000	36,800	92,000	3	9.60	3.00
	EN3910	10	51,500	41,200	103,000	3	12.00	3.80
	EN3912	12	59,200	47,300	118,400	3	14.00	4.50
Four Ply	EN491	1	10,000	8,000	20,000	3	1.60	.52
	EN492	2	19,800	15,800	39,600	3	3.20	1.00
	EN493	3	26,700	21,300	53,400	3	4.90	1.60
	EN494	4	35,600	28,400	71,200	3	6.50	2.10
	EN496	6	50,500	40,400	101,000	3	9.70	3.10
	EN498	8	57,600	46,000	115,200	3	13.00	4.20
	EN4910	10	67,200	53,700	134,400	3	16.00	5.20
	EN4912	12	80,700	64,500	161,400	3	19.00	6.20

** Before ordering slings that are going to be used in a chemically active environment, contact Liftex® Customer Service, to recommend the right sling for the right usage.*

Chemically Active Environments can affect the strength of webbing slings in varying degrees, ranging from little to total degradation.

Available in:

PRO EDGE® Tougher. Stronger. Better.®

WARNING

SLING FAILURE CAN CAUSE
DEATH OR INJURY
SLING FAILURE RESULTS FROM MISUSE, DAMAGE, AND EXCESSIVE WEAR

ADHERE TO INDUSTRY STANDARDS & REGULATIONS

Reversed Eye (RE – TYPE VI)

Reversed Eye "RE" (return eye) slings are formed by using multiple widths of webbing held edge to edge. A wear pad is attached on both sides of the web sling body, and on both sides of the loop eyes to form a loop eye at each end, which is at a right angle to the plane of the web sling body. The Reversed Eye sling can be used with all three hitch types (vertical, basket, choker), but is particularly well suited to the choker hitch due to the "twisted eye".

REVERSED EYE CAPACITY CHART

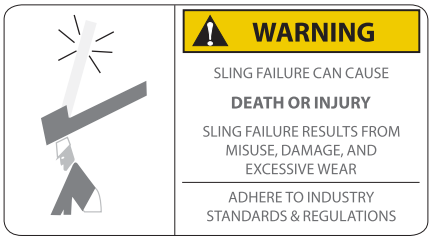
		Rated Capacity (lbs.)			Eye Dimensions		
Part Number	Sling Width (inches)	Vertical	Choker	Vertical Basket	Width (inches)	Length (inches)	Min. Standard Length (ft)
RE192	2	4,600	3,680	9,200	1	9	3
RE292	2	7,700	6,160	15,400	1	12	3
RE193	3	6,900	5,520	13,800	1-1/2	12	4
RE293	3	11,600	9,280	23,200	1-1/2	12	4
RE194	4	8,600	6,880	17,200	1	12	4
RE294	4	14,500	11,600	29,000	2	18	6
RE394	4	20,400	16,320	40,800	2	18	6
RE494	4	23,000	18,400	46,000	2	18	6
RE196	6	12,000	9,600	24,000	1-1/2	14	6
RE296	6	17,400	13,920	34,800	1-1/2	18	6
RE396	6	26,500	21,200	53,000	3	20	6
RE496	6	34,000	27,200	68,000	3	24	6

**Before ordering slings that are going to be used in a chemically active environment, contact Liftex® Customer Service, to recommend the right sling for the right usage.*

Chemically Active Environments can affect the strength of webbing slings in varying degrees, ranging from little to total degradation.

Available in:

PRO EDGE® Tougher. Stronger. Better.®



HOW TO ORDER INSTRUCTIONS

RE 2 9 2 x 10 P

- RE 2 — Sling type: RE for Reverse Eye
- 2 — # of plies: 1, 2, 3, or 4
- 9 — Web Strength: 9 = 9800# per inch of width
- 2 — Sling Width: 2"–6"
- 10 — Sling Length: measured bearing point to bearing point
- P — P = Polyester Pro-Edge®, N = Nylon Pro-Edge®

WARNING **PROTECT SLINGS FROM CUTTING:** Failure to protect sling from cutting may result in damage, injury or death. Contact us to discuss sling protection options.

Cargo Integral Eye & Cargo Bridle Eye

WIDE BODY SLING:
Cargo Integral Eye (CIE)

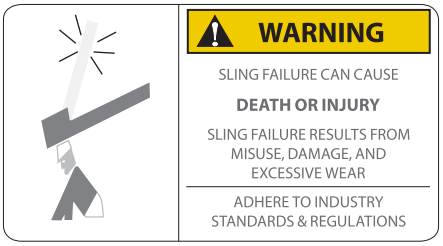
The Cargo Integral Eye is for applications where a wide sling is needed for load stability or for protection of soft surfaces. Spreads the load over a greater area.

CARGO INTEGRAL EYE CAPACITY CHART

Width	Part Number	Eye Width	Eye Length	Min. Sling Length	Rated Capacity (lbs. — Vertical Basket ONLY)
6	CIE2-93	1-1/2"	12"	3'	18,600
6	CIE4-93	1-1/2"	12"	4'	37,200
8	CIE2-94	2"	12"	4'	24,800
8	CIE4-94	2"	12"	4'	44,000
12	CIE2-96	2"	14"	5'	37,200
12	CIE4-96	2"	20"	5'	66,000
16	CIE2-98	3"	18"	5'	44,000
16	CIE4-98	3"	24"	6'	88,000
18	CIE3-96	2"	24"	8'	37,200
18	CIE6-96	3"	30"	8'	66,000
24	CIE3-98	3"	30"	10'	44,000
24	CIE2-912	5"	30"	10'	66,000
24	CIE6-98	3"	36"	10'	88,000
24	CIE4-912	6"	36"	10'	132,000

WIDE BODY SLING:
Cargo Bridle Eye (CBE)

The Cargo Bridle Eye has the same purpose as the CIE but is a lighter duty version. Eyes are a smaller width so they are more compatible with smaller hooks.

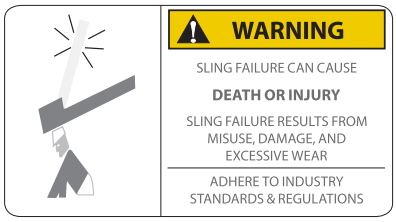


CARGO BRIDLE EYE CAPACITY CHART

Width	Part Number	Eye Width	Eye Length	Min. Sling Length	Rated Capacity (lbs. — Vertical Basket ONLY)
6	CBE-680	1"	6"	3'	8,000
8	CBE-880	1"	6"	3'	8,000
12	CBE-1280	1"	12"	4'	8,000
16	CBE-16100	1"	12"	4'	10,000
18	CBE-18100	1"	12"	4'	10,000
24	CBE-24100	1"	18"	5'	10,000

Hardware Slings

Hardware end fittings can be helpful to prolong sling life by protecting the webbing from abrasion on rough crane hooks. Some riggers find it easier and quicker to use hardware as opposed to a fabric eye. If the webbing in the sling becomes damaged, often the hardware can be reused, lowering sling replacement costs.



Steel hardware is ideal when the application involves alkali, caustic environments and salt water. Aluminum hardware can be severely degraded in such environments. Steel is also best when higher capacities are needed. Aluminum is only rated for 1 ply slings. See our capacity chart listed below.

CHOKER HARDWARE SLING

Type 1: Choker Hardware "CH" sling made with a triangle fitting on one end and a slotted triangle choker fitting on the other end. The CH configuration provides the most efficient and effective method of choke hitching of all sling types and configurations. This sling type can also be used in a vertical and basket hitch. Fittings can be of aluminum or alloy steel.

CHOKER HARDWARE CAPACITY CHART

		Rated Capacity (lbs.)			
Part Number	Sling Width (inches)	Vertical	Choker	Vertical Basket	Min. Standard Length (ft)
CHS1-92	2	3,200	2,560	6,400	3
CHS2-92	2	6,400	5,120	12,800	3
CHS3-92	2	8,300	6,640	16,600	3
CHS4-92	2	12,400	9,920	24,800	3
CHS1-93	3	4,800	3,840	9,600	3
CHS2-93	3	8,900	7,120	17,800	3
CHS3-93	3	12,500	10,000	25,000	3
CHS4-93	3	17,000	13,600	34,000	3
CHS1-94	4	6,400	5,120	12,800	3
CHS2-94	4	11,500	9,200	23,000	3
CHS3-94	4	16,000	12,800	32,000	3
CHS4-94	4	22,000	17,600	44,000	3
CHS1-96	6	9,600	7,680	19,200	3
CHS2-96	6	16,500	13,200	33,000	3
CHS3-96	6	23,000	18,400	46,000	3
CHS4-96	6	33,000	26,400	66,000	3
CHS1-98	8	12,800	10,240	25,600	6
CHS2-98	8	22,400	17,920	44,800	6
CHS3-98	8	30,700	24,560	61,400	6
CHS4-98	8	44,000	35,200	88,000	6
CHS1-910	10	16,000	12,800	32,000	6
CHS2-910	10	28,000	22,400	56,000	6
CHS3-910	10	36,800	29,440	73,600	6
CHS4-910	10	55,000	44,000	110,000	6
CHS1-912	12	19,200	15,360	38,400	6
CHS2-912	12	32,000	25,600	64,000	6
CHS3-912	12	44,000	35,200	88,000	6
CHS4-912	12	66,000	52,800	132,000	6

WARNING **PROTECT SLINGS FROM CUTTING:** Failure to protect sling from cutting may result in damage, injury or death. Contact us to discuss sling protection options.

BASKET HARDWARE CAPACITY CHART

Rated Capacity (lbs.)				
Part Number	Sling Width (inches)	Vertical	Vertical Basket	Min. Standard Length (ft)
BHS1-92	2	3,200	6,400	3
BHS2-92	2	6,400	12,800	3
BHS3-92	2	8,300	16,600	3
BHS4-92	2	10,000	20,000	3
BHS1-93	3	4,800	9,600	3
BHS2-93	3	8,900	17,800	3
BHS3-93	3	12,500	25,000	3
BHS4-93	3	14,900	29,800	3
BHS1-94	4	6,400	12,800	3
BHS2-94	4	11,500	23,000	3
BHS3-94	4	16,000	32,000	3
BHS4-94	4	19,800	39,600	3
BHS1-96	6	9,600	19,200	3
BHS2-96	6	16,500	33,000	3
BHS3-96	6	23,000	46,000	3
BHS4-96	6	29,800	59,600	3
BHS1-98	8	12,800	25,600	6
BHS2-98	8	22,400	44,800	6
BHS3-98	8	30,700	61,400	6
BHS4-98	8	39,700	79,400	6
BHS1-910	10	16,000	32,000	6
BHS2-910	10	28,000	56,000	6
BHS3-910	10	36,800	73,600	6
BHS4-910	10	49,600	99,200	6
BHS1-912	12	19,200	38,400	6
BHS2-912	12	32,000	64,000	6
BHS3-912	12	44,000	88,000	6
BHS4-912	12	59,500	119,000	6

BASKET HARDWARE SLING

Type 2: Basket Hardware "BH" slings are made with a triangle fitting on both ends. The BH configuration can be used in the vertical or basket hitch only and cannot be used in a choker hitch. Fitting can be of aluminum or alloy steel.

PRO EDGE® Tougher. Stronger. Better.®

Aluminum Hardware Slings — Rated Capacity (lbs.)					
Part Number	Sling Width (inches)	Vertical	Choker (CHA only)	Vertical Basket	Min. Standard Length (ft)
BHA1-92	2	3,200	n/a	6,400	3
BHA1-93	3	4,800	n/a	9,600	3
BHA1-94	4	6,400	n/a	12,800	3
BHA1-96	6	9,600	n/a	19,200	3
CHA1-92	2	3,200	2,560	6,400	3
CHA1-93	3	4,800	3,840	9,600	3
CHA1-94	4	6,400	5,120	12,800	3
CHA1-96	6	9,600	7,680	19,200	3

HOW TO ORDER INSTRUCTIONS

BH S 2 9 2 x 10 P

- Hardware Type: BH = Basket Fittings; CH = Choker Fittings
- Sling type: S = Steel; A = Aluminum
- # of plies: 1, 2, 3, or 4
- Web Strength: 9 = 9800# per inch of width
- Sling Width: 2"–12"
- Sling Length: measured bearing point to bearing point
- Webbing Choices: P = Polyester Pro-Edge®; N = Nylon Pro-Edge®

Bridle/Multi-Leg Web Slings

PRO EDGE® Tougher. Stronger. Better.®

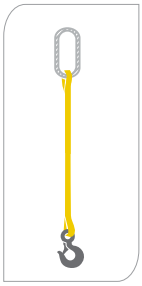
HOW TO ORDER INSTRUCTIONS

Sample Part Number for a Double Leg, Oblong Link, Sling Hook, and an Eye & Eye sling with a maximum capacity of 5540 lbs at a 60° and 4' legs:

- Sling configuration: DOS Leg Type Code: EE291 Sling Length bearing point to bearing point: 4'
- Final Part number: DOS-EE291x04'

SINGLE LEG SLINGS

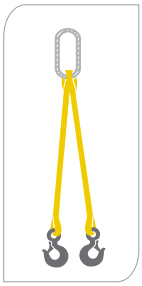
			*Capacity in lbs. at Horizontal Angle
Part Number	**Top Fitting**	**Bottom Fitting**	**90°**
SOS-EE191	Oblong Master Link	Sling Eye Hook	1,600
SOO-EE191	Oblong Master Link	Oblong Master Link	1,600
SSS-EE191	Sling Eye Hook	Sling Eye Hook	1,600
SOS-EE291	Oblong Master Link	Sling Eye Hook	3,200
SOO-EE291	Oblong Master Link	Oblong Master Link	3,200
SSS-EE291	Sling Eye Hook	Sling Eye Hook	3,200
SOS-EE292	Oblong Master Link	Sling Eye Hook	6,400
SOO-EE292	Oblong Master Link	Oblong Master Link	6,400
SSS-EE292	Sling Eye Hook	Sling Eye Hook	6,400



SOS

DOUBLE LEG SLINGS

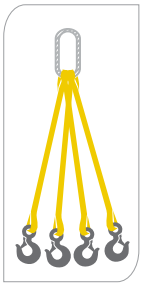
			*Capacity in lbs. at Horizontal Angle		
Part Number	**Top Fitting**	**Bottom Fitting**	**60°**	**45°**	**30°**
DOS-EE191	Oblong Master Link	Sling Eye Hook	2,770	2,260	1,600
DOO-EE191	Oblong Master Link	Oblong Master Link	2,770	2,260	1,600
DOS-EE291	Oblong Master Link	Sling Eye Hook	5,540	4,520	3,200
DOO-EE291	Oblong Master Link	Oblong Master Link	5,540	4,520	3,200
DOS-EE292	Oblong Master Link	Sling Eye Hook	11,090	9,050	6,400
DOO-EE292	Oblong Master Link	Oblong Master Link	11,090	9,050	6,400



DOS

QUADRUPLE LEG SLINGS

			*Capacity in lbs. at Horizontal Angle		
Part Number	**Top Fitting**	**Bottom Fitting**	**60°**	**45°**	**30°**
QOS-EE191	Oblong Master Link	Sling Eye Hook	5,540	4,520	3,200
QOO-EE191	Oblong Master Link	Oblong Master Link	5,540	4,520	3,200
QOS-EE291	Oblong Master Link	Sling Eye Hook	11,090	9,050	6,400
QOO-EE291	Oblong Master Link	Oblong Master Link	11,090	9,050	6,400
QOS-EE292	Oblong Master Link	Sling Eye Hook	22,180	18,100	12,800
QOO-EE292	Oblong Master Link	Oblong Master Link	22,180	18,100	12,800



QOS

***TRIPLE LEG BRIDLES AVAILABLE**

SEE PAGE 43 FOR ADDITIONAL FITTINGS OPTIONS

⚠ WARNING **PROTECT SLINGS FROM CUTTING:** Failure to protect sling from cutting may result in damage, injury or death. Contact us to discuss sling protection options.

RoundUp™ RoundSlings

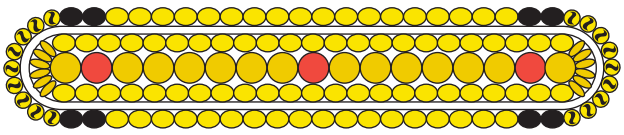
Liftex® RoundUp™ RoundSlings offer the user the ultimate in lifting security and rigging ease. RoundUp™ RoundSlings are constructed from a continuous loop of 100% polyester fiber. Each RoundUp™ RoundSling is covered with a double polyester woven jacket to protect the load-bearing fibers from damage. Because the load-bearing fibers never come in contact with the load, they are protected from some abrasions and ultraviolet degradation. Each sling has a tough, resilient tag for quick and easy identification.

SLING TYPE	USAGE	ADVANTAGES
ENDLESS	A versatile sling for general use with unlimited rigging methods.	• Reduce cost with less total rigging weight • Easy handling and storage • Reduce risk of back and hand injuries • Cover abrasion will not reduce capacity • Provides a strong grip on loads • Provides a tighter choke with an easier release • Capacities are color coded
EYE & EYE	A versatile sling for general use with choker, basket, or vertical hitches.	
BRIDLE/MULTI-LEG	Special purpose slings with multiple combinations.	
BRAIDED ROUNDSLINGS	Braided roundslings provide greater security in handling high-capacity loads.	

ROUNDUP™ ROUNDSLING OR FLAT SLING?

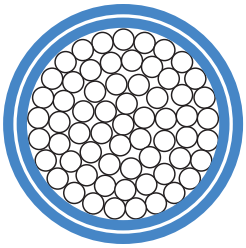
FLAT WEB

- Surface Yarns carry a portion of the load.
- Capacity is reduced by abrasion.



ROUNDUP™ ROUNDSLINGS:

- Double Jacket construction protects load-bearing core from some abrasion and ultraviolet degradation.
- Core Yarns Carry 100% of Load.
- There is no reduction in capacity from surface abrasion.



Endless RoundUp™ RoundSlings

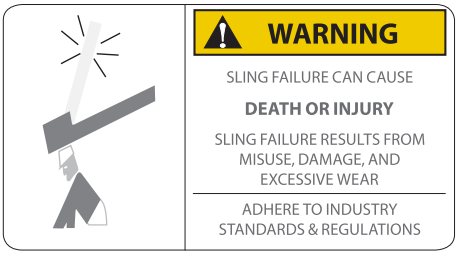
ENDLESS (ENR)
Liftex® Endless RoundUp™ RoundSlings are the most basic roundsling, yet they offer great versatility. Endless roundslings may be used in a vertical, choker or basket type hitch.

ADVANTAGES:
- Reduce cost with less total rigging weight
- Easy handling and storage
- Reduce risk of back and hand injuries
- Cover abrasion will not reduce capacity
- Provides a strong grip on loads
- Provides a tighter choke with an easier release
- Capacities are color coded

ENDLESS ROUNDSLING CAPACITY CHART

		Rated Capacity (lbs.)			Minimum	Approx.	Approx.
	Part Number	Vertical	Choker	Basket	Length	Diameter	WT / FT
PURPLE	ENR1	2,600	2,100	5,200	3'	.625"	0.3 LB
GREEN	ENR2	5,300	4,200	10,600	3'	.875"	0.4 LB
YELLOW	ENR3	8,400	6,700	16,800	3'	1.125"	0.5 LB
TAN	ENR4	10,600	8,500	21,200	3'	1.125"	0.6 LB
RED	ENR5	13,200	10,600	26,400	3'	1.375"	0.8 LB
WHITE	ENR6	16,800	13,400	33,600	6'	1.375"	0.9 LB
BLUE	ENR7	21,200	17,000	42,400	6'	1.625"	1.3 LB
ORANGE	ENR8	25,000	20,000	50,000	6'	1.750"	1.6 LB
ORANGE	ENR9	31,000	24,800	62,000	6'	2.125"	2.0 LB
ORANGE	ENR10	40,000	32,000	80,000	6'	2.350"	2.6 LB
ORANGE	ENR11	53,000	42,400	106,000	8'	3.150"	3.4 LB
ORANGE	ENR12	66,000	52,800	132,000	8'	3.950"	4.3 LB
ORANGE	ENR13	90,000	72,000	180,000	8'	4.800"	5.9 LB
ORANGE	ENR14	100,000	80,000	200,000	8'	5.520"	6.8 LB

* LARGER SIZES AVAILABLE

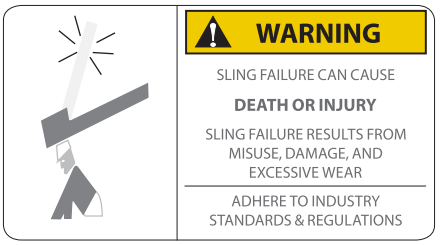


HOW TO ORDER: PART NUMBER X LENGTH (LENGTH IS MEASURED BEARING POINT TO BEARING POINT)

WARNING **PROTECT SLINGS FROM CUTTING:** Failure to protect sling from cutting may result in damage, injury or death. Contact us to discuss sling protection options.

Eye & Eye RoundUp™ RoundSlings

Liftex® Eye & Eye RoundUp™ RoundSlings are ideal where abrasion to the sling body is a problem. A tough, abrasion resistant sleeve is sewn to the body forming a loop at each end. They may be used in a vertical, choker or basket hitch.



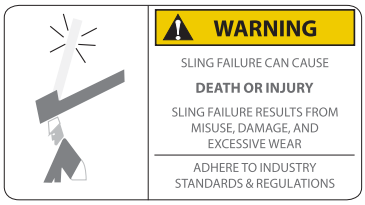
EYE AND EYE ROUNDSLING CAPACITY CHART

	Part Number	Rated Capacity (lbs.)			Minimum Length	Body Width	Approx. WT / FT
		Vertical	Choker	Basket			
PURPLE	EER1	2,600	2,100	5,200	3'	2.25"	0.4 LB
GREEN	EER2	5,300	4,200	10,600	3'	2.50"	0.5 LB
YELLOW	EER3	8,400	6,700	16,800	4'	2.50"	0.6 LB
TAN	EER4	10,600	8,500	21,200	4'	3.50"	0.7 LB
RED	EER5	13,200	10,600	26,400	5'	3.50"	1.0 LB
WHITE	EER6	16,800	13,400	33,600	7'	3.50"	1.1 LB
BLUE	EER7	21,200	17,000	42,400	7'	4.25"	1.6 LB
ORANGE	EER8	25,000	20,000	50,000	7'	5"	1.8 LB
ORANGE	EER9	31,000	24,800	62,000	7'	6"	2.2 LB
ORANGE	EER10	40,000	32,000	80,000	7'	6.5"	2.8 LB
ORANGE	EER11	53,000	42,400	106,000	8'	7"	3.6 LB
ORANGE	EER12	66,000	52,800	132,000	10'	8"	4.5 LB
ORANGE	EER13	90,000	72,000	180,000	10'	9"	6.1 LB
ORANGE	EER14	100,000	80,000	200,000	10'	10.4"	7.1 LB

* LARGER SIZES AVAILABLE

HOW TO ORDER: PART NUMBER X LENGTH (LENGTH IS MEASURED BEARING POINT TO BEARING POINT)

Bridle/Multi-Leg RoundUp™ RoundSlings



HOW TO ORDER INSTRUCTIONS

Sample Part Number for a Double Leg, Oblong Link, Sling Hook, and an Endless sling with a maximum capacity of 4500 lbs at a 60° and 4' legs:

- Sling configuration: DOS Leg Type Code: ENR1 Sling Length bearing point to bearing point.
- Final Part number: DOS-ENR1x04'

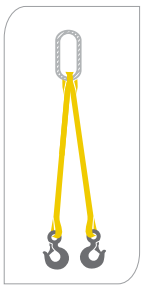
SINGLE LEG ROUNDUP BRIDLE SLINGS

Endless Legs Code	Eye & Eye Legs Code	Leg Color	Vertical Capacity in lbs.	Minimum Leg Length B to B
ENR1	EER1	PURPLE	2,080	4'
ENR2	EER2	GREEN	4,240	4'
ENR3	EER3	YELLOW	6,720	4'
ENR4	EER4	TAN	8,480	4'
ENR5	EER5	RED	10,560	4'
ENR6	EER6	WHITE	13,440	8'
ENR7	EER7	BLUE	16,960	8'


SOS

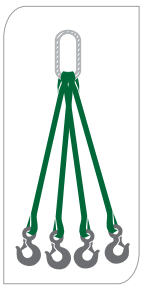
DOUBLE LEG ROUNDUP BRIDLE SLINGS

			*Capacity in lbs. at Horizontal Angle			
Endless Legs Code	Eye & Eye Legs Code	Leg Color	60°	45°	30°	Minimum Leg Length B to B
ENR1	EER1	PURPLE	3,600	2,960	2,080	4'
ENR2	EER2	GREEN	7,360	6,000	4,240	4'
ENR3	EER3	YELLOW	11,600	9,440	6,720	4'
ENR4	EER4	TAN	14,640	11,920	8,480	4'
ENR5	EER5	RED	18,240	14,880	10,560	4'
ENR6	EER6	WHITE	23,200	18,960	13,440	8'
ENR7	EER7	BLUE	29,360	23,920	16,960	8'


DOS

QUAD (4) LEG ROUNDUP BRIDLE

			*Capacity in lbs. at Horizontal Angle			
Endless Legs Code	Eye & Eye Legs Code	Leg Color	60°	45°	30°	Minimum Leg Length B to B
ENR1	EER1	PURPLE	7,200	5,888	4,160	4'
ENR2	EER2	GREEN	14,720	12,000	8,480	4'
ENR3	EER3	YELLOW	23,200	18,880	13,440	4'
ENR4	EER4	TAN	29,280	23,840	16,960	4'


QOS

***TRIPLE LEG AVAILABLE**

SEE PAGE 43 FOR ADDITIONAL FITTINGS OPTIONS

WARNING **PROTECT SLINGS FROM CUTTING:** Failure to protect sling from cutting may result in damage, injury or death. Contact us to discuss sling protection options.

Braided RoundUp™ RoundSlings

Braided RoundUp™ RoundSlings provide greater security in handling high-capacity loads while maintaining the qualities our other roundslings offer. Braided RoundUp™ RoundSlings are constructed using 3 (6-part) or 4 (8-part) Endless RoundUp™ RoundSlings. Braided RoundUp™ RoundSlings offer superior performance in a vertical, choker, or basket hitch.

- Eyes are covered with abrasion-resistant polyester
- Soft, flexible and easy to handle
- Conform well to load
- Excellent strength-to-weight ration
- Capacities are color coded
- Each sling is tagged for easy identification

6-PART BRAIDED ROUNDSLINGS CAPACITY CHART

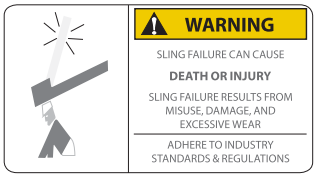
		Capacity in lbs.						
Part Number	Color Code	Vertical	Choker	Vertical Basket	Minimum Length	Standard Eye Length	Approx. Weight per foot	Width Under Load
6BR1	PURPLE	6,700	5,300	13,400	5'	14"	1.1 lb.	3.25"
6BR2	GREEN	13,500	10,800	27,000	5'	15"	1.45 lb.	3.75"
6BR3	YELLOW	21,400	17,100	42,800	6'	18"	1.9 lb.	4.25"
6BR4	TAN	27,000	21,600	54,000	6'	18"	2.25 lb.	4.50"
6BR5	RED	33,600	26,800	67,200	7'	25"	3.0 lb.	5.25"
6BR6	WHITE	42,800	34,200	85,600	7'	25"	3.5 lb.	5.50"
6BR7	BLUE	54,000	43,200	108,000	9'	30"	4.95 lb.	6.63"
6BR8	ORANGE	63,700	50,900	127,400	10'	33"	6.0 lb.	8.25"
6BR9	ORANGE	79,000	63,200	158,000	10'	38"	7.75 lb.	11.0"

* LARGER SIZES AVAILABLE

8-PART BRAIDED ROUNDSLINGS CAPACITY CHART

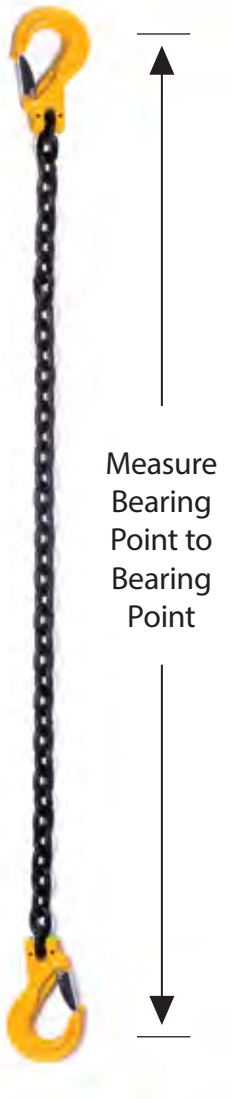
		Capacity in lbs.						
Part Number	Color Code	Vertical	Choker	Vertical Basket	Minimum Length	Standard Eye Length	Approx. Weight per foot	Width Under Load
8BR1	PURPLE	9,000	7,200	18,000	5'	14"	1.4 lb.	3.50"
8BR2	GREEN	18,000	14,400	36,000	5'	15"	1.85 lb.	4.00"
8BR3	YELLOW	28,500	22,800	57,000	6'	18"	2.40 lb.	4.75"
8BR4	TAN	36,000	28,800	72,000	6'	18"	2.85 lb.	5.00"
8BR5	RED	44,900	35,900	89,800	7'	25"	3.8 lb.	6.00"
8BR6	WHITE	57,100	45,600	114,200	7'	25"	4.4 lb.	6.25"
8BR7	BLUE	72,000	57,600	144,000	9'	30"	6.25 lb.	7.50"
8BR8	ORANGE	85,000	68,000	170,000	10'	33"	7.6 lb.	9.50"
8BR9	ORANGE	105,300	84,200	210,600	10'	38"	9.75 lb.	13"

* LARGER SIZES AVAILABLE



PAC-Slings™: PAC-Link®
Premium Alloy Chain for High Heat & High Abrasion Applications

Pac-Link® Slings are made of Grade 100 alloy chain. With a higher capacity than slings made of Grade 80, Pac-Link® Slings are suitable in the temperature range of -40°F to 400°F with a 4:1 design factor. They have maximum abrasion and corrosion resistance. Pac-Link® Slings are available in single, double, triple, or quadruple leg and multiple end fitting configurations.



HOW TO ORDER CHAIN SLINGS

- Determine maximum load to be lifted.
- Determine type of sling required: Single Leg (S), Double Leg (D), Triple Leg (T), Quadruple Leg (Q).
- Determine the proper angle between the leg of the sling and the load during operation.
- Select the proper bottom fitting: Master Link (O), Sling Hook (S), Grab Hook (G), Foundry Hook (F).
- Determine the overall reach/length of the assembly (measured from bearing point on top fitting to bearing point on bottom fitting).
- Choose chain size which meets your required work load, angle and reduction factor. Refer to charts on page 42 and 43.

Example: Double Leg, Master Link top fitting, Sling Hook bottom fittings, 3/8" chain size, 20' length would be coded as: DOS 3/8 x '20

CAPACITY CHART FOR CHAIN SLINGS

G100 CHAIN SIZE	RATED CAPACITY (LBS.)						
	SINGLE LEG	DOUBLE LEG			TRIPLE & QUAD LEG		
INCHES	90°	60°	45°	30°	60°	45°	30°
9/32	4,300	7,400	6,100	4,300	11,200	9,100	6,400
5/16	5,700	9,900	8,100	5,700	14,800	12,100	8,500
3/8	8,800	15,200	12,400	8,800	22,900	18,700	13,200
1/2	15,000	26,000	21,200	15,000	39,000	31,800	22,500
5/8	22,600	39,100	32,000	22,600	58,700	47,900	33,900
3/4	35,300	61,100	49,900	35,300	91,700	74,900	53,000
7/8	42,700	74,000	60,400	42,700	110,900	90,600	64,000

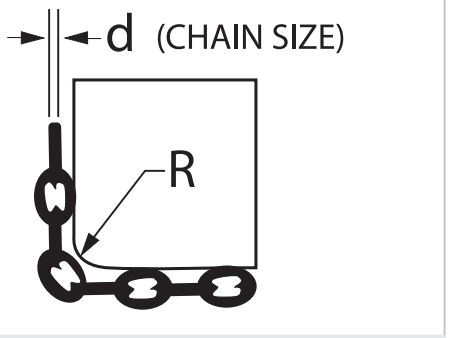
Working load limits are valid between temperatures of -40°F and 400°F

WARNING **PROTECT SLINGS FROM CUTTING:** Failure to protect sling from cutting may result in damage, injury or death. Contact us to discuss sling protection options.

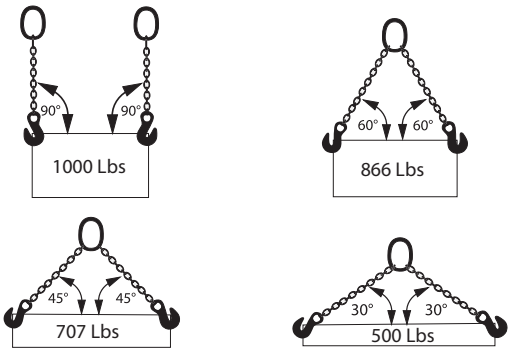
Fitting Options

SLING HOOK | **FOUNDRY HOOK** | **SELF LOCKING HOOK** | **GRAB HOOK** | **MASTER LINK**

Additional items available on request. Most fittings/hardware available in choice of Domestic or Import.



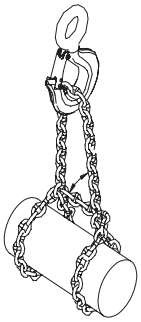
Edge Radius	R > 2x Chain d	R > Chain d	R < Chain d
Reduction Factor	1.0	0.7	0.5



The rated capacity of a sling with a 30° leg angle is 50% of the rated capacity for the same sling with a 90° leg angle.

See Page 17 for sling to load angle calculations

CHOKED ENDLESS CHAIN SLING WLL (IN LBS.)



MM	IN	90°	90°–60°	90°–45°
9/32	4,300	7,400	6,100	4,300
5/16	5,700	9,900	8,100	5,700
3/8	8,800	15,200	12,400	8,800
1/2	15,000	26,000	21,200	15,000
5/8	22,600	39,100	32,000	22,600
3/4	35,300	61,100	49,900	35,300
7/8	42,700	74,000	60,400	42,700

PAC-Slings™: PAC-Flex™
Premium Alloy Chain for High Heat & High Abrasion Applications

liftex® Pac-Flex™, Premium Alloy Chain Mesh Slings are specified for multiple lifting uses in metalworking and other applications where the loads are abrasive, hot or will tend to cut other types of slings. Pac-Flex™ is a uniquely engineered and patented arrangement of alloy steel chain and 1/8" wire rope. End fittings are heat treated alloy steel. Pac-Flex™ fills a niche that web slings, even wire mesh slings cannot fill. In fact, Pac-Flex™ is vastly superior in many aspects to the wire mesh sling.

PAC-FLEX™ — ALLOY CHAIN MESH SLINGS

Patented combination of alloy steel chain and 1/8" wire rope
- Standard duty features 7/32 chain
- Heavy Duty features 5/16 chain

End fittings are heat treated alloy steel

PAC-FLEX™ SLING FEATURES
- Flat, smoother bearing surfaces than wire mesh
- Higher tensile strength alloy steel chain
- Flexibility to conform to irregular shapes
- Withstands temperatures to 400°F
- Excellent resistance to abrasion and cutting
- Easy to inspect — use the same inspection criteria used for other alloy chain slings
- Easy to repair — each individual component can be repaired or replaced by Liftex® as needed to reduce costs

PAC-FLEX™ VS. WIRE MESH SLINGS
- Our 2" wide sling is 260% stronger than 2" wide wire mesh
- Our 4" wide sling is 200% stronger than 4" wire mesh slings
- Bi-Directional Flexibility: means better load control and longer sling life

⚠ WARNING **PROTECT SLINGS FROM CUTTING:** Failure to protect sling from cutting may result in damage, injury or death. Contact us to discuss sling protection options.

PAC-FLEX™ CHAIN MESH SLING CAPACITIES & SPECIFICATIONS

			Rated Capacity (lbs.)			Approx. Weight (lbs.)	
Sling Type	Part #	Nominal Sling width	Choker	Vertical	Basket	3' Sling	1' Body
Type II	PAC-4B	2"	–	6,000	12,000	7.9	1.8
Type I	PAC-4C	2"	6,000	6,000	12,000	9.4	1.8
Type II	PAC-7B	4"	–	10,000	20,000	13.1	3.2
Type I	PAC-7C	4"	10,000	10,000	20,000	15.2	3.2
Type II	PAC-5B/HD	4"	–	18,000	36,000	18.6	4.3
Type I	PAC-5C/HD	4"	18,000	18,000	36,000	22.1	4.3
Type II	PAC-8B/HD	6"	–	30,000	60,000	26.8	6.3
Type I	PAC-8C/HD	6"	30,000	30,000	60,000	31.9	6.3

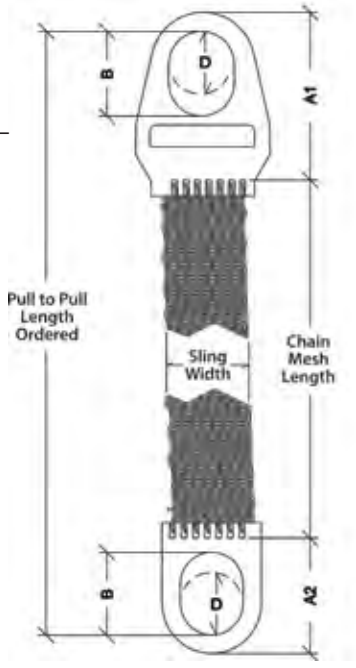
PAC-FLEX™ FITTING DIMENSIONS (IN INCHES)

	A1	A2	B	D	Thickness
PAC-4	6.88	4.75	3.50	2.25	0.75
PAC-7	8.50	6.25	4.25	3.25	0.75
PAC-5HD	12.00	9.19	7.13	3.63	1.00
PAC-8HD	12.75	9.75	6.82	4.75	1.00

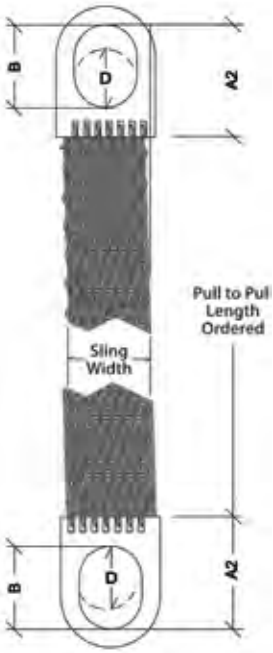
HOW TO ORDER

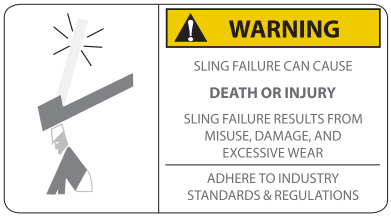
Specify on Purchase Order:
- Sling Width
- Sling Length (pull to pull — see illustration)
- Part Number

CHOKER TYPE 1



BASKET TYPE 2





Marine Slings

ORDERING OPTIONS

Eye Treatment
Available straight or tapered, flat or with a half twist.

Loose Pin Shackle
Made of strong forged steel.

Extra Eye
Available for adjusting length of sling. Can be made the same as end terminals (i.e. half-twist tapered loop, etc.)

Keel Pads
Fasten to the sling at the center to protect the sling from wear at this maximum load point. Specify fixed or sliding.

Sliding Chine and Rub Rail Sleeves
Prevent damage to both sling and boat at the chine and rub rails.

Lead Weights
Keep sling under water for easier positioning on boat. Keel pad required when lead weights are used.

Fabric-Eye Disconnect & Disconnect Pins
Available for slings 8" wide and larger.

POLYESTER MARINE SLINGS

Sling Width	Part Number	Basket Capacity (lbs.)	Loose Pin Hardware	Fabric Eye Disconnect
6"	MS196P	18,600	LPF6	N/A
8"	MS198P	24,800	LPF6	3&2
8"	MS298P	44,000	N/A	3&2
10"	MS19510P	31,000	LPF5	3&2
10"	MS29510P	55,000	N/A	3&2
12"	MS19612P	37,200	LPF6HD	3&2
12"	MS29612P	66,000	N/A	3&2
16"	MS19816P	44,000	N/A	4&3
16"	MS29816P	88,000	N/A	4&3

* LARGER SIZES AVAILABLE

WARNING **PROTECT SLINGS FROM CUTTING:** Failure to protect sling from cutting may result in damage, injury or death. Contact us to discuss sling protection options.

liftex® MARINE SLINGS

The most trusted name in slings since 1955.

STANDARD MEASUREMENTS

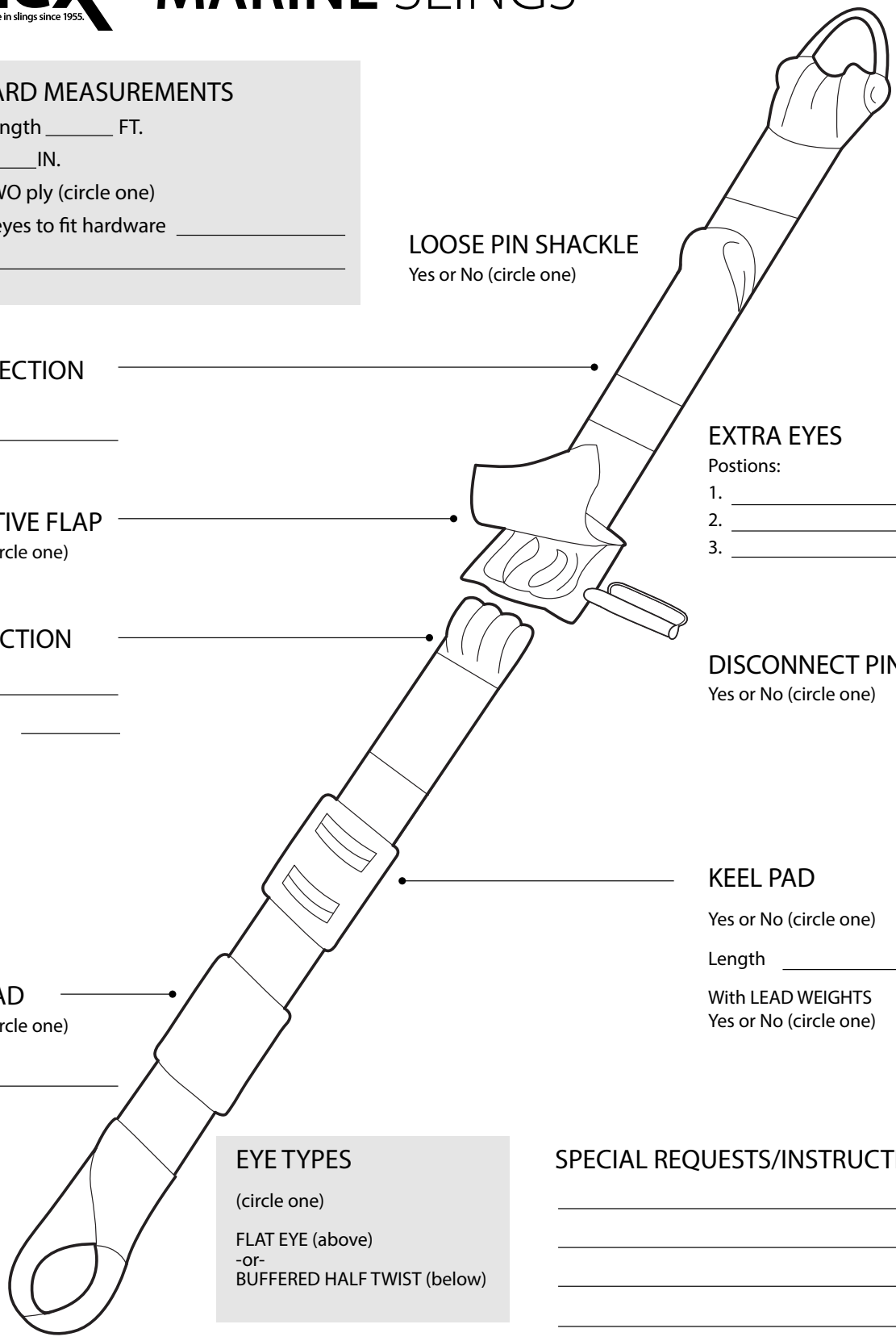
Overall Length _____ FT.

Width _____IN.

ONE or TWO ply (circle one)

Width of eyes to fit hardware _____

_____



LOOSE PIN SHACKLE

Yes or No (circle one)

SHORT SECTION

Length _____

# of Fingers

EXTRA EYES

Postions:

1. _____
2. _____
3. _____

PROTECTIVE FLAP

Yes or No (circle one)

LONG SECTION

Length _____

# of Fingers _____

DISCONNECT PINS

Yes or No (circle one)

KEEL PAD

Yes or No (circle one)

Length _____

With LEAD WEIGHTS
Yes or No (circle one)

CHINE PAD

Yes or No (circle one)

Length _____

EYE TYPES

(circle one)

FLAT EYE (above)
-or-
BUFFERED HALF TWIST (below)

SPECIAL REQUESTS/INSTRUCTIONS

_____

_____

_____

_____

Specialty Slings

- Large Animal/Equine
- Drum Handling Sling
- Cylinder Handling Sling
- Bucket Sling
- Hose Handling Sling
- Lumber Sorting Slings
- Stone Handling Slings
- Engineering and Development Services
- Cargo Nets

Contact your Liftex® Sales Associate for more details.

LARGE ANIMAL – EQUINE SLINGS

Specialty Materials

Liftex® offers a variety of specialty webbing to suite your special application. If you do not see what you are looking for in our catalog please contact your Liftex® Customer Service Representative to help design the sling to suite your special application's needs.

⚠ WARNING **PROTECT SLINGS FROM CUTTING:** Failure to protect sling from cutting may result in damage, injury or death. Contact us to discuss sling protection options.

RFID

"RFID" technology now available on liftex® Pro-Edge® products!

With increased government regulation and limited man power, equipment managers are tasked with the growing challenge of tracking the safety and whereabouts of their lifting assets. Radio Frequency Identification ("RFID") provides durable and unique electronic identification that can be scanned into any tracking software including spreadsheets, maintenance systems or lifting industry applications. Instant, accurate information ensures your safety program is on track. Liftex® is proud to partner with InfoChip® to bring to you access to "best in class" RFID technology!

STARTING EASY
Liftex® offers the option of having InfoChip® RFID chips factory-sewn into all "Pro-Edge®" sling products. Also available is the new low-cost InfoChip USB "Stick" reader that automatically scans your ChipID into any application. This plug and play reader helps you enjoy the benefits of RFID without the investment typically associated with this technology. It can scan any asset with high frequency chips including slings, rigging, fall protection, etc.

WHY RFID?:
- Allows FAST, EASY and PAPERLESS inspection of assets.
- Enables digital tracking of inspection, preventive maintenance and repair initiatives — including setting "schedule alerts".
- Enables real-time and on-site access to equipment identification, inspection and maintenance history info.

WHY INFOCHIP®?
- Industry leader with cutting edge RFID technology, software and equipment.
- Open platform design facilitates integration to any and all order management, work order and accounting systems thus avoiding manual entry and duplicate databases.

For more information visit:
www.liftex.com or call 1-800-478-4651
www.infochip.com or call 1-877-747-2448

Load Indicators

SAFE-T-WEIGH

RADIO TELEMETRY LOAD INDICATORS
- Quick and simple load checking, testing and measurement
- Totally portable operation
- Standard range 2 to 120 tonnes
- Lightweight and high strength aluminum link body
- Worldwide license except 2.4GHz operating frequency
- Range minimum 100m
- Battery life: active not less than 70 hours

FEATURES
Light weight aluminum body for ease of transportation and installation.

Battery life:
Active — not less than 70 hrs

Battery type:
Link — 2 x type AA
Handheld — 4 x type AA
"Power on" system test and calibration check
Illuminated 15mm digits

Operating Frequency:
2.4GHz

Proof Load:
200% Working Load Limit
(150% for 55T and above)
Ultimate Load: 7 Times Working Load Limit

Operating Temp.:
-10° to +40° C

Accuracy:
± 1% of ACTUAL Reading

Radio:
Built in compliance with
- U.S.A. : -FCC P14-TDK-BTISM
- EURO: -CE 0700

Range:
Greater than 100m under normal conditions

Link:
Weatherproofed to IP65
Push Button Tare
Peak Hold
Push button Unit Conversion (T, kg, lb, T_l , T_s)

Sling Protection

WEAR PADS
Wear pads give a sling extra protection where it wears the most. They can be furnished in numerous materials, including leather, buffer web, polyester, felt, PVC, among others. Whether you are trying to protect your sling against wear and/or oil and dirt, Liftex® will offer you protection that best fits your needs.

SLIDING SLEEVES
Sliding sleeves are ideal for handling material with sharp edges because the sleeve doesn't move when the sling stretches. Sleeves cover both sides of the sling and can be moved on the sling to where it is needed. Sleeves are available in many materials and in any length.

FLAT & ROUND QUICK SLEEVES
These heavy polyester or nylon sling covers have velcro closures for quick and easy protection of slings and/or load from damage.

* NOTE: Unless specifically indicated on tags, Wear Pads and Sleeves do not provide cut protection. For pads that provide cut protection — see Pro-Corner® Page 51


SUPER FELT WEAR PAD


PVC WEAR PAD


HEAVY WEB WEAR PAD


BUFFER WEB WEAR PAD

Material Choices: Buffer Web / Nylon / Polyester / Leather / Super Pad
See page 27 for all eye treatment options


BUFFER WEB EDGE WRAP


FLAT QUICK SLEEVE


ROUND QUICK SLEEVE


BUFFER WEB SLIDING SLEEVE


LEATHER SLIDING SLEEVE


FULLY WRAPPED EYE


BUFFER WEB EYE BUFFER

⚠ WARNING **PROTECT SLINGS FROM CUTTING:** Failure to protect sling from cutting may result in damage, injury or death. Contact us to discuss sling protection options.

Introducing "**PRO-CORNER**" Premium Cut Protection Pad

Cut Protection is different from Abrasion Protection.

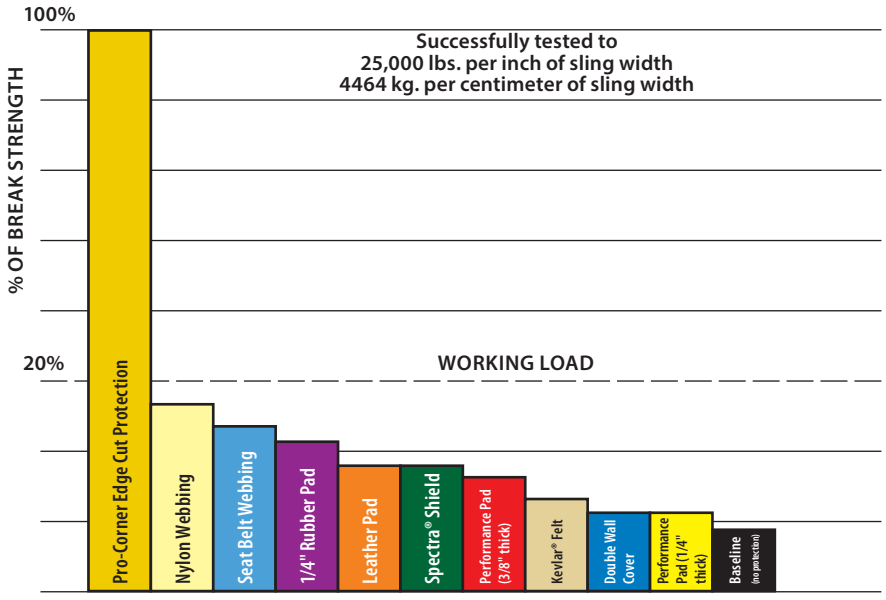
SUFFICIENT PRESSURE + EDGE CONTACT = A CUT SLING — EVERY TIME!

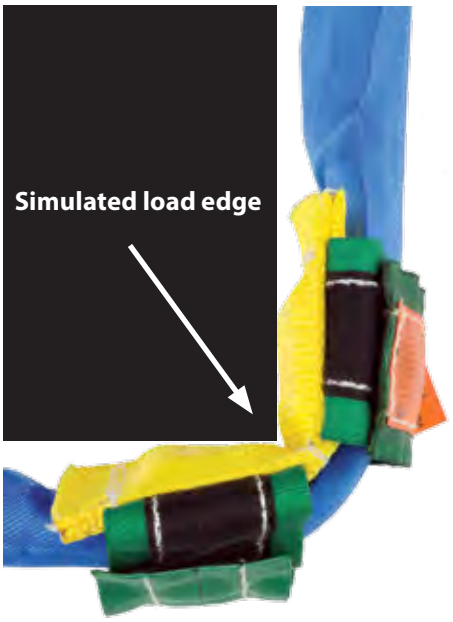
"Pro-Corner" prevents the contact — to prevent the cut.

"PRO-CORNER" FEATURES & BENEFITS

- Tested to 25,000 lbs/inch of sling width — maximum protection at maximum capacity
- Designed with adjustable straps — for easy placement, adjustment and recovery

"Pro-Corner" is specifically designed for use with 90° edge loads. Using a **Pro-Corner** pad creates a gap between the edge and pad/sling. Eliminate the contact to eliminate the potential for cut.



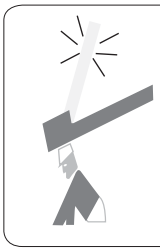


Liftex® Part No.	Sling Width	Pro-Corner Width	Pro-Corner Weight (lbs)
PC02	1" & 2"	4"	1.00
PC03	3"	5"	1.25
PC04	4"	6"	1.50
PC05	5"	8"	2.00
PC06	6"	8"	2.00
PC08	8"	10"	2.50
PC10	10"	12"	3.00

NOTE: All ProCorner pads are approximately 9 inches in length unless otherwise specified.

liftex® Cargo Control

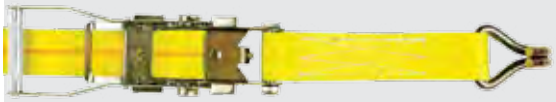
liftex® web tie-down assemblies fill a wide variety of material handling and load restraint needs on transportation equipment, as well as in industrial fields for a variety of uses. For a convenient way to tighten, hold or restrain almost anything, try liftex® tie-down assemblies. If a standard assembly will not fill your needs, liftex® will work with you to design a customized tie-down solution.



⚠ WARNING

ADHERE TO INDUSTRY STANDARDS & REGULATIONS

GENERAL PURPOSE TIE-DOWN ASSEMBLIES

2" WEBBING TIE-DOWN ASSEMBLIES	Part No.	End Fitting	Working Load Cap. (3:1 Design Factor)
	95103	Wire Hooks	3,330 lbs.
	95303	Flat Hooks	3,330 lbs.
	93303	Short Wide Handle Ratchet Flat Hook each end	3,330 lbs.
	93201	Keepered Hooks	3,330 lbs.
	93212	"D" Rings	3,330 lbs.
	90601	A&E Trac Clip	1,000 lbs.
	93505	Twisted Keeper Hooks	3,330 lbs.
	93406	Endless	3,330 lbs.

2" tie down standard lengths are 27' and 30'. Other lengths available.

⚠ WARNING **PROTECT SLINGS FROM CUTTING:** Failure to protect sling from cutting may result in damage, injury or death. Contact us to discuss sling protection options.

1" WEBBING TIE-DOWN ASSEMBLIES	Part No.	End Fitting	Working Load Cap.
	91101	Vinyl Coated "S" Hooks	1,000 lbs.
	91103	Wire Hooks	1,000 lbs.
	91105	Endless	1,400 lbs.

1" tie down standard lengths is 12'. Other lengths available.

FLAT BED TIE-DOWN AND ACCESSORIES

WINCH STRAPS	Web Width	Part No.	End Fitting	Working Load Cap.
	3"	63313	Flat Hook	4,000 lbs.
	4"	64313	Flat Hook	5,000 lbs.
	4"	64212	"V" Ring	5,000 lbs.
	3"	63314	Chain Anchor	4,000 lbs.
	4"	64314	Chain Anchor	5,000 lbs.

WINCHES

Portable Winch; 2 set screws
Part No. W6412

Standard Weld-On Winch
Part No. W6310

Part No. WB1310 Winch Bar

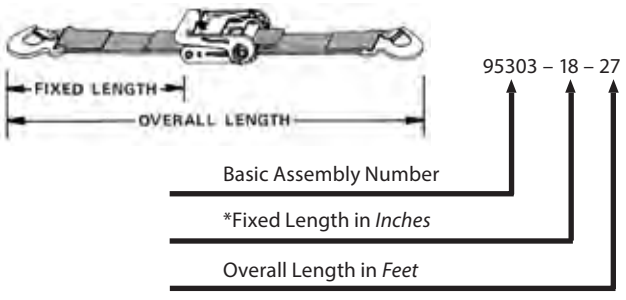
RATCHET BUCKLE TIE-DOWNS — 3" WIDE WEB ASSEMBLIES	Part No.	End Fitting	Working Load Cap.
	15M 96303	Flat Hooks	5,000 lbs.
	15M 96314	Chain Anchor	5,000 lbs.

HOW TO ORDER INSTRUCTIONS

RATCHET ASSEMBLIES

How to order: Part Numbers for Ratchet Assemblies come in three parts. The first part is for the basic assembly number, followed by the fixed length in inches, and then lastly the overall length in feet.

An example would read as follow: 95303-18-30.
Fixed length will be 18" unless otherwise specified.



WINCH STRAPS

To order winch straps, simply add an overall length to the basic assembly number.

liftex® Cargo Control

RECOMMENDED OPERATING PRACTICES FOR TIE-DOWNS
Select a synthetic web tie-down having suitable characteristics for the type of load, environment and attachment to vehicle anchor point. Fittings shall have the required shape and size to attach properly to the vehicle anchor points.

Identify the working load limit (WLL) marked on the synthetic web tie-down by the manufacturer. If the required markings are illegible or missing, remove from service. Read all warnings and/or instructions provided by the manufacturer.

Identify the working load limit (WLL) of the vehicle anchor points. If no rating is visible contact the vehicle manufacturer for tie-down instructions. The lesser-rated working load limit (WLL), whether that is the anchor point or the synthetic web tie-down, shall determine the working load limit (WLL) of the securement system.

Synthetic web tie-downs shall be attached to the vehicle and positioned in accordance with applicable regulations for the commodity being transported to prevent against shifting and/or loss of cargo.

Synthetic web tie-downs should not be dropped or dragged on the floor, ground or any abrasive surface.

Synthetic web tie-downs shall not be shortened, joined, repaired or lengthened by being tied into knots.

Synthetic web tie-downs should not be pulled from under cargo when the cargo is resting on the tie-down.

Synthetic web tie-downs shall always be protected from corners, edges, protrusions, and abrasive surfaces with edge protection that resists abrasion, cutting or crushing.

Synthetic web tie-downs designed to secure cargo shall not be used for lifting, lowering or suspending cargo or for towing.

Before operating any synthetic web tie-down assembly the user shall secure his footing to prevent slipping or falling. In adverse weather conditions, including freezing temperatures, additional caution should be exercised.

When using winch or ratchet straps a minimum of two (2) and a maximum of four (4) wraps of webbing shall be on the winch or ratchet mandrel. Excessive wraps of webbing on the mandrel may reduce the working load limit (WLL) of the synthetic web tie-down and may interfere with proper operation.

Synthetic web tie-downs shall be used, inspected and adjusted during the transportation of cargo per applicable federal, state, provincial, local and industry regulations.

SPECIFIC REMOVAL CRITERIA FOR TIE-DOWNS
A synthetic web tie-down shall be removed from service if any of the following are visible:

a) Holes, tears, cuts, snags or embedded particles which cause doubts as to the strength of the tie-down
b) Broken or worn stitching in load bearing stitch patterns
c) Excessive abrasive wear
d) Knots in any part of the webbing
e) Melting, charring or weld splatter on any part of the webbing
f) Acid or alkali burns
g) Signs of ultraviolet light degradation
h Excessive pitting, corrosion, cracked, distorted or broken buckles or end fittings
i) The working load limit (WLL) assigned by the tie-down manufacturer is no longer visible
j) Any other visible damage which causes doubt as to the strength of the tie-down.

WARNING **PROTECT SLINGS FROM CUTTING:** Failure to protect sling from cutting may result in damage, injury or death. Contact us to discuss sling protection options.

Recovery Products

POLYESTER RECOVERY STRAPS

Liftex® Polyester Recovery Straps are unmatched for strength and workmanship. They are made of Liftex's exclusive Pro-Edge® webbing. Each strap has a tapered eye at each end with optional leather lined eyes.

POLYESTER RECOVERY STRAPS

Part #	Description	Vertical Capacity (lbs.)	Basket Capacity (lbs.)
TRS1-912 X 16'	12" x 16' Polyester Recovery Strap	18,600	37,200
TRS1-912 X 26'	12" x 26' Polyester Recovery Strap	18,600	37,200
TRS1-96 X 16'	6" X 16' Polyester Recovery Strap	9,300	18,600
TRS1-96 X 26'	6" x 26' Polyester Recovery Strap	9,300	18,600
TRS1-98 X 16'	8" x 16' Polyester Recovery Strap	12,400	24,800
TRS1-98 X 26'	8" x 26' Polyester Recovery Strap	12,400	24,800

LIFTEX® COBRA RECOVERY STRAPS

The ideal Recovery Strap for assisting vehicles out of mud, sand, snow. It's made of Liftex's exclusive Nylon Pro-Edge® webbing which provides Flex-Power for increased pull. The Liftex® Cobra Recovery Strap first stretches then snaps back to add Flex-Power to the pull. Each Liftex® Cobra Recovery Strap comes with optional lined leather eye and optional 18" sliding sleeve on the body to protect against abrasion.

LIFTEX® COBRA RECOVERY STRAPS

Part #	Description	Rated Capacity (lbs.)
CTS-18 x 20'	2" x 20' 1-PLY Nylon Recovery Strap	5,300
CTS-18 x 30'	2" x 30' 1-PLY Nylon Recovery Strap	5,300
CTS-36 X 20'	2" x 20' 2-PLY Nylon Recovery Strap	10,660
CTS-36 X 30'	2" x 30' 2-PLY Nylon Recovery Strap	10,660
CTS-72HD X 20'	2" x 20' 4-PLY Nylon Recovery Strap	20,660
CTS-72HD X 30'	2" x 30' 4-PLY Nylon Recovery Strap	20,660

Call your Liftex Sales Representative for additional sizes & plies

liftex®
The most trusted name in slings since 1955.

Web Sling Inspection Report

Company: _____ **Distributor:** _____
Address: _____ **Address:** _____
City: _____ **St:** _____ **ZIP:** _____ **City:** _____ **St:** _____ **ZIP:** _____

Insp Date: _____ **Survey by:** _____ **Dist. Contact:** _____

Location	Description	Manufacturer	Serial No.	Length	Inspection Result			CUT	TORN	BURN	PUNCTURE	DAMAGED FITTING	NO / ILLEGIBLE TAG	OTHER - SEE BELOW*	COMMENTS
					OK	Scrap	Reweb								

* Other Removal Criteria: Ultraviolet Light (UV) degradation, damage to fittings, exposed red core yarn (if provided), and any other conditions which cause doubt as to the strength of the sling.

liftex®
The most trusted name in slings since 1955.

Chain Sling Inspection Report

Company: _____ **Distrib'r:** _____
Address: _____ **Address:** _____
City: _____ **St:** _____ **ZIP:** _____ **City:** _____ **St:** _____ **ZIP:** _____

Insp Date: _____ **Inspected by:** _____ **Dist. Contact:** _____

					Inspection Result			STRETCHED	BENT/TWISTED	GOUGED/PITTED	BURN/WELD SPLTR	DMGD FITTING	NO/ILLEG. TAG	OTHER	
Dept.	Type	Size	RCH	Serial #	OK	Repair	Scrap								COMMENTS

liftex®
The most trusted name in slings since 1955.

Chain Mesh Sling Inspection Report

Company: _____ Distrib'r: _____
Address: _____ Address: _____
City: _____ St: _____ ZIP: _____ City: _____ St: _____ ZIP: _____

Insp Date: _____ Inspected by: _____ Dist. Contact: _____

Dept.	Type	Size	RCH	Serial #	Inspection Result			UNEVEN/OVERLOAD	BROKEN WELD	WEAR	CORR/HEAT DMG	FITTING	NO/ILLEG. TAG	OTHER	COMMENTS
					OK	Repair	Scrap								

liftex®
The most trusted name in slings since 1955.

Wire Rope Inspection Report

Company: _____ Distrib'r: _____
Address: _____ Address: _____
City: _____ St: _____ ZIP: _____ City: _____ St: _____ ZIP: _____

Insp Date: _____ Inspected by: _____ Dist. Contact: _____

Dept.	Description	Lgth	Serial #	Inspection Result OK	Reweb	Scrap	Broken Wire/Strand	Worn Wire/Strand	Corrosion/Heat Dmge	Crush	Kink/Bird Cage	Dmgd/Worn Fitting	No/Illegible Tag	COMMENTS