

TUFLEX®
POLYESTER
MURRAY
TYPE EN150
LENGTH 71'
CHOKER 10000 LBS
BASKET @ BP 22000 LBS
S/N 1093
WARNING

THE TUFLEX® DIFFERENCE

All *Lift-All* slings meet or exceed OSHA and ASME B30.9 standards and regulations.

What is a *Tuflex* Roundslings?

A *Tuflex* roundslings is an endless synthetic sling made from a skein of polyester yarn covered by a double-wall tubular jacket. The roundslings body can be compared to sling webbing with the tubular jacket face yarns woven without binder yarns. This allows the core yarns to move independently within the jacket.

Tufhide™ Jacket on EN360 and Larger Slings

The double-wall *Tufhide* jacket (made from bulked nylon fibers) offers better abrasion resistance for our larger capacity *Tuflex* roundslings. Additionally, *Tufhide* reduces the heat buildup that can damage other high capacity roundslings when used in a choker hitch.

Features and Benefits

Promotes Safety

- Lightweight to reduce fatigue and strain on riggers.
- Synthetic materials will not cut hands.
- Consistent matched lengths for better multiple sling load control.
- No loss of capacity from abrasive wear to the cover.
- *Tuff-Tag* provides serial numbered identification for traceability.
- Low stretch (about 3% at rated capacity).
- Synthetic web resists marring of the load.
- Good for low headroom lifts.
- Extremely flexible, conforms to shape of load to grip securely.
- Tubular jacket protects load bearing yarns from UV degradation.
- Red core yarns provide added visual warning of sling damage.
- Color-coding provides positive sling capacity information.

Saves Money

- Double-wall cover for greater sling life.
- The soft cover will not scratch the load surface.
- Conforms to shape of the load for reduced load damage.
- The cover is seamless with no sewn edges, preventing rupture which requires removal from service.
- EN360 and larger *Tuflex* roundslings feature *Tufhide* wear-resistant nylon jacket for extra sling life.
- *Tuff-Tag* provides required OSHA information for the life of the sling.

Saves Time

- Color-coded capacities for quick identification.
- Lightweight and pliable for easy rigging and storage.
- Independent core yarns choke tightly but release easily after use.
- Easy to store and carry.

Always protect synthetic slings from being cut or damaged by corners, edges and protrusions by using protection sufficient for each application.



Refer to Sling Protection section in this catalog.

WARNING

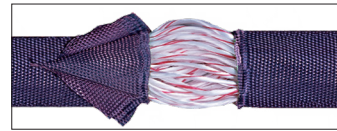
Follow temperature and chemical information located in the Web section of this catalog.

CONSTRUCTION COMPARISONS

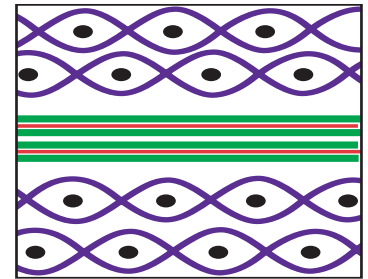
Tuflex® versus Sling Webbing

Tuflex

- Transverse pick yarns position surface yarns and protects core yarns.
- Woven surface yarns protect core yarns but carry no load.
- Longitudinal core yarns carry 100% of load.
- Red core warning yarns.



Tuflex
(Side View)

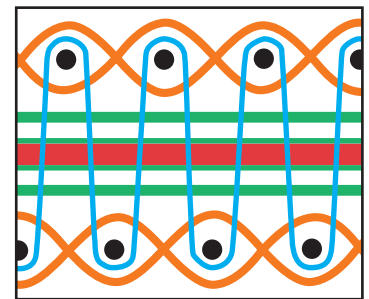


Roundsling construction (as shown above) protects all load carrying core yarns from abrasion with an independent, woven jacket. Replacement is not necessary until the red or white core yarns can be seen through holes in the jacket. When core yarns are visible, the sling must be removed from service. *Tuflex* roundslings provide double-wall protection for extended sling life.

Sling Webbing

- Transverse pick yarns inter-relate with binder yarns.
- Woven surface yarns cover each side and carry a portion of the load.
- Strip of longitudinal core yarns bears the majority of the load.
- Binder yarns secure the surface yarns to web core yarns.
- Red core warning yarns.

Sling Webbing
(Side View)



Sling webbing (as graphically demonstrated) has its surface yarns connected from side to side to not only protect the core yarns but to position all surface and tensile yarns to work together to support the load. Wear or damage to sling webbing face yarns cause an immediate strength loss. This is the reason why sling webbing has red core yarns to visually reveal damage and act as a basis for sling rejection.

HOW TO ORDER

1. Specify sling part number found in the charts throughout the *Tuflex* section.
2. Specify sling length in feet (bearing point to bearing point). Refer to footnotes under *Tuflex* tables for specific sling lengths and tolerances.
3. Matched lengths of slings must be specified at time of order.

TOLERANCES FOR ENDLESS ROUNDSLINGS

The following sling length tolerances apply to roundslings when new, at the time of final manufacture. Standard Length Tolerance – Endless and Eye & Eye style Roundslings should be made in conformance with the length tolerance values listed in the table below. Matched Set Length Tolerance – When multiple legs of a bridle sling are made, or when multiple slings are prescribed to be made within a Matched Set Tolerance, their length variance from their nominal length shall remain within a dimension equal to one-half of their corresponding Standard Length Tolerance Values listed in the table below.

Braided *Tuflex* length tolerance is $\pm (2" + 5\%$ of the ordered length with sling at rest). At its rated capacity, braided *Tuflex* will stretch approximately 9%.

| Roundsling Size / Vertical Capacity Range | Tolerance* |
|---|--|
| 30,000 lbs. or Less | $\pm (1" + 1\%$ of sling length) |
| Higher than 30,000 lbs., up to 90,000 lbs. | $\pm (2" + 1\%$ of sling length) |
| Higher than 90,000 lbs., up to 175,000 lbs. | $\pm (3.0" + 1\%$ of sling length) |
| Higher than 175,000 lbs. | $\pm (\text{Sling Body Diameter} + 1\%$ of sling length) |

* Prior to sling selection and use, please review and understand the General Information section in this catalog.

USING TUFLEX® ROUNDSLINGS

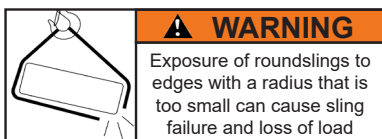
Protect Sling from Damage

ALWAYS protect roundslings from being cut or damaged by corners, edges and protrusions using protection sufficient for each application.

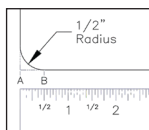
Do not ignore warning signs of misuse. **Cut marks detected during any sling inspection serve as a clear indication that cut protection is needed.** Refer to Sling Protection section of our catalog.

Exposure of Slings to Edges

Edges do not need to be sharp to cause failure of the sling. The following table



shows the minimum allowable edge radii suitable for contact with unprotected roundslings. Chamfering or cutting off edges is not an acceptable substitute for fully rounding the edges to the minimum radius. Slings can also be damaged from contact with edges or burrs at the sling connection.



Measure the edge radius. The radius is equal to the distance between points A and B.

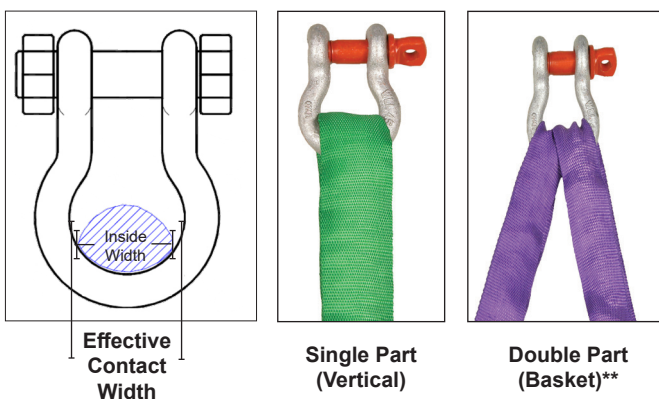
| Minimum Edge Radii Suitable For Contact With Unprotected Polyester Roundslings | | |
|--|---------------------------|--------------------------|
| Rated Capacity Vertical (lbs.) | Minimum* Edge Radii (in.) | Sling Width @ Load (in.) |
| EN30 | 0.14 | 1.00 |
| EN60 | 0.21 | 1.38 |
| EN90 | 0.26 | 1.75 |
| EN120 | 0.30 | 1.88 |
| EN150 | 0.33 | 2.00 |
| EN180 | 0.40 | 2.13 |
| EN240 | 0.41 | 2.63 |
| EN280 | 0.44 | 3.00 |
| EN360 | 0.50 | 3.25 |
| EN460 | 0.56 | 3.75 |
| EN600 | 0.67 | 4.00 |
| EN800 | 0.72 | 4.63 |
| EN900 | 0.80 | 5.00 |
| EN1000 | 0.87 | 5.25 |
| EN1100 | 0.92 | 5.50 |

* For further information on minimum edge radii, contact Lift-All or see WSTDA-RS-1.

Sling Hardware and Connections

Connection surfaces must be smooth to avoid abrading or cutting slings. Roundslings can be damaged or weakened by excessive compression between the sling and the connection points. Select and use proper connection hardware that conforms to the size requirements listed for choker, vertical, or basket hitches in the charts below.

Contact Lift-All (or see WSTDA-RS-1), for information about how to calculate whether a smaller connection size is allowable when tension on a roundslings is less than its capacity.



| Minimum Hardware Dimensions Suitable For Use With Tuflex Roundslings | | | | |
|--|------------------------------|-----------------------------|------------------------------|-----------------------------|
| Tuflex Size | Single Part | | Double Part** | |
| | Minimum Stock Diameter (in.) | Minimum Contact Width (in.) | Minimum Stock Diameter (in.) | Minimum Contact Width (in.) |
| EN30 | 0.44 | 1.00 | 0.57 | 1.38 |
| EN60 | 0.63 | 1.38 | 0.88 | 1.88 |
| EN90 | 0.75 | 1.75 | 1.06 | 2.38 |
| EN120 | 0.88 | 1.88 | 1.25 | 2.50 |
| EN150 | 1.00 | 2.00 | 1.38 | 2.88 |
| EN180 | 1.13 | 2.13 | 1.63 | 3.00 |
| EN240 | 1.19 | 2.63 | 1.63 | 3.75 |
| EN280 | 1.25 | 3.00 | 1.88 | 4.25 |
| EN360 | 1.50 | 3.25 | 2.00 | 4.50 |
| EN460 | 1.62 | 3.75 | 2.38 | 5.25 |
| EN600 | 2.00 | 4.00 | 2.75 | 5.63 |
| EN800 | 2.13 | 4.63 | 3.00 | 6.50 |
| EN900 | 2.25 | 5.00 | 3.25 | 7.00 |
| EN1000 | 2.50 | 5.25 | 3.50 | 7.38 |
| EN1100 | 2.62 | 5.5 | 3.75 | 8.00 |

** For hardware connected to the body of Eye/Eye Tuflex Roundslings, use the double part columns.

For Temperature and Chemical Information refer to the *Environmental Consideration* page in the WEB section of this catalog.

DIRECT CONNECT HOOKS

Direct Connect hooks are the quickest and easiest way to add hooks to *Tuflex*® roundslings and web slings at your job site. No tools or extra parts are needed.

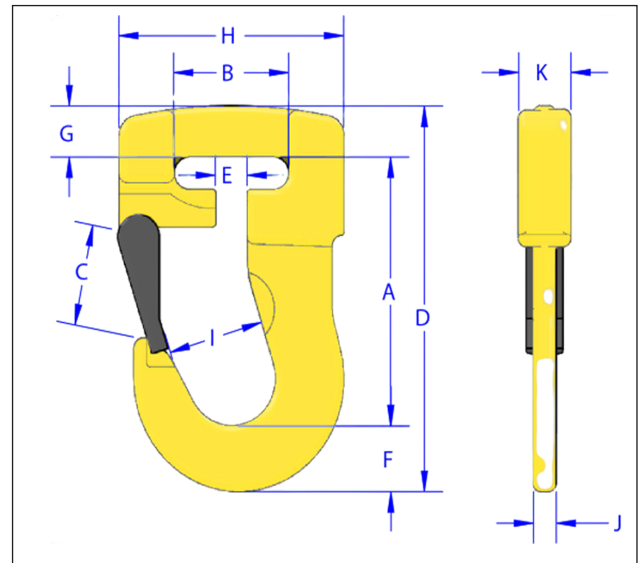
For *Tuflex* slings, just match the color-coded hook to the same color *Tuflex* sling, and you're ready to go. Rated capacities are the same for both the hook and the *Tuflex* roundslings.

Features and Benefits

- Rugged: The alloy steel hook and latch are forged for superior toughness.
- Color-coded hook matches *Tuflex* color and capacity.
- *Web-Trap*™ design keeps sling in place, ready to use.
- Four hook sizes to match *Tuflex* sizes EN30 (Purple), EN60 (Green), EN90 (Yellow) and EN150 (Red).
- Can be used with 1" and 2" web slings.
- Quick connections with no tools needed.
- Increases the life of the sling by reducing wear at the bearing point.

| Part No.* | Color | Rated Capacity (lbs.) | Tuflex | Web Slings | | A (in.) | B (in.) | C (in.) | D (in.) | E (in.) | F (in.) | G (in.) | H (in.) | I (in.) | J (in.) | K (in.) | Weight (lbs.) |
|-----------|--------|-----------------------|--------|------------|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------|
| | | | | Width | Plies | | | | | | | | | | | | |
| DCH1 | Purple | 2,600 | EN30 | 1 | 1 | 3.38 | 1.56 | 0.91 | 4.84 | 0.47 | 0.81 | .67 | 3.07 | 1.22 | 0.70 | 1.13 | 1.54 |
| DCH2 | Green | 5,300 | EN60 | 1 | 2 | 4.00 | 1.75 | 1.28 | 5.83 | 0.75 | 1.07 | .83 | 3.58 | 1.57 | 0.88 | 1.39 | 2.65 |
| DCH3 | Yellow | 8,400 | EN90 | 2 | 1 & 2 | 4.63 | 2.13 | 1.40 | 6.89 | 0.83 | 1.26 | .98 | 4.45 | 1.97 | 1.00 | 1.76 | 4.85 |
| DCH4 | Red | 13,200 | EN150 | — | — | 5.75 | 2.34 | 1.83 | 8.78 | 1.63 | 1.60 | 1.42 | 5.21 | 2.34 | 1.23 | 2.21 | 9.90 |

* Add an 'L' to end of part number to order replacement latch.



TUFLEX® ENDLESS ROUNDSLINGS

The Most Versatile *Tuflex* Roundslings

Features and Benefits

Maintains all the basic *Tuflex* features plus...

Promotes Safety

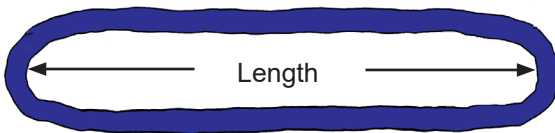
- Load stability and balance can be achieved by spreading sling legs.

Saves Money

- Wear points can be shifted to extend sling life.
- The most flexible style of sling.
- Individual slings can be attached together using appropriate hardware (see photo).



How To Measure



Tuflex Endless Roundslings

| Part Number | Color | Rated Capacity* (lbs.) | | | | Minimum Length (ft.) | Approximate Measurements | | | |
|-------------|--------|------------------------|--------|--------------|--------------|----------------------|--------------------------|-----------------------------|-----------------------------|-------------------------------|
| | | Vertical | Choker | Basket @ 90° | Basket @ 45° | | Weight (lbs./ft.) (ft.) | Body Diameter Relaxed (in.) | Body Width @ Load (W) (in.) | Minimum Hardware Dia.** (in.) |
| EN30 | Purple | 2,600 | 2,100 | 5,200 | 3,600 | 1.5 | 0.20 | 0.63 | 1.00 | 0.44 |
| EN60 | Green | 5,300 | 4,200 | 10,600 | 7,400 | 1.5 | 0.30 | 0.88 | 1.38 | 0.63 |
| EN90 | Yellow | 8,400 | 6,700 | 16,800 | 11,800 | 1.5 | 0.52 | 1.13 | 1.75 | 0.75 |
| EN120 | Tan | 10,600 | 8,500 | 21,200 | 14,000 | 2.0 | 0.60 | 1.13 | 1.88 | 0.88 |
| EN150 | Red | 13,200 | 10,600 | 26,400 | 18,000 | 2.0 | 0.76 | 1.38 | 2.00 | 1.00 |
| EN180 | White | 16,800 | 13,400 | 33,600 | 23,000 | 3.0 | 0.87 | 1.38 | 2.13 | 1.13 |
| EN240 | Blue | 21,200 | 17,000 | 42,400 | 29,000 | 3.0 | 1.10 | 1.75 | 2.63 | 1.19 |
| EN280 | Orange | 25,000 | 20,000 | 50,000 | 35,000 | 3.0 | 1.25 | 1.87 | 3.00 | 1.25 |
| EN360 | Gray | 31,000 | 24,800 | 62,000 | 43,000 | 3.0 | 1.70 | 2.25 | 3.25 | 1.50 |
| EN460 | Orange | 40,000 | 32,000 | 80,000 | 56,000 | 3.0 | 2.30 | 2.50 | 3.75 | 1.62 |
| EN600 | Brown | 53,000 | 42,400 | 106,000 | 74,000 | 8.0 | 2.90 | 2.75 | 4.00 | 2.00 |
| EN800 | Olive | 66,000 | 52,800 | 132,000 | 93,000 | 8.0 | 3.40 | 3.13 | 4.63 | 2.13 |
| EN900 | Orange | 77,000 | 61,600 | 154,000 | 108,000 | 8.0 | 3.90 | 3.42 | 5.00 | 2.25 |
| EN1000 | Black | 90,000 | 72,000 | 180,000 | 127,000 | 8.0 | 4.40 | 3.63 | 5.25 | 2.50 |
| EN1100 | Orange | 100,000 | 80,000 | 200,000 | 140,000 | 8.0 | 4.80 | 4.10 | 5.50 | 2.62 |

** This is the minimum recommended diameter for the connection hardware to be used for a vertical hitch.

* **WARNING** Always protect roundslings from corners, edges, or protrusions. Refer to the Sling Protection section of this catalog to choose the right protection product for your lift.

TUFLEX® EYE AND EYE

A More Rugged and Durable *Tuflex* Roundsling

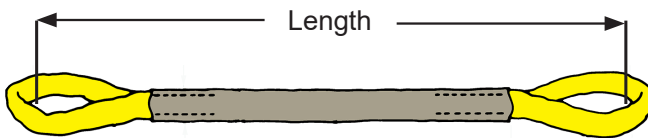
The Eye and Eye Advantage

An additional jacket of texturized, abrasion resistant nylon covers the *Tuflex* body forming two color-coded lifting eyes.

Maintains all the basic *Tuflex* features plus...

- Saves money by extending sling life in abrasive environments.

How To Measure



| Tuflex Eye/Eye Roundslings | | | | | | | | | | | |
|----------------------------|-----------|------------------------|--------|--------------|--------------|-----------------------|--------------------------|-----------------------------|--------------------------------|------------------------------|--|
| Part Number | Eye Color | Rated Capacity (lbs.)* | | | | Minimum Length* (ft.) | Approximate Measurements | | | | |
| | | Vertical | Choker | Basket @ 90° | Basket @ 45° | | Weight (lbs./ft.) (ft.) | Body Width @ Load (W) (in.) | Standard Eye Length (EL) (in.) | Minimum Hardware Dia** (in.) | |
| EE30 | Purple | 2,600 | 2,100 | 5,200 | 3,600 | 4 | 0.25 | 2.25 | 10 | 0.44 | |
| EE60 | Green | 5,300 | 4,200 | 10,600 | 7,400 | 4 | 0.35 | 2.50 | 10 | 0.63 | |
| EE90 | Yellow | 8,400 | 6,700 | 16,800 | 11,800 | 4 | 0.55 | 2.50 | 12 | 0.75 | |
| EE120 | Tan | 10,600 | 8,500 | 21,200 | 14,000 | 5 | 0.66 | 3.50 | 12 | 0.88 | |
| EE150 | Red | 13,200 | 10,600 | 26,400 | 18,000 | 5 | 0.81 | 3.50 | 14 | 1.00 | |
| EE180 | White | 16,800 | 13,400 | 33,600 | 23,000 | 7 | 0.93 | 3.50 | 16 | 1.13 | |
| EE240 | Blue | 21,200 | 17,000 | 42,400 | 29,000 | 7 | 1.20 | 3.50 | 16 | 1.19 | |
| EE280 | Orange | 25,000 | 20,000 | 50,000 | 35,000 | 7 | 1.30 | 4.25 | 18 | 1.25 | |
| EE360 | Gray | 31,000 | 24,800 | 62,000 | 43,000 | 7 | 1.75 | 4.50 | 20 | 1.50 | |
| EE460 | Orange | 40,000 | 32,000 | 80,000 | 56,000 | 7 | 2.35 | 6.00 | 22 | 1.62 | |
| EE600 | Brown | 53,000 | 42,400 | 106,000 | 74,000 | 8 | 2.90 | 7.00 | 24 | 2.00 | |
| EE800 | Olive | 66,000 | 52,800 | 132,000 | 93,000 | 10 | 3.45 | 8.00 | 30 | 2.13 | |
| EE900 | Orange | 77,000 | 61,600 | 154,000 | 108,000 | 10 | 3.95 | 8.00 | 32 | 2.25 | |
| EE1000 | Black | 90,000 | 72,000 | 180,000 | 127,000 | 12 | 4.45 | 9.00 | 36 | 2.50 | |
| EE1100 | Orange | 100,000 | 80,000 | 200,000 | 140,000 | 12 | 4.85 | 9.00 | 36 | 2.62 | |

** This is the minimum recommended diameter for the connection hardware to be used for a vertical hitch.

* Shorter lengths available using reduced eye lengths.

⚠ WARNING

Always protect roundslings from corners, edges, or protrusions. Refer to the Sling Protection section of this catalog to choose the right protection product for your lift.

- General Information
- Web Slings
- Round Slings
- Sling Protection
- Wire Rope
- Chain Slings
- Rigging Hardware
- Mesh Slings
- Load Huggers
- Tow Products
- Lift-All Hoists
- Hoist Rings
- Plate Clamps
- Lifting Devices

TUFLEX® BRIDLE ROUNDSLINGS

Features and Benefits

Promotes Safety

- Bridle slings provide better load control and balance.
- Use of hardware prevents cutting and abrasion of sling at bearing points.

Saves Money

- Reduces damage by protecting load between pick-up point and crane hook.

Saves Time

- Lightweight and pliable for easy rigging and storage.
- Sling hooks quickly connect to loads having hoist rings or eye bolts.

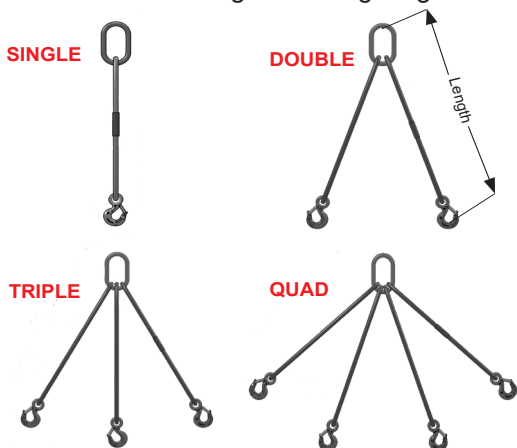
How to Order

Specify:

1. Number of legs:
S (Single), D (Double), T (Triple), Q (Quad)
2. Master Link: **O** (Oblong)
3. Bottom Attachments: **S** (Sling Hook), **O** (Oblong)
4. *Tuflex* Code: EN30, EN90, etc.
5. Length of Assembly - Feet
(Bearing point to bearing point)

Example:

DOSEN90 X 10' is a double leg bridle, with an oblong master link at the top, and sling hooks on each leg of the *Tuflex* EN90. Bearing to bearing length is 10-ft.



** Find hardware dimensions in Hardware section of this catalog. Use sling leg calculator to determine length at www.lift-all.com.

Note: Import hook with latch is standard up to 7 Ton. Domestic hook/latch options used over 7 Ton or upon request.

| LEGS | <i>Tuflex</i> Size | Rated Capacity (lbs.)* | | | Hardware** | |
|--------|--------------------|------------------------|---------|---------|---------------------------|-----------------------------|
| | | Vertical | Choker | Basket | Hook A - Alloy C - Carbon | Masterlink Stock Dia. (in.) |
| SINGLE | EN30 | 2,600 | 2,100 | 5,200 | 2TA | 1/2 |
| | EN60 | 5,300 | 4,200 | 10,600 | 4.5TA | 3/4 |
| | EN90 | 8,400 | 6,700 | 16,800 | 7TA | 3/4 |
| | EN120 | 10,600 | 8,500 | 21,200 | 11TA | 1 |
| | EN150 | 13,200 | 10,600 | 26,400 | 11TA | 1 |
| | EN180 | 16,800 | 13,400 | 33,600 | 15TA | 1-1/4 |
| | EN240 | 21,200 | 17,000 | 42,400 | 22TA | 1-1/4 |
| | EN360 | 31,000 | 24,800 | 62,000 | 20TC | 1-1/2 |
| | EN600 | 53,000 | 42,400 | 106,000 | 30TC | 2 |
| | EN800 | 66,000 | 52,800 | 132,000 | 40TC | 2-1/4 |
| EN1000 | 90,000 | 72,000 | 180,000 | - | 2-1/2 | |

| LEGS | <i>Tuflex</i> Size | One Leg @ 90° | All Legs @ | | | Hardware** | |
|--------|--------------------|---------------|------------|--------|--------|---------------------------|-----------------------------|
| | | | 60° | 45° | 30° | Hook A - Alloy C - Carbon | Masterlink Stock Dia. (in.) |
| DOUBLE | EN30 | 2,600 | 4,500 | 3,600 | 2,600 | 2TA | 1/2 |
| | EN60 | 5,300 | 9,100 | 7,400 | 5,300 | 4.5TA | 3/4 |
| | EN90 | 8,400 | 14,500 | 11,800 | 8,400 | 7TA | 1 |
| | EN120 | 10,600 | 18,300 | 14,900 | 10,600 | 11TA | 1-1/4 |
| | EN150 | 13,200 | 22,800 | 18,600 | 13,200 | 11TA | 1-1/4 |
| | EN180 | 16,800 | 29,100 | 23,700 | 16,800 | 15TA | 1-1/2 |
| | EN240 | 21,200 | 36,700 | 29,900 | 21,200 | 22TA | 1-1/2 |
| | EN360 | 31,000 | 53,700 | 43,800 | 31,000 | 20TC | 2 |
| | EN600 | 53,000 | 91,800 | 74,900 | 53,000 | 30TC | 2-1/2 |
| | EN800 | 66,000 | 114,300 | 93,300 | 66,000 | 40TC | 3 |
| EN1000 | 90,000 | 155,800 | 127,200 | 90,000 | - | 3-1/4 | |

| | | | | | | | |
|--------|--------|---------|---------|---------|--------|-------|-------|
| TRIPLE | EN30 | 2,600 | 6,700 | 5,500 | 3,900 | 2TA | 3/4 |
| | EN60 | 5,300 | 13,700 | 11,200 | 7,900 | 4.5TA | 1 |
| | EN90 | 8,400 | 21,800 | 17,800 | 12,600 | 7TA | 1-1/4 |
| | EN120 | 10,600 | 27,500 | 22,400 | 15,900 | 11TA | 1-1/2 |
| | EN150 | 13,200 | 34,200 | 27,900 | 19,800 | 11TA | 1-1/2 |
| | EN180 | 16,800 | 43,600 | 35,600 | 25,200 | 15TA | 1-3/4 |
| | EN240 | 21,200 | 55,000 | 44,900 | 31,800 | 22TA | 2 |
| | EN360 | 31,000 | 80,500 | 65,700 | 46,500 | 20TC | 2-1/4 |
| | EN600 | 53,000 | 137,600 | 112,400 | 75,900 | 30TC | 3-1/4 |
| | EN800 | 66,000 | 171,400 | 139,900 | 99,000 | 40TC | 3-1/2 |
| EN1000 | 90,000 | 233,800 | 190,800 | 135,000 | - | 4-1/4 | |

| | | | | | | | |
|--------|--------|---------|---------|---------|---------|-------|-------|
| QUAD | EN30 | 2,600 | 9,000 | 7,300 | 5,200 | 2TA | 3/4 |
| | EN60 | 5,300 | 18,300 | 14,900 | 10,600 | 4.5TA | 1-1/4 |
| | EN90 | 8,400 | 29,100 | 23,700 | 16,800 | 7TA | 1-1/2 |
| | EN120 | 10,600 | 36,700 | 29,900 | 21,200 | 11TA | 1-1/2 |
| | EN150 | 13,200 | 45,700 | 37,300 | 26,400 | 11TA | 1-3/4 |
| | EN180 | 16,800 | 58,200 | 47,500 | 33,600 | 15TA | 2 |
| | EN240 | 21,200 | 73,400 | 59,900 | 42,400 | 22TA | 2-1/4 |
| | EN360 | 31,000 | 107,300 | 87,600 | 62,000 | 20TC | 2-3/4 |
| | EN600 | 53,000 | 183,600 | 149,900 | 106,000 | 30TC | 3-1/2 |
| | EN800 | 66,000 | 228,600 | 186,600 | 132,000 | 40TC | 4-1/4 |
| EN1000 | 90,000 | 311,700 | 254,500 | 180,000 | - | 4-3/4 | |

* **WARNING**

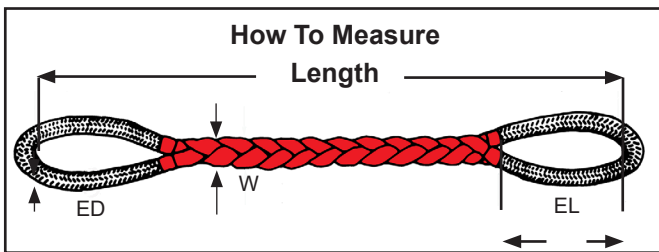
Always protect roundslings from corners, edges, or protrusions. Refer to the Sling Protection section of this catalog to choose the right protection product for your lift.

BRAIDED TUFLEX® ROUNDSLINGS

For multi-part heavy lifting, braided *Tuflex* roundslings offer you additional security.

Safety Built-In

Tuflex braids are made from three (6-Part), or four (8-Part) individual *Tuflex* roundslings. Should one of these component slings be damaged while in use, the remaining undamaged slings will be able to assist in safely returning the load to the ground.



Features and Benefits

Maintains all the basic *Tuflex* features plus...

Promotes Safety

- Braided construction offers engineered safety.
- Lightweight and more flexible than chain slings.

Saves Money

- Large capacity slings are generally purchased for one major lift, then rarely used again. Braided *Tuflex* roundslings can be returned to *Lift-All* for disassembly, inspection, and re-tagging as individual slings.
- 6-part flat braid offers wide-body for load stability.

Saves Time

- Easy to transport and hook-up.

| 6-Part Flat Braid (B6E) | | | | | | | | | | | | | | |
|-------------------------|--------|------------------------|---------|---------|--------------|--------------------------------------|--------------------------|--------------------------------|------------------------|-------------------------|---------------------|-------------------------------|----------------------------------|--|
| Part Number | Color | Rated Capacity (lbs.)* | | | | Min. Sling Length ⁺ (ft.) | Approximate Measurements | | | | | | | |
| | | Vertical | Choker | Basket | Basket @ 45° | | Wt. (lbs. per ft.) | Standard Eye Length (EL) (in.) | Width @ Load (W) (in.) | Thickness at Load (in.) | Eye Dia. (ED) (in.) | Minimum Hardware Dia.** (in.) | Minimum Edge Contact Radii (in.) | |
| B6E30 | Purple | 6,700 | 5,300 | 13,400 | 9,400 | 4.50 | 0.8 | 15 | 3.25 | 0.75 | 1.75 | 0.63 | 0.313 | |
| B6E60 | Green | 13,500 | 10,800 | 27,000 | 19,000 | 5.00 | 1.2 | 15 | 3.75 | 1.13 | 2.00 | 1.00 | 0.438 | |
| B6E90 | Yellow | 21,400 | 17,100 | 42,800 | 30,000 | 5.50 | 1.6 | 15 | 4.25 | 1.25 | 2.00 | 1.25 | 0.500 | |
| B6E120 | Tan | 27,000 | 21,600 | 54,000 | 38,000 | 5.50 | 2.0 | 15 | 4.50 | 1.31 | 2.25 | 1.38 | 0.625 | |
| B6E150 | Red | 33,600 | 26,800 | 67,200 | 47,000 | 6.50 | 2.7 | 20 | 5.25 | 1.75 | 2.50 | 1.50 | 0.688 | |
| B6E180 | White | 42,800 | 34,200 | 85,600 | 60,000 | 7.00 | 3.2 | 20 | 5.50 | 2.00 | 2.75 | 1.75 | 0.813 | |
| B6E240 | Blue | 54,000 | 43,200 | 108,000 | 76,000 | 9.00 | 4.4 | 20 | 6.63 | 2.25 | 3.50 | 1.75 | 0.813 | |
| B6E360 | Gray | 79,000 | 63,200 | 158,000 | 111,000 | 9.50 | 6.5 | 30 | 8.25 | 2.50 | 4.25 | 2.50 | 1.00 | |
| B6E600 | Brown | 135,100 | 108,000 | 270,200 | 191,000 | 10.50 | 9.7 | 30 | 11.00 | 2.75 | 5.00 | 3.00 | 1.313 | |
| B6E800 | Olive | 168,300 | 134,600 | 336,600 | 230,000 | 13.00 | 12.0 | 30 | 12.00 | 4.00 | 5.25 | 3.50 | 1.375 | |
| B6E1000 | Black | 229,500 | 183,600 | 459,000 | 320,000 | 14.50 | 15.6 | 31 | 13.50 | 4.50 | 5.75 | 4.00 | 1.750 | |

** This is the minimum recommended diameter for the connection hardware to be used for a vertical hitch.

+ Shorter lengths available using reduced eye lengths.

*** ⚠ WARNING**

Always protect roundslings from corners, edges, or protrusions. Refer to the Sling Protection section of this catalog to choose the right protection product for your lift.

General Information
Web Slings
Round Slings
Sling Protection
Wire Rope
Chain Slings
Rigging Hardware
Mesh Slings
Load Huggers
Tow Products
Lift-All Hoists
Hoist Rings
Plate Clamps
Lifting Devices

BRAIDED *TUFLEX*® ROUNDSLINGS

General Information
Web Slings
Round Slings
Sling Protection
Wire Rope
Chain Slings
Rigging Hardware
Mesh Slings
Load Huggers
Tow Products
Lift-All Hoists
Hoist Rings
Plate Clamps
Lifting Devices



Order Information

Ordering length should be based on the sling at rest. Braided *Tuflex* length tolerance is $\pm 2'' + 5\%$ of the ordered length, with the sling at rest. At its rated capacity, braided *Tuflex* will stretch approximately 9%.

Always protect synthetic slings from being cut or damaged on corners, edges and protrusions by using protection sufficient for each application.



Refer to Sling Protection section in this catalog.

8-Part Round Braid (B8E)

| Part Number | Color | Rated Capacity (lbs.)* | | | | Min. Sling Length ⁺ (ft.) | Approximate Measurements | | | | | | |
|-------------|--------|------------------------|---------|---------|--------------|--------------------------------------|--------------------------|--------------------------------|------------------------|-------------------------|---------------------|--------------------------------|----------------------------------|
| | | Vertical | Choker | Basket | Basket @ 45° | | Wt. (lbs. per ft.) | Standard Eye Length (EL) (in.) | Width @ Load (W) (in.) | Thickness at Load (in.) | Eye Dia. (ED) (in.) | Minimum Hardware Dia. ** (in.) | Minimum Edge Contact Radii (in.) |
| B8E30 | Purple | 8,800 | 7,100 | 17,600 | 12,400 | 4.50 | 1.1 | 15 | 3.50 | 1.00 | 1.75 | 0.75 | 0.313 |
| B8E60 | Green | 18,000 | 14,400 | 36,000 | 25,000 | 5.00 | 1.5 | 15 | 4.00 | 1.38 | 2.00 | 1.13 | 0.500 |
| B8E90 | Yellow | 28,500 | 22,800 | 57,000 | 40,000 | 5.50 | 2.2 | 15 | 4.75 | 1.63 | 2.50 | 1.50 | 0.563 |
| B8E120 | Tan | 36,000 | 28,800 | 72,000 | 50,000 | 5.50 | 2.6 | 15 | 5.00 | 1.75 | 2.50 | 1.50 | 0.688 |
| B8E150 | Red | 44,900 | 35,900 | 89,800 | 63,000 | 6.50 | 3.6 | 20 | 6.00 | 2.13 | 2.75 | 1.75 | 0.750 |
| B8E180 | White | 57,100 | 45,600 | 114,200 | 80,000 | 7.00 | 4.1 | 20 | 6.25 | 2.50 | 3.25 | 2.00 | 0.875 |
| B8E240 | Blue | 72,000 | 57,600 | 144,000 | 101,000 | 9.00 | 5.6 | 20 | 7.50 | 2.75 | 3.75 | 2.00 | 0.938 |
| B8E360 | Gray | 105,400 | 84,300 | 210,800 | 149,000 | 9.50 | 8.3 | 30 | 9.50 | 3.25 | 4.50 | 2.50 | 1.125 |
| B8E600 | Brown | 180,200 | 144,100 | 360,400 | 250,000 | 10.50 | 12.0 | 30 | 13.00 | 3.75 | 5.50 | 3.50 | 1.500 |
| B8E800 | Olive | 224,400 | 179,500 | 448,800 | 310,000 | 13.00 | 16.0 | 30 | 13.50 | 4.50 | 6.00 | 4.00 | 1.625 |
| B8E1000 | Black | 306,000 | 244,000 | 612,000 | 430,000 | 14.50 | 20.0 | 31 | 15.75 | 5.25 | 6.50 | 4.75 | 2.00 |

** This is the minimum recommended diameter for the connection hardware to be used for a vertical hitch.

+ Shorter lengths available using reduced eye lengths.

WARNING

Always protect roundslings from corners, edges, or protrusions. Refer to the Sling Protection section of this catalog to choose the right protection product for your lift.

HIGH PERFORMANCE ROUNDSLINGS

The solution for lifting the heaviest loads using the lightest, most flexible, and ergonomic slings available!

Promotes Safety

- *Lift-All* slings with high performance core fibers are ergonomically engineered providing the lightest sling weight to lifting capacity ratio of our product line. This ergonomic solution reduces rigger fatigue and injury.
- Non-blended core fibers provide more consistent sling performance.
- Low stretch (1%) is especially helpful when working in low headroom areas.
- Double-wall *Tufhide*™ jacket is abrasion resistant, protecting the core fibers from wear and degradation from UV light.
- Flexible, conforms to the shape of load.
- Consistent matched lengths for better multiple sling control.
- *Tuff-Tag*™ provides serial numbered identification for traceability of manufacturing components and process.
- *Lift-All* maintains the same design criteria for the entire product line, and does not lower design requirements for roundslings rated above 100,000 lbs.

Inspection Criteria

Remove from service when:

- Cuts to the sling cover that expose core yarns.
- Holes, tears, snags or abrasion that expose core yarns.
- The sling shows signs of melting, charring or chemical damage.
- Capacity tag is illegible or missing.
- Other visible damage that causes doubt as to strength of the sling.

Saves Time

- Independent core yarns choke tightly but release easily after use.
- The single component round body profile makes for faster rigging, avoiding any need to keep the sling body flat.
- Round bearing surface makes for easier hook-up to connection point.
- Meet capacity requirements with a smaller diameter sling to fit more easily into tight work areas.

Saves Money

- Roundslings with damaged outer covers may be returned for inspection and possible cover repair and proof-test.
- Double-wall seamless cover has no sewn edges preventing rupture, which requires removal from service.
- Endless style allows wear points to be shifted extending sling life.

Environmental Considerations

- **Chemical:** Do not use in a non-compatible chemical environment. For confirmation, contact *Lift-All* and provide specific chemical, concentration, temperature, and time factors.

Temperature

- *KeyFlex*™ slings are approved for use up to 350°F.
- *DynaFlex*™ slings are approved for use up to 158°F.

*



WARNING

Always protect roundslings from corners, edges, or protrusions. Refer to the Sling Protection section of this catalog to choose the right protection product for your lift.

HIGH PERFORMANCE ROUNDSLINGS

- General Information
- Web Slings
- Round Slings
- Sling Protection
- Wire Rope
- Chain Slings
- Rigging Hardware
- Mesh Slings
- Load Huggers
- Tow Products
- Lift-All Hoists
- Hoist Rings
- Plate Clamps
- Lifting Devices

The *Lift-All* Difference

The *Lift-All* Difference - Why Compromise Work Safety? Here's Why All High Performance Roundslings are not the same:

- **Load-Bearing Core Yarn:** Non-blended core fibers provide more consistent sling performance, regardless of the application.
- **Verified Strength:** *Lift-All* regularly completes strength verification of all sizes of roundslings using test pins that are smaller than required by the industry to represent actual loading conditions more closely.
- **Single Path Core is Our Standard:** Multi-path slings exhibit an advantage during strength verification testing as test pins allow for tension forces to be spread over a wider, flat bearing surface. Our single path round design fits naturally in narrow, rounded bearing surfaces of connection hardware. We designed our high performance roundslings with the understanding of how the sling is used in the field. This is validated during strength verification testing.
- **The Cover Sleeve:** Roundslings are typically removed from service due to cover wear. *Lift-All's* design contains a durable, double layer cover that offers rotational benefits for even wear and ease of feeding through connections.

Ordering Information

How to Measure



Specify the sling code and length in feet (bearing point to bearing point).

Slings are made to a tolerance of $\pm 1"+1\%$ of the specified length, and can stretch 1% at rated capacity.

Notes:

1. Matched lengths of slings must be specified at time of order.
2. Available in endless style only.
3. Not to be used in a towing application.

* **⚠ WARNING** Always protect roundslings from corners, edges, or protrusions. Refer to the Sling Protection section of this catalog to choose the right protection product for your lift.

DYNAFLEX™ ROUNDSLING

Dyneema® High-Performance Core Ultra-Lightweight Roundslings

DynaFlex is manufactured with a load bearing core of *Dyneema*, the world's strongest fiber, yet remains soft and flexible to allow for easy rigging. This high capacity, ultra-lightweight roundslings is a safe and ergonomic alternative to steel and other forms of synthetic slings.



Features and Benefits

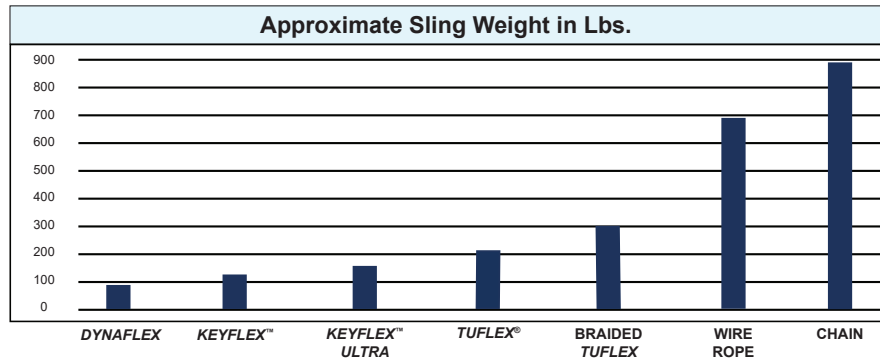
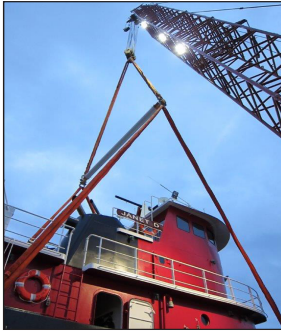
- **Ultra-Lightweight** – Approximately 20% lighter than *KeyFlex*™ and 52% lighter than *Tuflex*® for the same capacity, reducing the probabilities of hand and shoulder strains and sprains.
- **Good Chemical Resistance with Reduced Water Absorption** – A 10' *DynaFlex* sling will increase 6 pounds in water weight when rigged wet vs. 13 pounds for the same capacity and length *Tuflex* roundslings. Users will appreciate the weight reduction, minimizing rigger fatigue and increasing safety.
- **Neutral Buoyancy** – *DynaFlex* slings are a great choice for water recovery and lifting applications.
- **100% Dyneema Core (non-blended)** – We use the most advanced high tenacity fiber on the market for lifting slings. The homogeneous core fiber reacts uniformly regardless of lift application. Designed with your safety in mind.
- ***DynaFlex* Single Component Twisted Core** – Single path design allows higher strength retention around common rigging hardware. This saves time during hook up to the connection point and rigging vs. dual path slings. No need to worry about sling body orientation.
- **Promotes Safety** – Customized designs are available, including higher capacity and/or shorter length versions.

Note: *DynaFlex* slings are approved for use up to 158°F.

*  **WARNING**

Always protect roundslings from corners, edges, or protrusions. Refer to the Sling Protection section of this catalog to choose the right protection product for your lift.

DYNAFLEX™ ROUNDSLING



| Item | Approximate Sling Weight (lbs.) | Vertical Capacity (lbs.) |
|-------------------------------------|---------------------------------|--------------------------|
| DynaFlex Roundslings: | | |
| DEN200K x 25-ft. | 99 | 200,000 |
| KeyFlex™ Roundslings: | | |
| KEN200K x 25-ft. | 130 | 200,000 |
| KeyFlex Ultra Roundslings: | | |
| KEN3P200 x 25-ft. | 173 | 200,000 |
| Tuflex® Roundslings (2 ea.): | | |
| EN1000 x 25-ft. | 207 | 180,000 |
| Braided Tuflex Roundslings: | | |
| B8E600 x 25-ft. | 300 | 180,000 |
| Wire Rope Sling (2 ea.): | | |
| 2-1/4" 6X37 IWRC x 25-ft. | 669 | 176,000 |
| Chain Sling (2 ea.): | | |
| 1-1/4" SOS x 25-ft. | 870 | 144,600 |

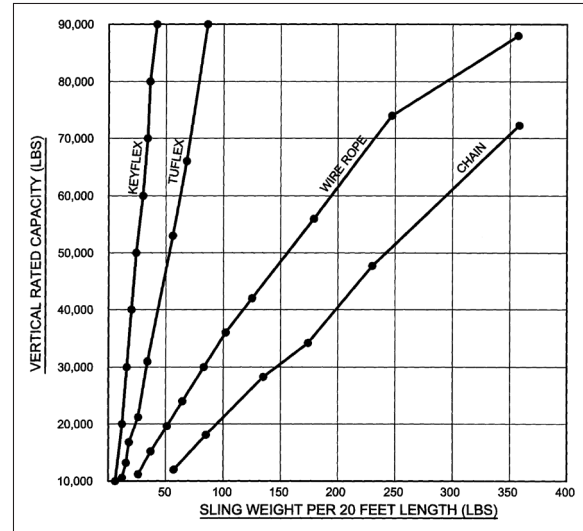
| DynaFlex Capacities and Measurements | | | | | | | | | | |
|--------------------------------------|------------------------|---------|--------------|--------------|-------------------|--------------------------|-------------------------|--------------------|---------------------------------|----------------------------------|
| Part Number | Rated Capacity (lbs.)* | | | | Min. Length (ft.) | Approximate Measurements | | | | |
| | Vertical | Choker | Basket @ 90° | Basket @ 45° | | Wt. (lbs per ft.) | Body Dia. Relaxed (in.) | Width @ Load (in.) | Minimum Hardware Diameter (in.) | Minimum Edge Contact Radii (in.) |
| DEN10K | 10,000 | 8,000 | 20,000 | 14,100 | 2 | 0.25 | 1.00 | 1.56 | 0.69 | 0.23 |
| DEN15K | 15,000 | 12,000 | 30,000 | 21,000 | 3 | 0.38 | 1.13 | 1.75 | 0.88 | 0.31 |
| DEN20K | 20,000 | 16,000 | 40,000 | 28,000 | 3 | 0.44 | 1.25 | 2.00 | 1.06 | 0.37 |
| DEN25K | 25,000 | 20,000 | 50,000 | 35,000 | 3 | 0.54 | 1.25 | 2.13 | 1.25 | 0.47 |
| DEN30K | 30,000 | 24,000 | 60,000 | 42,000 | 3 | 0.66 | 1.38 | 2.13 | 1.44 | 0.50 |
| DEN40K | 40,000 | 32,000 | 80,000 | 56,000 | 3 | 0.79 | 1.75 | 2.75 | 1.50 | 0.53 |
| DEN50K | 50,000 | 40,000 | 100,000 | 70,000 | 5 | 1.16 | 1.88 | 2.88 | 1.75 | 0.62 |
| DEN60K | 60,000 | 48,000 | 120,000 | 84,000 | 5 | 1.31 | 2.00 | 3.13 | 2.00 | 0.69 |
| DEN70K | 70,000 | 56,000 | 140,000 | 98,000 | 8 | 1.47 | 2.13 | 3.25 | 2.19 | 0.76 |
| DEN80K | 80,000 | 64,000 | 160,000 | 113,000 | 8 | 1.59 | 2.25 | 3.50 | 2.38 | 0.82 |
| DEN90K | 90,000 | 72,000 | 180,000 | 127,000 | 8 | 1.94 | 2.50 | 3.88 | 2.38 | 0.83 |
| DEN100K | 100,000 | 80,000 | 200,000 | 141,000 | 8 | 2.06 | 2.75 | 4.25 | 2.50 | 0.84 |
| DEN125K | 125,000 | 100,000 | 250,000 | 176,000 | 8 | 2.60 | 3.00 | 4.88 | 2.63 | 0.92 |
| DEN150K | 150,000 | 120,000 | 300,000 | 210,000 | 8 | 3.24 | 3.25 | 5.25 | 2.88 | 1.00 |
| DEN175K | 175,000 | 140,000 | 350,000 | 240,000 | 8 | 3.51 | 3.50 | 5.75 | 3.13 | 1.10 |
| DEN200K | 200,000 | 160,000 | 400,000 | 280,000 | 8 | 3.90 | 3.75 | 6.13 | 3.38 | 1.18 |

* **WARNING** Always protect roundslings from corners, edges, or protrusions. Refer to the Sling Protection section of this catalog to choose the right protection product for your lift.

KEYFLEX™ ROUNDSLINGS with Technora® core

The chart at the right plots the weights of 20-ft. slings at various capacities:

| Sling Type | Vertical Rating (lbs.) | Sling Weight (lbs.) |
|------------|------------------------|---------------------|
| KeyFlex | 90,000 | 48 |
| Tuflex® | 90,000 | 86 |
| Wire Rope | 88,000 | 357 |
| Chain | 72,300 | 358 |



KeyFlex Benefits:

- Low weight per capacity reduces risk of injury to riggers.
- Great for low headroom situations.
- 1% stretch at rated capacity reduces abrasion and allows for better load control.
- **KeyFlex** with aramid load fiber is approved for use **up to 350°F**.
- Lightweight and compact size promote speedier rigging, transport and storage when compared to any other type of sling.

| KeyFlex Capacities and Measurements | | | | | | | | | | |
|-------------------------------------|------------------------|---------|--------------|--------------|-------------------|--------------------------|-------------------------|--------------------|---------------------------------|----------------------------------|
| Part Number | Rated Capacity (lbs.)* | | | | Min. Length (ft.) | Approximate Measurements | | | | |
| | Vertical | Choker | Basket @ 90° | Basket @ 45° | | Wt. (lbs per ft.) | Body Dia. Relaxed (in.) | Width @ Load (in.) | Minimum Hardware Diameter (in.) | Minimum Edge Contact Radii (in.) |
| KEN10K | 10,000 | 8,000 | 20,000 | 14,100 | 3 | 0.3 | 1.00 | 1.56 | 0.69 | 0.23 |
| KEN15K | 15,000 | 12,000 | 30,000 | 21,000 | 3 | 0.5 | 1.13 | 1.75 | 0.88 | 0.31 |
| KEN20K | 20,000 | 16,000 | 40,000 | 28,000 | 3 | 0.6 | 1.25 | 2.00 | 1.06 | 0.37 |
| KEN25K | 25,000 | 20,000 | 50,000 | 35,000 | 3 | 0.7 | 1.25 | 2.13 | 1.25 | 0.47 |
| KEN30K | 30,000 | 24,000 | 60,000 | 42,000 | 3 | 0.8 | 1.38 | 2.13 | 1.44 | 0.50 |
| KEN40K | 40,000 | 32,000 | 80,000 | 56,000 | 3 | 1.0 | 1.75 | 2.75 | 1.50 | 0.53 |
| KEN50K | 50,000 | 40,000 | 100,000 | 70,000 | 5 | 1.3 | 1.88 | 2.88 | 1.75 | 0.62 |
| KEN60K | 60,000 | 48,000 | 120,000 | 84,000 | 5 | 1.7 | 2.00 | 3.13 | 2.00 | 0.69 |
| KEN70K | 70,000 | 56,000 | 140,000 | 98,000 | 8 | 1.9 | 2.13 | 3.25 | 2.19 | 0.76 |
| KEN80K | 80,000 | 64,000 | 160,000 | 113,000 | 8 | 2.1 | 2.25 | 3.50 | 2.38 | 0.82 |
| KEN90K | 90,000 | 72,000 | 180,000 | 127,000 | 8 | 2.4 | 2.50 | 3.88 | 2.38 | 0.83 |
| KEN100K | 100,000 | 80,000 | 200,000 | 141,000 | 8 | 2.6 | 2.75 | 4.25 | 2.50 | 0.84 |
| KEN125K | 125,000 | 100,000 | 250,000 | 176,000 | 8 | 3.0 | 3.00 | 4.88 | 2.63 | 0.92 |
| KEN150K | 150,000 | 120,000 | 300,000 | 210,000 | 8 | 3.5 | 3.25 | 5.25 | 2.88 | 1.00 |
| KEN175K | 175,000 | 140,000 | 350,000 | 240,000 | 8 | 4.8 | 3.50 | 5.75 | 3.13 | 1.10 |
| KEN200K | 200,000 | 160,000 | 400,000 | 280,000 | 8 | 5.3 | 3.75 | 6.13 | 3.38 | 1.18 |

Available in higher capacity and/or shorter length versions.

Technora is a registered trademark of Teijin LTD.

* **WARNING** Always protect roundslings from corners, edges, or protrusions. Refer to the Sling Protection section of this catalog to choose the right protection product for your lift.

General Information
Web Slings
Round Slings
Sling Protection
Wire Rope
Chain Slings
Rigging Hardware
Mesh Slings
Load Huggers
Tow Products
Lift-All Hoists
Hoist Rings
Plate Clamps
Lifting Devices

KEYFLEX™ ULTRA ROUNDSLINGS

The Higher Capacity *KeyFlex* Roundslings

- **High Capacities:** Up to 1/2 million pounds in a vertical hitch, or 1 million pounds in a basket hitch.
- **Rugged Construction:** Our best 4-ply *Tufhide*™ nylon jacket covers three individual *KeyFlex* roundslings with *Technora*® core.
- **High Value:** You get the *Lift-All* quality you expect which exceeds industry standards at a competitive price.
- **Extra Utility:** *KeyFlex Ultra* roundslings can be returned to *Lift-All* for disassembly, inspection, and re-tagging as individual slings.
- **Repairable:** The outer cover can be replaced.



KeyFlex Ultra is 87% lighter than comparable capacity wire rope slings.

This makes it easier to handle, and safer for workers to use.

| Part Number | Rated Capacity (lbs.)* | | | |
|-------------|------------------------|---------|--------------|--------------|
| | Vertical | Choker | Basket @ 90° | Basket @ 45° |
| KEN3P200 | 200,000 | 160,000 | 400,000 | 280,000 |
| KEN3P250 | 250,000 | 200,000 | 500,000 | 350,000 |
| KEN3P300 | 300,000 | 240,000 | 600,000 | 420,000 |
| KEN3P400 | 400,000 | 320,000 | 800,000 | 560,000 |
| KEN3P500 | 500,000 | 400,000 | 1,000,000 | 700,000 |

Available in lengths up to 79 feet

| Part Number | Component Sling Size | Minimum Sling Length (ft.) | Weight Per Foot (lbs.) | Body Diameter Relaxed (in.) | Body Width @ Load (in.) | Minimum Edge Contact Radius | Minimum Hardware Diameter |
|-------------|----------------------|----------------------------|------------------------|-----------------------------|-------------------------|-----------------------------|---------------------------|
| KEN3P200 | KEN80K | 10 | 6.9 | 3.88 | 6.25 | 1.13 | 3.25 |
| KEN3P250 | KEN100K | 12 | 8.6 | 4.75 | 7.75 | 1.25 | 3.25 |
| KEN3P300 | KEN125K | 14 | 9.9 | 5.50 | 9.00 | 1.25 | 3.50 |
| KEN3P400 | KEN150K | 15 | 15.8 | 6.00 | 10.50 | 1.50 | 4.25 |
| KEN3P500 | KEN200K | 17 | 17.5 | 6.75 | 11.00 | 1.63 | 4.63 |

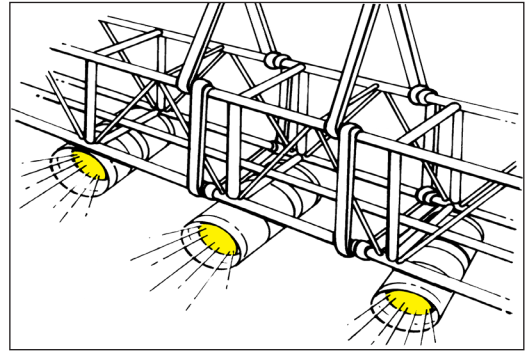
Technora is a registered trademark of Teijin LTD.

*  **WARNING**

Always protect roundslings from corners, edges, or protrusions. Refer to the Sling Protection section of this catalog to choose the right protection product for your lift.

STEELFLEX™ ROUNDSLINGS

THE STEEL SLING
WITH THE FABRIC FEEL



Designed for suspension applications

With safety being of the utmost importance in overhead suspension, *Lift-All's SteelFlex* roundslings combine flexibility, strength and heat resistance (400°F) with the soft feel of fabric to meet your most demanding suspension requirements.

SteelFlex roundslings feature steel galvanized aircraft cable wound in an endless configuration. This wire core is encased in a black double-wall, polyester jacket. A unique inspection window allows for easy inspection of the core for broken wires and corrosion. The result is a highly flexible, easy to use sling that complies with all of the current rigging codes. Stretch at rated capacity is approximately 1%.

Features and Benefits

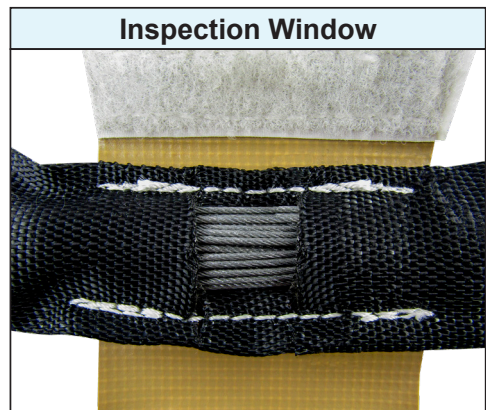
- Black cover for stage rigging applications.
- No backup rigging required.
- Engineered window allows for core inspection.
- Superior flexibility makes rigging easy.
- Conforms to the load to grip securely.
- Superior cut resistance.

How To Measure



| Part Numbers | Weight per Foot (lbs.) | Rated Capacity (lbs.) | | | Minimum Hardware Dia. (in.) |
|---------------|------------------------|-----------------------|--------|--------|-----------------------------|
| | | Vertical | Choker | Basket | |
| GACEN40CX18IN | 0.60 | 3,600 | 3,000 | 7,200 | .625 |
| GACEN40CX2 | | | | | |
| GACEN60CX18IN | 0.75 | 5,300 | 4,200 | 10,600 | .625 |
| GACEN60CX2 | | | | | |
| GACEN60X3 | | | | | |
| GACEN60X4 | | | | | |
| GACEN60X5 | | | | | |
| GACEN60X6 | | | | | |
| GACEN60X7 | | | | | |
| GACEN60X8 | | | | | |
| GACEN60X9 | | | | | |
| GACEN60X10 | | | | | |
| GACEN60X11 | | | | | |
| GACEN60X12 | | | | | |

400°F Temperature Rating
NO Wire Rope Backup Needed
Core Inspection Window Standard

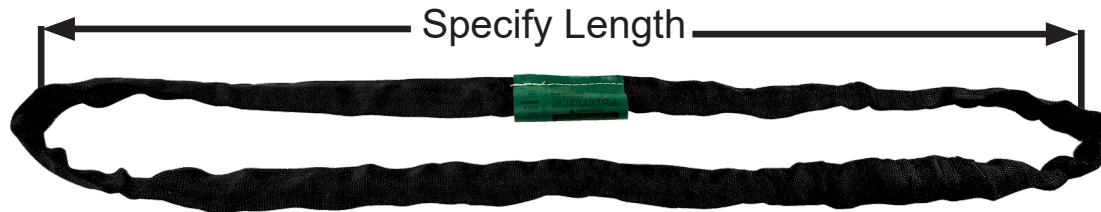


1. Maximum length for *SteelFlex* is 12-ft.
2. Sling lengths under 3' use a modified construction and do not have a seamless cover.

- General Information
- Web Slings
- Round Slings
- Sling Protection
- Wire Rope
- Chain Slings
- Rigging Hardware
- Mesh Slings
- Load Huggers
- Tow Products
- Lift-All Hoists
- Hoist Rings
- Plate Clamps
- Lifting Devices

POLYESTER STAGE SLINGS

These lightweight roundslings are ideal for easy and inconspicuous suspension of stage sound and lighting equipment. Black sleeve material helps sling blend into the surroundings. *Lift-All* stage slings include all of the *Tuflex*® features and benefits except that the color coding of the slings is achieved by using a color-coded identification tag. Double-wall sleeve material is standard.



| Part Number | Color of Tags | Rated Capacity (lbs.)* | | | Minimum Length (ft.) | Approximate Measurements | | | |
|-------------|---------------|------------------------|--------|--------|----------------------|--------------------------|-----------------------------|------------------------|---------------------------------|
| | | Vertical | Choker | Basket | | Weight (lbs. / ft.) | Body Diameter Relaxed (in.) | Body Width @Load (in.) | Minimum Hardware Diameter (in.) |
| BSEN30 | Purple | 2,600 | 2,100 | 5,200 | 1-1/2 | .2 | 5/8 | 1-1/8 | 7/16 |
| BSEN60 | Green | 5,300 | 4,200 | 10,600 | 1-1/2 | .3 | 7/8 | 1-1/2 | 5/8 |
| BSEN90 | Yellow | 8,400 | 6,700 | 16,800 | 3 | .4 | 1-1/8 | 1-7/8 | 3/4 |



TUFLEX WIDE-LIFT

Wide Load Support and Balance

Tuflex wide-lift slings distribute the load over a wide area and offer better balance of larger loads, whether heavy or light.

Features and Benefits

Maintains all the basic *Tuflex* features plus...

Promotes Safety

- Wide body distributes load over wide area and offers improved stability.

Saves Money

- Bearing point of eyes can be shifted to prolong sling life.
- Custom sizes available to fit your needs.

Saves Time

- Standard eye length is 12", making hook-up easy and fast.
- Standard body width is 12", making load balancing easier.

Note:

Wide-lift slings should only be used in basket hitch.

Consult *Lift-All* for special requirements.



| Code | Color of Eyes | Vertical Basket Hitch Rated Capacity* (lbs.) |
|---------|---------------|--|
| WLEN30 | Purple | 5,200 |
| WLEN60 | Green | 10,600 |
| WLEN90 | Yellow | 16,800 |
| WLEN120 | Tan | 21,200 |

* **WARNING** Always protect Roundslings from corners, edges, or protrusions. Refer to the Sling Protection section of this catalog to choose the right protection product for your lift.

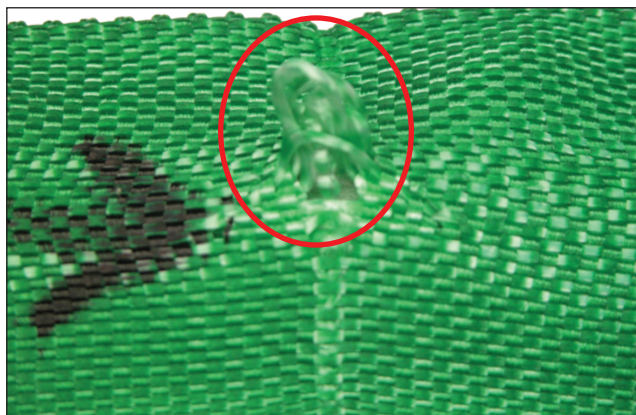
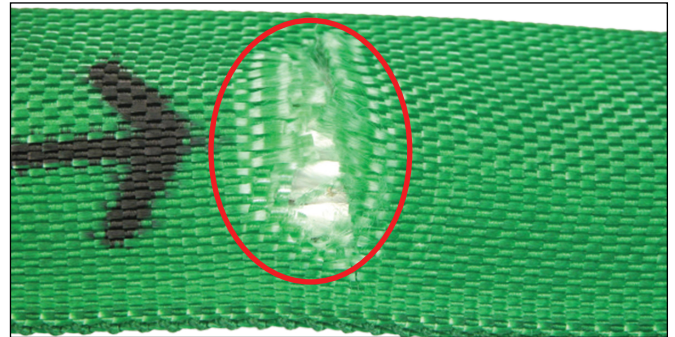
ROUNDSLING INSPECTION CRITERIA

The following photos illustrate some of the damage that occurs and indicates the sling must be taken out of service. For inspection frequency requirements, see the General Information section in this catalog.

CUTS TO THE COVER

WHAT TO LOOK FOR: Broken fibers of equal length indicate that the sling has been cut. When core yarns are exposed, the damage to the yarns cannot be determined. Therefore, the sling must be taken out of service.

TO PREVENT: Always protect synthetic slings from being cut by using cut protection. See Sling Protection section in this catalog.



HOLES, SNAGS, or PULLS

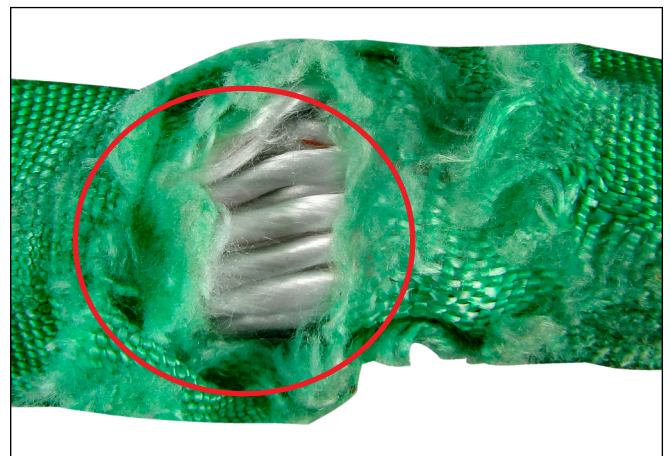
WHAT TO LOOK FOR: Punctures or areas where fibers stand out from the rest of the sling surface. Inspect sling and remove from service if core yarn is exposed.

TO PREVENT: Avoid sling contact with protrusions, both during lifts and while transporting or storing. See Sling Protection section in this catalog.

ABRASIVE WEAR

WHAT TO LOOK FOR: Areas of the sling that look and feel fuzzy indicate that the fibers have been broken by contact and movement against a rough surface. Affected areas are usually discolored. Inspect sling and remove from service if core yarn is exposed.

TO PREVENT: Never drag slings along the ground. Never pull slings from under loads that are resting on the sling. Use wear protection between slings and rough surface loads. See Sling Protection section in this catalog.



- General Information
- Web Slings
- Round Slings
- Sling Protection
- Wire Rope
- Chain Slings
- Rigging Hardware
- Mesh Slings
- Load Huggers
- Tow Products
- Lift-All Hoists
- Hoist Rings
- Plate Clamps
- Lifting Devices

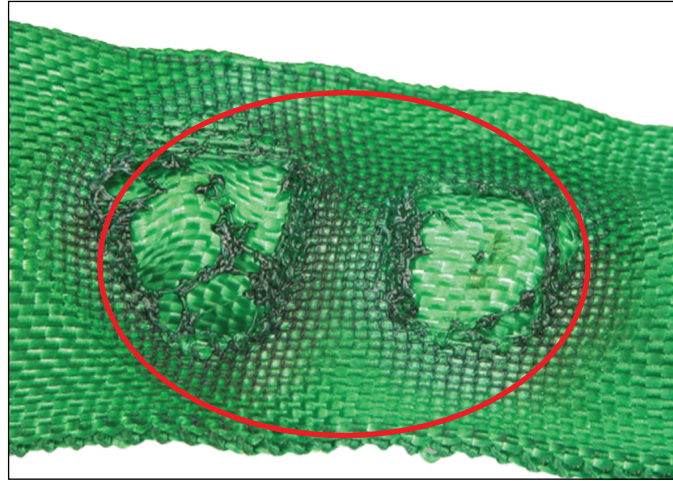
ROUNDSLING INSPECTION CRITERIA

- General Information
- Web Slings
- Round Slings
- Sling Protection
- Wire Rope
- Chain Slings
- Rigging Hardware
- Mesh Slings
- Load Huggers
- Tow Products
- Lift-All Hoists
- Hoist Rings
- Plate Clamps
- Lifting Devices

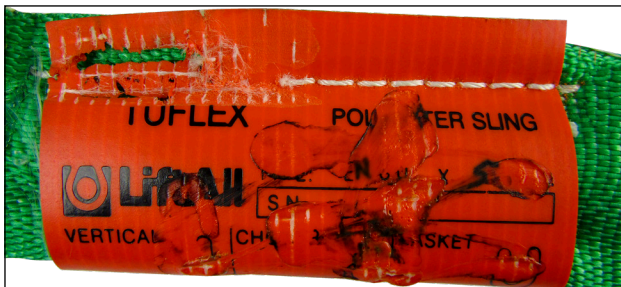
HEAT / CHEMICAL DAMAGE

WHAT TO LOOK FOR: Melted or charred fibers anywhere along the sling. Heat and chemical damage look similar and can damage sling fibers, compromising the sling's strength. Look for discoloration and/or fibers that have been fused together and may feel hard or crunchy. Slings showing heat or chemical damage must be removed from service.

TO PREVENT: Never use *Tuflex*® roundslings where they can be exposed to temperatures in excess of 200°F, or around chemicals without confirming that the sling material is compatible with the chemicals being used. For elevated temperatures up to 350°F, use *KeyFlex*™ roundslings.



ILLEGIBLE OR MISSING TAGS



WHAT TO LOOK FOR: The information provided on the sling tag is important for knowing what sling to use and how it will function. If you cannot find or read all of the information on a sling tag, the sling must be taken out of service.

TO PREVENT: Never set loads down on top of slings or pull slings from beneath loads if there is any resistance. Load edges should never contact sling tags during the lift. Avoid paint or chemical contact with tags.

KNOTS

WHAT TO LOOK FOR: Knots compromise the strength of slings by not allowing all fibers to contribute to the lift as designed. Knots are rather obvious problems as shown here.

TO PREVENT: Never tie knots in slings.



Cuts to the cover NOT exposing internal core yarns. The double-walled jacket protects the inner core yarns from damage. If the damage appears only to the outer jacket and does not expose the inner core yarns, the sling may remain in service (except chemical or heat damage). The sling may also be returned to *Lift-All* for inspection and repair to the jacket.

TO PREVENT: Use the appropriate sling protection between the sling and all edges that come in contact with the sling. See the Sling Protection section in this catalog.