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 ergonimic 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.

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.

Inspection Criteria

Remove from service when:

- Cuts to the sling cover that expose core varns.
- 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.

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.



HIGH PERFORMANCE ROUNDSLINGS

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 ± 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.

DYNAFLEX™ ROUNDSLING

Dyneema® High-Performance Core Ultra-Lightweight Roundsling

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 roundsling 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* roundsling. 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.



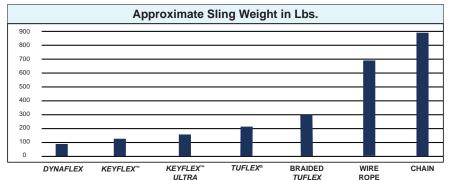
Round

Chain Slings

High Performance Roundslings

DYNAFLEX™ ROUNDSLING





Iten	1	Approximate Sling Weight (lbs.)	Vertical Capacity (lbs.)
DynaFlex Roundsling:	DEN200K x 25-ft.	99	200,000
<i>KeyFlex</i> [™] Roundsling:	KEN200K x 25-ft.	130	200,000
KeyFlex Ultra Roundsling:	KEN3P200 x 25-ft.	173	200,000
Tuflex® Roundsling (2 ea.):	EN1000 x 25-ft.	207	180,000
Braided <i>Tuflex</i> Roundsling:	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										
		Rated Capa	acity (lbs.)*			Approximate Measurements					
	Vertical	Choker	Basket @ 90°	Basket @ 45°						Minimum	
Part Number			U		Min. Length (ft.)	Wt. (lbs per ft.)	Body Dia. Relaxed (in.)	Width @ Load (in.)	Minimum Hardware Diameter (in.)	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	

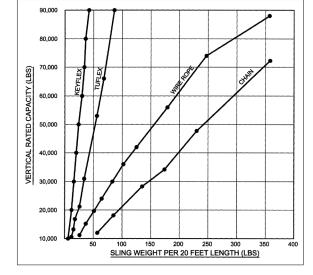
Always protect roundslings from corners, edges, or protrusions. Refer to the Sling Protection section of this catalog to choose the right protection product for your lift.

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										
		Rated Capa	acity (lbs.)*			Approximate Measurements				;	
Part Number	Vertical	Choker	Basket @ 90°	Basket @ 45°	Min. Length (ft.)	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	8.0	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.

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.



Information

Round

Protection

Chain Slings

High Performance Roundslings

KEYFLEX™ULTRA ROUNDSLINGS

The Higher Capacity KeyFlex Roundsling

- 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.

	Rated Capacity (lbs.)*								
Part Number	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

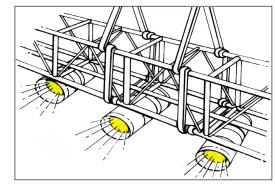
Technora is a registered trademark of Teijin LTD.

▲ WARNING

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WITH THE FABRIC FEEL



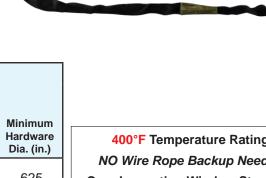
Designed for suspension applications

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

Length

Rated Capacity (lbs.) Vertical Choker **Basket** Weight **Part** per Foot **Numbers** (lbs.) **GACEN40X18IN** 7,200 0.60 3,600 3,000 .625 GACEN40X2 **GACEN60CX18IN GACEN60CX2** GACEN60X3 GACEN60X4 **GACEN60X5 GACEN60X6** 0.75 5,300 4,200 10,600 .625 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.

Slings

Protection

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.



	Rated Capac				os.)*		Approximate Measurements				
Part Number	Color of Tags		Vertical	Choker	Basket	Minimum Length (ft.)	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.

Inspection Criteria



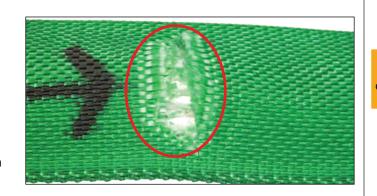
ROUNDSLING INSPECTION CRITERIA

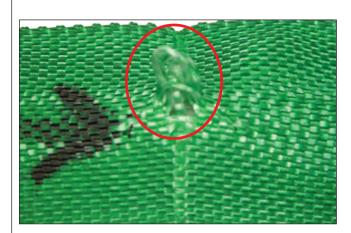
The following photos illustrate some of the damage that occurs and indicates the sling must be taken out of service. For inspection frequency requirements, see the General Information section in this catalog.

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

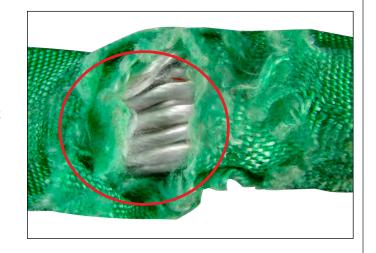
WHAT TO LOOK FOR: Punctures or areas where fibers stand out from the rest of the sling surface. Inspect sling and remove from service if core yarn is exposed.

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

Slings

Protection

Rigging

Huggers Products

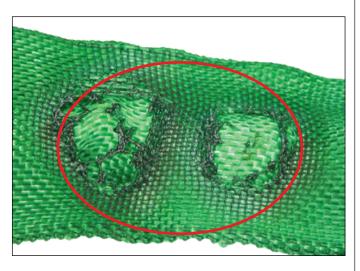
Inspection Criteria

ROUNDSLING INSPECTION CRITERIA

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.



VERTICAL ICHI 1

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.

Web

Round

Sling Protection

Wire Rope

Chain Slings

Rigging ardwar

lesh

Load

To Prodi

ift-All loists

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rlate Iamps

Lifting evices