

## TUFLEX ENDLESS ROUNDSLINGS

**Tuflex Endless (EN)**  
The Most Versatile *Tuflex* Roundslings

### Features, Advantages and Benefits

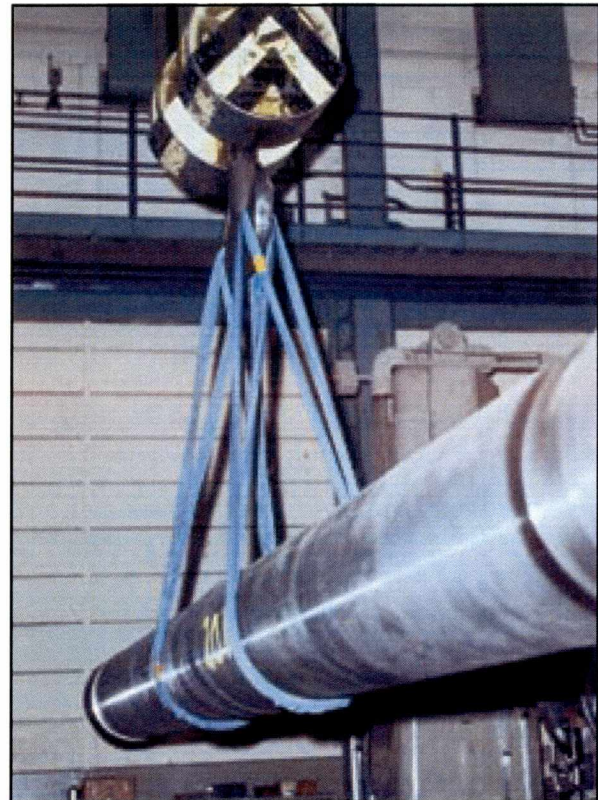
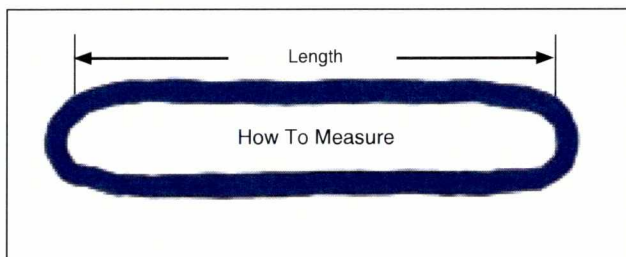
Maintains all the basic *Tuflex* features plus...

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



Part No.	Color	Rated Capacity (lbs.)*			Minimum Length (ft.)	Approximate Measurements			
		Vertical	Choker	Basket		Weight (lbs. / ft.)	Body Dia. Relaxed (in.)	Width at Load (in.)	Minimum Hardware Dia. ** (in.)
EN30	Purple	2,600	2,100	5,200	1 1/2	.2	5/8	1 1/8	1/2
EN60	Green	5,300	4,200	10,600	1 1/2	.3	7/8	1 1/2	5/8
EN90	Yellow	8,400	6,700	16,800	3	.5	1 1/8	1 7/8	3/4
EN120	Tan	10,600	8,500	21,200	3	.6	1 1/8	2 1/8	7/8
EN150	Red	13,200	10,600	26,400	3	.8	1 3/8	2 1/4	1
EN180	White	16,800	13,400	33,600	3	.9	1 3/8	2 1/2	1 1/8
EN240	Blue	21,200	17,000	42,400	3	1.3	1 3/4	3	1 1/4
EN360	Grey	31,000	24,800	62,000	3	1.7	2 1/4	3 3/4	1 1/2
EN600	Brown	53,000	42,400	106,000	8	2.8	2 3/4	4 5/8	1 7/8
EN800	Olive	66,000	52,800	132,000	8	3.4	3 1/8	5 1/4	2 1/8
EN1000	Black	90,000	72,000	180,000	8	4.3	3 5/8	6	2 1/2

\* **WARNING** Do not exceed rated capacities. Sling capacity decreases as the angle from horizontal decreases. Slings should not be used at angles of less than 30°. Refer to Effect of Angle chart page 10.

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



# Tuflex Roundslings



## TUFLEX EYE AND EYE

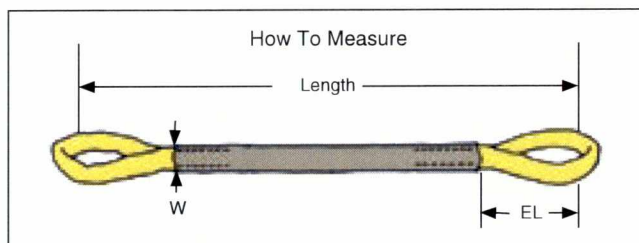
A More Rugged and Durable *Tuflex*

### The Eye and Eye Advantage

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

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

- Saves money by extending sling life where abrasion to sling body is a problem.



Tuflex

Part No.	Color of Eyes	Rated Capacity (lbs.)*			Minimum Length (ft.) +	Approximate Measurements			
		Vertical	Choker	Basket		Weight (lbs./ft.)	Body Width at Load (W) (in.)	Standard Eye Length (EL) (in.)	Minimum Hardware Dia. ** (in.)
EE30	Purple				4	.25	2 1/4	10	1/2
EE60	Green				4	.36	2 1/2	10	5/8
EE90	Yellow				4	.50	2 1/2	12	3/4
EE120	Tan				5	.60	3 1/2	12	7/8
EE150	Red				5	.84	3 1/2	14	1
EE180	White				7	.96	3 1/2	16	1 1/8
EE240	Blue				7	1.5	4 1/4	16	1 1/4
EE360	Grey				7	1.8	6	20	1 1/2
EE600	Brown				8	2.7	7	24	1 7/8
EE800	Olive				10	3.3	8	30	2 1/8
EE1000	Black				12	4.2	9	36	2 1/2

### ⚠ WARNING

Do not exceed rated capacities. Sling capacity decreases as the angle from horizontal decreases. Slings should not be used at angles of less than 30°.

Refer to Effect of Angle chart page 10.

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

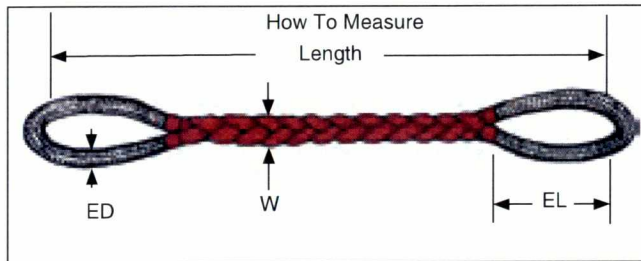
+ Shorter lengths available using reduced eye lengths.

## BRAIDED TUFLEX ROUNDSLINGS

For the ultimate in big loads - (up to 612,000 lbs. in a vertical basket)  
or for the security of multiple part sling lifting.

### Redundant Safety

Tuflex braids are made from three [6 part] or four [8 part] individual Tuflex. Should one of these component slings be damaged while in use, the remaining undamaged slings should be able to safely return the load to the ground.



### 6 Part Flat Braid (B6E)

Part No.	Color	Rated Capacity (lbs.)*			Minimum Length (ft.) +	Approximate Measurements					
		Vertical	Choker	Basket		Weight (lbs./ft.)	Standard Eye Length (EL) (in.)	Width at Load (W) (in.)	Thickness at Load (in.)	Eye Dia. (ED) (in.)	Minimum Hardware Dia. ** (in.)
B6E30	Purple	6,700	5,300	13,400	4 1/2	.8	15	3 1/4	3/4	1 3/4	5/8
B6E60	Green	13,500	10,800	27,000	5	1.2	15	3 3/4	1 1/8	2	1
B6E90	Yellow	21,400	17,100	42,800	5 1/2	1.6	15	4 1/4	1 1/4	2	1 1/4
B6E120	Tan	27,000	21,600	54,000	5 1/2	2.0	15	4 1/2	1 5/16	2 1/4	1 3/8
B6E150	Red	33,600	26,800	67,200	6 1/2	2.7	20	5 1/4	1 3/4	2 1/2	1 1/2
B6E180	White	42,800	34,200	85,600	7	3.2	20	5 1/2	2	2 3/4	1 3/4
B6E240	Blue	54,000	43,200	108,000	9	4.4	20	6 5/8	2 1/4	3 1/2	1 3/4
B6E360	Grey	79,000	63,200	158,000	9 1/2	6.5	30	8 1/4	2 1/2	4 1/4	2 1/2
B6E600	Brown	135,100	108,000	270,200	10 1/2	9.7	30	11	2 3/4	5	3
B6E800	Olive	168,300	134,600	336,600	13	12.0	30	12	4	5 1/4	3 1/2
B6E1000	Black	229,500	183,600	459,000	14 1/2	15.6	31	13 1/2	4 1/2	5 3/4	4

### ⚠ WARNING

Do not exceed rated capacities. Sling capacity decreases as the angle from horizontal decreases. Slings should not be used at angles of less than 30°.

Refer to Effect of Angle chart page 10.

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

+ Shorter lengths available using reduced eye lengths.

### Braided Tuflex Features, Advantages and Benefits

Maintains all the basic Tuflex features plus ...

#### Promotes Safety

- Braided construction offers redundant safety
- User friendly compared to steel slings

#### Saves Money

- Large capacity slings are generally purchased for one major lift, then rarely used again. Braided Tuflex can be disassembled into component slings for general purpose lifting, if individual slings are correctly tagged.
- Can be returned for disassembly, inspection and retagging as individual slings.

#### Saves Time

- Easy to transport and hook-up



# Tuflex Roundslings



## BRAIDED TUFLEX ROUNDSLINGS



### Order Information

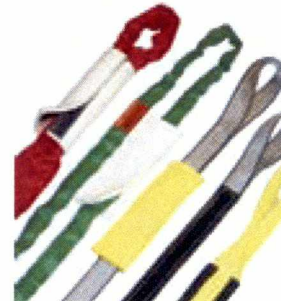
Ordering length should be based on sling at rest.

Braided *Tuflex* length tolerance is  $\pm 5\%$  of the ordered length (sling at rest).

At its rated capacity, braided *Tuflex* will stretch approximately 9% and have a length variance of  $\pm 2\%$ .

Tuflex

Always use Wear Pads to protect synthetic slings from being cut by load edges.



See page 123

### 8 Part Round Braid (B8E)

Part No.	Color	Rated Capacity (lbs.)*			Minimum Length (ft.) +	Approximate Measurements					
		Vertical	Choker	Basket		Weight (lbs./ft.)	Standard Eye Length (EL) (in.)	Width at Load (W) (in.)	Thickness at Load (in.)	Eye Dia. (ED) (in.)	Minimum Hardware Dia. ** (in.)
B8E30	Purple				4 1/2	1.1	15	3 1/2	1	1 3/4	3/4
B8E60	Green				5	1.5	15	4	1 3/8	2	1 1/8
B8E90	Yellow				5 1/2	2.2	15	4 3/4	1 5/8	2 1/2	1 1/2
B8E120	Tan				5 1/2	2.6	15	5	1 3/4	2 1/2	1 1/2
B8E150	Red				6 1/2	3.6	20	6	2 1/8	2 3/4	1 3/4
B8E180	White				7	4.1	20	6 1/4	2 1/2	3 1/4	2
B8E240	Blue				9	5.6	20	7 1/2	2 3/4	3 3/4	2
B8E360	Grey				9 1/2	8.3	30	9 1/2	3 1/4	4 1/2	2 1/2
B8E600	Brown				10 1/2	12.0	30	13	3 3/4	5 1/2	3 1/2
B8E800	Olive				13	16.0	30	13 1/2	4 1/2	6	4
B8E1000	Black				14 1/2	20.0	31	15 3/4	5 1/4	6 1/2	4 3/4

### WARNING

Do not exceed rated capacities. Sling capacity decreases as the angle from horizontal decreases. Slings should not be used at angles of less than 30°.

Refer to Effect of Angle chart page 10.

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

+ Shorter lengths available using reduced eye lengths.

## THE STRONGEST AND LIGHTEST SLINGS IN THE WORLD

Rigging injuries decrease when lighter, less cumbersome slings are used. Light, flexible **KeyFlex™** Roundslings help prevent injuries.

### Sling Weights per Capacities

On the average, **KeyFlex™** Roundslings are:

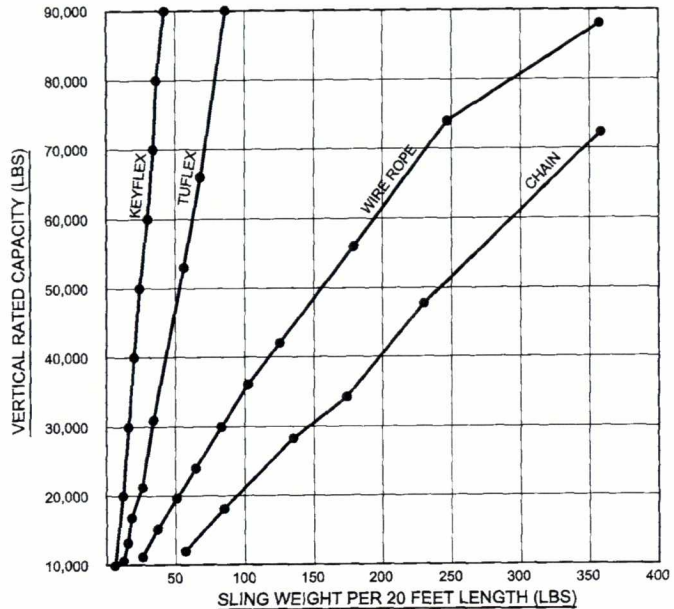
- 53% lighter than **Tuflex™** Roundslings,
- 82% lighter than Wire Rope Slings,
- 89% lighter than G80 Chain Slings

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

Sling Type	Vert. Rating	Weight
<b>KeyFlex™</b>	90,000 lbs.	42 lbs.
<b>Tuflex™</b>	90,000 lbs.	86 lbs.
Wire Rope	88,000 lbs.	357 lbs.
Chain	72,300 lbs.	358 lbs.

### KeyFlex™ Benefits:

- Lowest weight per capacity reduces risk of back and other injuries to riggers.
- Low stretch (1% at rated capacity) reduces elastic bounce for better load control – allows for use in most low headroom situations – reduces sling and load abrasion.
- Aramid load yarns allow sling use up to 350° F versus 200° F for other synthetics.
- Lightweight and compact size promotes speedier rigging, transport and storage when compared to any other type of sling.



### KeyFlex™ Capacities and Measurements

Part No.	Rated Capacity (lbs.)*			Minimum Length (ft.)	Approximate Measurements			
	Vertical	Choker	Basket		Weight (lbs. / ft.)	Body Dia. Relaxed (in.)	Width at Load (in.)	Minimum Hardware Dia. (in.)
KEN10K	10,000	8,000	20,000	3	.3	1	1 3/4	7/8
KEN15K	15,000	12,000	30,000	3	.5	1 1/8	2	1
KEN20K	20,000	16,000	40,000	3	.6	1 1/4	2 1/4	1 1/4
KEN25K	25,000	20,000	50,000	3	.7	1 1/4	2 1/2	1 3/8
KEN30K	30,000	24,000	60,000	3	.8	1 3/8	2 3/4	1 1/2
KEN40K	40,000	32,000	80,000	3	1.0	1 3/4	3	1 1/2
KEN50K	50,000	40,000	100,000	5	1.3	1 7/8	3 1/2	1 3/4
KEN60K	60,000	48,000	120,000	8	1.7	2	3 3/4	2
KEN70K	70,000	56,000	140,000	8	1.9	2 1/8	4	2 1/2
KEN80K	80,000	64,000	160,000	8	2.1	2 1/4	4 1/4	2 1/2
KEN90K	90,000	72,000	180,000	8	2.4	2 1/2	4 3/4	2 1/2
KEN100K	100,000	80,000	200,000	8	2.6	2 3/4	5	2 1/2
KEN125K	125,000	100,000	250,000	8	3.0	3	5 1/4	3
KEN150K	150,000	120,000	300,000	8	3.5	3 1/4	5 1/2	3 1/2
KEN175K	175,000	140,000	350,000	8	4.0	3 1/2	6	3 1/2
KEN200K	200,000	160,000	400,000	8	4.5	3 3/4	6 1/4	3 1/2



## YOUR KEY TO LIFTING HEAVY LOADS USING THE LIGHTEST, MOST FLEXIBLE SLING AVAILABLE !

### KeyFlex™ Roundslings Share Most of the Benefits of Standard Tuflex™ Roundslings

#### Promote Safety

- Synthetic materials won't cut hands
- Consistent matched lengths for better multiple sling control
- No loss of strength from abrasion on double walled jacket
- *Tuff-Tag*™ provides serial numbered identification for traceability
- Conforms to shape of load to grip securely
- Load bearing yarns protected from UV degradation
- Contrasting color core yarns provide visual warning of sling damage  
(**KeyFlex**™ : Orange jacket, Gold Core Yarns)
- Endless style promotes load stability by spreading sling legs

#### Inspection Criteria

Remove from service when:

- Cuts to sling cover expose gold core yarns
- Holes, tears, snags or abrasion expose gold core yarns
- End fittings are pitted or corroded, cracked, distorted or broken
- 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 chemical environment without first contacting the Lift-All engineering department at 717-898-6615. Please provide specific chemical, concentration, temperature and time factors.
- **TEMPERATURE** –**KeyFlex**™ are approved for use up to 350° F.
- **WARNING:** These products may contain chemicals known to the State of California to cause cancer and/or birth defects or other reproductive harm.

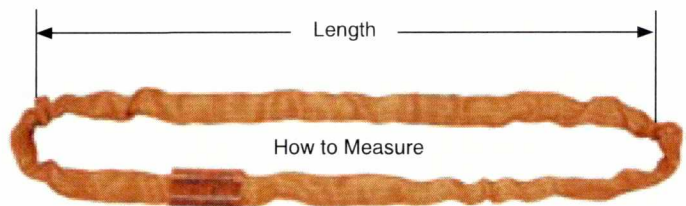
#### Saves Time

- Independent core yarns choke tightly, but release easily after use

#### Saves Money

- Double wall cover for greater sling life
- Soft cover won't scratch load surface
- Conforms to shape of load to reduce load damage
- Seamless – no sewn edges to rupture prematurely, requiring removal from service
- *Tufhide* wear resistant nylon jacket for extra sling life standard KEN60K and larger sizes
- *Tuff-Tag* provides required OSHA information for life of the sling, not just the life of the tag
- Wear points can be shifted to extend sling life
- Endless version is the most versatile style of sling
- **KeyFlex**™ Roundslings with damaged covers may be returned to our factory for inspection and possible repair and proof test.

Tuflex



#### Ordering Information

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

**KeyFlex**™ are made to a tolerance of  $\pm 1\%$  of the specified length ( $\pm 1"$  minimum tolerance) and can stretch 1% at rated capacity.

*Note: Matched lengths of slings must be specified at time of order. Available in endless style only.*

## WIDE-LIFT TUFLEX

### WIDE-LIFT TUFLEX

#### Wide Load Support and Balance

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

#### Tuflex Wide-Lift Features, Advantages and Benefits

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

Promotes Safety

- Wide body distributes load over wide area and offers better balance

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

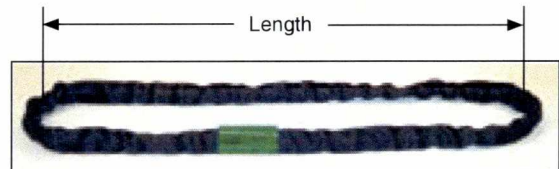
Consult factory  
for special  
requirements.



Code	Color of Eyes	Vertical Basket Hitch Rated Capacity* (lbs.)
WL30	Purple	5,200
WL60	Green	10,600
WL90	Yellow	16,800
WL120	Tan	21,200

## POLYESTER STAGE SLINGS - BLACK

These lightweight roundslings are ideal for easy and inconspicuous suspension of stage sound and lighting equipment. Black sleeve material helps sling blend into its surroundings. *Lift-All* Stage Slings maintain the basic *Tuflex* features, advantages and benefits except that the color coding of the slings is achieved by using a color coded identification *Tuff-Tag*. Double Wall sleeve material is standard.



## STEELFLEX & POLYESTER STAGE SLING INFORMATION

	Part No.	Rated Capacity (lbs.)*			Minimum Length (ft.)	Approximate Measurements		
		Vertical	Choker	Basket		Weight (lbs. / ft.)	Body Dia. Relaxed (in.)	Width at Load (in.)
Polyester Stage Sling	BSEN30	2,600	2,100	5,200	1 1/2	.2	5/8	1 1/8
	BSEN60	5,300	4,200	10,600	1 1/2	.3	7/8	1 1/2
	BSEN90	8,400	6,700	16,800	3	.4	1 1/8	1 7/8
Steelflex	GACEN60	5,300	4,200	10,600	3**	.75	7/8	1 1/2

### ⚠ WARNING

Do not exceed rated capacities. Sling capacity decreases as the angle from horizontal decreases. Slings should not be used at angles of less than 30°.

Refer to Effect of Angle chart page 10.

\*\* Maximum length for Steelflex is 9 ft.

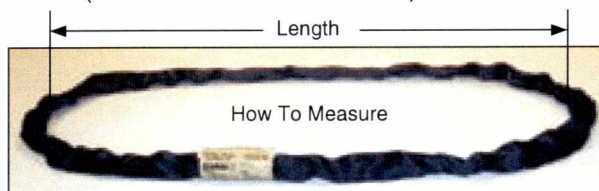


# STEELFLEX ROUNDSLINGS

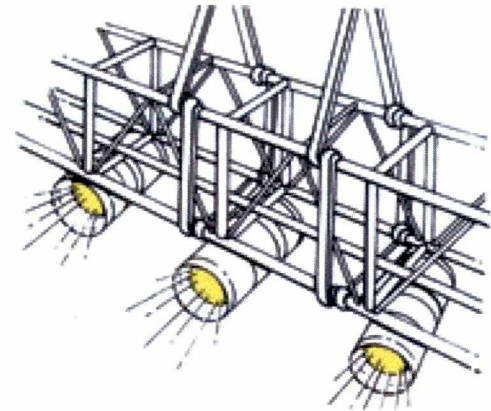


# STEELFLEX ROUNDSLINGS

**THE STEEL SLING  
WITH THE FABRIC FEEL**  
(U.S Patent No. 6422624 )



GACEN60



Tuflex

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

Designed for Suspension Applications where metal slings are required.

With the trend in stage rigging to require metal slings for all overhead suspension, the problem has been how to accomplish this in the most efficient and cost effective way. **STEELFLEX ROUNDSLINGS** are the answer to that problem!

The load-bearing member of **STEELFLEX ROUNDSLINGS** is made from 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.

The benefits are many:

#### Increased Safety

- Improved cut resistance
- Higher heat resistance
- Conforms to load to grip securely
- Window allows complete core inspection

#### Saves Time

- No backup rigging required
- Fewer components to inventory and carry
- Superior flexibility makes rigging easy
- Tan colored Tuff-Tag confirms steel core

#### Saves Money

- Gives you the slings you want to use (roundslings), without having to buy the slings you would be required to use (wire rope or chain)
- Lowers show to show freight costs



Inspection Window



## TUFLEX HARDWARE / BRIDLE SLINGS

### Features, Benefits and Advantages

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

#### Promotes Safety

- Bridles provide better load control and balance\_
- Hardware avoids cutting and abrasion of sling at bearing points

#### Saves Money

- Reduced load damage - protected between pick-up point and crane hook

#### Saves Time

- Lighter weight and easier to use and store than wire rope or chain slings
- Sling hooks quickly connect to loads having hoist rings or eye bolts

#### How to Order

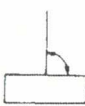


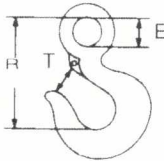
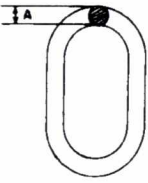
Specify:

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



Example:

DOSEN90 X 10' is a double leg bridle, oblong master link, with sling hooks attached to each *Tuflex* EN90. Assembly length is 10 ft.

Part No.	Color	Rated Capacity (lbs.)*			Sling Hook **		Oblong Link (in.)		
							Oblong Link Stock Dia. A (in.)		
		Single @ 90° Vertical	Double @ 60°	Quad @ 60°			Size	E x R x T (in.)	Single
EN30	Purple	2,600	4,500	9,000	2TA	1 1/8 x 4 3/32 x 1 1/16	1/2	1/2	3/4
EN60	Green	5,300	9,100	18,300	4.5TA	1 9/16 x 5 25/32 x 1 1/2	3/4	3/4	1 1/4
EN90	Yellow	8,400	14,500	29,100	7TA	2 x 7 5/16 x 1 3/4	3/4	1	1 1/2
EN120	Tan	10,600	18,300	36,700	11TA	2 7/16 x 9 1/16 x 2 1/4	3/4	1 1/4	1 1/2
EN150	Red	13,200	22,800	45,700	11TA	2 7/16 x 9 1/16 x 2 1/4	1	1 1/4	1 3/4
EN180	White	16,800	29,100	58,200	15TA	2 13/16 x 10 1/32 x 2 15/32	1 1/4	1 1/2	2 1/4
EN240	Blue	21,200	36,700	73,400	22TA	3 1/2 x 12 15/32 x 3 11/32	1 1/4	1 1/2	2 1/4
EN360	Grey	31,000	53,700	107,300	20TC	3 1/2 x 14 1/16 x 4	1 1/2	2	2 3/4
EN600	Brown	53,000	91,800	183,600	30TC	4 1/16 x 20 1/8 x 4 3/4	2	2 1/2	3 1/2
EN800	Olive	66,000	114,300	228,600	40TC	5 9/16 x 23 3/4 x 5 3/4	2 1/4	3	4 1/4
EN1000	Black	90,000	155,800	311,700		NA	2 1/2	3 1/4	4 3/4

\*\* Hook sizes have been increased to conform to latest industry standards.