Tuflex™ Roundslings

LiftAll PRODUCTS FOR BETTER LIFTING

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.

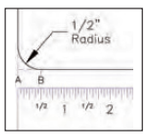
Exposure of slings to edges

⚠ WARNING

Exposure of roundslings to edges with a radius that is too small can cause sling failure and loss of load

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

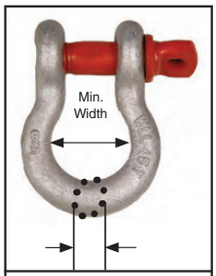
Rated Capacity Vertical (lbs.)	Minimum* Edge Radii (in.)	Sling Width At Load (in.)
EN30	3/16	1.00
EN60	1/4	1.38
EN90	5/16	1.75
EN120	5/16	1.88
EN150	3/8	2.00
EN180	7/16	2.13
EN240	7/16	2.63
EN360	1/2	3.25
EN600	11/16	4.00
EN800	3/4	4.63
EN1000	7/8	5.25

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

Sling Hardware and Connections

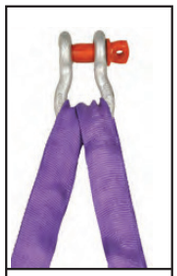
Connection surfaces must be smooth to avoid abrading or cutting slings. Roundslings can be damaged or weakened by excessive compression between the sling and the connection points. Select and use proper connection hardware that conforms to the size requirements listed for choker, vertical, or basket 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 roundsling is less than its capacity.



Min. Stock Diameter or Thickness

Single Part (Vertical)



Double Part (Basket)**

Minimum hardware dimensions suitable for use with *Tuflex* Roundslings

Tuflex Size	Single Part		Double Part**	
	Min. Stock Diameter (in.)	Min. Width (in.)	Min. Stock Diameter (in.)	Min. Width (in.)
EN30	7/16	1.00	9/16	1.38
EN60	5/8	1.38	7/8	1.88
EN90	3/4	1.75	1-1/16	2.38
EN120	7/8	1.88	1-1/4	2.50
EN150	1	2.00	1-3/8	2.88
EN180	1-1/8	2.13	1-5/8	3.00
EN240	1-3/16	2.63	1-5/8	3.75
EN360	1-1/2	3.25	2	4.50
EN600	2	4.00	2-3/4	5.63
EN800	2-1/8	4.63	3	6.50
EN1000	2-1/2	5.25	3-1/2	7.38

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

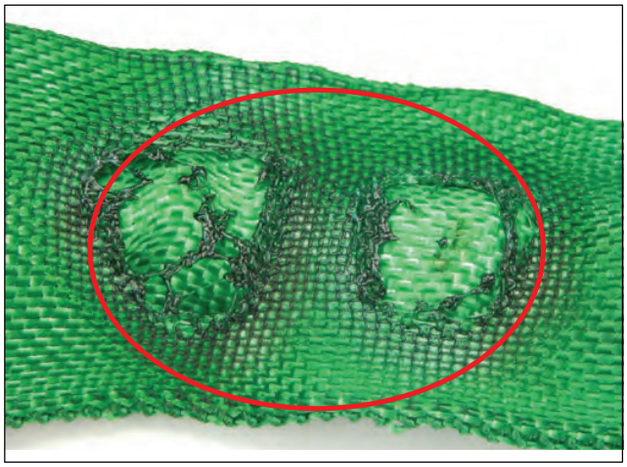
For Temperature and Chemical Information refer to the 'Environmental Consideration' page in the WEB section in this catalog.

INSPECTION CRITERIA FOR *TUFLEX / KEYFLEX*

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 wear protections between the sling and all edges that come in contact with the sling.

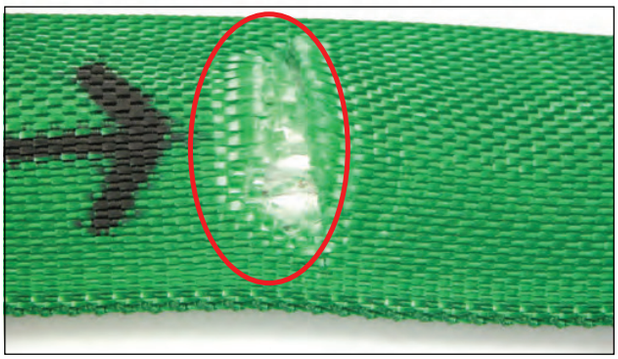
INSPECTION CRITERIA FOR *TUFLEX / KEYFLEX*

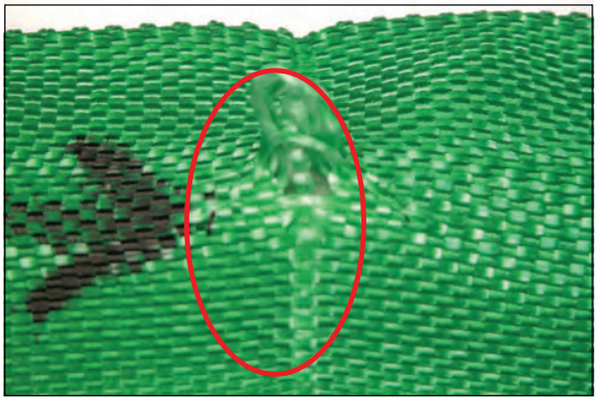
The following photos illustrate some of the damage that occurs and indicates the sling must be taken out of service. For inspection frequency requirements, see the HELP section in this catalog.

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.

ABRASION

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.