

Sling Protection

SLING SHIELD TM

Pat. Pending

The number one cause of synthetic sling failure is cutting. *Sling Shield* Edge **Protectors** prevent synthetic slings from being cut by load edges. Low weight, high strength extruded aluminum body provides a full 1" radius to protect your slings from even the sharpest of load edges.

Stop replacing your synthetic slings and wear pads due to cutting. Use the new Lift-All **Sling Shields**.



Features:

Aluminum bar with 1" radius supports basket or choker sling tensions of up to 25,000 lbs. per inch of sling width
Polycarbonate end restraints help keep slings on bar

- when lifting at angles
- Magnet keeps **Sling Shield** in place on steel loads while rigging the lift
- Velcro[®] straps help keep sling in position prior to lift

Benefits:

- Improves Safety Eliminates dropped loads caused by load edges cutting the sling
- Saves Time Magnet and Velcro[®] straps greatly reduce rigging time
- Saves Money No cut slings or wear pads means fewer replacement purchas

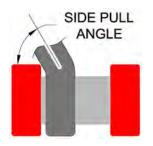


Lift-All	SS Inside	SS Overall	SS Weight	Widest	Largest Appropriate Tuflex Size		Largest Appropriate KeyFlex Size	
Part #	Width (In.)	Length (In.)	(Lbs.)	Web Sling (In.)	Single Leg	Double Leg	Single Leg	Double Leg
SS1-4	4.50	7.50	2.7	4	EN360	EN120	KEN80K	KEN15K
SS1-6	6.75	10.00	3.2	6	EN1000	EN240	KEN100K	KEN40K
SS1-12	12.75	16.00	4.8	12	EN1000	EN1000	KEN100K	KEN100K

LOAD RATINGS

The load rating of *Sling Shields* is **25,000 lbs**. of sling tension per inch of sling width using a basket or choker hitch. This rating is reduced when lifting at side pull angles of less than 70°. Do not exceed listed sling tensions. Prevent *Sling Shield* from sliding when using at an angle. Do not use at side pull angles less than 45°. See Safety Bulletin for more detailed information.

Side Pull Angle	Basket/Choker Rating (Lbs.)*
65°	17,500
60°	15,000
55°	13,000
50°	11,000
45°	8,000





800-909-1964 www.lift-all.com

* Ultimate rating regardless of width.

Lifting in a vertical hitch reduces these ratings by half.



EDGE DEFENDER™

The number one cause of synthetic sling failure is cutting. *Edge Defender* pads are our best synthetic product for protecting slings from being cut by load edges and protecting load edges from being marred due to lifting equipment. Protect your loads and your slings now by using the new Lift-All *Edge Defender!*



Standard Pad Widths & Maximum

Features:

- Three layers of webbing sewn together with Kevlar[®] thread
- A layer of orange vinyl is sandwiched between the first and second layer to aid inspection
- Synthetic material is flexible under load
- Velcro[®] straps help keep sling in position prior to lift

Benefits:

- Improves Safety Thick pad sewn with Kevlar[®] thread gives excellent cut resistant protection to the sling
- Saves Time Velcro[®] straps help to keep pad positioned on the sling to reduce rigging time
- Saves Money This longer lasting pad protects slings better, extends sling life and reduces replacement purchases



	Appropriate Sling Sizes									
Pad	Max. Web	Max.	Max.	Part Numbers for Standard Edge Defender Lengths						
Width (In.)	Sling Width (In.)	Tuflex Size	KeyFlex Size	12 In.	18 ln.	24 In.	30 ln.	36 In.		
3	2	EN30	NA	ED3X12IN	ED3X18IN	ED3X24IN	ED3X30IN	ED3X36IN		
4	3	EN60	NA	ED4X12IN	ED4X18IN	ED4X24IN	ED4X30IN	ED4X36IN		
6	4	EN150	KEN20K	ED6X12IN	ED6X18IN	ED6X24IN	ED6X30IN	ED6X36IN		
8	6	EN240	KEN50K	ED8X12IN	ED8X18IN	ED8X24IN	ED8X30IN	ED8X36IN		
10	8	EN600	KEN90K	ED10X12IN	ED10X18IN	ED10X24IN	ED10X30IN	ED10X36IN		

Velcro[®] is a registered trademark of Velcro Industries B.V. Kevlar[®] is a registered trademark of E.I. du Pont de Nemours and Company

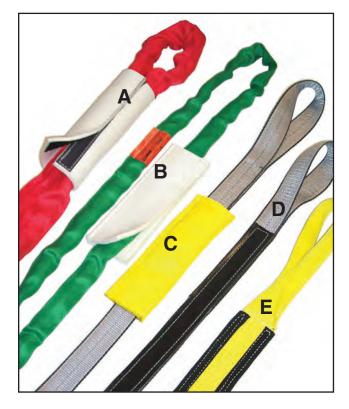


WEAR PADS

The Importance of Wear Pads

Wear Pads can help protect slings against cutting and abrasion. The number one cause of synthetic sling failure is cutting. When slings are cut, property damage and personal injury or death can result. Wear pads can help to reduce this problem by acting as a buffer between the load edge and the sling. When used with steel slings, wear pads help protect both sling and load from damage along points of contact.

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



- A Tubular Quick Sleeve using Pukka Pad Material
- B Flat Quick Sleeve using Pukka Pad Material
- C Flat Sewn Sleeve using Webmaster 1600
- D Sewn-On Wear Pad using PVC
- E Edgeguard using texturized nylon

Features, Advantages and Benefits

Promotes Safety

 Helps prevent sling cutting that can cause property damage, personal injury or death.

Saves Money

- Helps protect both sling and load from damage
- Increases sling life

Primary Causes of Cutting - How to avoid

- Edges Edges do not need to be "sharp" to cause sling failure. Increase radius of all edges in contact with slings
- Movement restrict sling movement against edges
- Pressure reduce by using wider or additional slings

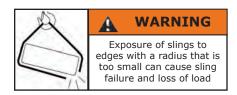
A WARNING

Wear pads may not prevent cutting or other sling damage. To avoid severe personal injury or death, keep all personnel clear of loads about to be lifted and suspended loads.

Safe Operating Practices

A qualified person must select materials and methods that adequately protect the slings from damage. *Lift-All* recommends that, prior to making a lift, the load be raised slightly, then lowered so that the slings and wear pads can be inspected for damage. If there is evidence of cutting, the lift should be tested again using different pad materials and/or methods.

Do not ignore warning signs of misuse. Cut marks detected during any sling inspection serve as a clear signal that sling protection must be added or improved.





SLEEVE TYPE

WEAR PAD STYLES

Sling Protection

Preferred for slings that are used in a variety of lifting situations. Easily repositioned along sling body to accommodate loads of various sizes. Sleeve allows sling to adjust to lift without movement against load edge. Use with: Tuflex Roundslings High strength Velcro* for secure positioning, tubular design gives Chain and Wire Rope Slings Tubular Quick Sleeve А maximum useable surface and maximum pad life. Available materials: All (except PVC) Use with: All Slings Velcro* allows easy installation and removal. Friction keeps sleeve В Flat Quick Sleeve Available materials: All (except PVC) in place when rigging. Preferred for long term use on single sling. May be repositioned Use with: All Slings С Flat Sewn Sleeve as needed along sling length. May require factiory installation on Available mateirals: All (except PVC) slings with hardware and on single leg Tuflex. Use with: Web Slings Slides easily along sling length for convenient sling protection. Poly Pads (Limited range of sizes) Must be installed at factory for web slings with hardware.

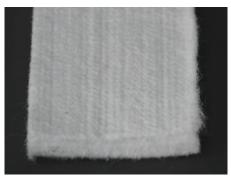
SEWN-ON TYPE

For use on web slings where repetitive lifting situations subject known areas of the sling to cutting and/or abrasion. Eliminates the need to position pad before each lift.

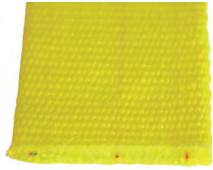
Available materials: PVC

D	Sewn-On Wear Pad	Use with: Web Slings Only Available materials: All	For sling protection at expected wear points. Can be sewn anywhere on the sling, be any length and be on one or both sides.
E	Edgeguard	Use with: Web Slings Only Available materials: Texturized nylon or light duty leather	Helps protect edges of sling. Both edges will be covered to the length and position required.

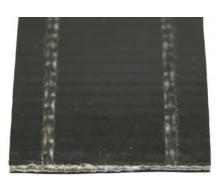
WEAR PAD MATERIALS



Pukka-Pads (P) 5/16" Thick
A high density, synthetic felt.



Webmaster 1600 (N) 3/16" Thick
Heavy nylon sling webbing with red core warning yarns.



PVC Belting (PVC) 1/8" Thick
Non-absorbent conveyor type belting.



 Texturized Nylon (TN) 3/32" Thick
 A bulked nylon fiber is used to produce a thin webbing that has good abrasion resistance.



 Heavy Leather (HL) 5/32" Thick
 Genuine top-grain cowhide (may require multiple pieces for longer lengths.)



 Ballistic Nylon (BN) 1/16" Thick
 A thin, 2-ply wear resistant fabric made of bulked nylon fiber, appropriate for wider sleeves and bundling applications.

* Velcro ® is a registered trademark of Velcro Industries B.V.



WEAR PADS

Flat Quick Sleeves

Flat Quick Sleeve Widths and Appropriate Slings ¹

	0	Web Oliver		Tufle			Chain	
Part No.	Sleeve Width ² (in.)	Web Sling Width ³ (in.)	Single Leg	Double Leg	6-Part Braid	8-Part Braid	Wire Rope Sling Dia. (in.)	Chain Sling Size (in.)
3FQS	3	1					1/4 - 7/16	
4FQS	4	2	EN30/60	EE30			1/2 - 3/4	7/32 - 9/32
5FQS	5	3	EN90/120/150	EE60			7/8 - 1 1/8	3/8
6FQS	6	4	EN180	EE90/120	B6E30		1 1/4 - 1 1/2	1/2
8FQS	8	6	EN240/360	EE150/180/240	B6E60	B8E30	1 5/8 - 2 1/4	5/8
10FQS	10	8	EN600/800	EE360	B6E90/120	B8E60/90	2 1/2	3/4 - 7/8
12FQS	12	10	EN1000	EE600	B6E150/180	B8E120/150		1

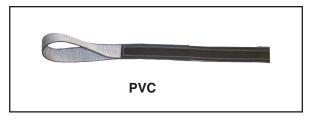


Note: 1. Slings shown are the maximum recommended size for each sleeve width.

2. Width of sleeve depends on the material being used. This chart is based on using Pukka Pad material.

3. One or two ply only. For three or four ply, go to the next larger sleeve.

Sewn-On Wear Pads (Code WP)



Edgeguard (Code EG)



Tubular Quick Sleeves

Tubular Quick Sleeve Widths and Appropriate Slings ¹

	Open		Tuf	lex			
Part No.	Sleeve Width (A) (in.)	Single Leg	Double Leg	6-Part Braid	8-Part Braid	Wire Rope Sling Dia. (in.)	Chain Sling Size (in.)
4TQS	4					1/4	
5TQS	5					5/16 - 1/2	
6TQS	6	EN30//60				9/16 - 7/8	7/32
8TQS	8	EN90/120/150	EE30/60			1 - 1 1/2	9/32 - 3/8
10TQS	10	EN180/240	EE90/120	B6E30/60	B8E30	1 3/4 - 2	1/2 - 5/8
12TQS	12	EN360	EE150/180	B6E90	B8E60	2 1/4 - 2 1/2	3/4
14TQS	14	EN600/800	EE240		B8E90		7/8 - 1
16TQS	16	EN1000	EE360	B6E120/150	B8E120		1 1/4
18TQS	18		EE600	B6E180/240	B8E150/180		
20TQS	20		EE800				
22TQS	22		EE1000	B6E360	B8E240		
24TQS	24						
26TQS	26			B6E600	B8E360		
30TQS	30			B6E800	B8E600		
34TQS	34			B6E1000	B8E800		

Note: 1. Slings shown are the maximum recommended size for each sleeve width.

2. Tubular Pukka Pads not available under 10" open sleeve width.

WEAR PADS

Standard Sewn-Sleeves

Sewn-Sleeve Widths and Appropriate Slings ¹

	Sleeve Sling			1	uflex	Wire Rope	Chain		
Part No.	Width ² (in.)	Width ³ (in.)	Single Leg	Double Leg	6-Part Braid	8-Part Braid	Sling Dia (in.)	Sling Size (in.)	
3SS	3	1	EN30/60				1/4 - 3/4	7/32	
4SS	4	2	EN90/150	EE30/60			7/8 - 1 1/8	9/32 - 3/8	
5SS	5	3	EN180/240	EE90/120	B6E30		1 1/4 - 1 1/2	1/2	
6SS	6	4	EN360	EE150/180	B6E60	B8E30	1 5/8 - 1 3/4	5/8	
8SS	8	6	EN600/800	EE240/360	B6E90/120	B8E60	2 - 2 1/2	3/4 - 7/8	1
10SS	10	8	EN1000	EE600	B6E150/180	B8E90/120/150		1	
12SS	12	10		EE800/1000	B6E240	B8E180		1 1/4	

Note: 1. Slings shown are the maximum recommended size for each sleeve width.

2. Width of sleeve depends on the material being used. This chart is based on using Pukka Pad material.

3. One or two ply only. For three or four ply, go to the next larger sleeve.

Poly Pads

Easily movable Poly Pads are made of tough, woven polyester fabric impregnated and coated with PVC. Easy to position on both web slings and tiedowns. Poly Pads are designed to give protection when lifting on load edges or abrasive loads.

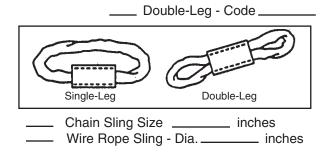
Part No.	Poly Pad	Web Width (in.)
60115	3 1/2 x 12	1 - 2
60116	6 x 12	3 - 4



- 1. Choose code for width and style
 - TQS Tubular Quick Sleeve
 - FQS Flat Quick Sleeve
 - SS Flat Sewn Sleeve
 - WP Sewn-On Wear Pad
 - EG Edgeguard
 - Poly Pad (Use Part No.)
- 2. Choose a Material
 - P 5/16" Heavy Duty Pukka-Pad
 - N Webmaster 1600 Nylon
 - HL Heavy Leather
 - TN Texturized Nylon
 - BN Ballistic Nylon (Tubular only)
 - <u>PVC</u> (Sewn-on Wear Pads only)
- 3. Length of Sleeve
 - (if sewn-on pad, describe position on sling) ——— Feet

- - 4. For Use On
 - Web Sling Code or Width

 Tuflex Single-Leg Code



A WARNING

Wear pads may not prevent cutting or other sling damage. To avoid severe personal injury or death, keep all personnel clear of loads about to be lifted and suspended loads.