

LIFT-ALL HULL SAVER BOAT SLINGS

Polyester** web slings designed especially for use with travel lifts to lower and retrieve large boats.

Features, Advantages and Benefits

Promotes Safety

- *Tuff-Tag* provides required OSHA information for the life of the sling in a marine environment.
- *Lift-All* trained professionals are available for recommended seasonal inspection.
- Two ply *Hull Savers* are our standard for improved durability and UV resistance.

Saves Time

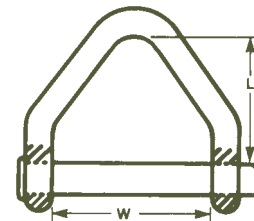
- Optional keel pad lead weights accelerate sinking to required lift depth.
- Quick disconnects are available to improve boat yard productivity.
- Extra eye offers versatility, reducing sling changing time and sling inventory.

Saves Money

- Low-stretch polyester webbing helps to avoid scuff damage to hulls.**
- HS polymer treatment is available to greatly extend sling life by resisting abrasion and UV degradation.
- Optional chine & keel pads protect boat and increase sling life.
- Edgeguard wear resistant webbing available - helps protect sling from abrasion.

Hull Savers

Web Plies	Hull Saver Code	Width (in.)	1 Rated Capacity* (lbs.)	Optional Pull Pin Shackles			
				Shackle Code	W (in.)	L (in.)	Weight Each (lbs.)
Two Ply	HS2804	4	23,000	PPS-4	4	3.75	3.2
	HS2806	6	32,600	PPS-6	6	4.75	6.8
	HS2808	8	38,400	PPS-6HD	6	4.75	9.8
	HS2810	10	44,800	PPS-6HD	6	4.75	9.8
	HS2812	12	53,800 ²	PPS-6HD ²	6	4.75	9.8



Pull Pin Shackles (Optional)

- Notes:
1. Capacity in lbs. is the rating of one sling in a vertical basket hitch.
 2. Derate sling to 48,000 when used with 6" HD Shackle (PPS-6HD)

** Note: Nylon webbing is available, but will stretch about 50% more than polyester and should not be used near acids. Polyester should not be used near caustics.

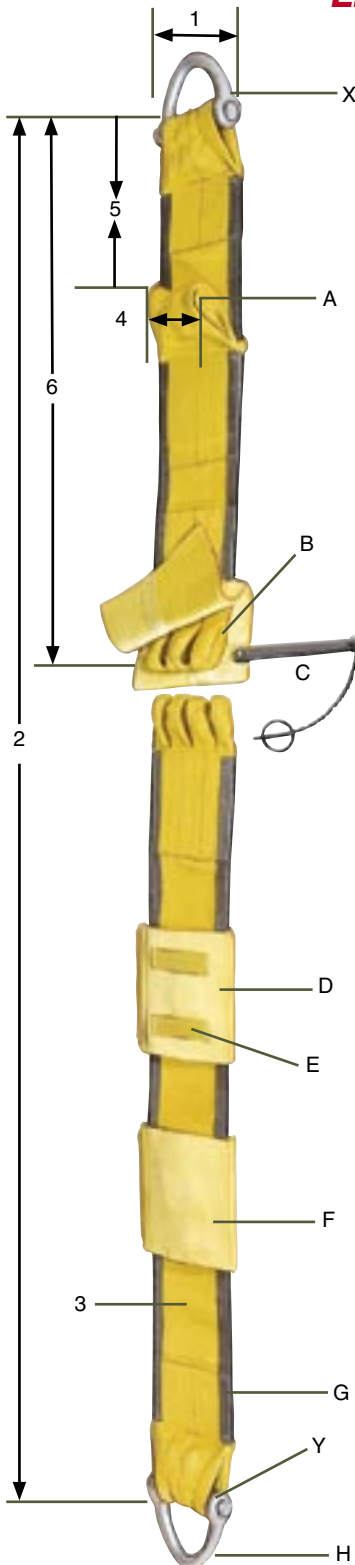
Custom Hull Savers

Lift-All will manufacture boat slings to fill your particular needs for width, length and capacity. Please call for quotations.



* 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.

LIFT-ALL HULL SAVER BOAT SLINGS



STANDARD BOAT SLING MEASUREMENTS

1. Sling Width _____ in.
2. Sling Length _____ ft.
3. Two Ply
4. Width of eyes _____ in.

SLING MATERIAL

Low stretch polyester webbing is standard because it helps to reduce chine marring. Nylon webbing is available, but will stretch about 50% more than polyester and should not be used near acids. HS Polymer Treatment extends sling life.

- POLYESTER - Natural or Treated (circle choice)
- NYLON - Natural or Treated (circle choice)

BOAT SLING ACCESSORIES

A. Extra Eyes - for shortening sling to lift smaller craft. See Measurement #5

- Extra Eye #1 - Position _____ ft. from point X / Y (circle choice)
- Extra Eye #2 - Position _____ ft. from point X / Y (circle choice)
- Extra Eye #3 - Position _____ ft. from point X / Y (circle choice)

B. Quick Disconnect With Flaps - Saves time needed to lower the lift for removing slings from the hooks. Available for 6" or wider only. Protective flap to cover pin is standard. See Measurement #6. Position _____ ft. from point X / Y.

C. Quick Disconnect Pin - This reusable pin is necessary for Quick Disconnect operation. Pin is galvanized for corrosion resistance. GAC wire with retaining clip holds pin in place.

D. Keel Pad - Helps protect the sling from abrasion and cutting. Sliding sleeve style allows sling to adjust to center point without scraping along keel. Pad uses the same webbing as the sling. Standard length is 48".

- Sliding Style - Length _____ ft.
- Sewn-on Style - Length _____ ft. Starting _____ ft. from X / Y

E. Keel Pad Weights - Lead weights allow for speedy submersion of sling.

F. Chine Pads - Helps to protect boat chines and rub rails and the sling from abrasion damage. Sliding pad can be positioned to accommodate any size and style of boat. May be sewn to sling per your specification. Pad uses the same webbing as the sling. Standard length is 48".

- Sliding - Quantity _____ Length _____ ft.
- Sewn-on - Quantity _____ Length _____ ft. Starting _____ ft. from X / Y

G. Edgeguard - Special wear resistant webbing applied to sling edges to help protect the sling from abrasion.

H. Pull Pin Shackles - Promotes sling life by protecting eyes of sling. Easier attachment of sling to lifting hook. Galvanized steel for corrosion resistance. Reusable.

- Quantity _____

LIFT-ALL HULL SAVER BOAT SLINGS

Safe Operating Practices

▲ WARNING

Read Definition on page 3

- Inspect slings prior to each use and do not use if damaged
- Never allow people to be aboard the boat while it is suspended by slings
- Never work under or near a boat suspended by slings
- Boats must be properly blocked and stabilized before removing slings
- *Hull Saver* Boat Slings are capacity rated for vertical basket lifts. Do not exceed rated capacities
- When lifting with extra eyes, direction of pull must always be away from center point of the original sling length

Environmental Considerations

- Nylon and polyester are seriously degraded at temperatures above 200°F.
- Prolonged exposure to ultraviolet light adversely affects nylon and polyester. Slings become bleached and stiff when exposed to sunlight or arc welding
- Many acids, alkalis and chemicals have an adverse effect on nylon and polyester. See Chemical Environment Data chart on page 14.

Inspection Criteria for *Hull Saver* Boat Slings

▲ WARNING

Read Definition on page 3

Remove from service if any of the following is visible:

- Sling is bleached or stiff due to sunlight exposure
- Capacity tag is missing or illegible
- Red core warning yarns are visible
- Sling shows signs of melting, charring or chemical damage
- End fittings are excessively pitted, corroded, distorted, cracked or broken
- Cuts on the face or edge of webbing
- Holes, tears, snags or crushed web
- Signs of excessive abrasive wear
- Broken or worn threads in the stitch patterns
- Any other visible damage which causes doubt as to its strength

Refer to photographs illustrating damaged webbing on pages 16-17.