

TWIN-PATH SLINGS

TWIN-PATH®

- A** Twin-Path® Slings are two separate paths working together as one sling.
- B** High performance fibers known as (K-Spec) have less than 1% elongation at rated capacity with a high resistance to chemicals, heat and moisture.
- C** Covermax outer cover is 4x more abrasion resistant than polyester outer covers.
- D** Our Armor Wear Pads are removable using Velcro or can be sewn directly over sling
- E** Safety inner sleeve acts as an early warning device when the outer sleeve is cut or worn.
- F** Check-Fast® External Warning Indicator provides a quick way of checking the condition of the sling.



"WEIGHS 90% LESS THAN A STEEL SLING"

TWIN-PATH® ULTRA COVERMAX® SLINGS

- Twin-Path Extra Covermax Slings are constructed of high performance load carrying yarns.
- Orange Tag Patch: High Performance Load Yarns.
- Load carrying yarns are protected by two independent, seamless, color coded, covers.
- The internal red cover is protected by an outer green cover of Covermax nylon.
- Sleeves can be sewn around the body of the sling so that they can be positioned to the areas needed.

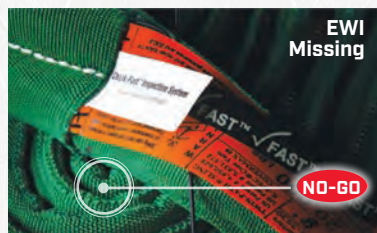


CHECK-FAST® INSPECTION SYSTEM

Designed to improve job site safety, the Check-Fast® External Warning Indicator (EWI) provides a criteria for pass/fail inspection when the internal load-bearing core yarn may be damaged. The Check-Fast® Inspection System can also indicate ultraviolet (UV) light degradation, fiber-on-fiber abrasion, fatigue, and severe overload. If the sling is overloaded beyond its rated capacity, the EWI is designed to retract before the sling fails. The sling inspector now has an objective "GO/NO-GO" inspection device rather than relying on subjective and labor-intensive inspection techniques to guess if the load-bearing core yarns are in good condition.



FAST TAG & EWI EXTEND FROM COVER

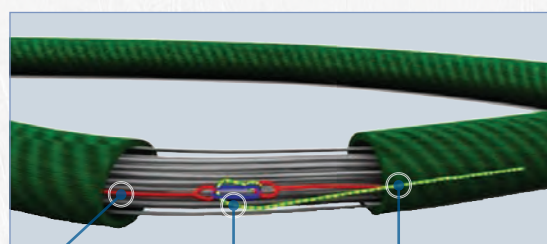


EWI IS MISSING: REMOVE FROM SERVICE

TWIN-PATH® EXTRA COVERMAX STOCK NO.	VERTICAL	CHOKER	RATED CAPACITIES (LBS) 5-1 D/F			APPROX. WEIGHT (LBS/FT) (BEARING-BEARING)	APPROX. BODY WIDTH (IN)
			BASKET HITCHES				
			U	60°	45°		
TPXCCF/TPXC 1000	10,000	8,000	20,000	17,320	14,140	.40	1.5 - 3
TPXCCF/TPXC 1500	15,000	12,000	30,000	25,980	21,210	.45	1.5 - 3
TPXCCF/TPXC 2000	20,000	16,000	40,000	34,640	28,280	.51	1.5 - 3
TPXCCF/TPXC 2500	25,000	20,000	50,000	43,300	35,350	.57	1.5 - 3
TPXCCF/TPXC 3000	30,000	24,000	60,000	51,960	42,420	.71	2.0 - 4
TPXCCF/TPXC 4000	40,000	32,000	80,000	69,280	56,560	.83	2.0 - 4
TPXCCF/TPXC 5000	50,000	40,000	100,000	86,139	70,700	1.14	2.5 - 5
TPXCCF/TPXC 6000	60,000	48,000	120,000	103,920	84,840	1.27	2.5 - 5
TPXCCF/TPXC 7000	70,000	56,000	140,000	121,240	98,980	1.39	2.5 - 5
TPXCCF/TPXC 8500	85,000	68,000	170,000	147,220	120,190	1.65	3.0 - 6
TPXCCF/TPXC 10000	100,000	80,000	200,000	173,200	141,400	1.84	3.0 - 6
TPXCCF/TPXC 12500	125,000	100,000	250,000	216,500	176,750	2.35	4.0 - 8
TPXCCF/TPXC 15000	150,000	120,000	300,000	259,800	212,100	2.66	4.0 - 8
TPXCCF/TPXC 17500	175,000	140,000	350,000	303,100	247,450	3.14	5.0 - 10
TPXCCF/TPXC 20000	200,000	160,000	400,000	346,400	282,800	3.45	5.0 - 10
TPXCCF/TPXC 25000	250,000	200,000	500,000	433,000	353,500	4.07	5.0 - 10
TPXCCF/TPXC 27500	275,000	220,000	550,000	476,300	388,850	4.61	6.0 - 12
TPXCCF/TPXC 30000	300,000	240,000	600,000	519,600	424,200	4.92	6.0 - 12
TPXCCF/TPXC 40000	400,000	320,000	800,000	689,112	565,600	6.54	7.0 - 14
TPXCCF/TPXC 50000	500,000	400,000	1,000,000	861,390	707,000	8.15	8.0 - 16
TPXCCF/TPXC 60000	600,000	480,000	1,200,000	1,039,900	848,000	10.20	9.0 - 18

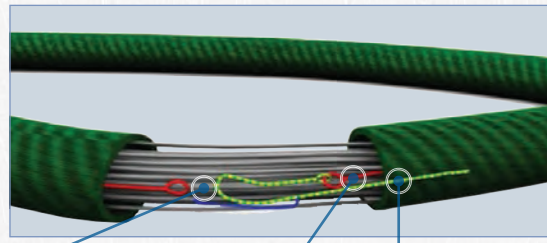
NOTE: When ordering a Twin-Path sling, the Check-Fast® Inspection System is included unless specified otherwise.

UNDAMAGED SLING



Sacrificial strand (same material as sling core yarns) "Weak Link" +/- 65% breaking strength vs. sling core yarns. External Warning Indicator (E.W.I.)

OVERLOADED SLING



Weak Link fails from severe overload. Sacrificial strand recoils. External Warning Indicator pulls violently into the sling



BUFFALO 716.826.2636 ROCHESTER 585.235.0160 ALBANY 518.438.0139 CONNECTICUT 203.481.3469
 SYRACUSE 315.299.4114 WATERTOWN 315.782.8247 CAROLINAS 704.220.1779 www.HANESUPPLY.COM

COVERMAX® COVERS

COVERMAX® COVER - UV RESISTANCE

ULTRA-VIOLET LIGHT (UV) RESISTANCE (TESTING)

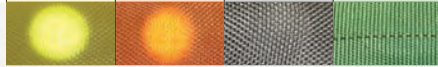
Because of the Covermax® tubing's thick dense structure the material restricts a vast majority of the ultra-violet rays that penetrate other round sling covers.

NO EXPOSURE

500 HOURS EXPOSURE



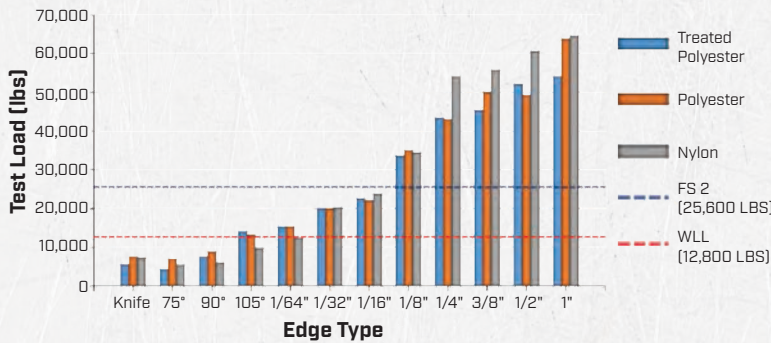
FIBER TYPE	NO UV EXPOSURE	NO COVER	DBL YELLOW POLY COVER	DBL ORANGE COVER	DBL BLACK POLY COVER	COVERMAX COVER
	BASE LINE	PERCENTAGE OF STRENGTH LOST AT 500 HOURS OF UV EXPOSURE TO COVERS / FIBER				
POLYESTER	100%	36%	12%	9%	5%	2%
ARAMID	100%	28%	28%	27%	9%	2%
K-SPEC®	100%	12%	-	-	-	1.13%



SLING PROTECTION

Once synthetic slings have been selected, they then need to be protected. Web slings and round slings can be quickly damaged from cutting and friction. In ASME B30.9 Slings it states, "Slings in contact with edges, corners, protrusions, or abrasive surfaces shall be protected with a material of sufficient strength, thickness, and construction to prevent damage". Edges have varying degrees of danger. You should protect all edges. This removes all subjectivity from the workers guessing which edges protection and which may not. All edges can cut a sling. A sling's design factor of 5:1 is not reached until the radius of the protected edge is approximately 1". THEREFORE: Slingmax® recommends cut protection for edges with a radius <1".

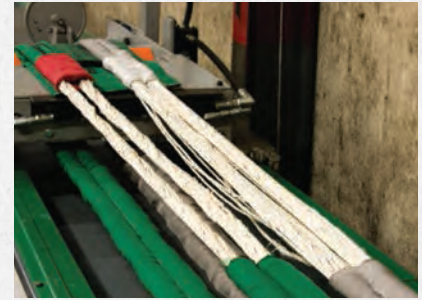
CHART 1: SLING BREAK LOAD VS. EDGE TYPE



COVERMAX® RIFLED COVER TECHNOLOGY

US PATENT #7,926,859

Rifled Cover® Technology is a major patented breakthrough only available on Slingmax® Twin-Path® high-performance fiber roundslings. Rifled Cover® Technology works like the inside of a rifle barrel, where the bullet spins as it leaves the muzzle of the gun. The helical winding of the core fibers significantly improves strength and efficiency.

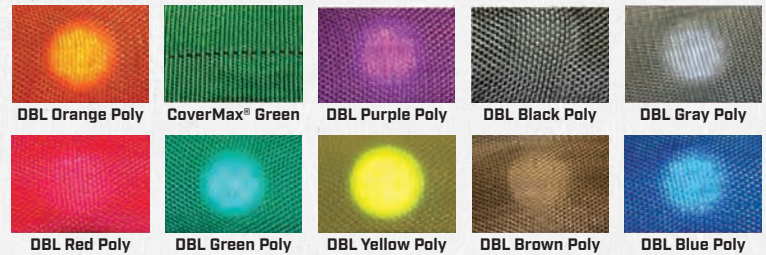


Twin-Path® high-performance roundslings with patented Rifled Cover® Technology yield three major advantages:

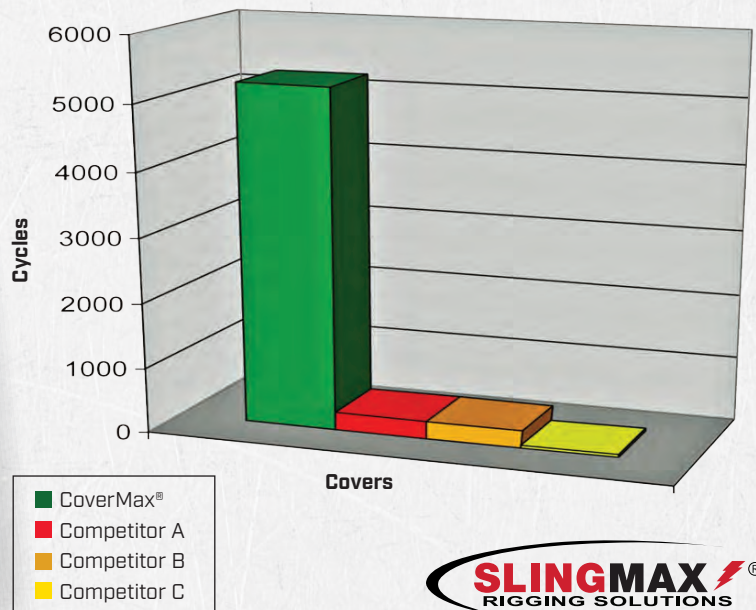
1. Increased strength-to-weight ratio. 17% increased breaking strength with the same amount of core yarn.
2. Consistent and predictable breaking strength for every sling.
3. Repeatability in the manufacturing process.

COVERMAX® COVER - ABRASION

Any Twin-Path® sling can be made with a Covermax® cover. This is made of a heavy-duty, double layer industrial nylon material. The outside cover is green and the inside cover is red. If you see any red showing through the green cover, stop using the sling and get a repair evaluation. This cover has been tested to provide the best ultraviolet (UV) protection and the best abrasion protection of any commercially available synthetic lifting sling. Below are summary charts of the cover tests.



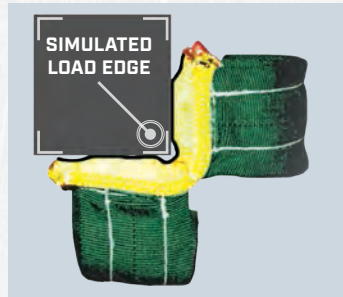
ROUNDSLING COVER ABRASION TEST RESULTS



TWIN-PATH® ACCESSORIES

CORNERMAX® PADS (EDGE PROTECTION)

Exposure of a sling to load edges or corners requires protection that is not susceptible to cutting because of toughness or zero contact. As shown in the photo, the CornerMax Pad forms a tunnel between the load edge and the pad. This geometric separation is essential in protecting the pad itself from contacting the load edge, which provides maximum protection to the sling.



Cornermax® pads have a rated WLL of 25,000 lbs. per inch of sling width.

CORNERMAX® PATENT PENDING			
STOCK NO.	SLING WIDTH (IN.)	APPROX WIDTH (IN.)	APPROX WEIGHT (TONS)
CRNMX02	1 & 2	4	1.00
CRNMX03	3	5	1.25
CRNMX04	4	6	1.50
CRNMX05	5	8	2.00
CRNMX06	6	8	2.00
CRNMX08	8	10	2.50
CRNMX10	10	12	3.00

SYNTHETIC ARMOR™ PADS (ABRASION PROTECTION)

(ABRASION PROTECTION)

Synthetic Armor Pads protect slings from abrasion damage which can be caused by contact with rough surfaces such as concrete beams and structures. They are also used to protect finished or painted loads from marring. These wear pads can be made to fit any length or width sling. They can also be made in long lengths which the customer can cut into suitable sizes on the job. Double or triple thickness provides resistance for the more severe conditions. There is no maximum width and a variety of materials are used to protect slings and to protect loads.



CORNERMAX® (CUT PROTECTION)

The CornerMax Sleeve is the latest in rigging protection from SLINGMAX® Rigging Solutions. The CornerMax Sleeve is the ideal solution to protect synthetic slings from cutting when it is not practical to use a CornerMax Pad, whether due to curvature of the load edge or repetitive uses such as unloading steel coils. Independent field and laboratory testing has shown the CornerMax Sleeve to be extremely cut resistant. The CornerMax Sleeve is made with Dyneema® Fiber and is proven tough. To prevent sliding, the 6" wide CornerMax Sleeve has been sewn down the middle (5") on each end of the Twin-Path Extra Sling (pictured). The true benefits of this revolutionary material far outweigh the costs and now provide for the use of synthetic slings in applications previously dominated by heavy chain, mesh and wire rope slings.



SHACKLE PIN PADS (ABRASION PROTECTION)

The pin area of a shackle can cause synthetic slings to cut and placing synthetic slings on the pin should be avoided. Even a new shackle can have a sharp edge where the threaded pin goes through the shackle ear. If the sling is exposed to this area, it can cut and fail. The Shackle Pin Pad is the latest SLINGMAX® SOLUTION in the constant effort to ensure the ultimate rigging safety of our customers. If you must rig on the pin, protect your sling with a Shackle Pin Pad.



SYN-GLIDE FILM (FRICTION PROTECTION)

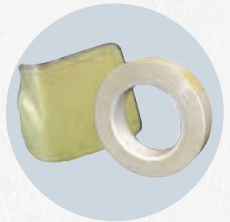
(FRICTION PROTECTION)

Syn-Glide Film is the only material available on the market today that reduces 70% of cover friction by allowing the cover to glide over itself or a piece of hardware. Syn-Glide is an important accessory for every rigger that works with Twin-Path® Slings. Syn-Glide is designed to eliminate the "bite" of the Covermax cover in situations where the cover is resting on itself when the weight of a load is applied.



Syn-Glide will:

- Decrease cost of job
- Eliminate large shackles and hardware
- Increase job-site safety
- Increase job speed
- Significantly reduce the need for sling repair



TWIN-PATH® EQUALIZER BLOCK

The Equalizer Block is used to maintain tension on all legs of the sling during a lift. Rather than adjusting slings and hooks prior to completing a lift, the Equalizer Block automatically adjusts itself when the load is put on the device from the sling. This product was designed specifically for Twin-Path® slings and is the only rolling block for synthetic roundslings.



TWIN-PATH® EQUALIZER BLOCK				
PART NO.	CAPACITY (5:1 DF)	MAX SLING WIDTH (IN.)	SUGGESTED SLING FOR 90° BASKET	BLOCK WEIGHT (LBS)
SEB10	10 US TON	3	TPXCF1000	44
SEB25	25 US TON	4	TPXCF2500	79
SEB50	50 US TON	6	TPXCF5000	220
SEB75	75 US TON	6	TPXCF7500	270
SEB125M	125 METRIC TON	8	TPXCF15000	640

TWIN-PATH® FIELD TAPER

The Twin-Path® Field Taper is a removable, repositionable wrap that reduces the width of TPXCF slings onsite. This is a tool that can be utilized to fit a sling into smaller openings without sacrificing sling capacity.



Benefits:

1. Removable and transferable from sling to sling.
2. Can be installed by the customer in the field.
3. Bearing points can be changed throughout the sling length.
4. Much quicker installation.
5. Doesn't contaminate a nuclear fuel pool.
6. Easy inspection of sling after use.