

Fortis² Sling



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 China Patent No. CN 105209368 - Australia Patent No. 2014239887 AU
 South Africa Patent No. 2015/07153

Fortis² Slings are heavy-lift, multipart slings made with our Unitrex™ XS Max Wear synthetic cable that has a core of Honeywell Spectra® fiber encased with neoprene and a tough braided jacket of high-tenacity polyester. The result is a heavy-lift sling of Unitrex™ XS that has the durability and stiffness of a wire rope sling at a fraction of the weight.

- 80% lighter than a comparable wire rope sling
- Stiff enough to push under objects
- More durable than traditional fiber slings
- One person able to lift eye to crane hook
- Easy to inspect for damage
- Will not corrode or rust
- Will not soak up water or freeze

Fortis² models 84 and up now come with standard ChafePro® HB Series chafe protection for the eye of the sling. The HB Series is constructed of multiple layers of FJORD, Inc.'s specially formulated and designed heavy-duty nylon weaves.

Abrasion testing has shown the Chafe-Pro HB Series to be more resistant to chafe abrasion than marine-grade fire hose and chafing gear made from such materials as HMW-PE (polyethylene), Kevlar, etc.

- Chafe-Pro HB series multi-layer design
- Easily removable for inspection
- Chafe-Pro Shore Grip Technology on inner layer prevents slipping on eye
- Easy latch system for quick opening of the material

Fortis² slings are tagged with the Etiflex tag.

- Ratings and warnings are molded into the tag, not printed
- Excellent abrasion resistance
- Resistant to most solvents and petroleum products
- Excellent UV resistance and all temperature performance
- High-visibility, two-color design
- Labels will not stain or mildew



Specifications

Weight Comparison

15 Ft Sling	Rated Capacity	Unit Weight	Weight per Rated Ton
	Vertical Tons	in Lbs	
Fortis ² Sling	50	44	0.9
9-Part Wire Rope	56	254	4.5
3-Part Wire Rope	46	200	4.4
Grade 80 Chain	36	363	10.1



Fortis² models 84 and up now come with standard ChafePro® HB Series chafe protection for the eye of the sling.

Sling Model	Color	Rated Capacity*			Weight Per Foot Lbs	Standard Eye Size Inches	Min. Length Feet
		Vertical	Basket	Choker			
44	Blue	28,000	56,000	22,400	0.7	22	7
53	Green	35,000	70,000	28,000	0.9	24	8
58	Orange	46,000	92,000	36,800	1.2	26	9
63	Yellow	58,000	116,000	46,400	1.4	28	10
71	Black	68,000	136,000	54,400	1.7	30	11
84	Blue	100,000	200,000	80,000	2.4	35	13
100	Green	128,000	256,000	102,400	3.3	40	15
115	Orange	160,000	320,000	128,000	4.3	45	17
125	Yellow	202,000	404,000	161,600	5.3	50	19
140	Black	250,000	500,000	200,000	6.6	55	21
170	Blue	338,000	676,000	270,400	9.4	60	24
180	Green	397,000	794,000	317,600	10.0	70	27
190	Orange	461,000	922,000	368,800	11.4	80	29
220	Yellow	550,000	1,100,000	440,000	14.5	90	33

* Rated capacity is based on 5:1 Design Factor.

Fortis² Sling – Inspection Criteria



Sleeve Abrasion – No Action Required

Sleeve abrasion is typical of normal use even with proper care. When inspecting the sling look for areas of localized abrasion; seek to minimize localized abrasion by avoiding sharp bends or contact with abrasive surfaces. Localized abrasion can lead to sleeve failure requiring repair. Uniform sleeve abrasion does not affect sling capacity.



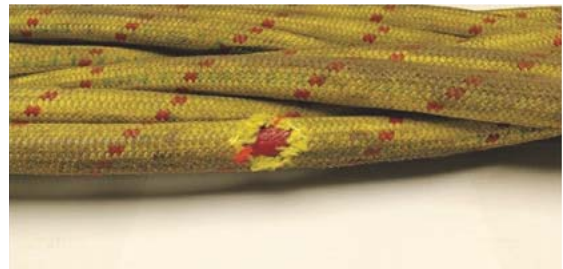
Damage Tape – Repairable

If inspection indicates damage to the red rubber tape there is a potential the load bearing core has been damaged. Carefully inspect the core for cut or frayed white polyethylene ends or any foreign contamination resulting from penetration of the rubber barrier. Foreign matter should be carefully removed to prevent internal abrasion of core ends. If no cuts or strand abrasion is apparent, the rubber barrier and sleeve can be fully repaired. Sling capacity is not affected.



Tail Ends Movement – Requires Expert Evaluation

Fortis² Slings have a unique tail termination system; the condition of the tails can indicate possible overload or abuse. If the black cold shrink is absent, or if the green painted tails have been pulled through the cold shrink, the sling should be reserved for additional detailed inspection. Inspect the braided body of the sling to ensure all of the strands are equal in length; there should be no loops or imbalance. Look closely for any glazing or melting of the outer polyester jacket, particularly near the sling tails.



Parted Sleeve – Repairable

Broken sleeve strands result from either localized abrasion or contact with sharp edges. The damaged area should be thoroughly inspected to be sure the load bearing core strands have not been damaged. Fortis² slings have a red rubber barrier under the protective sleeve which is easily cut if the sleeve is compromised, thus indicating potential damage to the core. Inspect the red barrier; if it is intact and no white polyethylene strands are seen through the sleeve can be repaired. Sling capacity is not affected.



Cut Core Ends – Requires Expert Evaluation

Any damage to the sling that might compromise the integrity of the core elements should be carefully inspected. Any sling where damage to the core elements has occurred should be immediately removed from service and held for additional detailed evaluation. Depending on severity of the damage the sling can be repaired or permanently removed from service.



Ends can be repaired if body is not distorted

If neither are present, the sling tails can be repaired by replacement of the black shrink tube over the end of the tails. If any distortion of the braided body of the sling is observed the sling should be immediately retired from service for expert evaluation.