

Wire Rope & Slings

WIRE ROPE AND SLING BASICS

Wire rope slings are both flexible and resistant to abrasion. These characteristics are determined by the rope construction. Fewer wires result in larger diameter wires, better abrasion resistance, and reduced flexibility. More wires result in decreased wire diameter, reduced abrasion resistance, increased flexibility, and kink resistance.

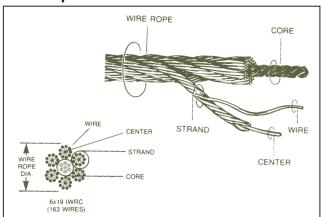
The scale below shows the relative position of the sling constructions shown in this catalog as they pertain to abrasion resistance and flexibility.

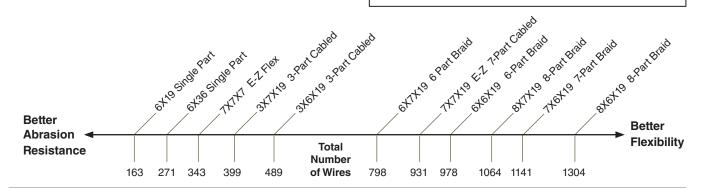
EIPS = Extra Improved Plow Steel

FC = Fiber Core

IWRC = Independent Wire Rope Core

Wire Rope Construction





WIRE ROPE SLINGS

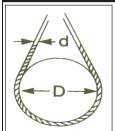
Features and Benefits

- Tuff-Tag for capacity and serial numbered identification for traceability and compliance with OSHA.
- Least expensive (per capacity), of all steel slings.
- Use of EIPS IWRC rope gives 15% greater capacity than IP (Improved Plow) IWRC ropes.
- Countless combinations of sling terminations: hooks, chokers, and thimbles are available to fit specific lift requirements.

Environmental Considerations

- IWRC must not be used at temperatures above 400°F.
- FC must not be used at temperatures above 180°F.
- Fiber core ropes should not be subjected to degreasing solvents.

D/d - Basket Hitch Effect



Tests have shown that when a sling body is bent around a diameter, the strength of the sling is decreased.

D/d ratio is the ratio of the diameter around which the sling is bent, divided by the body diameter of the sling.

The capacities in this catalog are based on the minimum D/d ratios that appear below each of the capacity tables. For more severe bending conditions, contact *Lift-All* for revised capacities.

Effect of Shackle Pin or Crane Hook on Sling Eye



Damage to slings can occur if the wrong size pin or hook is used. The width of the hook should never exceed the natural inside width of the eye.

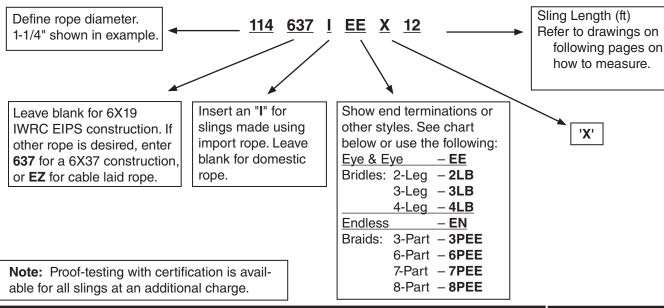
The eye dimension for each type and size of the slings are shown in the capacity tables of this catalog. If your pin or hook is large, request an oversized eye.

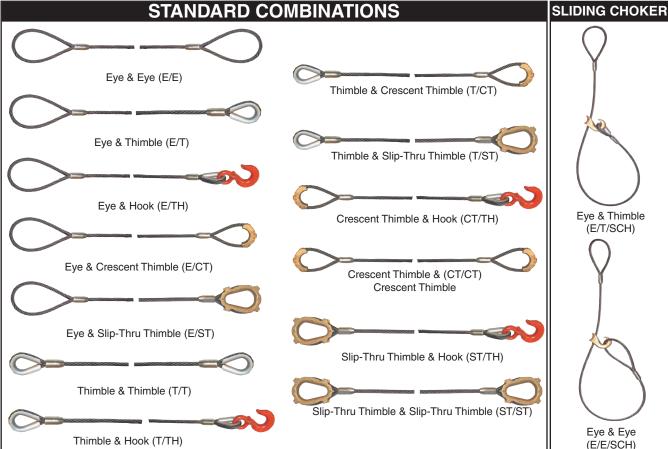
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HOW TO ORDER WIRE ROPE SLINGS

Prior to sling selection and use, review and understand the HELP section in this catalog. We have developed the following wire rope sling code system to help you in ordering these products.





Tolerances and Minimum Lengths

Refer to tables for tolerances and minimum lengths

Stretch

Approximately 1% at rated capacity.

Wire Rope Class

Standard rope classes are shown for each type and size of sling in the charts. Specific rope constructions are available upon request.