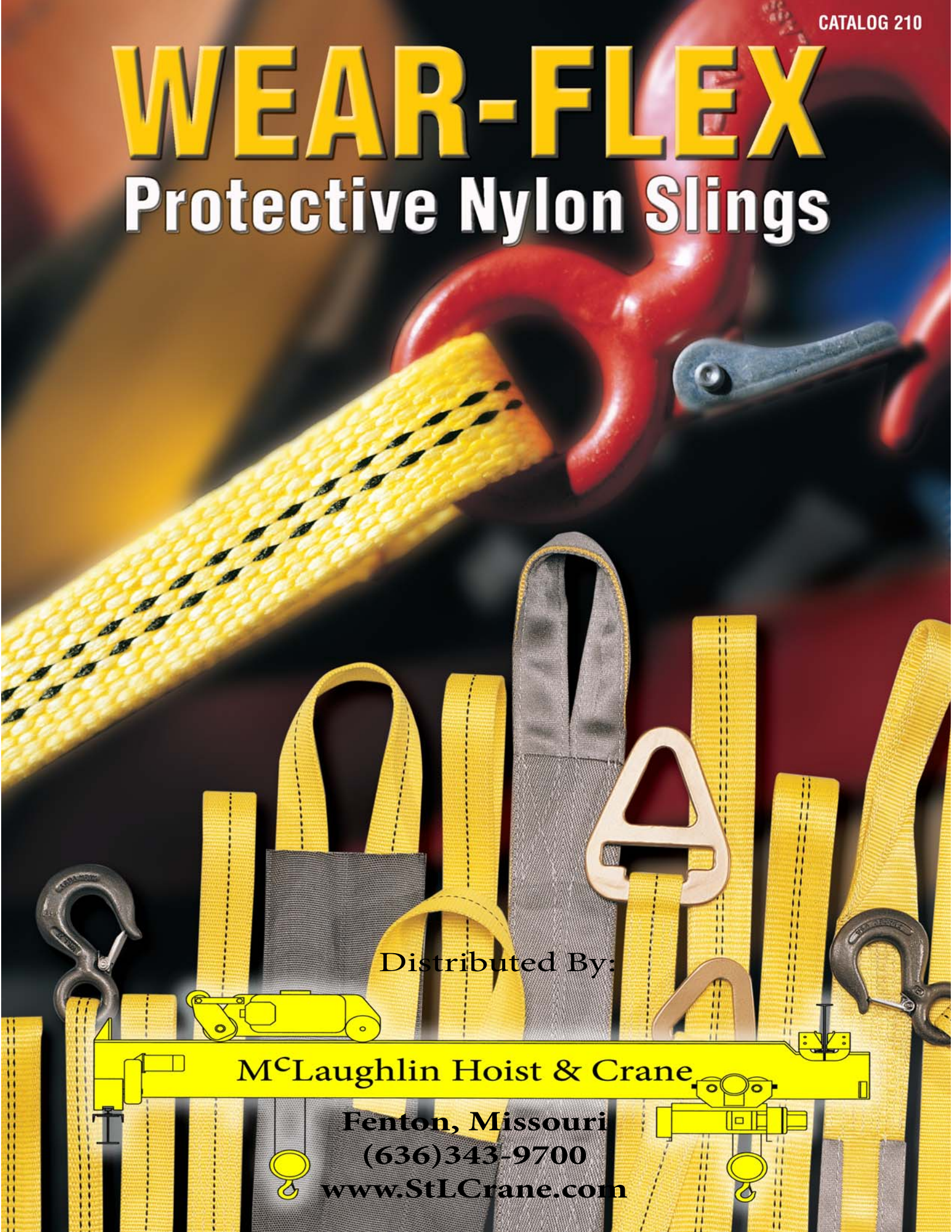
CATALOG 210

WEAR-FLEX

Protective Nylon Slings



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GENERAL INFORMATION
SAFETY
HOW TO ORDER
SAFE-LINE
SAFE-EDGE
RED-CORE & ROUND SLINGS
LOAD BINDERS
WEAR PADS & SLEEVES

WEAR-FLEX® SLINGS AMERICA'S LEADING MANUFACTURER OF PROTECTIVE NYLON SLINGS

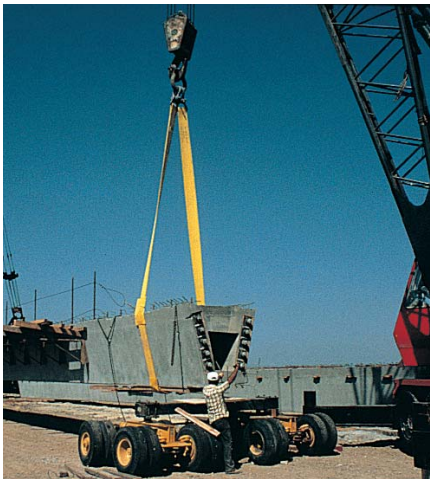
Since 1958, Wear-Flex has been the acknowledged leader in the field of synthetic slings. With the formation of our own weaving operation we can develop products and techniques not offered by other sling manufacturers. We have the distinction of being the only sling manufacturer to have total quality control over its product. Concentrating solely on synthetic slings, not as an accessory item to the chain and wire rope business, the expertise of Wear-Flex is unmatched by competitors.

The webbings used in Wear-Flex Slings lifting devices are woven on high speed needle looms. They are constructed of the highest tenacity industrial grade nylon available. The high elasticity and extraordinary strength of nylon, along with the advanced technology in synthetics today, allows us to manufacture a quality lifting tool.

With the most experienced technical engineers and production staff in the industry, Wear-Flex guarantees a quality product. Whether it is a standard cataloged sling or one of custom design, rest assured it will be handled the right way... the Wear-Flex way!

WEAR-FLEX NYLON SLING BENEFITS AND ADVANTAGES:

- Kink free and non-spinning
- Light weight and exceptionally strong
- Fast to rig and quick to unhitch
- Grips like a pair of human hands
- Easily handled and stored
- Non-sparking and alkali resistant
- Load rated with 5 to 1 design factor
- Shock absorbing and extremely flexible
- Stretches visibly and indicates load
- Available in capacities to 150 tons



PRODUCT QUALITY

All Wear-Flex synthetic web slings are manufactured under strict quality control to meet or exceed cataloged rated capacities and specifications.

Wear-Flex tests webbings, fittings and all repaired slings on our 200,000 lb. capacity tensile machine which is calibrated to meet or exceed ASTM E4 specifications. This is another step to insure product quality and keep safety at a premium.

PRODUCT CONFORMANCE

Wear-Flex synthetic web slings are tagged and meet or exceed all present requirements of OSHA and ASME B30.9.

FIELD SERVICE

Wear-Flex has an engineering service available to help with your lifting problems. Wear-Flex engineers, with many years of sling experience and professional training, are ready to assist you. Call either your local distributor or Wear-Flex direct.

CUSTOMER SERVICE

When you need a sling, our number one priority is to give you prompt service. With two strategically located manufacturing facilities, orders are shipped quickly and efficiently to anywhere in the United States or abroad.

DISTRIBUTOR NETWORK

Wear-Flex Slings are promoted and sold through our extensive distributor network system. Wear-Flex authorized distributors are knowledgeable in sling applications and capable of offering fast reliable service. Slings are often available from stock for immediate delivery.

SPECIAL SLINGS

If you require a sling not cataloged, Wear-Flex will manufacture it to your specifications. Wear-Flex grows by putting your needs for efficient lifting and safety first.

WEBBING REPLACEMENT

To help control costs, Wear-Flex can reweb existing fittings. Inspection of the fittings is required prior to the web replacement to determine if the fittings are reusable. Slings will then be proof-tested to twice their rated capacity in compliance with OSHA and ASME B30.9 Standards. A certificate of Conformance will be supplied upon request.

WEAR-FLEX
America's Leading Manufacturer of Protective Nylon Slings

WEAR-FLEX SAFETY DATA

WEAR-FLEX SLING I.D. TAG WITH INDIVIDUAL SERIAL NUMBER

WEAR-FLEX IDENTIFICATION TAG

Every Wear-Flex Sling has a heat-imprinted sewn-on tag that includes the sling stock number, length and rated capacity. It also has a nylon safety warning tag.

WEAR-FLEX SERIAL NUMBER

Every Wear-Flex Sling has an individual serial number imprinted on the identification tag which provides for positive identification necessary for inspection record purposes.

SERIAL NUMBER LEGEND

2 28069160

Indicates plant of manufacture:
1. Chicago, IL
2. Winston-Salem, NC

Sequential number of sling manufactured

SAFETY PROGRAM

Our Safety Program is unequaled – as well as our slings being state-of-the-art, we also offer education to the user that is invaluable. In areas where sales engineers are available, Wear-Flex will conduct on-site Safe Load-Lifting Seminars. The seminars include recommended safety procedures for material handling with nylon slings, proper sling selection, recommended sling applications and sling maintenance procedures. Certificates of Achievement are available for those in attendance.

LIFE CYCLE SLING USE PROTECTION

A. Cataloged information and specifications

B. Wall load chart with sling-to-load angles

C. Pocket load chart with safety data

PROTECTIVE INSPECTION PROGRAM

D. ICU 97 Pamphlet

Recommended procedures for a complete system of inspection, protective care and maintenance

E. Inspection Record

Complete inspection record system for preventive maintenance program using individual sling serial number identification

F. Safe Load-Lifting Seminar certificate

TYPES OF HITCHES

CHOKER

VERTICAL

BASKET

WEAR-FLEX SAFETY DATA

TERMS AND DEFINITIONS

1. RATED CAPACITY

The term "Rated Capacity" represents the ratio of the minimum breaking strength divided by the design factor of 5 under the following conditions:

- In a straight pull
- When the sling is new
- Ideal sling conditions
- Ideal test conditions

Expressed as a formula, with a design factor of 5:

$$\text{Rated Capacity} = \frac{\text{Minimum breaking strength}}{5}$$

Catalog rated capacity charts are determined by actual tests. Do not exceed sling rated capacity.

The term "Rated Capacity" does not represent the sling's lifting capacity under all lifting conditions or at any time during the working life of the sling. When calculating a sling working load it is necessary to consider:

- The increased sling loading from lifting at angles. Refer to sling-to-load angle chart.
- The loss of sling strength through age, wear, or damage.
- The added sling loading of accelertion, deceleration and shock.

2. DESIGN FACTOR

"Design Factor" is the ratio between the sling's minimum breaking strength and the sling's rated capacity. Wear-Flex designs all slings to a minimum design factor of 5.

3. TOLERANCE

Wear-Flex Slings are manufactured to a tolerance of ±2% for single and double ply slings and ±4% for three and four ply slings.

4. BREAKING STRENGTH

The load at which any part of a sling breaks to destruction.

5. PROOF TEST

A load factor of two (2) times the rated capacity of the sling applied during a testing procedure.

6. ELONGATION

The measurement of stretch determined as a % of the no-load length. Wear-Flex nylon slings stretch approximately 5-7% at rated capacity and 30-33% at breaking strength. Elongation varies with web and sling construction. Polyester stretches approximately one half as much as nylon.

7. TEMPERATURE

The upper use limit for nylon and polyester as a sling material is 194° Fahrenheit (90° Celsius).

8. ULTRAVIOLET LIGHT

Untreated nylon is adversely affected by ultraviolet light exposure. For prolonged exposure to sunlight or other sources of ultraviolet light, slings should be treated or coated.

9. SHARP EDGES

Do not use on sharp edges without proper sling protection.

SAFETY TIPS

EYE SIZE

Right  Wrong 

Eyes should fit freely on the hook. Snug fits greatly increase eye strain.

CHOKER HITCH

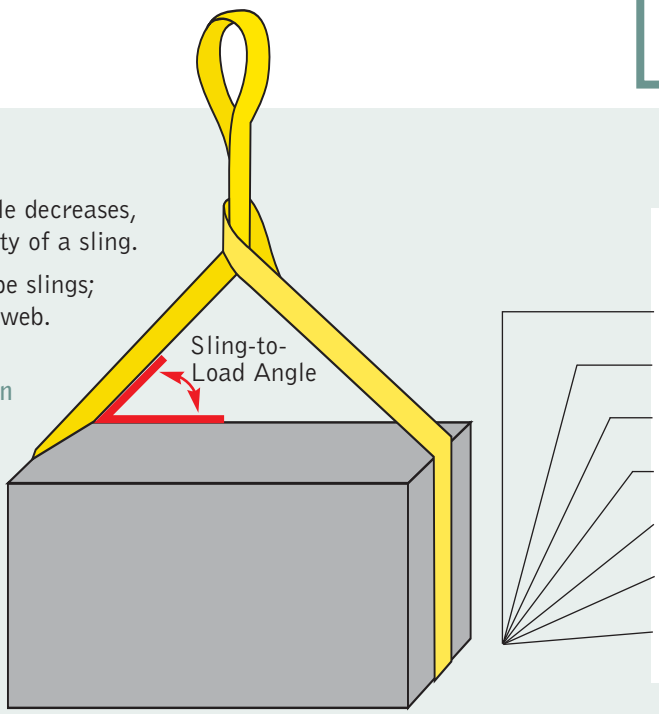
Tight chokes greatly increase sling stress. Full wrap before choke gives no-slip lifting.

SLING LOAD CHART

As the sling-to-load angle decreases, so does the rated capacity of a sling.

Use this chart for all type slings; rope, chain or synthetic web.

Sling-To-Load Angle is always the angle between the sling leg and the horizontal surface.



RATED SLING CAPACITY (one leg)

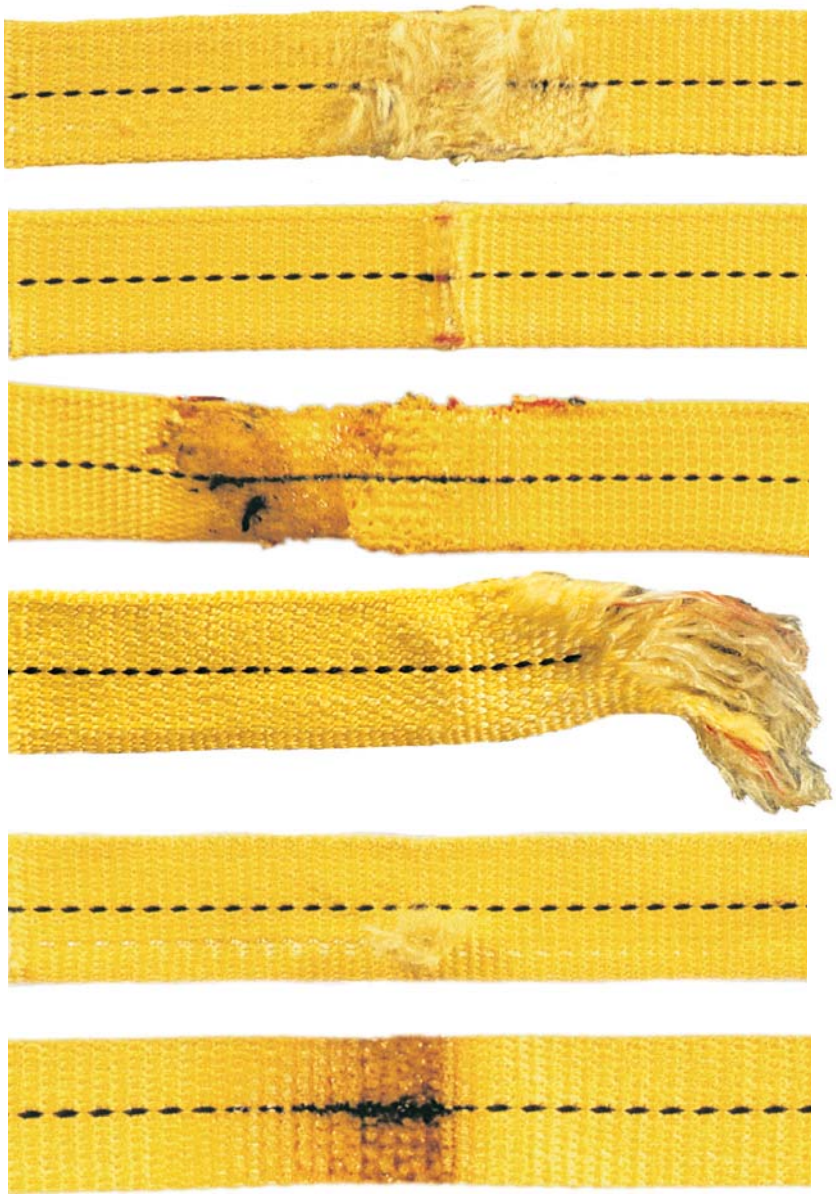
Sling-To-Load Angle	Sling Lifting Efficiency (in %)	Sling Capacity @ 90° (in lbs)	Actual Sling Capacity (in lbs)
90°	100.0	1000	1000
75°	96.6	1000	966
60°	86.6	1000	866
45°	70.7	1000	707
30°	50.0	1000	500
15°	25.8	1000	258
5°	8.7	1000	87

WEAR-FLEX®
America's Leading Manufacturer of Protective Nylon Slings

WEAR-FLEX SAFETY DATA

RECOGNIZING DAMAGE IN WEAR-FLEX NYLON SLINGS

Before using web slings, inspect the slings for any of the following damages. Never use a Wear-Flex sling if red core yarns become visible.



ABRASION DAMAGE

Can result from friction between the sling and an abrasive surface or from pulling the sling from under the load.

CUT DAMAGE

A cut is a clean break in the webbing resulting from contact with a sharp load edge. If inner red safety core yarns are visible, remove sling from service.

ACID DAMAGE

Acid or caustic vapors destroy the integrity of the nylon filaments. If slings show any sign of acid damage, promptly discard them.

TENSILE BREAK

Can result from sling overload. A frayed appearance at the failure point indicates this type of break. Never handle a load with an under capacity sling.

SNAGS & PUNCTURES

Sharp objects can snag or puncture sling webbing. Due to the inability to determine the amount of sling loss on this type of damage, remove the sling from service.

HEAT DAMAGE

A sling exposed to heat above 194° Fahrenheit (90° Celsius) has lost its efficiency and should be removed from service.

	Acids	Alcohols	Aldehydes	Strong Alkalis	Bleaching Agents	Dry Cleaning Solvents	Ethers	Halo-genated Hydro Carbons	Hydro Carbons	Ketones	Oils Crude	Oils Lubri - cating	Soap & Detergents	Water & Seawater	Weak Alkalis
Nylon	No	OK	OK	OK	NO	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Polyester	*	OK	NO	**	OK	OK	NO	OK	OK	OK	OK	OK	OK	OK	OK

*Disintegrated by concentrated sulfuric acid.

**Degraded by strong alkalis at elevated temperatures

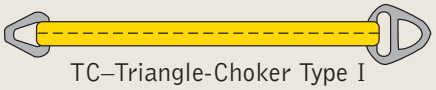
HOW TO ORDER

STEP 1: SELECT THE WEAR-FLEX SLING BEST SUITED FOR YOUR JOB.

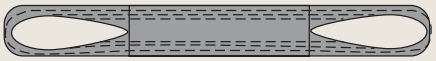
EN–Endless Type V

EE–Eye & Eye Type III

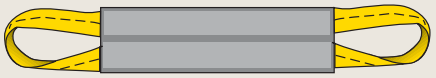
TT–Triangle-Triangle Type II



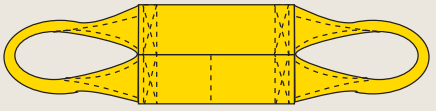
TC–Triangle-Choker Type I



RE–Reverse Eye Type VI

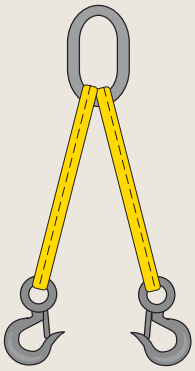


BG–Body Guard



CA–Cargo

PE–Patch Eye



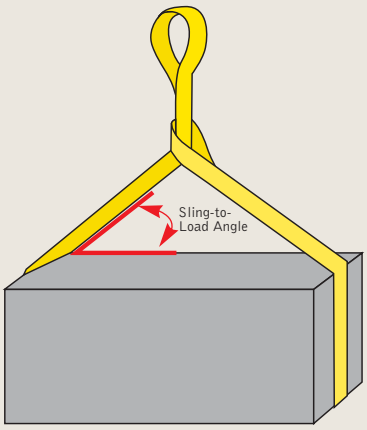
Bridle Sling

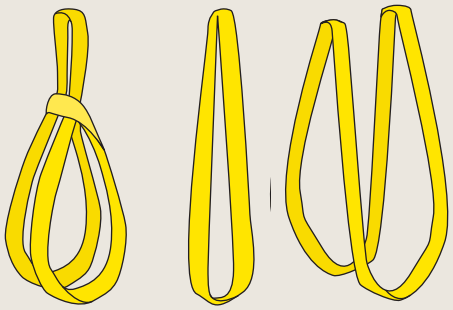
STEP 2. DETERMINE THE RATED CAPACITY REQUIRED TO SAFELY LIFT YOUR LOAD.

From rated capacity load charts, select a sling for the type hitch to be used, with a rated capacity that equals or exceeds the load. To determine required rated capacity, always consider the sling-to-load angle. Catalog rated capacities are given at the three sling-to-load angles.

30˚for a choker hitch 90˚for vertical and basket hitches

Refer to Sling Load Chart on Page 5.





Choker Hitch Vertical Hitch Basket Hitch

Illustrations are endless slings

STEP 3. DETERMINE BEARING TO BEARING SLING LENGTH TO SAFELY LIFT LOAD AND SPECIFY IN FEET.

STEP 4. ORDER SLINGS BY STOCK NUMBER.

Specify sling length in feet after stock number. Every Wear-Flex Sling has a stock number.

EXAMPLE:

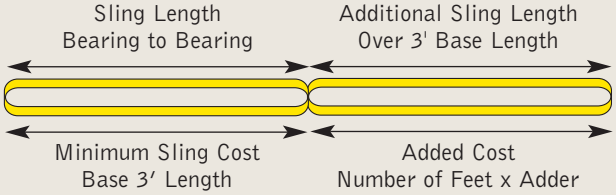
EN 1 – 0901 X 10FT

Sling type (see step 1)	Number of body plys *(except Safe-Line)	Sling and web construction detail	Sling width in inches	Bearing to bearing length in feet

*Safe-Line Slings do not have number of body ply designation because they are all single ply.

STEP 5: HOW TO PRICE A SLING.

Calculate sling prices by using the minimum bearing to bearing 3 ft. base price. To this, add the price of each additional foot over 3 feet. Each fractional foot is charged as a full foot. Minimum sling length varies with capacity and sling.



EXAMPLE:

EN1–0901 x 10 ft
3 ft. base price=$12.35
Adder price per foot=$1.95
x additional ft. (7)=$13.65
Total price for 10 foot sling=$26.00

Note: All prices subject to change without notice.