

SYNTHETIC WEB SLING TYPES & TERMS GUIDE

WEB SLING CONFIGURATIONS

Eye & Eye (EE)

Eye and eye slings have eyes sewn into both ends of the sling. Eye and eye slings can be configured with either a flat eye or twisted eye on both ends.



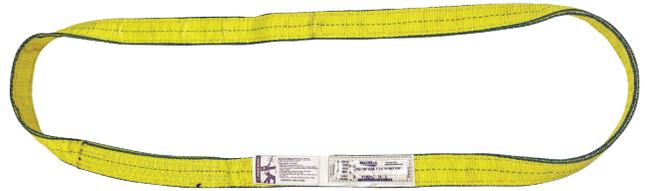
Reversed Eye

Reversed eye slings typically have reinforced eyes and wear pads on both sides of the body for premium resistance to wear and abrasion.



Endless / Infinite Loop (EN)

Endless web slings can be used in all three types of sling hitches. The sling can be rotated throughout its service life to minimize wear and avoid repetitive use damage at load-bearing points.



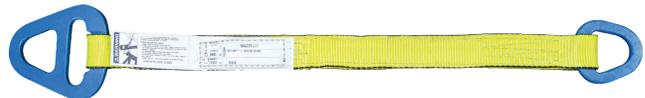
Wide Lift

Used in a basket hitch, wide lift slings have more surface area than traditional web slings and are used to support and protect bulky or delicate loads.

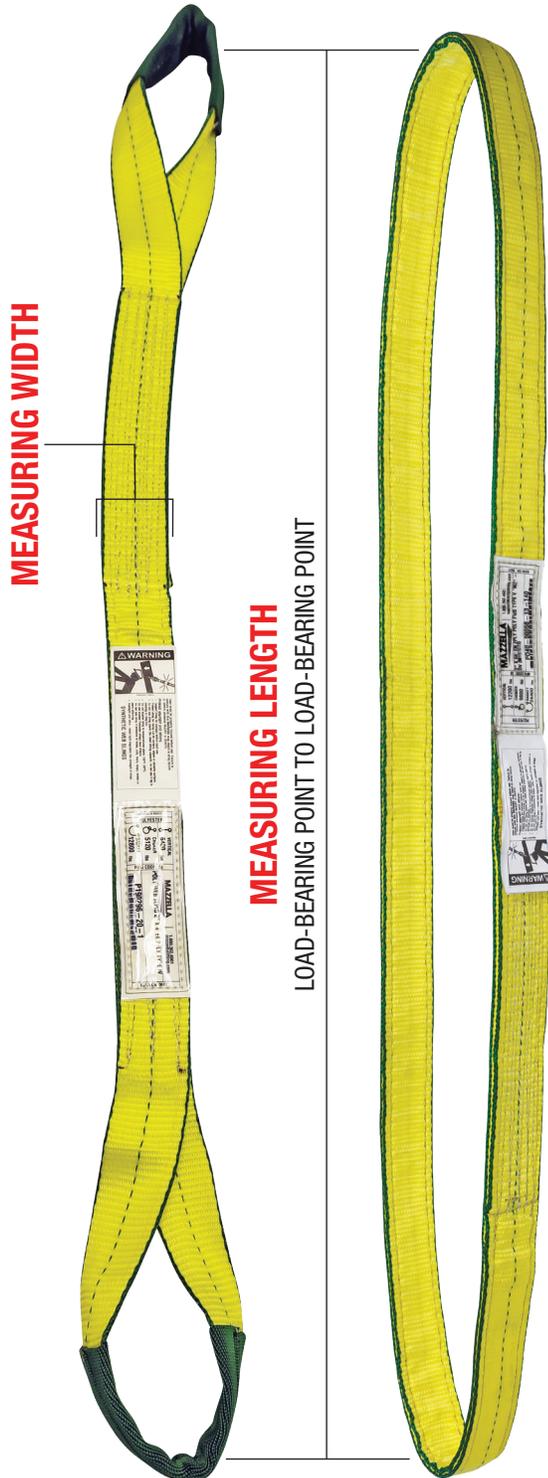


Triangle / Choker Fittings (TC)

These slings are configured with a triangle and choker fitting on either end and are typically used in a choker hitch, but can be used in vertical and basket hitches, as well.



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WEB SLING LENGTH

When determining sling length, measure from the top load-bearing point to the bottom load-bearing point. An eye and eye sling length is measured from tip to tip of the eyes. Multi-leg sling assemblies, or single-leg slings with fittings, are measured from the load-bearing point of any rings, hooks, or fittings.

WEB SLING WIDTH

Web slings can come in a variety of widths ranging anywhere from 1" to 12" in width. Larger width slings can distribute the load over a larger sling surface area for better load balance and control.

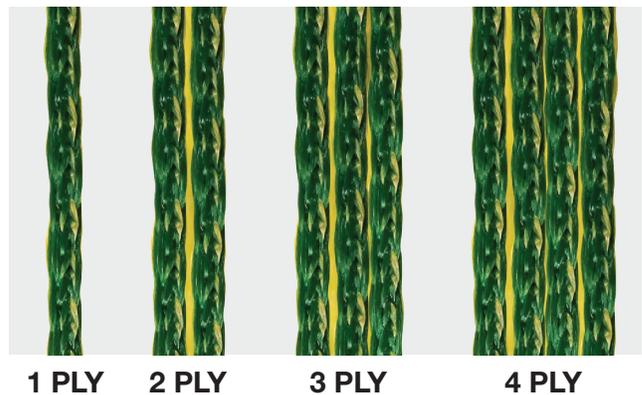
HITCHES

Synthetic web slings can be used in the following hitch orientations:



PLIES

The ply number, or number of plies, refers to the layers of webbing that make up the body of the sling. A web sling is generally available in 1, 2, 3, or 4-ply configurations. Adding more plies to the sling provides added strength to the body of the sling.



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MASTER LINK

- Oblong (Oval) Master Link
- Pear-Shaped Master Link
- Round (Circle) Master Link

MULTI-LEG ASSEMBLIES

- S0 Heavy Duty Nylon Web Bridle (Single Leg)
- D0 Heavy Duty Nylon Web Bridle (Double Leg)
- T0 Heavy Duty Nylon Web Bridle (Triple Leg)
- Q0 Heavy Duty Nylon Web Bridle (Quad Leg)

END FITTINGS

Sling Hooks

GOOD-FIT APPLICATIONS

Good-fit applications for synthetic web slings include:

- Manufacturing shops
- Outdoor environments (avoid prolonged UV exposure)
- Cleaner environments without flying debris

BAD-FIT APPLICATIONS

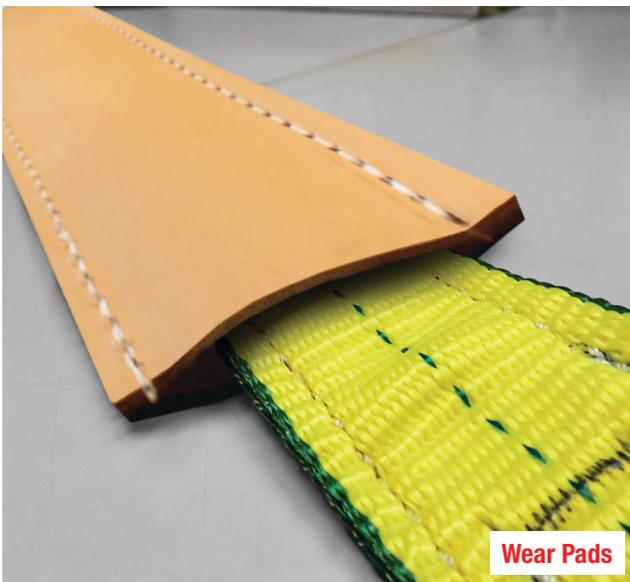
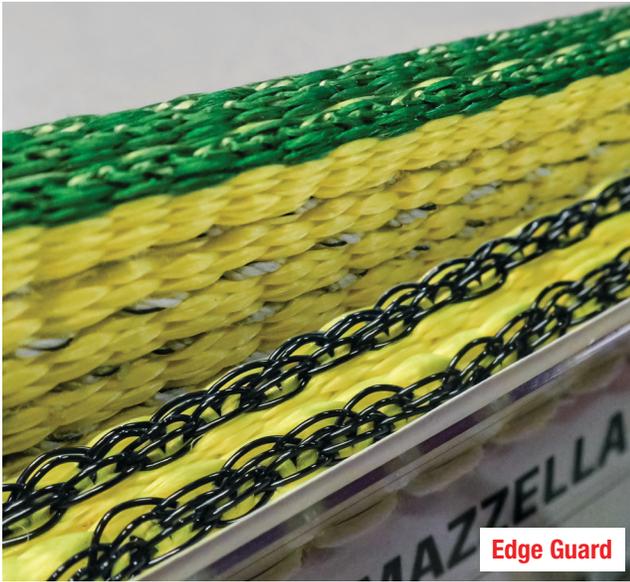
Any environment in which the web sling will be subject to cut or melt potential is a bad fit. Excess heat cause the fibers to melt, which will lead to sling failure. Also, in applications with sharp edges, web slings will not be a good fit.

You can use web slings outdoors, but once they get exposed to UV (ultraviolet) rays, it's going to degrade the sling very quickly, and you may not get as many uses. If you're using web slings in the weather, remember it's not good to submerge them in water for prolonged periods of time. If the slings see a little bit of rain, you'll be able to continue using them.

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WEB SLING PROTECTION

Sling protection should always be used if a synthetic web sling is going to be exposed to an edge or abrasive surface.

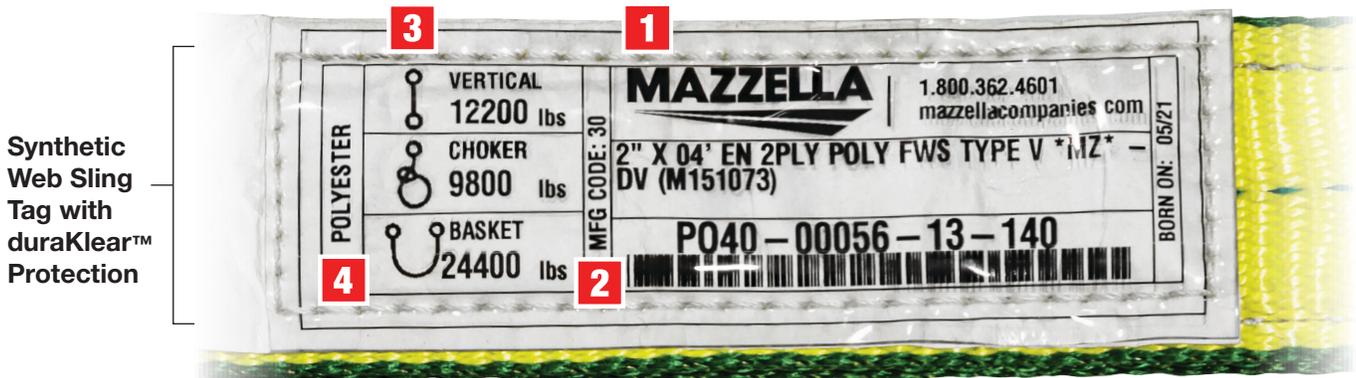


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HOW TO READ A MAZZELLA SYNTHETIC WEB SLING TAG

Per ASME B30.9, each synthetic web sling shall be marked by the manufacturer to include:

- 1** Name or trademark of the manufacturer, or if repaired, the entity performing the repair
- 2** Manufacturer's code or stock number
- 3** Rated load for at least one hitch type and the angle at which it is based
- 4** Type of synthetic web material
- 5** Number of legs, if more than one



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NYLON

- Unaffected by grease and oil and has excellent chemical resistance to aldehydes, ethers, and strong alkalis
- Not suitable for use with acids and bleaching agents, or at temperatures in excess of 194° F
- Stretch of a nylon sling at capacity is approximately 8–10%

POLYESTER

- Used primarily in conditions where acid is present and minimum stretch is desired
- Unaffected by common acids and bleaching agents
- Not suitable for use in conditions where concentrated sulfuric acid and alkaline is present, or at temperatures in excess of 194° F
- Stretch of a polyester web sling at rated capacity is approximately 3%

Guidelines on what type of slings can be used in conjunction with various types of chemicals

CHEMICALS	NYLON	POLYESTER
Acids	✗	*
Alcohols	✓	✓
Aldehydes	✓	✗
Strong Alkalis	✓	**
Bleach Agents	✗	✓
Dry Cleaning Solvents	✓	✓
Ethers	✓	✗
Halogenated Hydrocarbons	✓	✓
Hydrocarbons	✓	✓
Ketones	✓	✓
Oils (Crude)	✓	✓
Oils (Lubricating)	✓	✓
Soaps & Detergents	✓	✓
Water & Sea Water	✓	✓
Weak Alkalis	✓	✓

* Disintegrated by concentrated sulfuric acid

** Degraded by strong alkalis at elevated temperatures