

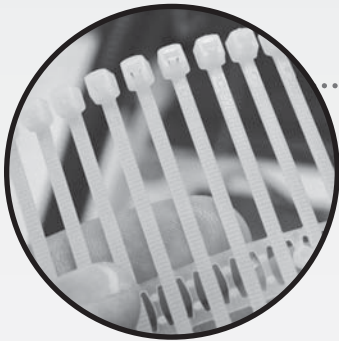
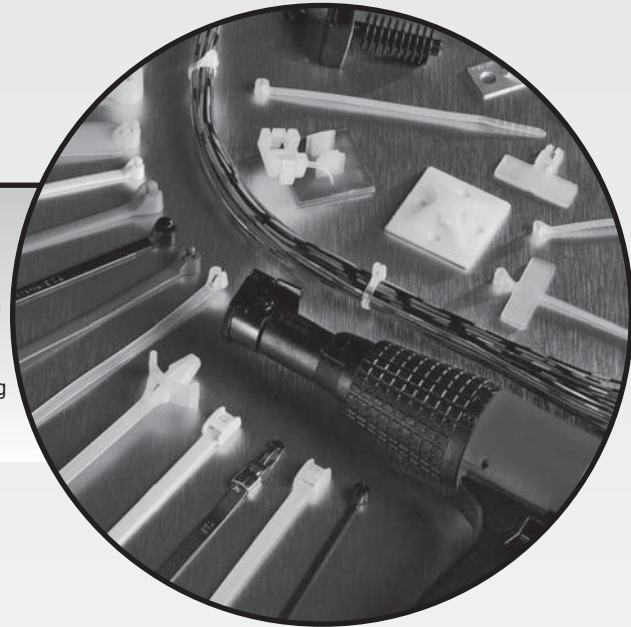
# Ty-Rap® Cable Fastening Systems

## Overview

### Trust Ty-Rap® to securely fasten your cables!

#### Installers Know and Trust Ty-Rap High-Performance Fastening Products from Thomas & Betts

Wire bundling is an integral part of modern electrical and electronic installations. To finish your harnessing and bundling project as reliably and economically as possible, choose genuine Ty-Rap cable ties. These fastening systems include a full range of cable ties, identification ties, clamps, bases, harnessing aids and installing tools. Using Ty-Rap fastening systems for all wiring jobs, large and small, will speed and improve the reliability of harnessing and wire bundling while saving you money.



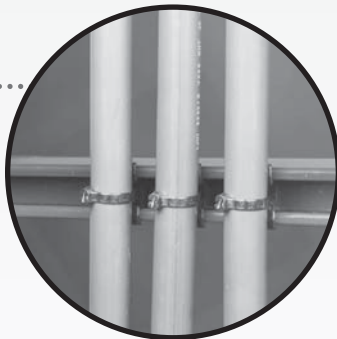
#### Harnessing


- **Harness Board pre-wiring prior to installation**
- **Large OEMs-Automotive, Aerospace, Computers, Electronics, Copiers, Appliances and other Durable Goods**

T&B fastening systems for large volume cable tying combine high-speed ergonomically designed automatic and semi-automatic tools, along with a wide selection of ties and harnessing aids to meet your application requirements. Accessories include various harnessing aids, retainers, supports, posts, pins and guides that allow the wire to be quickly routed with or without the use of nails.

#### Other Applications

- **HVAC**
- **Recreational**
- **Telecom & Utility**
- **Packaging**



Ty-Rap cable ties are remarkably well suited for a variety of other non-electrical applications. Ty-Rap cable ties exceed UL E4940S requirements for smoke developed and heat release for use in air handling spaces. Ty-Rap cable ties meet international standards such as CSA and CE as well as UL, , Belcor, ADC and military specifications in North America. T&B also offers a complete stainless steel an Deltec™ cable fastening system for demanding and weather-resistant applications. Choose genuine Ty-Rap cable ties for the rugged "Grip of Steel®." Look for the oval head.

#### Point-to-point and Long Distance Wiring

- **Bundling & fastening cables between equipment**
- **Panel & Machine Tool Builders**
- **Industrial & Commercial Applications, Refineries, Office Buildings**

Installers prefer the ease of use and exceptional durability of genuine Ty-Rap cable ties. Engineered for labor savings and high performance, Ty-Rap cable ties are commonly used in a variety of applications. Standoffs, bulkhead mounting bases, adhesive mounting bases and a wide variety of clamping devices will meet or exceed any requirements. Weatherable and special material Ty-Rap cable ties are exceptionally suited for years of service in extreme environments.

#### Cable Fastening Accessories

Choose from one of the largest assortments of mounting bases, clips and clamps, spacers, lashing straps, harness board accessories, braided wire sleeve, and accessories for heavy-duty lashing. Use Thomas & Betts cable fastening accessories for the finishing touch on your next wiring project.

#### Tools

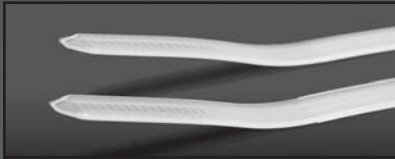
Ty-Rap installing tools finish the installation of the cable tie. Ties are cinched to the proper tension and the excess tail is cut off precisely flush with the head, leaving no sharp corners or ragged edges. Ty-Rap installing tools have narrow noses and slim profiles for work in tight spaces or between harness board nails. The operation is quick, reliable and cost effective.

# Ty-Rap® Cable Fastening Systems

## Why Choose Genuine Ty-Rap® Cable Ties?

### Rounded, Low Profile Head

gives a professional, quality look to wire bundling projects. The classic-shaped head is designed to prevent snags on uneven surfaces and more easily pull through bulkheads. There are no sharp edges, so these ties are also easier on the installer's hands.

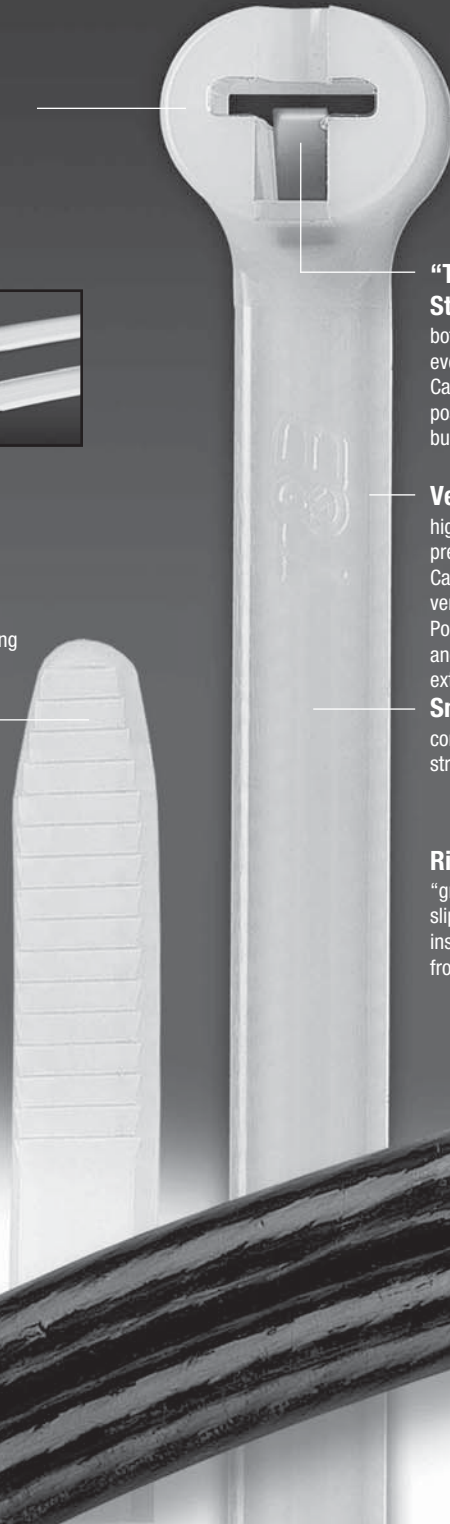


The **Turned-up Tail** orients the tie for easy assembly, making the ties easier to pick up on a flat surface.

**No-Slip Tail** provides easy grip during tensioning. Ty-Rap cable ties feature a unique friction surface design that's appreciated by more tradespeople.



For a whole bundle of reasons, trust only Genuine **Ty-Rap Cable Ties** by Thomas & Betts in your next wiring installation.

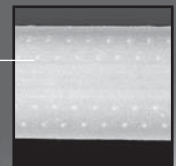


**"The Grip of Steel"® Non-Magnetic Stainless Steel Locking Barb** insures both maximum strength and the right tightness every time. Because there are no notches, Ty-Rap Cable Ties provide an infinite number of locking positions while fastening the tie at the precise bundle diameter.

**Versatile Nylon 6/6 Material** provides high strength, a wide temperature range and prevents toxic or irritating emissions. Ty-Rap Cable Ties are also available in weather-resistant versions, heat-stabilized, flame-retardant, Polypropylene, Nylon12, Fluoropolymer, Halar, and Stainless Steel materials for a variety of extreme environments.

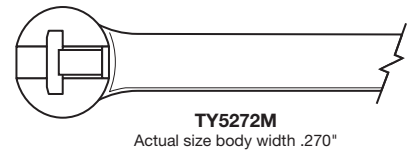
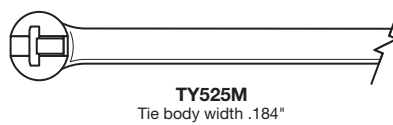
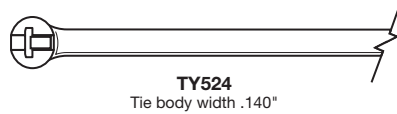
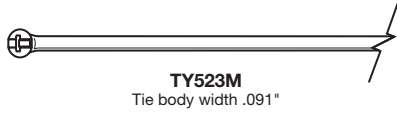
**Smooth, Notchless Body** reduces stress concentration points under tension, making the tie stronger and thinner than notched body ties.

**Ribbed and Stippled Body** "grips" the bundle and prevents slippage. Rounded edges protect insulation, preventing sharp edges from damaging cables.



When you choose a cable tie from T&B, you can count on quality, performance and innovation to make your work easier. Depending on your application, choose genuine Ty-Rap Cable ties Cable Ties, along with our wide assortment of quality accessories and installing tools to make installation hassle-free.

# Ty-Rap® Cable Ties



## Standard Nylon 6/6 Cable Ties

Std. Cat. No.	Bulk Cat. No.	Body Width (in.)	Length (in.)	Max. Wire Bundle Dia. (in.)	Military Standard Part No.	Tensile Strength (lb.)	Std. Pkg.	Bulk Pkg.
<b>TY523M</b>	<b>TY23M</b>	.093	3.62	.625	MS3367-4	18	100	1000
<b>TY52315M</b>	<b>TYB2315M</b>	.092	7.00	1.500	—	18	100	1000
<b>TY5232M</b>	<b>TY232M</b>	.086	8.00	2.000	—	18	100	1000
<b>TY5234M</b>	<b>TY234M</b>	.086	14.00	4.000	—	18	100	1000
<b>TY524M</b>	<b>TY24M</b>	.140	5.50	1.125	MS3367-5	40	100	1000
<b>TY5242M</b>	<b>TY242M</b>	.140	8.19	2.000	—	40	100	1000
<b>TY526M</b>	<b>TY26M</b>	.140	11.10	3.000	—	40	100	1000
<b>TY5244M</b>	<b>TY244M</b>	.140	14.50	4.000	—	40	100	1000
<b>TY525M</b>	<b>TY25M</b>	.185	7.31	1.750	MS3367-1	50	100	1000
<b>TY5253M</b>	<b>TY253M</b>	.187	11.6	3.000	MS3367-7	50	100	1000
<b>TY528M</b>	<b>TY28M</b>	.187	14.20	4.000	MS3367-2	50	100	1000
<b>TY5272M*</b>	<b>TY272M*</b>	.270	8.75	2.000	—	120	50	500
<b>TY527M†</b>	<b>TY27M**†</b>	.270	13.40	3.500	MS3367-3	120	50	500
<b>TY5275M</b>	<b>TY275M</b>	.270	18.00	5.000	—	120	50	500
<b>TY5277M</b>	<b>TY277M</b>	.270	24.30	7.000	—	120	50	500
<b>TY529M</b>	<b>TY29M</b>	.270	30.00	9.000	MS3367-6	120	50	500
<b>TY53510M†</b>	—	.320	35.00	10.000	—	175	50	—
<b>TY54513M†</b>	—	.320	45.00	13.000	—	175	50	—

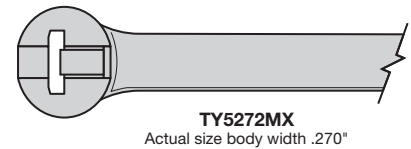
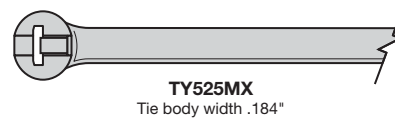
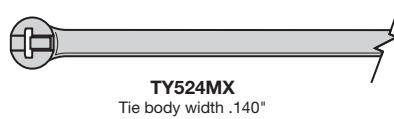
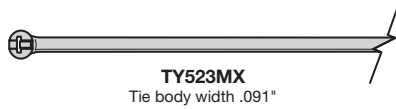
Cable ties made from natural nylon 6/6 are excellent performers in most applications. Nylon 6/6 is recommended for use in temperatures ranging from 185°F to -40°F.

† Recognized Models.

• CSA Certified Natural 6/6 Nylon Cable Ties are suitable for use in air handling spaces in accordance with rules 12-010 (3), (4) and (5), and 12-020 of the CEC.

\* Not CSA Certified

# Ty-Rap® Cable Ties



ULTRAVIOLET  
RESISTANT

The MX series cable ties are recommended for outdoor use. The addition of carbon black provides good ultraviolet resistance and prolongs the useful life of the cable tie.



## Nylon 6/6 Weather Resistant

Std. Cat. No.	Bulk Cat. No.	Body Width (in.)	Length (in.)	Max. Wire Bundle Dia. (in.)	Military Standard Part No.	Tensile Strength (lb.)	Std. Pkg.	Bulk Pkg.
TY523MX	TY23MX	.093	3.62	.625	MS3367-4	18	100	1000
TY52315MX	TYB2315MX	.092	7.00	1.500	—	18	100	1000
TY5232MX	TY232MX	.086	8.00	2.000	—	18	100	1000
TY5234MX	TY234MX	.086	14.00	4.000	—	18	100	1000
TY524MX	TY24MX	.140	5.50	1.125	MS3367-5	40	100	1000
TY5242MX	TY242MX	.140	8.19	2.000	—	40	100	1000
TY526MX	TY26MX	.140	11.10	3.000	—	30	100	1000
TY5244MX	TY244MX	.140	14.50	4.000	—	30	100	1000
TY525MX	TY25MX	.185	7.31	1.750	MS3367-1	50	100	1000
TY5253MX	TY253MX	.187	11.6	3.000	MS3367-7	50	100	1000
TY528MX	TY28MX	.187	14.20	4.000	MS3367-2	50	100	1000
TY5272MX <sup>†</sup>	TY272MX <sup>(1)</sup>	.270	8.75	2.000	—	120	50	500
TY527MX <sup>†</sup>	TY27MX <sup>(1)</sup>	.270	13.40	3.500	MS3367-3	120	50	500
TY5275MX	TY275MX <sup>**</sup>	.270	18.00	5.000	—	120	50	500
TY5277MX	TY277MX <sup>**</sup>	.270	24.30	7.000	—	120	50	500
TY529MX	TY29MX <sup>*</sup>	.270	30.00	9.000	MS3367-6	120	50	500
TY53510MX <sup>†</sup>	—	.320	35.00	10.000	—	175	50	—
TY54513MX <sup>†</sup>	—	.320	45.00	13.000	—	175	50	—

\* For military compliance of weather resistant black 120 lb. ties, replace suffix X with O (ie. TY27M-O).

<sup>†</sup> Not Listed or Recognized Models. / (1) Not CSA Certified

\*\* <sub>us</sub>

• CSA Certified Natural 6/6 Nylon Cable Ties are suitable for use in air handling spaces in accordance with rules 12-010 (3), (4) and (5), and 12-020 of the CEC.



**NEW**  
Now UV-Stabilized  
Nylon 6.6

## Ty-Rap® Nylon 6/6 Cable Tie – Colour Assortment

Std. Cat. No.	Body Width (in.)	Length (in.)	Max. Wire Bundle Dia. (in.)	Military Standard Part No.	Tensile Strength (lb.)	Std. Pkg.
TY525M-CLRS	0.184	7.31	1.75	–	50	10

Cable ties are same size as TY525M shown above. 10 ties in each colour (black, brown, red, orange, yellow, green, blue, purple, grey & white) are packaged. 100 total cable ties per package.

The colors you need in convenient packs!

Ty-Rap® Nylon 6.6 Cable Ties —  
Color Assortment



• Construction — nylon 6.6, 316 stainless steel locking device



Std. Pkg. Cat. No.	Bulk Pkg. Cat. No.	Description	Length (in./mm)	Tensile Strength (lb./n.)	Std. Bulk Qty
–	TY525M-CLRS	Multi-Coloured, Natural Nylon, (10 each of standard ten colours)	7.31/185.67	50/222.40	100 Ties
–	TY25M-0	Black, Natural Nylon	7.31/185.67	50/222.40	1,000 Ties
–	TY25M-1	Brown, Natural Nylon	7.31/185.67	50/222.40	1,000 Ties
–	TY25M-2	Red, Natural Nylon	7.31/185.67	50/222.40	1,000 Ties
–	TY25M-3	Orange, Natural Nylon	7.31/185.67	50/222.40	1,000 Ties
–	TY25M-4	Yellow, Natural Nylon	7.31/185.67	50/222.40	1,000 Ties
–	TY25M-5	Green, Natural Nylon	7.31/185.67	50/222.40	1,000 Ties
–	TY25M-6	Blue, Natural Nylon	7.31/185.67	50/222.40	1,000 Ties
–	TY25M-7	Purple, Natural Nylon	7.31/185.67	50/222.40	1,000 Ties
–	TY25M-8	Grey, Natural Nylon	7.31/185.67	50/222.40	1,000 Ties
–	TY25M-9	White, Natural Nylon	7.31/185.67	50/222.40	1,000 Ties

For use in temperatures ranging from -40° F to 185° F (-40° C to 85° C)

• UL Listed Natural 6.6 Nylon Cable Ties are suitable for use in air handling spaces (plenums) in accordance with Section 300.22 (C) & (D) of the National Electrical Code.

• 100 standard ties in black, brown, red, orange, yellow, green, blue, purple, grey and white (10 each)

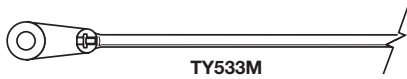
• Recommended tooling – ERG-50, WT1-TB

### How to Order Coloured Ty-Rap® Cable Ties and Accessories

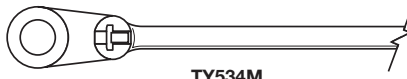
Natural nylon is standard. For coloured Ty-Rap® ties, add the following suffix numbers to catalogue numbers. **Example:** TY25M-2 would be read TY25M. (Consult customer service for ordering information.)

COLOR	SUFFIX NO.	COLOR	SUFFIX NO.	COLOR	SUFFIX NO.	COLOR	SUFFIX NO.
■ Black	X	■ Red	2	■ Green	5	■ Gray	8
■ (outdoor)		■ Orange	3	■ Blue	6	□ White	9
■ Brown	1	■ Yellow	4	■ Purple	7		

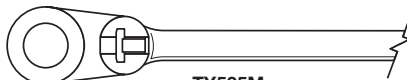
# Ty-Rap® Cable Ties



TY533M



TY534M



TY535M  
TY5354M

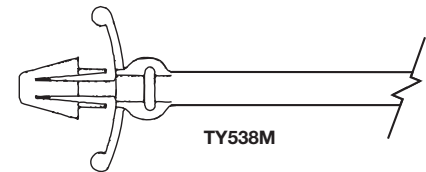


TY537M

• Great for use with screws, nuts and bolts for secure fastening to surfaces.



TY554M



TY538M



TY533MX



TY534MX



TY535MX  
TY5354MX



TY537MX

The MX series cable ties are recommended for outdoor use. The addition of carbon black provides good ultraviolet resistance and prolongs the useful life of the cable tie.

## Ty-Rap® Mounting Head Cable Ties

Std. Cat. No.	Bulk Cat. No.	Body Width (in.)	Length (in.)	Max. Wire Bundle Dia. (in.)	Mounting Hole	Tensile Strength (lb.)	Std. Pkg.	Bulk Pkg.
TY533M	TY33M	.091	4.00	.625	#4	18	100	1000
TY534M	TY34M	.140	6.00	1.125	#8	40	100	1000
TY535M	TY35M	.184	7.80	1.750	#10	50	100	1000
TY5354M	TY354M	.184	14.60	4.000	#10	50	100	1000
TY1435M	-	.189	7.8	1.77	.248	50	-	1000
TY635M	-	.189	7.8	1.77	.138	50	-	1000
TYF535M	TYF35M	.189	7.24	1.77	.138	50	100	1000
TY537M	TY37M	.301	13.90	3.500	1/4	120	50	500

Cable ties made from natural nylon 6/6 are excellent performers in most applications. Nylon 6/6 is recommended for use in temperatures ranging from 185°F to -40°F.



## Ty-Rap® Push Mount Cable Ties

For use in 3/16" and 1/4" pre-drilled holes. Thickness panel .094 max. (TY554M)  
Range .04 - .156 (TY538M)

Std. Cat. No.	Bulk Cat. No.	Body Width (in.)	Length (in.)	Max. Wire Bundle Dia. (in.)	Mounting Hole	Tensile Strength (lb.)	Std. Pkg.	Bulk Pkg.
TY554M	TY54M	.140	5.96	1.125	3/16	40	100	1000
TY538M	TY38M*	.184	7.80	1.750	1/4	50	100	1000

Cable ties made from natural nylon 6/6 are excellent performers in most applications. Nylon 6/6 is recommended for use in temperatures ranging from 185°F to -40°F.

\* Nylon 6/6 UV weather resistant version available (TY38MX).

## Nylon 6/6 Weather Resistant

Std. Cat. No.	Bulk Cat. No.	Body Width (in.)	Length (in.)	Max. Wire Bundle Dia. (in.)	Mounting Hole	Tensile Strength (lb.)	Std. Pkg.	Bulk Pkg.
TY533MX	TY33MX	.091	4.00	.625	#4	18	100	1000
TY534MX	TY34MX	.140	6.00	1.125	#8	40	100	1000
TY535MX	TY35MX	.184	7.80	1.750	#10	50	100	1000
TY5354MX	TY354MX	.184	14.60	4.000	#10	50	100	1000
TY538MX	TY38MX	.184	7.80	1.750	1/4	50	-	1000
TY537MX	TY37MX	.301	13.90	3.500	1/4	120	50	500



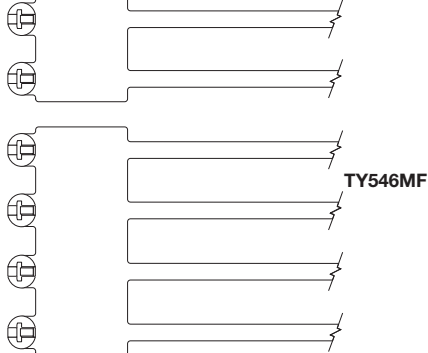
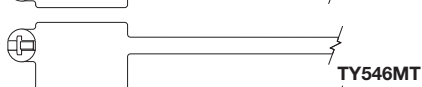
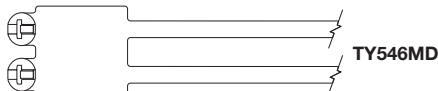
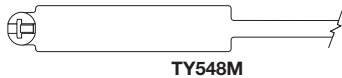
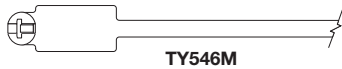
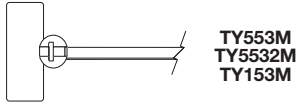
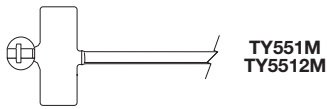
ULTRAVIOLET  
RESISTANT

**Note:** The base catalogue number for Ty-Rap® cable ties is for natural (non-coloured) nylon without the UV-stabilizing additive, which is not suitable for outdoor use. For coloured UV-stabilized nylon Ty-Rap® cable ties, add the following suffix numbers to the base catalogue numbers. For example, TY25M is natural (non-coloured) nylon for indoor use only, while TY25M-2 is red UV-stabilized nylon for indoor or outdoor use. (Consult customer service for ordering information.)

### How to Order Colour-Coded Ty-Rap® Ties and Accessories

Colour	Suffix No.	Colour	Suffix No.
Black	X	Blue	6
Brown	1	Purple	7
Red	2	Grey	8
Orange	3	White	9
Yellow	4	Beige	22
Green	5		





**Ty-Rap® Identification Cable Ties**

Std. Cat. No.	Bulk Cat. No.	Body Width (in.)	Total Length (in.)	Max. Wire Bundle Dia. (in.)	Military Standard Part No.	Marking Pad Size (in.) W x H	Tensile Strength (lb.)	Std. Pkg.	Bulk Pkg.
TY551M	TY51M	.093	3.60	0.625	MS3368-5	1 x .313	18	100	500
TY5512M	TY512M	.090	8.30	2	-	1 x .313	18	100	1000
TY553M	TY53M	.093	4.00	0.625	-	.813 x .359	18	50	500
TY5532M	TY532M	.090	8.40	2	-	.813 x .359	18	100	1000
-	TY153M	.097	4.35	0.625	-	.781 x 1	18	-	500
TY546M	TY46M	.184	7.1	1.75	MS3368-1	.5 x .875	50	100	1000
TY548M	TY48M*	.187	14.2	4	MS3368-2	.5 x 2.125	50	100	1000
TY546MD	TY46MD*	.185	7.25	1.75	MS3368-3	1.172 x 1	50	50	500
TY546MT	TY46MT*	.185	7.25	1.75	MS3368-4	1.210 x 1	50	100	500
TY546MF	TY46MF	.185	7.25	1.75	-	2.48 x 1	50	-	500

Self-locking Ty-Rap® identification ties are available in both single and multiple configurations. They may be marked with the special Thomas & Betts black or red marking pen which produces a permanent legend, or they can be heat stamped. Because the ties serve the dual purpose of tying and identifying, you will achieve extra economies. They can be applied with the standard Ty-Rap® tying tools used for regular ties.

\* Nylon 6/6 UV weather resistant version available (add suffix "-x").



**Custom Heat Stamping**

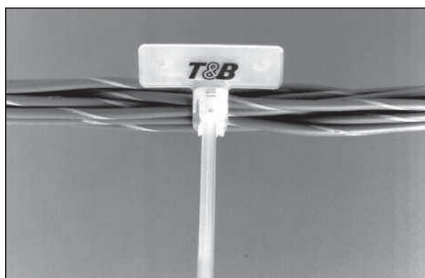
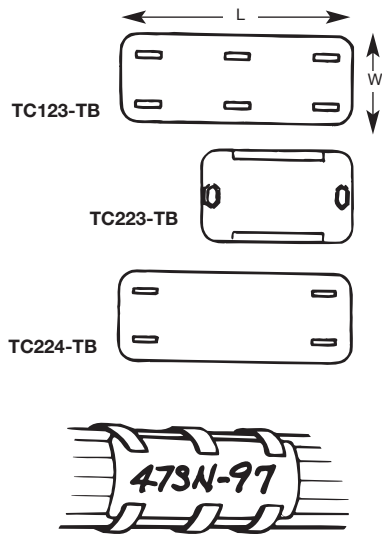
Thomas & Bett's Custom Heat Stamping provides an economical way to fasten and identify cable bundles. Mark nylon cable ties, identification cable ties, and identification plates to suit your application.

- 1/16", 1/8", 3/16" characters available.
- Standard Type: Gothic Capitol.
- Character sizes can be mixed from line to line on Identification cable ties.
- Alphanumeric and Sequential numbering available.

- Six digit sequential numbering available in 1/8" characters.
- Eight digit sequential numbering available in 1/16" and 3/16" characters.
- The following colours of heat stamping are available – Black, Blue, Green, Red, Yellow, Orange and White.
- Special logos and different type styles can be accommodated when camera ready artwork is provided.
- Minimum order quantity is 3000 pieces per part number and message.

Contact your Regional Sales Office for Pricing, Availability, Quotation and Order Entry.

# Ty-Rap® Cable Ties



*Snaps onto the head of a conventional cable tie to convert it to an identification tie.*

- *When snapped onto the tie head, the tag is conveniently held in place until it is permanently fastened.*
- *Offers maximized inventory control because the I.D. tag will accommodate different tie lengths and materials.*



## Identification Plates

Bulk Cat. No.	Width (in.)	Length (in.)	Thickness (in.)	Max. Cable Tie Width (in.)	Bulk Pkg.
TC123-TB	.75	1.25	.010	.190	1000
TC124-TB	.75	1.50	.010	.190	1000
TC125-TB	.75	1.75	.010	.190	1000
TC126-TB	.75	2.00	.010	.190	1000
TC128-TB	.75	2.50	.010	.190	1000
TC223-TB	.75	1.28	.015	.190	1000
TCZ223	.75	1.28	.015	.190	1000
TC224-TB	.75	1.28	.015	.190	1000
TC225-TB	.75	1.75	.015	.190	1000
TC226-TB	.75	2.00	.015	.190	1000
TC228-TB	.75	2.50	.015	.190	1000

Ranging in length from 1-1/4" to 2-1/2", the identification plates are secured to the cable with Ty-Rap® ties. They are composed of .010" and .015"-thick nylon, and have a surface which can be marked easily. Thomas & Betts offers custom heat stamping of your plates at the factory. Other materials are available. Contact customer service.

## Snap-On Identification Marker Tag

- Allows marking and bundling to be done in one operation.
- The marking can be made with a Thomas & Betts permanent marking pen (black or red); catalogue numbers: WT163M-1 (black), WT163M-3 (red).
- The identification tags are sold separately and can be conveniently snapped on the cable ties at the assembly location just before being installed on the bundle.

Std. Cat. No.	Bulk Cat. No.	Description	Marking Pad Size (in.) W x H	Std. Pkg.	Bulk Pkg.
TC523	TC23	Snaps onto the heads of all miniature 18 lb. series cable ties	1" x .35"	100	1000
TC524	TC24	Snaps on to the heads of all intermediate 30 & 40 lb. series cable ties	1" x .50"	100	1000
TC525	TC25	Snaps onto the heads of all standard 50 lb. series cable ties	1" x .50"	100	1000

Note: Made of natural nylon 6/6.

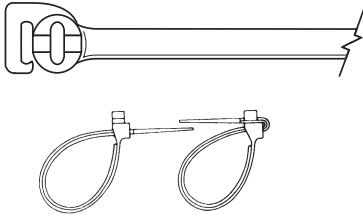
## Ty-Rap® Marking Pens

Cat. No.	Colour Ink	Std. Pkg.
WT163M-1	Black	1
WT163M-3	Red	1

Note: Permanent, fine point.



# Ty-Rap® Cable Ties



*This Ty-Rap® brand cable tie lets you secure wire bundles up to 1-3/4 inches in diameter to all masonry surfaces. It is equipped with a masonry plug which is driven into the drilled hole. Once installed, the tail is looped through the head to provide a neat, safe, low-profile installation. It is made of black, weather-resistant nylon.*



*The Drive-Ty™ cable tie gives you a fast, safe means of securing cables to wood surfaces.*



- One-piece design, fast and convenient to use.
- Lowers your installed cost.
- Clamping range of 1/16 to 2-3/8 inches reduces your inventory – one clamp replaces many.
- Visually attractive – head resembles rivet.
- Locking grooves maintain tight grip.

## Reusable Ty-Rap® Cable Ties

Cat. No.	Body Width (in.)	Length (in.)	Bundle Dia. (in.)	Tensile Strength	Std. Pkg.
<b>TYR505</b>	.184	7.50	1.75	50	100
<b>TYR508</b>	.184	14.30	4.00	50	100

Cable ties made from natural nylon 6/6 are excellent performers in most applications. Nylon 6/6 is recommended for use in temperatures ranging from 185°F to -40°F.

## Plug-Ty™ Cable Tie for Masonry Surfaces

Cat. No.	Body Width (in.)	Max. Wire Bundle Dia. (in.)	Masonry Hole Size	Pullout Force	Std. Pkg.
<b>TY544MX</b>	.184	1.75	1/4	25	50

## Drive-Ty™ Cable Tie

Cat. No.	Body Width (in.)	Max. Wire Bundle Dia. (in.)	Pullout Force	Std. Pkg.
<b>TY545MX</b>	.184	1.5	50	50

## Universal Button Head Cable Tie

Std. Cat. No.	Bulk Cat. No.	Body Width (in.)	Length (in.)	Max. Wire Bundle Dia. (in.)	Hole Size	Tensile Strength	Std. Pkg.	Bulk Pkg.
<b>TY541M</b>	<b>TY41M</b>	.225	9.60	2.37	.32-.68	65	50	1000
<b>650-41600</b>	–	.225	10.25	2.5	.32-.68	65	500	1000
<b>696-41848</b>	–	.225	12.5	3	.32-.68	65	500	1000

Note: Loop tie through hole in frame, around electrical, hydraulic, or air hoses to be clamped, and through head. Tighten and cut off with Ty-Rap tool. Visually looks like a rivet.

# Ty-Rap®

## Cable Ties for Special Environments

### Cable Ties – Material Selection Ordering Guide

Thomas & Betts offers Ty-Rap® cable ties and accessories in a wide variety of materials, each suited for specific environments. The purpose of this document is to assist you in choosing the best material for your particular application. The effects of weathering, flame, chemicals, extreme temperatures, and radiation on the different materials are clearly presented in the following tables to simplify this process. Once you have determined the most suitable material, you can choose from the wide variety of Ty-Rap® cable ties, identification ties, mounting bases, lashing ties, etc., offered by Thomas & Betts.

#### How to use Table 1:

Table 1 simplifies the material selection process by giving the relative performance ratings of the materials offered by Thomas & Betts. For example, if your application is in an extremely cold environment, four materials will answer your need: Fluoropolymer, nylon 12, Halar® +, and stainless steel. Then, cost may be your next most important criteria, so out of those four options, nylon 12 would be the most cost effective. However, if tensile strength is important, then stainless steel would be the better choice.

Refer to tables 2 (page 38) and 3 (page 40-42) for more detailed information regarding physical properties of the materials and chemical resistance of the materials respectively.

It is extremely difficult to provide data on all the possible combinations or conditions that can occur. This information is based on data provided by the manufacturers of the specific materials listed and is provided only as a general guide. No specific recommendation is intended. As each application may differ, cable tie samples should be tested in the intended application by the user to determine suitability.

+ - Halar® is the trademark of Solvay Solexis, Inc.

**TABLE 1**

**Available Materials**

**5 = Most Suitable    1 = Least Suitable**

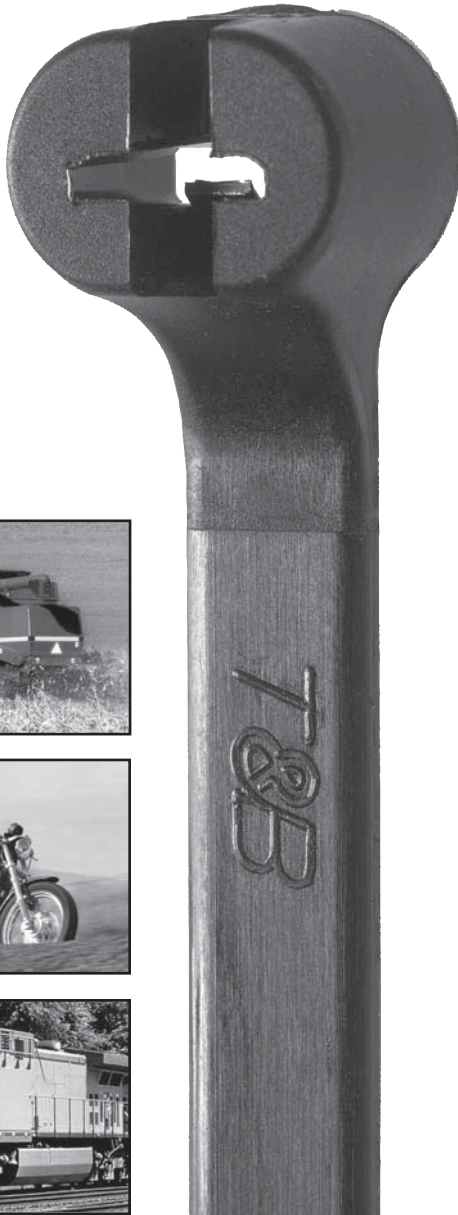
	Natural 66 Nylon	Weather Resistant 66 Nylon	Heat Stabilized Natural 66 Nylon	Flame Retardant 66 Nylon	Weather Resistant Nylon 12	Weather Resistant Polypropylene	Fluoro- polymer	Halar®	Stainless Steel	Weatherable Acetal
Ultraviolet Resistance	1	4	1	1	4	4	5	5	5	4
Radiation Resistance	1	1	1	1	1	1	4	4	5	1
Low Temperature	3	3	3	2	4	3	4	4	5	4
High Temperature	3	3	4	3	2	2	4	4	5	2
Flammability	3	3	3	4	1	1	4	4	5	1
Tensile Strength	3	3	3	3	2	1	3	3	5	2
Relative Cost	Low	Low	Low	Med	Med	Low	High	High	High	High
Chemical Resistance	See Table 3									



## Heat Stabilized/Ultraviolet Resistant Cable Ties

Ty-Rap® Heat Stabilized/Ultraviolet (UV) Resistant Cable Ties are a durable, cost effective bundling solution designed to be used in special applications and in harsh environmental conditions. The new ties combine heat stabilizing and UV resistant materials to provide a better match for special applications both in outdoor and high temperature areas. These ties also provide a smooth, low profile look and they offer unlimited tensioning range for a perfect fit. The convenience of a single tie for both applications keeps installation time and cost to a minimum. These ties are also an effective alternative to expensive metallic fasteners, which are priced higher and take longer to install. Remember to look for the oval head, which is featured on every original Ty-Rap® Cable Tie.

- Ideal for industrial OEM and MRO (includes, but not limited to industrial, lawn/garden/farming equipment, recreation vehicles, heavy equipment)
- Can be placed in environments requiring heat stabilized and UV resistance
- Provides a smooth, low profile look and offers unlimited tensioning range for a perfect fit
- Features an oval head on every original Ty-Rap® Cable Tie
- Quicker to install and less expensive than metallic fasteners, lacing cord or tape
- Made of heat stabilized nylon
- UV Resistant
- Black Colour
- Temperature Rating: (-40°F/-40°C) to (221°F/105°C)
- UL Recognized



### Ty-Rap® Heat Stabilized/UV Resistant Cable Ties

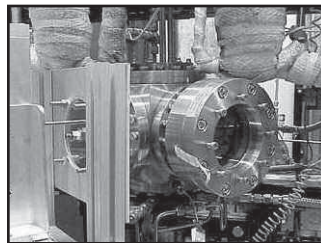
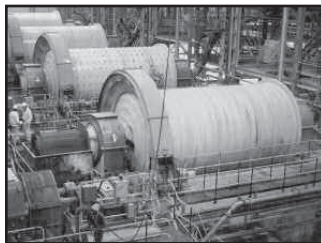
Cat. Number	Description	Std. Pkg. Qty.	UPC Number
TY23MX-A	Ty-Rap® Cable Ties, Heat Stabilized and UV Resistant Black Nylon, 3.62" length, 18 lb. tensile strength	1000 Per Bag	78621081641
TY24MX-A	Ty-Rap® Cable Ties, Heat Stabilized and UV Resistant Black Nylon, 5.5" length, 40 lb. tensile strength	1000 Per Bag	78621081615
TY25MX-A	Ty-Rap® Cable Ties, Heat Stabilized and UV Resistant Black Nylon, 7.31" length, 50 lb. tensile strength	1000 Per Bag	78621081636
TY27MX-A	Ty-Rap® Cable Ties, Heat Stabilized and UV Resistant Black Nylon, 13.40" length, 120 lb. tensile strength	500 Per Bag	78621081642



## Extra High Temperature Cable Ties

Ty-Rap® Extra High Temperature Cable Ties are designed to withstand extended usage in extra high temperature applications. The advanced nylon heat stabilizing material is suitable in an extra high temperature setting, thus reducing the need for expensive metallic fasteners. These ties also provide a smooth, low profile look and they offer unlimited tensioning range for a perfect fit. Ty-Rap® Extra High Temperature Cable Ties can save time, money and are a solid match for applications where extra high temperatures are present in the environment. Remember to look for the oval head, which is featured on every original Ty-Rap® Cable Tie.

- Ideal for industrial OEM and MRO (includes, but not limited to metal processing, paper mills, lighting and other high temperature environments) and commercial construction markets
- Provides a smooth, low profile look and offers unlimited tensioning range for a perfect fit
- Features an oval head on every original Ty-Rap® Cable Tie
- Made of extra high temperature nylon
- Light Green Colour
- Quicker to install and less expensive than metallic fasteners, lacing cord or tape
- Maximum continuous temperature rating in air: (-40°F/-40°C) to (302°F/150°C)



### Ty-Rap® Extra High Temperature Cable Ties

Cat. Number	Description	Std. Pkg. Qty.	UPC Number
TYHT23M	Ty-Rap® Cable Ties, High Temperature Light Green Nylon, 3.62" length, 18 lb. tensile strength	1000 Per Bag	78621095267
TYHT25M	Ty-Rap® Cable Ties, High Temperature Light Green Nylon, 7.31" length, 50 lb. tensile strength	1000 Per Bag	78621095270
TYHT27M	Ty-Rap® Cable Ties, High Temperature Light Green Nylon, 13.40" length, 120 lb. tensile strength	500 Per Bag	78621095272
TYHT28M	Ty-Rap® Cable Ties, High Temperature Light Green Nylon, 14.20" length, 50 lb. tensile strength	1000 Per Bag	78621095271



# Ty-Rap® Tote™



## 4", 8", and 11"–14" Combination Length Cable Tie Dispensers

Keep Ty-Rap® cable ties at your fingertips with Ty-Rap® Totes™. Ty-Rap® Tote™ cable tie dispensers are a fast and easy way to store and dispense cable ties between 4", 8", 11"–14" in length. Clip one to your belt or tool pouch, and free your hands for the rigors of the job. Your Ty-Rap® cable ties will be easily accessible when and where you need them.

- Durable, lightweight polyester exterior and tough vinyl interior construction
- Rugged diamond-shaped cutout for easy access to cable ties (up to 8", 11"–14" lengths) and rectangular-shaped (for 4" length)
- Handy belt clip and chrome steel loop for easy attachment
- Resealable hook-and-loop flap for easy refill
- Includes 100 genuine Ty-Rap® cable ties
- Refilling is a cinch
- Cable ties at your fingertips
- Free your hands for the job
- No more lost ties or dropped bags

### Ty-Rap® Tote™ Cable Tie Dispenser

Cat. Number	Description	Std. Pkg. Qty.	UPC Number
TY-TOTE-23	Ty-Rap® Tote™ 4" Cable Tie Dispenser (includes 1 pkg. TY523M)	1 Tote	78621095084
TY-TOTE-25	Ty-Rap® Tote™ 8" Cable Tie Dispenser (includes 1 pkg. TY525M)	1 Tote	78621083871
TY-TOTE-28	Ty-Rap® Tote™ 11"–14" Combination Cable Tie Dispenser (includes 1 pkg. TY528M)	1 Tote	78621097941

*Order only genuine Ty-Rap® Cable Ties to refill your dispenser!*

TY523M	Ty-Rap® Cable Ties, Natural Nylon, 3.62" length, 18 lb. tensile strength (100 to a pkg.)	100 Ties	78621080507
TY523MX	Ty-Rap® Cable Ties, UV Resistant (Black), 3.62" length, 18 lb. tensile strength (100 to a pkg.)	100 Ties	78621080508
TY525M	Ty-Rap® Cable Ties, Natural Nylon, 7.31" length, 50 lb. tensile strength (100 to a pkg.)	100 Ties	78621080509
TY525MX	Ty-Rap® Cable Ties, UV Resistant (Black), 7.31" length, 50 lb. tensile strength (100 to a pkg.)	100 Ties	78621080510
TY5253M	Ty-Rap® Cable Ties, Natural Nylon, 11.6" length, 50 lb. tensile strength (100 to a pkg.)	100 Ties	78621086989
TY5253MX	Ty-Rap® Cable Ties, UV Resistant (Black), 11.6" length, 50 lb. tensile strength (100 to a pkg.)	100 Ties	78621088513
TY528M	Ty-Rap® Cable Ties, Natural Nylon, 14.2" length, 50 lb. tensile strength (100 to a pkg.)	100 Ties	78621080513
TY528MX	Ty-Rap® Cable Ties, UV Resistant (Black), 14.2" length, 50 lb. tensile strength (100 to a pkg.)	100 Ties	78621080514

**Because Secret Ingredients  
Aren't Always a Good Thing.**





## Avoid Unpleasant Surprises with Ty-Rap® Detectable Cable Ties.

When you were six, you were thrilled to find the secret decoder ring at the bottom of the cereal box. But since then, you probably don't think of hidden surprises in food as a good thing. And if you're employed in food, beverage or pharmaceutical processing, the last thing you want is a consumer finding the trimmed-off end of a cable tie packaged with your product.

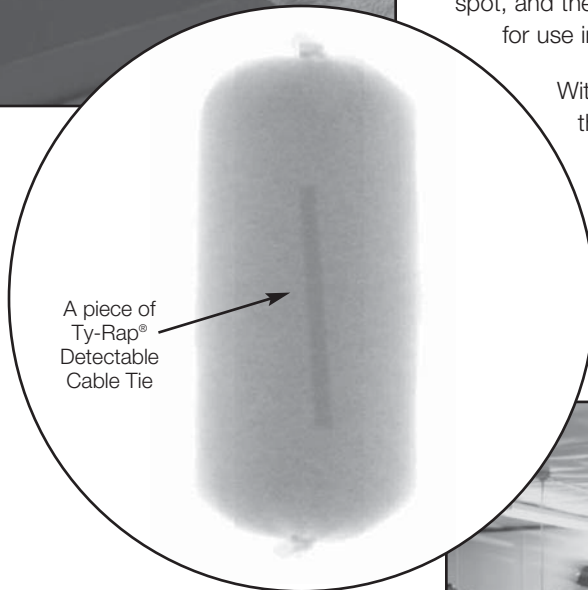
In fact, some manufacturing plants in industries sensitive to contamination have banned the use of nylon cable ties in their manufacturing plants, because standard nylon can pass unnoticed through metal detectors, x-ray equipment and standard visual detection systems.

Now there's an alternative to protect against potential contamination of your product with standard nylon cable ties or paying for expensive stainless steel fasteners. Ty-Rap® Detectable Cable Ties are made from standard nylon or polypropylene, but incorporate a unique, compound detectable by metal detectors and x-ray equipment. Their bright blue colour makes them easy to spot, and the polypropylene version is buoyant, making it ideal for use in liquid processing areas.

With Ty-Rap® Detectable Cable Ties, you have all of the advantages of the original Ty-Rap® Cable Tie, including a smooth body with an infinitely adjustable design, high-performance stainless steel locking device for a perfect fit and superior holding power — plus the peace of mind of knowing the integrity of your product is uncompromised.

### Detectable by:

- Metal detectors
- X-ray equipment
- Visual detection systems

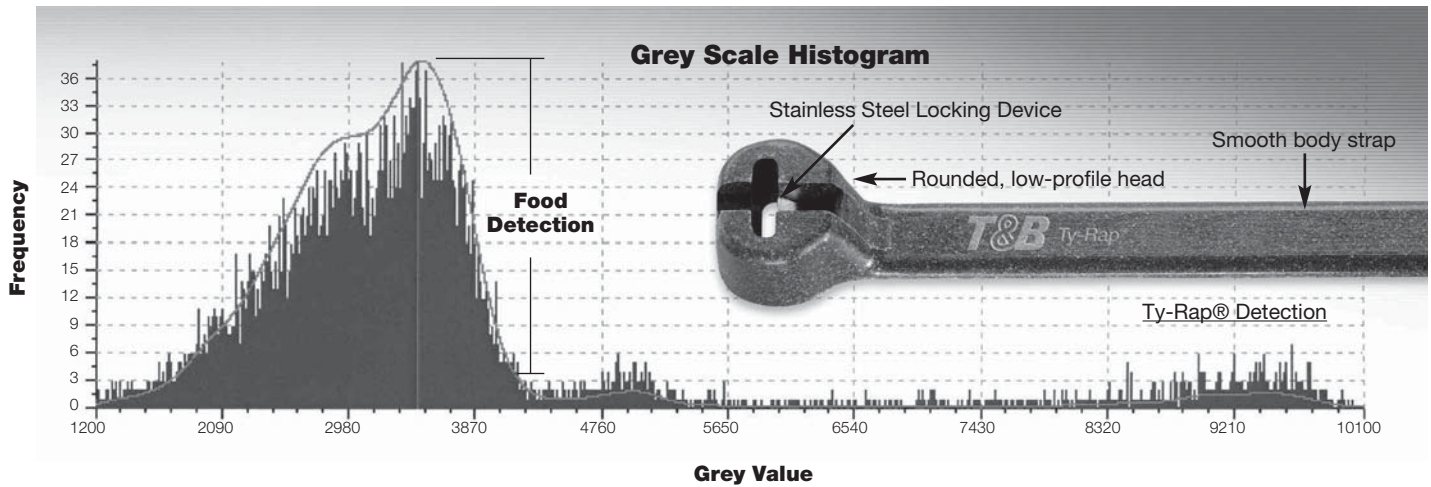


Contains a unique, compound detectable by metal detectors and x-ray equipment.



# Ty-Rap®

## Cable Ties for Special Environments



### Features

- Detectable by metal detectors set at minimum 1.5mm ferrous sphere
- Detectable by x-ray equipment
- Bright blue colour allows easy visual detection, especially on white conveyor systems
- Buoyant, polypropylene version available for use in liquid-processing applications
- “The Grip of Steel®” locking device offers superior performance
- Oval, low-profile head and smooth molded body shed contaminants
- Half the price of stainless steel fasteners
- Infinitely adjustable design ensures the right fit
- Maximum operating temperature: 185° F (85° C)
- Available in a variety of sizes and tensile ratings

### Typical Applications

- Food and beverage processing
- Pharmaceutical production
- Chemical and compounds manufacturing
- Tobacco processing
- Tire and airbag manufacturing
- Any other industry sensitive to contamination and using detection equipment



Ty-Rap® - Ty-Pak®



Ty-Rap® Detectable Cable Ties were tested by leading metal-detection and x-ray equipment manufacturers to ensure detectability.



The polypropylene version of Ty-Rap® Detectable Cable Ties floats, making it easy to spot in liquid-processing areas.





### Great addition to the Ty-Rap® Detectable Cable Ties!

## Ty-Gun™ Cable Tie Tool

No More Flying Cable Tie Tails — Cleanly Cuts Ties and Holds Tails Captive!

- Lightweight, break-through ergonomic design dramatically reduces user stress and strain
- 360° rotating nose enables operation from any position
- Front-access tension-adjustment wheel permits fast, easy changes



ERG50

### Ty-Rap® Detectable Cable Ties

Cat. Number	Length	Width	Bundle Dia. Max.	Tensile Rating	Std. Pkg. Qty.	UPC Number
Bright Blue Detectable — Compound Nylon 6.6						
TY523M-NDT	3.62"	0.093"	0.625"	18 lb./80N	100	78621099531
TY525M-NDT	7.31"	0.185"	1.750"	50 lb./220N	100	78621099533
TY527M-NDT	13.40"	0.270"	3.500"	120 lb./540N	50	78621099537
TY528M-NDT	14.20"	0.187"	4.000"	50 lb./220N	100	78621099535
Bright Blue Detectable — Compound Buoyant Polypropylene						
TY523M-PDT	3.62"	0.093"	0.625"	18 lb./80N	100	78621099532
TY525M-PDT	7.31"	0.185"	1.750"	30 lb./135N	100	78621099534
TY527M-PDT	13.40"	0.270"	3.500"	60 lb./267N	50	78621099538
TY528M-PDT	14.20"	0.187"	4.000"	30 lb./135N	100	78621099536

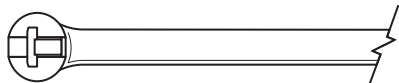
Cat. Number	Description	Std. Pkg. Qty.	UPC Number
Ty-Rap® TY-Pak®			
TB-RAP-100	Double-barrel module	1	78620986650
TB-RAP-200	Single-barrel module	1	78620986651
TB-RAP-300	Single-barrel module	1	78620986652
TB-RAP-110	Double-barrel module	1	78620986653
TB-RAP-210	Single-barrel module	1	78620986654
TB-RAP-310	Single-barrel module	1	78620986655
TB-RAP-211	Single-barrel module	1	78620986656
TB-RAP-311	Single-barrel module	1	78620986657

Cat. Number	Handle Colour	Tie Body Tension	Width Range	Std. Pkg. Qty.	UPC Number
Ty-Gun™ Cable Tie Tool					
ERG50	Black	18-50 lb.	0.094" – 0.184"	1	78621058790
ERG120	Red	50-120 lb.	0.184" – 0.301"	1	78621058788

Temperature rating: -40°F (-40°C) to 185°F (85°C)

# Ty-Rap®

## Cable Ties for Special Environments



FLAMMABILITY

### Flame Retardant Ties

Bulk Cat. No.	Body Width (in.)	Length (in.)	Max. Wire Bundle Dia. (in.)	Marking Pad Size (in.) W x H	Tensile Strength (lb.)	Bulk Pkg.
<b>TY23MFR</b>	.091	3.62	.625	NA	18	1000
<b>TY232MFR</b>	.091	8.00	2.00	NA	18	1000
<b>TY24MFR</b>	.140	5.50	1.125	NA	40	1000
<b>TY25MFR</b>	.184	7.31	1.75	NA	50	1000
<b>TY28MFR</b>	.184	14.20	4.00	NA	50	1000
<b>TY272MFR†</b>	.301	8.00	2.00	NA	120	500
<b>TY27MFR</b>	.301	13.20	3.50	NA	120	500
<b>TY53MFR</b>	.091	4.00	.625	.813 x .359	18	500
<b>TY153MFR</b>	.097	4.35	.625	.781 x 1	18	500

This material meets U.L. 94V-0 flammability rating. (85°C / 185°F)

† Not Ⓜ Recognized Model.

Colour – White



WEATHER RESISTANT



ULTRAVIOLET RESISTANT

### Nylon 12 Ties

Std. Cat. No.	Bulk Cat. No.	Body Width (in.)	Length (in.)	Max. Wire Bundle Dia. (in.)	Tensile Strength (lb.)	Std. Pkg.	Bulk Pkg.
<b>TC525MX</b>	<b>TYC25MX</b>	.184	7.31	1.75	35	100	1000
-	<b>TYC28MX</b>	.184	14.20	4.00	35	-	1000
-	<b>TYC272MX</b>	.270	8.00	2.00	85	-	500
-	<b>TYC27MX</b>	.270	13.20	3.50	85	-	500
-	<b>TYC29MX</b>	.300	30.00	9.00	85	-	500

This material provides very good resistance to ultraviolet light and chemical exposure. Nylon 12 is a lower, moisture-absorbing material than 6/6 nylon and the effect of water on properties is much less.

Colour – Black



HIGH TEMPERATURE

### Heat-Stabilized Ties

Bulk Cat. No.	Body Width (in.)	Length (in.)	Max. Wire Bundle Dia. (in.)	Tensile Strength (lb.)	Bulk Pkg.
<b>TYH23M</b>	.091	3.62	.625	18	1000
<b>TYH232M</b>	.091	8.00	2.00	18	1000
<b>TYH24M</b>	.140	5.50	1.125	30	1000
<b>TYH242M</b>	.140	8.19	2.00	30	1000
<b>TYH26M</b>	.140	11.10	3.00	30	1000
<b>TYH25M</b>	.184	7.31	1.75	50	1000
<b>TYH253M</b>	.184	11.40	3.00	50	1000
<b>TYH28M</b>	.184	14.20	4.00	50	1000
<b>TYH27M</b>	.270	13.20	3.50	120	500
<b>TYH272M</b>	.270	8.75	2.00	120	500
<b>TYH29M</b>	.301	30.00	9.00	120	500

Heat-stabilized ties are recommended for higher continuous temperature use (105°C / 221°F).

Material meets ASTM D4066 PA121.

Colour – Green Tint





ULTRAVIOLET  
RESISTANT



CHEMICAL  
RESISTANT

Many factors combine to determine the useful life of a cable tie, but none is as important as chemical exposure. Polypropylene cable ties are ideally suited for chemical environments.



LOW  
SMOKE

Ty-Rap® cable ties, made of Halar®, are designed for use in air-handling spaces. Due to its UL 94V-0 flammability rating and low-smoke density characteristics, Halar® material is most suitable in applications where flame resistance and smoke generation is a concern.



ULTRAVIOLET  
RESISTANT



RADIATION

Fluoropolymer cable ties offer high-radiation resistance and temperature stability to 338°F. Also, Fluoropolymer provides excellent resistance to ultraviolet light and meets U.L. flammability rating 94V-0.

### Weather-Resistant Polypropylene Ties

Bulk Cat. No.	Body Width (in.)	Length (in.)	Max. Wire Bundle Dia. (in.)	Tensile Strength (lb.)	Bulk Pkg.
TYP25MX	.186	7.01	1.75	30	1000
TYP28MX	.184	13.92	4.00	30	1000
TYP27MX	.270	13.17	3.50	60	500

Colour – Black



### Halar®\* Cable Ties

Std. Cat. No.	Bulk Cat. No.	Body Width (in.)	Length (in.)	Max. Wire Bundle Dia. (in.)	Tensile Strength (lb.)	Std. Pkg.	Bulk Pkg.
TYV523M**	TYV23M**	.091	3.62	.625	18	100	1000
TYV525M <sup>(1)</sup>	TYV25M <sup>(1)</sup>	.184	7.31	1.750	50	100	1000

\* Solvay Solexis, Inc. registered trademark.

Colour – Maroon

\*\* CSA Certified Natural 6/6 Nylon Cable Ties are suitable for use in air handling spaces in accordance with rules 12-010 (3), (4) and (5), and 12-020 of the CEC.

(1) cUL<sup>us</sup>



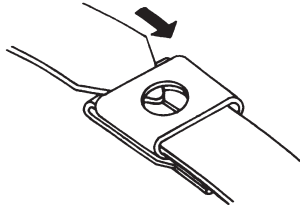
### Radiation Resistant Fluoropolymer Cable Ties

Std. Cat. No.	Bulk Cat. No.	Body Width (in.)	Length (in.)	Max. Wire Bundle Dia. (in.)	Tensile Strength (lb.)	Std. Pkg.	Bulk Pkg.
TYZ523M**	TYZ23M**	.091	3.62	.625	18	100	1000
TYZ525M <sup>(1)</sup>	TYZ25M <sup>(1)</sup>	.184	7.31	1.750	50	100	1000
TYZ528M	TYZ28M	.184	14.19	4.000	50	100	500
TYZ527M	TYZ27M	.301	13.38	3.500	120	50	100

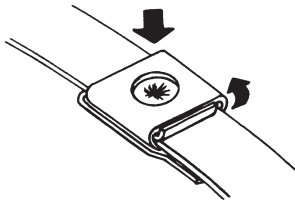
Colour – Aqua

\*\* CSA Certified Natural 6/6 Nylon Cable Ties are suitable for use in air handling spaces in accordance with rules 12-010 (3), (4) and (5), and 12-020 of the CEC.

(1) cUL<sup>us</sup>



After wrapping the object to be tied, insert the free end of the tie through the buckle and into the tool.



Squeeze the handle of the tool to create the dual lock and cut off the tail. The cable tie forms a low-profile dual lock.



- The tail is formed into a fold lock behind the buckle.
- The tool forces a dimple in the band into a hole in the buckle.

### Dual Lock

Thomas & Betts has a complete package of stainless steel cable ties and accessories that are easy to apply and superior in quality. These products have been designed for tying, lashing and identification applications in demanding environments such as boiler rooms, chemical plants, refineries, pulp/paper mills, shipyards and offshore oil platforms. They are made of a variety of high-quality stainless steel materials which offer excellent corrosion resistance, high temperature and durability characteristics. There is also a variety of high-quality installation and identification tools to complete your cable tie accessory needs.

For cable bundling, I.D. tags and other general bundling applications – especially in hazardous environments – Thomas & Betts Stainless Steel Cable Ties provide a strong, safe, permanent installation with a unique, dual lock.

The Type 304 stainless steel ties are completely fireproof – no toxic fumes, no sagging cables. They are extremely resistant to corrosion and UV light, with the ability to withstand the harshest temperature extremes. Yet they are surprisingly economical.

The low-profile ties are fast and easy to apply. A quick squeeze of the installation tool forms two strong locks – a dimple lock and a fold lock.

Their two-piece configuration adds to its versatility. Available in standard lengths to wrap bundle diameters from 1 to 10 inches, Thomas & Betts Stainless Steel Cable Ties can be supplied in other lengths on special order.

Low-profile Thomas & Betts Stainless Steel Ties are fireproof and resist corrosion, UV light and extreme weather conditions for safe, permanent cable bundling.

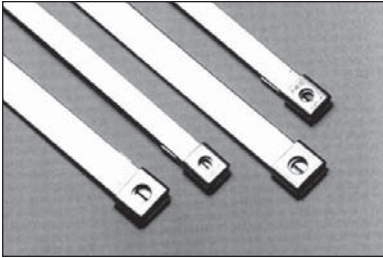
### Installation Hand Tool

The installation hand tool is a lightweight, pocket size hand tool which quickly and easily applies the stainless steel cable ties.

To use, simply separate the pull-up handle from the body, push the release lever down and insert the clamp tail as far as possible. Squeeze the pull-up handle until the band is tight. Finally, move the pull-up handle to the locking/cut-off position by moving it away from the body as far as it will go. Then squeeze to form the dual lock and cut off the excess tail.

### Catalogue Number System

TYS	6	280	C
CABLE TIE TYPE	LENGTH INCHES	WIDTH	COATED
SS = Two-piece solid stainless steel cable tie Type 304	6 = 6.0" long	280 = .280" wide	C = Nylon 11 coated _ = uncoated
TYS = Multi-lock stainless steel cable tie Type 316			
SSR = Reusable stainless steel cable tie Type 200/300			
SSH = Heavy duty stainless steel clamp Type 201			



**Strong, safe, low-profile permanent single wrap ties with a unique, dual lock.**



**A lightweight, pocket size hand tool which quickly and easily applies standard-size stainless steel ties.**

### Standard Stainless Steel Cable Ties

Cat. No.	For Bundle Diameter of		Tensile Strength lb.	Width		Length		Weight	
	in.	mm		in.	mm	in.	mm	lb.	kg.
<b>SS10-250</b>	2	51	200	.25	6.35	10.0	254	1.1	6.50
<b>SS17-250</b>	4	101	200	.25	6.35	16.5	419	1.8	0.82
<b>SS23-250</b>	6	152	200	.25	6.35	22.5	572	2.5	1.14
<b>SS29-250</b>	8	203	200	.25	6.35	29.0	737	3.2	1.45
<b>SS35-250</b>	10	254	200	.25	6.35	35.0	889	3.8	1.73

### Mini Stainless Steel Cable Ties

<b>SS7-180</b>	1	25	100	.177	4.5	6.5	165	0.7	0.32
<b>SS10-180</b>	2	51	100	.177	4.5	10.0	254	0.9	0.41
<b>SS16-180</b>	4	102	100	.177	4.5	16.0	406	1.4	0.64
<b>SS23-180</b>	6	152	100	.177	4.5	22.5	572	1.846	-
<b>SS29-180</b>	8	203	100	.177	4.5	29.0	737	2.346	-

304 Stainless Steel

Packaging Quantity: 100/bag

.015" (.38mm) Thickness

Note: Other lengths available on special request.

Add suffix **-316** for 316 Stainless Steel.

### Standard Tie Installation Tool

Cat. No.	Description	Weight	
		lb.	kg.
<b>WTA250</b>	Hand tool to apply standard stainless steel cable ties; easy to use tool applies tension, locks tie with the dual lock, and cuts off band flush with top surface of buckle	1.17	0.53

Packaging Quantity: 1/box

### Mini Tie Installation Tool

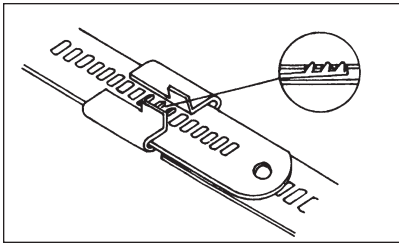
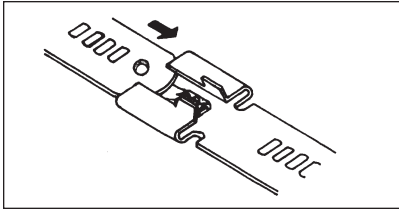
Cat. No.	Description	Weight	
		lb.	kg.
<b>WTA290</b>	Hand tool to apply standard stainless steel cable ties; easy to use tool applies tension, locks tie with the dual lock, and cuts off band flush with top surface of buckle	1.17	0.53

Packaging Quantity: 1/box

Note: Mini Installation Tools will only apply mini-size ties.



## Multi-Lok™ Stainless Steel Self-Locking Cable Ties



As the free end of the Multi-Lok™ tie passes through the buckle, three separate teeth (four teeth in the 12mm Multi-Lok™) mesh with corresponding slots in the band automatically locking the tie as it is being tensioned. Self-locking Multi-Lok™ Ties feature an extremely strong, unique multiple locking system.

Fire hazards ... corrosive environments ... temperature extremes ... for many cable bundling applications, plastic ties are simply inadequate—or even dangerous.

That's why we developed stainless steel Multi-Lok™ Ties. Unaffected by fire, UV or extreme temperatures, corrosion-resistant Multi-Lok™ Ties provide a safe, strong, worry-free hold.

Quickly and easily applied by hand or with the Thomas & Betts Cable Tie Tensioner or Tensioning hook, Multi-

Lok™ Ties feature a unique, self-locking, multiple-locking system that holds in excess of 200 lb.

Multi-Lok™ Ties are manufactured from Type 316 stainless steel and are available either uncoated or coated with halogen-free, non-toxic black Nylon 11. This weather-resistant coating is unaffected by UV sunlight. This adds resistance to corrosion, chemicals, and weathering. Ties are available in two widths and various lengths.



### Type 316 Stainless Steel–Nylon 11 Coated

Cat. No.	Tensile Strength		Width		Length		Weight	
	lb.		in.	mm	in.	mm	lb.	kg.
<b>TYS6-280C</b>	250		.276	7	6	150	.66	.30
<b>TYS9-280C</b>	250		.276	7	9	225	.99	.45
<b>TYS12-280C</b>	250		.276	7	12	300	1.32	.60
<b>TYS18-280C</b>	250		.276	7	18	450	1.76	.80
<b>TYS24-280C</b>	250		.276	7	24	610	2.64	1.20
<b>TYS6-470C</b>	250		.472	12	6	150	1.10	.50
<b>TYS9-470C</b>	250		.472	12	9	225	1.65	.75
<b>TYS12-470C</b>	250		.472	12	12	300	2.20	1.00
<b>TYS18-470C</b>	250		.472	12	18	450	2.97	1.35
<b>TYS24-470C</b>	250		.472	12	24	610	4.29	1.95

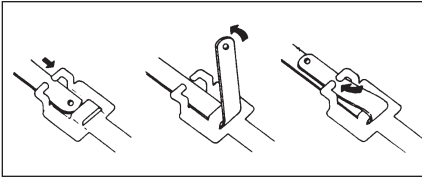
Packaging Quantity: 100/bag  
.010" (.245mm) Thickness

### Type 316 Stainless Steel–Uncoated

Cat. No.	Tensile Strength		Width		Length		Weight	
	lb.		in.	mm	in.	mm	lb.	kg.
<b>TYS6-280</b>	250		.276	7	6	150	.66	.30
<b>TYS9-280</b>	250		.276	7	9	225	.88	.40
<b>TYS12-280</b>	250		.276	7	12	300	1.21	.55
<b>TYS18-280</b>	250		.276	7	18	450	1.98	.90
<b>TYS24-280</b>	250		.276	7	24	610	2.64	1.20
<b>TYS6-470</b>	250		.472	12	6	150	1.10	.50
<b>TYS9-470</b>	250		.472	12	9	225	1.65	.75
<b>TYS12-470</b>	250		.472	12	12	300	2.20	1.00
<b>TYS18-470</b>	250		.472	12	18	450	3.19	1.45
<b>TYS24-470</b>	250		.472	12	24	610	4.29	1.95

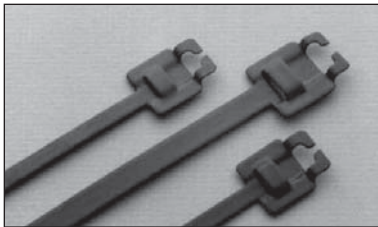
Packaging Quantity: 100/bag  
.010" (.245mm) Thickness

## Reusable Stainless Steel Cable Ties



### Fast, Easy Installation.

Thomas & Betts Reusable Ties are fast and easy to install. Simply pass free end of tie through buckle bridge, tension by hand or with a Thomas & Betts Tensioning Tool, bend over bridge, and secure into preformed ears.



Reusable Stainless Steel Cable Ties



Cable Tie Tensioner



Tensioning Hook



Tie-It Tool DAS250

These reusable cable ties are made from high-strength, corrosion-resistant 200/300 series stainless steel, coated with a non-toxic, halogen-free, low-smoke Nylon 11.

The unique buckle design provides quick, easy application and can just as easily be unfastened for reuse. The

weather-resistant Nylon 11 coating is unaffected by UV, extremely flexible at low temperatures and protects the cables from damage or interference due to direct contact with the stainless steel. The coated product is also user-friendly on the installer's hands.

### For Cable Bundling in Harsh Environments



### Reusable Stainless Steel Cable Ties—Coated

Cat. No.	Tensile Strength lb.	Width		Length		Weight	
		in.	mm	in.	mm	lb.	kg.
SSR6-250C	75	1/4	6.35	6	152	1.4	.6
SSR9-250C	75	1/4	6.35	9	229	1.8	.8
SSR12-250C	75	1/4	6.35	12	305	2.1	1.0
SSR18-250C	75	1/4	6.35	18	457	3.0	1.4
SSR24-250C	75	1/4	6.35	24	610	3.7	1.7
SSR6-375C	100	3/8	9.53	6	152	1.8	.8
SSR9-375C	100	3/8	9.53	9	229	2.5	1.1
SSR12-375C	100	3/8	9.53	12	305	3.1	1.4
SSR18-375C	100	3/8	9.53	18	457	4.4	2.0
SSR24-375C	100	3/8	9.53	24	610	6.6	3.0
SSR30-375C	100	3/8	9.53	30	762	7.0	3.2
SSR36-375C	100	3/8	9.53	36	914	8.3	3.8

Material: 200/300 Series Stainless Steel

Packaging Quantity: 100/bag

.015" (.38mm) Metal Thickness; .045" (1.1mm) Coated Thickness

Nylon 11 Coating

Note: This product may be double-wrapped for additional tensile strength. For additional colours and uncoated ties, consult Thomas & Betts Customer Service for pricing and availability.

For 316 Stainless Steel, add "suffix -316" after catalogue number. Consult Customer Service for availability.

### Tensioning Tools

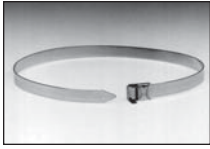
Cat. No.	Description	Weight	
		lb.	kg.
<b>Cable Tie Tensioner WTAE200</b>	For tensioning Reusable Ties and Multi-Lok Ties	.6	.3
Packaging Quantity: 1/box			
<b>Tensioning Hook WTAE201</b>	For tensioning Reusable Ties and Multi-Lok Ties	.1	.05
Packaging Quantity: 1/box			
<b>Tie-It Tool DAS250</b>	For installing Multi-Lok Series Stainless Steel Ties	1.0	.45

Packaging Quantity: 1/box

U.L. listed

# Ty-Rap®

## Stainless Steel Ties–Free-End



Pre-assembled Free-End Clamps provide maximum strength and durability. They may be single-wrapped or, for extra strength, double-wrapped.

Strong, durable Free-End Clamps are available in a wide range of lengths, widths, and thicknesses.

### Heavy Duty Free-End Stainless Steel Clamps–Type 201

Cat. No.	Max. Dia. Once Around		Max. Dia. Twice Around		Total Length		Tensile Strength Single Wrap lb.	Band Width		Band Thickness		Pkg. Qty.	Weight	
	in.	mm	in.	mm	in.	cm		in.	mm	in.	mm		lb.	kg.
SSH10-250	2	50	–	–	10	25	450	1/4	6.35	.020	.51	100	2.2	.99
SSH16-250	3-1/2	88	1-1/2	38	16	40	450	1/4	6.35	.020	.51	100	3.1	1.40
SSH16-375	3-1/2	88	1-1/2	38	16	40	900	3/8	9.53	.025	.63	100	6.2	2.80
SSH18-500	4	101	2	50	18	45	1400	1/2	12.70	.030	.76	100	10.5	4.80
SSH21-625	5	127	2-1/2	63	21	53	1700	5/8	15.88	.030	.76	100	15.1	6.80
SSH24-750	6	152	3	76	24	60	2000	3/4	19.05	.030	.76	50	10.9	4.90
SSH27-250	7	177	3-1/2	88	27	68	450	1/4	6.35	.020	.51	100	4.6	2.10
SSH31-500	8	203	4	101	31	78	1400	1/2	12.70	.030	.76	25	4.7	2.10
SSH34-250	9	228	4-1/2	114	34	86	450	1/4	6.35	.020	.51	100	5.6	2.60
SSH37-750	10	254	5	127	37	93	2000	3/4	19.05	.030	.76	25	7.6	3.50
SSH44-375	12	304	6	152	44	112	900	3/8	9.53	.025	.63	25	3.6	1.60
SSH50-750	14	355	7	177	50	127	2000	3/4	19.05	.030	.76	25	9.7	4.40
SSH56-625	16	406	8	203	56	142	1700	5/8	15.88	.030	.76	25	9.0	4.10
SSH62-750	18	457	9	228	62	157	2000	3/4	19.05	.030	.76	25	11.6	5.30
SSH69-625	20	508	10	254	69	175	1700	5/8	15.88	.030	.76	25	10.7	4.80

Type 201 Stainless Steel

Other Free-End Clamp sizes and metals are available on special order.



WTJ020

Lightweight pocket-size tool to install 1/4" and 3/8" wide Free-End Clamps. It applies tension and has a built-in cutter.

### Installation Tools

Cat. No.	Description	Weight	
		lb.	kg.
WTJ020	Pok-It II Tool	1.1	.5
WTC075	Bantam Tool; Three-way handle version for one-hand pistol grip or two-hand tensioning	2.6	1.2
WTC001	Heavy-Duty Clamp Tool	4.4	2.0

Packaging Quantity: 1/box



WTC075

Designed to install 1/4" to 5/8" wide Free-End Clamps. The lightweight, ratchet-action tool tensions, cuts and secures the buckle tab.



WTC001

A drop-forged tool with tensioning capability to do all Free-End Clamps.



# Ty-Rap®

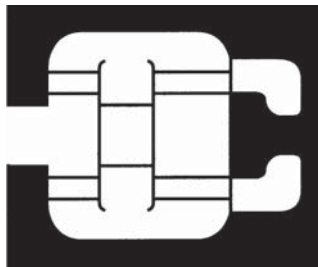
## Stainless Steel Cable Ties



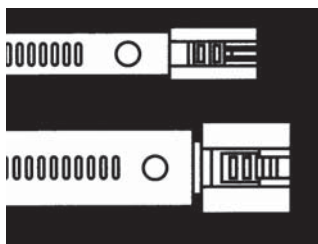
Mini Stainless Steel Cable Ties



Standard Stainless Steel Cable Ties



Reusable Stainless Steel Cable Ties



Multi-Lok Ties



Free-End Clamps

### Specifications

Cat. No.	Width		Length		Thickness		Max. Dia. Single Wrap		Max. Dia. Double Wrap		
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	
<b>SS7-180</b>	.177	4.50	6.5	165	.015	.38	1.7	43	(single wrap)		
<b>SS10-180</b>	.177	4.50	10	254	.015	.38	2.8	71	(single wrap)		
<b>SS16-180</b>	.177	4.50	16	406	.015	.38	4.7	119	(single wrap)		
<b>SS23-180</b>	.177	4.5	22.5	572	.015	.38	6	152	-		
<b>SS29-180</b>	.177	4.5	29.0	737	.015	.38	8	203	-		
<b>SS10-250</b>	1/4	6.35	10	254	.015	.38	2.1	53			
<b>SS17-250</b>	1/4	6.35	16.5	419	.015	.38	4.3	109	(single wrap)		
<b>SS23-250</b>	1/4	6.35	22.5	572	.015	.38	6.5	165	(single wrap)		
<b>SS29-250</b>	1/4	6.35	29	737	.015	.38	8.5	215	(single wrap)		
<b>SS35-250</b>	1/4	6.35	35	889	.015	.38	10.5	265			
<b>SSR6-250C</b>	1/4	6.35	6	152	.015	.38	1.5	38	N.A.	N.A.	
<b>SSR9-250C</b>	1/4	6.35	9	229	.015	.38	2.5	63	1.1	28	
<b>SSR12-250C</b>	1/4	6.35	12	305	.015	.38	3.4	86	1.5	38	
<b>SSR18-250C</b>	1/4	6.35	18	457	.015	.38	5.4	137	2.5	64	
<b>SSR24-250C</b>	1/4	6.35	24	610	.015	.38	7.3	185	3.5	89	
<b>SSR6-375C</b>	3/8	9.53	6	152	.015	.38	1.5	38	N.A.	N.A.	
<b>SSR9-375C</b>	3/8	9.53	9	229	.015	.38	2.5	63	1.1	28	
<b>SSR12-375C</b>	3/8	9.53	12	305	.015	.38	3.4	86	1.5	38	
<b>SSR18-375C</b>	3/8	9.53	18	457	.015	.38	5.4	137	2.5	64	
<b>SSR24-375C</b>	3/8	9.53	24	610	.015	.38	7.3	185	3.5	89	
<b>SSR30-375C</b>	3/8	9.53	30	762	.015	.38	9.1	231	4.4	112	
<b>SSR36-375C</b>	3/8	9.53	36	914	.015	.38	11.0	280	5.3	135	
<b>Uncoated</b>	<b>Nylon 11 Coated</b>										
<b>TYS6-280</b>	<b>TYS6-280C</b>	.28	7.00	6	152	.010	.25	1.9	48		
<b>TYS9-280</b>	<b>TYS9-280C</b>	.28	7.00	9	229	.010	.25	2.8	71		
<b>TYS12-280</b>	<b>TYS12-280C</b>	.28	7.00	12	305	.010	.25	3.8	96		
<b>TYS18-280</b>	<b>TYS18-280C</b>	.28	7.00	18	457	.010	.25	5.7	144	(single wrap)	
<b>TYS24-280</b>	<b>TYS24-280C</b>	.28	7.00	24	610	.010	.25	7.6	193	(single wrap)	
<b>TYS6-470</b>	<b>TYS6-470C</b>	.47	12.00	6	152	.010	.25	1.9	48		
<b>TYS9-470</b>	<b>TYS9-470C</b>	.47	12.00	9	229	.010	.25	2.8	71		
<b>TYS12-470</b>	<b>TYS12-470C</b>	.47	12.00	12	305	.010	.25	3.8	96		
<b>TYS18-470</b>	<b>TYS18-470C</b>	.47	12.00	18	457	.010	.25	5.7	144		
<b>TYS24-470</b>	<b>TYS24-470C</b>	.47	12.00	24	610	.010	.25	7.6	193		
<b>SSH10-250</b>		1/4	6.35	10	250	.020	.51	2.0	50	N.A.	N.A.
<b>SSH16-250</b>		1/4	6.35	16	400	.020	.51	3.5	88	1.5	38
<b>SSH19-250</b>		1/4	6.35	19	480	.020	.51	5.0	127	2.5	63
<b>SSH27-250</b>		1/4	6.35	27	680	.020	.51	7.0	177	3.5	88
<b>SSH34-250</b>		1/4	6.35	34	860	.020	.51	9.0	228	4.5	114
<b>SSH16-375</b>		3/8	9.53	16	400	.025	.63	3.5	88	1.5	38
<b>SSH44-375</b>		3/8	9.53	44	1120	.025	.63	12.0	304	6.0	152
<b>SSH18-500</b>		1/2	12.70	18	460	.030	.76	4.0	101	2.0	50
<b>SSH31-500</b>		1/2	12.70	31	780	.030	.76	8.0	203	4.0	101
<b>SSH21-625</b>		5/8	15.88	21	530	.030	.76	5.0	127	2.5	63
<b>SSH56-625</b>		5/8	15.88	56	1420	.030	.76	16.0	406	8.0	203
<b>SSH69-625</b>		5/8	15.88	69	1750	.030	.76	20.0	508	10.0	254
<b>SSH24-750</b>		3/4	19.05	24	600	.030	.76	6.0	152	3.0	76
<b>SSH37-750</b>		3/4	19.05	37	940	.030	.76	10.0	254	5.0	127
<b>SSH50-750</b>		3/4	19.05	50	1270	.030	.76	14.0	355	7.0	177
<b>SSH62-750</b>		3/4	19.05	62	1570	.030	.76	18.0	457	9.0	228



### Specifications—continued

Cat. No.	Stainless Steel Type	Coating or Finish	Min. Loop Tensile Strength Single Wrap		Min. Loop Tensile Strength Double Wrap		Application Tools Used	General Application
			Lb.	Newtons	Lb.	Newtons		
SS7-180*	304	Dull to Bright	100	445	(single		<ul style="list-style-type: none"> <li>• Wire/Cable bundling</li> <li>• I.D. Tagging</li> </ul>	
SS10-180*	304		100	445	wrap	<b>WTA290</b> <b>WT5S</b> <b>DAS-250</b>		
SS16-180*	304		100	445	only)			
SS23-180*	304		100	445				
SS29-180*	304		100	445				
SS10-250*	304	Dull to Bright	200	890	(single		<b>WTA250</b> <b>WT5S</b> <b>DAs-250</b>	<ul style="list-style-type: none"> <li>• Wire/Cable bundling</li> <li>• I.D. Tagging</li> </ul>
SS17-250*	304		200	890	wrap			
SS23-250*	304		200	890	only)			
SS29-250*	304		200	890				
SS35-250*	304		200	890				
SSR6-250C	200/300		75	334	300	1334	<b>WTAE200</b> <b>WTAE201</b> <b>WTC075</b>	<ul style="list-style-type: none"> <li>• Reusable</li> <li>• Cable bundling</li> <li>• Oil Rigs</li> <li>• Tele-Communications towers</li> <li>• Hazardous and corrosive environments</li> </ul>
SSR9-250C	200/300		75	334	300	1334		
SSR12-250C	200/300		75	334	300	1334		
SSR18-250C	200/300	Nylon 11 Coated	75	334	300	1334		
SSR24-250C	200/300	(Uncoated or other	75	334	300	1334		
SSR6-375C	200/300	colours available on	100	445	500	2224		
SSR9-375C	200/300	special order)	100	445	500	2224		
SSR12-375C	200/300		100	445	500	2224		
SSR18-375C	200/300		100	445	500	2224		
SSR24-375C	200/300		100	445	500	2224		
SSR30-375C	200/300		100	445	500	2224		
SSR36-375C	200/300		100	445	500	2224		
<b>Uncoated</b>	<b>Nylon 11 Coated</b>							
<b>TYS6-280</b>	<b>TYS6-280C</b>	316	250	1112				
<b>TYS9-280</b>	<b>TYS9-280C</b>	316	250	1112				
<b>TYS12-280</b>	<b>TYS12-280C</b>	316	250	1112				
<b>TYS18-280</b>	<b>TYS18-280C</b>	316	250	1112	(single			
<b>TYS24-280</b>	<b>TYS24-280C</b>	316	250	1112	wrap			
<b>TYS6-470</b>	<b>TYS6-470C</b>	316	250	1112	only)			
<b>TYS9-470</b>	<b>TYS9-470C</b>	316	250	1112				
<b>TYS12-470</b>	<b>TYS12-470C</b>	316	250	1112				
<b>TYS18-470</b>	<b>TYS18-470C</b>	316	250	1112				
<b>TYS24-470</b>	<b>TYS24-470C</b>	316	250	1112				
SSH10-250		201	450	2002	1200	5338	<b>WTC001</b> <b>WTC075</b> <b>WTJ020</b>	<ul style="list-style-type: none"> <li>• Indus. hoses</li> <li>• Cable bundling</li> <li>• Hi-strength</li> </ul>
SSH16-250		201	450	2002	1200	5338		
SSH19-250		201	450	2002	1200	5338		
SSH27-250		201	450	2002	1200	5338		
SSH34-250		201	450	2002	1200	5338		
SSH16-375		201	900	4003	2400	10675		
SSH44-375		201	900	4003	2400	10675		
SSH18-500		201	1400	6227	3300	14678		
SSH31-500		201	1400	6227	3300	14678		
SSH21-625		201	1700	7562	4000	17792		
SSH56-625		201	1700	7562	4000	17792		
SSH69-625		201	1700	7562	4000	17792		
SSH24-750		201	2000	8896	5000	22240		
SSH37-750		201	2000	8896	5000	22240		
SSH50-750		201	2000	8896	5000	22240		
SSH62-750		201	2000	8896	5000	22240		

Thomas & Betts Stainless Steel Cable Ties have passed a variety of mechanical, environmental, and electrical tests. Other data can be made available upon request.

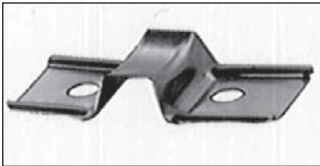
\*S.S. series also available in (316) Stainless.

# Ty-Rap®

## Stainless Steel Cable Ties



Stainless steel cable ties have been designed for high-temperature applications as in boiler rooms, and for use in areas of harsh, corrosive environments such as shipyards and off-shore oil platforms. They are made of type 316 stainless steel, and rated at 200 pound tensile strength. Smooth edges protect both the cable insulation and the installer.



*Note: Ability to be hung on cables*

WT3S

### Stainless Steel Cable Ties

Cat. No.	Body Width (in.)	Length (in.)	Max. Wire Bundle Dia. (in.)	Tensile Strength (lb.)	Std. Pkg.
TYS8	.310	10.65	2	200	100
TYS14	.310	14.65	4	200	50
TYS22	.310	22.65	6	200	50
TYS28	.310	28.65	8	200	50

Note: Use WT3S Tool for tensioning and cutoff.

- Cannot be coated with any covering material.

### Stainless Steel Strap on a Reel

Cat. No.	Description	Body Width (in.)	Tensile Strength (lb.)	Std. Pkg.
TYS1000	1000 foot of strap, 2 reels of 500 feet each	.310	200	1

Stainless steel ties of virtually any length can be produced from the 1000 foot reel in combination with the matching head.

Note: Use WT3S tool for tensioning and cutoff.

### Stainless Steel Locking Heads

Cat. No.	Description	Std. Pkg.
TYS5200H	Heads only for stainless steel strap	50

### Stainless Steel Mounting Base

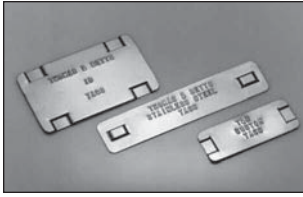
Cat. No.	Description	Std. Pkg.
TCS25	Mounting base for stainless steel ties	50

### Ty-Rap® Stainless Steel Tool

Cat. No.	Description	Std. Pkg.	Wt. Each
WT3S	Stainless steel cable tie installing tool. TYS body slots	1	8 oz.

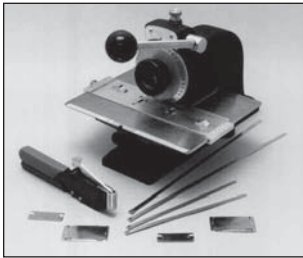
Tool is designed to install tie. Do not attempt to cut excess strap with tool.

## Customized Embossed Tags Stainless Steel Tape Embossing System

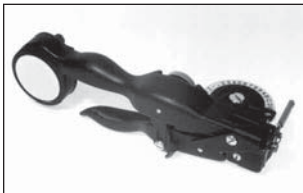


Identify your cable bundles with permanent, Type 304 stainless steel imprinted tags applied with stainless steel cable ties. After imprinting the tags, merely slip a tie through slots in the tag and fasten with the installation tool.

- Works with 1/4" wide ties.



For imprinting Thomas & Betts stainless steel I.D. tags. Includes special tag holder which provides quick, accurate positioning of tag. Comes with a 3/32" character imprinting wheel, standard (no substitutions allowed).



After making your tag, apply with stainless steel cable ties.

### I.D. Tagging System

Cat. No.	Width		Length		Weight	
	in.	mm	in.	mm	lb.	kg.
<b>SSID100</b>	.75	19.05	2.0	51	0.5	.22
<b>SSID101</b>	1.50	38.10	2.5	63	1.2	.55
<b>SSID102</b>	.75	19.05	3.5	89	0.8	.36

304 Stainless Steel

Packaging Quantity: 100/box

.015" (.254mm) Thickness

Note: Customized pre-embossed tags are available. Please consult Technical Service for details.

Add suffix (316) for 316 Stainless Steel.

### I.D. Tag Imprinter

Cat. No.	Description	Weight	
		lb.	kg.
<b>WTID200</b>	I.D. Tag Imprinter	29.5	13.41
<b>WTID290</b>	3/32" character imprinting wheel	–	–
<b>WTID281</b>	1/8" character imprinting wheel	–	–
<b>WTID283</b>	3/16" character imprinting wheel	–	–
<b>WTID300</b>	I.D. Marking Kit	–	–
<b>WTID204</b>	(Kit) WTID200 and WTID 283	–	–

Packaging Quantity: 1/box

### S.S. Tape Embossing System

Cat. No.	Description	Weight	
		lb.	kg.
<b>WTID400</b>	Hand-held tool for embossing S.S. I.D. Tape	2.57	1.17
<b>WTID405</b>	Replacement S.S. tape (21" long, 1/2" wide)	.18	.01

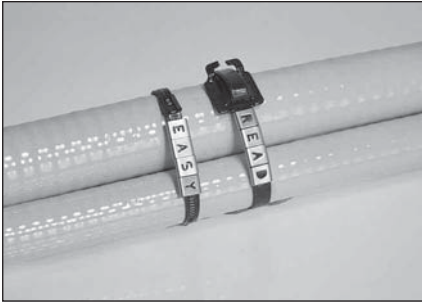
304 Stainless Steel

Packaging Quantity: 1/box

Note: The embossing tool comes complete with two rolls of stainless steel tape.

# Ty-Rap®

## Stainless Steel I.D. Tag



The Thomas & Betts Stainless Steel R.D. Tagging System includes a complete range of individual letters, numbers, and symbols—slip them over carriers (shown above) or strips (below) and attach to your cable or hose with a variety of Thomas & Betts Stainless Steel Cable Ties.



### Thomas & Betts Stainless Steel I.D. Tag

Cat. No.	Description	Length	Width	Std. Pkg.	Wt. per 100
ER010	A	.445"	.375"	100	.31
ER011	B	.445"	.375"	100	.31
ER012	C	.445"	.375"	100	.31
ER013	D	.445"	.375"	100	.31
ER014	E	.445"	.375"	100	.31
ER015	F	.445"	.375"	100	.31
ER016	G	.445"	.375"	100	.31
ER017	H	.445"	.375"	100	.31
ER018	I	.445"	.375"	100	.31
ER019	J	.445"	.375"	100	.31
ER020	K	.445"	.375"	100	.31
ER021	L	.445"	.375"	100	.31
ER022	M	.445"	.375"	100	.31
ER023	N	.445"	.375"	100	.31
ER024	O	.445"	.375"	100	.31
ER025	P	.445"	.375"	100	.31
ER026	Q	.445"	.375"	100	.31
ER027	R	.445"	.375"	100	.31
ER028	S	.445"	.375"	100	.31
ER029	T	.445"	.375"	100	.31
ER030	U	.445"	.375"	100	.31
ER031	V	.445"	.375"	100	.31
ER022	W	.445"	.375"	100	.31
ER032	X	.445"	.375"	100	.31
ER033	Y	.445"	.375"	100	.31
ER034	Z	.445"	.375"	100	.31
ER018	1	.445"	.375"	100	.31
ER037	2	.445"	.375"	100	.31
ER038	3	.445"	.375"	100	.31
ER039	4	.445"	.375"	100	.31
ER040	5	.445"	.375"	100	.31
ER041	6	.445"	.375"	100	.31
ER021	7	.445"	.375"	100	.31
ER042	8	.445"	.375"	100	.31
ER041	9	.445"	.375"	100	.31
ER024	0	.445"	.375"	100	.31
ER035	Minus/Hyphen	.445"	.375"	100	.31
ER036	Blank	.445"	.375"	100	.31
ER046	Plus +	.445"	.375"	100	.31
ER047	Earth	.445"	.375"	100	.31
ER048	Sine	.445"	.375"	100	.31
ER049	Slash /	.445"	.375"	100	.31

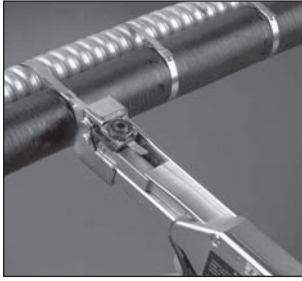
Character size .218"  
Material .025 316 stainless steel

### Thomas & Betts Stainless Steel I.D. Tag Strips/Carriers

Cat. No.	Description	Length	Width	Std. Pkg.	Wt. per 100	Opening Width
ER043	6 Character Carrier	3.64"	.38"	100	.73	0.395"
ER044	10 Character Carrier	5.14"	.38"	100	1.25	0.395"
ER045	16 Character Carrier	7.39"	.38"	100	1.47	0.395"
ER050	Short Strip	4.25"	.38"	100	.98	0.395"
ER051	Medium Strip	5.75"	.38"	100	1.33	0.395"
ER052	Long Strip	8.0"	.38"	100	1.85	0.395"
ER060	I.D. Tag Kit	—	—	1	—	0.395"

I.D. Tag Kit contains 50 of each letter, number, symbol, carrier and strip in a handy carrying case.

## Stainless Steel Self-Locking Ties



### Application Tool

#### DAS-250 Hand Tool

(Adjustable tension, automatic cut-off)

#### Spare Blades Part No. BL250S

### Stainless Steel Ties With Roller Locking Mechanism

Thomas & Betts offers a line of self-locking, stainless steel ties for indoor and outdoor use. This low profile design features an internal locking roller and spring-tension head that ensures a secure fit.

#### Features and Benefits

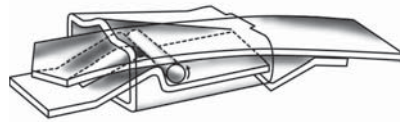
- Spring feature provides extra snug fit in applications where bundle tightness is critical.
- Internal locking roller (Average slip, within the locking mechanism at 100 lb. load is 55% lower than conventional ball lock design).
- Rounded edges and smooth surfaces for fast, safe hand installation.
- Buckle length is 38% less and height is 24% less than the conventional ball locking design.

- 5 standard lengths with custom lengths available.
- Available in two grades of stainless steel (302/304 for standard applications and 316 for extra corrosion resistance).

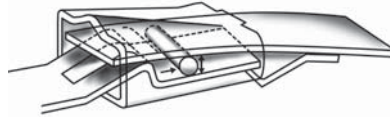
#### Ideal Applications

- High temperature locations.
- Marine environment (ship building, salt water environment).
- Harsh environment (oil rigs, wash down areas, refineries, food processing plants, auto car washers).
- Automotive plants.

### How It Works



Insert the tail into the buckle. The internal locking bar rolls freely as the tie is tightened.



Once the proper tension is reached the tool automatically cuts off the tail. The bar then wedges into the buckle locking it tightly against both the top and bottom of the band.

### Roller Locking Mechanism vs. Ball Locking Mechanism

Characteristic	Self-Lok	Ball Lock
Rating (pounds)	150	100
Buckle Length (inch)	.260	.420
Height Over Buckle (inch)	.130	.170
Avg. Slip @ 100 Lb Load (inch)	.090	.200
Normal Mode of Failure	Cont. Slip	Loss of Ball
Buckle Retention	Smooth ID	Fold Under
Tie Length	Same	Same
Material	304 or 316 SS	304 or 316 SS



*Unique Spring-Tension Head Design provides extra snug fit where bundle tightness is critical.*

### Ordering Information

Cat. No.	Length		Width		Max. Bundle Dia.		Tensile		Qty./box pcs.
	in.	mm.	in.	mm.	in.	mm.	lb.	kg.	
<b>302/304 Grade Stainless Steel</b>									
TS-4.6-200A	8.8	222.9	0.18	4.6	2	50.8	150	68.0	100
TS-4.6-360A	15.3	388.0	0.18	4.6	4	101.6	150	68.0	100
TS-4.6-520A	21.3	540.4	0.18	4.6	6	152.4	150	68.0	100
TS-4.6-680A	27.8	705.5	0.18	4.6	8	203.2	150	68.0	100
TS-4.6-840A	33.8	857.9	0.18	4.6	10	254.0	150	68.0	100
<b>316 Grade Stainless Steel</b>									
TS-4.6-200B	8.8	222.9	0.18	4.6	2	50.8	150	68.0	100
TS-4.6-360B	15.3	388.0	0.18	4.6	4	101.6	150	68.0	100
TS-4.6-520B	21.3	540.4	0.18	4.6	6	152.4	150	68.0	100
TS-4.6-680B	27.8	705.5	0.18	4.6	8	203.2	150	68.0	100
TS-4.6-840B	33.8	857.9	0.18	4.6	10	254.0	150	68.0	100



**DAS-250**  
Preset tension tool  
Automatic cut-off  
Spare Blades Part No. BL 250 S

### Stainless Steel Ties with Ball Locking Mechanism

Thomas and Betts introduces a range of self-locking, one-piece stainless steel ties, suitable for indoor or outdoor use.

#### Wide range of sizes

Six standard lengths up to 41" long will cover most applications with custom lengths available. Two widths are offered with minimum loop tensile strengths of 100 and 250 lb. Space requirements are minimized by the low head profile – 20" maximum.

#### Fast, Easy Installation

Thomas & Betts stainless steel ties are self-locking, requiring no time consuming crimping or folding operations. The strong locking mechanism, incorporating a steel ball, requires a low insertion force while the strap section has rounded edges and smooth surfaces making the ties ideal for fast, safe, hand installation.

#### Two Materials

Two grades of stainless steel are available – 302/304 for standard applications and 316 for extra corrosion resistance. 302/304 and 316 stainless steels are non-magnetic and are ideal for high temperature applications ranging –80 °C to 538 °C.

#### Applications

- High temperature locations
- Marine environment (shipbuilding, salt water environment)
- Harsh environment (oil rigs, wash-down areas, refineries, food processing plants, auto car washers)
- Automotive plants

## Ordering Information

Cat. No.	Length		Width		Max. Bundle Dia.		Tensile		Qty./box pcs.
	in.	mm.	in.	mm.	in.	mm.	lb.	kg.	
<b>302/304 Grade Stainless Steel</b>									
LS-4.6-200A	7.9	201.0	0.18	4.6	2	51	100	45.3	100
LS-4.6-360A	14.2	360.0	0.18	4.6	4	102	100	45.3	100
LS-4.6-520A	20.5	520.0	0.18	4.6	6	152	100	45.3	100
LS-4.6-680A	26.7	679.0	0.18	4.6	8	203	100	45.3	100
LS-4.6-840A	33.0	838.0	0.18	4.6	10	254	100	45.3	100
LS-7.9-200A	7.9	201.0	0.31	7.9	3	51	250	113.3	50
LS-7.9-360A	14.2	360.0	0.31	7.9	4	102	250	113.3	50
LS-7.9-520A	20.5	520.0	0.31	7.9	6	152	250	113.3	50
LS-7.9-680A	26.7	679.0	0.31	7.9	8	203	250	113.3	50
LS-7.9-840A	33.0	838.0	0.31	7.9	10	254	250	113.3	50
LS-7.9-1010A	41.3	1050.0	0.31	7.9	12.5	318	250	113.3	50
<b>316 Grade Stainless Steel</b>									
LS-4.6-200B	7.9	201.0	0.18	4.6	2	51	100	45.3	100
LS-4.6-360B	14.2	360.0	0.18	4.6	4	102	100	45.3	100
LS-4.6-520B	20.5	520.0	0.18	4.6	6	152	100	45.3	100
LS-4.6-680B	26.7	679.0	0.18	4.6	8	203	100	45.3	100
LS-4.6-840B	33.0	838.0	0.18	4.6	10	254	100	45.3	100
LS-7.9-200B	7.9	201.0	0.31	7.9	3	51	250	113.3	50
LS-7.9-360B	14.2	360.0	0.31	7.9	4	102	250	113.3	50
LS-7.9-520B	20.5	520.0	0.31	7.9	6	152	250	113.3	50
LS-7.9-680B	26.7	679.0	0.31	7.9	8	203	250	113.3	50
LS-7.9-840B	33.0	838.0	0.31	7.9	10	254	250	113.3	50
LS-7.9-1010B	41.3	1050.0	0.31	7.9	12.5	318	250	113.3	50

# Ty-Rap® Cable Ties—DELTEC™



## The Deltec™ Cable Support System

**Provides a strong, long-life and cost saving method of securing communication cables**

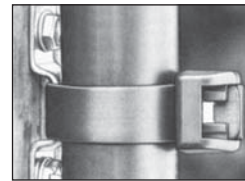
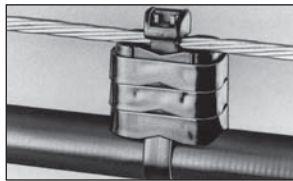
The Deltec™ Cable Support System is a user-friendly product designed to provide ease and flexibility in fastening communications cables to messenger strand. It is equally well suited for copper conductor cable, coaxial cable, fiber optic cable and inner duct in aerial applications.

The Deltec™ system answers your aerial cable needs with innovative design and state of the art materials. This system includes weather-resistant Delrin® cable straps, marine grade locking devices, and base hanger accessories for specific applications where mounting is required.

Deltec™ cable straps are available in standard lengths of 10, 13.5, 16 and 27 inches, and in convenient 50 foot reels where specific lengths need to be established by the installer in the field. Additional "standard" lengths can be established for applications where higher volumes prevail.

## Advantages of the Deltec™ System Include:

- Proven years of service.
- No sharp edges - craft friendly! Cable friendly!
- Ease of installation - one wrap, no re-treading of re-strap.
- Lowers installation costs.
- High tensile strength after fastening.
- Total flexibility in lengths when using reel.
- Stackable spacers accommodate all cable sizes - no need to stock multiple sizes of individual height spacers.
- Spacer designed to retain strap on each side and cradle the cable, providing restricted movement of spacer and preventing damage to cable.
- In situations where multiple cables are supported, the T&B TCP360 stackable spacer may be rotated 90 degrees and installed similar to a single cable, yet provide the same restricting features (unlike those commonly used today).
- Month and year of manufacture stamped into strap material.
- Squirrels and vermin won't eat it!



## Cable Tie with Double-Locking Head

Cat. No.	Body Width	Length (in.)	Max. Wire Bundle Dia. (in.)	Tensile Strength (lb.)	Std. Pkg.
<b>TYD510M</b>	.394	51.2	—	250	
<b>TYD5135M</b>	.500	13.5	3.5	250	25
<b>TYD5270M</b>	.500	27.0	8.0	250	10

The recommended maximum continuous static loading for the DELTEC™ straps is 20 lb. per strap. For best results suggested spacing is 15 inches. It is the responsibility of the user to determine whether or not their application meets our recommendation.

Note: Use WT3D Tool for tensioning and cutoff.

### SPECIFICATIONS

Strap and body	Offers superior resistance to sunlight, moisture, and salt environments.
Locking Device	Marine grade corrosion-resistant silicon bronze.

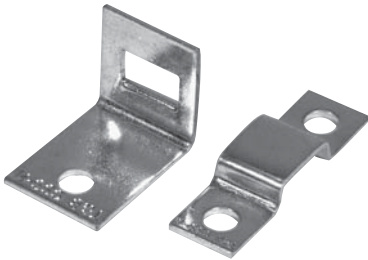
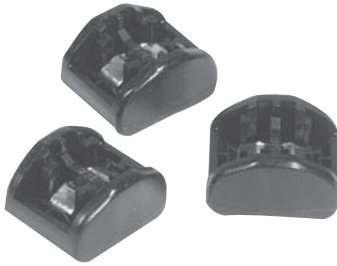
Installation Range	-30°F to 150°F.
Minimum Tensile Strength	250 lb. minimum.
Outdoor Life	Designed to last a minimum of 20 years
Continuous Load	20 pounds

## DELTEC™ Strap on a Reel

Cat. No.	Description	Tensile Strength (lb.)	Body Width	Std. Pkg.
<b>TYD-50R</b>	50' reel of strap	250	.500	1
<b>696-41794</b>	1000' reel	250	.500	2







CSS-B  
CSS-H



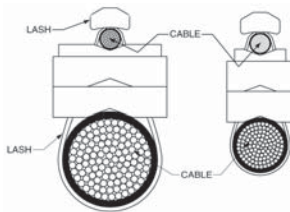
### Locking Heads

Cat. No.	Description	Std. Pkg.
<b>TYD-LH</b>	Heads only for DELTEC strap	25
<b>696-41795</b>	1000 heads only for DELTEC strap	1000

Material: Deltec™

### Modular Stackable Cable Spacers

Cat. No.	Description	Std. Pkg.
<b>TCP5255</b>	Modular stackable spacer for DELTEC™ straps	25
<b>TCP360</b>	For Coaxial Cable	—



- One spacer for any cable size.
- Stackable for any desired spacing.
- Less inventory – one catalogue number.
- Made of weather-resistant polypropylene.
- 1/2" high.

### DELTEC™ Base and Hanger

Cat. No.	Description	Std. Pkg.
<b>CSS-B</b>	Base for Deltec™ strap	50
<b>CSS-H</b>	Hanger for Deltec™ strap	50

- Made of zinc-plated steel
- Secures cables to all types of surfaces

### Drop Wire Support

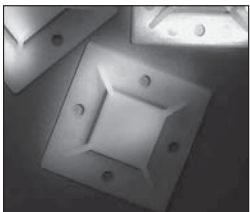
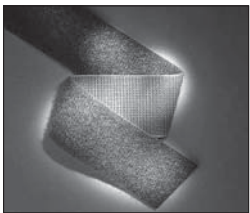
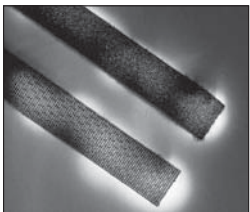
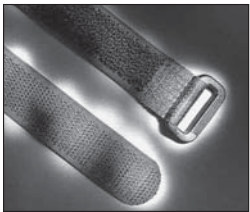
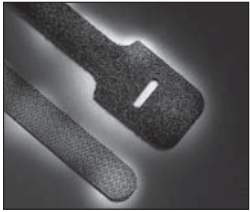
Cat. No.	Description	Std. Pkg.
<b>CSS-DWS</b>	Nylon coated steel, order by each.	25

### Installation/Cutting Tool

Cat. No.	Description	Range	Std. Pkg.	Wt. Each
<b>WT3D</b>	Installs self-locking Ty-Rap® cable ties and Thomas & Betts 2-piece lashing ties.	.184 thru .500	1	8 oz.

# Ty-Rap®

## Hook and Loop Fasteners



**Available in these colours:** (0) Black, (1) Brown, (2) Red, (3) Orange, (4) Yellow, (5) Green, (6) Blue, (8) Grey, and (9) White. Please consult customer service for delivery and availability.

These handy ties are very easy to release and re-use, making them ideal for applications where changes are anticipated or continuous access is required.

### Features

- High quality Hook & Loop Fasteners designed specifically for Thomas & Betts.
- Allows quick and convenient bundling of Category 5 & Fiber optic cables.
- Multiple colours available for identifying specific bundles.
- Sizes available to accommodate varying bundle diameters.
- Screw and adhesive mounting bases provide multiple mounting options.
- New version available UL94V-2 rated material. Contact Customer Service for availability and delivery.

## FO Series Loop Ties

Ideal for wrapping pre-determined bundle diameters because of the convenient slotted head

Cat. No.	Min. Tensile Strength	Max. Bundle Dia.	Length	Width	Inner Pack Qty.
FO200-40*	40lb	2.0"	9.0"	.50	10
FO200-50*	50lb	2.0"	9.0"	.75	10
FO350-40*	40lb	3.5"	13.0"	.50	10
FO350-50*	50lb	3.5"	13.0"	.75	10

## FOL Series Buckle Ties

Buckle ties provide added strength and stability because of the high performance polymer buckle.

Cat. No.	Min. Tensile Strength	Max. Bundle Dia.	Length	Width	Inner Pack Qty.
FOL300-50-0	50lb	3.0"	12.0"	.75	10
FOL500-50-0	50lb	5.0"	18.0"	.75	10

## FOS Series Strip Ties

Pre-cut lengths which makes bundling a cinch.

Cat. No.	Min. Tensile Strength	Max. Bundle Dia.	Length	Inner Pack Qty.
FOS150-50-0	50lb	1.5"	6.0"	10
FOS320-50-0	50lb	3.2"	12.0"	10
FOS500-50-0	50lb	5.0"	18.0"	10

## FOR Series Rolled Hook and Loop

Rolled hook and loop allows customers to conveniently cut pieces to desired lengths, eliminating waste.

Cat. No.	Min. Tensile Strength	Max. Bundle Dia.	Width	Length	Inner Pack Qty.
FOR180-50-0	50lb	Various	.75"	180"	1

Black is standard colour  
\* Add - "FR" for UL94V-2 rated material (after colour).

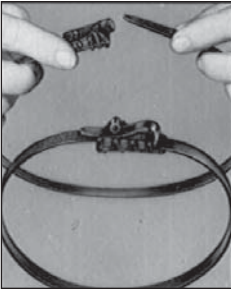
## Mounting Bases

Two mounting bases specifically designed for use with hook and loop fasteners

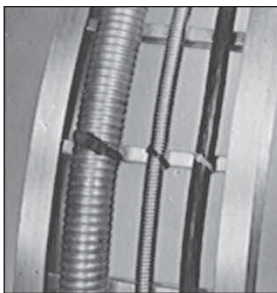
Cat. No.	Min. Tensile Strength	Screw Size	Length	Inner Pack Qty.
TC368	2"x 2" Screw mounted	#8	0.75"	500
TC368A	2"x 2" Adhesive mounted	#8	0.75"	500

# Ty-Rap®

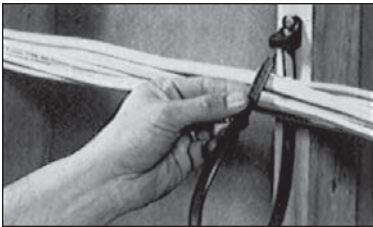
## Lashing Straps



The heavy-duty lashing tie is made from weather-resistant nylon. The addition of carbon black provides good ultraviolet resistance and prolongs the useful life of the cable tie.



This lashing tie is ideally suited for chemical environments that are unsuitable for nylon. Strapping is made of black, weather-resistant polypropylene for outdoor use. Head is made of nylon 66.



Many factors combine to determine the useful life of a cable tie and chemical exposure can be a very important consideration in certain situations. Polypropylene cable ties are ideally suited for chemical environments. It is black for outdoor use.

### Heavy Duty Lashing Tie (releasable)

Std. Cat. No.	Bulk Pkg. Cat. No.	Body Width (in.)	Length (in.)	Maximum Wire Bundle Diameter (in.)	Tensile Strength (lb.)	Std. Pkg.	Bulk Pkg.
TY5409	TY409	.500	19.00	4.75	200	25	100



Length 19"

### Weather-Resistant Polypropylene Lashing Tie (releasable)

Cat. No.	Body Width (in.)	Length (in.)	Maximum Wire Bundle Diameter (in.)	Tensile Strength (lb.)	Std. Pkg.
TY5418PX	.500	18	5	150	25
TY5424PX	.500	24	7	150	25
TY5442PX	.500	42	12	150	10
TY5460PX	.500	60	18	150	10

### Weather-Resistant Polypropylene Hanger Lashing Tie (releasable)

Cat. No.	Body Width (in.)	Length (in.)	Maximum Wire Bundle Diameter (in.)	Tensile Strength (lb.)	Std. Pkg.
TY53418PX	.500	18	5	150	25

# Ty-Rap® Lashing Straps



Nylon 12 provides very good resistance to ultraviolet light and chemical exposure. Nylon 12 is a lower, moisture-absorbing material than 6/6 nylon and the effect of water on properties is much less.



Nylon 12 provides very good resistance to ultraviolet light and chemical exposure. Nylon 12 is a lower, moisture-absorbing material than 6/6 nylon and the effect of water on properties is much less.

## Weather-Resistant Nylon 12 Messenger Hanger Straps (releasable)

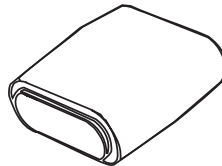
Cat. No.	Body Width (in.)	Length (in.)	Maximum Wire Bundle Diameter (in.)	Hook Material	Tensile Strength (lb.)	Std. Pkg.
<b>TYM5412X</b>	.500	12	3	Bronze	200	50
<b>TYM5418X</b>	.500	18	5	Bronze	200	25
<b>TYM5423X</b>	.500	24	7	Bronze	200	25
<b>TYM5430X</b>	.500	30	9	Bronze	200	25
<b>TYM5436X</b>	.500	36	11	Bronze	200	25
<b>TYM5412X-S</b>	.500	12	3	Stainless Steel	200	50
<b>TYM5418X-S</b>	.500	18	5	Stainless Steel	200	25
<b>TYM5423X-S</b>	.500	24	7	Stainless Steel	200	25
<b>TYM5430X-S</b>	.500	30	9	Stainless Steel	200	25
<b>TYM5436X-S</b>	.500	36	11	Stainless Steel	200	25

The recommended, maximum continuous static loading for the nylon 12 straps is 25 lb. per strap. For best results suggested spacing is 15 inches. It is the responsibility of the user to determine whether or not their application meets our recommendation.

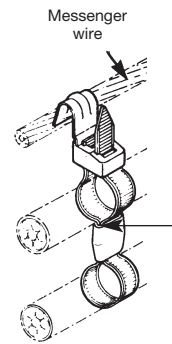
- Hook will accommodate 1/2" dia. messenger wire.

## Messenger Hanger Spacer

Cat. No.	Description	Std. Pkg.
<b>TC5254</b>	1" long stackable spacer for messenger straps	50



Spacer separating cable bundles



*This one-inch long spacer allows you to separate power and signal cables with a single-hanger, lashing strap if desired. The spacer is stackable so that you may suspend the cable bundle at any desired distance from the messenger wire in order to keep the cable runs parallel.*

## Weather-Resistant Nylon 12 Hanger Strap (releasable)

Cat. No.	Body Width (in.)	Length (in.)	Maximum Wire Bundle Diameter (in.)	Hook Material	Tensile Strength (lb.)	Std. Pkg.
<b>TY54407X</b>	.500	6.36	2	Steel	200	50
<b>TY54413X</b>	.500	13.75	4	Steel	200	25

The recommended, maximum continuous static loading for the nylon 12 straps is 25 lb. per strap. For best results suggested spacing is 15 inches. It is the responsibility of the user to determine whether or not their application meets our recommendation.

**Table 2-Physical Properties of Ty-Rap® Cable Tie Materials**

		Natural 66 Nylon	Weather Resistant 66 Nylon	Heat Stabilized Natural 66 Nylon	Flame Retardant 66 Nylon	Weatherable Acetal	Weather Resistant Nylon 12	Weather Resistant Polypropylene	Radiation Resistant Fluoropolymer	Halar (2)	Stainless Steel
Tensile Strength (Yield)											
@ 73° F (Dry-As-Molded) (1)	psi	12,000	12,000	12,000	11,000	10,000	7500	4600	6,700	6,600	90,000
Flammability Rating	-	UL94V-2	UL94V-2	UL94V-2	UL94V-0	UL94HB	-	-	UL94V-0	UL94V-0	-
Radiation Resistance	rads	1 x 10 <sup>5</sup>	1 x 10 <sup>5</sup>	1 x 10 <sup>5</sup>	1 x 10 <sup>5</sup>	1 x 10 <sup>6</sup>	1 x 10 <sup>5</sup>	1 x 10 <sup>5</sup>	2 x 10 <sup>6</sup>	2 x 10 <sup>6</sup>	2 x 10 <sup>6</sup>
Ultraviolet Light Resistance	-	Poor	Good	Poor	Poor	Very Good	Good	Good	Excellent	Excellent	Excellent
Water Absorption (24 hrs)	%	1.3	1.2	1.4	1.4	0.25	0.25	0.1	<.01	<.01	None
Oxygen Index	-	28	28	31	34	21	-	-	30	52	-
Max. Continuous Use Temperature	F / C	185 / 85	185 / 85	221 / 105	185 / 85	185 / 85	176 / 80	185 / 85	338 / 170	284 / 140	1000 / 537
Min. Continuous Use Temperature	F / C	-40 / -40	-40 / -40	-40 / -40	-40 / -40	-40 / -40	-40 / -40	-40 / -40	-76 / -60	-50 / -46	-112 /
Colour	-	Natural	Black	Green tint	White	Black	Black	Black	Aqua	Maroon	Stainless

(1) ASTM D638-878 except stainless steel which is ASTM E8

(2) Halar is a trademark of Solvay Solexis, Inc.

### **Flammability ratings for selecting Ty-Rap® cable ties**

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Note: Flammability ratings of Ty-Rap® cable tie materials are shown in Table 2. These tests for flammability of plastic material are intended to serve as a preliminary indication of acceptability with respect to flammability for particular applications.

### **UL 94 vertical burn test procedures**

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Test specimens of the material, with dimensions 5" x 1/2", with the thickness intended for use in the end product, are tested in both the manufactured condition and in the aged state. The test requires that the specimen be supported in a vertical fixture and a precisely controlled flame applied for a 10 second period. The flame is removed and the duration of flaming is noted. If the flame extinguishes, a second exposure to flame for 10 seconds is applied and duration of flaming is again noted. It is observed and recorded whether or not test specimens drip flaming particles that ignite a cotton swatch.

### **Materials classed V-0**

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A material classed V-0 shall:

- A. Not have any specimens that burn with flaming combustion for more than 10 seconds after either application of the test flame.
- B. Not have a total flaming combustion time exceeding 50 seconds for the 10 flame applications for each set of five specimens.
- C. Not have any specimens that burn with flaming or glowing combustion up to the holding fixture.
- D. Not have any specimens that drip flaming particles that ignite the dry absorbent surgical cotton located 12" below the test specimen.
- E. Not have any specimens with glowing combustion that persists for more than 30 seconds after the second removal of the test flame.

### **Materials classed V-1**

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A material classed V-1 shall:

- A. Not have any specimens that burn with flaming combustion for more than 30 seconds after either application of the test flame.
- B. Not have a total flaming combustion time exceeding 250 seconds for the 10 flame applications for each set of five specimens.
- C. Not have any specimens that burn with flaming or glowing combustion up to the holding fixture.
- D. Not have any specimens that drip flaming particles that ignite the dry absorbent surgical cotton located 12" below the test specimen.
- E. Not have any specimens with glowing combustion that persists for more than 60 seconds after the second removal of the test flame.

### **Materials classed V-2**

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A material classed V-2 shall:

- A. Not have any specimens that burn with flaming combustion for more than 30 seconds after either application of the test flame.
- B. Not have a total flaming combustion time exceeding 250 seconds for the 10 flame applications for each set of five specimens.
- C. Not have any specimens that burn with flaming or glowing combustion up to the holding fixture.
- D. Be permitted to have specimens that drip flaming particles that burn only briefly, some of which ignite the dry absorbent surgical cotton placed 12" below the test specimen.
- E. Not have any specimens with glowing combustion that persists for more than 60 seconds after the second removal of the test flame.

### Chemical resistance

Table 3 shows the resistance of Ty-Rap® cable tie materials to various chemicals. The table is designed to help you determine the cable tie material best suited for a particular chemical environment.

**Table 3-Resistance of Available Materials to Various Chemicals Temp 20°C (70°F)**

Reagents	Concentration	Heat-	Halar <sup>†</sup>	Weatherable	Standard 6/6	6/6 Weather-	6/6 Fire-	Weather-	Polypropylene	Weather-	Fluoro-	Stainless
		Stabilized 6/6 Nylon as Used in TYH	as Used in TYV	Acetal as Used in TYD	Nylon as Used in TY	Resistant Nylon as Used in TY	Retardant Nylon as Used in TY	Resistant Nylon 12 as Used in TYC	as Used in TYP	Resistant Polypropylene as Used in TYP	polymer as Used in TYZ	Steel as Used in TYS
		Series	Series	Series	Series	X Series	FR Series	X Series	Series	X Series	Series	Series
Arsenic Acid	40%	—	—	—	—	—	—	—	E	E	—	E
Acetaldehyde	50%	S	—	—	S	S	S	—	—	—	—	—
Acetone	100%	E	E	F	E	E	E	E	E	E	E	E
Aluminum Hydroxide	AQ	—	E	—	—	—	—	—	E	E	E	E
Ammonia	100%	—	E	—	—	—	—	E	E	E	E	E
Ammonium Carbonate	5%	S	E	—	S	S	S	E	E	E	E	E
Ammonium Hydroxide	10%	E	E	F	E	E	E	—	E	E	E	E
Ammonium Nitrate	—	—	E	—	—	—	—	E	E	E	E	E
Ammonium Sulfate	10%	—	E	—	—	—	—	S	S	S	S	S
Barium Carbonate	100%	—	E	—	—	—	—	E	E	E	E	E
Barium Chloride	5%	NR	—	—	NR	NR	NR	E	E	E	E	E
Barium Sulfate	10%	E	—	—	E	E	E	E	E	E	E	E
Barium Sulfide	10%	S	—	—	S	S	S	E	E	E	E	E
Benzene	100%	E	E	F	E	E	E	E	S	S	E	E
Benzoic Acid	100%	NR	E	—	NR	NR	NR	E	E	E	E	E
Butyric Acid	50%	NR	E	—	NR	NR	NR	—	E	E	E	E
Calcium Carbonate	AQ	—	E	—	—	—	—	—	E	E	E	E
Calcium Hydroxide	20%	—	F	E	—	—	—	—	E	E	E	E
Calcium Hydrochlorite	2	NR	—	—	NR	NR	NR	—	F	F	F	F
Calcium Sulfate	2%	—	E	—	—	—	—	—	E	E	E	E
Carbon Tetrachloride	100%	E	E	E	E	E	E	E	F	F	E	E
Chlorine (WET)	—	NR	—	—	NR	NR	NR	—	F	F	F	F
Chlorine (DRY)	—	NR	—	—	NR	NR	NR	—	NR	NR	F	F
Chloroacetic Acid	30%	NR	—	—	NR	NR	NR	—	—	—	F	F
Chloroform	100%	—	E	—	—	—	—	F	F	F	E	E
Chromic Acid	50%	NR	S	—	NR	NR	NR	—	F	F	F	F
Citric Acid	50%	S	E	E	S	S	S	E	E	E	E	E
Copper Cyanide	10%	—	E	—	—	—	—	—	E	E	E	E
Copper Nitrate	50%	—	E	—	—	—	—	—	E	E	E	E
Cider	—	—	E	—	—	—	—	—	E	E	E	E
Dichloroethane	100%	—	E	—	—	—	—	—	—	—	E	E
Diethyl Ether	100%	—	E	S	—	—	—	E	E	E	E	E
Ethyl Alcohol	100%	S	E	—	S	S	S	E	E	E	E	E

<sup>†</sup> Halar® Trademark of Solvay Solexis, Inc.

#### Ratings

**E** = Excellent

**S** = Satisfactory

**F** = Fair

**NR** = Not Recommended

**(AQ)** = Aqueous

# Ty-Rap®

## Cable Ties-Material Selection Ordering Guide

**Table 3-continued**

Reagents	Concentration	Heat-Stabilized 6/6	Halar® as	Weatherable	Standard 6/6	6/6 Weather-	6/6 Fire-	Weather-	Polypropylene	Weather-	Fluoro-	Stainless
		Nylon as Used in TYH	Used in TYV	Acetal as Used in TYD	Nylon as Used in TY	Resistant Nylon as Used in TY	Retardant Nylon as Used in TY	Resistant Nylon 12 as Used in TYC	as Used in TYP	Resistant Polypropylene as Used in TYP	polymer as Used in TYZ	Steel as Used in TYS
		Series	Series	Series	Series	X Series	FR Series	X Series	Series	X Series	Series	Series
Ethyl Chloride	100%	—	S	E	—	—	—	F	F	F	E	E
Ethylene Glycol	100%	E	E	S	E	E	E	—	E	E	E	E
Ferric Hydroxide	100%	—	E	—	—	—	—	—	E	E	E	E
Ferric Nitrate	10%	—	E	—	—	—	—	—	E	E	E	E
Ferrous Sulfate	10%	—	E	—	—	—	—	—	E	E	E	E
Fuel Oil	100%	—	E	—	—	—	—	E	—	—	E	E
Furfural	100%	—	E	—	—	—	—	—	F	F	E	E
Gallic Acid	AQ	—	E	—	—	—	—	—	—	—	E	E
Gasoline	100%	E	E	—	E	E	E	—	S	S	E	E
Glycerine	100%	—	E	—	—	—	—	E	E	E	—	E
Hydrocyanic Acid	100%	—	E	—	—	—	—	—	E	E	E	E
Hydrogen Peroxide	30%	NR	E	F	NR	NR	NR	S	E	E	E	E
Hydrogen Sulfide	Dry	NR	E	—	NR	NR	NR	E	E	E	E	E
Iodoform	100%	—	E	—	—	—	—	—	—	—	E	E
Isopropyl Alcohol	100%	S	E	—	S	S	S	E	E	E	E	E
Jet Fuel	100%	E	E	—	E	E	E	—	S	S	E	E
Lactic Acid	10%	E	E	—	E	E	E	S	E	E	E	E
Lanolin	10%	E	E	—	E	E	E	E	E	E	E	E
Lead Acetate	5%	—	E	—	—	—	—	—	E	E	E	E
Linseed Oil	10%	E	E	E	E	E	E	E	E	E	E	E
Magnesium Carbonate	100%	—	E	—	—	—	—	E	E	E	E	E
Magnesium Chloride	10%	F	—	—	F	F	F	F	F	F	F	F
Magnesium Nitrate	100%	—	E	—	—	—	—	E	E	E	E	E
Malic Acid	AQ	—	E	—	—	—	—	—	E	E	E	E
Mercury	100%	—	E	—	—	—	—	E	E	E	E	E
Methyl Alcohol	100%	S	E	—	S	S	S	E	E	E	E	E
Methyl Chloride	100%	—	S	—	—	—	—	—	S	S	E	E
Methyl Ethyl Ketone	100%	—	E	F	—	—	—	E	E	E	E	E
Naptha	100%	—	E	—	—	—	—	—	E	E	E	E
Nitric Acid	30%	NR	E	NR	NR	NR	NR	—	E	E	E	E
Nitric Acid	30-70%	NR	S	NR	NR	NR	NR	—	F	F	S	E
Nitrous Acid	5%	—	E	—	—	—	—	—	F	F	E	E
Oieic Acid	100%	—	E	S	—	—	—	—	E	E	E	E
Oxalic Acid	10%	—	E	—	—	—	—	S	E	E	E	E
Paraffin	100%	E	E	—	E	E	E	E	E	E	E	E
Petroleum Ether	100%	—	E	—	—	—	—	E	F	F	E	E
Phenol	90%	NR	E	NR	NR	NR	NR	—	E	E	E	E
Phosphoric Acid	10%	NR	E	—	NR	NR	NR	—	E	E	E	E
Picric Acid	1%	—	E	—	—	—	—	—	E	E	E	E
Potassium Bromide	AQ	—	—	—	—	—	—	—	S	S	S	S

† Halar® Trademark of Solvay Solexis, Inc.

**Ratings**

**E** = Excellent

**S** = Satisfactory

**F** = Fair

**NR** = Not Recommended

**(AQ)** = Aqueous



**Table 3—continued**

Reagents	Concentration	Heat-	Halar®† as	Weatherable	Standard 6/6	6/6 Weather-	6/6 Fire-	Weather-	Polypropylene	Weather-	Fluoro-	Stainless
		Stabilized 6/6 Nylon as Used in TYH	Used in TYV	Acetal as Used in TYD	Nylon as Used in TY	Resistant Nylon as Used in TY	Retardant Nylon as Used in TY	Resistant Nylon 12 as Used in TYC	as Used in TYP	Resistant as Used in TYP	polymer as Used in TYZ	Steel as Used in TYS
		Series	Series	Series	Series	X Series	FR Series	X Series	Series	X Series	Series	Series
Potassium Carbonate 1%	—	E	—	—	—	—	E	E	E	E	E	E
Potassium Chlorate	AQ	—	E	—	—	—	—	S	E	E	E	E
Potassium Dichromate	40%	NR	E	—	NR	NR	NR	F	E	E	E	E
Potassium Ferrocyanide	25%	—	E	—	—	—	—	—	E	E	E	E
Potassium Hydroxide	5%	S	E	—	S	S	S	—	E	E	E	E
Potassium Iodide	100%	—	E	—	—	—	—	E	E	E	E	E
Potassium Nitrate	50%	F	E	—	F	F	F	E	E	E	E	E
Potassium Permanganate	5%	NR	E	S	NR	NR	NR	NR	E	E	E	E
Potassium Sulfate	5%	—	E	—	—	—	—	E	E	E	E	E
Potassium Sulfide	AQ	—	E	—	—	—	—	—	E	E	E	E
Propyl Alcohol	100%	E	E	—	E	E	E	—	E	E	E	E
Silver Nitrate	10%	—	E	—	—	—	—	E	E	E	E	E
Sodium Acetate	60%	E	E	—	E	E	E	—	E	E	E	E
Sodium Bicarbonate	100%	E	E	—	E	E	E	E	E	E	E	E
Sodium Bisulfate	10%	—	E	E	—	—	—	E	E	E	E	E
Sodium Borate	100%	—	E	—	—	—	—	—	E	E	E	E
Sodium Carbonate	5%	E	E	S	E	E	E	E	E	E	E	E
Sodium Chlorate	25%	—	E	E	—	—	—	S	E	E	E	E
Sodium Chloride	2%	E	E	S	E	E	E	E	E	E	E	E
Sodium Fluoride	5%	—	—	—	—	—	—	—	F	F	F	F
Sodium Hydroxide	10%	E	E	S	E	E	E	E	E	E	E	E
Sodium Hyposulfite	AQ	—	E	—	—	—	—	—	—	—	E	E
Sodium Nitrate	5%	E	E	—	E	E	E	E	E	E	E	E
Sodium Nitrite	AQ	—	E	—	—	—	—	S	E	E	E	E
Sodium Perchlorate	10%	—	E	—	—	—	—	—	—	—	E	E
Sodium Phosphate	5%	—	E	—	—	—	—	E	E	E	E	E
Sodium Sulfate	5%	S	E	—	S	E	E	E	E	E	E	E
Sodium Thiosulfate	5%	—	—	S	—	—	—	S	S	S	S	S
Stearic Acid	100%	—	E	—	—	—	—	F	E	E	E	E
Sulfur	100%	—	E	—	—	—	—	E	E	E	E	E
Sulfur Dioxide	100%	NR	E	—	NR	NR	NR	E	E	E	E	E
Sulfuric Acid	Conc.	NR	E	NR	NR	NR	NR	—	S	S	E	E
Sulfuric Acid	5%	NR	F	F	NR	NR	NR	F	F	F	F	F
Tannic Acid	10%	—	E	—	—	—	—	—	E	E	E	E
Tartaric Acid	50%	—	E	E	—	—	—	E	E	E	E	E
Tetrahydrofuran	100%	—	F	E	—	—	—	S	F	F	E	E
Toluene	100%	E	E	F	E	E	E	E	F	F	E	F
Xylene	100%	E	—	—	E	E	E	E	F	F	E	E
Zinc Chloride	70%	F	E	NR	F	F	F	E	E	E	E	E
Zinc Nitrate	AQ	—	E	—	—	—	—	E	E	E	E	E
Zinc Sulfate	AQ	—	E	—	—	—	—	E	E	E	E	E

† Halar® Trademark of Solvay Solexis, Inc.

**Ratings**

**E** = Excellent

**S** = Satisfactory

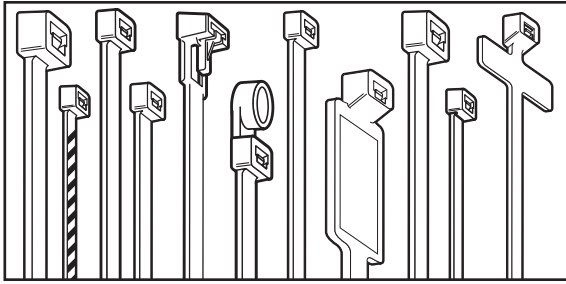
**F** = Fair

**NR** = Not Recommended

**(AQ** = Aqueous)

# Catamount™

## Cable Ties



- MINIATURE
- HEAVY DUTY
- INTERMEDIATE
- EXTRA HEAVY DUTY
- STANDARD
- RELEASABLE TIES

- MOUNTING HEAD
- STRIPED TIES
- RESTRICTED BUNDLE
- IDENTIFICATION TIES
- MIL-SPEC TIES

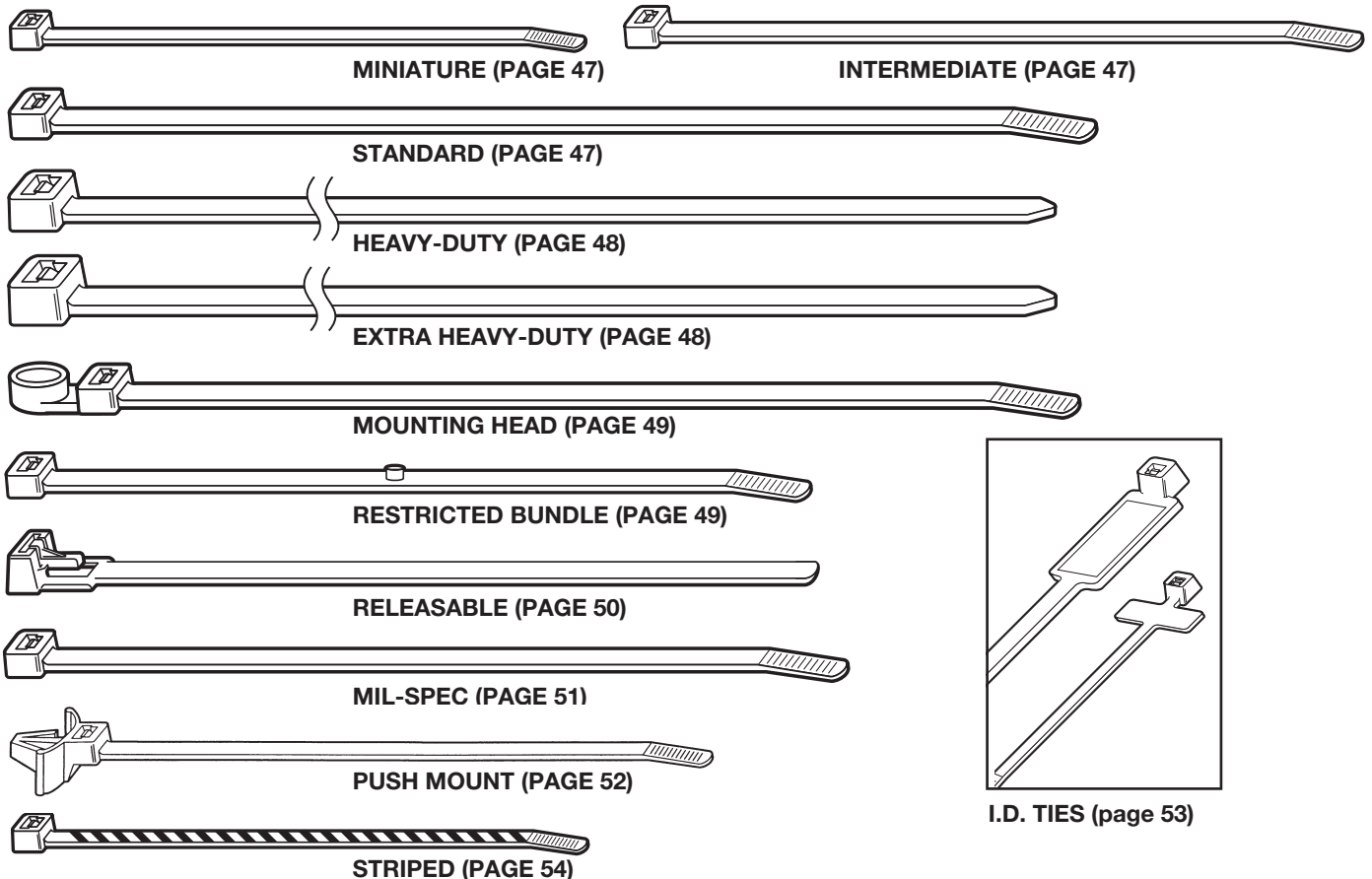
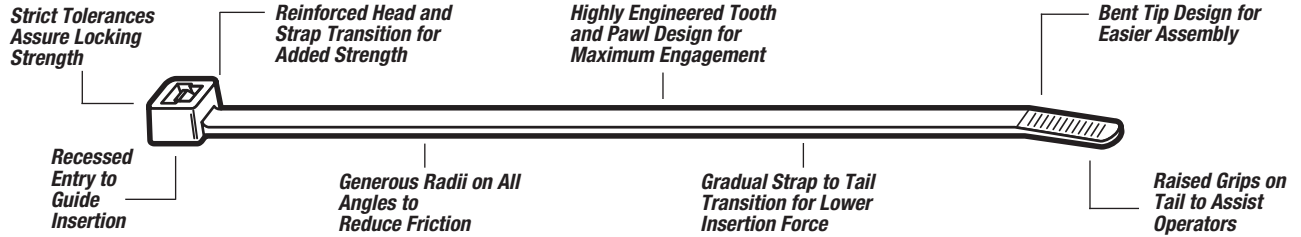
Catamount™ Cable Ties are available in lengths from 4" to our exclusive 48" strap. Cable Ties will satisfy bundling requirements from 1/16" to 15" and loop tensile strengths from 18 to 175 pounds.

Cable Ties are stocked in materials and colours as listed. Contact your Catamount™ Distributor or Customer Service Representative for availability in special colours.

Where applicable, Catamount™ Cable Ties are UL Recognized, Mil-Spec Approved and/or QPL Listed.

State-of-the-art robotic and raw material handling equipment assures product and material integrity throughout the manufacturing process. Overall quality is achieved through statistical analysis and quality driven operator objectives. Catamount™ has attained Mil-Spec I-45208 quality ratings from a number of equipment manufacturers.

Catamount™ products are sold through stocking T&B Distributors.





# Catamount™

## Cable Ties

### Materials for Molded Assembly Hardware

Property	ASTM Method	Test Condition	Units	Molded 6/6 Nylon	Heat Stabilized Nylon	UV Black Nylon
Tensile Strength	D638	+73°F; 50% RH	kpsi	11.2	11.2	9.0
Elongation at Break	D638	+73°F; 50% RH	%	Ž300	Ž300	200
Yield Strength	D638	+73°F; 50% RH	kpsi	8.5	8.5	9.0
Shear Strength	D732	Dry As Molded (DAM)	kpsi	9.6	9.6	10.5
Deformation Under Load	D621	2,000 psi +122°F; DAM	%	1.4	1.4	1.2
IZOD Impact	D256	+73°F; 50% RH	ft lb/in	2.1	2.1	2.0
Tensile Impact Strength	D1822	+73°F; Long Specimen; DAM	ft lb/in <sup>2</sup>	240	240	N.R.
Melting Point	D789	Fisher-Johns	°F	491	491	491
Thermal Linear Expansion	D696	DAM	in/in/°F	4 x 10 <sup>-5</sup>	4 x 10 <sup>-5</sup>	N.R.
Thermal Conductivity	–	DAM Conche-Fitch	BTU - in/h . ft <sup>2</sup> . °F	1.7	1.7	1.7
Brittleness Temperature	D746	50% RH	°F	-85	-85	-62
Oxygen Index	D2863	DAM 50% RH	%O <sub>2</sub>	28 31	28 31	25 31
UL Flammability	UL 94	DAM 50% RH	– –	V-2 V-2	V-2 V-2	V-2 V-2

- Material data as provided by our suppliers.
- Tests conducted on 1/4" specimens.
- N.R. = Not Reported

# Catamount®

## Cable Ties

### About Nylon...

Nylons possess an outstanding balance of properties combining strength, moderate stiffness, high service temperature and a high level of toughness. Nylon is particularly resistant to repeated impact, has a low co-efficient of friction and excellent abrasion resistance.

Nylon is resistant to fuels, lubricants and most chemicals, but is attacked by phenols, strong acids and oxidizing agents. Contact your Catamount™ Customer Service Representative or your Catamount™ Distributor for chemical data relative to your application.

Nylon is inherently susceptible to environmental conditions. Catamount™ Cable Ties are moisturized to optimum performance levels at machine-side and should be stored in cool dry areas out of direct sunlight. Cable Ties are packaged in plastic bags to contain moisture and should remain sealed until ready for use.

### NBS Smoke Generation for 6/6 Nylon

Sample Thickness	UL Flammability	Energy Source	Specific Optical Density	
			at Maximum Smoke Accumulation	at 2 Minutes
1/16"	94 V-2	Radiant (2.5 watts/sq cm)	13	0
1/8"	94 V-2	Radiant Plus Flaming Gas Jets	26	1

- Results as provided by National Bureau of Standards (NBS). Results may not be directly correlated with larger fires, such as burning buildings. Materials should be tested to your application.

### Temperature Index for Molded Nylons

Material	Minimum Thickness (in)	Temperature Index		
		Electrical (°C)	Mechanical w/o Impact (°C)	Hot Wire Ignition (sec)
6/6 Nylon	.058	125	85	15.0
UV Black Nylon	.120	125	85	35.0
Heat Stabilized Nylon	.240	125	85	35.0
Heat Stabilized Nylon	.058	130	105	11.0
Heat Stabilized Nylon	.120	130	110	20.0

- Temperature Index is the temperature at which the specific property will decrease to one-half its original value after 60,000 hours exposure at that temperature.

# Catamount™

## Cable Ties



### Miniature – Series 18

Std. Cat. No.	Bulk Cat. No.	Material	Colour	Bundle Diameter		Length		Width		Minimum Loop Tensile		Std. Pkg.	Bulk Pkg.
				Inch	(mm)	Inch	(mm)	Inch	(mm)	LB	(kg)		
L-4-18HS-0-C	L-4-18HS-0-M	Heat Stabilized Nylon	Black	1/16 - 5/8	(2-16)	4.0	(102)	.100	(3)	18	(8.2)	100	1000
L-4-18-9-C	L-4-18-9-M	Nylon	Natural	1/16 - 5/8	(2-16)	4.0	(102)	.100	(3)	18	(8.2)	100	1000
L-4-18-0-C	L-4-18-0-M	Nylon	Black	1/16 - 5/8	(2-16)	4.0	(102)	.100	(3)	18	(8.2)	100	1000
L-6-18-9-C	L-6-18-9-M	Nylon	Natural	1 1/16 - 1 1/2	(2-38)	6.4	(163)	.100	(3)	18	(8.2)	100	1000
L-6-18-0-C	L-6-18-0-M	Nylon	Black	1 1/16 - 1 1/2	(2-38)	6.4	(163)	.100	(3)	18	(8.2)	100	1000
L-8-18-9-C	L-8-18-9-M	Nylon	Natural	1/16 - 2	(2-51)	8.0	(202)	.100	(3)	18	(8.2)	100	1000
L-8-18-0-C	L-8-18-0-M	Nylon	Black	1 1/16 - 2	(2-51)	8.0	(202)	.100	(3)	18	(8.2)	100	1000

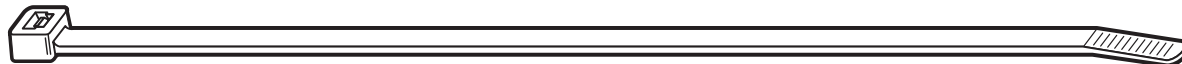
• Use QC-100, L-200, L-400-C, or ERG-299 Installation Tools.  
Consult Customer Service for availability and colours.



### Intermediate - Series 30/40

Std. Cat. No.	Bulk Cat. No.	Material	Colour	Bundle Diameter		Length		Width		Minimum Loop Tensile		Std. Pkg.	Bulk Pkg.
				Inch	(mm)	Inch	(mm)	Inch	(mm)	LB	(kg)		
L-5-30HS-0-C	L-5-30HS-0-M	Heat Stabilized Nylon	Black	1/16 - 1 1/4	(2-32)	5.6	(145)	.130	(3)	30	(13.6)	100	1000
L-5-30-9-C	L-5-30-9-M	Nylon	Natural	1/16 - 1 1/4	(2-32)	5.6	(145)	.130	(3)	30	(13.6)	100	1000
L-5-30-0-C	L-5-30-0-M	Nylon	Black	1/16 - 1 1/4	(2-32)	5.6	(145)	.130	(3)	30	(13.6)	100	1000
L-8-40-9-C	L-8-40-9-M	Nylon	Natural	1/16 - 2	(2-51)	8.5	(215)	.140	(3)	40	(18.2)	100	1000
L-8-40-0-C	L-8-40-0-M	Nylon	Black	1/16 - 2	(2-51)	8.5	(215)	.140	(3)	40	(18.2)	100	1000
L-11-40-9-C	L-11-40-9-D	Nylon	Natural	1/16 - 3	(2-76)	11.5	(282)	.146	(4)	40	(18.2)	100	500
L-11-40-0-C	L-11-40-0-D	Nylon	Black	1/16 - 3	(2-76)	11.5	(282)	.146	(4)	40	(18.2)	100	500
L-14-40-9-C	L-14-40-9-D	Nylon	Natural	1/16 - 4	(2-102)	14.5	(358)	.146	(4)	40	(18.2)	100	500
L-14-40-0-C	L-14-40-0-D	Nylon	Black	1/16 - 4	(2-102)	14.5	(358)	.146	(4)	40	(18.2)	100	500

• Use QC-100, L-200, L-400-C, or ERG-299 Installation Tools.  
Consult Customer Service for availability and colours.



### Standard - Series 50

Std. Cat. No.	Bulk Cat. No.	Material	Colour	Bundle Diameter		Length		Width		Minimum Loop Tensile		Std. Pkg.	Bulk Pkg.
				Inch	(mm)	Inch	(mm)	Inch	(mm)	LB	(kg)		
L-5-50HS-0-C	L-5-50HS-0-M	Heat Stabilized Nylon	Black	1/16 - 1	(2-25)	5.5	(140)	.187	(5)	50	(22.7)	100	1000
L-5-50-9-C	L-5-50-9-M	Nylon	Natural	1/16 - 1	(2-25)	5.5	(140)	.187	(5)	50	(22.7)	100	1000
L-5-50-0-C	L-5-50-0-M	Nylon	Black	1/16 - 1	(2-25)	5.5	(140)	.187	(5)	50	(22.7)	100	1000
L-7-50-9-C	L-7-50-9-M	Nylon	Natural	1/16 - 1 3/4	(2-44)	7.5	(193)	.187	(5)	50	(22.7)	100	1000
L-7-50-0-C	L-7-50-0-M	Nylon	Black	1/16 - 1 3/4	(2-44)	7.5	(193)	.187	(5)	50	(22.7)	100	1000
L-11-50-9-C	L-11-50-9-D	Nylon	Natural	1/16 - 3	(2-76)	11.1	(282)	.187	(5)	50	(22.7)	100	500
L-11-50-0-C	L-11-50-0-D	Nylon	Black	1/16 - 3	(2-76)	11.1	(282)	.187	(5)	50	(22.7)	100	500
L-14-50-9-C	L-14-50-9-D	Nylon	Natural	1/16 - 4	(2-102)	14.1	(358)	.187	(5)	50	(22.7)	100	500
L-14-50-0-C	L-14-50-0-D	Nylon	Black	1/16 - 4	(2-102)	14.1	(358)	.187	(5)	50	(22.7)	100	500

• Use QC-100, L-200, L-400-C, or ERG-299 Installation Tools.  
Consult Customer Service for availability and colours.

Sample Catalogue Order:

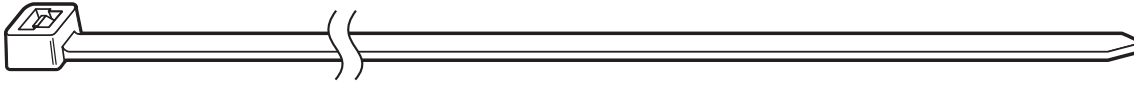
**L 4 18 9 C** = Natural Colour Type

#### Colour Table

0 – Black (Outdoor)	5 – Green	FL11 – Fluorescent Pink
1 – Brown	6 – Blue	FL16 – Fluorescent Orange
2 – Red	7 – Purple	FL17 – Fluorescent Yellow
3 – Orange	8 – Grey	FL18 – Fluorescent Green
4 – Yellow	9 – Natural	FL20 – Fluorescent Blue

# Catamount™

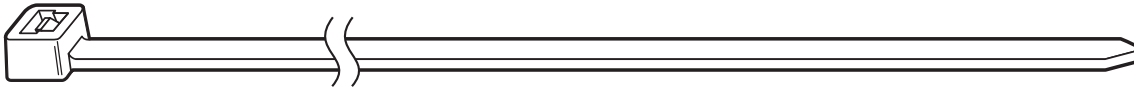
## Cable Ties



### Heavy Duty - Series 120

Std. Cat. No.	Material	Colour	Bundle Diameter		Length		Width		Minimum Loop Tensile		Std. Pkg.
			Inch	(mm)	Inch	(mm)	Inch	(mm)	LB	(kg)	
L-8-120HS-0-C	Heat Stabilized Nylon	Black	3/16 - 2	(5-51)	8.0	(202)	.300	(8)	120	(54.4)	100
L-8-120-9-C	Nylon	Natural	3/16 - 2	(5-51)	8.0	(202)	.300	(8)	120	(54.4)	100
L-8-120-0-C	Nylon	Black	3/16 - 2	(5-51)	8.0	(202)	.300	(8)	120	(54.4)	100
L-11-120-9-C	Nylon	Natural	3/16 - 3	(5-76)	11.1	(282)	.300	(8)	120	(54.4)	100
L-11-120-0-C	Nylon	Black	3/16 - 3	(5-76)	11.1	(282)	.300	(8)	120	(54.4)	100
L-14-120-9-C	Nylon	Natural	3/16 - 4	(5-102)	14.2	(363)	.300	(8)	120	(54.4)	100
L-14-120-0-C	Nylon	Black	3/16 - 4	(5-102)	14.2	(363)	.300	(8)	120	(54.4)	100
L-18-120-9-L	Nylon	Natural	3/16 - 4 7/8	(5-124)	18.0	(457)	.300	(8)	120	(54.4)	50
L-18-120-0-L	Nylon	Black	3/16 - 4 7/8	(5-124)	18.0	(457)	.300	(8)	120	(54.4)	50
L-24-120-9-L	Nylon	Natural	3/16 - 7	(5-178)	24.2	(616)	.300	(8)	120	(54.4)	50
L-24-120-0-L	Nylon	Black	3/16 - 7	(5-178)	24.2	(616)	.300	(8)	120	(54.4)	50
L-28-120-9-L	Nylon	Natural	3/16 - 9	(5-230)	28.0	(816)	.300	(8)	120	(54.4)	50
L-28-120-0-L	Nylon	Black	3/16 - 9	(5-230)	28.0	(816)	.300	(8)	120	(54.4)	50

• Use L-300C or ERG-297 Installation Tool. Consult Customer Service for availability and colours.



### Extra Heavy Duty - Series 175

Std. Cat. No.	Material	Colour	Bundle Diameter		Length		Width		Minimum Loop Tensile		Std. Pkg.
			Inch	(mm)	Inch	(mm)	Inch	(mm)	LB	(kg)	
L-24-175-9-L	Nylon	Natural	3/16 - 7.2	(5-184)	24.0	(612)	.345	(9)	175	(79.3)	50
L-24-175-0-L	Nylon	Black	3/16 - 7.2	(5-184)	24.0	(612)	.345	(9)	175	(79.3)	50
L-34-175-9-L	Nylon	Natural	3/16 - 10	(5-254)	34.0	(864)	.345	(9)	175	(79.3)	50
L-36-175-9-L	Nylon	Natural	2 3/4 - 10 3/4	(70-273)	36.0	(914)	.345	(9)	175	(79.3)	50
L-36-175-0-L	Nylon	Black	2 3/4 - 10 3/4	(70-273)	36.0	(914)	.345	(9)	175	(79.3)	50
L-41-175-9-L	Nylon	Natural	3/16 - 12	(5-305)	41.0	(1032)	.345	(9)	175	(79.3)	50
L-41-175-0-L	Nylon	Black	3/16 - 12	(5-305)	41.0	(1032)	.345	(9)	175	(79.3)	50
L-48-175-9-L	Nylon	Natural	3/16 - 15	(5-375)	48.0	(1216)	.345	(9)	175	(79.3)	50
L-48-175-0-L	Nylon	Black	3/16 - 15	(5-375)	48.0	(1216)	.345	(9)	175	(79.3)	50

• Use L-300C Installation Tool. Consult Customer Service for availability and colours.

Sample Catalogue Order:

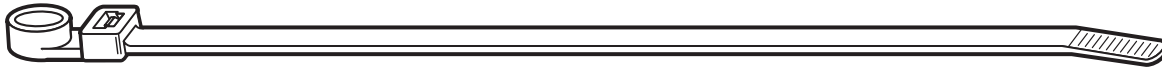
**L 4 18 9 C** = Natural Colour Type

#### Colour Table

0 – Black (Outdoor)	5 – Green	11 – Fluorescent Pink
1 – Brown	6 – Blue	16 – Fluorescent Orange
2 – Red	7 – Purple	17 – Fluorescent Yellow
3 – Orange	8 – Grey	18 – Fluorescent Green
4 – Yellow	9 – Natural	20 – Fluorescent Blue

# Catamount™

## Cable Ties



### Mounting Head Ties

Std. Cat. No.	Cat. No. Bulk	Material	Colour	Bundle Diameter		Length		Width		Minimum Loop Tensile		Mounting Head Screw Size	Std. Pkg.	Bulk Pkg.
				Inch	(mm)	Inch	(mm)	Inch	(mm)	LB	(kg)			
L-5-30MH-9-C	L-5-30MH-9-M	Nylon	Natural	1/16 - 1 1/4	(2 - 32)	5.85	(148.6)	.140	(4)	30	(13.6)	No. 8	100	1000
L-5-30MH-0-C	L-5-30MH-0-M	Nylon	Black	1/16 - 1 1/4	(2 - 32)	5.85	(148.6)	.140	(4)	30	(13.6)	No. 8	100	1000
L-7-50MH-9-C	L-7-50MH-9-M	Nylon	Natural	1/16 - 1 3/4	(2 - 44)	7.5	(191)	.185	(5)	30	(13.6)	No. 10	100	1000
L-7-50MH-0-C	L-7-50MH-0-M	Nylon	Black	1/16 - 1 3/4	(2 - 44)	7.5	(191)	.185	(5)	30	(13.6)	No. 10	100	1000
L-11-50MH-9-C	L-11-50MH-9-D	Nylon	Natural	1/16 - 3	(2 - 76)	11.1	(282)	.187	(5)	50	(22.7)	No. 10	100	500
L-11-50MH-0-C	L-11-50MH-0-D	Nylon	Black	1/16 - 3	(2 - 76)	11.1	(282)	.187	(5)	50	(22.7)	No. 10	100	500
L-14-50MH-9-C	L-14-50MH-9-D	Nylon	Natural	1/16 - 4	(2 - 102)	14.5	(365)	.187	(5)	50	(22.7)	No. 10	100	500
L-14-50MH-0-C	L-14-50MH-0-D	Nylon	Black	1/16 - 4	(2 - 102)	14.5	(365)	.187	(5)	50	(22.7)	No. 10	100	500
L-14-120MH-9-C		Nylon	Natural	3/16 - 4	(5 - 102)	14.85	(374)	.300	(8)	120	(54.4)	1/4 inch	100	-
L-14-120MH-0-C		Nylon	Black	3/16 - 4	(5 - 102)	14.85	(374)	.300	(8)	120	(54.4)	1/4 inch	100	-

• Use QC-100, L-200, L-400-C, ERG-297, or ERG-299 Installation Tool. Consult Customer Service for availability and colours.



### Restricted Bundle

Std. Cat. No.	Cat. No. Bulk	Material	Colour	Bundle Diameter		Length		Width		Minimum Loop Tensile		Tab Height		Std. Pkg.	Bulk Pkg.
				Inch	(mm)	Inch	(mm)	Inch	(mm)	LB	(kg)	Inch	(mm)		
L-5-30TB-3-M		Nylon	Orange	21/32 - 1 1/4	(17 - 32)	5.6	(142)	.130	(3)	30	(13.6)	.062	(1.58)	-	1000

• Recommended for tote-box, security and temporary applications.  
 • Use QC-100, L-200, L-400-C, or ERG-299 Installation Tools on Low setting. Consult Customer Service for availability and colours.

Sample Catalogue Order:

**L 4 18 9 C** = Natural Colour Type

#### Colour Table

0 - Black (Outdoor)	5 - Green	11 - Fluorescent Pink
1 - Brown	6 - Blue	16 - Fluorescent Orange
2 - Red	7 - Purple	17 - Fluorescent Yellow
3 - Orange	8 - Grey	18 - Fluorescent Green
4 - Yellow	9 - Natural	20 - Fluorescent Blue



# Catamount™

## Cable Ties



### Releasable Ties

Std. Cat. No.	Cat. No. Bulk	Material	Colour	Bundle Diameter		Length		Width		Minimum Loop Tensile		Std. Pkg.	Bulk Pkg.
				Inch	(mm)	Inch	(mm)	Inch	(mm)	LB	(kg)		
L-5-50R-9-C	L-5-50R-9-D	Nylon	Natural	1/8 - 1 1/4	(3 - 32)	5.9	(150)	.295	(7.5)	50	(22.7)	100	500
L-5-50R-0-C	L-5-50R-0-D	Nylon	Black	1/8 - 1 1/4	(3 - 32)	5.9	(150)	.295	(7.5)	50	(22.7)	100	500
L-8-50R-9-C	L-8-50R-9-D	Nylon	Natural	1/8 - 2	(3 - 51)	7.8	(198)	.295	(7.5)	50	(22.7)	100	500
L-8-50R-0-C	L-8-50R-0-D	Nylon	Black	1/8 - 2	(3 - 51)	7.8	(198)	.295	(7.5)	50	(22.7)	100	500
L-10-50R-9-C	L-10-50R-9-D	Nylon	Natural	1/8 - 3	(3 - 76)	11.265	(286)	.295	(7.5)	50	(22.7)	100	500
L-10-50R-0-C	L-10-50R-0-D	Nylon	Black	1/8 - 3	(3 - 76)	11.265	(286)	.295	(7.5)	50	(22.7)	100	500

- Push Button Release.
- Use QC-100, L-200, L-400-C, ERG-297, ERG-299 Installation Tool. Consult Customer Service for availability and colours.

Sample Catalogue Order:

**L 4 18 9 C** = Natural Colour Type

#### Colour Table

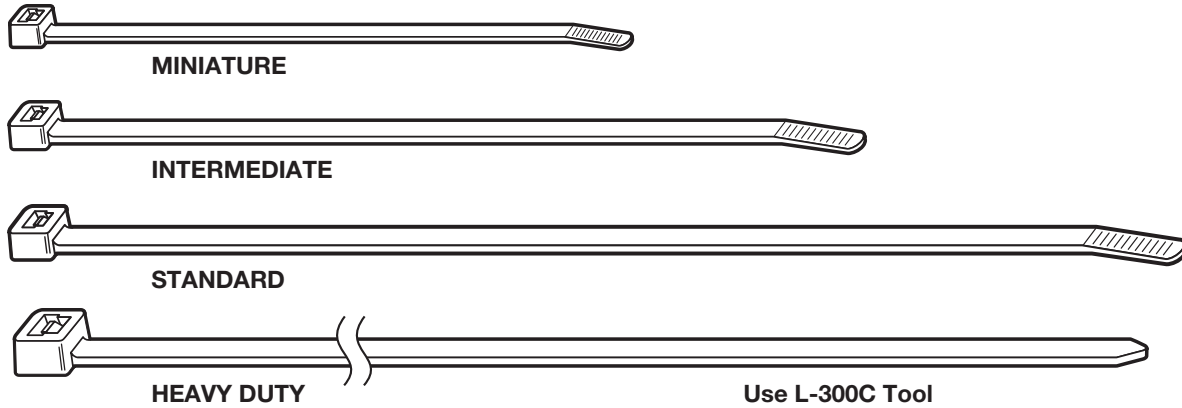
0 – Black (Outdoor)	5 – Green	11 – Fluorescent Pink
1 – Brown	6 – Blue	16 – Fluorescent Orange
2 – Red	7 – Purple	17 – Fluorescent Yellow
3 – Orange	8 – Grey	18 – Fluorescent Green
4 – Yellow	9 – Natural	20 – Fluorescent Blue

# Catamount™

## Cable Ties

### Catamount™ Military Specification Ties

The following cable ties meet the stringent requirements of military specifications. To locate ties that meet a particular specification, refer to the chart below.



### Mil-Spec Cable Ties

Mil-Spec	Std. Cat. No.	Bulk Cat. No.	Material	ID Code	Tool Setting	Std. Pkg.	Bulk Pkg.
MS-3367-2-9	L-14-50-9-C	L-14-50-9-D	Natural Nylon	STD	6 to 8	100	500
MS-3367-2-0	L-14-50-0-C	L-14-50-0-D	UV Black Nylon	STD	6 to 8	100	500
MS-3367-3-9	L-14-120-9-C	-	Natural Nylon	HVY	5 to 8	100	-
MS-3367-3-0	L-14-120-0-C	-	UV Black Nylon	STD	6 to 8	100	-
MS-3367-4-9	L-4-18-9-C	-	Natural Nylon	MIN	1 to 3	100	-
MS-3367-4-0	L-4-18-0-C	-	UV Black Nylon	MIN	1 to 3	100	-
MS-3367-5-9	L-5-30-9-C	-	Natural Nylon	INT	3 to 5	100	-
MS-3367-5-0	L-5-30-0-C	-	UV Black Nylon	INT	3 to 5	100	-
MS-3367-7-9	L-11-50-9-C	L-11-50-9-D	Natural Nylon	STD	6 to 8	100	500
MS-3367-7-0	L-11-50-0-C	L-11-50-0-D	UV Black Nylon	STD	6 to 8	100	500
MS-3367-6-9	L-28-120-9-L	-	Natural Nylon	HVY	5 to 8	50	-
MS-3367-6-0	L-28-120-0-L	-	UV Black Nylon	HVY	5 to 8	50	-

• Use L-200, L-400-C, or ERG-297 Installation Tools

• Catamount™ FSCM 65664 QPL Listed

• **UL File No. E151267**  
*Electrical Construction Materials*  
*Spiral Wrap*

• **UL File No. E132609**  
*Wire Connectors*

• **UL File No. E107819**  
*Fabricated Parts*  
*Fasteners and Hardware for*  
*Material Traceability*

To assure that military labeling requirements are met when ordering MIL-SPEC Cable Ties, please reference the desired MS number when ordering.

Sample Catalogue Order:

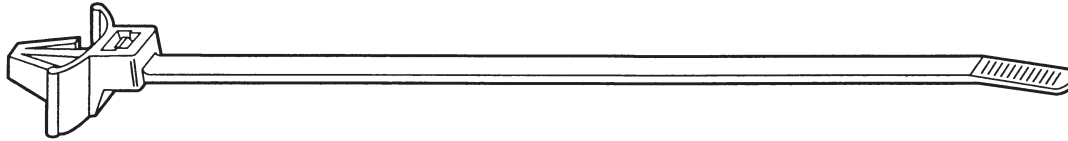
**L 4 18 9 C** = Natural Colour Type

#### Colour Table

0 – Black (Outdoor)	5 – Green	11 – Fluorescent Pink
1 – Brown	6 – Blue	16 – Fluorescent Orange
2 – Red	7 – Purple	17 – Fluorescent Yellow
3 – Orange	8 – Grey	18 – Fluorescent Green
4 – Yellow	9 – Natural	20 – Fluorescent Blue

# Catamount™

## Cable Ties



### Push Mount Cable Ties

Std. Cat. No.	Cat. No. Bulk	Tie Colour	Stripe Colour	Bundle Diameter		Length		Width		Minimum Loop Tensile		Std. Pkg.	Bulk Pkg.
				Inch	(mm)	Inch	(mm)	Inch	(mm)	LB	(kg)		
L-5-50PM-9-C	L-5-50PM-9-D	Nylon	Natural	1/16 - 1	(2-25)	5.8	(147)	.187	(4.76)	50	(22.7)	100	500
L-5-50PM-0-C	L-5-50PM-0-D	Nylon	Black	1/16 - 1	(2-25)	5.8	(147)	.187	(4.76)	50	(22.7)	100	500
L-7-50PM-9-C	L-7-50PM-9-D	Nylon	Natural	1/16 - 1 3/4	(2-44)	8.2	(208)	.187	(4.76)	50	(22.7)	100	500
L-7-50PM-0-C	L-7-50PM-0-D	Nylon	Black	1/16 - 1 3/4	(2-44)	8.2	(208)	.187	(4.76)	50	(22.7)	100	500

- For use in .250 mounting hole.
  - Maximum panel thickness .105.
- Consult Customer Service for availability and colours.

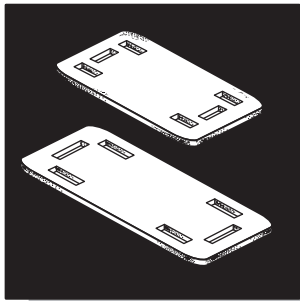
### Releasable Push Mount Cable Ties

Std. Cat. No.	Cat. No. Bulk	Tie Colour	Stripe Colour	Bundle Diameter		Length		Width		Minimum Loop Tensile		Std. Pkg.	Bulk Pkg.
				Inch	(mm)	Inch	(mm)	Inch	(mm)	LB	(kg)		
L-5-50PMR-9-C	L-5-50PMR-9-D	Nylon	Natural	1/16 - 1	(2-25)	5.8	(147)	.187	(4.76)	50	(22.7)	100	500
L-5-50PMR-0-C	L-5-50PMR-0-D	Nylon	Black	1/16 - 1	(2-25)	5.8	(147)	.187	(4.76)	50	(22.7)	100	500
L-7-50PMR-9-C	L-7-50PMR-9-D	Nylon	Natural	1/16 - 1 3/4	(2-44)	8.2	(208)	.187	(4.76)	50	(22.7)	100	500
L-7-50PMR-0-C	L-7-50PMR-0-D	Nylon	Black	1/16 - 1 3/4	(2-44)	8.2	(208)	.187	(4.76)	50	(22.7)	100	500

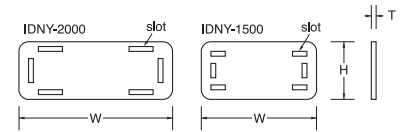
- For use in .250 mounting hole.
  - Maximum panel thickness .105.
- Consult Customer Service for availability and colours.

# Catamount™

## Cable Ties



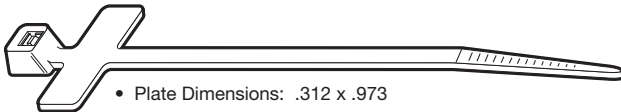
- Two tags for marking bundles to 9" diameters.
- Run ties through opposing mounting holes lengthwise or across the height of tags.
- IDNY-1500 accepts ties to 50 pound tensile; IDNY-2000 accepts ties to 120 pound tensile.
- Stocked in 6/6 Natural Nylon.
- UL Flammability 94 V-2.
- Non-Conductive, Non-Corrosive; resistant to fuels, lubricants and most chemicals.



### Identification Tags

Std. Cat. No.	Bulk Cat. No.	H Height		W Width		T Thickness		Slot Height		Slot Width		Std. Pkg.	Bulk Pkg.
		Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)		
-	<b>IDNY-1500-9-M</b>	.745	(18.92)	1.500	(38.08)	.015	(.381)	.090	(2.29)	.200	(5.08)	-	1000
-	<b>IDNY-2000-9-M</b>	.745	(18.92)	2.000	(50.78)	.025	(.653)	.113	(2.87)	.336	(8.53)	-	1000
<b>Tolerance ±</b>		.015	(.381)	.030	(.762)	.005	(.127)	-	.010	(.254)	-	-	-

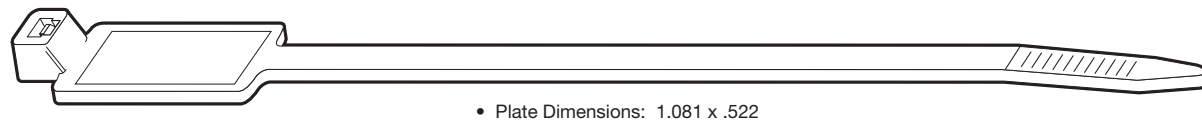
• Matte finish for sharp legends.  
Consult Customer Service for availability and colours.



### Identification Ties

Std. Cat. No.	Bulk Cat. No.	Material	Colour	Max. Bundle Diameter		Length		Width		Minimum Loop Tensile		Std. Pkg.	Bulk Pkg.
				Inch	(mm)	Inch	(mm)	Inch	(mm)	LB	(kg)		
<b>L-4-18ID-9-C</b>	<b>L-4-18ID-9-M</b>	Nylon	Natural	3/4	(19)	4.0	(102)	.100	(2.54)	18	(8.2)	100	1000

• Use QC-100, L-200 or L-400-C Installation Tool.  
Consult Customer Service for availability and colours.



Std. Cat. No.	Bulk Cat. No.	Material	Colour	Max. Bundle Diameter		Length		Width		Minimum Loop Tensile		Std. Pkg.	Bulk Pkg.
				Inch	(mm)	Inch	(mm)	Inch	(mm)	LB	(kg)		
<b>L-7-50ID-9-C</b>	<b>L-7-50ID-9-M</b>	Nylon	Natural	1 3/4	(44)	7.875	(200)	.183	(4.65)	50	(22.7)	100	1000

• Use QC-100, L-200 or L-400-C Installation Tool.  
Consult Customer Service for availability and colours.

### Marking Pens



Cat. No.	Colour Ink	Std. Pkg.
<b>WT163M-1</b>	Black Marking Pen	1
<b>WT163M-3</b>	Red Marking Pen	1

# Catamount™

## Cable Ties



• Striped ties are used to identify wire in bundles.

### Striped Ties

Std. Cat. No.	Tie Colour	Stripe Colour	Diameter		Length		Width		Loop Tensile		Std. Pkg.
			Inch	(mm)	Inch	(mm)	Inch	(mm)	LB	(kg)	
L-4-18-1/10-L	Brown	White	1/16 - 7/8	(2 - 16)	4.0	(102)	.100	(3)	18	(8.2)	50
L-4-18-1/2-L	Brown	Red	1/16 - 7/8	(2 - 16)	4.0	(102)	.100	(3)	18	(8.2)	50
L-4-18-1/0-L	Brown	Black	1/16 - 7/8	(2 - 16)	4.0	(102)	.100	(3)	18	(8.2)	50
L-4-18-1/4-L	Brown	Yellow	1/16 - 7/8	(2 - 16)	4.0	(102)	.100	(3)	18	(8.2)	50
L-4-18-1/7-L	Brown	Purple	1/16 - 7/8	(2 - 16)	4.0	(102)	.100	(3)	18	(8.2)	50
L-4-18-3/10-L	Orange	White	1/16 - 7/8	(2 - 16)	4.0	(102)	.100	(3)	18	(8.2)	50
L-4-18-3/2-L	Orange	Red	1/16 - 7/8	(2 - 16)	4.0	(102)	.100	(3)	18	(8.2)	50
L-4-18-3/0-L	Orange	Black	1/16 - 7/8	(2 - 16)	4.0	(102)	.100	(3)	18	(8.2)	50
L-4-18-3/4-L	Orange	Yellow	1/16 - 7/8	(2 - 16)	4.0	(102)	.100	(3)	18	(8.2)	50
L-4-18-3/7-L	Orange	Purple	1/16 - 7/8	(2 - 16)	4.0	(102)	.100	(3)	18	(8.2)	50
L-4-18-5/10-L	Green	White	1/16 - 7/8	(2 - 16)	4.0	(102)	.100	(3)	18	(8.2)	50
L-4-18-5/2-L	Green	Red	1/16 - 7/8	(2 - 16)	4.0	(102)	.100	(3)	18	(8.2)	50
L-4-18-5/0-L	Green	Black	1/16 - 7/8	(2 - 16)	4.0	(102)	.100	(3)	18	(8.2)	50
L-4-18-5/4-L	Green	Yellow	1/16 - 7/8	(2 - 16)	4.0	(102)	.100	(3)	18	(8.2)	50
L-4-18-5/7-L	Green	Purple	1/16 - 7/8	(2 - 16)	4.0	(102)	.100	(3)	18	(8.2)	50
L-4-18-6/10-L	Blue	White	1/16 - 7/8	(2 - 16)	4.0	(102)	.100	(3)	18	(8.2)	50
L-4-18-6/2-L	Blue	Red	1/16 - 7/8	(2 - 16)	4.0	(102)	.100	(3)	18	(8.2)	50
L-4-18-6/0-L	Blue	Black	1/16 - 7/8	(2 - 16)	4.0	(102)	.100	(3)	18	(8.2)	50
L-4-18-6/4-L	Blue	Yellow	1/16 - 7/8	(2 - 16)	4.0	(102)	.100	(3)	18	(8.2)	50
L-4-18-6/7-L	Blue	Purple	1/16 - 7/8	(2 - 16)	4.0	(102)	.100	(3)	18	(8.2)	50
L-4-18-8/10-L	Grey	White	1/16 - 7/8	(2 - 16)	4.0	(102)	.100	(3)	18	(8.2)	50
L-4-18-8/2-L	Grey	Red	1/16 - 7/8	(2 - 16)	4.0	(102)	.100	(3)	18	(8.2)	50
L-4-18-8/0-L	Grey	Black	1/16 - 7/8	(2 - 16)	4.0	(102)	.100	(3)	18	(8.2)	50
L-4-18-8/4-L	Grey	Yellow	1/16 - 7/8	(2 - 16)	4.0	(102)	.100	(3)	18	(8.2)	50
L-4-18-8/7-L	Grey	Purple	1/16 - 7/8	(2 - 16)	4.0	(102)	.100	(3)	18	(8.2)	50

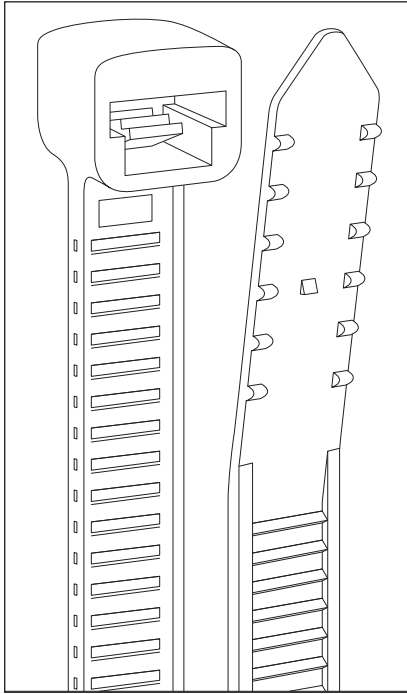
• Also available in bulk packages of 1000.

• Use QC-100, L-200, L-400-C, or ERG-299 Installation Tool.

Consult Customer Service for availability and colours.

# T&B®

## Cable Ties



- The integrally formed nylon pawl combines low insertion and high locking strength
- A rounded, low-profile head makes for less snags
- Tails have an improved two-sided finger grip design that helps the operator grasp and pull ties snug
- “Sure Grip” tab keeps the tail from popping out while being threaded, then holds it securely for final tightening by hand or tool
- Quick, easy pull through increases productivity, reduces operator fatigue

### From one end to the other, T&B® Cable Ties fit the needs of OEMs

Designed with OEMs in mind, this new series of competitively priced T&B cable ties holds down costs and speeds up cable fastening. Our all-nylon design lowers installation costs and provides features to ease fastening for harness fabrication and wire bundling in the manufacturing environment.

T&B® cable ties are made of nylon 6/6 and perform well in most applications in temperatures ranging from 185°F to -40°F. The smooth edges are designed to prevent damage to wire insulation, reducing the opportunity for shorting, and tails are “turned up” for fast assembly. T&B® cable ties come in natural or outdoor weatherable black, and custom colours and options are available.

T&B® cable ties may be fastened with standard Thomas & Betts tying tools. All your favorite Ty-Rap® mounting bases and accessories may be used with T&B® cable ties. For harsh industrial environments, use our “grip of steel”™ Ty-Rap cable ties with the unique stainless steel barb. Ty-Rap and T&B® cable ties combine to offer the most complete package of cable ties and accessories for the fastening market.

T&B® cable ties come in large poly bags for convenient inventory and easy access at the manufacturing site. Call your local Thomas & Betts distributor today and find out how well T&B cable ties can fit your needs, from one end to the other.

### T&B® Cable Ties

Cat. No.	Min. Tensile Strength (in lb)	Military Standard Part No.	Tie Length (in.)	Max. Bundle Diameter (in.)	Width (in.)	Std. Pkg. (pieces)
TY075-18	18	MS3367-4	3.60	.75	.095	1000
TY125-18	18		5.34	1.25	.095	1000
TY125-40	40	MS3367-5	5.60	1.25	.140	1000
TY200-18	18		7.75	2.00	.095	1000
TY200-40	40		8.00	2.00	.140	1000
TY200-120	120		8.63	2.00	.299	500
TY300-40	40		11.40	3.00	.140	1000
TY175-50	50	MS3367-1	7.30	1.75	.184	1000
TY300-50	50	MS3367-7	11.40	3.00	.184	1000
TY400-50	50	MS3367-2	14.30	4.00	.184	1000
TY400-120	120	MS3367-3	14.30	4.00	.301	500

Add suffix (-20) for cosmetic black, non-weatherable material.

### Outdoor Weatherable (black)

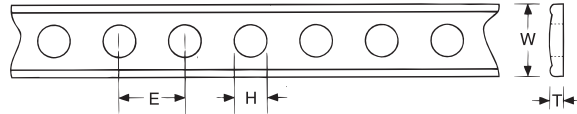
Cat. No.	Min. Tensile Strength (in lb)	Military Standard Part No.	Tie Length (in.)	Max. Bundle Diameter (in.)	Width (in.)	Std. Pkg. (pieces)
TY075-18X	18	—	3.60	.75	.095	1000
TY125-18X	18	—	5.34	1.25	.095	1000
TY125-40X	40	—	5.60	1.25	.140	1000
TY200-18X	18	—	7.75	2.00	.095	1000
TY200-40X	40	—	8.00	2.00	.140	1000
TY200-120X	120	—	8.63	2.00	.299	500
TY300-40X	40	—	11.40	3.00	.140	1000
TY175-50X	50	—	7.30	1.75	.184	1000
TY300-50X	50	—	11.40	3.00	.184	1000
TY400-50X	50	—	14.30	4.00	.184	1000
TY400-120X	120	—	14.30	4.00	.301	500

# Catamount™

## Cable Ties



- Extruded in 5 widths with 8 mounting hole diameters for use with a variety of standard and custom fasteners.
- Extrusion grade Black Nylon.
- Hole spacing allows for greater flexibility in meeting bundle diameter requirements.
- Strapping provides a wide range of tensile strengths depending on mounting method (S2NY-096-0 tested at 50 lb. with BTNY-096).
- Non-Conductive, Non Corrosive; resistant to fuels, lubricants and most chemicals.



### Strapping

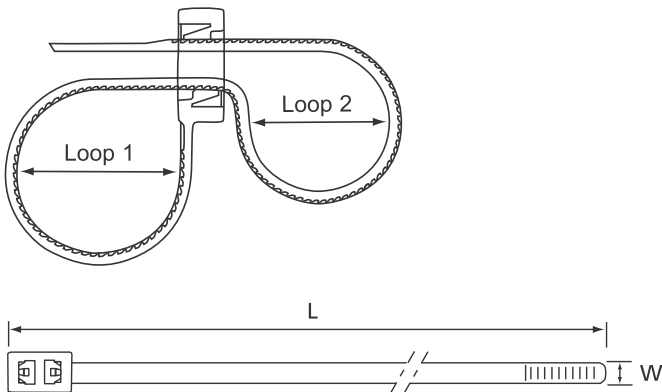
Item Number	W Width		T Thickness		H Hole		E Spacing		Quantity
	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	
<b>S2NY-096-0-C</b>	.281	(7.13)	.032	(.813)	.096	(2.44)	.187	(4.75)	100 foot rolls
<b>S4NY-128-0-C</b>	.375	(9.52)	.040	(1.02)	.128	(3.25)	.312	(7.92)	100 foot rolls
<b>S4NY-140-0-C</b>	.375	(9.52)	.040	(1.02)	.140	(3.56)	.312	(7.92)	100 foot rolls
<b>S4NY-167-0-C</b>	.375	(9.52)	.040	(1.02)	.167	(4.24)	.312	(7.92)	100 foot rolls
<b>S4NY-167X-0-C</b>	.375	(9.52)	.040	(1.02)	.167	(4.24)	.218	(5.54)	100 foot rolls
<b>S6NY-000-0-C</b>	.500	(12.70)	.060	(1.52)	N/A	N/A	N/A	N/A	100 foot rolls
<b>S6NY-167-0-C</b>	.500	(12.70)	.060	(1.52)	.167	(4.24)	.390	(9.90)	100 foot rolls
<b>S6NY-203-0-C</b>	.500	(12.70)	.060	(1.52)	.203	(5.16)	.390	(9.90)	100 foot rolls
<b>S6NY-203X-0-C</b>	.500	(12.70)	.060	(1.52)	.203	(5.16)	.281	(7.14)	100 foot rolls
<b>S7NY-265-0-C</b>	.625	(15.87)	.070	(1.78)	.265	(6.73)	.500	(12.70)	100 foot rolls
<b>S7NY-265X-0-C</b>	.625	(15.87)	.070	(1.78)	.265	(6.73)	.375	(9.52)	100 foot rolls
<b>S7NY-281-0-C</b>	.625	(15.87)	.070	(1.78)	.281	(7.14)	.500	(12.70)	100 foot rolls
<b>S9NY-000-0-C</b>	.875	(22.22)	.070	(1.78)	N/A	N/A	N/A	N/A	100 foot rolls
<b>S9NY-203-0-C</b>	.875	(22.22)	.070	(1.78)	.203	(5.16)	.500	(12.70)	100 foot rolls
<b>S9NY-265-0-C</b>	.875	(22.22)	.070	(1.78)	.265	(6.73)	.500	(12.70)	100 foot rolls
<b>S9NY-390-0-C</b>	.875	(22.22)	.070	(1.78)	.390	(9.90)	.625	(15.87)	100 foot rolls

### Strapping Accessories Reference

Strapping Number	Strap-Tite Buckle	Mounting Tab	Mounting Cradle	Stud Buttons	Machine Screw
<b>S2NY-096-0-C</b>	N/A	M4NY-203-0-D	C4NY-203-0-D	BTNY-096-0-D	#2
<b>S4NY-128-0-C</b>	N/A	M4NY-203-0-D	C4NY-203-0-D	N/A	#5
<b>S4NY-140-0-C</b>	N/A	M4NY-203-0-D	C4NY-203-0-D	N/A	#6
<b>S4NY-167-0-C</b>	B4NY-167-0-D	M4NY-203-0-D	C4NY-203-0-D	BTNY-167-0-D	#8
<b>S4NY-167X-0-C</b>	B4NY-167-0-D	M4NY-203-0-D	C4NY-203-0-D	BTNY-167-0-D	#8
<b>S6NY-000-0-C</b>	N/A	M6NY-265-0-D	N/A	N/A	N/A
<b>S6NY-167-0-C</b>	N/A	M6NY-265-0-D	N/A	N/A	#8
<b>S6NY-203-0-C</b>	B6NY-203-0-D	M6NY-265-0-D	N/A	BTNY-203-0-D	#10
<b>S6NY-203X-0-C</b>	B6NY-203-0-D	M6NY-265-0-D	N/A	BTNY-203-0-D	#10
<b>S7NY-265-0-C</b>	B7NY-265-0-D	M7NY-328-0-D	N/A	BTNY-265-0-D	1/4
<b>S7NY-265X-0-C</b>	B7NY-265-0-D	M7NY-328-0-D	N/A	BTNY-265-0-D	1/4
<b>S7NY-281-0-C</b>	N/A	M7NY-328-0-D	N/A	N/A	1/4
<b>S9NY-203-0-C</b>	N/A	N/A	N/A	BTNY-203-0-D	#10
<b>S9NY-265-0-C</b>	N/A	N/A	N/A	BTNY-265-0-D	1/4
<b>S9NY-390-0-C</b>	N/A	N/A	N/A	N/A	3/8



Double Loop ties allow the parallel routing of two bundles of cable with one single tie. Available in 3 different lengths.



**T&B<sup>®</sup>**  
Cable Ties

**One Tie, Two Loops**

Double Loop Cable Ties allow the parallel routing of two bundles of cable with one single cable tie. The unique design loops itself twice through the head of the tie in separate latching pawls. Applications include appliance manufacturers, automotive, aerospace, data communications, and electrical equipment manufacturers.

**Advantages:**

- Manufactured of natural colour nylon 6/6 material
- Temperature range of -40°F to 185°F
- UL 94 V-2 flammability rating
- Halogen and silicone-free to meet your application needs
- The integrally formed pawl combines low insertion and high locking strength
- A rounded, low-profile head makes for less snags
- Tails have improved two-sided finger grip design that helps the operator grasp and pull ties snug
- Quick and easy pull through increases productivity, reduces operator fatigue

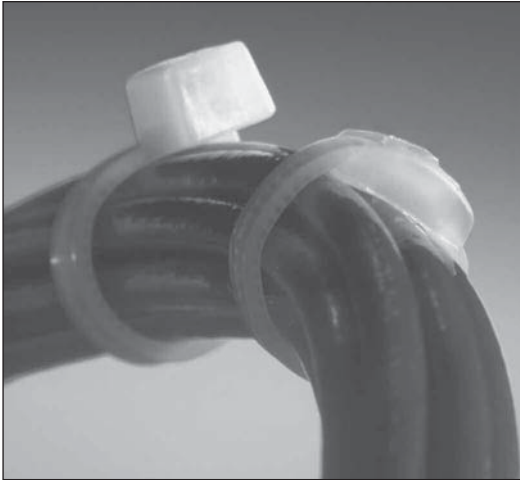


**Double Loop Cable Ties Information**

Package Catalogue Number	Length (in.)	Width (in.)	Bundle Diameter Range		Min. Tensile M Strength	Installation For All Sizes	Tooling Quantity
			Loop 1 (in.)	Loop 2 (in.)			
TB-50RLDH	7.8	.19	.1 - 1.8	.1 - 1.7	50	ERG-50	1000
TB-12-50RLDH	11.8	.19	.1 - 2.8	.1 - 2.7	50	ERG-120	1000
TB-15-50RLDH	14.6	.19	.1 - 3.9	.1 - 3.8	50	WT193A, TR227	1000



**Low-Profile In-Line Fasteners**



Low profile contoured head compared with the profile of the traditional T&B Cable Tie.

This fastener design from Thomas & Betts is ideal for use where precision bundling is required and clearance is a necessity. A unique saddle back design curves to form a snug fit around the bundle, and allows for easy pull-through in bulkheads and any other tight spaces. Our contoured head eliminates snagging and sharp edges are reduced by our safe-guard walls.

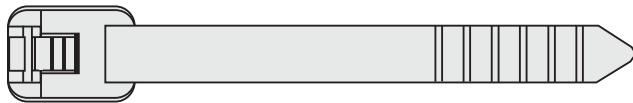
**Features**

- Low-profile, contoured head reduces clearance required for the bundle and enhances the appearance of your harness.
- The safe-guard wall eliminates exposure to sharp edges.
- The saddle back fits snug against the contour of the wiring harness.
- Sizes and colours available to accommodate varying requirements.
- High-quality nylon strength.

**Cable Ties Ordering Information**

Std. Cat. No.	Bundle Range Dia. In. (mm)	Tensile Strength lb.(Kg)	Tie Length In (mm)	Strap Width In (mm)	Strap Thick In (mm)	Std. Pkg.	Bulk. Pkg.
SF100-18	.125-1.00 (3.17-25.4)	18 (8.16)	4.65 (118.11)	.095 (2.41)	.043 (1.09)	100	1000
SF150-18	.125-1.50 (3.17-38.1)	18 (8.16)	6.45 (163.83)	.095 (2.41)	.043 (1.09)	100	1000
SF200-18	.125-2.00 (3.17-50.8)	18 (8.16)	8.10 (205.74)	.095 (2.41)	.043 (1.09)	100	1000
SF175-50	.187-1.75 (4.74-44.4)	50 (22.68)	7.70 (195.58)	.187 (4.74)	.048 (1.21)	100	1000
SF300-50	.187-3.00 (4.74-76.2)	50 (22.68)	11.33 (287.78)	.187 (4.74)	.052 (1.32)	100	1000
SF400-50	.187-4.00 (4.74-101.6)	50 (22.68)	14.53 (369.06)	.187 (4.74)	.052 (1.32)	100	1000
SF400-120	.375-4.00 (9.52-101.6)	120 (54.43)	14.58 (370.33)	.300 (7.62)	.075 (1.90)	100	1000
SF600-120	.375-6.00 (9.52-152.4)	120 (54.43)	21.00 (533.40)	.300 (7.62)	.075 (1.90)	100	1000
ERG120	Application tool for 50 lb. to 120 lb. tensile strength						
ERG50	Application tool for 18 lb. to 50 lb. tensile strength						

Material: Natural Nylon 6/6 in accordance with ASTM D4066 PA111. Also available in black outdoor weatherable (suffix "-X").  
 Dimensions: Designed according to military standards (MS3367) except for the head length, which is slightly larger than MIL spec.  
 Packaging: Standard package is 1000 pieces.



**How to Order Colour Cable Ties**

Colour	Suffix No.
Black (outdoor)	X
Brown	1
Red	2
Orange	3
Yellow	4
Green	5
Blue	6
Purple	7
Grey	8
White	9

Packaged for handling convenience.  
 Natural nylon is standard. For coloured cable ties in-line fasteners add the following suffix numbers to catalogue numbers.  
 Example: **SF175-50-2** (Red)  
 For Distributor Packs (100), add suffix "-100".  
 Example: **SF175-50-100**  
 (Consult customer service for ordering information)

# T&B®

## Cable Ties



### T&B® Badge Holder

The ticket fastener that won't leave you out in the cold.

Thomas & Betts offers ski resorts a convenient, low-cost, quick, and safe alternative to the metal wire clip currently used to attach ski lift tickets to skiers' clothing.

T&B® cable ties offer these prominent advantages:

- Designed specifically for lift ticket attachment to prevent damage to skiers' clothing.
- Incorporates a loop diameter restriction device that forms the proper sized 1-1/4 inch loop required to hold the lift ticket in place and lay flat on the skier.
- Prevents the tie from being over-tightened and damaging the lift ticket.
- May also serve to aid the skier in zipping their coat by extending the zipper length.
- The Badge Holder is tamper resistant and smooth up to the restriction point to keep it from being shared or reused by other skiers.
- The smooth body eliminates the notch sensitivity issue inherent to all-nylon cable ties.
- The Badge Holder is designed with a flexible short round tail, safely eliminating sharp metal.
- Affordable at just pennies per fastener!

The Badge Holder comes in 9 different colours to match the resort's colour schemes and is made of high quality Nylon 6/6 material to withstand cold temperatures. It is 5 inches long and has a sturdy 30 pound tensile strength rating. Badge Holders may also be heat-stamped with additional identification, such as the resort's name or web site.

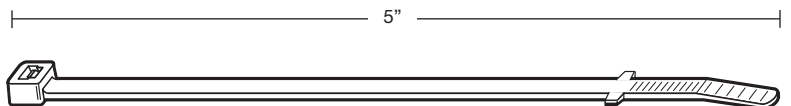
When the snow starts, Badge Holders will be ready to keep things snug, all the way down the mountain!

### T&B Badge Holder Ordering Information

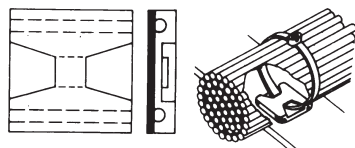
Cat No.	Description	Qty.	UPC
SJ-5-30SKI-9-M	Ticket Fastener	1000 bag	78621017017

Natural nylon colour. Please consult Customer Service for ordering and availability of colours and heat-stamping.

Dimensions: 5"  
 Construction: Nylon 6/6  
 Max. Tensile Strength: 30 lb.



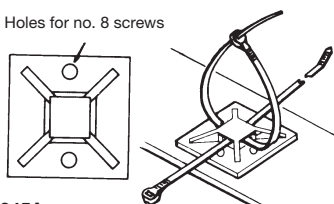
# Cable Tie Mounting Bases



TC5342A

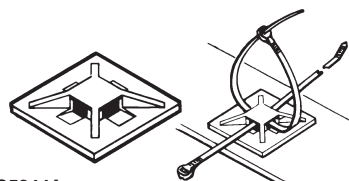
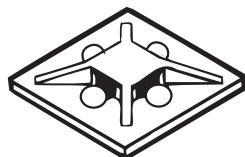
This nylon base is neutral in colour, and for indoor use.

Holes for no. 8 screws



TC5345A

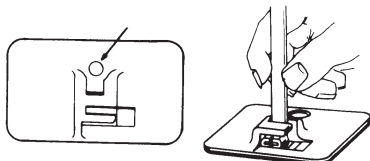
Accepting cable ties in four directions at 90°, this nylon, adhesive-backed base has two advantages. It eliminates errors in premounting the base with respect to its orientation to wire bundle direction. It also is a convenient way to mount wire bundles at cross-over points. Four optional mounting holes are included.



TC5344A

The four-way, pressure-sensitive, adhesive mounting base for use on cable ties up to .140 maximum width.

Hole for no. 6 screw



TC5353A

## Mounting bases (adhesive backed, epoxy or screws)

Thomas & Betts has a mounting base or clamp to suit most applications and cable tie widths. For easier installation, some bases are available with pressure sensitive adhesive tape.

### Features

- Available in a variety of materials for both indoor and outdoor use.
- One-piece molding – no loss of parts.
- Adhesive backed with pressure sensitive adhesive tape (where applicable).

## Ordering Information

### Adhesive Mounting Bases

Std. Cat. No.	Bulk Cat. No.	Mounting Method	Max. Tie Width Accom.	Length (in.)	Width (in.)	Material	Std. Pkg.	Bulk Pkg.
TC5342A	TC342A	Adhesive	.190	1.125	1.125	Nylon 6/6	100	1000
-	TC342A-X	Adhesive	.190	1.125	1.125	Weatherable nylon	-	1000
-	TC342	TC2PA	.190	1.125	1.125	Nylon 6/6	-	1000
-	TC342X	TC2PA	.190	1.125	1.125	Weatherable nylon	-	1000
-	TC342A-FR	Adhesive	.190	1.125	1.125	Flame-retardant nylon	-	1000

### Four-Way Adhesive Mounting Base

Std. Cat. No.	Bulk Cat. No.	Mounting Method	Max. Tie Width Accom.	Length (in.)	Width (in.)	Material	Std. Pkg.	Bulk Pkg.
TC5345A	TC345A	Adhesive	.190	1.125	1.125	Nylon 6/6	100	1000
-	TC345AFR	Adhesive	.190	1.125	1.125	Flame-retardant	-	1000
-	TC345AX	Adhesive	.190	1.125	1.125	Weatherable nylon	-	1000
-	TC345	TC2PA/Screws	.190	1.125	1.125	Nylon 6/6	-	1000

### Larger Size Four-Way Mini Base

Std. Cat. No.	Bulk Cat. No.	Mounting Method	Size (in.)	Material
TC050X050A-C	TC050X050A	Adhesive Backed	0.5 x 0.5	Nylon 6/6
TC150X150-L	TC150X150	Screw Mount	1.50 x 1.50	Nylon 6/6
TC150X150A-L	TC150X150A	Adhesive Backed	1.50 x 1.50	Nylon 6/6
TC200X200-L	TC200X200	Screw Mount	2.0 x 2.0	Nylon 6/6
TC200X200A-L	TC200X200A	Adhesive Backed	2.0 x 2.0	Nylon 6/6

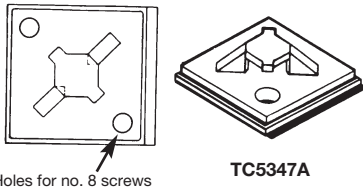
### Four-Way Mini Base

Std. Cat. No.	Bulk Cat. No.	Mounting Method	Max. Tie Width Accom.	Length (in.)	Width (in.)	Material	Std. Pkg.	Bulk Pkg.
TC5344A	TC344A	Adhesive	.140	.750	.750	Nylon 6/6	100	1000
TC5344AX	TC344AX	Adhesive	.140	.750	.750	Weatherable Nylon	100	1000

### Flexible Adhesive Base for Preassembled Ties

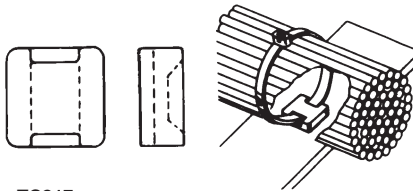
Std. Cat. No.	Bulk Cat. No.	Mounting Method	Max. Tie Width Accom.	Length (in.)	Width (in.)	Material	Std. Pkg.	Bulk Pkg.
TC5353A	TC353A	Adhesive	.190	2.000	1.000	Nylon 6/6	25	500
-	TC353	TC2PA/Screws	.190	2.000	1.000	Nylon 6/6	-	500

# Cable Tie Mounting Bases

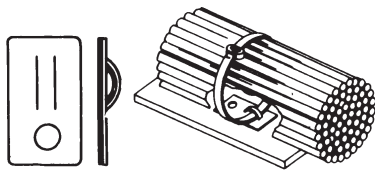


TC5347A

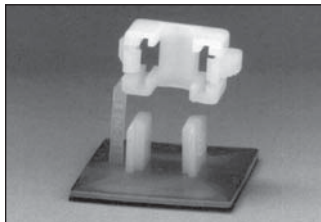
The TC347 series is a versatile base which accommodates the entire line of standard cable ties. It is a four-way base for cable ties up to .184 maximum width, and a two-way base for ties up to .301 maximum width. It may also be mounted with #8 size screw (2 holes).



TC817



TC105



- Provides a fast and convenient method of securing bundles.
- Single piece design offers reduced installation time and maximized inventory control.
- Integral top cover incorporates a unique ratchet design that is fully adjustable and releasable.
- Available in a pressure sensitive adhesive or screw mount design.



## Adhesive Mounting Base

Std. Cat. No.	Bulk Pkg. Cat. No.	Mounting Method	Max. Tie Width Accom.	Length (in.)	Width (in.)	Material	Std. Pkg.	Bulk Pkg.
TC5347A	TC347A	Adhesive	.301	1.125	1.125	Nylon 6/6	100	1000
-	TC347	TC2PA/Screws	.301	1.125	1.125	Nylon 6/6	-	1000
-	TC347FR	TC2PA/Screws	.301	1.125	1.125	Flame-retardant	-	1000
-	TC347X	TC2PA/Screws	.301	1.125	1.125	Weatherable nylon	-	1000
-	TCZ347	TC2PA/Screws	.301	1.125	1.125	Fluoropolymer	-	1000

## Miniature Base

Std. Cat. No.	Bulk Pkg. Cat. No.	Mounting Method	Max. Tie Width Accom.	Length (in.)	Width (in.)	Material	Std. Pkg.	Bulk Pkg.
-	TC817-TB	TC2PA	.190	.437	.437	Nylon 6/6	-	1000

## Aluminum Adhesive Mounting Plates

Std. Cat. No.	Bulk Pkg. Cat. No.	Mounting Method	Max. Tie Width Accom.	Length (in.)	Width (in.)	Material	Std. Pkg.	Bulk Pkg.
-	TC105	TC2PA	.190	1.000	.500	Aluminum	-	1000
-	TC824-TB	TC2PA	.190	1.375	.375	Aluminum	-	1000

Note: For adhesive back bases temperature rating is -18°C to +49°C (0°F to +120°F)

## One-Piece Mounting Clamp

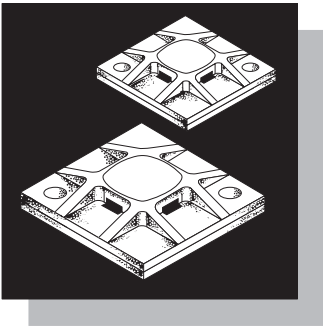
Cat. No.	Base Style	Maximum Height	Clamping Area		Std. Pkg.	
			Minimum	Maximum		
TC349A-TB	Adhesive	0.57" (14.5mm)	0.18" x 0.24" (4.5mm x 6.0mm)		1000	
TC5349A-TB	Adhesive					.035" x 0.24" (9.0mm x 6.0mm)
TC350-TB	Screw Mount	0.89" (22.5mm)	0.20" x 0.59" (5.0mm x 15.0mm)		1000	
TC350A-TB	Adhesive				0.45" x 0.59" (11.5mm x 15.0mm)	1000
TC5350A-TB	Adhesive					100

Note: Made of natural nylon 6/6.  
 Temperature Range: -40°C to +85°C (-40°F to +185°F)  
 Classified to U.L. 94V-2.  
 Product Base is .94" (25.0 mm) x .94" (25.0 mm).  
 Utilizes #8 self-tapping screw for mounting the TC350-TB.

## Mounting Base Adhesive

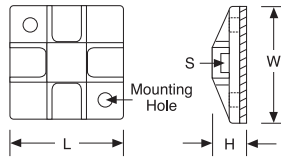
Cat. No.	Description	Std. Pkg.
TC2PA	Consists of one tube each adhesive and activator	1

# Cable Tie Mounting Bases



## Mounting Pads

- 3/4" and 1" mounts for use with 18# through 50# tensile cable ties.



- Supplied on rubber based (weatherproof resistant nylon) closed cell foam adhesive on acrylic based adhesive, or with no adhesive for #6 screw mount applications.
- Available in 6/6 Natural Nylon and heat stabilized 6/6 Black Nylon.
- UL Flammability 94 V-2 (clip).



## 3/4" x 3/4" Mount

Std. Cat. No.	Bulk Cat. No.	Material	Mount Method	Height		Length		Width		Slot Height		Slot Width		Std. Pkg.	Bulk Pkg.
				Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)		
MPNY-750-9-C	MPNY-750-9-D	Natural Nylon	Synthetic Polymer	.205	(5.21)	.750	(19.04)	.750	(19.04)	.050	(1.27)	.140	(3.18)	100	500
MPNY-750-0-C	MPNY-750-0-D	Black Nylon	Synthetic Polymer	.205	(5.21)	.750	(19.04)	.750	(19.04)	.050	(1.27)	.140	(3.18)	100	500
MPNY-750A-9-C	MPNY-750A-9-D	Natural Nylon	Acrylic Adhesive	.205	(5.21)	.750	(19.04)	.750	(19.04)	.050	(1.27)	.140	(3.18)	100	500
MPNY-750A-0-C	MPNY-750A-0-D	Black Nylon	Acrylic Adhesive	.205	(5.21)	.750	(19.04)	.750	(19.04)	.050	(1.27)	.140	(3.18)	100	500
MPNY-750S-9-C	MPNY-750S-9-D	Natural Nylon	#6 Screw	.205	(5.21)	.750	(19.04)	.750	(19.04)	.050	(1.27)	.140	(3.18)	100	500
MPNY-750S-0-C	MPNY-750S-0-D	Black Nylon	#6 Screw	.205	(5.21)	.750	(19.04)	.750	(19.04)	.050	(1.27)	.140	(3.18)	100	500
<b>Tolerance ±</b>				.010	(.254)	.015	(.381)			.010	(.254)				

For use with 18-40 lb. Cable Ties.



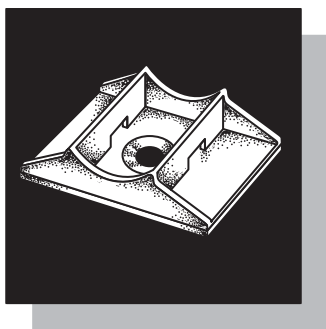
## 1 1/8" x 1 1/8" Mount

Std. Cat. No.	Bulk Cat. No.	Material	Mount Method	H Height		L Length		W Width		S Slot Height		S Slot Width		Std. Pkg.	Bulk Pkg.
				Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)		
MPNY-1000-9-C	-	Natural Nylon	Synthetic Polymer	.215	(5.46)	1.125	(28.58)	1.125	(28.58)	.070	(1.78)	.190	(4.83)	100	-
MPNY-1000-0-C	-	Black Nylon	Synthetic Polymer	.215	(5.46)	1.125	(28.58)	1.125	(28.58)	.070	(1.78)	.190	(4.83)	100	-
MPNY-1000A-9-C	-	Natural Nylon	Acrylic Adhesive	.215	(5.46)	1.125	(28.58)	1.125	(28.58)	.070	(1.78)	.190	(4.83)	100	-
MPNY-1000A-0-C	-	Black Nylon	Acrylic Adhesive	.215	(5.46)	1.125	(28.58)	1.125	(28.58)	.070	(1.78)	.190	(4.83)	100	-
MPNY-1000S-9-C	MPNY-1000S-9-D	Natural Nylon	#6 Screw	.215	(5.46)	1.125	(28.58)	1.125	(28.58)	.070	(1.78)	.190	(4.83)	100	1000
MPNY-1000S-0-C	MPNY-1000S-0-D	Black Nylon	#6 Screw	.215	(5.46)	1.125	(28.58)	1.125	(28.58)	.070	(1.78)	.190	(4.83)	100	1000
<b>Tolerance ±</b>				.010	(.254)	.015	(.381)			.010	(.254)				

For use with 18-50 lb. Cable Ties.

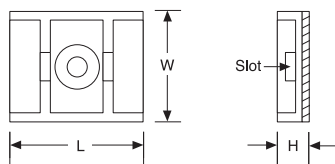
- **Mounting Surface should be cleaned with alcohol based (IPA) cleaner before application.**
- **Acrylic Based may be repositioned initially. Allow 24-72 hours set-up for maximum performance with Acrylic Based adhesives.**
- **For rubber based, allow 15 minutes set-up for maximum performance.**

# Cable Tie Mounting Bases

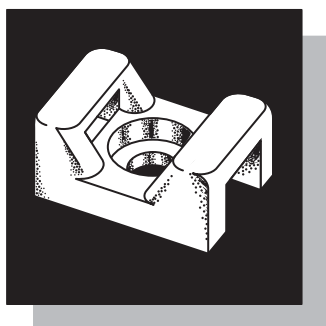


## Mounting Cradle

- Accepts cable ties to 50# tensile (miniature through standard).
- Supplied on closed cell foam with synthetic polymer “rubber” based adhesive.
- Use #6 self-tapping screw for added strength if desired.
- UL Flammability 94 V-2 (mount).
- Mount molded in 6/6 Natural Nylon.

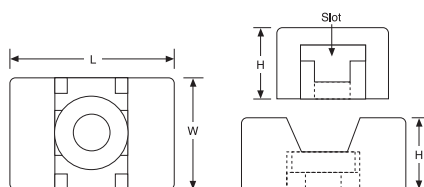


Cat. No.	Material	H Height		L Length		W Width		Slot Height		Slot Width		Mount Method	Bulk Pkg.
		Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)		
<b>MCNY-1250-9-D</b>	Natural Nylon	.285	(7.24)	1.250	(31.73)	1.000	(25.40)	.090	(2.29)	.300	(7.62)	Adhesive	500
<b>MCNY-1250-9-C</b>	Natural Nylon	.285	(7.24)	1.250	(31.73)	1.000	(25.40)	.090	(2.29)	.300	(7.62)	Adhesive	100
<b>Tolerance ±</b>		.010	(.254)		.015	(.381)		.010	(.254)				



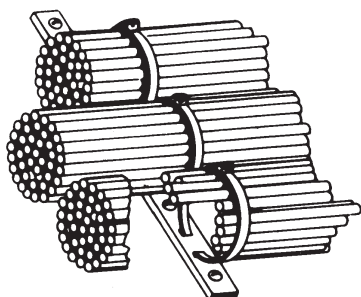
## Screw Mount

- SMNY-001 accepts cable ties to 50# Tensile (miniature through standard).
- SMNY-002 accepts cable ties to 120# Tensile (miniature through heavy duty).
- Use #4, #6, #8 or #10 machine screw (as referenced) to apply.
- Stocked in 6/6 Natural or heat stabilized Black Nylon.
- UL Flammability 94 V-2.



Cat. No.	Material	H Height		L Length		W Width		Slot Height		Slot Width		Mount Method	Bulk Pkg.
		Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)		
<b>SMNY-000-9-D</b>	Natural Nylon	.270	(6.86)	.570	(14.48)	.340	(8.64)	.070	(1.78)	.120	(3.10)	#4 Screw	500
<b>SMNY-001-9-D</b>	Natural Nylon	.280	(7.11)	.600	(15.24)	.385	(9.77)	.060	(1.52)	.200	(5.08)	#6, #8 Screw	500
<b>SMNY-002-9-C</b>	Natural Nylon	.390	(9.90)	.875	(22.22)	.625	(15.87)	.090	(2.29)	.325	(8.26)	#8, #10 Screw	100
<b>SMNY-002-9-D</b>	Natural Nylon	.390	(9.90)	.875	(22.22)	.625	(15.87)	.090	(2.29)	.325	(8.26)	#8, #10 Screw	500
<b>SMNY-001-0-D</b>	Heat Stabilized Black Nylon	.280	(7.11)	.600	(15.24)	.385	(9.77)	.060	(1.52)	.200	(5.08)	#6, #8 Screw	500
<b>SMNY-002-0-C</b>	Heat Stabilized Black Nylon	.390	(9.90)	.875	(22.22)	.625	(15.87)	.090	(2.29)	.325	(8.26)	#8, #10 Screw	100
<b>SMNY-002-0-D</b>	Heat Stabilized Black Nylon	.390	(9.90)	.875	(22.22)	.625	(15.87)	.090	(2.29)	.325	(8.26)	#8, #10 Screw	500
<b>Tolerance ±</b>						.015	(.381)						

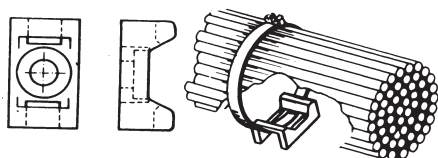
# Cable Tie Mounting Bases



## Multiple-Bundle Mounting Strips

Bulk Cat. No.	Mounting Method	Maximum Tie Width Accom.	Width (in.)	Length (in.)	Capacity (bundles)	Mil. Std. Part No.	Bulk Pkg.
TC1101	#6 screws	.190	.500	1.75	1	MS3339-1	100
TC1102	#6 screws	.190	.500	3.00	2	MS3339-2	100
TC1103	#6 screws	.190	.500	4.25	3	MS3339-3	100
TC1104	#6 screws	.190	.500	5.50	4	MS3339-4	100
TC1105	#6 screws	.190	.500	6.75	5	MS3339-5	100
TC1112	#6 screws	.301	.625	9.60	6	MS3339-11	100
TC1113	#6 screws	.301	.625	2.10	6	MS3339-6	100
TC1114	#6 screws	.301	.625	3.60	2	MS3339-7	100
TC1115	#6 screws	.301	.625	5.10	3	MS3339-8	100
TC1116	#6 screws	.301	.625	6.60	4	MS3339-9	100
TC1117	#6 screws	.301	.625	8.10	5	MS3339-10	100

These nylon mounting strips for parallel installation of wire bundles can accommodate up to six closely spaced bundles.

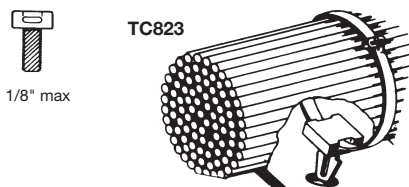


## Saddle Support Base

Std. Cat. No.	Bulk Cat. No.	Mounting Method	Maximum Tie Width Accom.	Width (in.)	Length (in.)	Std. Pkg.	Bulk Pkg.
-	TC140	#4 Pan head	-	-	-	-	500
TC5141	TC141*	#6 Pan head	.190	.439	.672	100	500
TC5142	TC142	#10 Pan head	.301	.563	.922	100	500

This mounting base provides a saddle for the wire run. Ty-Rap® tie is threaded under bundle and tied in usual manner. Note: For additional materials see Technical Services.

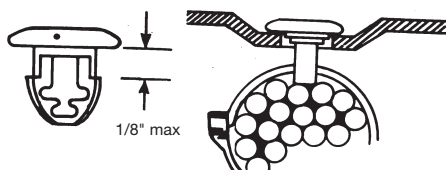
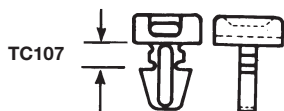
\* Add suffix FR for flame retardant material. (TC141 only.)



## Push-In and Bolted Bases

Std. Cat. No.	Bulk Cat. No.	Mounting Hole Size	Maximum Tie Width Accom.	Width (in.)	Length (in.)	Std. Pkg.	Bulk Pkg.
TC5823	TC823-TB	1/4	.190	.438	.625	100	1000
-	TC107†	#10-32 thd	.190	.438	.688	-	1000

† Not Ⓢ Recognized.



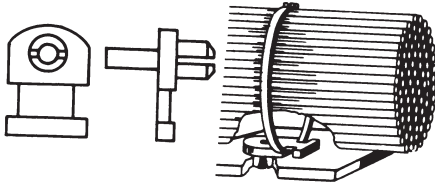
## Snap-In Mounting Base Cap

Bulk Cat. No.	Mounting Hole Size	Maximum Tie Width Accom.	Width (in.)	Length (in.)	Material	Bulk Pkg.
TC121-TB	.250	.190	.445	.415	Nylon 6/6	1000
TCH121†	.250	.190	.445	.415	Nylon 6/6 heat stabilized	1000

Snap-in, premountable base for securing wire bundles in cabinets maintains the attractive external appearance of the equipment housing—TC121 Snap-Cap.

† Not Ⓢ Recognized.

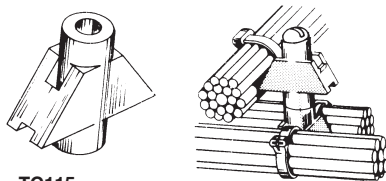
# Cable Tie Mounting Bases



## Self-Riveting Base

Bulk Cat. No.	Mounting Hole Size	Maximum Tie Width Accom.	Width (in.)	Length (in.)	Material	Bulk Pkg.
TC116-TB	.146	.190	.500	.750	Nylon 6/6 (Red)	1000
TC118-TB	.169	.190	.500	.750	Nylon 6/6 (Blue)	1000
TC120	.196	.190	.500	.750	Nylon 6/6 (Yellow)	1000

Knock-in mounting base TC116-TB, TC118-TB, TC120—firmly locks into position when projecting pin is knocked into hollow peg. Slip tie under base and tie as usual.

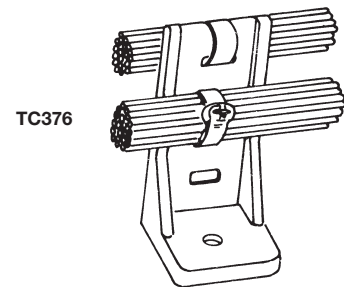


TC115

## Ty-Rap® Mounting Blocks

Bulk Cat. No.	Mounting Bolt Size	Maximum Tie Width Accom.	Width (in.)	Length (in.)	Bulk Pkg.
TC115-TB	#10	.190	.469	1.00	1000

Mounting blocks permit vertical stacking and can be used in any direction.

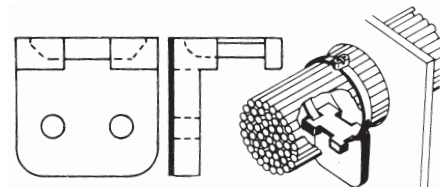


TC376

## Ty-Rap® Stand-Off Brackets

Bulk Cat. No.	Maximum Tie Width Accom.	Width (in.)	Length (in.)	Bulk Pkg.
TC375	.190	.750	3.65	100
TC376	.190	.670	1.75	100

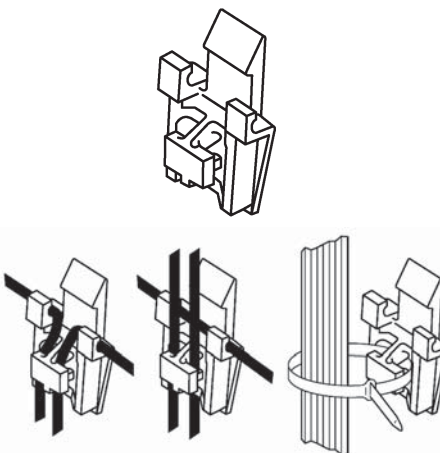
These brackets permit bundles to be mounted on either side. They also serve as means to raise bundles off the surface.



## Right-Angle Bundle Support

Bulk Cat. No.	Maximum Tie Width Accom.	Width (in.)	Length (in.)	Bulk Pkg.
TC109	.190	.563	.438	200
TC106	.301	1.000	1.000	1000

This style meets Military Specification requirements as a support at holes in bulkheads and walls.



## Aluminum Siding Clip

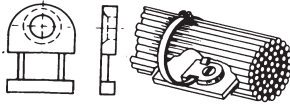
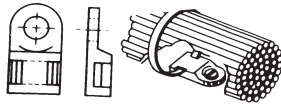
Cat. No.	Wire Accommodation
TC201	1/8" dia. wire (2 pair station wire)

Material:

- Transparent – Colour and texture of siding shows through.
- Material – Weather resistant grade polycarbonate.
- Designed to accommodate PITTSBURG INTERLOCK metal siding.
- Accommodates wires both vertically and/or horizontally.
- Provision for utilizing Ty-Rap® cable ties to secure large diameter bundles.



# Cable Tie Mounting Bases

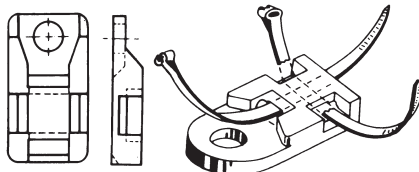


These miniature mounting bases are ideal for high-density packaging. Simply slip Ty-Rap® tie under slot in fastened mount, and complete tie in usual manner. Check chart for mounting details.

## Miniature Mounting Bases

Std. Cat. No.	Bulk Pkg. Cat. No.	Mounting Method	Maximum Tie Width Accom.	Width (in.)	Length (in.)	Std. Pkg.	Bulk Pkg.
TC502	TC102	#8 screw	.190	.500	.750	100	1000
-	TC104	#5 screw	.091	.316	.406	-	1000
-	TC804-TB	#2 screw	.091	.316	.406	-	1000
-	TC112-TB	#8 screw	.190	.375	.750	-	1000
-	TC812-TB	#10 screw	.190	.375	.750	-	1000
-	TC814-TB	#5 screw	.190	.375	.750	-	1000

Threaded insert permits screw to come from outside of mounting surface.



TC826-TB

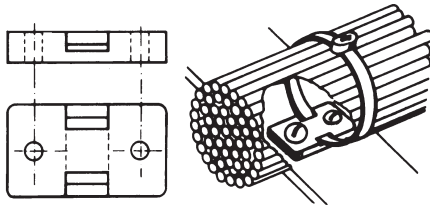
TC828-TB

## Two-Direction Mounting Base

Std. Cat. No.	Bulk Pkg. Cat. No.	Mounting Method	Maximum Tie Width Accom.	Width (in.)	Length (in.)	Std. Pkg.	Bulk Pkg.
-	TC826-TB	#8 screw	.190	.500	1	-	1000
TC5828	TC828-TB	#8 screw	.190	.390	.875	100	1000

The TC826-TB mounting base can be used to tie bundles running parallel or perpendicular to length of base.

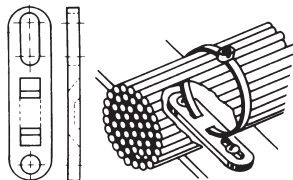
The TC828-TB mounting plate also handles ties installed in either direction and is somewhat smaller than TC826.



## In-Line Base

Bulk Cat. No.	Mounting Method	Maximum Tie Width Accom.	Width (in.)	Length (in.)	Bulk Pkg.
TC815-TB	#10 screws	.301	.750	1.125	500

A standard two-hole base that installs in-line with the wire bundle which conceals it.

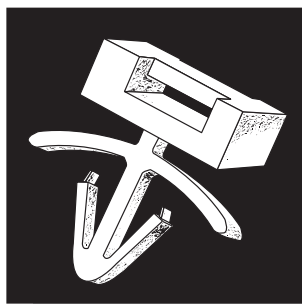


## Single-Bundle Mounting Base

Std. Cat. No.	Bulk Cat. No.	Mounting Method	Maximum Tie Width Accom.	Width (in.)	Length (in.)	Std. Pkg.	Bulk Pkg.
-	TC101	#10 screws	.190	.500	2.00	-	1000
TC503	TC103	1/4 screws	.301	.625	3.08	100	500

The TC101 and TC103 nylon bases provide a mounting range for bundles from 1/4" through 4" in diameter. One mounting hole is slotted to permit adjustment of the bundle position up to the time of actual bundle installation.

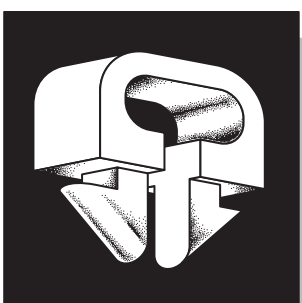
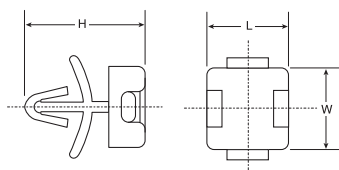
# Cable Tie Mounting Bases



## Push Mounts

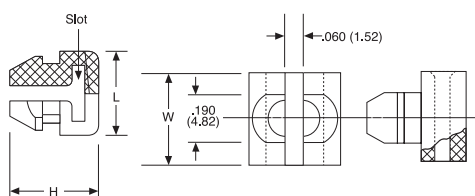
### PMNY-185

- Versatile push mount for cable ties to 50# tensile strength.
- For use in .187 / .192 mounting hole for panel thickness .030 to .080.
- Stocked in 6/6 Natural Nylon.
- UL Flammability: 94 V-2.
- Oxygen index: 31.

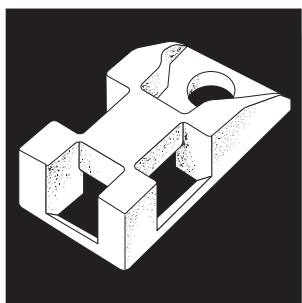


### PMNY-245

- Accepts cable ties to 50# tensile (miniature through standard).
- For use in .250" mounting hole for maximum panel thickness of .062".
- Stocked in 6/6 Natural Nylon.
- UL Flammability 94 V-2.
- Oxygen index: 31.

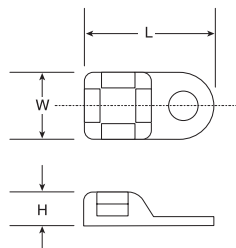


Cat. No.	Material	H Height		L Length		W Width		Slot Height		Slot Width		Bulk Pkg.
		Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	
PMNY-185-9-D	Natural Nylon	.640	(16.26)	.430	(10.92)	.430	(10.92)	.065	(1.65)	.065	(1.65)	500
PMNY-245-9-D		.355	(9.01)	.320	(8.12)	.320	(8.12)	.050	(1.27)	.220	(5.59)	500
Tolerance ±					.010		(.254)					



## 4-Way Mount

- 4-Way screw mounts for cable ties to 50# tensile strength.
- Mount with #6 or #8 screws.
- Available in 6/6 Natural Nylon.
- UL Flammability: 94 V-2.



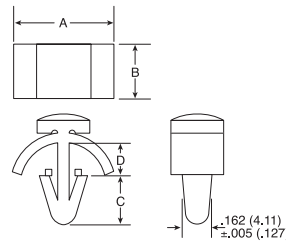
Cat. No.	Height	Length	Width	Slot Width	Mount Dia.	Bulk Pkg.
SMNY-220-9-D	.230	.950	.500	.220	.170	500
Tolerance ±			.015			

# Cable Clamps and Clips

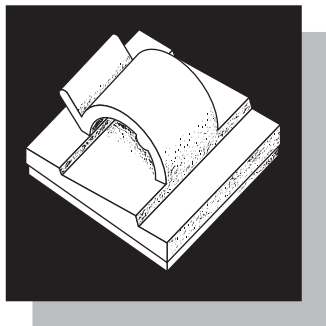


## Snap Mounts

- For panel thicknesses from .060" to .150" to hold separate pieces of material together.
- Used with W4 or N4 Series Cable Clamps; allowable panel thickness is .030" to .050".
- Stocked in Natural 6/6 Nylon.
- UL Flammability 94 V-2.

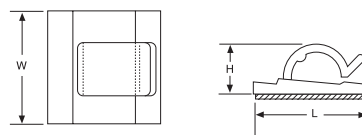


Cat. No.	Material	A		B		C		D		Bulk Pkg. Qty.
		Inch	(mm)	Inch	(mm)	Inch	(mm)	inch	(mm)	
MSNY-166-0-M	UV Black Nylon	.485	(12.32)	.312	(7.93)	.281	(7.14)	.180	(4.57)	1000
Tolerance ±				.010		(.254)				



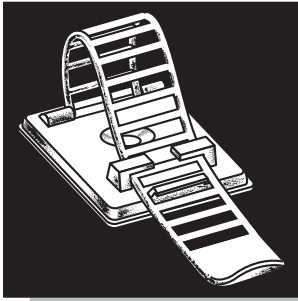
## Round Adhesive Clips

- Diverse cable clamps for bundle diameters from .160 to .620.
- Mounted on a rubber based closed cell foam adhesive.
- Natural nylon.
- UL Flammability 94 V-2 (clip).
- Flexible center tang for removal or addition of cables.



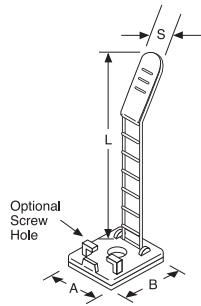
Cat. No.	Material	H Height		L Length		W Width		Maximum Bundle	Mounting Method	Bulk Pkg. Qty.
		Inch	(mm)	Inch	(mm)	Inch	(mm)			
RANY-160-9-D	Natural Nylon	.250	(6.35)	.630	(16.00)	.580	(14.73)	.160	Rubber Based Adhesive	500
RANY-280-9-D	Natural Nylon	.410	(10.41)	1.000	(25.40)	1.000	(25.40)	.280	Rubber Based Adhesive	500
RANY-530-9-D	Natural Nylon	.620	(15.75)	1.000	(25.40)	1.000	(25.40)	.530	Rubber Based Adhesive	500
RANY-620-9-D	Natural Nylon	.560	(14.22)	1.250	(31.75)	1.120	(28.45)	.620	Rubber Based Adhesive	500
Tolerance ±			.015		(.381)					

# Cable Clamps and Clips

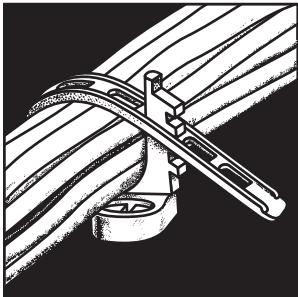


## Adjustable Cable Clamps

- Three sizes for bundles from .118" to .984".
- Ladder style fastener is easily released and refastened.
- Supplied "single-cut" on a rubber based closed cell foam adhesive.
- Stocked in 6/6 Grey Nylon.
- UL Flammability 94 V-2 (clip).
- Optional screw hole for #4 or #5 flat head screw.

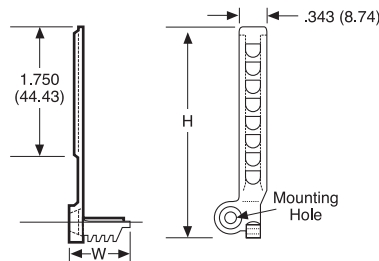


Cat. No.	Material	A		B		S		L		Applied Wire Range	Screw Hole Dia.		Std. Pkg.
		Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)		Inch	(mm)	
ULNY-013-8-C	Grey Nylon	.709	(18.00)	.984	(25.00)	.314	(8.00)	2.340	(59.50)	.118 - .500	.110	(2.79)	100
ULNY-018-8-C	Grey Nylon	.827	(21.00)	1.180	(30.00)	.472	(12.00)	3.120	(79.40)	.197 - .827	.110	(2.79)	100
ULNY-023-8-C	Grey Nylon	.984	(25.00)	1.380	(35.00)	.551	(14.00)	3.370	(85.50)	.275 - .984	.135	(3.43)	100
Tolerance ±			.015	(.381)		.010	(.254)	.030	(.762)				



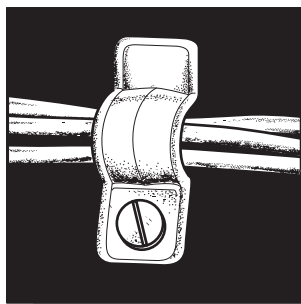
## Tab-Lock Cable Clamps

- Adjustable cable clamp for diameters to 3/4".
- Releasable and reusable. Add or remove wires from bundles as required.
- #6 or #8 82° flat head machine screw to mount.
- Stocked in 6/6 Natural Nylon.
- UL Flammability 94 V-2.



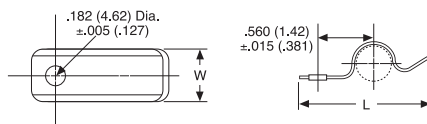
Cat. No.	Material	H Height		W Width		Adjustable Diameter	Mounting Method	Bulk Pkg. Qty.
		Inch	(mm)	Inch	(mm)			
TBNY-750-9-M	Natural Nylon	2.833	(71.96)	.850	(21.59)	.375 - .750 (9.52 - 19.05)	#6, #8 Flat Head Screw	1000
Tolerance ±			.030	(.762)	.015	(.381)		

# Cable Clamps and Clips



## Flex Clips

- Utilizes nylon's "memory" to retain original shape even after repeated use.
- Ideal for temporary applications.
- Mounts with one #8 machine screw.
- Stocked in Natural 6/6 Nylon.
- UL Flammability 94 V-2.

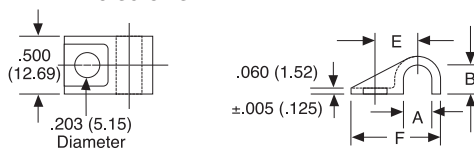


Cat. No.	Material	L Length		W Width		Max. Cable Diameter		Mounting Method	Bulk Pkg. Qty.
		Inch	(mm)	Inch	(mm)	Inch	(mm)		
<b>FCNY-312-9-M</b>	Natural Nylon	1.350	(34.29)	.500	(12.69)	.312	(7.93)	#8 Screw	1000
<b>Tolerance ±</b>		.020	(.508)	.015	(.381)				



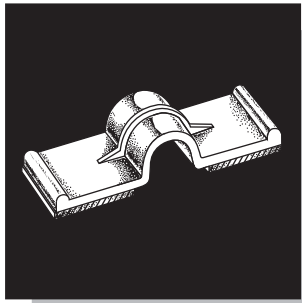
## Half Clamps

- Rugged clamps with reinforced side panels for bundle diameters to .484".
- 203 mounting hole accepts #6 through #10 screws.
- Stocked in 6/6 Natural and heat stabilized Black Nylon.
- UL Flammability 94 V-2.



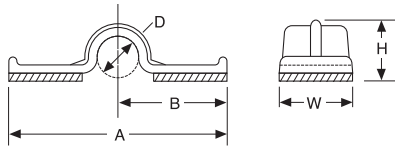
Cat. No.	Material	A		B		E		F		Bulk Pkg. Qty.
		Inch	(mm)	Inch	(mm)	Inch	(mm)	inch	(mm)	
<b>CPNY-115-9-M</b>	Natural Nylon	.115	(2.92)	.115	(2.92)	.314	(7.98)	.675	(17.15)	1000
<b>CPNY-172-9-M</b>	Natural Nylon	.172	(4.36)	.172	(4.36)	.336	(8.53)	.732	(18.59)	1000
<b>CPNY-234-9-M</b>	Natural Nylon	.234	(5.94)	.234	(5.94)	.370	(9.40)	.793	(20.14)	1000
<b>CPNY-297-9-M</b>	Natural Nylon	.297	(7.54)	.297	(7.54)	.400	(10.16)	.859	(21.82)	1000
<b>CPNY-422-9-M</b>	Natural Nylon	.422	(10.71)	.422	(10.71)	.470	(11.94)	.980	(24.89)	1000
<b>CPNY-484-9-M</b>	Natural Nylon	.484	(12.29)	.484	(12.29)	.500	(12.69)	1.044	(26.52)	1000
<b>CPNY-115-0-M</b>	Heat Stabilized Black Nylon	.115	(2.92)	.115	(2.92)	.314	(7.98)	.675	(17.15)	1000
<b>CPNY-172-0-M</b>	Heat Stabilized Black Nylon	.172	(4.36)	.172	(4.36)	.336	(8.53)	.732	(18.59)	1000
<b>CPNY-234-0-M</b>	Heat Stabilized Black Nylon	.234	(5.94)	.234	(5.94)	.370	(9.40)	.793	(20.14)	1000
<b>CPNY-297-0-M</b>	Heat Stabilized Black Nylon	.297	(7.54)	.297	(7.54)	.400	(10.16)	.859	(21.82)	1000
<b>CPNY-359-0-M</b>	Heat Stabilized Black Nylon	.359	(9.11)	.359	(9.11)	.435	(11.05)	.920	(23.37)	1000
<b>CPNY-422-0-M</b>	Heat Stabilized Black Nylon	.422	(10.71)	.422	(10.71)	.470	(11.94)	.980	(24.89)	1000
<b>Tolerance ±</b>			.010	(.254)			.015	(.381)		

# Cable Clamps and Clips

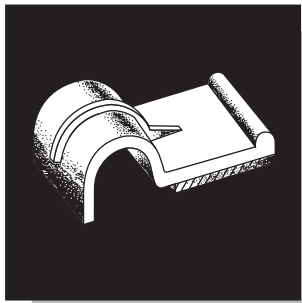


## Press Clips

- 4 Sizes to accommodate bundles up to 1/2".
- Clips are provided on a rubber based closed cell foam adhesive.
- Stocked in 6/6 Natural Nylon. Contact factory for availability in special materials.
- UL Flammability 94 V-2 (clip).

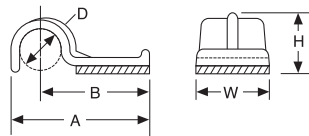


Cat. No.	Material	D Diameter		A		B		H		W		Bulk Pkg. Qty.
		Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	
PCNY-125-9-D	Natural Nylon	.125	(3.17)	.760	(19.30)	.380	(9.65)	.211	(5.36)	.375	(9.52)	500
PCNY-250-9-D	Natural Nylon	.250	(6.35)	1.380	(35.05)	.690	(17.52)	.324	(8.23)	.500	(12.69)	500
PCNY-375-9-D	Natural Nylon	.375	(9.52)	1.470	(37.32)	.735	(18.61)	.444	(11.29)	.625	(15.87)	500
PCNY-500-9-D	Natural Nylon	.500	(12.69)	1.590	(40.57)	.795	(20.19)	.585	(14.85)	.750	(19.05)	500
<b>Tolerance ±</b>		.010	(.254)	.020	(.508)			.010	(.254)			



## Half Press Clips

- 4 Sizes to accommodate bundles up to 1/2".
- Clips are provided on a rubber based closed cell foam adhesive.
- Stocked in 6/6 Natural Nylon. Contact factory for availability in special materials.
- UL Flammability 94 V-2 (clip).



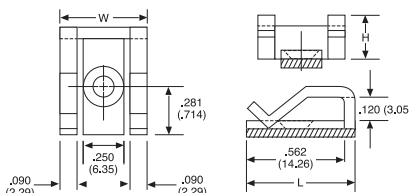
Cat. No.	Material	D Diameter		A		B		H		W		Bulk Pkg. Qty.
		Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	
HCNY-125-9-M	Natural Nylon	.125	(3.17)	.493	(12.52)	.380	(9.65)	.180	(4.57)	.375	(9.52)	1000
HCNY-250-9-M	Natural Nylon	.250	(6.35)	.865	(21.97)	.690	(17.52)	.325	(8.25)	.500	(12.69)	1000
HCNY-375-9-M	Natural Nylon	.375	(9.52)	.980	(24.88)	.750	(19.05)	.415	(10.54)	.625	(15.87)	1000
HCNY-500-9-M	Natural Nylon	.500	(12.69)	1.110	(28.19)	.820	(20.83)	.560	(14.22)	.750	(19.05)	1000
<b>Tolerance ±</b>		.010	(.254)	.020	(.508)			.010	(.254)			

# Cable Clamps and Clips

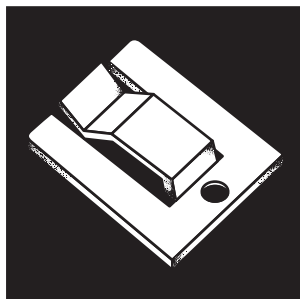


## Flat Cable Clips

- Low profile clip for single or multiple layers of flat ribbon cable.
- FANY supplied on a rubber based closed cell foam adhesive.
- Screw mountable with a #4 flat head screw.
- Flexible tangs allow for easy removal and replacement of desired cable.
- Stocked in 6/6 Natural Nylon.
- UL Flammability 94 V-2 (clip).

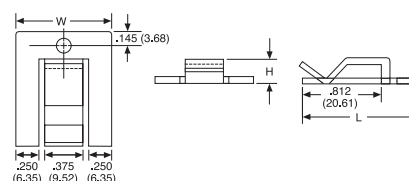


Cat. No.	Material	H Height		L Length		W Width		Mounting Method	Bulk Pkg. Qty.
		Inch	(mm)	Inch	(mm)	Inch	(mm)		
FANY-562-9-D	Natural Nylon	.264	(6.70)	.625	(15.87)	.500	(12.69)	Adhesive	500
FSNY-562-9-D	Natural Nylon	.233	(5.92)					#4 Screw	500
<b>Tolerance ±</b>		.010	(.254)		.015	(.381)			



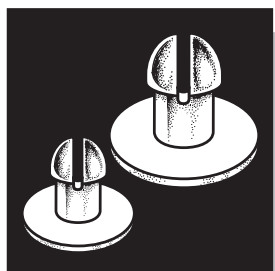
## Flat Cable Screw Clip

- Flat ribbon cable clamp with mounting hole for #8 screw.
- Stocked in Natural 6/6 Nylon.
- Flexible center tang allows for easy removal and replacement of desired cable.
- UL Flammability 94 V-2.



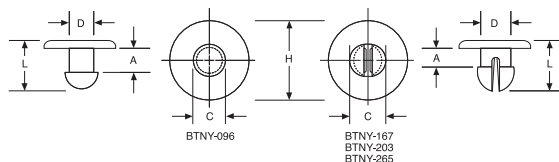
Cat. No.	Material	H Height		L Length		W Width		Mounting Method	Bulk Pkg. Qty.
		Inch	(mm)	Inch	(mm)	Inch	(mm)		
FSNY-812-9-D	Natural Nylon	.250	(3.17)	1.187	(30.15)	1.000	(25.40)	#8 Screw	500
<b>Tolerance ±</b>		.010	(.254)		.015	(.381)			

# Cable Clamps and Clips

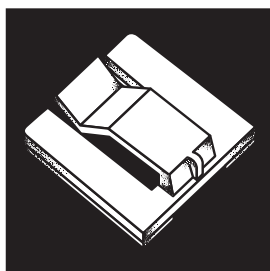


## Stud Buttons

- Utilize nylon's "memory" to retain original shape after compression.
- Part numbers contain recommended mounting hole diameters.
- For use with Catamount™ strapping or panel thickness through .165" with mounting holes through #1/4.
- Stocked in heat stabilized Black Nylon for high heat applications.
- UL Flammability 94 V-2.

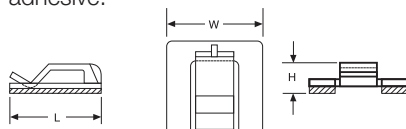


Cat. No.	H Head Dia.		A		C		D		L		Bulk Pkg. Qty.
	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	
BTNY-167-0-D	.343	(8.71)	.125	(3.17)	.202	(5.13)	.165	(4.19)	.297	(7.54)	500
BTNY-203-0-D	.468	(11.88)	.156	(3.96)	.238	(6.04)	.200	(5.08)	.359	(9.11)	500
BTNY-265-0-D	.580	(14.73)	.171	(4.34)	.300	(7.62)	.260	(6.60)	.410	(10.41)	500
Tolerance ±					.010	(.254)					



## Flat Adhesive Clips

- Low profile clip for single or multiple layers of flat ribbon cable.
- Supplied on a rubber based closed cell foam adhesive.
- Flexible center tang for removal or addition of cables.
- Stocked in 6/6 Natural Nylon.
- UL Flammability 94 V-2 (clip).

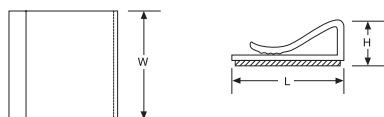


Cat. No.	Material	H Height		L Length		W Width		Mounting Method	Bulk Pkg. Qty.
		Inch	(mm)	Inch	(mm)	Inch	(mm)		
FANY-812-9-D	Natural Nylon	.281	(7.14)	1.000	(25.40)	1.000	(25.40)	Adhesive	500
Tolerance ±		.010	(.254)	.015	(.381)				



## Flat PVC Clips

- Low profile clip for single or multiple layers of flat ribbon cable.
- "Single-Cut" on a rubber based closed cell foam adhesive.
- Grey PVC.
- UL Flammability 94 V-0 (clip).



Cat. No.	Material	H Height		L Length		W Width		Mounting Method	Bulk Pkg. Qty.
		Inch	(mm)	Inch	(mm)	Inch	(mm)		
FRPV-1000-8-D	Grey PVC	.415	(5.84)	1.062	(26.97)	1.000	(25.40)	Adhesive	500
Tolerance ±		.015	(.381)	.030	(.762)	.015	(.381)		

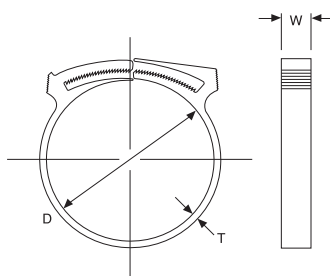


# Cable Clamps and Clips



## Gator Grip Hose Clamp

- 16 sizes for bundle diameters to 2-3/8".
- Removable and reusable. Twist by hand or with pliers to remove.
- Stocked in black Nylon. 100 pieces per package.
- UL Flammability 94 V-2.
- Request samples for testing to your application. Tested to 250 PSI.



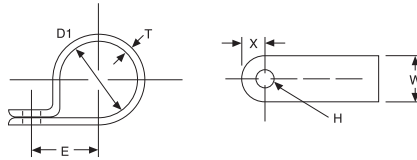
Cat. No.	D Nominal Diameter		D1 Closed Diameter		T Thickness		W Width		Bulk Pkg. Qty.
	Inch	(mm)	Inch	(mm)	Inch	(mm)	inch	(mm)	
GGNY-344-0-C	13/32	(10.32)	11/32	(8.73)	.070	(1.8)	.220	(5.6)	100
GGNY-406-0-C	15/32	(11.92)	13/32	(10.32)	.070	(1.8)	.220	(5.6)	100
GGNY-468-0-C	17/32	(13.49)	15/32	(11.91)	.070	(1.8)	.220	(5.6)	100
GGNY-531-0-C	19/32	(15.08)	17/32	(13.49)	.070	(1.8)	.220	(5.6)	100
GGNY-593-0-C	21/32	(16.67)	19/32	(15.08)	.070	(1.8)	.220	(5.6)	100
GGNY-672-0-C	13/16	(20.64)	43/64	(17.07)	.070	(1.8)	.220	(5.6)	100
GGNY-750-0-C	7/8	(22.23)	3/4	(19.05)	.070	(1.8)	.220	(5.6)	100
GGNY-875-0-C	1	(25.40)	7/8	(22.23)	.070	(1.8)	.220	(5.6)	100
GGNY-953-0-C	13/32	(27.78)	61/64	(24.21)	.070	(1.8)	.310	(7.9)	100
GGNY-1031-0-C	1-13/16	(30.16)	1-1/32	(26.19)	.070	(1.8)	.310	(7.9)	100
GGNY-1250-0-C	1-7/16	(36.51)	1-1/4	(31.75)	.070	(1.8)	.360	(9.1)	100
GGNY-1406-0-C	1-5/8	(41.28)	1-13/32	(35.72)	.070	(1.8)	.360	(9.1)	100
GGNY-1593-0-C	1-13/16	(46.04)	1-19/32	(40.48)	.070	(1.8)	.360	(9.1)	100
GGNY-1687-0-C	1-29/32	(48.42)	1-11/16	(42.86)	.070	(1.8)	.360	(9.1)	100
GGNY-1875-0-C	2-1/8	(53.98)	1-7/8	(47.63)	.070	(1.8)	.400	(10.2)	100
GGNY-2125-0-C	2-1/8	(60.33)	2-3/8	(53.98)	.070	(1.8)	.400	(10.2)	100
Tolerance ±			.010 (.254)						

# Cable Clamps and Clips



## Plain Edge Cable Clamps

- Fully radiused inside edges with size markings in inches and millimeters for easy identification.
- Stocked in Natural White and Black 6/6 Nylon.
- 18 diameters and 2 widths with mounting holes for #4 through #10 screws.
- Plain edge cable clamps are designed to perform to NAS-1397P.



\*Note: "C" Also 100 packs available. Replace "-M" with "-C" for 100 pack.

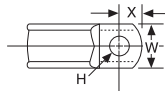
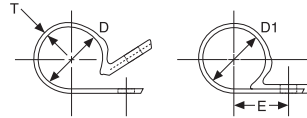
Cat. No.		D1 Closed Diameter		E		T Thickness		W Width		H Hole Diameter		X		Bulk Pkg. Qty.
White	Black	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	
N4NY-002-9-M	N4NY-002-0-M	.125	(3.2)	.343	(8.7)	.050	(1.3)	.375	(9.5)	.170	(4.3)	.218	(5.5)	1000
N4NY-003-9-M	N4NY-003-0-M	.187	(4.8)	.378	(9.6)	.050	(1.3)	.375	(9.5)	.170	(4.3)	.218	(5.5)	1000
N4NY-004-9-M	N4NY-004-0-M	.250	(6.4)	.421	(10.7)	.050	(1.3)	.375	(9.5)	.170	(4.3)	.218	(5.5)	1000
N4NY-005-9-M	N4NY-005-0-M	.312	(7.9)	.441	(11.2)	.050	(1.3)	.375	(9.5)	.170	(4.3)	.218	(5.5)	1000
N4NY-006-9-M	N4NY-006-0-M	.375	(9.5)	.464	(11.8)	.050	(1.3)	.375	(9.5)	.170	(4.3)	.218	(5.5)	1000
N4NY-007-9-M	N4NY-007-0-M	.437	(11.1)	.500	(12.7)	.050	(1.3)	.375	(9.5)	.170	(4.3)	.218	(5.5)	1000
N4NY-008-9-M	N4NY-008-0-M	.500	(12.7)	.530	(13.5)	.050	(1.3)	.375	(9.5)	.170	(4.3)	.218	(5.5)	1000
N4NY-002B-9-M	N4NY-002B-0-M	.125	(3.2)	.343	(8.7)	.050	(1.3)	.375	(9.5)	.203	(5.2)	.218	(5.5)	1000
N4NY-003B-9-M	N4NY-003B-0-M	.187	(4.8)	.378	(9.6)	.050	(1.3)	.375	(9.5)	.203	(5.2)	.218	(5.5)	1000
N4NY-004B-9-M	N4NY-004B-0-M	.250	(6.4)	.421	(10.7)	.050	(1.3)	.375	(9.5)	.203	(5.2)	.218	(5.5)	1000
N4NY-005B-9-M	N4NY-005B-0-M	.312	(7.9)	.441	(11.2)	.050	(1.3)	.375	(9.5)	.203	(5.2)	.218	(5.5)	1000
N4NY-006B-9-M	N4NY-006B-0-M	.375	(9.5)	.464	(11.8)	.050	(1.3)	.375	(9.5)	.203	(5.2)	.218	(5.5)	1000
N4NY-007B-9-M	N4NY-007B-0-M	.437	(11.1)	.500	(12.7)	.050	(1.3)	.375	(9.5)	.203	(5.2)	.218	(5.5)	1000
N4NY-008B-9-M	N4NY-008B-0-M	.500	(12.7)	.530	(13.5)	.050	(1.3)	.375	(9.5)	.203	(5.2)	.218	(5.5)	1000
N6NY-004C-9-M	N6NY-004C-0-M	.250	(6.4)	.437	(11.1)	.060	(1.5)	.500	(12.7)	.203	(5.2)	.218	(5.5)	1000
N6NY-005C-9-M	N6NY-005C-0-M	.312	(7.9)	.474	(12.0)	.060	(1.5)	.500	(12.7)	.203	(5.2)	.218	(5.5)	1000
N6NY-006C-9-M	N6NY-006C-0-M	.375	(9.5)	.500	(12.7)	.060	(1.5)	.500	(12.7)	.203	(5.2)	.218	(5.5)	1000
N6NY-007C-9-M	N6NY-007C-0-M	.437	(11.1)	.533	(13.5)	.060	(1.5)	.500	(12.7)	.203	(5.2)	.218	(5.5)	1000
N6NY-008C-9-M	N6NY-008C-0-M	.500	(12.7)	.553	(14.1)	.060	(1.5)	.500	(12.7)	.203	(5.2)	.218	(5.5)	1000
N6NY-009-9-M	N6NY-009-0-M	.562	(14.3)	.603	(15.3)	.060	(1.5)	.500	(12.7)	.203	(5.2)	.218	(5.5)	1000
N6NY-010-9-M	N6NY-010-0-M	.625	(15.9)	.625	(15.9)	.060	(1.5)	.500	(12.7)	.203	(5.2)	.218	(5.5)	1000
N6NY-011-9-M	N6NY-011-0-M	.687	(17.4)	.665	(16.9)	.060	(1.5)	.500	(12.7)	.203	(5.2)	.218	(5.5)	1000
N6NY-012-9-M	N6NY-012-0-M	.750	(19.1)	.699	(17.8)	.060	(1.5)	.500	(12.7)	.203	(5.2)	.218	(5.5)	1000
N6NY-013-9-M	N6NY-013-0-M	.812	(20.6)	.765	(19.9)	.060	(1.5)	.500	(12.7)	.203	(5.2)	.218	(5.5)	1000
N6NY-014-9-M	N6NY-014-0-M	.875	(22.2)	.795	(20.2)	.060	(1.5)	.500	(12.7)	.203	(5.2)	.218	(5.5)	1000
N6NY-016-9-M	N6NY-016-0-M	1.000	(25.4)	.825	(20.9)	.060	(1.5)	.500	(12.7)	.203	(5.2)	.218	(5.5)	1000
N6NY-018-9-D	N6NY-018-0-D	1.125	(28.6)	.940	(23.8)	.060	(1.5)	.500	(12.7)	.203	(5.2)	.218	(5.5)	500
N6NY-019-9-D	N6NY-019-0-D	1.187	(30.1)	.963	(24.5)	.060	(1.5)	.500	(12.7)	.203	(5.2)	.218	(5.5)	500
N6NY-020-9-D	N6NY-020-0-D	1.250	(31.8)	.980	(24.9)	.060	(1.5)	.500	(12.7)	.203	(5.2)	.218	(5.5)	500
N6NY-022-9-D	N6NY-022-0-D	1.375	(34.9)	1.045	(26.5)	.060	(1.5)	.500	(12.7)	.203	(5.2)	.218	(5.5)	500
N6NY-024-9-D	N6NY-024-0-D	1.500	(38.1)	1.114	(28.3)	.060	(1.5)	.500	(12.7)	.203	(5.2)	.218	(5.5)	500
Tolerance ±		.010 (.254)	.030 (.762)	.005 (.127)	.015 (.381)	.010 (.254)	.030 (.762)							

# Cable Clamps and Clips



## Self-Aligning Cable Clamps

- Molded-in saddle washer enhances performance and appearance.
- Self-Alignment feature makes this clamp ideal for assembly applications.



- 14 diameters and 2 widths with mounting holes for #4 through #10 screws.
- UL Flammability W.NY 94 V-2; W.TZ 94 V-0.
- Stocked in Natural and heat stabilized black 6/6 Nylon, and Fluoropolymer for highest heat applications.
- Item numbers molded-in for easy identification.

Cat. No.	Material	D Nominal Diameter		D1 Closed Diameter		E		T Thickness		W Width		H Hole Diameter		X	Bulk Pkg. Qty.	
		Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)			
W4NY-125-9-M	Natural Nylon	.125	(3.17)	.114	(2.89)	.333	(8.46)	.040	(1.02)	.375	(9.52)	.167	(4.24)	.257	(6.53)	1000
W4NY-187-9-M	Natural Nylon	.187	(4.76)	.172	(4.36)	.355	(9.02)	.040	(1.02)	.375	(9.52)	.167	(4.24)	.218	(5.53)	1000
W4NY-250-9-M	Natural Nylon	.250	(6.34)	.234	(5.94)	.382	(9.70)	.040	(1.02)	.375	(9.52)	.167	(4.24)	.190	(4.83)	1000
W4NY-312-9-M	Natural Nylon	.312	(7.93)	.297	(7.54)	.422	(10.71)	.040	(1.02)	.375	(9.52)	.167	(4.24)	.205	(5.21)	1000
W4NY-375-9-M	Natural Nylon	.375	(9.52)	.359	(9.11)	.454	(11.53)	.040	(1.02)	.375	(9.52)	.167	(4.24)	.210	(5.33)	1000
W4NY-500-9-M	Natural Nylon	.500	(12.69)	.484	(12.29)	.490	(12.45)	.040	(1.02)	.375	(9.52)	.167	(4.24)	.266	(6.76)	1000
W6NY-187-9-M	Natural Nylon	.187	(4.76)	.172	(4.36)	.375	(9.52)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.241	(6.12)	1000
W6NY-250-9-M	Natural Nylon	.250	(6.34)	.234	(5.94)	.407	(10.34)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.241	(6.12)	1000
W6NY-312-9-M	Natural Nylon	.312	(7.93)	.297	(7.54)	.445	(11.30)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.280	(7.11)	1000
W6NY-375-9-M	Natural Nylon	.375	(9.52)	.359	(9.11)	.484	(12.29)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.291	(7.39)	1000
W6NY-437-9-M	Natural Nylon	.437	(11.11)	.422	(10.71)	.522	(13.25)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.263	(6.68)	1000
W6NY-500-9-M	Natural Nylon	.500	(12.69)	.484	(12.29)	.560	(14.22)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.272	(6.91)	1000
W6NY-562-9-M	Natural Nylon	.562	(14.28)	.547	(13.90)	.657	(16.68)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.236	(5.99)	1000
W6NY-625-9-M	Natural Nylon	.625	(15.87)	.609	(15.46)	.637	(16.17)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.290	(7.37)	1000
W6NY-687-9-M	Natural Nylon	.687	(17.46)	.672	(17.06)	.694	(17.63)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.327	(8.31)	1000
W6NY-750-9-M	Natural Nylon	.750	(19.04)	.734	(18.64)	.726	(18.44)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.326	(8.28)	1000
W6NY-812-9-M	Natural Nylon	.812	(20.63)	.797	(20.24)	.776	(19.71)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.323	(8.20)	1000
W6NY-875-9-D	Natural Nylon	.875	(22.22)	.859	(21.81)	.733	(18.62)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.310	(7.87)	500
W6NY-1000-9-D	Natural Nylon	1.000	(25.39)	.984	(24.99)	.881	(22.38)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.292	(7.42)	500
W6NY-1250-9-D	Natural Nylon	1.250	(31.73)	1.227	(31.16)	1.010	(25.65)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.339	(8.61)	500
W4NY-125-0-M	Heat Stabilized Black Nylon	.125	(3.17)	.114	(2.89)	.333	(8.46)	.040	(1.02)	.375	(9.52)	.167	(4.24)	.257	(6.53)	1000
W4NY-187-0-M	Heat Stabilized Black Nylon	.187	(4.76)	.172	(4.36)	.355	(9.02)	.040	(1.02)	.375	(9.52)	.167	(4.24)	.218	(5.53)	1000
W4NY-250-0-M	Heat Stabilized Black Nylon	.250	(6.34)	.234	(5.94)	.382	(9.70)	.040	(1.02)	.375	(9.52)	.167	(4.24)	.190	(4.83)	1000
W4NY-312-0-M	Heat Stabilized Black Nylon	.312	(7.93)	.297	(7.54)	.422	(10.71)	.040	(1.02)	.375	(9.52)	.167	(4.24)	.205	(5.21)	1000
W4NY-375-0-M	Heat Stabilized Black Nylon	.375	(9.52)	.359	(9.11)	.454	(11.53)	.040	(1.02)	.375	(9.52)	.167	(4.24)	.210	(5.33)	1000
W4NY-500-0-M	Heat Stabilized Black Nylon	.500	(12.69)	.484	(12.29)	.490	(12.45)	.040	(1.02)	.375	(9.52)	.167	(4.24)	.266	(6.76)	1000
W6NY-187-0-M	Heat Stabilized Black Nylon	.187	(4.76)	.172	(4.36)	.375	(9.52)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.241	(6.12)	1000
W6NY-250-0-M	Heat Stabilized Black Nylon	.250	(6.34)	.234	(5.94)	.407	(10.34)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.241	(6.12)	1000
W6NY-312-0-M	Heat Stabilized Black Nylon	.312	(7.93)	.297	(7.54)	.445	(11.30)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.280	(7.11)	1000
W6NY-375-0-M	Heat Stabilized Black Nylon	.375	(9.52)	.359	(9.11)	.484	(12.29)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.291	(7.39)	1000
W6NY-437-0-M	Heat Stabilized Black Nylon	.437	(11.11)	.422	(10.71)	.522	(13.25)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.263	(6.68)	1000
W6NY-500-0-M	Heat Stabilized Black Nylon	.500	(12.69)	.484	(12.29)	.560	(14.22)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.272	(6.91)	1000
W6NY-562-0-M	Heat Stabilized Black Nylon	.562	(14.28)	.547	(13.90)	.657	(16.68)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.236	(5.99)	1000
W6NY-625-0-M	Heat Stabilized Black Nylon	.625	(15.87)	.609	(15.46)	.637	(16.17)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.290	(7.37)	1000
W6NY-687-0-M	Heat Stabilized Black Nylon	.687	(17.46)	.672	(17.06)	.694	(17.63)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.327	(8.31)	1000
W6NY-750-0-M	Heat Stabilized Black Nylon	.750	(19.04)	.734	(18.64)	.726	(18.44)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.326	(8.28)	1000
W6NY-812-0-M	Heat Stabilized Black Nylon	.812	(20.63)	.797	(20.24)	.776	(19.71)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.323	(8.20)	1000
W6NY-875-0-D	Heat Stabilized Black Nylon	.875	(22.22)	.859	(21.81)	.733	(18.62)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.310	(7.87)	500
W6NY-1000-0-D	Heat Stabilized Black Nylon	1.000	(25.39)	.984	(24.99)	.881	(22.38)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.292	(7.42)	500
W6NY-1250-0-D	Heat Stabilized Black Nylon	1.250	(31.73)	1.227	(31.16)	1.010	(25.65)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.339	(8.61)	500
<b>Tolerance ±</b>				.010	(.254)	.030	(.762)	.005	(.127)	.015	(.381)	.010	(.254)	.030	(.762)	

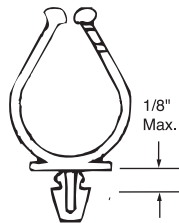
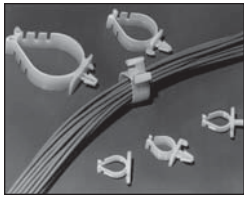
(Continued)

# Cable Clamps and Clips

## Self-Aligning Cable Clamps (continued) – For Extreme Applications

Cat. No.	Material	D Nominal Diameter		D1 Closed Diameter		E		T Thickness		W Width		H Hole Diameter		X		Bulk Pkg. Qty.
		Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	
W4TZ-125-5-D	Fluoropolymer	.125	(3.17)	.114	(2.89)	.333	(8.46)							.257	(6.53)	500
W4TZ-187-5-D	Fluoropolymer	.187	(4.76)	.172	(4.36)	.355	(9.02)							.218	(5.53)	500
W4TZ-250-5-D	Fluoropolymer	.250	(6.34)	.234	(5.94)	.382	(9.70)	.040	(1.02)	.375	(9.52)	.167	(4.24)	.190	(4.83)	500
W4TZ-312-5-D	Fluoropolymer	.312	(7.93)	.297	(7.54)	.422	(10.71)							.205	(5.21)	500
W4TZ-375-5-D	Fluoropolymer	.375	(9.52)	.359	(9.11)	.454	(11.53)							.210	(5.33)	500
W4TZ-500-5-D	Fluoropolymer	.500	(12.69)	.484	(12.29)	.490	(12.45)							.266	(6.76)	500
W6TZ-187-5-D	Fluoropolymer	.187	(4.76)	.172	(4.36)	.375	(9.52)							.241	(6.12)	500
W6TZ-250-5-D	Fluoropolymer	.250	(6.34)	.234	(5.94)	.407	(10.34)									500
W6TZ-312-5-D	Fluoropolymer	.312	(7.93)	.297	(7.54)	.445	(11.30)							.280	(7.11)	500
W6TZ-375-5-D	Fluoropolymer	.375	(9.52)	.359	(9.11)	.484	(12.29)	.060	(1.52)	.500	(12.69)	.203	(5.15)	.291	(7.39)	500
W6TZ-437-5-D	Fluoropolymer	.437	(11.11)	.422	(10.71)	.522	(13.25)							.263	(6.68)	500
W6TZ-500-5-D	Fluoropolymer	.500	(12.69)	.484	(12.29)	.560	(14.22)							.272	(6.91)	500
W6TZ-625-5-D	Fluoropolymer	.625	(15.87)	.609	(15.46)	.637	(16.17)							.290	(7.37)	500
W6TZ-750-5-D	Fluoropolymer	.750	(19.04)	.734	(18.64)	.726	(18.44)							.326	(8.28)	500
Tolerance ±	Fluoropolymer			.010	(.254)	.030	(.762)	.005	(.127)	.015	(.381)	.010	(.254)	.030	(.762)	

# Harnessing Accessories

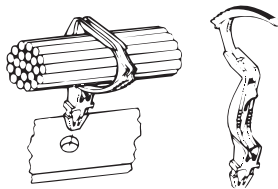


1/8" max  
Snap-in 1/4" hole

## Mechanical-Locking Routing Clamps

Bulk Cat. No.	Mounting Hole Size	Maximum Wire Bundle Diameter (in.)	Width (in.)	Length (in.)	Bulk Pkg.
TC88	.250	.500	.250	.891	100
TC95	.250	1.000	.500	1.590	100

The locking clamp is available in several mounting styles, as shown. This clamp acts as a retainer during wire routing and as a positive clamp when desired. Anti-rotational peg is available.

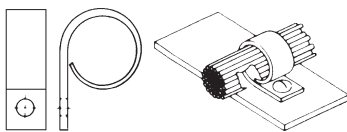


Here is an inexpensive harness clip for grouping wires in appliances, office equipment and other noncritical applications.

Designed to perform the same basic function as a cable tie in holding wires together, the new adjustable, self-locking clip requires no tools for installation. A projecting prong is simply pressed into a 1/4" hole where it compresses and locks. The simple ratchet-type lock is released by moving the locking lever.

## Harness Clips

Bulk Cat. No.	Mounting Hole Size	Maximum Wire Bundle Diameter (in.)	Bulk Pkg.
HCP438	1/4	.375	1000

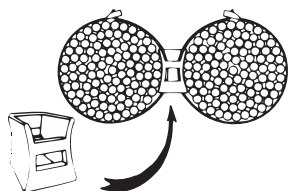
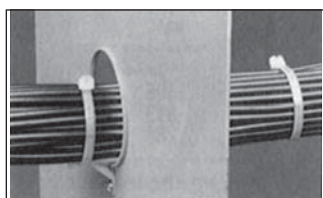
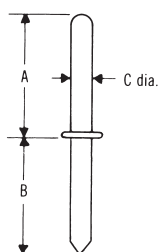
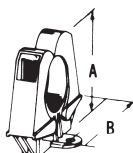
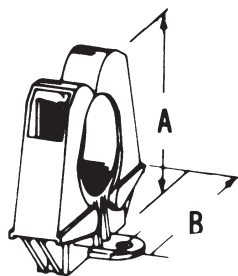


AC-loop retaining clamp is ideal to support long runs in point-to-point wiring or as a harness aid. Rigid PVC.

## HBundle-Retaining Clamp

Bulk Cat. No.	Mounting Method	Maximum Wire Bundle Diameter (in.)	Width (in.)	Bulk Pkg.
TC70	#10 screw	.250	.400	100
TC71	#10 screw	.500	.400	100
TC72	#10 screw	.750	.500	100
TC73	#10 screw	1.000	.500	100
TC74	#10 screw	1.500	.500	100

# Harnessing Accessories



## Wire-Bundle Retainers

Bulk Cat. No.	Fastener	Maximum Wire Bundle Diameter (in.)	Width (in.)	Height (in.)	Bulk Pkg.
TC86	#6 screws	.750	1.750	1.813	25
TC87	#6 screws	1.250	2.469	2.281	10

These retainers consist of a spring-loaded clip and an elastic bundle support. Wires are inserted simply by snapping them through spring-loaded clips. Wires are held 1/4 inch above work surface for easy tying.

## Harness-Board Nails

Bulk Cat. No.	A (in.)	Dimensions B (in.)	C (in.)	Bulk Pkg.
HBP34	.750	.625	.072	100
HBP-1	1.000	.625	.072	100
HBP112	1.500	.625	.082	100
HBP2	2.000	.625	.092	100
HBP212	2.500	.625	.105	100
HBP3	3.000	.625	.120	100

Hardened, nickel plated steel.



## Bulkhead Bundle Support Feed-Through

Bulk Cat. No.	Mounting Method	Maximum Tie Width Accom.	Width (in.)	Length (in.)	Bulk Pkg.
TC131	#6 screw	.190	1.115	1.890	1000

TC131 bulkhead mounting base can be installed from either side. Ties are installed through the clamp on either side of the bulkhead.

## Wire-Bundle Spacer

Cat. No.	Maximum Tie Width Accom.	Width (in.)	Length (in.)	Std. Pkg.	Bulk Pkg.
TC5339	.190	.266	.500	100	500

# Mounting Bases for Heavy-Duty Applications

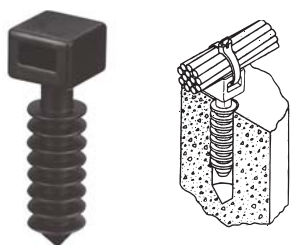


## Ty-Rap® Mounting Base for Lashing Tie

Cat. No.	Mounting Method	Maximum Tie Width Accom.	Width (in.)	Length (in.)	Std. Pkg.
TC5355	#8 screw	.500	.750	1.125	25
TC5356	#10 screw	.500	.750	1.125	25
TC5357	1/4 screw	.500	.750	1.125	25

Weather-resistant nylon mounting base for use with lashing tie Cat. No. TY-5409 (.500" wide).

## Ty-Rap® Mounting Base for Masonry and Brick Surfaces



**Only two sizes to stock—reduces inventory**  
**The new base features a specially designed head which is range-taking. Just two sizes can accommodate virtually all of your cable-to-masonry clamping needs.**

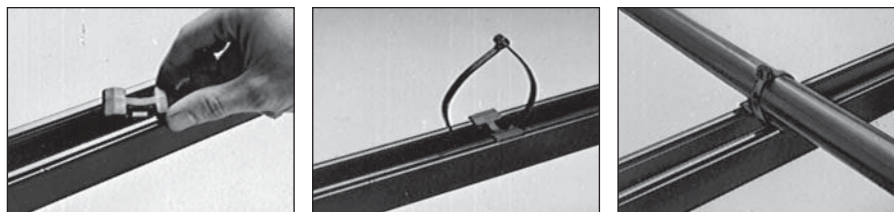
Cat. No.	Hole Size in Masonry	Maximum Tie Width Accom.	Std. Pkg.
TC5358	1/4	.190	100
TC5359	3/8	.500	50

- Quick, easy installation without adhesives or epoxies.
- Provides a quick, easy means of attaching cable and wires to masonry surfaces.
- Installs simply by tapping it into a drilled hole.
- It's immediately ready to accept a cable tie and wire bundle, no tedious surface preparation, no waiting for adhesives to set.
- Provides quick, dependable mechanical installation.
- Replaces a variety of anchors, clamps, screws, and adhesives.
- Designed for both indoor and outdoor applications made of a special impact and ultraviolet resistant black nylon, the new base is designed for both indoor and outdoor use, in addition, shelf life is indefinite because it uses no adhesives.

## Framing Channel Clamp



- **Installs with a push and twist**
- **Designed for indoor or outdoor use**
- **Smooth design protects cable insulation**
- **Takes range of cable diameters**

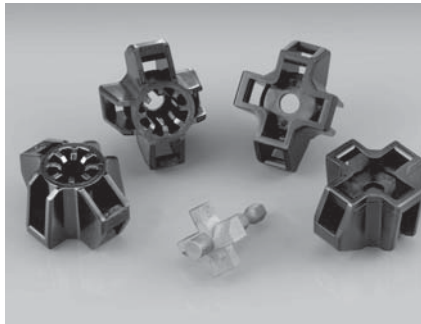


Mounting bases for heavy duty applications are made from high-impact weather-resistant nylon.

When fastening wire bundles, cables, or hoses to framing channels, you can cut costs considerably by using the Ty-Rap® cable clamp. It is made of smooth, weather-resistant nylon and designed to protect cable insulation and hoses from wear or damage as can occur with metal clamps. The clamp may be used for both indoor or outdoor applications. It installs in the framing channel with a simple push and twist. It requires no screws, nuts or tools. The clamp fits all 1-1/2" and 1-5/8" channels regardless of channel depth.

Cat. No.	Channel Size	Maximum Tie Width Accom.	Std. Pkg.
TC5363X	1.5 & 1.625	.301	50

# Mounting Bases for Heavy-Duty Applications



The Stud Mount Cable Fastening System includes a range of bases and the custom drill bit which mounts all sizes.

## Features and Benefits

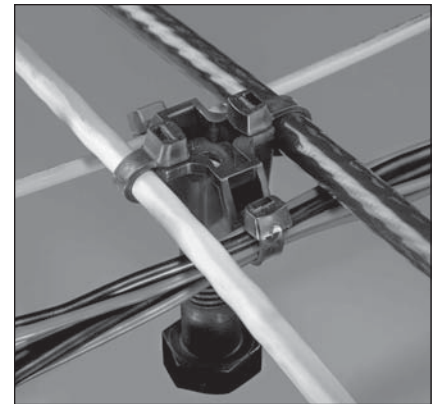
- **Fast, easy installation, using standard 3/8" power drill**
- **Custom drill bit quickly installs base to proper torque—won't crack or break mounting base due to being overtightened**
- **Unlimited harnessing flexibility using conventional T&B cable ties**
- **Unique 4-way multi-directional design**
- **10 position harness capability**
- **Available for 3/8", 1/2", 5/8", & 3/4" stud/bolt sizes**
- **Self-tapping thread design for reliable installation onto stud**
- **High pull-out strength of 500 + lb.**
- **Custom application tool for standard 3/8" power drill**
- **Material: Black 6/6 Nylon**

## Fast, easy wire management to last for the long haul.

Thomas & Betts' Stud Mount Fastening System is a fast and simple harnessing method for neat, versatile wire management. Using a custom drill bit for your 3/8" power drill, the Stud Mount base is quickly attached onto a stud to the proper torque every time. The innovative "X" design of the base reliably supports many types of cable or hose assemblies using a wide range of conventional T&B cable ties. Designed with ten separate lashing positions, the Stud Mount offers unlimited wire harnessing arrangements. T&B's Stud Mount is available in four convenient stud bolt sizes.



During installation, the custom Stud Mount drill bit ejects itself from mounting base, ensuring proper torque and preventing cracking or breaking of the mount from being overtightened.



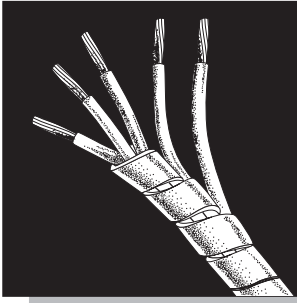
Virtually unlimited harnessing flexibility is provided in the unique 10-position harness design of the Stud Mount base.

## Ordering Information

Cat. No.	Description	Stud Size	Material	Colour
<b>XMNY-375-0-D</b>	Mount Fastener	3/8	Nylon 6/6, UV Stabilized	Black
<b>XMNY-500-0-D</b>	Mount Fastener	1/2	Nylon 6/6, UV Stabilized	Black
<b>XMNY-625-0-D</b>	Mount Fastener	5/8	Nylon 6/6, UV Stabilized	Black
<b>XMNY-750-0-D</b>	Mount Fastener	3/4	Nylon 6/6, UV Stabilized	Black
<b>WTXM</b>	Application Tool	—	Tool Steel	—

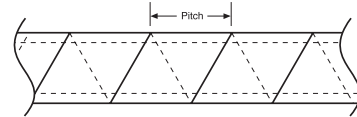
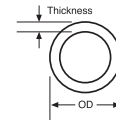


# Wire Protection Products



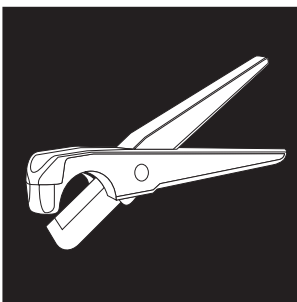
## Spiral Wrap

- For protection of bundles from .063" to 7".
- Install gapped for greater flexibility or butted for maximum abrasion resistance, insulation and rigidity.
- Stocked in 3 materials including Polyethylene and 6/6 Nylon.
- a.k.a.: Reverse cut, left-hand cut, counter clockwise cut.
- Use cutting tool SR-100.



Cat. No.	Material	Outside Diameter		Pitch		Nominal Wall Thickness		Min./Max. Bundle Range				UL Flammability	
		Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)		
SRPE-125-9-C	Natural Polyethylene	.125	(3.2)	.210	(5.3)	.035	(0.9)	.063	(1.6)	to	0.500	(12.7)	94 HB
SRPE-187-9-C	Natural Polyethylene	.187	(4.8)	.240	(6.1)	.040	(1.0)	.125	(3.2)	to	1.500	(25.9)	94 HB
SRPE-250-9-C	Natural Polyethylene	.250	(6.4)	.375	(9.5)	.045	(1.1)	.188	(4.8)	to	2.000	(50.8)	94 HB
SRPE-375-9-C	Natural Polyethylene	.375	(9.5)	.438	(11.1)	.052	(1.3)	.313	(7.9)	to	3.000	(76.2)	94 HB
SRPE-500-9-C	Natural Polyethylene	.500	(12.7)	.563	(14.3)	.062	(1.6)	.375	(9.5)	to	4.000	(102.0)	94 HB
SRPE-625-9-C	Natural Polyethylene	.625	(15.9)	.625	(15.9)			.625	(15.9)	to	4.500	(114.3)	94 HB
SRPE-750-9-C	Natural Polyethylene	.750	(19.1)	.750	(19.1)	.065	(1.7)	.750	(19.1)	to	5.000	(127.0)	94 HB
SRPE-1000-9-C	Natural Polyethylene	1.000	(25.4)	1.110	(28.2)	.070	(1.8)	1.000	(25.4)	to	7.000	(177.8)	94 HB
SRPE-125-0-C	UV Black Polyethylene	.125	(3.2)	.210	(5.3)	.035	(0.9)	.063	(1.6)	to	0.500	(12.7)	94 HB
SRPE-187-0-C	UV Black Polyethylene	.187	(4.8)	.240	(6.1)	.040	(1.0)	.125	(3.2)	to	1.500	(25.9)	94 HB
SRPE-250-0-C	UV Black Polyethylene	.250	(6.4)	.375	(9.5)	.045	(1.1)	.188	(4.8)	to	2.000	(50.8)	94 HB
SRPE-375-0-C	UV Black Polyethylene	.375	(9.5)	.438	(11.1)	.052	(1.3)	.313	(7.9)	to	3.000	(76.2)	94 HB
SRPE-500-0-C	UV Black Polyethylene	.500	(12.7)	.563	(14.3)	.062	(1.6)	.375	(9.5)	to	4.000	(102.0)	94 HB
SRPE-625-0-C	UV Black Polyethylene	.625	(15.9)	.625	(15.9)			.625	(15.9)	to	4.500	(114.3)	94 HB
SRPE-750-0-C	UV Black Polyethylene	.750	(19.1)	.750	(19.1)	.065	(1.7)	.750	(19.1)	to	5.000	(127.0)	94 HB
SRPE-1000-0-C	UV Black Polyethylene	1.000	(25.4)	1.110	(28.2)	.070	(1.8)	1.000	(25.4)	to	7.000	(177.8)	94 HB
SRNY-250-9-C	Natural Nylon 6/6	.250	(6.4)	.375	(9.5)	.025	(.6)	.187	(4.8)	to	2.000	(50.8)	94 HB
SRNY-375-9-C	Natural Nylon 6/6	.375	(9.5)	.438	(11.1)			.312	(7.9)	to	3.000	(76.2)	94 HB
SRNY-500-9-C	Natural Nylon 6/6	.500	(12.7)	.563	(14.3)	.035	(.9)	.375	(9.5)	to	4.000	(102.0)	94 HB
SRTL-250-WH-C	*Teflon®	.250	(6.4)	.375	(9.5)	.030	(.76)	.188	(4.8)	to	2.000	(50.8)	94 V-0
SRTL-375-WH-C	*Teflon®	.375	(9.5)	.438	(11.1)	.030	(.76)	.313	(7.9)	to	3.000	(76.2)	94 V-0
SRTL-500-WH-C	*Teflon®	.500	(12.7)	.563	(14.3)	.030	(.76)	.375	(9.5)	to	4.000	(102.0)	94 V-0
SRTL-625-WH-C	*Teflon®	.625	(15.9)	.625	(15.9)	.030	(.76)	.625	(15.9)	to	4.500	(114.3)	94 V-0
SRTL-750-WH-C	*Teflon®	.750	(19.1)	.750	(19.1)	.030	(.76)	.750	(19.1)	to	5.000	(127.0)	94 V-0
<b>Tolerance ±</b>		.030	(.762)		.010	(.254)							

• Stocked in 100 foot rolls.



## SR-100 Cutting Tool

Use our SR-100 cutting tool for all your plastic pipe and PVC conduit needs to 1 1/4" I.D.

### Features:

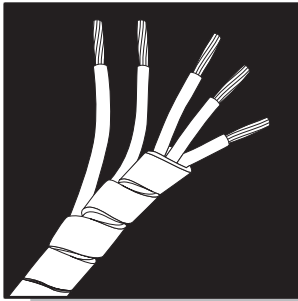
- High-carbon, \*Teflon®-coated replacement steel blade.

- Contoured handle resists tube crushing.
- Produces no "sawdust", no need to debur.
- Lightweight, low-profile and no exposed blade when stored.

\*Teflon® is a trademark of E.I. DuPont de Nemours and Company.

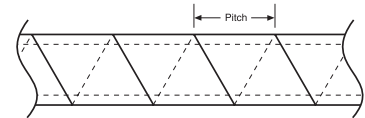
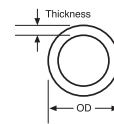
Cat. No.	Description
SR-100	Cutting Tool
SR-R	Replacement Blade

# Wire Protection Products



## Forward Cut Spiral Wrap

- For protection of bundles from .063" to 7".
- Install gapped for greater flexibility or butted for maximum abrasion resistance, insulation and rigidity.
- Available in 4 materials including Polyethylene, Nylon and Teflon®.
- a.k.a.: Right-hand cut, clockwise cut.
- Use cutting tool SR-100.



Cat. No.	Material	Outside Diameter		Pitch		Nominal Wall Thickness		Min./Max. Bundle Range				UL Flammability	
		Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)		
SRPE-250F-9-C	Natural Polyethylene	.250	(6.4)	.375	(9.5)	.045	(1.1)	.188	(4.8)	to	2.000	(50.8)	94 HB
SRPE-187F-9-C	Natural Polyethylene	.187	(4.8)	.240	(6.1)	.040	(1.0)	.125	(3.2)	to	1.500	(25.9)	94 HB
SRPE-250F-9-C	Natural Polyethylene	.250	(6.4)	.375	(9.5)	.045	(1.1)	.188	(4.8)	to	2.000	(50.8)	94 HB
SRPE-375F-9-C	Natural Polyethylene	.375	(9.5)	.438	(11.1)	.052	(1.3)	.313	(7.9)	to	3.000	(76.2)	94 HB
SRPE-500F-9-C	Natural Polyethylene	.500	(12.7)	.563	(14.3)	.062	(1.6)	.375	(9.5)	to	4.000	(102.0)	94 HB
SRPE-625F-9-C	Natural Polyethylene	.625	(15.9)	.625	(15.9)	.062	(1.6)	.625	(15.9)	to	4.500	(114.3)	94 HB
SRPE-750F-9-C	Natural Polyethylene	.750	(19.1)	.750	(19.1)	.065	(1.7)	.750	(19.1)	to	5.000	(127.0)	94 HB
SRPE-1000F-9-C	Natural Polyethylene	1.000	(25.4)	1.110	(28.2)	.070	(1.8)	1.000	(25.4)	to	7.000	(177.8)	94 HB
SRPE-187F-0-C	UV Black Polyethylene	.187	(4.8)	.240	(6.1)	.040	(1.0)	.125	(3.2)	to	1.500	(25.9)	94 HB
SRPE-250F-0-C	UV Black Polyethylene	.250	(6.4)	.375	(9.5)	.045	(1.1)	.188	(4.8)	to	2.000	(50.8)	94 HB
SRPE-375F-0-C	UV Black Polyethylene	.375	(9.5)	.438	(11.1)	.052	(1.3)	.313	(7.9)	to	3.000	(76.2)	94 HB
SRPE-500F-0-C	UV Black Polyethylene	.500	(12.7)	.563	(14.3)	.062	(1.6)	.375	(9.5)	to	4.000	(102.0)	94 HB
SRPE-625F-0-C	UV Black Polyethylene	.625	(15.9)	.625	(15.9)	.062	(1.6)	.625	(15.9)	to	4.500	(114.3)	94 HB
SRPE-750F-0-C	UV Black Polyethylene	.750	(19.1)	.750	(19.1)	.065	(1.7)	.750	(19.1)	to	5.000	(127.0)	94 HB
SRPE-1000F-0-C	UV Black Polyethylene	1.000	(25.4)	1.110	(28.2)	.070	(1.8)	1.000	(25.4)	to	7.000	(177.8)	94 HB
SRFR-187F-WH-C	White Flame Retardant Polyethylene	.187	(4.8)	.240	(6.1)	.040	(1.0)	.125	(3.2)	to	1.500	(25.9)	94 V-0
SRFR-250F-WH-C	White Flame Retardant Polyethylene	.250	(6.4)	.375	(9.5)	.045	(1.1)	.188	(4.8)	to	2.000	(50.8)	94 V-0
SRFR-375F-WH-C	White Flame Retardant Polyethylene	.375	(9.5)	.438	(11.1)	.052	(1.3)	.313	(7.9)	to	3.000	(76.2)	94 V-0
SRFR-500F-WH-C	White Flame Retardant Polyethylene	.500	(12.7)	.563	(14.3)	.062	(1.6)	.375	(9.5)	to	4.000	(102.0)	94 V-0
SRTL-250-F-9-C	*Teflon®	.250	(6.4)	.375	(9.5)	.030	(.76)	.188	(4.8)	to	2.000	(50.8)	94 V-0
SRTL-375-F-9-C	*Teflon®	.375	(9.5)	.438	(11.1)	.030	(.76)	.313	(7.9)	to	3.000	(76.2)	94 V-0
SRTL-500-F-9-C	*Teflon®	.500	(12.7)	.563	(14.3)	.030	(.76)	.375	(9.5)	to	4.000	(102.0)	94 V-0
SRTL-625-F-9-C	*Teflon®	.625	(15.9)	.625	(15.9)	.030	(.76)	.625	(15.9)	to	4.500	(114.3)	94 V-0
SRTL-750-F-9-C	*Teflon®	.750	(19.1)	.750	(19.1)	.030	(.76)	.750	(19.1)	to	5.000	(127.0)	94 V-0
<b>Tolerance ±</b>		.030	(.762)	.010	(.254)								

• Stocked in 100 foot rolls.

\*Teflon® is a trademark of E.I. DuPont de Nemours and Company.

### Polyethylene

For general indoor use to 122°F. Wrap is flexible and easy to work with.

### UV Polyethylene

Available in black only. Designed to resist ultraviolet light in outdoor applications.

### \*TEFLON®

PTFE Flexible Industrial Tubing meets or exceeds ASTM D 3295. 260°C -240°C

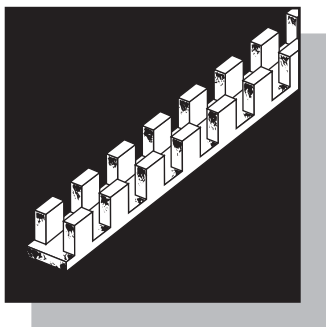
### Flame Retardant Polyethylene

Material is UL rated 94 V-0. More economical and less rigid than nylon.

### Nylon 6/6

Offers highest abrasion resistance and rigidity. Self-extinguishing to UL 94 HB and a Recognized Component.

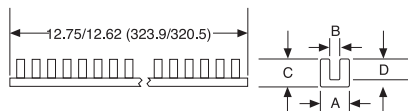
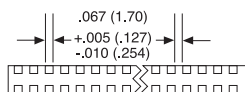
# Wire Protection Products



## Molded Grommeting

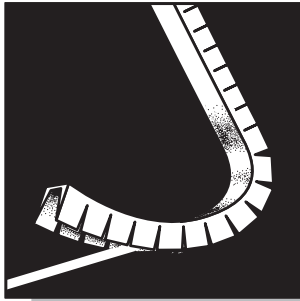
- Meets MS21266-(1-4)N.
- Available in 3 materials for panel thicknesses from .015" to .192".

- Grommet is used to protect panel edges and knock-outs where the chafing of passing wires is a concern.
- Suitable for round hole or odd shape applications.
- Also Available in Fluoropolymer.



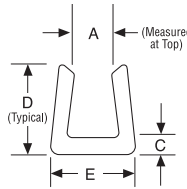
Cat. No.	Material	A		B		C		D		For Panel Thickness Inch (mm)	Military Standard Numbers	Per Pkg.
		Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)			
GSNY-052-9-C	Natural Nylon	.150	(3.81)	.056	(1.42)					.015 (.381) to .052 (1.32)	MS-21266-1N	100
GSNY-085-9-C	Natural Nylon	.175	(4.44)	.090	(2.28)	.155	(3.93)	.100	(2.54)	.053 (1.34) to .085 (2.15)	MS-21266-2N	100
GSNY-128-9-C	Natural Nylon	.220	(5.58)	.131	(3.32)					.086 (2.18) to .128 (3.25)	MS-21266-3N	100
GSNY-192-9-C	Natural Nylon	.323	(8.20)	.192	(4.88)	.230	(5.84)	.162	(4.12)	.128 (3.25) to .192 (4.88)	MS-21266-4N	100
GSTZ-052-9-C	Natural Fluoropolymer	.150	(3.81)	.045	(1.42)					.015 (.381) to .052 (1.32)	-	100
GSTZ-085-9-C	Natural Fluoropolymer	.175	(4.44)	.090	(2.28)	.155	(3.93)	.100	(2.54)	.053 (1.34) to .085 (2.15)	-	100
GSTZ-128-9-C	Natural Fluoropolymer	.220	(5.58)	.131	(3.32)					.086 (2.18) to .128 (3.25)	-	100
GSTZ-192-9-C	Natural Fluoropolymer	.323	(8.20)	.192	(4.88)	.230	(5.84)	.162	(4.12)	.128 (3.25) to .192 (4.88)	-	100
<b>Tolerance</b>		+.015 -.005		(+.381 -.127)		+.020 -.005		(+.508 -.127)				

# Wire Protection Products



## Extruded Grommeting

- Used to line panel edges and knock-outs where the chafing of passing wires is a concern.



- Available in 8 stock sizes in 100 foot lengths for panels from .030" to .250" thick.
- A variety of stocked materials to cover a wide range of applications.
- Un-cut Polyethylene is ideal for protection of glass, sheet metal, wood panels or other sheet-form materials.
- In most applications, grommeting will grip tightly by itself. If not, a touch of epoxy will keep it in place.

Cat. No.	Material	A		C		D		E		UL Flammability
		Max. Panel Thickness Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	
GRNY-040-9-C	Natural Nylon	.040	(1.01)	.040	(1.01)	.190	(4.82)	.125	(3.17)	94 V-2
GRNY-052-9-C	Natural Nylon	.052	(1.32)	.040	(1.01)	.190	(4.82)	.125	(3.17)	94 V-2
GRNY-062-9-C	Natural Nylon	.062	(1.57)	.045	(1.14)	.200	(5.08)	.170	(4.32)	94 V-2
GRNY-085-9-C	Natural Nylon	.085	(2.15)	.045	(1.14)	.200	(5.08)	.170	(4.32)	94 V-2
GRNY-100-9-C	Natural Nylon	.100	(2.54)	.045	(1.14)	.220	(5.58)	.210	(5.33)	94 V-2
GRNY-125-9-C	Natural Nylon	.125	(3.17)	.050	(1.27)	.220	(5.58)	.205	(5.23)	94 V-2
GRNY-187-9-C	Natural Nylon	.187	(4.74)	.050	(1.27)	.270	(6.85)	.275	(6.98)	94 V-2
GRNY-250-9-C	Natural Nylon	.250	(6.35)	.050	(1.27)	.280	(7.11)	.370	(9.39)	94 V-2
GRNY-040-0-C	Black Nylon	.040	(1.01)	.040	(1.01)	.190	(4.82)	.125	(3.17)	94 V-2
GRNY-052-0-C	Black Nylon	.052	(1.32)	.040	(1.01)	.190	(4.82)	.125	(3.17)	94 V-2
GRNY-062-0-C	Black Nylon	.062	(1.57)	.045	(1.14)	.200	(5.08)	.170	(4.32)	94 V-2
GRNY-085-0-C	Black Nylon	.085	(2.15)	.045	(1.14)	.200	(5.08)	.170	(4.32)	94 V-2
GRNY-100-0-C	Black Nylon	.100	(2.54)	.045	(1.14)	.220	(5.58)	.210	(5.33)	94 V-2
GRNY-125-0-C	Black Nylon	.125	(3.17)	.050	(1.27)	.220	(5.58)	.205	(5.23)	94 V-2
GRNY-187-0-C	Black Nylon	.187	(4.74)	.050	(1.27)	.270	(6.85)	.275	(6.98)	94 V-2
GRNY-250-0-C	Black Nylon	.250	(6.35)	.050	(1.27)	.280	(7.11)	.370	(9.39)	94 V-2
GRPE-040-9-C	Natural Polyethylene	.040	(1.01)	.040	(1.01)	.190	(4.82)	.125	(3.17)	94 HB
GRPE-052-9-C	Natural Polyethylene	.052	(1.32)	.040	(1.01)	.190	(4.82)	.125	(3.17)	94 HB
GRPE-062-9-C	Natural Polyethylene	.062	(1.57)	.045	(1.14)	.200	(5.08)	.170	(4.32)	94 HB
GRPE-085-9-C	Natural Polyethylene	.085	(2.15)	.045	(1.14)	.200	(5.08)	.170	(4.32)	94 HB
GRPE-100-9-C	Natural Polyethylene	.100	(2.54)	.045	(1.14)	.220	(5.58)	.210	(5.33)	94 HB
GRPE-125-9-C	Natural Polyethylene	.125	(3.17)	.050	(1.27)	.220	(5.58)	.205	(5.23)	94 HB
GRPE-187-9-C	Natural Polyethylene	.187	(4.74)	.050	(1.27)	.270	(6.85)	.275	(6.98)	94 HB
GRPE-250-9-C	Natural Polyethylene	.250	(6.35)	.050	(1.27)	.280	(7.11)	.370	(9.39)	94 HB
GRUPE-040-9-C	Un-Cut Polyethylene	.040	(1.01)	.040	(1.01)	.190	(4.82)	.125	(3.17)	94 HB
GRUPE-052-9-C	Un-Cut Polyethylene	.052	(1.32)	.040	(1.01)	.190	(4.82)	.125	(3.17)	94 HB
GRUPE-062-9-C	Un-Cut Polyethylene	.062	(1.57)	.045	(1.14)	.200	(5.08)	.170	(4.32)	94 HB
GRUPE-085-9-C	Un-Cut Polyethylene	.085	(2.15)	.045	(1.14)	.200	(5.08)	.170	(4.32)	94 HB
GRUPE-100-9-C	Un-Cut Polyethylene	.100	(2.54)	.045	(1.14)	.220	(5.58)	.210	(5.33)	94 HB
GRUPE-125-9-C	Un-Cut Polyethylene	.125	(3.17)	.050	(1.27)	.220	(5.58)	.205	(5.23)	94 HB
GRUPE-187-9-C	Un-Cut Polyethylene	.187	(4.74)	.050	(1.27)	.270	(6.85)	.275	(6.98)	94 HB
GRUPE-250-9-C	Un-Cut Polyethylene	.250	(6.35)	.050	(1.27)	.280	(7.11)	.370	(9.39)	94 HB
GRFR-040-WH-C	Flame Retardant Polyethylene	.040	(1.01)	.040	(1.01)	.190	(4.82)	.125	(3.17)	94 V-0
GRFR-052-WH-C	Flame Retardant Polyethylene	.052	(1.32)	.040	(1.01)	.190	(4.82)	.125	(3.17)	94 V-0
GRFR-062-WH-C	Flame Retardant Polyethylene	.062	(1.57)	.045	(1.14)	.200	(5.08)	.170	(4.32)	94 V-0
GRFR-085-WH-C	Flame Retardant Polyethylene	.085	(2.15)	.045	(1.14)	.200	(5.08)	.170	(4.32)	94 V-0
GRFR-100-WH-C	Flame Retardant Polyethylene	.100	(2.54)	.045	(1.14)	.220	(5.58)	.232	(5.33)	94 V-0
GRFR-125-WH-C	Flame Retardant Polyethylene	.125	(3.17)	.050	(1.27)	.220	(5.58)	.232	(5.32)	94 V-0
GRFR-187-WH-C	Flame Retardant Polyethylene	.187	(4.74)	.050	(1.27)	.270	(6.85)	.275	(6.98)	94 V-0
GRFR-250-WH-C	Flame Retardant Polyethylene	.250	(6.35)	.050	(1.27)	.280	(7.11)	.370	(9.39)	94 V-0
<b>Tolerance</b>		+ .000 - .015	(+ .000) (- .381)	± .007	(.178)	± .010	(.254)	+ .015 - .000	(+ .381) (- .000)	

• 100 feet per roll.

# Braided Expandable Wire Sleevings



## Product Description

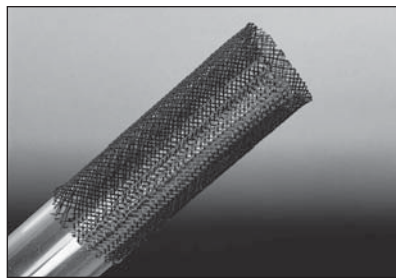
Thomas & Betts braided expandable wire sleeving is used to bundle and protect wires and cables from abrasion and excessive wear. Its flexible, lightweight, open weave construction installs easily over a variety of bundle diameters and shapes. The sleeving is resistant to chemicals, fungus, fuels, UV sunlight and has an indefinite shelf life. It is easily cut with a hot knife, which seals

the end-preventing fraying. Ends can be secured using Ty-Rap® cable ties.

Available in:

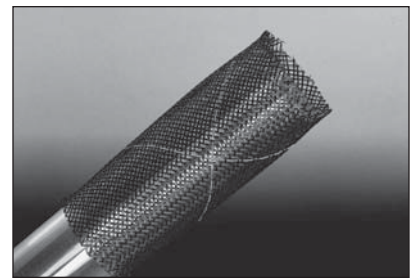
- either handy mini spools or bulk reels.
- eight sizes from 1/8" to 2-1/2" nominal I.D. size.
- solid or wraparound hook and loop braided expandable wire sleeving.

## Types of Materials



### PET – Polyethylene terephthalate

A black 0.010" polyester monofilament material designed for indoor and outdoor applications. It is rated for continuous operating temp. -75°C to 125° C.



### F – Flame Retardant Polyfibre-polyester

A 0.010" self-extinguishing polyester monofilament material that can be used indoors and outdoors. It is provided in black with white tracer for identification and is rated for continuous operating temp. -75°C to 125°C.

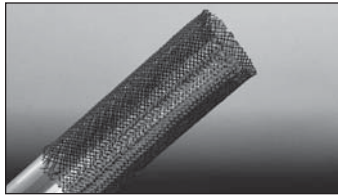
## Catalogue Number System

### Example: S250PM-O

<b>S</b>	<b>250</b>	<b>P</b>	<b>M</b>	<b>O</b>
Braided	Nominal	Material	Reel/Spool	Colour
Expandable	I.D.	<b>P</b> = PET (Polyethylene Terephthalate)	Size	<b>O</b> = Weather Resistant Black
Wire	Size	<b>F</b> = Flame-retardant polyester	<b>M</b> = 1000 ft.	
Sleeving	<b>125</b> = 1/8"	<b>PW</b> = PET hook & loop wrap-around sleeving.	<b>D</b> = 500 ft.	
	<b>250</b> = 1/4"	<b>FW</b> = Flame retardant polyester hook & loop wrap-around sleeving	<b>K</b> = 250 ft.	
	<b>500</b> = 1/2"		<b>T</b> = 200 ft.	
	<b>750</b> = 3/4"		<b>C</b> = 100 ft.	
	<b>1250</b> = 1-1/4"		<b>L</b> = 50 ft.	
	<b>1750</b> = 1-3/4"			
	<b>2000</b> = 2"			
	<b>2500</b> = 2-1/2"			

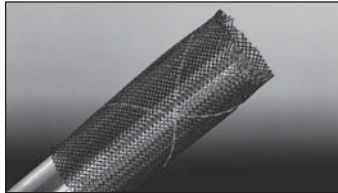
Min. orders may be required for non standard combinations.

# Braided Expandable Wire Sleeving



## PET Braided Expandable Wire Sleeving – Mini Spool

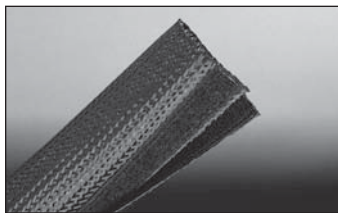
Cat. No.	Nominal I.D. (in.)	Colour	Nominal Diameter Range (in.)	Spool Quantity	Std. Pkg.
S250PT-0	.250		.125 to .375	200 ft.	1
S500PC-0	.500	Black	.250 to .750	100 ft.	1
S750PC-0	.750		.500 to 1.250	100 ft.	1
S1250PL-0	1.250		.750 to 1.750	50 ft.	1



## Flame Retardant Braided Expandable Wire Sleeving – Mini Spool

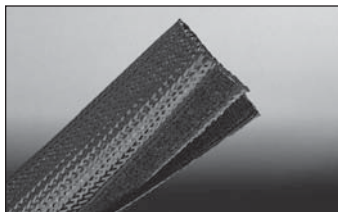
Cat. No.	Nominal I.D. (in.)	Colour	Nominal Diameter Range (in.)	Spool Quantity	Std. Pkg.
S250FT-0	.250		.125 to .375	200 ft.	1
S500FC-0	.500	Black with white tracer	.250 to .750	100 ft.	1
S750FC-0	.750		.500 to 1.250	100 ft.	1
S1250FL-0	1.250		.750 to 1.750	50 ft.	1

Note: Order by spool, not per foot.



## PET Hook and Loop, Wraparound Sleeving – Mini Spool

Cat. No.	Nominal I.D. (in.)	Colour	Nominal Diameter Range (in.)	Spool Quantity	Std. Pkg.
S500PWL-0	.500		.250 to .750	50 ft.	1
S750PWL-0	.750	Black	.500 to 1.250	50 ft.	1
S1250PWL-0	1.250		.750 to 1.750	50 ft.	1
S2000PWL-0	2.000		1.500 to 3.500	50 ft.	1



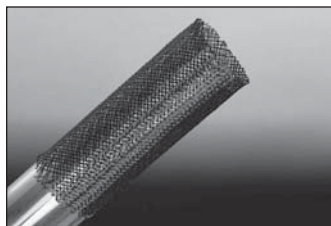
## Flame Retardant Hook and Loop, Wraparound Sleeving – Mini Spool

Cat. No.	Nominal I.D. (in.)	Colour	Nominal Diameter Range (in.)	Spool Quantity	Std. Pkg.
S500FWL-0	.500		.250 to .750	50 ft.	1
S750FWL-0	.750	Black with white tracer	.500 to 1.250	50 ft.	1
S1250FWL-0	1.250		.750 to 1.750	50 ft.	1
S2000FWL-0	2.000		1.500 to 3.500	50 ft.	1

Note: Order by spool, not per foot.

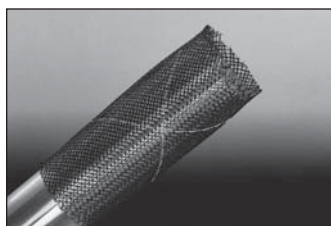
- Hook and loop fastener design allows for easy wrapping of existing wire harnesses and cables.
- Convenient for rework without disrupting existing connection.
- No tools required to close the sleeving.
- Hook and loop material is made of 100% nylon.

# Braided Expandable Wire Sleeving



## PET Braided Expandable Wire Sleeving – Bulk Reel

Cat. No.	Nominal I.D. (in.)	Colour	Nominal Diameter Range (in.)	Reel Quantity	Std. Pkg.
S125PM-0	.125		.094 to .250	1000 ft.	1
S250PM-0	.250		.125 to .375	1000 ft.	1
S500PD-0	.500		.250 to .750	500 ft.	1
S750PK-0	.750	Black	.500 to 1.250	250 ft.	1
S1250PK-0	1.250		.750 to 1.750	250 ft.	1
S1750PT-0	1.750		1.250 to 2.750	200 ft.	1
S2000PT-0	2.000		1.500 to 3.500	200 ft.	1
S2500PT-0	2.500		1.750 to 4.500	200 ft.	1



## Flame Retardant Braided Expandable Wire Sleeving – Bulk Reel

Cat. No.	Nominal I.D. (in.)	Colour	Nominal Diameter Range (in.)	Reel Quantity	Std. Pkg.
S125FM-0	.125		.094 to .250	1000 ft.	1
S250FM-0	.250		.125 to .375	1000 ft.	1
S500FD-0	.500		.250 to .750	500 ft.	1
S750FK-0	.750	Black with white tracer	.500 to 1.250	250 ft.	1
S1250FK-0	1.250		.750 to 1.750	250 ft.	1
S1750FT-0	1.750		1.250 to 2.750	200 ft.	1
S2000FT-0	2.000		1.500 to 3.500	200 ft.	1
S2500FT-0	2.500		1.750 to 4.500	200 ft.	1

Note: order by reel, not per foot.

For other colours, lengths, sizes and materials please contact customer service.



WTBM

## Sleeving End Cutter/Sealer Tools

Cat. No.	Description	Std. Pkg.
WTBM	Bench mount end cutter/sealer tool, 110 volt AC	1

It is recommended that the sleeving be cut with hot knife for a straight cut and to seal the ends which prevents fraying.

# Ty-Rap®

## Cable Tie Installation Tools



### Ty-Rap® Cable Tie Installation Tool

#### The Most Comfortable and Efficient Hand Tool Available for Installing Cable Ties!!

Thomas & Betts set out to develop a high performance and very reliable hand-operated cable tie installation tool. This new and improved Ty-Rap® Cable Tie Installation Tool is the result, and it fits the bill in every aspect. It's ergonomic with more features than any competing tool on the market.

Our engineers carefully considered user comfort and designed this rugged yet lightweight, well-balanced tool to reduce stress, fatigue and the risk of carpal tunnel syndrome and other cumulative trauma disorders to the hand and wrist. They didn't stop with ergonomics, however. This new tool offers a flush cable tie tail-to-head trim, a longer handle stroke requiring less handle force, higher tension capabilities and much, much more!



#### Designed for Efficiency

- Wide cable-tie insertion gap makes it easier to insert tie into tool
- Tension adjustment wheel on nose offers easy access and quick setting — about five times faster than competing tools!
- Tension-locking mechanism maintains constant tension setting, even when tool is frequently put down and picked up again
- Flush tail-to-head cut-off eliminates sharp cable tie ends that can cut or scratch installers, wires and nearby devices
- Longest stroke length available on the market — a full 1" — means fewer handle-tensioning cycles to save time and lower installation costs

#### Designed for Comfort

- 360° rotating nose offers maximum flexibility in any position, especially in tight spaces — no twisting of tool required!
- Adjustable grip span adapts to fit large or small hands
- Anti-recoil cut-off mechanism reduces shock and vibration to hand and wrist
- High-low handle travel feature offers lowest handle force with highest tension in any hand-operated cable tie installation tool on the market
- Handles constructed from rugged, lightweight, high-impact polymer in a balanced design with soft, over-molded, round-edged grips for added user comfort

The two Ty-Rap® Cable Tie Installation Tools install either 18-50 lb. tensile strength cable ties or 50-120 lb. tensile strength cable ties.

#### Specifications:

Dimensions: 7" L x 5" H x 1-5/8" W  
 Weight: 9oz

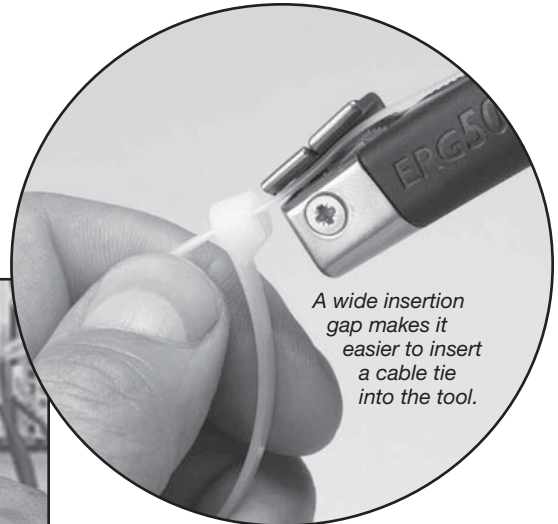
Cat. Number	Description	Std. Pkg. Qty.	UPC Number
<i>Cable Tie Installation Tool</i>			
ERG50	Tool for 18-50 lb. Cable Ties	1	78620986729
ERG120	Tool for 50-120 lb. Cable Ties	1	78620986730



# Ty-Rap®

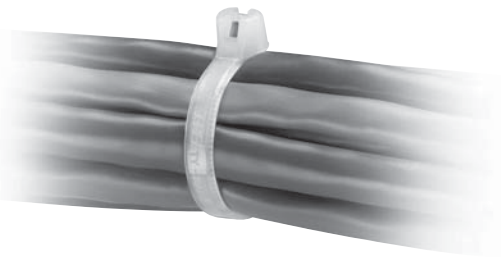
## Cable Tie Installation Tools

### Ty-Rap® Cable Tie Installation Tool Features



A wide insertion gap makes it easier to insert a cable tie into the tool.

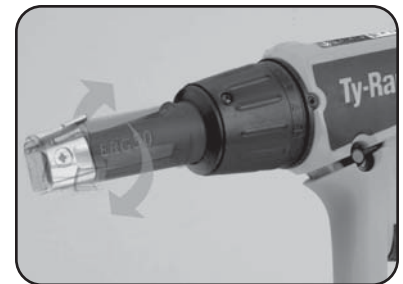
The Ty-Rap® Cable Tie Installation Tool trims cable ties flush, leaving no sharp edges behind to scratch or cut people or wires. It holds trimmed-off tails captive, leaving no mess behind to clean up.



The adjustable grip span offers a comfortable custom fit for any size hand, large or small.



The easy-access tension adjustment wheel, located on the nose, enables quick tension setting — up to five times faster than other tools on the market. Tension can be locked to maintain a constant setting.

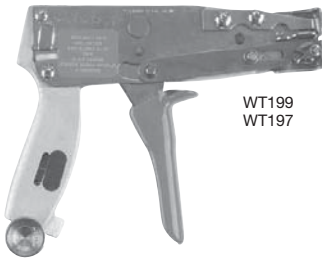


The swivel head enables you to get into any tight space — no twisting of tool required!

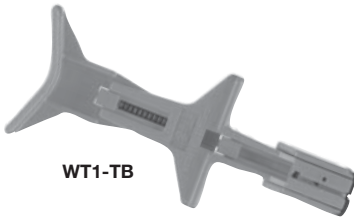
# Cable Tie Installation Tools



WT193A



WT199  
WT197



WT1-TB



WT2-TB



WT3D  
WT3S

## Stainless Steel Installation Tool

Cat. No.	Description	Std. Pkg.
DAS250	Installation Tool for Stainless Steel Ties	1

## Installation Tools

### WT193A Installation Tool

Cat. No.	Description	Body Width (in.)	Std. Pkg.	Wt. Each
WT193A	Pistol-type, easy tension adjustment, cuts tail off flush	.094-.184	1	10 oz.

### WT199/WT197 Installation Tool

Cat. No.	Description	Body Width (in.)	Std. Pkg.	Wt. Each
WT197	Pistol-type, easy tension adjustment, cuts tail off flush	.301	1	10 oz.
WT199	Pistol-type, easy tension adjustment, cuts tail off flush	.094-.184	1	10 oz.

\* Mil Spec Approved (WT197 - MS90387-2; WT199 - MS90387-1)

### WT1-TB/WT2-TB Installation Tool

Lightweight, hand-operated cable tying tools install cable ties up to .301 inch wide and .080 inch thick. Made of high-impact plastic and steel to withstand shock and rough handling, they are symmetrical in design for use by both left-hand and right-hand operators.

They cinch up the tie with a squeeze action, and cut away the excess tail when twisted 180 degrees. A specially designed pawl cuts away the tail if the tension limit is exceeded, thereby preventing the cable tie from being over tightened. Ideally suited to spot-tying applications.

Cat. No.	Description	Body Width (in.)	Std. Pkg.	Wt. Each
WT1-TB	Compact hand tool made of high-impact plastic, preset tension, cuts off flush,	.094 thru .184	1	1-1/4 oz.
WT2-TB	lightweight and economical	.184-.301	1	1-1/4 oz.

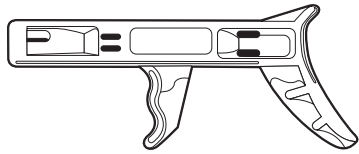
### Deltec™ and Stainless Steel Tool

Cat. No.	Description	Body Width (in.)	Std. Pkg.	Wt. Each
WT3D	Installs self-locking Ty-Rap® cable ties and Thomas & Betts 2-piece lashing ties.	.184 thru .500	1	8 oz.
WT3S	Stainless steel cable tie installing tool.		1	8 oz.



DAS250

# Cable Tie Installation Tools



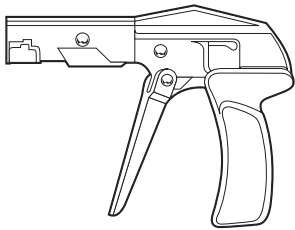
QC-100 (plastic)

## Cable Tie Tool

### QC-100

A lightweight tool for least critical applications. Cinch tie to desired bundle and twist tool to remove excess strap. Recommended for use with 18 - 50 pound ties.

Cat. No.	Description	Tie Body Width	Std. Pkg.	Wt. Ea.
QC-100	Cable Tie Tool, 18-50 lb. tension Plastic Handle	.094-.184"	1	2.56 oz.

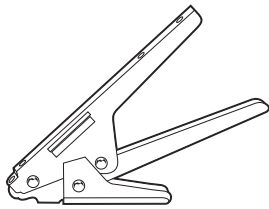


L-200 Metal (steel)

### L-200

Economy tool for use with 18 - 50 pound ties. Automatic cut-off removes excess strap flush against cable tie head. Tool is equipped with adjustable tensioning.

Cat. No.	Description	Tie Body Width	Std. Pkg.	Wt. Ea.
L-200	Cable Tie Tool, 18-50 lb. tension Steel Handle	.094-.184"	1	13.44 oz.

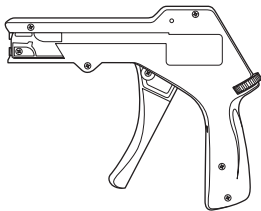


L-300C Metal (steel)

### L-300-C

Rugged construction makes this tool ideal for use with our 120 - 175 pound ties. Cinch tie to desired bundle and pull trigger to cut excess flush at Cable Tie head. Field proven durability.

Cat. No.	Description	Tie Body Width	Std. Pkg.	Wt. Ea.
L-300C	Cable Tie Tool, 120-175 lb. tension Steel Handle	.301-.345"	1	12 oz.



L-400-C (plastic)

### L-400-C

Heavy Duty tool for use with 18 - 50 pound ties. Automatic cut-off and adjustable tensioning for dependable use in assembly applications.

Cat. No.	Description	Tie Body Width	Std. Pkg.	Wt. Ea.
L-400-C	Cable Tie Tool, 18-50 lb. tension Plastic Handle	.094-.184"	1	7.52 oz.

# Cable Tie Installation Tools

## ***Semi-automatic air tool speeds cable tying operation – increases productivity***



TR227  
TR227R

- Semi-automatic operation—produces fast, effortless tying; cinches and trims tie in one fast motion
- Positive tail ejection—ensures high operating efficiency
- Precision engineered—gives you long-term dependable service, reduces operator fatigue
- Adjustable tension—provides uniform, quality installations over wide bundle diameter range

The TR227 pistol-type, semiautomatic air tool provides quick, effortless cable tying. It installs self-locking Ty-Rap® cable ties having body widths of .091" to .187" regardless of the tie's length or diameter of the wire bundle.

The trigger activated pneumatic tool:

1. tightens the tie to a preset tension,
2. trims it flush to the head,
3. positively ejects the cut-off portion of the cable tie in a single stroke.

The tool is so easy to operate that just installing a few ties is all the training required. This lightweight, precision tool is designed to be the workhorse in production tying operations. Its long barrel and narrow nose make it ideal for reaching into congested wire areas.

Designed with a comfort-grip handle to avoid operator fatigue, the tool is quality engineered to provide years of dependable service. Your wire harnessing and cable bundling will be accomplished quickly, easily, and at low installed cost.

### **Consistent tension for all bundle diameters**

The tool has a convenient tension adjustment permitting each tie to be installed with the proper tension regardless of variations in the bundle diameter. To increase tension on the tie, turn the tension disc clockwise—to decrease tension, turn the disc counterclockwise.

The tension range is indicated on the disc from min. to max.

### **Modular head**

If difficulty should arise with operation of the tool, a convenient modular head allows quick replacement. Simple on-line repair—downtime reduced to an absolute minimum.

## **Ty-Rap® Pneumatic Tool**

Cat. No.	Description	Body Width (in.)
TR227	Semiautomatic hand tool	.094-.184
TR227R	Replaceable Head For TR227	