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## 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.

### 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.

### 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.


## Overview

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### 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 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 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.



### 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.

### 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.

## Overview

Choose Genuine Ty-Rap® High-Performance Cable Ties for Quality, Performance and Innovation.

**The original oval, high-performance cable ties**  
Invented in 1958

The original oval, 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 is easier to pull through bulkheads. There are no sharp edges, so these ties are also easier on the installer's hands.

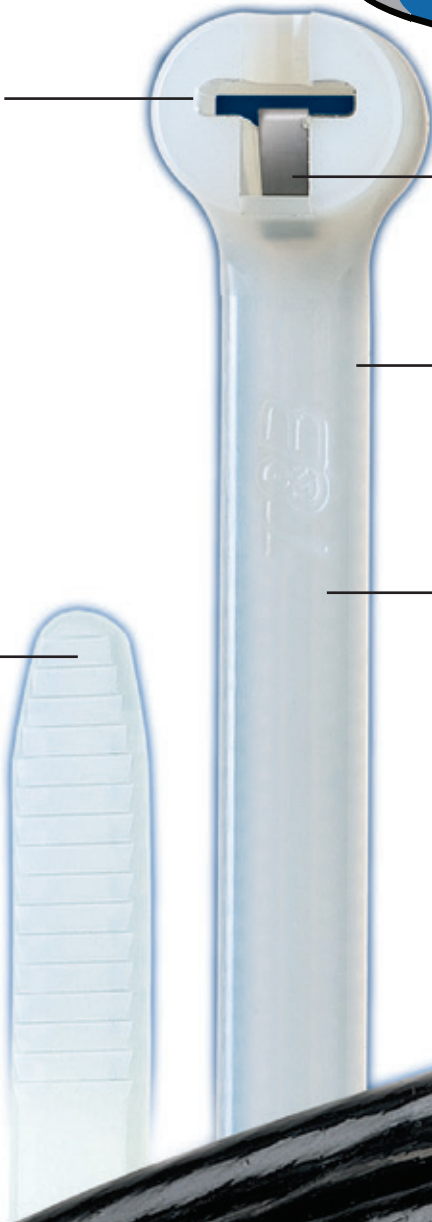


The Turned-up Tail makes the tie easier to pick up off a flat surface and provides the ability to orient the cable tie for easy assembly without looking down — perfect for blind or repetitive applications.

No-Slip Tail provides extra grip during tensioning.



For a whole bundle of reasons, trust only Genuine Ty-Rap<sup>md</sup> High-Performance Attaches pour câbles by Thomas & Betts in your next wiring installation.

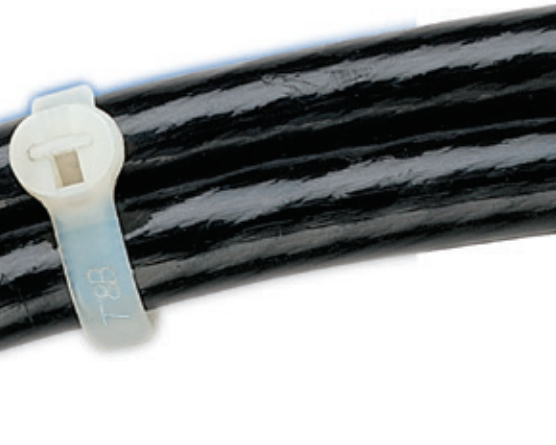
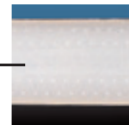


"The Grip of Steel™" Non-Hydroscopic Stainless Steel Locking Device ensures maximum performance, strength and life.

Versatile Nylon 6/6 Material provides high strength and a wide temperature range. Ty-Rap® High-Performance Cable Ties are also available in a wide range of other materials for a variety of extreme environments.

Smooth, Notchless Body reduces stress concentration points under tension, making the tie stronger and increasing life expectancy, especially in changing environments.

Ribbed and Stippled Body grips the bundle and prevents slippage.



## Overview

### Type Classifications Explained

#### The Ty-Rap® Advantage:

- Ty-Rap® cable ties identified in this catalogue as TYPE 21S are certified to meet the requirements of TYPE 21S.
  - TYPE 21S is a 2015 CEC requirement that stipulates that «cable ties is a type specifically approved for the purpose» can be used as a method of supporting for:
    - Cable (clauses 12-510, 12-706).
    - Flexible metal conduit (clause 12-1010).
    - Liquidtight flexible conduit (clause 12-1308) and.
    - Electrical nonmetallic tubing (clause 12-1504).

**New**

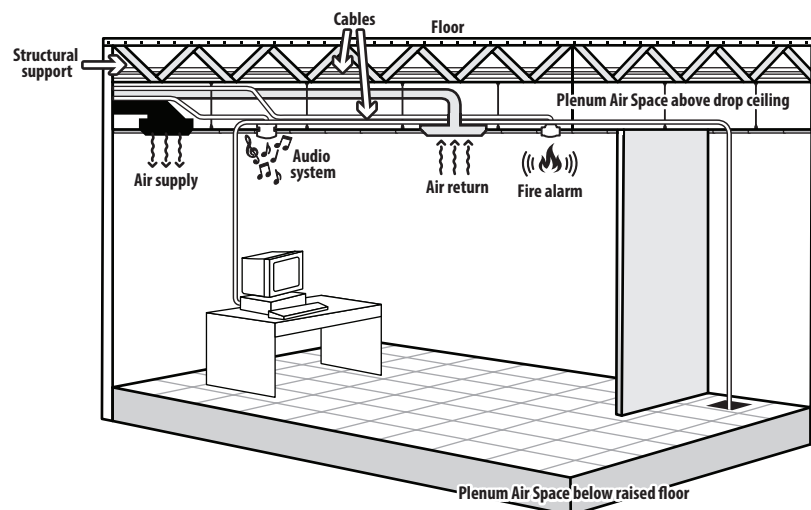
Note: Please check with your local inspection authority if TYPE 21S has been approved for use in your jurisdiction as a support method. Adoption of the CEC 2015 differs by province.

- Ty-Rap® product line includes a wide range of AH-2 plenum-rated cable ties.
  - AH-2 is a 2015 CEC rating for air-handling spaces (drop ceilings, raised floors, etc.)

#### Plenum Ratings:

If a cable tie is identified as suitable for use in air-handling spaces, the following plenum rating is declared, AH-1 or AH-2.

New Short-Form Coding (proposed)	Product Type	Standard Label Marking
AH-1	Metallic Cable Ties and Fixing Devices	"Suitable for use in Air-Handling Spaces (plenums)" in accordance with Section 300.22 (B), (C), and (D) of the National Electrical Code, and Rules 12-010 (3), (4), and (5), and 12-020 of the Canadian Electrical Code, Part I or an equivalent wording.
AH-2	Nonmetallic or Composite Cable Ties and Fixing Devices	"Suitable for use in Air-Handling Spaces (plenums)" in accordance with Section 300.22 (C), and (D) of the National Electrical Code, and Rules 12-010 (3), (4), and (5), and 12-020 of the Canadian Electrical Code, Part I or an equivalent wording.



## Overview

### Type Classifications Explained

The new Canadian CSA 62275 standard, cable ties for electrical installations replaces standard CSA C22.2 No.18.5 (Positioning Devices). The new standard was adopted on June 1, 2014.

It is based on the international standard IEC 62275 (Cable Management Systems-Cable Ties for Electrical Installations). It is harmonized with U.S standard UL 62275 and Mexican standard NMX-623-ANCE Products conforming to the new standard will be identified by new “**TYPE**” classifications and “**Standard performance ratings**”.

The “Type” classification in the latest standard is based on the demonstrated ability of the product to retain its mechanical performance both before and after exposure to various application conditions.



#### 21S

##### Nonmetallic, composite and all Cable tie fixing devices

Type 21S cable ties pass the same tests as Type 2 but must also have additional qualifications for suitability to support flexible conduit and cables for building construction in accordance to national installation codes.

- ● TY25M, TY25M-2, TY25XM, TY28M, TY28M-2, TY28MX



#### 21

##### Nonmetallic, composite and all Cable tie fixing devices


Type 21 cable ties pass the same tests as Type 2 but are made from a UL recognized material. In addition, they pass pre-qualifications to long-term performance characteristics of nonmetallic molding materials.

- ●



#### 1

##### Nonmetallic and composite Cable tie

Retains at least 50% of declared loop tensile strength after all test conditions. Equivalent to , the component recognition mark for UL.

-

## Overview

### Type Classifications Explained



**11**

**Nonmetallic and composite Cable tie**

Type 11 cable ties pass the same tests as Type 1 but are made from a UL recognized material. In addition, they pass pre-qualifications to long-term performance characteristics of nonmetallic molding materials.



**2**

**Metallic, nonmetallic, composite and all cable tie fixing devices**

Retains at least 100% of declared loop tensile strength after all test conditions.



**2S**

**Metallic, nonmetallic, composite and all cable tie fixing devices**

Type 2S cable ties pass the same tests as Type 2 but must also have additional qualifications for suitability to support flexible conduit and cables for building construction in accordance to national installation codes. The key here is that metallic can only be 2S, but composite can be 2S or 21S.

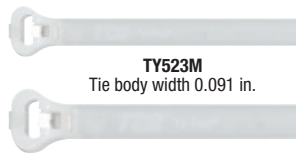


The new CSA 62275 standard for cable ties and accessories defines the terms and performance in each performance rating category:

**Performance Rating Categories:**

- Mechanical (Minimum loop tensile strength is a reference mechanical characteristic of a cable tie with its locking mechanism engaged.)
- Thermal - indicating minimum and maximum operating temperature for application and minimum temperature for installation
- Fire effects - reflecting degree of resistance to flammability
- Environmental - reflecting resistance of nonmetallic or composite materials to UV light and of metallic cable ties and accessories (or those containing metal) to corrosion

## Cable Ties



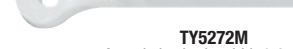
**TY523M**  
Tie body width 0.091 in.



**TY524**  
Tie body width 0.140 in.



**TY525M**  
Tie body width 0.184 in.



**TY5272M**  
Actual size body width 0.270 in.



Std. Cat. No.	Bulk Cat. No.	Type DSG	Plenum Rating	Usage	ANSI UL94 Flame Rating	Body Width (in./mm)	Length (in./mm)	Max. Wire Bundle Dia. (in./mm)	Military Standard Part No.	Tensile Strength (lb./N)	Std. Pkg.	Bulk Pkg.
<b>Ty-Rap® Standard Nylon 6/6 Cable Ties</b>												
<a href="#">TY523M</a>	<a href="#">TY23M</a>	2/21	AH-2	Indoor Only	V-2	0.09/2.29	3.62/91.95	0.87/22.00	MS3367-4	18/80.00	100	1,000
<a href="#">TY52315M</a>	<a href="#">TYB2315M</a>						7.00/177.80	1.25/32.00	–			
<a href="#">TY5232M</a>	<a href="#">TY232M</a>						8.00/203.20	2.00/51.00	–			
<a href="#">TY5234M</a>	<a href="#">TY234M</a>						14.00/355.60	4.00/102.00	–			
<a href="#">TY524M</a>	<a href="#">TY24M</a>					0.14/3.56	5.50/139.70	1.38/35.00	MS3367-5	40/180.00		
<a href="#">TY5242M</a>	<a href="#">TY242M</a>						8.19/208.03	2.00/51.00	–			
<a href="#">TY526M</a>	<a href="#">TY26M</a>						11.10/281.94	3.00/76.00	–			
<a href="#">TY5244M</a>	<a href="#">TY244M</a>						14.50/368.30	4.00/102.00	–			
<a href="#">TY525M</a>	<a href="#">TY25M</a>	2S/21S	AH-2	Indoor Only	V-2	0.19/4.83	7.31/185.67	1.89/48.00	MS3367-1	50/222.00		
<a href="#">TY5253M</a>	<a href="#">TY253M</a>						11.60/294.64	3.00/78.00	MS3367-7			
<a href="#">TY528M</a>	<a href="#">TY28M</a>						14.20/360.68	4.00/102.00	MS3367-2			
<a href="#">TY5272M</a>	<a href="#">TY272M</a>					0.27/6.86	8.75/222.25	2.00/51.00	–	120/540.00		
<a href="#">TY527M</a>	<a href="#">TY27M</a>	13.40/340.36	4.00/102.00	MS3367-3								
<a href="#">TY5275M</a>	<a href="#">TY275M</a>	18.00/457.20	5.00/127.00	–								
<a href="#">TY5277M</a>	<a href="#">TY277M</a>	24.30/617.22	7.00/177.00	–								
<a href="#">TY529M</a>	<a href="#">TY29M</a>					30.00/762.00	9.00/229.00	MS3367-6		50		
<a href="#">TY53510M**</a>	–	N/A	N/A		N/A	0.32/8.13	35.00/889.00	10.00/254.00	–	175/778.40		–
<a href="#">TY54513M**</a>	–	N/A	N/A		N/A	0.32/8.13	45.00/330.20	13.00/330.20	–			–

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 -60°C to 85°C (-76°F to 185°F). CSA Certified file 002884. Natural 6/6 Nylon Cable Ties are suitable for use in air handling plenum spaces in accordance with rules 12-010 (3), (4) and (5), and 12-020 of the CEC.

\*\* Halogen free, Silicone free  
UL recognized models.



## Cable Ties



**TY523MX**  
Tie body width 0.091 in.



**TY524MX**  
Tie body width 0.140 in.



**TY525MX**  
Tie body width 0.184 in.



**TY5272MX**  
Actual size body width 0.270 in.

The MX Series cable ties are recommended for outdoor use.



Std. Cat. No.	Bulk Cat. No.	Type DSG	Plenum Rating	Usage	ANSI UL94 Flame Rating	Body Width (in./mm)	Length (in./mm)	Max. Wire Bundle Dia. (in./mm)	Military Standard Part No.	Tensile Strength (lb./N)	Std. Pkg.	Bulk Pkg.						
Ty-Rap® Nylon 6/6 – Weather-Resistant																		
<a href="#">TY523MX</a>	<a href="#">TY23MX</a>	2/21	AH-2	Indoor/ Outdoor	V-2	0.09/2.29	3.62/91.95	0.87/22.00	MS3367-4	18/80.00	100	1,000						
<a href="#">TY52315MX</a>	<a href="#">TYB2315MX</a>						7.00/177.80	1.25/32.00	–									
<a href="#">TY5232MX</a>	<a href="#">TY232MX</a>						8.00/203.20	2.00/51.00	–									
<a href="#">TY5234MX</a>	<a href="#">TY234MX</a>						14.00/355.60	4.00/102.00	–									
<a href="#">TY524MX</a>	<a href="#">TY24MX</a>					0.14/3.56	5.50/139.70	1.38/35.00	MS3367-5	40/180.00								
<a href="#">TY5242MX</a>	<a href="#">TY242MX</a>						8.19/208.03	2.00/51.00	–	30/130.00								
<a href="#">TY526MX</a>	<a href="#">TY26MX</a>						11.10/281.94	3.00/76.00	–									
<a href="#">TY5244MX</a>	<a href="#">TY244MX</a>					14.50/368.30	4.00/102.00	–										
<a href="#">TY525MX</a>	<a href="#">TY25MX</a>					2S/21S	N/A		HB	0.27/6.86			7.31/185.67	1.89/48.00	MS3367-1	120/540.00	50	500
<a href="#">TY5253MX</a>	<a href="#">TY253MX</a>												11.60/294.64	3.00/78.00	MS3367-7			
<a href="#">TY528MX</a>	<a href="#">TY28MX</a>	14.20/360.68	4.00/102.00	MS3367-2														
<a href="#">TY5272MX</a>	<a href="#">TY272MX</a>	8.75/222.25	2.00/51.00	–	175/778.40													
<a href="#">TY527MX</a>	<a href="#">TY27MX</a>	13.40/340.36	4.00/102.00	MS3367-3														
<a href="#">TY5275MX</a>	<a href="#">TY275MX</a>	18.00/457.20	5.00/127.00	–														
<a href="#">TY5277MX</a>	<a href="#">TY277MX</a>					24.30/617.22	7.00/177.00	–										
<a href="#">TY529MX</a>	<a href="#">TY29MX*</a>					30.00/762.00	9.00/229.00	MS3367-6										
<a href="#">TY53510MX**</a>	–	N/A			N/A	0.32/8.13	35.00/889.00	10.00/254.00	–			–						
<a href="#">TY54513MX**</a>	–	N/A					45.00/330.20	13.00/330.20	–									

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

\*\*

Halogen free, Silicone free

CSA Certified file 002884. Natural 6/6 Nylon Cable Ties are suitable for use in air handling plenum spaces in accordance with rules 12-010 (3), (4) and (5), and 12-020 of the CEC.

Nylon 6/6 is recommended for use in temperatures ranging from -60°C to 85°C (-76°F to 185°F).

## Cable Ties



Std. Pkg. Cat. No.	Body Width (in./mm)	Length (in./mm)	Max. Wire Bundle Dia. (in./mm)	Tensile Strength (lb./N)	Std. Pkg.
<b>Ty-Rap® Nylon 6/6 Cable Tie – Colour Assortment</b>					
<b>TY525M-CLRS</b>	0.19/4.83	7.31/185.67	1.75/44.45	50/222.00	100

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 colours you need in convenient packs!

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

- Construction – nylon 6/6, 316 stainless steel locking device

Std. Cat. No.	Bulk Cat. No.	Description	Type DSG	Plenum Rating	Usage	ANSI UL94 Flame Rating	Body Width (in./mm)	Length (in./mm)	Max. Wire Bundle Dia. (in./mm)	Tensile Strength (lb./N)	Std. Pkg.
–	<b>TY525M-CLRS</b>	Multi-Coloured Natural Nylon (10 each of standard ten colours)	2S/21S	AH2	Indoor Only	V2	0.19/4.83	7.31/185.67	1.89/48.00	50/222.00	100
–	<b>TY25M-0</b>	Black, Natural Nylon									1000
–	<b>TY25M-1</b>	Brown, Natural Nylon									
–	<b>TY25M-2</b>	Red, Natural Nylon									
–	<b>TY25M-3</b>	Orange, Natural Nylon									
–	<b>TY25M-4</b>	Yellow, Natural Nylon									
–	<b>TY25M-5</b>	Green, Natural Nylon									
–	<b>TY25M-6</b>	Blue, Natural Nylon									
–	<b>TY25M-7</b>	Purple, Natural Nylon									
–	<b>TY25M-8</b>	Grey, Natural Nylon									
–	<b>TY25M-9</b>	White, Natural Nylon									

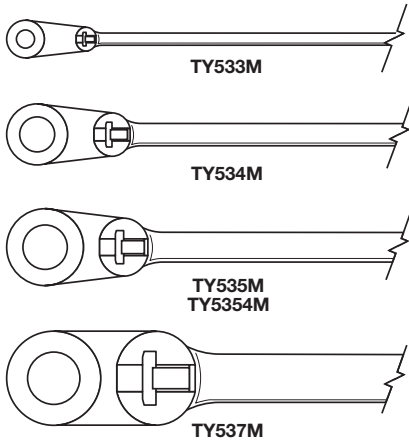
For use in temperatures ranging from -60°C to 85°C (-76°F to 185°F)

- UL Listed Natural Nylon 6/6 Cable Ties are suitable for use in air handling spaces (plenums) in accordance with rules 12-010 (3), (4) and (5), and 12-020 of the CEC part I
- CSA Certified file 002884
- 100 standard ties in black, brown, red, orange, yellow, green, blue, purple, grey and white (10 each)
- Recommended tooling – ERG-50, WT1-TB

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

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

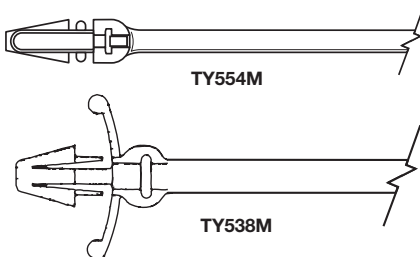
**How to Order Coloured Ty-Rap® Cable Ties and Accessories**



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

Std. Cat. No.	Bulk Cat. No.	Body Width (in./mm)	Length (in./mm)	Max. Wire Bundle Dia. (in./mm)	Mounting Hole	Tensile Strength (lb./N)	Std. Pkg.	Bulk Pkg.
<b>Ty-Rap® Mounting Head Cable Ties</b>								
TY533M	TY33M	0.09/2.29	4.00/101.60	0.63/16.00	#4	18/80.07	100	1,000
TY534M	TY34M	0.14/3.56	6.00/152.40	1.13/28.70	#8	40/177.90		
TY535M	TY35M	0.18/4.57	7.80/198.12	1.75/44.45	#10	50/222.40		
TY5354M	TY354M		14.60/370.84	4.00/101.60	#10			
TY1435M	-	0.19/4.83	7.80/198.12	1.77/44.96	0.248		-	
TY635M	-				0.138			
TYF535M	TYF35M		7.24/183.90	0.138	100			
TY537M	TY37M	0.30/7.62	13.90/353.06	3.50/88.90	1/4	120/533.80	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 -40°C to 85°C (-40°F to 185°F).

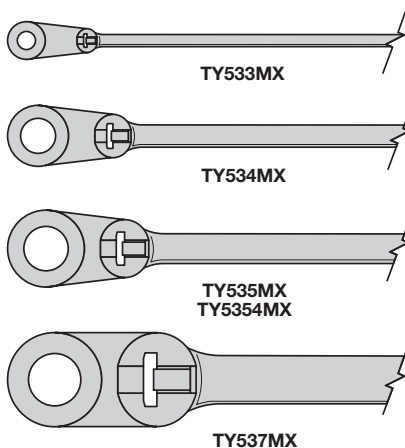


For use in 3/16 in. and 1/4 in. pre-drilled holes. Thickness panel 0.094 max. (TY554M) Range 0.04 - 0.156 (TY538M)

Std. Cat. No.	Bulk Cat. No.	Body Width (in./mm)	Length (in./mm)	Max. Wire Bundle Dia. (in./mm)	Mounting Hole	Tensile Strength (lb./N)	Std. Pkg.	Bulk Pkg.
<b>Ty-Rap® Push Mount Cable Ties</b>								
TY554M	TY54M	0.14/3.56	5.96/151.38	1.13/28.70	3/16	40/177.90	100	1,000
TY538M	TY38M*	0.18/4.57	7.80/198.12	1.75/44.45	1/4	50/222.40		

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 -40°C to 85°C (-40°F to 185°F).

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



The MX series cable ties are recommended for outdoor use.

Std. Cat. No.	Bulk Cat. No.	Body Width (in./mm)	Length (in./mm)	Max. Wire Bundle Dia. (in./mm)	Mounting Hole	Tensile Strength (lb./N)	Std. Pkg.	Bulk Pkg.
<b>Ty-Rap® Nylon 6/6 Weather-Resistant</b>								
TY533MX	TY33MX	0.09/2.29	4.00/101.60	0.63/16.00	#4	18/80.07	100	1,000
TY534MX	TY34MX	0.14/3.56	6.00/152.40	1.13/28.70	#8	40/177.90		
TY535MX	TY35MX	0.18/4.57	7.80/198.12	1.75/44.45	#10	50/222.40		
TY5354MX	TY354MX		14.60/370.84	4.00/101.60	#10			
TY537MX	TY37MX	0.30/7.62	13.90/353.06	3.50/88.90	1/4	120/533.80	50	500

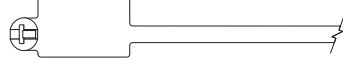
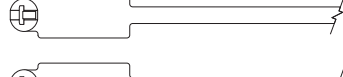
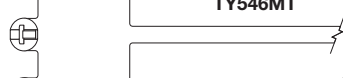
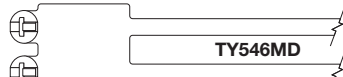
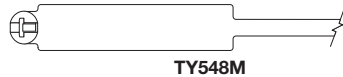
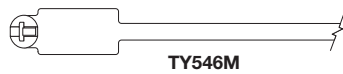
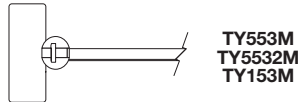
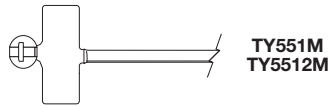
Colour - Black

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

## Identification Cable Ties

Self-locking Ty-Rap® identification ties are available in both single and multiple configurations. 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”).



Std. Cat. No.	Bulk Cat. No.	Body Width (in./mm)	Length (in./mm)	Max. Wire Bundle Dia. (in./mm)	Military Standard Part No.	Marking Pad Size (in.) W x H	Tensile Strength (lb./N)	Std. Pkg.	Bulk Pkg.
<b>Ty-Rap® Identification Cable Ties</b>									
TY551M	TY51M	0.09/2.29	3.60/91.44	0.63/16.00	MS3368-5	1 x 0.313	18/80.07	100	500
TY5512M	TY512M		8.30/210.82	2.00/50.80	—	1 x 0.313			1,000
TY553M	TY53M		4.00/101.60	0.63/16.00	—	0.813 x 0.359		50	500
TY5532M	TY532M		8.40/213.36	2.00/50.80	—	0.813 x 0.359		100	1,000
—	TY153M	0.10/2.54	4.35/110.49	0.63/16.00	—	0.781 x 1	—	—	500
TY546M	TY46M	0.18/4.57	7.10/180.34	1.75/44.45	MS3368-1	0.5 x 0.875	50/222.40	100	1,000
TY548M	TY48M	0.19/4.83	14.20/360.68	4.00/101.60	MS3368-2	0.5 x 2.125			
TY546MD	TY46MD		7.25/184.15	1.75/44.45	MS3368-3	1.172 x 1		50	
TY546MT	TY46MT		MS3368-4	1.210 x 1	100	500			
TY546MF	TY46MF		—	2.48 x 1	—	—			

Colour — Natural nylon colour

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

## Identification Cable Ties



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

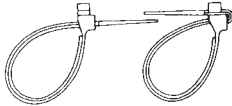
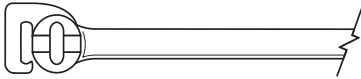
- When snapped onto the tie head, the tag is conveniently held in place until it is permanently fastened
- Offers maximized inventory control because the I.D. tag will accommodate different tie lengths and materials

Std. Cat. No.	Bulk Cat. No.	Description	Marking Pad Size (in.) W x H	Std. Pkg.	Bulk Pkg.
<b>Snap-On Identification Marker Tag</b>					
<b>TC523</b>	—	Snaps onto the heads of all miniature 18 lb. series cable ties	1 x 0.35	100	1,000
<b>TC524</b>	<b>TC24</b>	Snaps onto the heads of all intermediate 30 and 40 lb. series cable ties	1 x 0.50		
<b>TC525</b>	—	Snaps onto the heads of all standard 50 lb. series cable ties	1 x 0.50		

Note: Made of natural nylon 6/6.

- Allows marking and bundling to be done in one operation
- 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

## Speciality 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

Cat. No.	Body Width (in./mm)	Length (in./mm)	Bundle Dia. (in./mm)	Tensile Strength (lb./N)	Std. Pkg.
<b>Reusable Ty-Rap® Cable Ties</b>					
<b>TYR505</b>	0.18/4.57	7.50/190.50	1.75/44.45	50/222.40	100
<b>TYR508</b>		14.30/363.22	4.00/101.60		

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 -40°C to 85°C (-40°F to 185°F).

Cat. No.	Body Width (in./mm)	Max. Wire Bundle Dia. (in./mm)	Masonry Hole Size	Pullout Force	Std. Pkg.
<b>Plug-Ty™ Cable Tie for Masonry Surfaces</b>					
<b>TY544MX</b>	0.18/4.57	1.75/44.45	1/4	25	50

Cat. No.	Body Width (in./mm)	Max. Wire Bundle Dia. (in./mm)	Pullout Force	Std. Pkg.
<b>Drive-Ty™ Cable Tie</b>				
<b>TY545MX</b>	0.18/4.57	1.75/44.45	25	50

Std. Cat. No.	Bulk Cat. No.	Body Width (in./mm)	Length (in./mm)	Max. Wire Bundle Dia. (in./mm)	Hole Size	Tensile Strength (lb./N)	Std. Pkg.	Bulk Pkg.
<b>Universal Button Head Cable Ties</b>								
<b>TY541M</b>	<b>TY41M</b>	0.23/5.84	9.60/243.84	2.37/60.20	0.32-0.68	65	50	1,000
<b>650-41600</b>	–		10.25/260.35	2.50/63.50			500	
<b>696-41848</b>	–		12.50/317.50	3.00/76.20				

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.

**Colour** — Black  
For use in temperatures ranging from -40°C to 85°C (-40°F to 185°F).

## Stripped-Coloured Cable Ties

Designed primarily for P.I.C. and station cable binder marking, these self-locking ties install without tools in less than 10 seconds. Compared to an installation time of 30–60 seconds using the twisted wire method, the time saving is substantial. High-contrast colour stripes extend to end of tail for instant, permanent identification of binder.

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



Std. Cat. No.	Bulk Cat. No.	Tie Colour	Colour Stripe	Body Width (in./mm)	Length (in./mm)	Tensile Strength (lb./N)	Std. Pkg.	Bulk Pkg.
<b>Striped-Coloured Ty-Rap® Cable Ties for Identification Telephone Cable Binder</b>								
696-40527-0C	696-40527-0C	Black	–	0.09/2.29	3.62/91.95	18/80.07	Order per bag 1 bag = 50 cable ties Sold in Multiple of 20	1,000
696-40527-1-0C	696-40527-1-0	Brown	Black					
696-40527-1-2C	696-40527-1-2		Red					
696-40527-1-4C	696-40527-1-4		Yellow					
696-40527-1-7C	696-40527-1-7		Violet					
696-40527-1-9C	696-40527-1-9		White					
696-40527-2C	696-40527-2		Red					
696-40527-3-0C	696-40527-3-0	Orange	Black					
696-40527-3-2C	696-40527-3-2		Red					
696-40527-3-4C	696-40527-3-4		Yellow					
696-40527-3-7C	696-40527-3-7		Violet					
696-40527-3-9C	696-40527-3-9		White					
696-40527-4C	696-40527-4	Yellow	–					
696-40527-5-0C	696-40527-5-0	Green	Black					
696-40527-5-2C	696-40527-5-2		Red					
696-40527-5-4C	696-40527-5-4		Yellow					
696-40527-5-7C	696-40527-5-7		Violet					
696-40527-5-9C	696-40527-5-9		White					
696-40527-6-0C	696-40527-6-0	Blue	Black					
696-40527-6-2C	696-40527-6-2		Red					
696-40527-6-4C	696-40527-6-4		Yellow					
696-40527-6-7C	696-40527-6-7		Violet					
696-40527-6-9C	696-40527-6-9		White					
696-40527-8-0C	696-40527-8-0	Slate	Black					
696-40527-8-2C	696-40527-8-2		Red					
696-40527-8-4C	696-40527-8-4		Yellow					
696-40527-8-9C	696-40527-8-9		White					

Cat. No.	Description	Std. Pkg.
<b>Striped-Coloured Ty-Rap® Cable Tie Kits</b>		
650-40587	Pouch only	1
650-40587-1	Pouch with Ty-Rap® cable tie assortment 1 bag each of 50 each (1,250 total)	
650-40587C	Cloth pouch only	
650-40587CF	Cloth pouch with 1 bag of 50 each Ty-Rap® cable ties (1,250 total)	
650-40587M	Mini pouch only	
650-40587MF	Mini pouch filled with assortment of Ty-Rap® cable ties (50 each)	



## Stripped-Coloured Cable Ties

### Bi-Coloured Ty-Rap®

There is also available a plastic (Part# 650-40587) and canvas (Part# 650-40587-C) pouch designed with 25 pockets to store the bi-coloured ties. Also available is a plastic mini-pouch (Part# 650-40587-M) designed to fit into shirt pocket or over belt. Holds a maximum of 5 plastic bags of 50 each of the bi-coloured ties.

Plastic and canvas pouches also available filled with bi-coloured ties.

Cat. No. 650-40587-1 (filled plastic pouch)

Cat. No. 650-40587-CF (filled canvas pouch)

**Ty-Rap®  
Mini-pouch**



**Cat. No. 650-40587-M (Empty)**

### PLASTIC & CANVAS POUCH LOADING DIAGRAM

Blue Tie White Stripe #696-40527-6-9-C	Orange Tie White Stripe #696-40527-3-9-C	Green Tie White Stripe #696-40527-5-9-C	Brown Tie White Stripe #696-40527-1-9-C	Slate Tie White Stripe #696-40527-8-9-C
Blue Tie Red Stripe #696-40527-6-2-C	Orange Tie Red Stripe #696-40527-3-2-C	Green Tie Red Stripe #696-40527-5-2-C	Brown Tie Red Stripe #696-40527-1-2-C	Slate Tie Red Stripe #696-40527-8-2-C
Blue Tie Black Stripe #696-40527-6-0-C	Orange Tie Black Stripe #696-40527-3-0-C	Green Tie Black Stripe #696-40527-5-0-C	Brown Tie Black Stripe #696-40527-1-0-C	Slate Tie Black Stripe #696-40527-8-0-C
Blue Tie Yellow Stripe #696-40527-6-4-C	Orange Tie Yellow Stripe #696-40527-3-4-C	Green Tie Yellow Stripe #696-40527-5-4-C	Brown Tie Yellow Stripe #696-40527-1-4-C	Slate Tie Yellow Stripe #696-40527-8-4-C
Blue Tie Violet Stripe #696-40527-6-7-C	Orange Tie Violet Stripe #696-40527-3-7-C	Green Tie Violet Stripe #696-40527-5-7-C	Brown Tie Violet Stripe #696-40527-1-7-C	Red Tie Violet Stripe #696-40527-2-C



**Cat. No. 650-40587CF (Canvas Filled)  
Cat. No. 650-40587-C (Canvas Empty)**

**Ty-Rap®  
Ty-Pouch**



**Cat. No. 650-40587-1 (Plastic Filled)  
Cat. No. 650-40587 (Plastic Empty)**



## Cable Ties Dispenser

### Cable Ties at your fingertips!

- Durable, lightweight polyester exterior and tough vinyl interior construction
- Rugged diamond-shaped cutout for easy access to cable ties (up to 8 in., 11 in. -14 in. lengths) and rectangular-shaped (for 4 in. 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

Cat. No.	Description	Pkg.
<b>Ty-Rap® Tote™ 4 in., 8 in. and 11 in. -14 in. Combination Length Cable Tie Dispensers</b>		
<b>TY-TOTE-25</b>	Ty-Rap Tote™ 8 in. Cable Tie Dispenser (includes 1 pkg. TY525M)	1
<b>TY-TOTE-23</b>	Ty-Rap Tote™ 4 in. Cable Tie Dispenser (includes 1 pkg. TY523M)	
<b>TY-TOTE-28</b>	Ty-Rap Tote™ 11 in.-14 in. Cable Tie Dispenser (includes 1 pkg. TY528M)	



## Cable Ties for Special Environments

### 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 C37) and 3 (pages C38-C40) 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 Nylon 6/6	Weather Resistant Nylon 6/6	Heat Stabilized Natural Nylon 6/6	Flame Retardant Nylon 6/6	Weather Resistant Nylon 12	Resistant Polypropylene	Fluoro-polymer	Weather 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									

## Cable Ties for Special Environments

Perfect for outdoor applications!



**Colour** — Black  
 For use in temperatures ranging from  
 -60°C to 105°C (-76°F to 221°F)

- 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 stabilization 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 UV resistant, heat-stabilized nylon



Bulk Cat. No.	Type DSG	Usage	Length (in./mm)	Tensile Strength (lb./N)	Bulk Pkg.
<b>Ty-Rap® Heat Stabilized/Ultraviolet Resistant Cable Ties</b>					
TY23MX-A	2/21	Indoor/ Outdoor	3.62/91.95	18/80.00	1,000
TY24MX-A			5.50/139.70	30/133.00	
TY25MX-A	2S/21S		7.31/185.67	50/222.00	500
TY27MX-A			13.40/340.36	120/540.00	



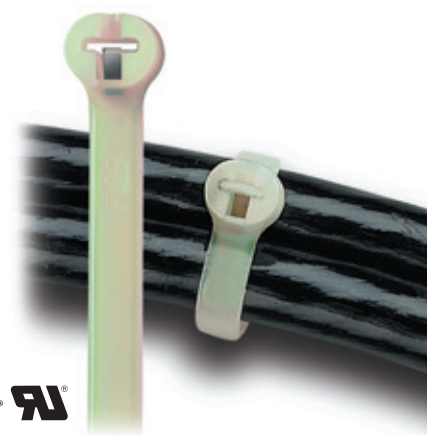
## Beat the heat!

- Ideal for Industrial OEM and MRO (includes, but not limited to metal processing, paper mills, lighting and commercial construction markets with high temperature environments up to 150°C (302°F))
- 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 extra high-temperature resistant nylon



Bulk Cat. No.	Type DSG	Usage	Length (in./mm)	Tensile Strength (lb./N)	Bulk Pkg.
<b>Ty-Rap® Extra High-Temperature Cable Ties</b>					
TYHT23M	1/11	Indoor Only	3.62/91.9	18/80	1,000
TYHT24M			5.5/139.7	40/178	
TYHT25M			7.31/186	50/222	
TYHT27M			13.4/340	120/534	500
TYHT28M*			14.2/361	50/222	1,000

\*UR Pending



**Colour** — Olive  
 For use in temperatures ranging from -40° to 150°C  
 (-40° to 302°F)

## Cable Ties for Special Environments



Detectable using metal detection and X-ray detection systems and visions systems. Polypropylene parts are also bouyant in liquid application.

**Material** — Polyamide (Nylon 6/6) or Polypropylene

**Colour** — Blue

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

### 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

Cat. No.	Length (in./mm)	Body Width (in./mm)	Max. Wire Bundle Dia. (in./mm)	Tensile Strength (lb./N)	Base Material	Std. Pkg.
<b>Ty-Rap® Detectable Cable Ties</b>						
<b>TY523M-NDT</b>	3.62/91.95	0.09/2.29	0.63/16.00	18/80	Nylon	100
<b>TY525M-NDT</b>	7.31/186.00	0.19/4.70	1.75/44.40	50/220		50
<b>TY527M-NDT</b>	13.40/340.00	0.27/6.86	3.50/89.00	120/540		
<b>TY528M-NDT</b>	14.20/36.00	0.19/4.70	4.00/102.00	50/220	Polypropylene	100
<b>TY523M-PDT</b>	3.62/91.90	0.09/2.29	0.63/16.00	18/80		50
<b>TY525M-PDT</b>	7.31/186.00	0.19/4.70	1.75/44.40	30/135		
<b>TY527M-PDT</b>	13.40/340.00	0.27/6.86	3.50/89.00	60/267		100
<b>TY528M-PDT</b>	14.20/36.00	0.19/4.70	4.00/102.00	30/135		



Make safety a priority!

This material meets UL 94V-0 flammability rating.

**Colour** — White

For use in temperatures ranging from -20°C to 65°C (-4°F to 149°F).

Cat. No.	Type DSG	Usage	Length (in./mm)	Body Width (in./mm)	Max. Wire Bundle Dia. (in./mm)	Marking Pad Size (in./mm) W x H	Tensile Strength (lb./N)	Std. Pkg.
<b>Ty-Rap® Cable Ties – Flame Retardant Nylon 6/6</b>								
<b>TY23MFR</b>	2/21	Indoor/ Outdoor	3.62/91.95	0.09/2.29	0.63/16.00	N/A	18/80.07	1,000
<b>TY232MFR</b>			8.00/203.20	0.09/2.29	2.00/50.80		40/177.90	
<b>TY24MFR</b>			5.50/139.70	0.14/3.56	1.13/28.70		50/222.40	
<b>TY25MFR</b>	2S/21S		7.31/185.67	0.18/4.57	1.75/44.45		120/533.80	500
<b>TY28MFR</b>	2/21		14.20/360.68	0.18/4.57	4.00/101.60			
<b>TY272MFR</b>	2S/21S		8.00/203.20	0.27/6.86	2.00/50.80			
<b>TY27MFR</b>		13.20/335.28	0.27/6.86	3.50/88.90				
<b>TY53MFR</b>	N/A	N/A	4.00/101.60	0.09/2.29	0.63/16.00	0.81 x 0.36/20.57 x 9.1	18/80.07	
<b>TY153MFR</b>			4.35/110.49	0.10/2.54	0.63/16.00	0.78 x 1/19.81 x 14.00		



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

**Colour** — Black

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

Std. Cat. No.	Bulk Cat. No.	Length (in./mm)	Body Width (in./mm)	Max. Wire Bundle Dia. (in./mm)	Tensile Strength (lb./N)	Std. Pkg.	Bulk Pkg.
<b>Ty-Rap® Nylon 12 Cable Ties – Ultraviolet and weather-resistant!</b>							
<b>TYC525MX</b>	<b>TYC25MX</b>	7.31/185.67	0.18/4.57	1.75/44.45	35/155.70	100	1,000
–	<b>TYC28MX</b>	14.20/360.68		4.00/101.60		–	
–	<b>TYC272MX</b>	8.00/203.20	0.27/6.86	2.00/50.80	85/378.10	–	500
<b>TYC527MX</b>	<b>TYC27MX</b>	13.20/335.28		3.50/88.90		50	
–	<b>TYC29MX</b>	30.00/762.00	0.30/7.62	9.00/228.60		–	

## Cable Ties for Special Environments



Engineered to withstand high temperatures!

Material meets ASTM D4066 PA121.

**Colour** — Green Tint

For use in temperatures ranging from -60°C to 105°C (-76°F to 221°F).

Cat. No.	Type DSG	Plenum Rating	Usage	Length (in./mm)	Body Width (in./mm)	Max. Wire Bundle Dia. (in./mm)	Tensile Strength (lb./N)	Std. Pkg.
<b>Ty-Rap® Heat Stabilized Ties</b>								
<b>TYH23M</b>	2/21	AH-2	Indoor Only	3.62/91.95	0.09/2.29	0.63/16.00	18/80.07	1,000
<b>TYH232M</b>				8.00/203.20		2.00/50.80	40/177.90	
<b>TYH24M</b>				5.50/139.70	0.14/3.56	1.13/28.70	30/135	
<b>TYH242M</b>				8.19/208.03		2.00/50.80		
<b>TYH26M</b>				11.10/281.94		3.00/76.20		
<b>TYH25M</b>	2S/21S	AH-2	Indoor Only	7.31/185.67	0.18/4.57	1.75/44.45	50/222.40	500
<b>TYH253M</b>				11.40/289.56		3.00/76.20	120/533.80	
<b>TYH28M</b>				14.20/360.68	0.27/6.86	4.00/101.60	120/533.80	
<b>TYH27M</b>				13.20/335.28		3.50/88.90		
<b>TYH272M</b>				8.75/222.25		2.00/50.80		
<b>TYH29M</b>	30.00/762.00	0.30/7.62	9.00/228.60					



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.

**Colour** — Black

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



Cat. No.	Body Width (in./mm)	Length (in./mm)	Max. Wire Bundle Dia. (in./mm)	Tensile Strength (lb./N)	Std. Pkg.
<b>Ty-Rap® Weather-Resistant Polypropylene Ties</b>					
<b>TYP23MX</b>	0.09/2.29	3.62/91.95	0.63/16.00	18/80.07	1,000
<b>TYP25MX</b>	0.18/4.57	7.01/178.05	1.75/44.45	30/133.40	
<b>TYP28MX</b>		13.92/353.57	4.00/101.60	60/266.90	
<b>TYP27MX</b>	0.27/6.86	13.17/334.52	3.5088.90		500



**Colour** — Maroon

For use in temperatures ranging from -45°C to 140°C (-49°F to 284°F).



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.

Std. Cat. No.	Bulk Cat. No.	Type DSG	Usage	Body Width (in./mm)	Length (in./mm)	Max. Wire Bundle Dia. (in./mm)	Tensile Strength (lb./N)	Std. Pkg.	Bulk Pkg.
<b>Halar®* Cable Ties</b>									
<b>TYV523M</b>	<b>TYV23M</b>	2/21	Indoor Only	0.09/2.29	3.62/91.95	0.63/16.00	18/80.07	100	1,000
<b>TYV525M</b>	<b>TYV25M</b>			0.18/4.57	7.31/185.67	1.75/44.45	50/222.40		

\* Solvay Solexis, Inc. registered trademark.

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



Fluoropolymer cable ties offer high-radiation resistance and temperature stability from -60°C to 170°C (-76°F to 338°F). Also, fluoropolymer provides excellent resistance to ultraviolet light and meets UL flammability rating 94V-0.

**Colour** — Aqua

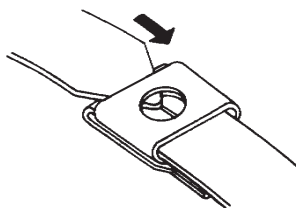


Std. Cat. No.	Bulk Cat. No.	Type DSG	Usage	Body Width (in./mm)	Length (in./mm)	Max. Wire Bundle Dia. (in./mm)	Tensile Strength (lb./N)	Std. Pkg.	Bulk Pkg.
<b>Ty-Rap® Nylon 12 Cable Ties – Ultraviolet and weather-resistant!</b>									
<b>TYZ523M</b>	<b>TYZ23M</b>	2/21	Indoor Only	0.09/2.29	3.62/91.95	0.625	18/80.07	100	1,000
<b>TYZ525M</b>	<b>TYZ25M</b>			0.18/4.57	7.31/185.67	1.750	50/222.40		
<b>TYZ528M</b>	<b>TYZ28M</b>			0.18/4.57	14.19/360.43	4.000	50/222.40	50	100
<b>TYZ527M</b>	<b>TYZ27M</b>			0.27/6.86	13.38/339.85	3.500	120/533.80		

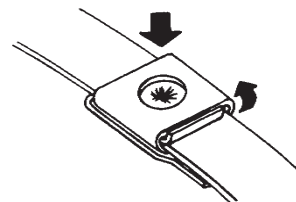
CSA Certified Natural 6/6 Nylon Cable Ties are suitable for use in air handling plenum spaces in accordance with rules 12-010 (3), (4) and (5), and 12-020 of the CEC.



## Stainless Steel Cable Ties and Accessories



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

CABLE TIE TYPE
<b>SS</b> = Two-piece solid stainless steel cable tie, Type 304
<b>TYS</b> = Multi-lock stainless steel cable tie, Type 316
<b>SSR</b> = Reusable stainless steel cable tie, Type 200/300
<b>SSH</b> = Heavy-duty stainless steel clamp, Type 201
<b>TS</b> = Roller bar locking stainless steel cable tie, Type 302/304
<b>LS</b> = Ball locking stainless steel cable tie, Type 302/304/316

Cat. No.	Bundle Diameter	Tensile Strength	Width	Length	Weight
	For Bundle Dia. of (in./mm)	Tensile Strength (lb./N)	Width (in./mm)	Length (in./mm)	Weight (lb./kg)
<b>SS10-250</b>	2/51	200/890	0.25/6.35	10.0/254	1.1/4.89
<b>SS17-250</b>	4/101	200/890	0.25/6.35	16.5/419	1.8/8.00

## Stainless Steel Cable Ties and Accessories

### SS – Two-Piece Solid

**Strong, slip-free ties with a unique dual lock**

- Low-profile, single wrap ties
- No slipping
- Dual locking mechanism



Cat. No.	For Bundle Dia. of (in./mm)	Tensile Strength (lb./N)	Width (in./mm)	Length (in./mm)	Weight (lb./kg)	Std. Pkg.
<b>Mini Stainless Steel Cable Ties</b>						
<b>SS7-180</b>	1/25	100/444.8	0.18/4.5	6.5/165	0.70/0.32	100
<b>SS10-180</b>	2/51			10.0/254	0.90/0.41	
<b>SS16-180</b>	4/102			16.0/406	1.40/0.64	
<b>SS23-180</b>	6/152			22.5/572	1.85/0.84	
<b>SS29-180</b>	8/203			29.0/737	2.35/1.07	
<b>Standard Stainless Steel Cable Ties</b>						
<b>SS10-250</b>	2/51	250/1,112	0.25/6.35	10.0/254	1.10/0.50	100
<b>SS17-250</b>	4/102			16.5/419	1.80/0.82	
<b>SS23-250</b>	6/152			22.5/572	2.50/1.13	
<b>SS29-250</b>	8/203			29.0/737	3.20/1.45	
<b>SS35-250</b>	10/254			35.0/889	3.80/1.72	

304 Stainless Steel  
0.015 in. (0.38mm) Thickness  
**NOTE:** Other lengths available on special request.  
Add suffix -316 for 316 Stainless Steel.

### Mini Tie Installation Tool

**Perfect for mini-sized stainless steel ties**

- Pocket-sized, light weight
- Applies mini-size stainless steel ties



Cat. No.	Description	Weight (lb./kg)	Std. Pkg.
<b>WTA290</b>	Hand tool to apply mini 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	1

### Standard Tie Installation Tool

**Pocket-sized hand tool for quick and easy cable tie installations**

- Lightweight
- Applies standard-size stainless steel ties



Cat. No.	Description	Weight (lb./kg)	Std. Pkg.
<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	1

## Stainless Steel Cable Ties and Accessories

### TYS – Multi-Lok™ Self-Locking



#### Strong — holds in excess of 200 lb. — and self locking

- Corrosion-resistant, providing a safe, strong, worry-free hold
- Unique, self-locking, multiple-locking system holds in excess of 200 lb.
- Manufactured from Type 316 stainless steel
- Available in two widths and various lengths

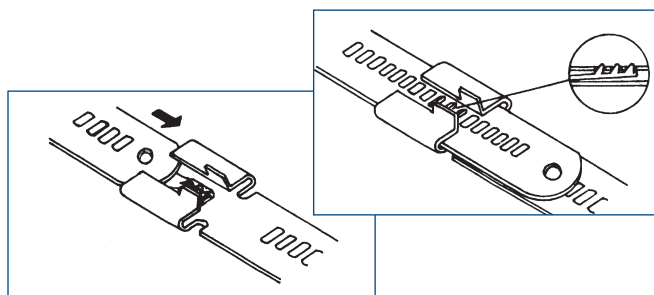
Cat. No.	Tensile Strength (lb./N)	Width (in./mm)	Length (in./mm)	Weight (lb./kg)	Std. Pkg.
<b>Type 316 Stainless Steel – Uncoated</b>					
TYS6-280	250/1,112	0.28/7.00	6/150	0.66/0.30	100
TYS9-280			9/225	0.99/0.45	
TYS12-280			12/300	1.32/0.60	
TYS18-280			18/450	1.76/0.80	
TYS24-280			24/610	2.64/1.20	
TYS6-470		0.47/12.00	6/150	1.10/0.50	
TYS9-470			9/225	1.65/0.75	
TYS12-470			12/300	2.20/1.00	
TYS18-470			18/450	2.97/1.35	
TYS24-470			24/610	4.29/1.95	

0.010 in. (0.245mm) Thickness

#### How it works:

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

- Nylon 11 weather-resistant coating is unaffected by UV sunlight, resistant to corrosion, chemicals, weathering and protects cable insulation
- Coated with halogen-free, non-toxic black nylon 11



Cat. No.	Tensile Strength (lb./N)	Width (in./mm)	Length (in./mm)	Weight (lb./kg)	Std. Pkg.
<b>Type 316 Stainless Steel – Nylon 11 Coated</b>					
TYS6-280C	250/1,112	0.28/7.00	6/150	0.66/0.30	100
TYS9-280C			9/225	0.99/0.45	
TYS12-280C			12/300	1.32/0.60	
TYS18-280C			18/450	1.76/0.80	
TYS24-280C			24/610	2.64/1.20	
TYS6-470C		0.47/12.00	6/150	1.10/0.50	
TYS9-470C			9/225	1.65/0.75	
TYS12-470C			12/300	2.20/1.00	
TYS18-470C			18/450	2.97/1.35	
TYS24-470C			24/610	4.29/1.95	

0.010 in. (0.245mm) Thickness



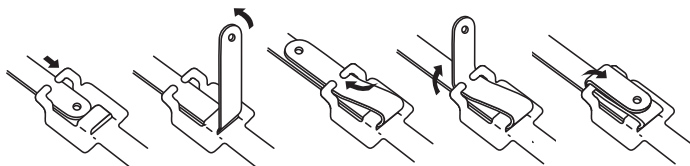
## Stainless Steel Cable Ties and Accessories

### SSR – Reusable

#### Ties to use and reuse with quickness and ease!

- Made of high-strength, corrosion-resistant 200/300 Series stainless steel
- Coated with a non-toxic, halogen-free, low-smoke Nylon 11, protecting cables from damage or interference due to direct contact with the stainless steel
- Nylon 11 is also chemical and weather-resistant, UV-protective, extremely flexible at low temperature, user-friendly on installer's hands and easy on bundles
- Unique buckle design for quick, easy application and re-use

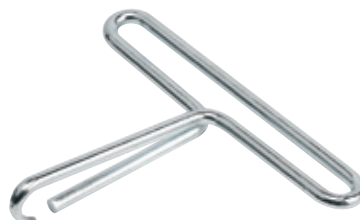
1. Insert cable tie tail through holding tabs and locking emboss.
2. Bend cable tie tail up.
3. Insert cable tie tail back through holding tabs, creating as tight a bend as possible. For increased tensile strength follow steps #4 and #5.
4. Bend cable tie tail up.
5. Fold cable tie tail over holding tabs.



Cat. No.	Tensile Strength (lb./N)	Width (in./mm)	Length (in./mm)	Weight (lb./kg)	Std. Pkg.
<b>Reusable Stainless Steel Cable Ties – Coated</b>					
<b>SSR6-250C</b>	75/333.60	0.25/6.35	6/152	1.4/0.64	100
<b>SSR9-250C</b>			9/229	1.8/0.82	
<b>SSR12-250C</b>			12/305	2.1/0.95	
<b>SSR18-250C</b>			18/457	3.0/1.36	
<b>SSR24-250C</b>			24/610	3.7/1.68	
<b>SSR6-375C</b>	100/444.80	0.38/9.53	6/152	1.8/0.82	
<b>SSR9-375C</b>			9/229	2.0/0.91	
<b>SSR12-375C</b>			12/305	3.1/1.41	
<b>SSR18-375C</b>			18/457	4.4/2.00	
<b>SSR24-375C</b>			24/610	6.6/2.99	
<b>SSR30-375C</b>			30/762	7.0/3.18	
<b>SSR36-375C</b>	36/914	8.3/3.76			



**WTAE200**  
Cable Tie Tensioner



**WTAE201**  
Tensioning Hook



**DAS250**  
Pistol Grip Tensioning Tool

(WTAE tools for use with type TYS – TYS C Series Cable ties)



Cat. No.	Description	Weight (lb./kg)	Std. Pkg.
<b>Tensioning Tools</b>			
<b>WTAE200</b>	Cable Tie Tensioner: For tensioning Reusable Ties and Multi-Lok™ Ties	0.6/0.27	1
<b>WTAE201</b>	Tensioning Hook: For tensioning Reusable Ties and Multi-Lok™ Ties	0.1/0.05	
<b>DAS250</b>	Pistol Grip Tensioning Tool: For installing Multi-Lok™, Ball Lock, & Roller Bar Lock SS Ties	1.0/0.45	

## Stainless Steel Cable Ties and Accessories

### SSH – Heavy-Duty Clamp



**Pre-assembled for single or double wrapping!**

- Double-wrapped clamps provide **extra** strength
- Available in various lengths, widths, and thicknesses



Cat. No.	Max. Dia. Once Around (in./mm)	Max. Dia. Twice Around (in./mm)	Total Length (in./mm)	Tensile Strength Single Wrap (lb./N)	Band Width (in./mm)	Band Thickness (in./mm)	Weight (lb./kg)	Std. Pkg.
<b>Heavy-Duty Free-End Stainless Steel Clamps — Type 201</b>								
SSH10-250	2/50	–	10/25	450/2002	0.25/6.35	0.02/0.51	2.2/1.00	100
SSH16-250	3.5/88	1.5/38	16/40				3.1/1.41	
SSH18-500	4/101	2/50	18/45				10.5/4.76	
SSH21-625	5/127	2.5/63	21/53				15.1/6.85	
SSH31-500	8/203	4/101	31/78	1,400/6228	0.5/12.70	0.03/0.76	4.7/2.13	25
SSH34-250	9/228	4.5/114	34/86	450/2002	0.25/6.35	0.02/0.51	5.6/2.54	100
SSH37-750	10/254	5/127	37/93	2,000/8896	0.75/19.05	0.03/0.76	7.6/3.45	25
SSH44-375	12/304	6/152	44/112	900/4003	0.38/9.53		3.6/1.69	
SSH50-750	14/355	7/177	50/127	2,000/8896	0.75/19.05		9.7/4.40	
SSH56-625	16/406	8/203	56/142	1,700/7562	0.63/15.88		9.0/4.08	
SSH62-750	18/457	9/228	62/157	2,000/8896	0.75/19.05		11.6/5.26	
SSH69-625	20/508	10/254	69/175	1,700/7562	0.63/15.88		10.7/4.86	

Type 201 Stainless Steel  
Other Free-End Clamp sizes and metals are available on special order.

### Apply tension, cut and secure with confidence!



**WTJ020**

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



**WTC075**

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



**WTC001**

A drop-forged tool with tensioning capability to do all 1/4 in. to 3/4 in. Free-End Clamp sizes.

Cat. No.	Description	Weight (lb./kg)	Std. Pkg.
<b>Installation Tools</b>			
WTJ020	Compact Free End Stainless Steel Cable Tie Installation Tool for 1/4 in. to 3/8 in. sizes	1.1/0.50	1
WTC075	Pistol Grip Free End Stainless Steel Cable Tie Installation Tool for 1/4 in. to 5/8 in. sizes	2.6/1.18	
WTC001	Free End Stainless Steel Cable Tie Installation Tool for all sizes	4.4/2.00	

## Stainless Steel Cable Ties and Accessories

### Specifications



Mini Stainless Steel Cable Ties



Standard Stainless Steel Cable Ties



Reusable Stainless Steel Cable Ties



Multi-Lok™ Ties — Uncoated



Multi-Lok™ Ties — Coated



Free-End Clamps

Cat. No.		Width (in./mm)	Length (in./mm)	Thickness (in./mm)	Max. Dia. Single Wrap (in./mm)	Max. Dia. Double Wrap (in./mm)					
<b>Specifications for Stainless Steel Ties</b>											
SS7-180	–	0.18/4.50	6.5/165	0.02/0.51	1.7/43	(single wrap only)					
SS10-180	–		10/254		2.8/71						
SS16-180	–		16/406		4.7/119						
SS23-180	–		22.5/572		6/152	–					
SS29-180	–		29.0/737		8/203	–					
SS10-250	–	0.25/6.35	10/254		0.02/0.51	2.1/153	(single wrap only)				
SS17-250	–		16.5/419			4.3/109					
SS23-250	–		22.5/572			6.5/165					
SS29-250	–		29/737			8.5/215					
SS35-250	–		35/889			10.5/265					
SSR6-250C	–	0.25/6.35	6/152			0.02/0.51	1.5/38	N/A			
SSR9-250C	–		9/229				2.5/63		1.1/28		
SSR12-250C	–		12/305				3.4/86	1.5/38			
SSR18-250C	–		18/457				5.4/137	2.5/64			
SSR24-250C	–		24/610				7.3/185	3.5/89			
SSR6-375C	–	0.38/9.53	6/152	0.02/0.51			1.5/38	N/A			
SSR9-375C	–		9/229				2.5/63		1.1/28		
SSR12-375C	–		12/305				3.4/86	1.5/38			
SSR18-375C	–		18/457				5.4/137	2.5/64			
SSR24-375C	–		24/610				7.3/185	3.5/89			
SSR30-375C	–		30/762		9.1/231		4.4/112				
SSR36-375C	–		36/914		11.0/280		5.3/135				
<b>Uncoated Nylon 11 Coated</b>											
TYS6-280	TYS6-280C	0.28/7.00	6/152		0.01/0.25		1.9/48	(single wrap only)			
TYS9-280	TYS9-280C		9/229				2.8/71				
TYS12-280	TYS12-280C		12/305			3.8/96					
TYS18-280	TYS18-280C		18/457			5.7/144					
TYS24-280	TYS24-280C		24/610			7.6/193					
TYS6-470	TYS6-470C	0.47/12.00	6/152			0.01/0.25	1.9/48		(single wrap only)		
TYS9-470	TYS9-470C		9/229				2.8/71				
TYS12-470	TYS12-470C		12/305	3.8/96							
TYS18-470	TYS18-470C		18/457	5.7/144							
TYS24-470	TYS24-470C		24/610	7.6/193							
SSH10-250	–	0.25/6.35	10/250	0.02/0.51			2.0/50	N/A			
SSH16-250	–		16/400				3.5/88			1.5/38	
SSH19-250	–		19/480				5.0/127	2.5/64			
SSH27-250	–		27/680				7.0/177	3.5/89			
SSH34-250	–		34/860				9.0/228	4.5/114			
SSH16-375	–	0.38/9.53	16/400		0.02/0.51		3.5/88	1.5/38			
SSH44-375	–		44/1,120				12.0/304		6.0/152		
SSH18-500	–	0.5/12.70	18/460				0.03/0.76	4.0/101	2.0/5.0		
SSH31-500	–		31/780					8.0/203		4.0/101	
SSH21-625	–	0.63/15.88	21/530					0.03/0.76	5.0/127	2.5/64	
SSH56-625	–		56/1,420			16.0/406			8.0/203		
SSH69-625	–		69/1,750			20.0/508			10.0/254		
SSH24-750	–	0.75/19.05	24/600			0.03/0.76			6.0/152	3.0/76	
SSH37-750	–		37/940						10.0/254		5.0/127
SSH50-750	–		50/1,270						14.0/355		7.0/177
SSH62-750	–		62/1,570	18.0/457					9.0/228		

## Specifications (cont'd)



Cat. No.		Stainless Steel Type	Coating or Finish	Min. Loop Tensile Strength Single Wrap (lb./N)	Min. Loop Tensile Strength Double Wrap (lb./N)	Application Tools Used	Max. Dia. Single Wrap (in./mm)				
<b>Specifications for Stainless Steel Ties (cont'd)</b>											
SS7-180		304	Dull to Bright	100/445	(single wrap only)	WTA290	<ul style="list-style-type: none"> <li>• Wire/cable bundling</li> <li>• I.D. tagging</li> </ul>				
SS10-180											
SS16-180											
SS23-180				200/890	WTA250						
SS29-180											
SS10-250											
SS17-250		200/300	Nylon 11 Coated (Uncoated or other colours available on special order)	75/334	300/1,334	WTAE200	<ul style="list-style-type: none"> <li>• Reusable</li> <li>• Cable bundling</li> <li>• Oil rigs</li> <li>• Telecommunications towers</li> <li>• Hazardous and corrosive environments</li> <li>• Cable trays</li> </ul>				
SS23-250											
SS29-250											
SS35-250											
SSR6-250C											
SSR9-250C											
SSR12-250C				100/445	500/2,224	WTAE201					
SSR18-250C											
SSR24-250C											
SSR6-375C											
SSR9-375C											
SSR12-375C											
SSR18-375C		316	Uncoated or Nylon 11 Coated Black	250/1,112	(single wrap only)	WTAE200	<ul style="list-style-type: none"> <li>• Self-locking</li> <li>• Cable bundling</li> <li>• Hazardous and corrosive environments</li> </ul>				
SSR24-375C											
SSR30-375C											
SSR36-375C											
WTJ020						201		Bright	450/2,002	1,200/5,338	WTC075
SSH10-250											
SSH16-250											
SSH19-250											
SSH27-250											
SSH34-250											
SSH16-375		900/4,003	2,400/10,675	WTC075							
SSH44-375											
SSH18-500											
SSH31-500											
SSH21-625											
SSH56-625											
SSH69-625		1,400/6,227	3,300/14,678	WTC001							
SSH24-750											
SSH37-750											
SSH50-750											
SSH62-750		1,700/7,562	4,000/17,792	WTC001							
		2,000/8,896	5,000/22,240	WTC001							

Ty-Rap® 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.

## Stainless Steel Cable Ties and Accessories

### Tools and Accessories

**Boiler rooms, shipyards, or off-shore oil platforms — a match for any severe environment!**

- Stainless steel strap cable ties have been designed for high-temperature applications and for use in areas of harsh, corrosive environments
- Rated at 200-lb. tensile strength
- Smooth edges protect both the cable insulation and the installer



Cat. No.	Body Width (in.)	Length (in.)	Max. Wire Bundle Dia. (in.)	Tensile Strength (lb.)	Std. Pkg.
<b>Ty-Rap® Stainless Steel Strap Cable Ties</b>					
<b>TYS8</b>	0.310	10.65	2	200	100
<b>TYS14</b>	0.310	14.65	4	200	50
<b>TYS22</b>	0.310	22.65	6	200	50
<b>TYS28</b>	0.310	28.65	8	200	50

Note: Use WT3S Tool for tensioning  
 Cannot be coated with any covering material  
 Made of 316 stainless steel

### 1,000-ft. reel to cut your desired length!



Cat. No.	Description	Width (in./mm)	Tensile Strength (lb./N)	Std. Pkg.
<b>Ty-Rap® Stainless Steel Strapping on a Reel</b>				
<b>TYS1000</b>	1,000-ft. of strap, 2 reels of 500 ft. each	0.31/7.87	200/889.60	1

Stainless steel ties of virtually any length can be produced from the 1,000-ft. reel in combination with the matching head.

Note: Use WT3S tool for tensioning and cutoff

### A perfect mate with cable ties for tensioning



WT3S



DAS250

Cat. No.	Description	Std. Pkg.
<b>Ty-Rap® Stainless Steel Cable Tie Installation Tools</b>		
<b>WT3S</b>	Installs strapping ties	1
<b>DAS250</b>	Installs Multi-Lok™, ball lock, and roller bar lock stainless steel ties	

### Lockable heads for stainless steel strapping



Cat. No.	Description	Std. Pkg.
<b>Ty-Rap® Stainless Steel Strapping Locking Heads</b>		
<b>TYS5200H</b>	Heads only for stainless strapping	50

### Long-lasting anchor hold



Cat. No.	Description	Std. Pkg.
<b>Ty-Rap® Stainless Steel Mounting Base</b>		
<b>TCS25</b>	Mounting bases for stainless steel ties	50

## Stainless Steel Cable Ties and Accessories

### Identify cable bundles with permanent, stainless steel imprintable tags

- Apply Type 304 stainless steel tags with stainless steel cable ties
- Easy-to-use — slip a tie through the slots in the tag and fasten with the installaton tool
- Works with 1/4 in. wide ties
- 0.015 in. Thickness



Cat. No.	Width (in./mm)	Length (in./mm)	Weight (lb./N)	Std. Pkg.
<b>I.D. Tagging System</b>				
<b>SSID100</b>	0.75/19.05	2.0/50.80	0.5/2.22	100
<b>SSID101</b>	1.50/38.10	2.5/63.50	1.2/5.34	
<b>SSID102</b>	0.75/19.05	3.5/88.90	0.8/3.56	

Packaging Quantity: 100/box

**Note:** Customized pre-embossed tags are available. Please consult Regional Sales Office for details. Add suffix (316) for 316 Stainless Steel.

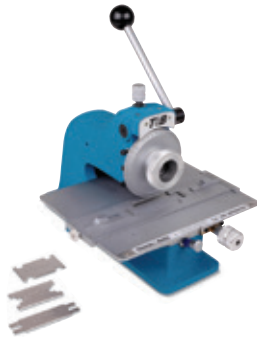
### S.S. Tape Embossing System



Cat. No.	Description	Weight	
		lb.	kg
<b>S.S. Tape Embossing System</b>			
<b>WTID400</b>	Hand-held tool for embossing S.S. I.D. Tap	2.57	1.17
<b>WTID405</b>	Replacement S.S. tape (21' long, 1/2" wide)	0.18	0.01

### No second guessing — quickly and accurately position I.D. tags!

- Imprint Thomas & Betts stainless steel I.D. tags
- Includes special tag holder for secure positioning and a 3/32 in. character imprinting wheel, standard (no substitutions allowed)



Cat. No.	Description	Weight (lb./N)
<b>I.D. Tagging System</b>		
<b>WTID200</b>	I.D. Tag Imprinter	29.5/131.2
<b>WTID290</b>	3/32 in. Character Imprinting Wheel	-
<b>WTID281</b>	1/8 in. Character Imprinting Wheel	
<b>WTID283</b>	3/16 in. Character Imprinting Wheel	
<b>WTID204</b>	(Kit) WTID200 and WTID283	

Packaging Quantity: 1/box

## Stainless Steel Cable Ties and Accessories

### LS - Heavy-Duty Ball-Lock Mechanism

Engineered to withstand the harshest environments!



YLS-7.9-200BC



LS-4.6-200A

These one-piece, self-locking stainless steel cable ties offer quick and easy installation — no crimping or folding required — and a strong, reliable lock. Choose among a variety of sizes and materials to meet all of your wire and cable bundling needs, even in the most extreme environments.

#### Safer, Stronger, Faster

- Self-locking — no time-consuming crimping or folding required
- Stainless steel ball in low-profile, wedge-shaped head locks tie securely in place
- Angled tail enables fast, easy insertion
- Rounded edges and smooth surfaces protect installer's hands
- Engineered with an average ultimate failure point of up to twice the listed strength

#### Wide range of sizes

- Six standard lengths cover most applications with custom lengths available

#### Three materials suit a variety of environments

- 302/304 grade stainless steel for standard applications
- 316 grade (marine-grade) stainless steel for extra corrosion resistance
- 316 grade (marine-grade) stainless steel, fully coated with low-smoke, halogen-free polyester to withstand continuous exposure to salt spray, sunlight, petroleum and chemicals

#### Typical Applications

- Offshore drilling
- Petrochemical processing
- Shipbuilding
- Food and beverage processing
- Pharmaceutical processing

#### Specifications

- Operating Temp. Range:  
Uncoated: -60°C to 300°C (-76°F to 572°F)  
Coated: -60°C to 150°C (-76°F to 302°F)
- Approvals/Standards: CSA, UL, CE, Lloyd's Register, Germanischer Lloyd, American Bureau of Shipbuilding, Det Norske Veritas, RoHS compliant
- Uncoated: CSA approved

#### Application Tool

DAS-250 Hand Tool (adjustable tension, automatic cut off), CT6 and CT3



### Ordering Information



Cat. No. Uncoated 302/304 Grade Stainless Steel	Cat. No. Uncoated 316 Grade Stainless Steel	Cat. No. Fully Polyester Coated 316 Grade Stainless Steel	Length (in./mm)	Width (in./mm)	Max. Bundle Dia. (in./mm)	Tensile Strength (lb./N)	Std. Pkg.	Recommended Tooling
LS-4.6-200A	LS-4.6-200B	YLS-4.6-200BC	7.9/201	0.18/4.6	2.0/51	200/444.8	50	DAS-250, CT6, CT3
LS-4.6-360A	LS-4.6-360B	YLS-4.6-360BC	14.2/360		4.0/102			
LS-4.6-520A	LS-4.6-520B	YLS-4.6-520BC	20.5/520		6.0/152			
LS-4.6-680A	LS-4.6-680B	YLS-4.6-680BC	26.7/679		8.0/203			
LS-4.6-840A	LS-4.6-840B	—	33.0/838		10.0/254			
LS-7.9-200A	LS-7.9-200B	YLS-7.9-200BC	7.9/201	0.31/7.9	2.0/51	450/1112.0		
LS-7.9-360A	LS-7.9-360B	YLS-7.9-360BC	14.2/360		4.0/102			
LS-7.9-520A	LS-7.9-520B	YLS-7.9-520BC	20.5/520		6.0/152			
LS-7.9-680A	LS-7.9-680B	YLS-7.9-680BC	26.7/679		8.0/203			
LS-7.9-840A	LS-7.9-840B	—	33.0/838		10.0/254			
LS-7.9-1010A	LS-7.9-1010B	—	41.3/1050		12.5/318			



## Stainless Steel Cable Ties and Accessories

### Ty-Met™ stainless steel retained-tension ball-lock cable ties

Wave-form spring crimp eliminates movement—even in high-vibration applications

Ty-Met™ stainless steel retained-tension ball-lock cable ties from Thomas & Betts combine the convenience of a ball-lock fastening mechanism with a spring crimp that maintains tension after installation. This new feature helps to ensure that the ties won't slide down the cable bundle after they're installed — making them the ideal choice for high-vibration applications.

- Specially formed spring crimp creates consistent tension on the tie for firm positioning
- High wave-form crimp provides positive clamping in high-vibration applications
- Crimp channel offers a path for a trace wire with protection from crushing and shorts
- Ball-lock mechanism is easy to assemble and adjust for tension
- Ties available in both Type 304 stainless steel and Type 316 marine-grade stainless steel for extended life in highly corrosive environments
- Choose T&B DAS-250 application tool for installation

#### Applications

- Shipbuilding
- Industrial
- Oil and gas
- Heavy equipment and trucking
- Wind power
- Solar energy

#### Specifications

- Material: Type 304 or Type 316 stainless steel
- Operating temperature : -112° F to 572° F (-80° C to 300° C)
- Certifications/ compliances :  
UL/EN/CSA62275 Type 2S rated for AH-1 plenum

Cat. No.	Length		Width		Max. bundle diameter		Tensile strength		Std. pkg. qty.
	in.	mm	in.	mm	in.	mm	in.	mm	
Type 304 stainless steel—uncoated									
RS-4.6-200A	7.9	200	0.18	4.6	2	51	200	890	50
RS-4.6-260A	10.2	260	0.18	4.6	2.7	70	200	890	50
RS-4.6-360A	14.2	360	0.18	4.6	4	102	200	890	50
RS-4.6-520A	20.5	520	0.18	4.6	6	152	200	890	50
RS-4.6-680A	26.8	680	0.18	4.6	8	203	200	890	50
RS-7.9-200A	7.9	200	0.31	7.9	2	51	450	2002	50
RS-7.9-360A	14.2	360	0.31	7.9	4	102	450	2002	50
RS-7.9-520A	20.5	520	0.31	7.9	6	152	450	2002	50
RS-7.9-680A	26.8	680	0.31	7.9	8	203	450	2002	50
Type 316 marine-grade									
RS-4.6-200B	7.9	200	0.18	4.6	2	51	200	890	50
RS-4.6-260B	10.2	260	0.18	4.6	2.7	70	200	890	50
RS-4.6-360B	14.2	360	0.18	4.6	4	102	200	890	50
RS-4.6-520B	20.5	520	0.18	4.6	6	152	200	890	50
RS-4.6-680B	26.8	680	0.18	4.6	8	203	200	890	50
RS-7.9-200B	7.9	200	0.31	7.9	2	51	450	2002	50
RS-7.9-360B	14.2	360	0.31	7.9	4	102	450	2002	50
RS-7.9-520B	20.5	520	0.31	7.9	6	152	450	2002	50
RS-7.9-680B	26.8	680	0.31	7.9	8	203	450	2002	50

Note: Minimum bundle diameter for all cable ties listed above is 1" (25.4mm)



## DELTEC™ Cable Support System

### Lashing Straps and Accessories

#### 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 innerduct 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 acetal cable straps, marine grade locking devices, and base hanger accessories for specific applications where mounting is required.

Pre-assembled Deltec™ cable straps are available in standard lengths of 10 in. (254 mm), 13.5 in. (342.9 mm), and 27 in. (685.8 mm). Convenient 50 ft. (15.24 m) to 3500 ft. (1066.8 m) reels where specific lengths need to be established by the installer in the field are available. 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 or 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° and installed similarly 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!

#### Specifications

- Strap and Body: Weatherable acetal; offers superior resistance to sunlight, moisture, and salt environments
- Locking Device: Marine-grade corrosion-resistant silicon copper alloy
- Deltec System Temperature Range: -34°C to 66°C (-30°F to 150°F)
- Minimum Tensile Strength: 250 lb. min. (1,211 N)
- Outdoor Life: Designed to last a min. of 20 years
- Continuous Load: 20 lb. (9.07 kg)
- Continuous Use Temperature: -65°C to 90°C (-85°F to 194°F)
- Colour: Black



#### Extra security!

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

**Note:** Use WT3D Tool for tensioning and cutoff.

Cat. No.	Body Width (in./mm)	Max. Wire Length (in./mm)	Bundle Dia. (in./mm)	Tensile Strength (lb./N)	Std. Pkg.
<b>Stainless Steel Strap Cable Ties</b>					
<b>CSS-100</b>	0.5/12.70	10/254.00	3/76.20	240/1,112	25
<b>CSS-160</b>		16/406.46	4/101.60		50
<b>CSS-135</b>		13.5/342.90	3.5/88.90		25
<b>CSS-270</b>		27/685.80	8/203.20		10



#### One spacer for any cable size

Cat. No.	Description	Std.Pkg.
<b>Modular Stackable Cable Spacers</b>		
<b>TCP5255</b>	Modular Stackable Spacer for Deltec™ Straps	25
<b>TCP360</b>	For Coaxial Cable	100

Made of weather-resistant polypropylene  
Colour — Black



#### Heads for Deltec™ strap

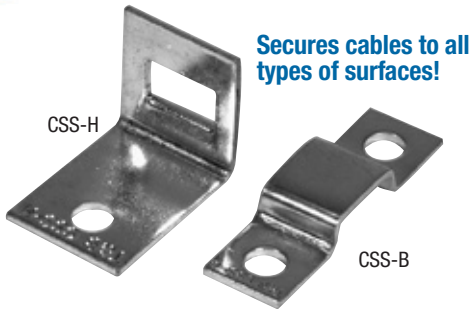
Cat. No.	Description	Std. Pkg.
<b>Locking Heads</b>		
<b>TYD-LH</b>	Heads only for Deltec™ Strap	25
<b>696-41795</b>		1,000

Made of weatherable acetal  
Colour — Black

- Stackable for any desired spacing
- Less inventory — one cat. No.
- 1/2 in. high

## DELTEC™ Cable Support System

### Lashing Straps and Accessories (cont'd)



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

Made of zinc-plated steel



Cat. No.	Description	Std. Pkg.
<b>Installation/Cutting Tool</b>		
<b>WT3D</b>	Installs self-locking Ty-Rap® cable ties and Thomas & Betts lashing ties	25

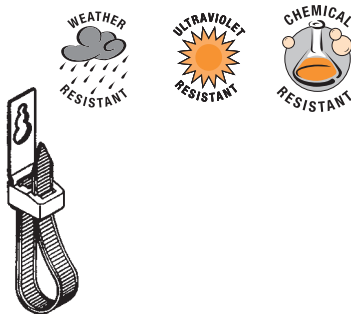
Cat. No.	Description	Tensile Strength (lb./N)	Body Width (in./mm)	Std. Pkg.
<b>Deltec™ Strap Dispenser on Reels</b>				
<b>TYD-50R</b>	50' Reel of Strap	250/1,112	0.50/12.70	1
<b>696-41794</b>	1,000' Reel of Strap			
<b>696-41952</b>	3,500' Reel of Strap			

### Resistant to UV light, chemicals, and lower in moisture absorption

Nylon 12 is a lower, moisture-absorbing material than nylon 6/6 — making the effect of water on properties much less.



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



Cat. No.	Body Width (in./mm)	Length (in./mm)	Max. Wire Bundle Dia. (in./mm)	Hook Material	Tensile Strength (lb./N)	Std. Pkg.		
<b>Weather-Resistant Nylon 12 Messenger Hanger Straps (Releasable)</b>								
<b>TYM5412X</b>	0.5/12.7	12/304.8	3/76.2	Bronze	200/889.6	50		
<b>TYM5418X</b>		18/457.2	5/127			25		
<b>TYM5423X</b>		24/609.6	7/177.8			25		
<b>TYM5430X</b>		30/762.0	9/228.6			25		
<b>TYM5436X</b>		36/914.4	11/279			25		
<b>TYM5412X-S</b>		12/304.8	3/76.2			Stainless Steel	50	
<b>TYM5418X-S</b>		18/457.2	5/127	25				
<b>TYM5423X-S</b>		24/609.6	7/177.8	25				
<b>TYM5430X-S</b>		30/762.0	9/228.6	25				
<b>TYM5436X-S</b>		36/914.4	11/279	25				
<b>Weather-Resistant Nylon 12 Hanger Strap (Releasable)</b>								
<b>TY54407X</b>		0.5/12.7	6.36/151.54	2/50.8		Steel	200/889.6	50
<b>TY54413X</b>	13.75/349.25		4/101.6	25				

The recommended, maximum continuous static loading for the nylon 12 straps is 25 lb. per strap. For best results, suggested spacing is 15 in. It's the responsibility of the user to determine whether or not their application meets our recommendation. Hook will accommodate 1/2 in. dia. messenger wire. For use in temperatures ranging from -40°C to 80°C (-40°F to 176°F). Colour — Black

## DELTEC™ Cable Support System

### Lashing Straps and Accessories (cont'd)

Carbon black prolongs the cable tie's life — UV protective, too!



Std. Cat. No.	Bulk Cat. No.	Body Width (in./mm)	Length (in./mm)	Max. Wire Bundle Dia. (in./mm)	Tensile Strength (lb./N)	Std. Pkg	Bulk Pkg.
<b>Heavy-Duty Lashing Tie (Releasable)</b>							
<b>TY5409</b>	<b>TY409</b>	0.5/12.7	19/482.6	4.75/120.65	200/889.6	25	100

Heavy-duty and made of weather-resistant nylon. For use in temperatures ranging from -40°C to 80°C (-40°F to 176°F).

### An absolute in chemical environments when nylon isn't applicable

Chemical exposure directly affects the life of a cable tie making polypropylene ties an ideal choice. Black is usable for outdoor use, too.

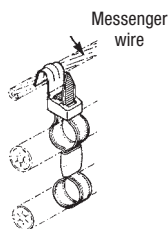


Cat. No.	Body Width (in./mm)	Length (in./mm)	Max. Wire Bundle Dia. (in./mm)	Tensile Strength (lb./N)	Std. Pkg.
<b>Weather-Resistant Polypropylene Lashing Tie (Releasable)</b>					
<b>TY5418PX</b>	0.5/12.7	18/457.2	5/127	150/667.2	25
<b>TY5424PX</b>		24/609.6	7/177.8		25
<b>TY5442PX</b>		42/1066.8	12/304.8		10
<b>TY5460PX</b>		60/1524	18/457.2		10
<b>Weather-Resistant Polypropylene Hanger Lashing Tie (Releasable)</b>					
<b>TY53418PX</b>	0.5/12.7	18/457.2	5/127	150/667.2	25

Made of black weather-resistant polypropylene for outdoor use. For use in temperatures ranging from -40°C to 80°C (-40°F to 176°F).



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.

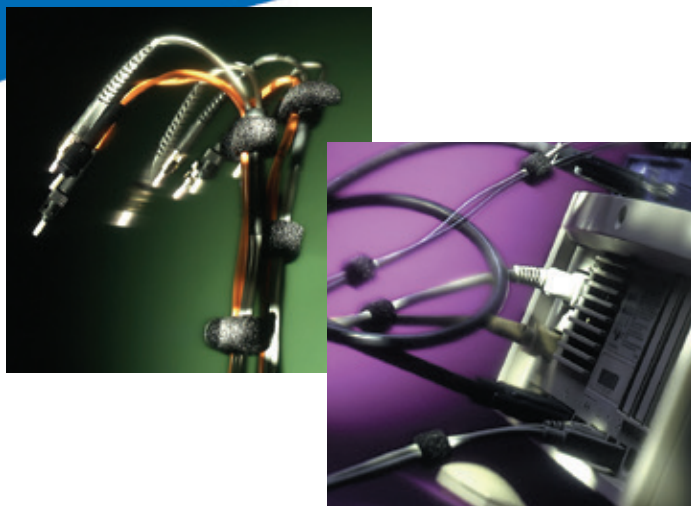
Cat. No.	Description	Std. Pkg.
<b>Messenger Hanger Spacer</b>		
<b>TC5254</b>	1 in. long stackable spacer for messenger straps	50

## Hook and Loop Fasteners

### FO, FOL, FOS and FOR Series

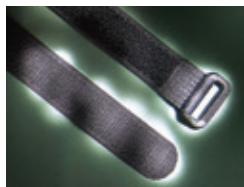
#### New version available — UL94V-2 rated material

- High-quality Hook & Loop Fasteners designed specifically for Thomas & Betts
- Enables quick and convenient bundling of data and fiber optic cables
- Sizes available to accommodate varying bundle diameters
- Screw and adhesive mounting bases provide multiple mounting options



**FO Series Loop Ties**

Wrap pre-determined bundle diameters using the convenient slotted head!



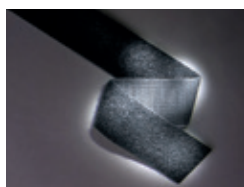
**FOL Series Buckle Ties**

Polymer buckles provide added strength and stability.



**FOS Series Strip Ties**

Pre-cut lengths make bundling a cinch!



**FOR Series Rolled Hook and Loop**

Rolled hook and loop material enables custom cut lengths, avoiding waste.

**Fasteners available in these colours:** Black, Brown, Red, Orange, Yellow, Green, Blue, Grey, and White.  
Please consult Regional Sales Office for delivery and availability.

Cat. No.	Min. Tensile Strength (lb./N)	Max. Bundle Dia. (in./mm)	Length (in./mm)	Width (in./mm)	Std. Pkg.
<b>*FO Series Loop Ties</b>					
<b>FO200-40-0</b>	40/177.9	2.0/50.80	9/228.6	0.50/12.7	10
<b>FO200-50-0</b>	50/222.4			0.75/19.05	
<b>FO350-40-0</b>		3.5/88.90	13/330.2	0.50/12.7	
<b>FO350-50-0</b>	0.75/19.05				
<b>FOL Series Buckle Ties</b>					
<b>FOL300-50-0</b>	50/222.4	3.0/76.20	12/304.8	0.75/19.05	10
<b>FOL500-50-0</b>		5.0/127.00	18/457.2		
<b>FOS Series Strip Ties</b>					
<b>FOS150-50-0</b>	50/222.4	1.5/38.10	6/152.4	-	10
<b>FOS320-50-0</b>		3.2/81.28	12/304.8		
<b>FOS500-50-0</b>		5.0/127.00	18/457.2		
<b>FOR Series Rolled Hook and Loop</b>					
<b>FOR180-50-0</b>	50/222.4	Various	180/4572	-	1

Black is standard colour.

Multiple colours available for identifying specific bundles

\*Add — "FR" for UL94V-2 rated material, after colour choice.

Contact your Regional Sales Office for availability and delivery.

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



Cat. No.	Description	Screw Size	Max. Tie Width Accom.	Std. Pkg.
<b>Nylon 6/6 Mounting Bases</b>				
<b>TC368</b>	2 in. x 2 in. Screw Mounted	#8	0.75/19.05	500
<b>TC368A</b>	2 in. x 2 in. Adhesive Mounted			

-40°F/-40°C to 176°F/80°C

Natural nylon colour.

## Material Selection Ordering Guide

### Physical Properties of Cable Tie Materials

TABLE 2

		Natural 6/6 Nylon	Weather Resistant 6/6 Nylon	Heat Stabilized Natural 6/6 Nylon	Flame Retardant 6/6 Nylon	Weatherable Acetal	Weather Resistant Nylon 12	Weather Resistant Polypropylene	Radiation Resistant Fluoropolymer	Halar® (2)	Stainless Steel
Physical Properties of Ty-Rap® Cable Tie Materials											
Tensile Strength (Yield)											
@ 23°C (Dry-As-Molded) (1)	psi	12,000	12,000	12,000	11,000	10,000	7,500	4,600	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 105	1 x 105	1 x 105	1 x 105	1 x 105	1 x 105	1 x 105	2 x 108	2 x 108	2 x 108
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 Temp.	C / F	85 / 185	85 / 185	105 / 221	85 / 185	85 / 185	80 / 176	85 / 185	170 / 338	140 / 284	537 / 1000
Min. Continuous Use Temp.	C / F	-40 / -40	-40 / -40	-40 / -40	-40 / -40	-40 / -40	-40 / -40	-40 / -40	-60 / -76	-46 / -50	-80 / -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

**Note:** 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

Test specimens of the material, with dimensions 5 in. x 1/2 in., 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

##### 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 in. 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

##### 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 in. 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

##### 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 in. 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.

## Material Selection Ordering Guide

### Chemical Resistance Chart (cont'd)

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**

Reagents	Concentration	Heat-Stabilized 6/6 Nylon as Used in TYH Series	Halar®† as Used in TYV Series	Weatherable Acetal as Used in TYD Series	Standard 6/6 Nylon as Used in TY Series	6/6 Weather-Resistant Nylon as Used in TY Series	6/6 Fire-Retardant Nylon as Used in TY Series	Weather Resistant Nylon as Used in TYH Series	Polypropylene as Used in TYP Series	Weather Resistant Polypropylene as Used in TYP Series	Fluoro-polymer as Used in TYZ Series	Stainless Steel as Used in TYS Series
<b>Resistance of Available Materials to Various Chemicals Temp 20°C (70°F)</b>												
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	–
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

† Halar® Trademark of Solvay Solexis, Inc.

**Ratings**

**E** = Excellent

**S** = Satisfactory

**F** = Fair

**NR** = Not Recommended

**AQ** = Aqueous

## Material Selection Ordering Guide

### Chemical Resistance Chart (cont'd)

TABLE 3 (con't)

Reagents	Concentration	Heat-Stabilized 6/6 Nylon as Used in TYH Series	Halar®† as Used in TYV Series	Weatherable Acetal as Used in TYD Series	Standard 6/6 Nylon as Used in TY Series	6/6 Weather-Resistant Nylon as Used in TY Series	6/6 Fire-Retardant Nylon as Used in TY Series	Weather Resistant Nylon as Used in TYH Series	Polypropylene as Used in TYP Series	Weather Resistant Polypropylene as Used in TYP Series	Fluoro-polymer as Used in TYZ Series	Stainless Steel as Used in TYS Series
<b>Resistance of Available Materials to Various Chemicals Temp 20°C (70°F)</b>												
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
Oleic 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

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## Material Selection Ordering Guide

Chemical Resistance Chart (cont'd)

TABLE 3 (con't)

Reagents	Concentration	Heat-Stabilized 6/6 Nylon as Used in TYH Series	Halar®† as Used in TYV Series	Weatherable Acetal as Used in TYD Series	Standard 6/6 Nylon as Used in TY Series	6/6 Weather-Resistant Nylon as Used in TY Series	6/6 Fire-Retardant Nylon as Used in TY Series	Weather Resistant Nylon as Used in TYH Series	Polypropylene as Used in TYP Series	Weather Resistant Polypropylene as Used in TYP Series	Fluoro-polymer as Used in TYZ Series	Stainless Steel as Used in TYS Series
<b>Resistance of Available Materials to Various Chemicals Temp 20°C (70°F)</b>												
Potassium Carbonate	–	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	E
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

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**Ty-Fast® Ag+® Cable Ties** **NEW!**

**Ty-Fast® Ag+® bacteria-resistant cable ties**

**A breakthrough safety solution for fastening in bacteria-prone areas**

A standard nylon cable tie is a harmless enough object—you install it to bundle and fasten cables, and then you forget about it. By its very design, full of notches and grooves, though, a cable tie makes an attractive home for micro-organisms to collect and reproduce.

In most applications, this isn't a concern. However, in hospitals and food processing facilities, where reducing the growth of unhealthy micro-organisms is critical, the presence of heat, moisture and organic material common in these environments can encourage the growth of bacteria, fungus and mold.

In response to the needs of customers in healthcare, food processing and preparation, pharmaceuticals, medical device manufacturing and other contamination-sensitive industries, Thomas & Betts introduces the industry's first bacteria resistant cable tie.

Ty-Fast® Ag+® bacteria-resistant cable ties are molded from an FDA-compliant nylon resin blended with an antimicrobial silver ion additive to prevent the growth of bacteria, fungus and mold on their surface. A proven antimicrobial agent, ionized silver has been used in consumer products for years and is effective against a broad spectrum of micro-organisms, preventing their reproduction and spread.

- The industry's first cable tie that inhibits microbial growth
- Protects itself against bacteria, mold and fungus
- Helps to reduce infection rate and spread of bacteria by not hosting microbial growth
- Promotes a clean environment—99.9% effective for bacterial reduction• Made from FDA-approved resin with EPA-registered antimicrobial
- Offers reliable Ty-Fast cable tie design for easy cable management
- UL recognized, RoHS and FDA compliant
- Patent pending

**Applications**

- Hospitals and other healthcare facilities
- Pharmaceutical production
- Food and beverage processing (off-line production)
- Medical equipment manufacturing

**Specifications**

- Material: FDA-compliant fungal-inert nylon 6.6 resin custom-blended with EPA-registered antimicrobial silver ion additive
- Operating temperature: -40 °F to 185 °F (-40 °C to 85 °C)
- Flammability rating: UL94V-2
- Certifications/ compliances:
  - Recognized to UL62275 Type 1
  - UL/EN/CSA62275 Type 2/2S rated for AH-2 plenum
  - Independent laboratory tested to ISO22196 (Measurement of Antibacterial Activity on Plastic Surfaces), equivalent to JISZ2802 (Japanese Test for Antimicrobial Activity and Efficacy)
  - Fungal inert to MIL-T-152B standard
  - RoHS compliant



## Ty-Fast® Ag+® Cable Ties

### Ty-Fast® Ag+® bacteria-resistant cable ties

In independent laboratory tests, Ty-Fast® Ag+® cable ties eliminated more than 99.9% of common surface bacteria. Now customers for whom cleanliness is a top priority have one less worry.



Ty-Fast Ag+ after 24 hours of exposure to bacteria

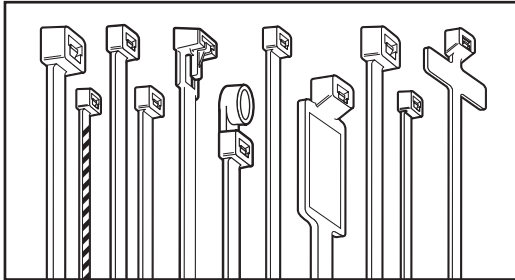


Standard cable tie after 24 hours of exposure to bacteria

Cat. No.	Length		Width		Max. bundle diameter		Tensile strength		Std. pkg. qty.
	in.	mm	in.	mm	in.	mm	lb	N	
<b>TY100-18-ANTI</b>	4.1	104.14	0.95	24.13	0.86	22	18	80	100
<b>TY175-50-ANTI</b>	7.7	195.58	0.186	4.72	1.75	44	50	220	100
<b>TY400-50-ANTI</b>	14.3	363.22	0.186	4.72	4.00	102	50	220	100
<b>TY400-120-ANTI</b>	14.3	363.22	0.300	7.62	4.00	102	120	540	100

Note: Ty-Fast® Ag+® bacteria-resistant cable ties provide no antimicrobial inhibitory activity beyond protection of the cable ties themselves. They do not provide protection against specific pathogenic organisms, nor do they prevent growth of bacteria on adjacent or nearby surfaces. The antimicrobial efficacy of the material lasts a minimum of two years from manufacture under normal use conditions.

## Catamount® Cable Ties

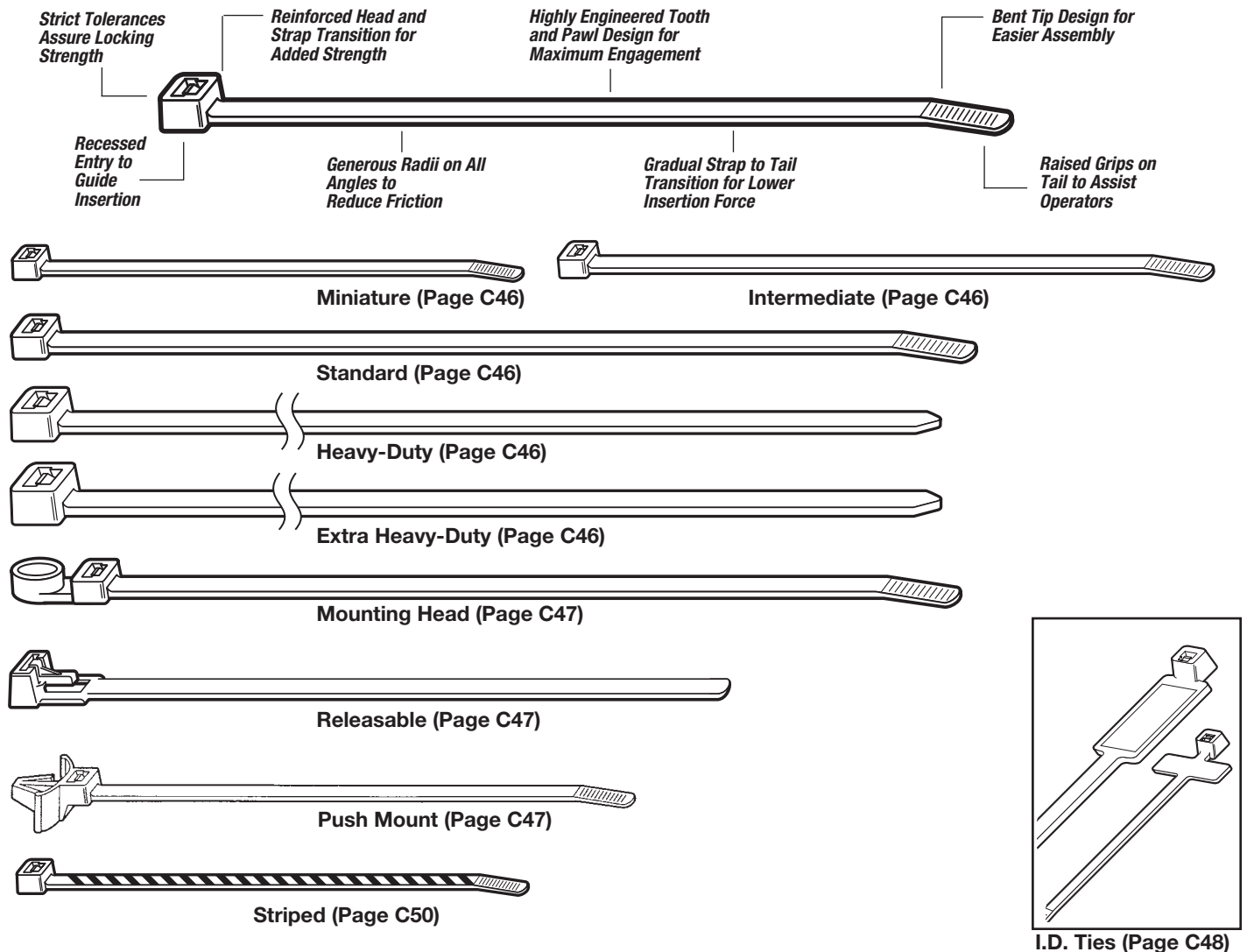


- Miniature
- Heavy-Duty
- Intermediate
- Extra Heavy-Duty
- Standard
- Releasable Ties
- Mounted Head
- Striped Ties
- Restricted Bundle
- Identification Ties

Catamount® Cable Ties are available in lengths from 4 in. to our exclusive 48 in. strap. Cable Ties will satisfy bundling requirements from 1/16 in. to 15 in. and loop tensile strengths from 18 to 175 pounds. Cable Ties are stocked in materials and colours as listed. Contact your Regional Sales Office for availability in special colours. Where applicable, Catamount® Cable Ties are UL Recognized.

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® products are sold through stocking T&B® Distributors.



## Catamount® Cable Ties

### Catalogue Number Construction

**L**      **4**      **18**      **HS**      -      **9**      **M**

**Product Prefix**  
 P - Plain Bagged Cable Ties  
 L - Cable Ties

**Length**  
 18 lb.  
 30 lb.  
 40 lb.  
 50 lb.  
 120 lb.  
 175 lb.  
 250 lb.

**Tensile Strength**

**Type of Product**  
 Nylon 6/6 - Leave Blank  
 Heat Stabilized - HS  
 (Black and Natural Colour Only)  
 Fluorescent - FL  
 Mounting Head - MH  
 Pushmount - PM  
 Pushmount Releasable - PMR  
 Releasable - R  
 Restricted Bundle - TB  
 Identification - ID

**Colour**  
 See Colour Table

**Quantity**  
 Q - 25 pack  
 L - 50 pack  
 C - 100 pack  
 D - 500 pack  
 M - 1,000 pack

**MP**      **NY**      -      **750**      -      **9**      **C**

**Material**  
 Nylon  
 TZ - Fluoropolymer  
 PV - PVC  
 PE - Polyethylene  
 FR - Flame Retardant  
 TL - Teflon

**Size / #**  
 .75"

**Colour**  
 See Colour Table

**Quantity**  
 Q - 25 pack  
 L - 50 pack  
 C - 100 pack  
 D - 500 pack  
 M - 1,000 pack

- Product Prefix**
- MP - Mounting Pad
  - ID - Identification
  - S# - Strapping Thickness
  - MC - Mounting Cradle
  - PM - Push Mounts
  - SM - Screw Mounts
  - N# - Plain-Edged Cable Clamps / Width
  - W# - Self-Aligning Cable Clamps / Dia.
  - UL - Adjustable Cable Clamps
  - GG - Gator Grip
  - FA - Flat Adhesive Clip
  - FS - Flat Screw Clip
  - FR - Flat Rubber Adhesive Clip
  - MS - Snap Mount
  - RA - Round Adhesive Clip
  - SR - Spiral Wrap
  - GS - Grommeting
  - GR - Extruded Grommeting
  - GRU - Extruded Grommeting Uncut

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

## Catamount® Cable Ties

Property	ASTM Method	Test Condition	Units	Molded 6/6 Nylon	Heat Stabilized Nylon	UV Black Nylon
<b>Materials for Molded Assembly Hardware</b>						
Tensile Strength	D638	+23°C; 50% RH	kpsi	11.2	11.2	9.0
Elongation at Break	D638	+23°C; 50% RH	%	Z300	Z300	200
Yield Strength	D638	+23°C; 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 +50°C; DAM	%	1.4	1.4	1.2
IZOD Impact	D256	+23°C; 50% RH	ft. lb./in.	2.1	2.1	2.0
Tensile Impact Strength	D1822	+23°C; Long Specimen; DAM	ft. lb./in.2	240	240	N.R.
Melting Point	D789	Fisher-Johns	°F	491	491	491
Thermal Linear Expansion	D696	DAM	in./in./°F	4 x 10-5	4 x 10-5	N.R.
Thermal Conductivity	-	DAM Conche-Fitch	BTU - in/h . ft2 . °F	1.7	1.7	1.7
Brittleness Temperature	D746	50% RH	°F	-85	-85	-62
Oxygen Index	D2863	DAM 50% RH	%O2	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
- N.R. = Not Reported
- Tests conducted on 1/4 in. specimens

### 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 Regional Sales Office 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.

Sample Thickness (in.)	UL Flammability	Energy Source	Specific Optical Density	
			at Maximum Smoke Accumulation	at 2 Minutes
<b>NBS Smoke Generation for 6/6 Nylon</b>				
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.

Material	Minimum Thickness (in.)	Temperature Index		Hot Wire Ignition (sec)
		Electrical (°C)	Mechanical w/o Impact (°C)	
<b>Temperature Index for Molded Nylons</b>				
6/6 Nylon	0.580	1.25	85	15.0
UV Black Nylon	0.120	1.25	85	35.0
	0.240	1.25	85	35.0
Heat Stabilized Nylon	0.580	1.30	105	11.0
	0.120	1.30	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

Catamount® Ties and Terminals fit the needs of general-purpose fastening and wire terminations. Installers quickly discover that Catamount® products offer durable and value-priced cable bundling for a variety of commercial and residential construction applications. Electricians can also take advantage of other benefits in stocking Catamount® products in their toolboxes, such as more terminals per bag in most popular sizes than leading comparable brands.

Catamount® Ties and Terminals are offered in a wide range of sizes, styles and colours and meet listing requirements for most electrical termination and fastening projects. A choice of matching tools are also offered to provide quick and reliable installations.



Cat. No.	Length (in.)	Max. Bundle Dia. (in.)	Colour	Std. Pkg.
<b>Miniature — Series 18</b>				
L-4-18-9-C	4.0	5/8	Natural	100
L-4-18-0-C			Black	
L-6-18-9-C	6.4	1-1/2	Natural	
L-6-18-0-C			Black	
L-8-18-9-C	8.0	2	Natural	
L-8-18-0-C			Black	

Bulk packages available. Contact your Regional Sales Office.  
Use QC-100, L-200, L-400-C or ERG-50 Installation Tools.



Cat. No.	Length (in.)	Max. Bundle Dia. (in.)	Colour	Std. Pkg.
<b>Intermediate — Series 30</b>				
L-5-30-9-C	5.6	1-1/4	Natural	100
L-5-30-0-C			Black	
L-8-40-9-C	8.5	2	Natural	
L-8-40-0-C			Black	
L-11-40-9-C	11.5	3	Natural	
L-11-40-0-C			Black	
L-14-40-9-C	14.5	4	Natural	
L-14-40-0-C			Black	

Bulk packages available. Contact your Regional Sales Office.  
Use QC-100, L-200, L-400-C or ERG-50 Installation Tools.



Cat. No.	Length (in.)	Max. Bundle Dia. (in.)	Colour	Std. Pkg.
<b>Standard — Series 50</b>				
L-5-50-9-C	5.5	1	Natural	100
L-5-50-0-C			Black	
L-7-50-9-C	7.5	1-3/4	Natural	
L-7-50-0-C			Black	
L-11-50-9-C	11.1	3	Natural	
L-11-50-0-C			Black	
L-14-50-9-C	14.1	4	Natural	
L-14-50-0-C			Black	

Bulk packages available. Contact your Regional Sales Office.  
Use QC-100, L-200, L-400-C or ERG-50 Installation Tools.



Cat. No.	Length (in.)	Max. Bundle Dia. (in.)	Colour	Std. Pkg.
<b>Heavy-Duty — Series 120</b>				
L-8-120-9-C	8.0	2	Natural	100
L-8-120-0-C			Black	
L-11-120-9-C	11.1	3	Natural	
L-11-120-0-C			Black	
L-14-120-9-C	14.2	4	Natural	
L-14-120-0-C			Black	
L-18-120-9-L	18.0	4-7/8	Natural	50
L-18-120-0-L			Black	
L-24-120-9-L	24.2	7	Natural	
L-24-120-0-L			Black	
L-28-120-9-L	28.0	8	Natural	
L-28-120-0-L			Black	

Use L-300C or ERG-120 Installation Tools.



Cat. No.	Length (in.)	Max. Bundle Dia. (in.)	Colour	Std. Pkg.
<b>Extra Heavy-Duty — Series 175</b>				
L-24-175-9-L	24.00	7.2	Natural	50
L-24-175-0-L			Black	
L-34-175-9-L	34.0	10	Natural	
L-36-175-9-L			36.0	
L-36-175-0-L	Black			
L-41-175-9-L	41.0	12	Natural	
L-41-175-0-L			Black	
L-48-175-9-L	48.0	15	Natural	
L-48-175-0-L			Black	

Use L300-FR or ERG-120 Installation Tools.

### Sample Catalogue Order:

Length: L 4 18 9 C  
Colour: 9 C  
Tensile Strength: 4  
Quantity: 18

4 in. Length, 18 lb. Tensile Strength, Natural Colour, 100-Pack Quantity

### Colour Table

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

## Catamount® Cable Ties



Cat. No.	Length (in.)	Max. Bundle Dia. (in.)	Colour	Std. Pkg.
<b>Releasable Ties</b>				
L-5-50R-0-C	5.90	1-1/4	Black	100
L-8-50R-9-C	7.80	2	Natural	
L-8-50R-0-C			Black	
L-10-50R-9-C	11.27	3	Natural	
L-10-50R-0-C			Black	

Bulk packages available. Contact your Regional Sales Office.  
Push button release.



Cat. No.	Length (in.)	Mounting Hole	Max. Panel Thickness	Max. Bundle Dia. (in.)	Colour	Std. Pkg.
<b>Push Mount Cable Ties</b>						
L-5-50PM-0-C	5.80	0.250	0.105	1	Black	100
L-7-50PM-9-C	8.20			Natural		
L-7-50PM-0-C				1-3/4	Black	

Bulk packages available. Contact your Regional Sales Office. Use QC-100, L-200 or L-400-C Installation Tools.  
Black shown.



Cat. No.	Length (in.)	Max. Bundle Dia. (in.)	Width (in.)	Min. Loop Tensile	Mounting Head Screw Size	Colour	Std. Pkg.
<b>Mounting Head Ties</b>							
L-5-30MH-9-C	5.85	1-1/4	0.140	30	No. 8	Natural	100
L-5-30MH-0-C						Black	
L-7-50MH-9-C	7.50	1-3/4	0.185		No. 10	Natural	
L-7-50MH-0-C						Black	
L-11-50MH-9-C	11.10	3	0.187	50	Natural		
L-11-50MH-0-C					Black		
L-14-50MH-9-C	14.50	4	0.300	120	1/4 in.	Natural	
L-14-50MH-0-C						Black	
L-14-120MH-9-C	14.85	4	0.300	120	1/4 in.	Natural	
L-14-120MH-0-C						Black	

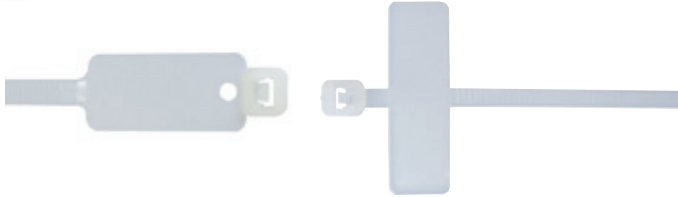
Bulk packages available. Contact your Regional Sales Office. Use QC-100, L-200, L-400-C, ERG-120 or ERG-50 Installation Tools.



Cat. No.	Length (in.)	Mounting Hole	Max. Panel Thickness	Max. Bundle Dia. (in.)	Colour	Std. Pkg.
<b>Releasable Push Mount Cable Ties</b>						
L-5-50PMR-9-C	5.80	0.250	0.105	1	Natural	100
L-7-50PMR-9-C	8.20			Natural		
L-7-50PMR-0-C				1-3/4	Black	

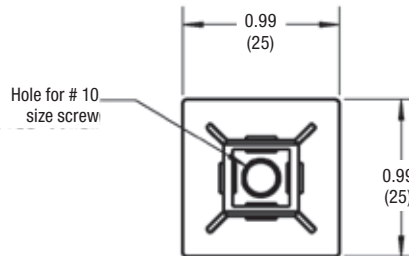
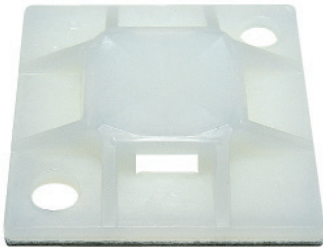
Bulk packages available. Contact your Regional Sales Office. Use QC-100, L-200 or L-400-C Installation Tools.

## Catamount® Cable Ties



Cat. No.	Length (in.)	Max. Bundle Dia. (in.)	Colour	Std. Pkg.
<b>Identification Ties</b>				
<b>L-7-50ID-9-C</b>	7.875	1-3/4	Natural	100
<b>L-4-18ID-9-C</b>	4.0	3/4	Natural	

Bulk packages available. Contact your Regional Sales Office.  
Use QC-100, L-200, L-400-C or ERG-50 Installation Tools.



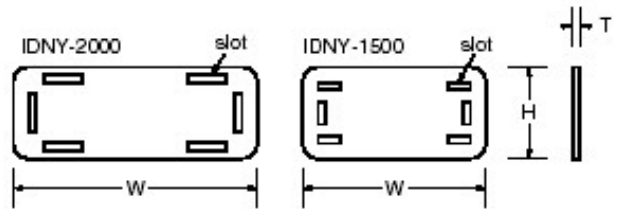
Cat. No.	Mount Method	Colour
<b>Cable Tie Mounting Bases</b>		
Catégorie 3/4 po		
<b>MPNY-750-9-C</b>	Synthetic Rubber Adhesive	Natural
<b>MPNY-750-0-C</b>	Synthetic Rubber Adhesive	Black
<b>MPNY-750A-9-C</b>	Acrylic Adhesive	Natural
<b>MPNY-750A-0-C</b>	Acrylic Adhesive	Black
<b>MPNY-750S-9-C</b>	Synthetic Rubber Adhesive	Natural
<b>MPNY-750S-0-C</b>	c/w #10 Center Bolt Hole	Black
1 in. Class		
<b>MPNY-1000-9-C</b>	Synthetic Rubber Adhesive	Natural Nylon
<b>MPNY-1000-0-C</b>	Synthetic Rubber Adhesive	Black Nylon
<b>MPNY-1000A-9-C</b>	Acrylic Adhesive	Natural Nylon
<b>MPNY-1000A-0-C</b>	Acrylic Adhesive	Black Nylon
<b>MPNY-1000S-9-C</b>	Synthetic Rubber Adhesive	Natural Nylon
<b>MPNY-1000S-0-C</b>	c/w #10 Center Bolt Hole	Black Nylon

**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 setup for maximum performance with Acrylic Based adhesives
- For Rubber Based, allow 15 minutes setup for maximum performance



Catamount® Cable Ties



Cat. No.	Width (in.)	Height (in.)	Slot Height (in.)	Slot Width (in.)	Colour	Std. Pkg.
<b>Identification Tags</b>						
IDNY-1500-9-M	1.5	0.745	0.090	0.200	Natural	100
IDNY-2000-9-M	2.0		0.113	0.336	Natural	

- 3/4 in. and 1 in. mounts for use with 18# through 50# tensile cable ties
- Supplied on rubber-based or acrylic closed cell foam adhesive or with no adhesive for #10 screw mount applications
- Available in Natural Nylon 6/6 and Black Nylon 6/6
- UL Flammability 94 V-2 (clip)

## Catamount® Cable Ties



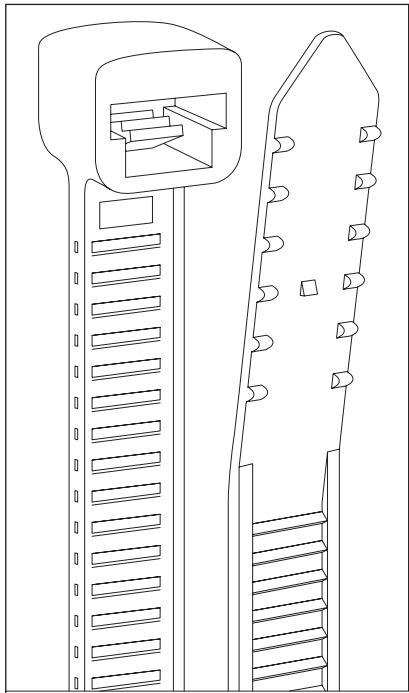
- Striped ties are used to identify wire bundles primarily for P.I.C. and station cable binder marking
- Telecom applications

Cat. No.	Tie Colour	Stripe Colour	Diameter		Length		Width		Loop Tensile		Std. Pkg.
			(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	lb.	kg	
<b>Striped Ties</b>											
L-4-18-1/10-L	Brown	White	1/16 - 7/8	2 - 16	4.0	102	0.100	3	18	8.2	50
L-4-18-1/2-L		Red									
L-4-18-1/0-L		Black									
L-4-18-1/4-L		Yellow									
L-4-18-1/7-L		Purple									
L-4-18-3/10-L	Orange	White									
L-4-18-3/2-L		Red									
L-4-18-3/0-L		Black									
L-4-18-3/4-L		Yellow									
L-4-18-3/7-L		Purple									
L-4-18-5/10-L	Green	White									
L-4-18-5/2-L		Red									
L-4-18-5/0-L		Black									
L-4-18-5/4-L		Yellow									
L-4-18-5/7-L		Purple									
L-4-18-6/10-L	Blue	White									
L-4-18-6/2-L		Red									
L-4-18-6/0-L		Black									
L-4-18-6/4-L		Yellow									
L-4-18-6/7-L		Purple									
L-4-18-8/10-L	Grey	White									
L-4-18-8/2-L		Red									
L-4-18-8/0-L		Black									
L-4-18-8/4-L		Yellow									
L-4-18-8/7-L		Purple									

Also available in bulk packages of 1,000.  
 Use QC-100, L-200, L-400-C, or ERG50 Installation Tools.  
 Consult your Regional Sales Office for availability and colours.

## T&B Cable Ties®

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



- 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

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 -40°C to 85°C. 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.

Cat. No.	Min. Tensile Strength (in./lb.)	Military Standard Part No.	Tie Length (in.)	Max. Bundle Diameter (in.)	Width (in.)	Std. Pkg. (pieces)
<b>T&amp;B® Cable Ties</b>						
<b>TY075-18</b>	18	MS3367-4	3.60	0.75	0.095	1,000
<b>TY125-18</b>	18	–	5.34	1.25	0.095	1,000
<b>TY125-40</b>	40	MS3367-5	5.60	1.25	0.140	1,000
<b>TY200-18</b>	18	–	7.75	2.00	0.095	1,000
<b>TY200-40</b>	40	–	8.00	2.00	0.140	1,000
<b>TY200-120</b>	120	–	8.63	2.00	0.299	500
<b>TY300-40</b>	40	–	11.40	3.00	0.140	1,000
<b>TY175-50</b>	50	MS3367-1	7.30	1.75	0.184	1,000
<b>TY300-50</b>	50	MS3367-7	11.40	3.00	0.184	1,000
<b>TY400-50</b>	50	MS3367-2	14.30	4.00	0.184	1,000
<b>TY400-120</b>	120	MS3367-3	14.30	4.00	0.301	500

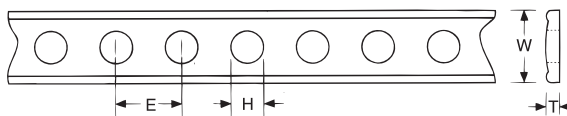
Add suffix (-20) for cosmetic black, non-weatherable material.

Cat. No.	Min. Tensile Strength (in./lb.)	Military Standard Part No.	Tie Length (in.)	Max. Bundle Diameter (in.)	Width (in.)	Std. Pkg. (pieces)
<b>Outdoor Weatherable (black)</b>						
<b>TY075-18X</b>	18	–	3.60	0.75	0.095	1,000
<b>TY125-18X</b>	18	–	5.34	1.25	0.095	1,000
<b>TY125-40X</b>	40	–	5.60	1.25	0.140	1,000
<b>TY200-18X</b>	18	–	7.75	2.00	0.095	1,000
<b>TY200-40X</b>	40	–	8.00	2.00	0.140	1,000
<b>TY200-120X</b>	120	–	8.63	2.00	0.299	500
<b>TY300-40X</b>	40	–	11.40	3.00	0.140	1,000
<b>TY175-50X</b>	50	–	7.30	1.75	0.184	1,000
<b>TY300-50X</b>	50	–	11.40	3.00	0.184	1,000
<b>TY400-50X</b>	50	–	14.30	4.00	0.184	1,000
<b>TY400-120X</b>	120	–	14.30	4.00	0.301	500

## T&B 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



Cat. No.	Width - W		Thickness - T		Hole - H		Spacing - E		Quantity				
	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)					
<b>Strapping</b>													
S2NY-096-0-C	0.281	7.13	0.32	0.813	0.096	2.44	0.187	4.75	100 foot rolls				
S4NY-128-0-C					0.128	3.25	0.312	7.92					
S4NY-140-0-C					0.375	9.52	0.40	1.02		0.140	3.56	0.312	7.92
S4NY-167-0-C										0.167	4.24	0.312	7.92
S6NY-000-0-C	0.500	12.70	0.60	1.52	N/A	N/A	N/A	N/A					
S6NY-167-0-C					0.167	4.24	0.390	9.90					
S6NY-203-0-C					0.203	5.16	0.390	9.90					
S6NY-203X-0-C					0.203	5.16	0.281	7.14					
S7NY-265-0-C	0.625	15.87	0.70	1.78	0.265	6.73	0.500	12.70					
S7NY-265X-0-C					0.265	6.73	0.375	9.52					
S7NY-281-0-C					0.281	7.14	0.500	12.70					
S9NY-000-0-C	0.875	22.22	0.70	1.78	N/A	N/A	N/A	N/A					
S9NY-203-0-C					0.203	5.16	0.500	12.70					
S9NY-265-0-C					0.265	6.73	0.500	12.70					
S9NY-390-0-C					0.390	9.90	0.625	15.87					

Cat. No.	Strap-Tite Buckle	Mounting Tab	Mounting Cradle	Stud Buttons	Machine Screw
<b>Strapping Accessories Reference</b>					
S2NY-096-0-C	N/A	N/A	N/A	N/A	#2
S4NY-128-0-C				N/A	#5
S4NY-140-0-C				N/A	#6
S4NY-167-0-C				BTNY-167-0-D	#8
S6NY-000-0-C	B6NY-203-0-D	M6NY-265-0-D	N/A	N/A	N/A
S6NY-167-0-C				N/A	#8
S6NY-203-0-C				N/A	#10
S6NY-203X-0-C				N/A	#10
S7NY-265-0-C	B7NY-265-0-D	M7NY-328-0-D	N/A	BTNY-265-0-D	1/4
S7NY-265X-0-C				BTNY-265-0-D	1/4
S7NY-281-0-C	N/A	N/A	N/A	N/A	1/4
S9NY-203-0-C				N/A	#10
S9NY-265-0-C				BTNY-265-0-D	1/4
S9NY-390-0-C				N/A	3/8

**T&B Cable Ties®**



**Double Loop Cable Ties**

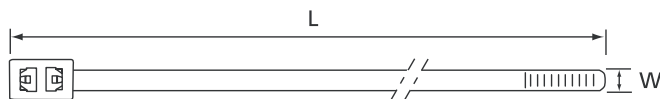
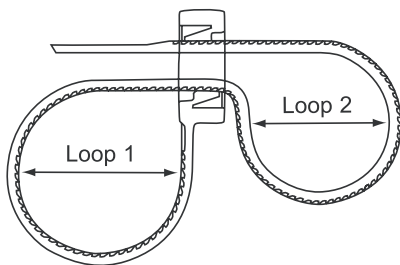
**One Tie, Two Loops**

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°C to 85°C (-76°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



Cat. No.	Length		Width		Bundle Diameter Range		Tensile Strength (lb./N)	Installation Tooling for all sizes	Std. Pkg.
	(in.)	(mm)	(in.)	(mm)	Loop 1 (in./mm)	Loop 2 (in./mm)			
<b>Double Loop Cable Ties</b>									
<b>TB-50RLDH</b>	7.8	198.12	0.19	4.83	0.1 - 1.8 / 2.54 - 45.72	0.1 - 1.7 / 2.54 - 43.18	50/222.4	ERG50	1,000
<b>TB-12-50RLDH</b>	11.8	299.72			0.1 - 2.8 / 2.54 - 71.12	0.1 - 2.7 / 2.54 - 68.58			
<b>TB-15-50RLDH</b>	14.6	370.84			0.1 - 3.9 / 2.54 - 99.06	0.1 - 3.8 / 2.54 - 96.52			

## T&B Cable Ties®



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

### Low-Profile Cable Ties

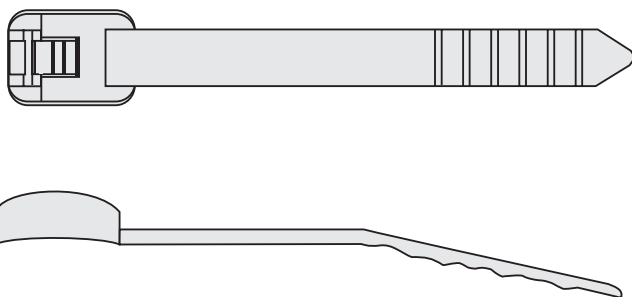
This fastener design from Thomas & Betts is ideal for use where precision bundling is required and clearance is a necessity. A unique saddle back design curves to form a snug fit around the bundle, and allows for easy pull-through in bulkheads and any other tight spaces. Our contoured head eliminates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

Cat. No.	Bundle Range Dia.		Tie Length		Strap Width		Strap Thick		Tensile Strength		Std. Pkg.	Bulk Pkg.
	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	lb.	kg		
<b>Cable Ties Ordering Information</b>												
SF100-18	0.125 - 1.00	3.17 - 25.4	4.65	118.11	0.95	2.41	0.043	1.09	18	8.16	100	1,000
SF150-18	0.125 - 1.50	3.17 - 38.1	6.45	163.83								
SF200-18	0.125 - 2.00	3.17 - 50.8	8.10	205.74								
SF175-50	0.187 - 1.75	4.74 - 44.4	7.70	195.58	0.187	4.74	0.48	1.21	50	22.68		
SF300-50	0.187 - 3.00	4.74 - 76.2	11.33	287.78			0.52	1.32				
SF400-50	0.187 - 4.00	4.74 - 101.6	14.53	369.06	0.300	7.62	0.75	1.90	120	54.43		
SF600-120	0.375 - 6.00	9.52 - 152.4	21.00	533.40								
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 100 pieces.



Colour	Suffix No.
<b>How to Order Colour Cable Ties</b>	
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 your Regional Sales Office for ordering information)

**T&B Cable Ties®**

**Ski-Badge Holder Cable Ties**



**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!

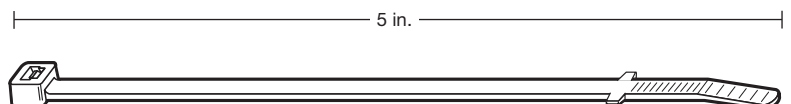
The Badge Holder comes in 9 different colours to match the resort's colour schemes and is made of high quality Nylon 6/6 material to withstand cold temperatures. It is 5 inches long and has a sturdy 30 lb. tensile strength rating. Badge Holders may also be heat stamped with additional identification,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

Cat. No.	Description	Qty.	UPC
<b>Badge Holder Ordering Information</b>			
<b>SJ-5-30SKI-9-M</b>	Ticket Fastener	1,000/bag	78621017017

Natural nylon colour. Please consult your Regional Sales Office for ordering and availability of colours and heat-stamping.

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



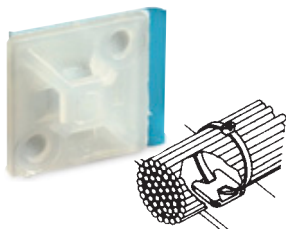
## Cable Tie Mounting Bases

Choose from adhesive-backed, epoxy or screw mounting bases!

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



Temperature Rating:  
0°C to 66°C (32°F to 150°F)  
\*Synthetic Rubber Adhesive

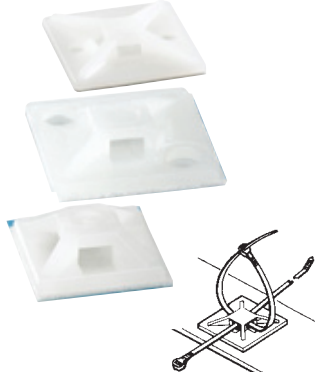


Std. Pkg. Cat. No.	Bulk Pkg. Cat. No.	Mounting Method	Max. Tie Width Accom.	Length		Width		Material	Std. Pkg.	Bulk Pkg.
				(in.)	(mm)	(in.)	(mm)			
<b>Two-Way Adhesive Mounting Bases</b>										
TC5342A	TC342A	SRA* Adhesive	0.19	1.13	28.58	1.13	28.58	Nylon 6/6	100	1,000
-	TC342A-X							Weatherable Nylon	-	
-	TC342	TC2PA	0.19	1.13	28.58	1.13	28.58	Nylon 6/6	-	1,000
-	TC342X							Weatherable Nylon	-	
-	TC342A-FR	SRA* Adhesive	0.19	1.13	28.58	1.13	28.58	Flame-Retardant Nylon	-	1,000

### Select the Four-way configuration you need!

- Eliminates errors in premounting the base with respect to its orientation to wire bundle direction
- Convenient way to mount wire bundles at cross-over points — two optional mounting holes included

Temperature Rating:  
0°C to 66°C (32°F to 150°F)  
Temperature Storage:  
0°C to 48°C (32°F to 120°F)  
\*Synthetic Rubber Adhesive



Std. Pkg. Cat. No.	Bulk Pkg. Cat. No.	Mounting Method	Max. Tie Width Accom.	Length		Width		Material	Std. Pkg.	Bulk Pkg.
				(in.)	(mm)	(in.)	(mm)			
<b>4-Way Adhesive Mounting Base</b>										
TC5345A	TC345A	SRA* Adhesive	0.19	1.13	28.58	1.13	28.58	Nylon 6/6	100	1,000
TC5345AX	TC345AX							Weatherable Nylon	100	
-	TC345	TC2PA/Screws	0.19	1.13	28.58	1.13	28.58	Nylon 6/6	-	1,000
<b>4-Way Mini Base</b>										
TC050X050A-C	TC050X050A	SRA* Adhesive	0.10	0.5	12.70	0.5	12.70	Nylon 6/6	100	1,000
TC050X050AX-C	TC050X050AX							Weatherable Nylon		
TC5344A	TC344A	SRA* Adhesive	0.14	0.75	19.05	0.75	19.05	Nylon 6/6	100	1,000
TC5344AX	TC344AX							Weatherable Nylon		
TC5344	TC344	Screw Mount	0.14	0.75	19.05	0.75	19.05	Nylon 6/6	-	1,000
<b>Large 4-Way Base**</b>										
TC150X150L	TC150X150	Screw Mount	0.19	1.5	38.10	1.5	38.10	Nylon 6/6	50	500
TC150X150A-L	TC150150A	SRA* Adhesive						Weatherable Nylon		
TC150X150AX-L	TC150X150AX	SRA* Adhesive	0.19	1.5	38.10	1.5	38.10	Nylon 6/6	-	500
TC200X200-L	TC200X200	Screw Mount	0.30	2.0	50.80	2.0	50.80	Nylon 6/6	50	500
TC200X200A-L	TC200X200A	SRA* Adhesive						Weatherable Nylon		
-	TC200X200AX	SRA* Adhesive	0.30	2.0	50.80	2.0	50.80	Nylon 6/6	-	500
-	TC368	Screw Mount	0.75	2.0	50.80	2.0	50.80	Nylon 6/6	-	-
-	TC368A	SRA* Adhesive						Weatherable Nylon		

\*UR not applicable

### Great versatility!

- Accommodates the entire line of standard cable ties
- 4-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)

Temperature Rating:  
0°C to 66°C (32°F to 150°F)  
\*Synthetic Rubber Adhesive



Std. Pkg. Cat. No.	Bulk Pkg. Cat. No.	Mounting Method	Max. Tie Width Accom.	Length		Width		Material	Std. Pkg.	Bulk Pkg.
				(in.)	(mm)	(in.)	(mm)			
<b>Two- and Four-Way Adhesive Mounting Base</b>										
TC5347A	TC347A	SRA* Adhesive	0.30	1.13	28.58	1.13	28.58	Nylon 6/6	100	1,000
TC5347AX	-							Weatherable Nylon		
-	TC347	TC2PA Screws	0.30	1.13	28.58	1.13	28.58	Nylon 6/6	-	1,000
-	TC347FR							Flame-Retardant		
-	TC347X							Weatherable Nylon		
-	TCZ347							Radiation Resistant Fluoropolymer		



## Cable Tie Mounting Bases



Natural nylon colour.  
Temperature Rating:  
0°C to 66°C (32°F to 150°F).  
\*Synthetic Rubber Adhesive.

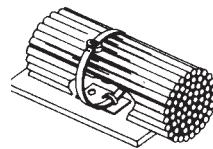
### Great for securing cables!

- 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

Std. Pkg. Cat. No.	Bulk Pkg. Cat. No.	Base Style	Maximum Height (in.)	Clamping Area				Std. Pkg.	Bulk Pkg.
				Min. (in.)	Min. (mm)	Max. (in.)	Max. (mm)		
<b>One-Piece Mounting Clamp</b>									
<b>TC5349A-TB</b>	<b>TC349A-TB</b>	SRA* Adhesive	0.57	0.18 x 0.24	4.57 x 6.10	0.35 x 0.24	0.89 x 6.10	100	1,000
<b>TC5350A-TB</b>	<b>TC350A-TB</b>		0.89	0.20 x 0.59	5.08 x 14.99	0.45 x 0.59	11.43 x 14.99		

### Great for securing cables!

Temperature Rating: 0°C to 66°C (32°F to 150°F).  
\*650-41349 has two holes for mounting.



Cat. No.	Mounting Method	Max. Tie Width Accom.	Max. Tie Length		Width		Material	Pkg.
			(in.)	(mm)	(in.)	(mm)		
<b>Aluminum Mounting Plates</b>								
<b>TC105</b>	TC2PA/Screws	0.19	1.00	25.40	0.50	12.70	Aluminum	1,000
<b>TC824-TB</b>	TC2PA		1.38	34.93	0.38	9.65		
<b>650-41349*</b>	TC2PA/Screws							

### Super strong adhesive!



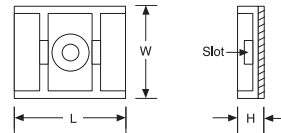
Cat. No.	Mounting Method	Pkg.
<b>Mounting Base Adhesive</b>		
<b>TC2PA</b>	Consists of one tube each, adhesive and activator	1

## Cable Tie Mounting Bases



**Accepts cable ties up to 50-lb. (222 N) tensile strength (miniature through standard)!**

- Supplied on closed cell foam with synthetic rubber-based adhesive
- Use #6 self-tapping screw for added strength if desired

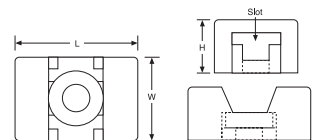


Std. Pkg. Cat. No.	Bulk Pkg. Cat. No.	Material	Mounting Method	Height		Length		Width		Slot Height		Slot Width		Std. Pkg.	Bulk Pkg.
				(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)		
<b>Adhesive Mounting Cradle</b>															
MCNY-1250-9-C	MCNY-1250-9-D	Natural Nylon 6/6	SRA* Adhesive	0.285	7.24	1.250	31.75	1.000	25.4	0.090	2.29	0.300	7.62	100	50



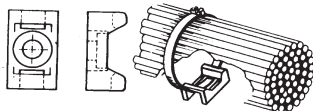
**Fluoropolymer available for harsh environments!**

- SMNY-001 accepts cable ties to 50 lbs. (222 N) tensile (miniature through standard)
- SMNY-002 accepts cable ties to 120 lbs. (533 N) tensile (miniature through heavy-duty)
- Use #4, #6, #8, or #10 machine screw (as referenced)



Std. Pkg. Cat. No.	Material	Mounting Method	Height		Length		Width		Slot Height		Slot Width		Std. Pkg.
			(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	
<b>Screw Mount</b>													
SMNY-000-9-D	Natural Nylon 6/6	#4 Screw	0.27	6.86	0.57	14.48	0.34	8.64	0.07	1.78	0.12	3.10	500
SMNY-001-0-D	Heat-Stabilized Black Nylon	#6,#8 Screw	0.28	7.11	0.60	15.24	0.39	9.77	0.06	1.52	0.20	5.08	

SMNY series for use in temperatures ranging from -40°C to 105°C (-40°F to 221°F).



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, refer to Regional Sales Office.



Std. Pkg. Cat. No.	Bulk Pkg. Cat. No.	Mounting Method	Maximum Tie Width Accom. (in.)	Width		Length		Std. Pkg.	Bulk Pkg.
				(in.)	(mm)	(in.)	(mm)		
<b>Saddle Support Base</b>									
-	TC140	#4 Pan Head	0.091	0.344	8.74	0.563	14.30	-	500
TC5141	TC141*	#6 Pan Head	0.190	0.439	11.15	0.672	17.07	100	
TC5142	TC142	#10 Pan Head	0.301	0.563	14.30	0.922	23.42		

\* Add suffix FR for flame-retardant material (TC141 only).  
Natural nylon colour.  
For use in temperatures ranging from -40°C to 85°C (-40°F to 185°F).

## Cable Tie Mounting Bases

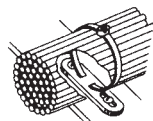
These nylon mounting strips for parallel installation of wire bundles can accommodate up to six closely spaced bundles.



Cat. No.	Mounting Method	Maximum Tie Width Accom. (in.)	Width		Length		Capacity (Bundles)	Mil. Std. Part No.	Std. Pkg.
			(in.)	(mm)	(in.)	(mm)			
<b>Multiple-Bundle Mounting Strips</b>									
TC1101	#6 Screws	0.190	0.50	12.70	1.75	44.45	1	MS3339-1	100
TC1102					3.00	76.20	2	MS3339-2	
TC1103					4.25	107.95	3	MS3339-3	
TC1104					5.50	139.70	4	MS3339-4	
TC1105					6.75	171.45	5	MS3339-5	
TC1112		0.301	0.63	15.88	9.60	243.84	6	MS3339-11	
TC1113					2.10	53.34	1	MS3339-6	
TC1114					3.60	91.44	2	MS3339-7	
TC1115					5.10	129.54	3	MS3339-8	
TC1116					6.60	167.64	4	MS3339-9	
TC1117					8.10	205.74	5	MS3339-10	

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

**Provides a mounting range for bundles from 1/4 in. through 4 in. in diameter!**



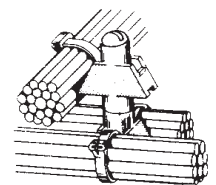
Std. Pkg. Cat. No.	Bulk Pkg. Cat. No.	Mounting Method	Maximum Tie Width Accom.		Length		Std. Pkg.	Bulk Pkg.		
			(in.)	(mm)	(in.)	(mm)				
<b>Single-Bundle Mounting Base</b>										
-	TC101	#10 Screws	0.190	4.83	0.500	12.7	2.00	50.80	-	1,000
TC503	TC103	1/4 in. Screws	0.301	7.65	0.625	15.88	3.08	78.23	100	500

The TC101 and TC103 nylon bases provide a mounting range for bundles from 1/4 in. through 4 in. in diameter. One mounting hole is slotted to permit adjustment of the bundle position up to the time of actual bundle installation.  
Natural nylon colour.  
For use in temperatures ranging from -40°C to 85°C (-40°F to 185°F).

**Permits vertical stacking!**



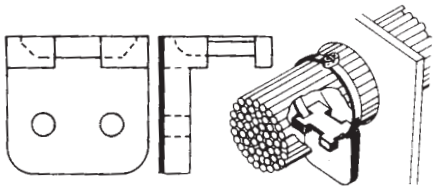
Cat. No.	Mounting Hole Size	Tie Width Accom.		Length		Max. Width		Std. Pkg.
		(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	
<b>Ty-Rap® Mounting Blocks</b>								
TC115-TB	#10	0.190	4.83	1.00	25.40	0.47	11.91	1,000



Mounting blocks permit vertical stacking and can be used in any direction.  
Natural nylon colour.  
For use in temperatures ranging from -40°C to 85°C (-40°F to 185°F).

## Cable Tie Mounting Bases

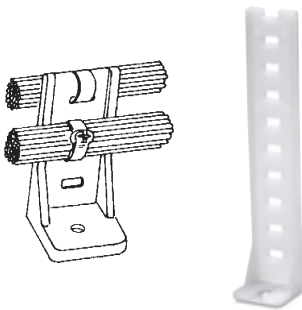
Meets military specs as a support in bulkheads and walls!



Cat. No.	Tie Width Accom.		Length		Max. Width		Std. Pkg.
	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	
<b>Right-Angle Bundle Support</b>							
<b>TC109</b>	0.190	4.83	0.44	11.13	0.56	14.30	200
<b>TC106</b>	0.30	7.62	1.00	25.40	1.00	25.40	1,000

This style meets Military Specification requirements as a support at holes in bulkheads and walls. (MS3341)  
Natural nylon colour.  
For use in temperatures ranging from -40°C to 85°C (-40°F to 185°F).

Mount bundles on either side!



Cat. No.	Max. Tie Width Accom.		Length		Width		Std. Pkg.
	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	
<b>Ty-Rap® Stand-Off Brackets</b>							
<b>TC375</b>	0.190	4.83	0.75	19.05	3.65	92.71	100
<b>TC375X (Weatherable)</b>			0.67	17.01	1.75	44.45	
<b>TC376</b>							

These brackets permit bundles to be mounted on either side. They also serve as means to raise bundles off the surface.  
Natural nylon colour.  
For use in temperatures ranging from -40°C to 85°C (-40°F to 185°F).  
Weatherable nylon is black.

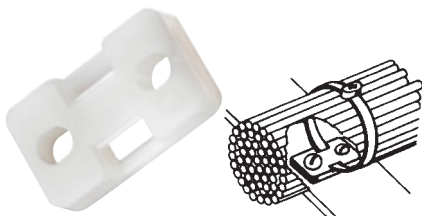
Weather-resistant and transparent!



Cat. No.	Wire Accommodation	Std. Pkg.
<b>Aluminum Siding Clip</b>		
<b>TC201</b>	1/8 in. Diameter Wire (2-pair station wire)	100

- 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

Installs in-line with the wire bundle!



Cat. No.	Mounting Method	Width Accom.		Max. Tie Width		Length		Std. Pkg.
		(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	
<b>In-Line Mounting Base</b>								
<b>TC815-TB</b>	#10 Screws	0.30	7.62	0.75	19.05	1.13	28.58	1,000

A standard 2-hole base that installs in-line with the wire bundle that conceals it.  
Natural nylon colour.  
For use in temperatures ranging from -40°C to 85°C (-40°F to 185°F).

## Cable Tie Mounting Bases

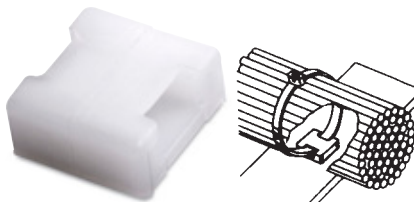
### Ideal for high-density packaging!

- Simply slip Ty-Rap® cable tie under slot in fastened mount, and attach bundle



Std. Pkg. Cat. No.	Bulk Pkg. Cat. No.	Mounting Method	Maximum Tie Width Accom. (in.)	Width		Length		Std. Pkg.	Bulk Pkg.
				(in.)	(mm)	(in.)	(mm)		
<b>Low-Profile Two-Way Miniature Mounting Bases</b>									
TC502	TC102	#8 screw	0.19	0.50	12.70	0.75	19.05	100	1,000
-	TC104	#5 screw	0.09	0.32	8.03	0.41	10.31	-	
-	TC804-TB	#2 screw	0.09					-	
-	TC112-TB	#8 screw	0.19	0.38	9.53	0.75	19.05	-	
-	TC812-TB	#10 screw	0.19					-	
-	TC814-TB	#5 screw	0.19					-	

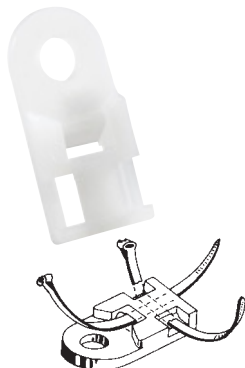
Threaded insert permits screw to come from outside of mounting surface.  
 Natural nylon colour.  
 For use in temperatures ranging from -40°C to 85°C (-40°F to 185°F).



Cat. No.	Mounting Method	Material	Max. Tie Width Accom.	Width		Length		Std. Pkg.
				(in.)	(mm)	(in.)	(mm)	
<b>Miniature Base</b>								
TC817-TB	TC2PA	Nylon 6/6	0.19	0.44	11.10	0.44	11.10	1,000

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

### Handles ties installed in either direction



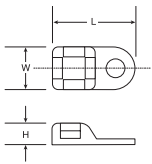
Std. Pkg. Cat. No.	Bulk Pkg. Cat. No.	Mounting Method	Maximum Tie Width Accom. (in.)	Width		Length		Std. Pkg.	Bulk Pkg.
				(in.)	(mm)	(in.)	(mm)		
<b>Low-Profile Four-Way Mounting Base</b>									
-	TC826-TB	#8 screw	0.19	0.50	12.70	1.00	25.40	-	1,000
TC5828	TC828-TB	#8 screw		0.39	9.91	0.88	22.23	100	

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

## Cable Tie Mounting Bases

Four-way screw mounts for cable ties up to 50-lb. (222 N) tensile strength!

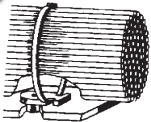
- Mount with #6 or #8 screws
- Available in natural nylon 6/6



Cat. No.	H		L		W		Slot W		Mount SCR	Std. Pkg.
	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)		
<b>Four-Way Mount</b>										
<b>SMMY-220-9-D</b>	0.23	5.84	0.95	25.13	0.50	12.70	0.22	5.59	#6, #8	500

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

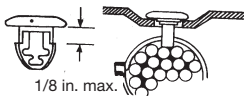
Firmly locks into position when projecting pin is pushed into the mounting hole



Cat. No.	Mounting Hole Size	Maximum Tie Width Accom. (in.)	Width		Length		Material	Std. Pkg.
			(in.)	(mm)	(in.)	(mm)		
<b>Self-Riveting Base</b>								
<b>TC116-TB</b>	0.146	0.190	0.5	12.7	0.75	19.05	Nylon 6/6 (Red)	1,000
<b>TC116-0</b>							Nylon 6/6 (Black)	
<b>TC118-TB</b>							Nylon 6/6 (Blue)	
<b>TC120</b>							Nylon 6/6 (Yellow)	

Slip tie under base to attach bundle.  
For use in temperatures ranging from -40°C to 85°C (-40°F to 185°F).

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



Cat. No.	Mounting Hole Size	Maximum Tie Width Accom. (in.)	Width		Length		Material	Std. Pkg.
			(in.)	(mm)	(in.)	(mm)		
<b>Snap-In Mounting Base Cap</b>								
<b>TC121-TB</b>	0.250	0.190	0.445	11.30	0.415	10.54	Nylon 6/6	1,000
<b>TCH121</b>							Nylon 6/6 Heat Stabilized	
<b>TCH121-0</b>							Nylon 6/6 (Black) Heat Stabilized	

Natural nylon colour.  
Nylon 6/6 for use in temperatures ranging from -40°C to 85°C (-40°F to 185°F).  
Heat stabilized for use in temperatures ranging from -40°C to 105°C (-40°F to 221°F).

## Cable Tie Mounting Bases

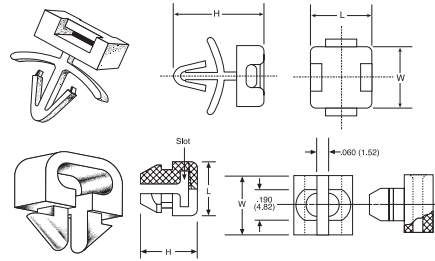
**STRONG — up to 50-lb. tensile strength!**

### PMNY-185:

- Versatile push mount for cable ties to 50-lb. tensile strength
- For use in 0.187 in./0.192 in. mounting hole for panel thickness 0.030 in. to 0.080 in.

### PMNY-245:

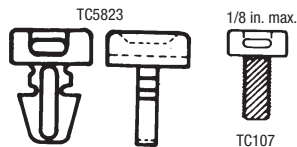
- Accepts cable ties to 50-lb. tensile (miniature through standard)
- For use in 0.250 in. mounting hole for maximum panel thickness of 0.062 in.



Natural nylon colour.

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

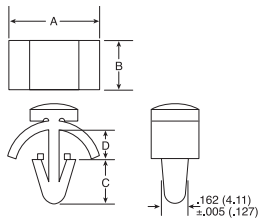
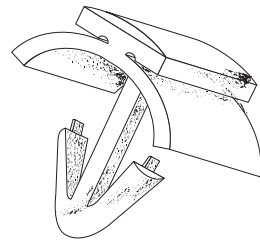
Cat. No.	Material	Height H		Length L		Width W		Slot Height		Slot Width		Std. Pkg.
		(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	
<b>Push Mounts</b>												
PMNY-185-9-D	Nylon	0.64	16.26	0.43	10.92	0.43	10.92	0.07	1.65	0.07	1.65	500
PMNY-254-9-C		0.36	9.02	0.32	8.13	0.32	8.13	0.05	1.27	0.22	5.59	10
PMNY-245-9-D												500



Std. Pkg. Cat. No.	Bulk Pkg Cat. No.	Mounting Hole Size	Maximum Tie Width Accom. (in.)	Width		Length		Std. Pkg.	Bulk Pkg.
				(in.)	(mm)	(in.)	(mm)		
<b>Push-In and Bolted Bases</b>									
TC5823	TC823-TB	1/4 in.	0.19	0.44	11.13	0.63	15.88	100	1,000
-	TC107	#10-32 thd						-	

Natural nylon colour.

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

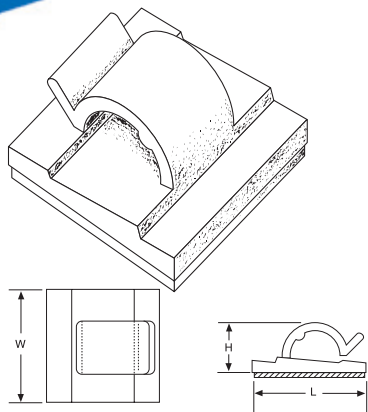


Cat. No.	Material	A		B		C		D		Std. Pkg.
		(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	
<b>Push-In and Bolted Bases</b>										
MSNY-166-0-M	UV Black Nylon	0.49	12.45	0.31	7.87	0.28	7.11	0.18	4.57	1,000
MSNY-187-0-M		0.625	15.87	0.343	8.73	0.281	7.14	0.210	5.33	

- For panel thicknesses from 0.060 in. to 0.150 in. to hold separate pieces of material together
- For MSNY-166-0-M used with W4 or N4 Series Cable Clamps, allowable panel thickness is 0.030 in. to 0.050 in.
- For MSNY-187-0-M used with W6 or N6 Series Cable Clamps, allowable panel thickness is 0.030 in. to 0.050 in.



## Cable Clamps and Clips



### Versatile adhesive clips keep cable paths organized

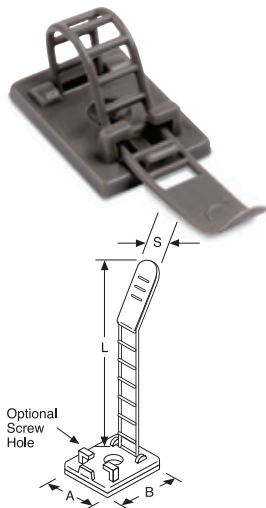
- Diverse cable clamps for bundle diameters from 0.160 in. to 0.620 in.
- Mounted on a rubber-based closed cell foam adhesive
- Flexible center tang for removal or addition of cables



Cat. No.	Material	Height H		Length L		Width W		Maximum Bundle		Mounting Method	Std. Pkg.
		(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)		
<b>Round Adhesive Clips</b>											
<b>RANY-160-9-D</b>	Nylon	0.250	6.35	0.630	16.0	0.580	14.73	0.160	4.06	Rubber-based adhesive	500
<b>RANY-280-9-D</b>		0.410	10.41	1.000	25.40	1.000	25.40	0.280	7.11		
<b>RANY-530-9-D</b>		0.620	15.75					0.530	13.46		
<b>RANY-620-9-D</b>		0.560	14.22	1.250	31.75	1.120	28.45	0.620	15.75		

Natural nylon colour.

Adhesive for use in temperatures ranging from 0°C to 66°C (32°F to 150°F).



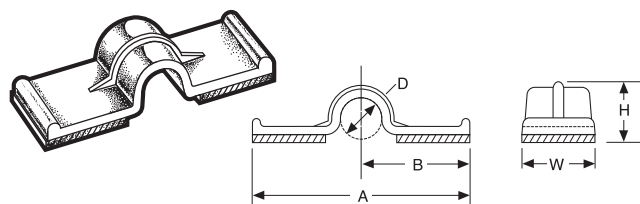
### Release and refasten with ease — in three adjustable sizes!

- Three sizes for bundles from 0.118 in. to 0.984 in.
- Ladder-style fastener is easily released and refastened
- Supplied on a rubber-based closed cell foam adhesive
- Optional screw hole for #4 or #5 flat head screw



Cat. No.	Material	Height A		Length B		Width S		Maximum Bundle		Applied Wire Range		Screw Hole Diameter		Std. Pkg.
		(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	
<b>Adjustable Cable Clamps</b>														
<b>ULNY-013-8-C</b>	Grey Nylon	0.709	18.00	0.984	24.99	0.314	7.98	2.340	59.44	0.118 - 0.500	3.0 - 12.7	0.110	2.79	100
<b>ULNY-013-9-C</b>	Natural Nylon													
<b>ULNY-018-8-C</b>	Grey Nylon	0.827	21.00	1.180	29.97	0.472	11.99	3.120	79.25	0.197 - 0.827	5.0 - 21.0			
<b>ULNY-023-8-C</b>		0.984	24.99	1.380	35.05	0.551	14.00	3.370	79.25	0.275 - 0.984	7.0 - 25.0	0.135	3.43	

Adhesive for use in temperatures ranging from 0°C to 66°C (32°F to 150°F).



### Choose from four sizes to accommodate bundles up to 1/2 in.

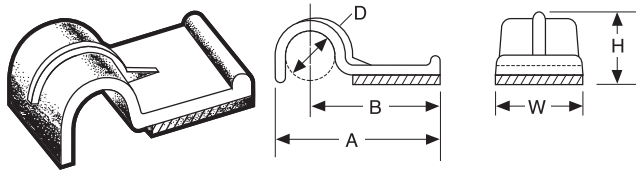
- Clips are provided on a rubber-based closed cell foam adhesive
- Stocked in natural nylon 6/6 colour. Contact your T&B Sales Representative for availability in special materials

Std. Pkg. Cat. No.	Bulk Pkg. Cat. No.	Material	D Diameter		A		B		H		W		Std. Pkg.	Bulk Pkg.
			(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)		
<b>Press Clips</b>														
<b>PCNY-125-9-C</b>	<b>PCNY-125-9-D</b>	Nylon	0.13	3.30	0.76	19.30	0.38	9.65	0.21	5.33	0.38	9.65	100	500
<b>PCNY-250-9-C</b>	<b>PCNY-250-9-D</b>		0.25	6.35	1.38	35.05	0.69	17.53	0.32	8.13	0.50	12.70		
<b>PCNY-375-9-C</b>	<b>PCNY-375-9-D</b>		0.38	9.65	1.47	37.34	0.74	18.80	0.44	11.176	0.63	16.00		
<b>PCNY-500-9-C</b>	<b>PCNY-500-9-D</b>		0.50	12.70	1.59	40.39	0.80	20.32	0.59	15.00	0.75	19.05		

For use in temperatures ranging from 0°C to 66°C (32°F to 150°F).



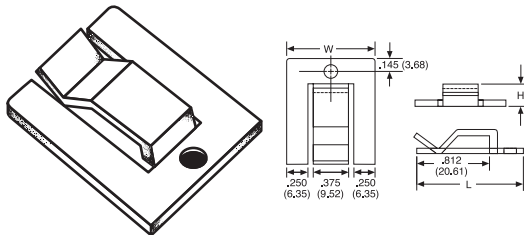
## Cable Clamps and Clips



### Eliminate the dangers of loose cables with these clips

- 4 sizes to accommodate bundles up to 1/2 in.
- Clips are provided on a rubber-based closed cell foam adhesive
- Stocked in natural nylon 6/6 colour. Contact your T&B Sales Representative for availability in special materials

Std. Pkg. Cat. No.	Bulk Pkg. Cat. No.	Material	D Diameter		A		B		H		W		Std. Pkg.	Bulk Pkg.
			(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)		
<b>Half Press Clips</b>														
<a href="#">HCNY-125-9-C</a>	<a href="#">HCNY-125-9-M</a>	Nylon	0.13	3.30	0.49	12.45	0.38	9.65	0.18	4.57	0.38	9.65	100	1,000
<a href="#">HCNY-250-9-C</a>	<a href="#">HCNY-250-9-M</a>		0.25	6.35	0.87	22.10	0.69	17.53	0.33	8.38	0.50	12.70		
<a href="#">HCNY-375-9-C</a>	<a href="#">HCNY-375-9-M</a>		0.38	9.65	0.98	25.90	0.75	19.05	0.42	10.67	0.63	16.00		
<a href="#">HCNY-500-9-C</a>	<a href="#">HCNY-500-9-M</a>		0.50	12.70	1.11	28.20	0.82	20.83	0.56	14.22	0.75	19.05		

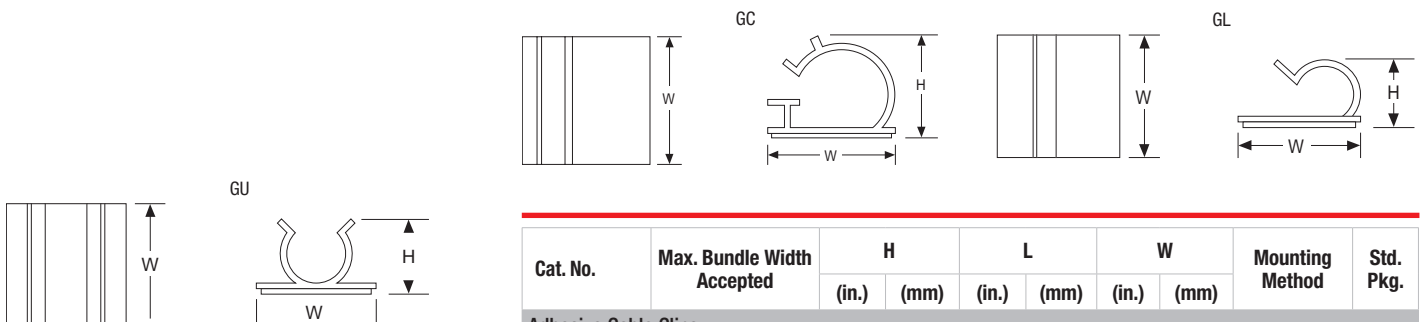


### Flat design provides an attractive, yet discreet look

- Flat ribbon cable clamp with mounting hole for #8 screw
- Stocked in natural nylon 6/6 colour
- Flexible center tang enables easy removal and replacement of desired cable

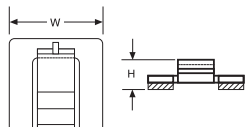
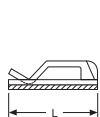
Cat. No.	Material	Height H		Length L		Width W		Mounting Method	Std. Pkg.
		(in.)	(mm)	(in.)	(mm)	(in.)	(mm)		
<b>Flat Cable Screw Clip</b>									
<a href="#">FSNY-812-9-C</a>	Nylon	0.25	6.35	1.19	30.23	1.00	25.40	#8 Screw	100

For use in temperatures ranging from 0°C to 66°C (32°F to 150°F).



Cat. No.	Max. Bundle Width Accepted	H		L		W		Mounting Method	Std. Pkg.
		(in.)	(mm)	(in.)	(mm)	(in.)	(mm)		
<b>Adhesive Cable Clips</b>									
<a href="#">RANY-160-9-D</a>	0.25	0.39	9.91	0.75	19.05	0.75	19.05	Adhesive	25
<a href="#">RANY-280-9-D</a>	0.50	0.63	16.00	1.00	25.40	1.00	25.40		
<a href="#">RANY-530-9-D</a>	0.25	0.76	19.30						
<a href="#">RANY-620-9-D</a>	0.50			0.75	19.05	0.75	19.05		
<a href="#">RANY-620-9-D</a>	0.25	0.47	11.94						
<a href="#">RANY-620-9-D</a>	0.50								

## Cable Clamps and Clips



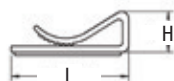
### Low-profile clip for single or multiple layers of flat ribbon cable

- Supplied on a rubber-based closed cell foam adhesive
- Flexible center tongue for removal or addition of cables
- Stocked in natural nylon 6/6 colour

Std. Pkg. Cat. No.	Bulk Pkg. Cat. No.	Material	Height H		Length L		Width W		Mounting Method (in.)	Std. Pkg.	Bulk Pkg.
			(in.)	(mm)	(in.)	(mm)	(in.)	(mm)			
<b>Flat Adhesive Clips</b>											
<b>FANY-812-9-C</b>	<b>FANY-812-9-D</b>	Nylon	0.28	7.11	1.00	25.40	1.00	25.40	Adhesive	100	500

Natural nylon colour.

For use in temperatures ranging from 0°C to 66°C (32°F to 150°F).



### Adhesive eliminates need for tools when mounting 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)

Std. Pkg. Cat. No.	Bulk Pkg. Cat. No.	Material	Height H		Length L		Width W		Mounting Method (in.)	Std. Pkg.	Bulk Pkg.
			(in.)	(mm)	(in.)	(mm)	(in.)	(mm)			
<b>Flat PVC Clips</b>											
<b>FRPV-1000-8-C</b>	<b>FRPV-1000-8-D</b>	Grey PVC	0.42	10.67	1.06	26.92	1.00	25.40	Adhesive	100	500

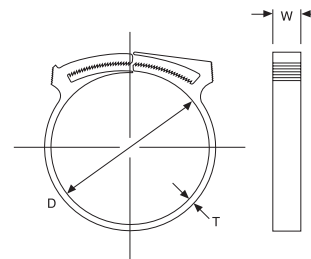
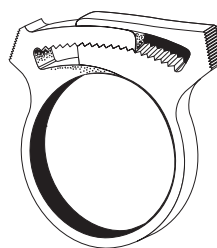
For use in temperatures ranging from 0°C to 66°C (32°F to 150°F).

### Ideal for assembly applications

- 16 sizes for bundle diameters to 2.38 in.
- Removable and reusable. Twist by hand or with pliers to remove
- Stocked in weatherable Nylon. 100 pieces per package
- Request samples for testing to your application. Tested to 250 psi

Black.

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



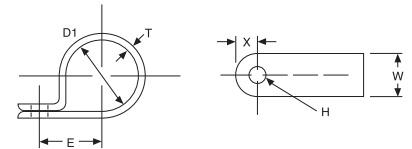
Cat. No.	D Nominal Diameter		D1 Closed Diameter		T Thickness		W Width		Std. Pkg.
	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	
<b>Adjustable Cable Clamps</b>									
<b>GGNY-344-0-C</b>	0.41	10.41	0.34	8.64	0.7	1.78	0.22	5.59	100
<b>GGNY-406-0-C</b>	0.47	11.94	0.41	10.41					
<b>GGNY-750-0-C</b>	0.88	22.35	0.75	19.05					
<b>GGNY-875-0-C</b>	1.00	25.40	0.88	22.35					

Cat. No.	D Nominal Diameter		D1 Closed Diameter		T Thickness		W Width		Std. Pkg.
	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	
<b>Adjustable Cable Clamps</b>									
<b>GGNY-953-0-C</b>	0.95	24.13	0.41	10.41	0.7	1.78	0.31	7.87	100
<b>GGNY-1031-0-C</b>	1.81	45.97	1.03	26.16					
<b>GGNY-1250-0-C</b>	1.44	36.58	1.25	31.75					
<b>GGNY-1406-0-C</b>	1.63	41.40	1.41	35.81			0.36	9.14	
<b>GGNY-1687-0-C</b>	1.91	48.51	1.34	34.04					
<b>GGNY-1875-0-C</b>	2.13	54.10	1.88	47.75					

## Cable Clamps and Clips

### Choose the diameter you need to clamp a specific-sized cable

- Fully radiused inside edges with size markings in inches and millimeters for easy identification
- Stocked in natural and black nylon 6/6
- Plain edge cable clamps are designed to perform to NAS-1397P
- 18 diameters and 2 widths with mounting holes for #8 and #10 screws
- Replace "-M" or "-D" with "-C" for 100 pack



White Cat. No.	Black Cat. No.	H Mounting Hole Size	D1 Closed Dia.		E		T Thickness		W Width		X		Std. Pkg.
			(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	
<b>Half Press Clips</b>													
N4NY-002-9-M	N4NY-002-0-M	#8	0.13	3.18	0.34	8.71	0.05	1.27	0.38	9.53			1,000
N4NY-003-9-M	N4NY-003-0-M		0.19	4.475	0.38	9.60							
N4NY-004-9-M	N4NY-004-0-M		0.25	6.35	0.42	10.70							
N4NY-005-9-M	N4NY-005-0-M		0.31	7.92	0.44	11.20							
N4NY-006-9-M	N4NY-006-0-M		0.38	9.53	0.46	11.79							
N4NY-007-9-M	N4NY-007-0-M		0.44	11.10	0.50	12.70							
N4NY-008-9-M	N4NY-008-0-M		0.50	12.70	0.53	13.46							
N4NY-002B-9-M	N4NY-002B-0-M		0.13	3.18	0.34	8.71							
N4NY-003B-9-M	N4NY-003B-0-M	0.19	4.475	0.38	9.60								
N4NY-004B-9-M	N4NY-004B-0-M	0.25	6.35	0.42	10.70								
N4NY-005B-9-M	N4NY-005B-0-M	0.31	7.92	0.44	11.20								
N4NY-006B-9-M	N4NY-006B-0-M	0.38	9.53	0.46	11.79								
N4NY-007B-9-M	N4NY-007B-0-M	0.44	11.10	0.50	12.70								
N4NY-008B-9-M	N4NY-008B-0-M	0.50	12.70	0.53	13.46								
N6NY-004C-9-M	N6NY-004C-0-M	#10	0.25	6.35	0.44	11.10	0.06	1.52	0.50	12.70	0.22	5.54	
N6NY-005C-9-M	N6NY-005C-0-M		0.31	7.92	0.47	12.04							
N6NY-006C-9-M	N6NY-006C-0-M		0.38	9.53	0.50	12.70							
N6NY-007C-9-M	N6NY-007C-0-M		0.44	11.10	0.53	13.54							
N6NY-008C-9-M	N6NY-008C-0-M		0.50	12.70	0.55	14.05							
N6NY-009-9-M	N6NY-009-0-M		0.56	14.27	0.60	15.32							
N6NY-010-9-M	N6NY-010-0-M		0.63	15.88	0.63	15.88							
N6NY-011-9-M	N6NY-011-0-M		0.69	17.45	0.67	16.89							
N6NY-012-9-M	N6NY-012-0-M		0.75	19.05	0.70	17.75							
N6NY-013-9-M	N6NY-013-0-M		0.81	20.62	0.77	19.43							
N6NY-014-9-M	N6NY-014-0-M		0.88	22.23	0.80	20.19							
N6NY-016-9-M	N6NY-016-0-M		1.00	25.40	0.83	21.00							
N6NY-018-9-D	N6NY-018-0-D	1.13	28.58	0.94	23.88								
N6NY-019-9-D	N6NY-019-0-D	1.19	30.15	0.96	24.46								
N6NY-020-9-D	N6NY-020-0-D	1.25	31.75	0.98	24.90								
N6NY-022-9-D	N6NY-022-0-D	1.38	34.93	1.05	26.54								
N6NY-024-9-D	N6NY-024-0-D	1.50	38.10	1.11	28.30								

## Harnessing Accessories

### Several mounting styles available

- Clamp acts as a retainer during wire routing, and as a permanent clamp when desired



### Wires are held 1/2 in. above work surface for easy tying

- Consist of a spring-loaded clip and an elastic bundle support
- Wires are inserted by snapping them through spring-loaded clips



Cat. No.	Mounting Hole Size		Bundle Dia.		Max. Wire Width		Length		Std. Pkg.
	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	
<b>Mechanical-Locking Routing Clamps</b>									
TC88	0.25	6.35	0.50	12.7	0.25	6.35	0.891	22.63	100
TC95			1.00	25.4	0.50	12.7	1.590	40.39	

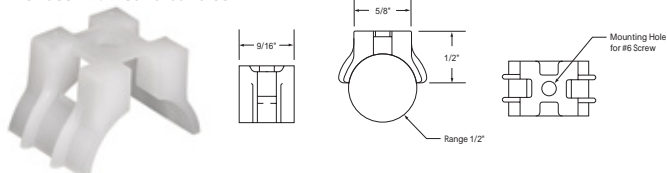
Natural nylon colour.

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

Cat. No.	Fastener	Max. Wire Bundle Dia.		Width		Height		Std. Pkg.
		(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	
<b>Wire-Bundle Retainers</b>								
TC86	#6 screws	0.750	19.05	1.750	44.45	1.81	46.05	25
TC87		1.250	31.75	2.469	62.71	2.281	57.94	10

### Saddle Mounting Plate

- For use with round bundles



### Hardened, nickel-plated, steel construction

- For wire harness board manufacturing

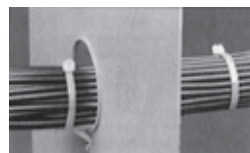


Cat. No.	Max. Tie Width		Size		Bundle Hole Size	Std. Pkg.
	(in.)	(mm)	(in.)	(mm)		
<b>Ty-Rap® Saddle Mounting Plate</b>						
TC92	0.190	4.83	1/2-1-1/4	12.7-31.75	#6 screws	100

Natural nylon colour.

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

Cat. No.	A		B		C		Std. Pkg.
	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	
<b>Harness-Board Nails</b>							
HBP-1	1.00	25.40	0.625	15.88	0.72	1.83	100
HBP112	1.50	38.10			0.82	2.08	
HBP2	2.00	50.80			0.92	2.34	
HBP212	2.50	63.50			0.105	2.67	
HBP3	3.00	76.20			0.120	3.05	



### Offers extra support for wires and cables

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



Cat. No.	Mounting Method	Tie Width Accom.		Maximum Width		Length		Std. Pkg.
		(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	
<b>Bulkhead Bundle Support Feedthrough</b>								
TC131	#6 screws	0.190	4.83	1.115	28.32	1.890	48.00	1,000

Natural nylon colour.

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

## Mounting Bases for Heavy-Duty Applications

### Designed for indoor or outdoor use and heavy-duty applications

- Quick and easy to install on existing metal framing channel
- Installs with a push and twist
- Smooth design protects cable insulation
- Takes range of cable diameters



When fastening wire bundles, cables or hoses to framing channels, you can cut costs considerably by using the Ty-Rap® cable clamp. It's made of smooth, weather-resistant nylon and designed to protect cable insulation and hoses from wear or damage, which can occur with metal clamps. The clamp may be used for both indoor or outdoor applications. It quickly 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 in. and 1-5/8 in. channels regardless of channel depth.



Cat. No.	Channel Size	Max. Tie Width Accom.		Std. Pkg.
	(in.)	(in.)	(mm)	
<b>Framing Channel Clamp</b>				
<b>TC5363X</b>	1-1/2 and 1-5/8	0.301	7.65	50

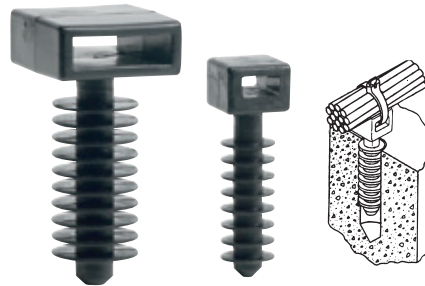
Made from high-impact weather-resistant black nylon.  
For use in temperatures ranging from -40°C to 85°C (-40°F to 185°F).

### Specially designed head is range-taking

- Quick, easy installation without cumbersome adhesives or epoxies
- Provides a quick, easy and dependable means of attaching cable and wires to masonry surfaces
- Installs 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
- Replaces a variety of anchors, clamps, screws and adhesives
- Designed for both indoor and outdoor applications
- Only two sizes to stock — reduces inventory

Cat. No.	Hole Size in Masonry	Max. Tie Width Accom.		Std. Pkg.
	(in.)	(in.)	(mm)	
<b>Framing Channel Clamp</b>				
<b>TC5358</b>	1/4	0.190	4.83	100
<b>TC5359</b>	3/8	0.500	12.70	50

Made of a special impact and ultraviolet-resistant black nylon.  
For use in temperatures ranging from -40°C to 85°C (-40°F to 185°F).



### Weather-resistant!

- For use with lashing ties up to .500 in. width (i.e. TY5409)
- High impact



Cat. No.	Mounting Method	Tid Width Accom.		Maximum Width		Length		Std. Pkg.
		(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	
<b>Ty-Rap® Mounting Base for Lashing Tie</b>								
<b>TC5355</b>	#8 screws	0.500	12.70	0.750	19.05	1.750	44.45	25
<b>TC5356</b>	#10 screws							
<b>TC5357</b>	1/4 in. screws							

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

## Mounting Bases for Heavy-Duty Applications



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



During installation, the custom Stud Mount drill bit application tool 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.

### A fast and simple harnessing method for neat, versatile wire management

Thomas & Betts Stud Mount Fastening System is a fast and simple harnessing method for neat, versatile, cord, cable, hose, and wire management. Using a custom drill bit for your 3/8 in. power drill, the Stud Mount base is quickly attached onto a threaded stud or bolt 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 10 separate lashing positions, the Stud Mount offers unlimited wire harnessing arrangements. T&B’s Stud Mount is available in four convenient stud bolt sizes.

- Great for harnessing wires, cables and hoses to truck and trailer chassis
- Fast, easy installation, using standard 3/8 in. power drill and application tool or simply hammer on
- Unlimited harnessing flexibility using conventional T&B® cable ties
- Custom drill bit quickly installs base to proper torque — won’t crack or break mounting base due to being overtightened
- Unique 4-way multi-directional design
- 10-position harness capability
- Available for 3/8 in., 1/2 in., 5/8 in., and 3/4 in. stud/bolt sizes
- Self-tapping thread design for reliable installation onto stud
- High pull-out strength of 500+ lb.

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

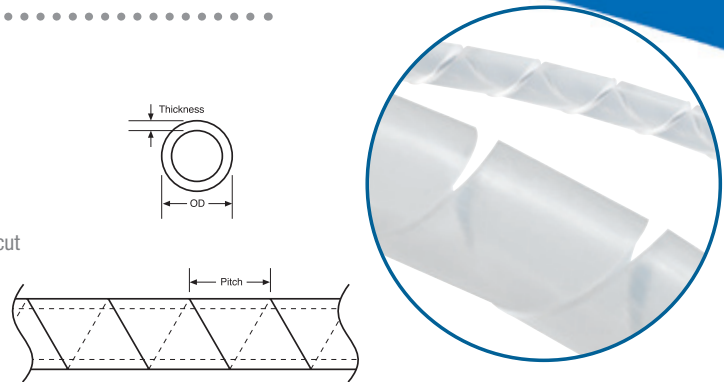
Material: Impact-resistant weatherable black nylon.  
For use in temperatures ranging from -40°C to 85°C (-40°F to 185°F).

## Wire Protection Products

### Spiral Wrap

Install with gaps for greater flexibility or butted together for maximum abrasion resistance, insulation and rigidity!

- Packaged in 100 foot reels
- Protects bundles from 0.063 in. to 7 in. (1.6 mm to 177.8 mm) diameters
- Available in three material types
- Also commonly known as reverse cut, left-handed cut or counter-clockwise cut
- For use with cutting tool CC120B (see page C73)
- UL 94 HB Flammability Rating

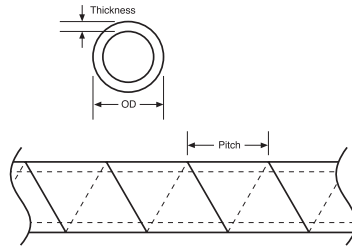
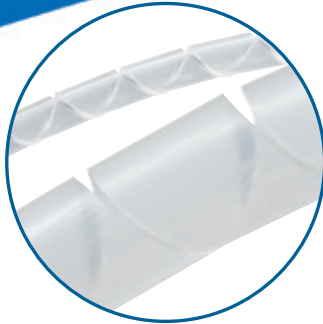


Cat. No.	Material	Outside Diameter		Pitch		Nominal Wall Thickness		Minimum/Maximum Bundle Range				Reel Qty.
		(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	
<b>Spiral Wrap</b>												
SRPE-125-9-C	Natural Polyethylene	0.125	3.18	0.210	5.33	0.35	0.89	0.06	1.60	0.50	12.70	1 (100 ft.)
SRPE-187-9-C		0.187	4.75	0.240	6.10	0.040	1.02	0.13	3.18	1.50	38.10	
SRPE-250-9-C		0.250	6.35	0.375	9.53	0.045	1.14	0.19	4.78	2.00	50.80	
SRPE-375-9-C		0.375	9.53	0.438	11.13	0.052	1.32	0.31	7.95	3.00	76.20	
SRPE-500-9-C		0.500	12.70	0.563	14.30	0.062	1.57	0.38	9.53	4.00	101.60	
SRPE-625-9-C		0.625	15.88	0.625	15.88	0.060	1.57	0.63	15.88	4.50	114.30	
SRPE-750-9-C		0.750	15.88	0.750	19.05	0.65	1.65	0.75	19.05	5.00	127.00	
SRPE-1000-9-C		1.000	25.40	1.110	28.19	0.70	17.78	1.00	25.40	7.00	177.80	
SRPE-125-0-C	Weatherable Black Polyethylene	0.125	3.18	0.210	5.33	0.35	0.89	0.06	1.60	0.50	12.70	
SRPE-187-0-C		0.187	4.75	0.240	6.10	0.040	1.02	0.13	3.18	1.50	38.10	
SRPE-250-0-C		0.250	6.35	0.375	9.53	0.045	1.14	0.19	4.78	2.00	50.80	
SRPE-375-0-C		0.375	9.53	0.438	11.13	0.052	1.32	0.31	7.95	3.00	76.20	
SRPE-500-0-C		0.500	12.70	0.563	14.30	0.062	1.57	0.38	9.53	4.00	101.60	
SRPE-625-0-C		0.625	15.88	0.625	15.88	0.060	1.57	0.63	15.88	4.50	114.30	
SRPE-750-0-C		0.750	15.88	0.750	19.05	0.065	1.65	0.75	19.05	5.00	127.00	
SRPE-1000-0-C		1.000	25.40	1.110	28.19	0.070	1.78	1.00	25.40	7.00	177.80	
SRNY-187-9-C	Natural Nylon 6/6	0.190	4.75	0.240	6.10	0.025	0.64	0.13	3.18	1.50	38.10	
SRNY-250-9-C		0.250	6.35	0.375	9.53	0.030	0.76	0.19	4.78	2.00	50.80	
SRNY-375-9-C		0.375	9.53	0.438	11.13	0.040	0.89	0.31	7.95	3.00	76.20	
SRNY-500-9-C		0.500	12.70	0.563	14.30	0.040	0.89	0.38	9.53	4.00	101.60	

Sold in 100-ft. rolls.

Polyethylene	Weatherable Polyethylene	Flame-Retardant Polyethylene	Nylon 6/6	Fluoropolymer
Available in natural and weatherable black.  For general indoor use to 50°C (122°F). Material is flexible and easy to work with.	Available in black only.  Designed to resist ultraviolet light in outdoor applications.	Available in white only.  Material is UL 94 V-0 rated. More economical and less rigid than nylon.	Available in natural only.  Offers highest abrasion resistance and rigidity. Self-extinguishing to UL 94 HB and a UL Recognized Component.	Available in opaque colour.  Excellent resistance to harsh environments 170°C (338°F) max operating temperature.

## Wire Protection Products



### Spiral Wrap

**Perfect for protection of bundles from 0.063 in. to 7 in. diameters**

- Install with gaps for greater flexibility or butted together for maximum abrasion resistance, insulation, and rigidity
- Available in three materials
- Also known as right-hand cut or clockwise cut
- Use cutting tool CC120B (see page C73)

Cat. No.	Material	Outside Diameter		Pitch		Nominal Wall Thickness		Minimum/Maximum Bundle Range				UL Flammability	Reel Qty.
		(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)		
<b>Forward Cut Spiral Wrap</b>													
SRPE-125F-9-C	Natural Polyethylene	0.19	4.75	0.24	6.10	0.04	1.02	0.06	1.60	0.50	12.70	94 HB	1 (100 ft.)
SRPE-187F-9-C		0.19	4.75	0.24	6.10	0.04	1.02	0.13	3.18	1.50	38.10		
SRPE-250F-9-C		0.25	6.35	0.38	9.53	0.05	1.14	0.19	4.78	2.00	50.80		
SRPE-375F-9-C		0.38	9.53	0.44	11.13	0.05	1.32	0.31	7.95	3.00	76.20		
SRPE-500F-9-C		0.50	12.70	0.56	14.30	0.06	1.57	0.38	9.53	4.00	101.60		
SRPE-625F-9-C		0.63	15.88	0.63	15.88	0.06	1.57	0.63	15.88	4.50	114.30		
SRPE-750F-9-C		0.75	19.05	0.75	19.05	0.07	1.65	0.75	19.05	5.00	127.00		
SRPE-1000F-9-C		1.00	25.40	1.11	28.19	0.07	1.78	1.00	25.40	7.00	177.80		
SRPE-125F-0-C	Weatherable Black Polyethylene	0.19	4.75	0.24	6.10	0.04	1.02	0.06	1.60	0.50	12.70		
SRPE-187F-0-C		0.19	4.75	0.24	6.10	0.04	1.02	0.13	3.18	1.50	38.10		
SRPE-250F-0-C		0.25	6.35	0.38	9.53	0.05	1.14	0.19	4.78	2.00	50.80		
SRPE-375F-0-C		0.38	9.53	0.44	11.13	0.05	1.32	0.31	7.95	3.00	76.20		
SRPE-500F-0-C		0.50	12.70	0.56	14.30	0.06	1.57	0.38	9.53	4.00	101.60		
SRPE-625F-0-C		0.63	15.88	0.63	15.88	0.06	1.57	0.63	15.88	4.50	114.30		
SRPE-750F-0-C		0.63	15.88	0.75	19.05	0.07	1.65	0.75	19.05	5.00	127.00		
SRPE-1000F-0-C		1.00	25.40	1.11	28.19	0.07	1.78	1.00	25.40	7.00	177.80		
SRFR-125F-WH-C	White Flame-Retardant Polyethylene	0.19	4.75	0.24	6.10	0.04	1.02	0.13	3.18	1.50	38.10	94 HB	
SRFR-187F-WH-C		0.19	4.75	0.24	6.10	0.04	1.02	0.19	4.78	2.00	50.80		
SRFR-250F-WH-C		0.25	6.35	0.38	9.53	0.05	1.14	0.31	7.95	3.00	76.20		
SRFR-375F-WH-C		0.38	9.53	0.44	11.13	0.05	1.32	0.38	9.53	4.00	101.60		
SRFR-500F-WH-C		0.50	12.70	0.56	14.30	0.06	1.57	0.19	2.00	2.00	50.80		
SRTL-250F-9-C	Fluoropolymer	0.25	6.35	0.38	9.53	0.05	1.32	0.31	3.00	3.00	76.20		
SRTL-500F-9-C		0.50	12.70	0.56	14.30	0.06	1.57	0.38	4.00	4.00	101.60		

#### Polyethylene

Available in natural and weatherable black.

For general indoor use to 50°C (122°F). Material is flexible and easy to work with.

#### Weatherable Polyethylene

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

#### Flame-Retardant Polyethylene

Available in white only.

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

#### Nylon 6/6

Available in natural only.

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

#### Fluoropolymer

Available in opaque colour.

Excellent resistance to harsh environments 170°C (338°F) max operating temperature.

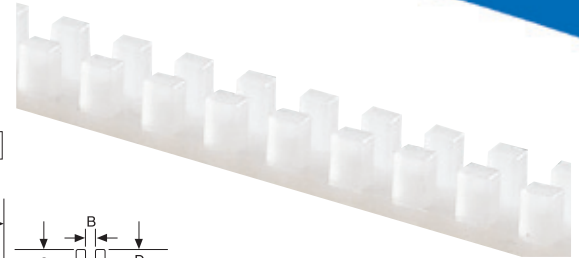
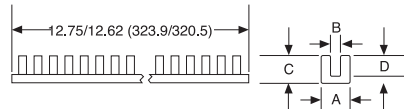
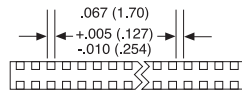


## Wire Protection Products

### Molded Grommeting

#### Suitable for round hole or odd-shape applications!

- Meets MS21266
- Available in three materials for panel thicknesses from 0.015 in. to 0.192 in.
- Grommet is used to protect panel edges and knockouts where the chafing of passing wires is a concern
- Also available in fluoropolymer material for harsh environments
- Strip length – 12-3/4 in.



Std. Cat. No.	Bulk Cat. No.	Material	A		B		C		D		For Panel Thickness		Military Standard Numbers	Std. Pkg.	Bulk Pkg.
			(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)			
<b>Molded Grommeting</b>															
<a href="#">GSNY-052-9-C</a>	–	Natural Nylon 6/6	0.15	3.81	0.06	1.42	0.16	3.94	0.10	2.54	0.02-0.052	0.38-1.32	MS-21266-1N	100	–
<a href="#">GSNY-085-9-C</a>	–		0.18	4.45	0.09	2.29					0.05-0.085	1.35-2.16	MS-21266-2N		
<a href="#">GSNY-128-9-C</a>	–		0.22	5.59	0.13	3.33	0.09-0.128	2.18-3.25			MS-21266-3N				
<a href="#">GSNY-192-9-C</a>	–		0.36	8.26	0.20	4.95	0.19-0.192	3.25-4.88			MS-21266-4N				
<a href="#">GSFR-052-WH-C</a>	–	Flame-Retardant White	0.15	3.81	0.06	1.42	0.23	5.84			0.02-0.052	0.38-1.32	–	–	500
–	<a href="#">GSFR-052-WH-D</a>		0.15	3.81	0.06	1.42					0.02-0.052	0.38-1.32			
<a href="#">GSFR-085-WH-C</a>	–		0.18	4.45	0.09	2.29					0.05-0.085	1.35-2.16			

### High-carbon, Teflon® coated steel blade!

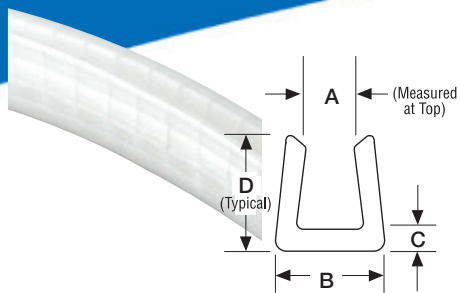
Use our CC120B cutting tool for all your spiral wrap, plastic pipe and PVC conduit needs up to 1-1/4 IN. I.D.

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

Cat. No.	Description
<b>CC120B</b>	Cutting Tool



## Wire Protection Products



### Extruded Grommeting

#### Line panel edges and knockouts!

- Used to line panel edges and knockouts where the chafing of passing wires is a concern
- Available in 8 stock sizes in 100-ft. lengths for panels from 0.040 in. (1.02 mm) to 0.250 in. (6.35 mm) thick
- A variety of stocked materials to cover a wide range of applications
- Solid Wall Polyethylene is ideal for protection of glass, sheet metal, wood panels, or other sheet-form materials
- This product is not UV rated

Cat. No.	Material	A Max. Panel Thickness		C Grommeting Thickness		D Grommeting Height		B Grommeting Width		UL Flammability	Reel Qty.		
		(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)				
<b>Extruded Grommeting</b>													
GRNY-040-9-C	Natural Nylon	0.04	1.02	0.04	1.02	0.19	4.83	0.13	3.18	94 V-2	1 (100 ft.)		
GRNY-052-9-C		0.05	1.32										
GRNY-062-9-C		0.06	1.57	0.05	1.32	0.20	5.08	0.17	4.32				
GRNY-085-9-C		0.09	2.16										
GRNY-100-9-C		0.10	2.54			0.22	5.89	0.21	5.33				
GRNY-125-9-C		0.13	3.18										
GRNY-187-9-C		0.19	4.75			0.27	6.86	0.28	6.99				
GRNY-250-9-C		0.25	6.35										
GRNY-040-0-C	Black Nylon	0.04	1.02			0.04	1.02	0.19	4.83			0.13	3.18
GRNY-052-0-C		0.05	1.32										
GRNY-062-0-C		0.06	1.57	0.05	1.32	0.20	5.08	0.17	4.32				
GRNY-085-0-C		0.09	2.16										
GRNY-100-0-C		0.10	2.54			0.22	5.89	0.21	5.33				
GRNY-125-0-C		0.13	3.18										
GRNY-187-0-C		0.19	4.75			0.27	6.86	0.28	6.99				
GRNY-250-0-C		0.25	6.35										
GRPE-040-9-C	Natural Polyethylene	0.04	1.02			0.04	1.02	0.19	4.83	0.13	3.18		
GRPE-052-9-C		0.05	1.32										
GRPE-062-9-C		0.06	1.57	0.05	1.32	0.20	5.08	0.17	4.32				
GRPE-085-9-C		0.09	2.16										
GRPE-100-9-C		0.10	2.54			0.22	5.89	0.21	5.33				
GRPE-125-9-C		0.13	3.18										
GRPE-187-9-C		0.19	4.75			0.27	6.86	0.28	6.99				
GRPE-250-9-C		0.25	6.35										
GRUPE-040-9-C	Solid Wall Polyethylene	0.04	1.02			0.04	1.02	0.19	4.83	0.13	3.18		
GRUPE-052-9-C		0.05	1.32										
GRUPE-062-9-C		0.06	1.57	0.05	1.32	0.20	5.08	0.17	4.32				
GRUPE-085-9-C		0.09	2.16										
GRUPE-100-9-C		0.10	2.54			0.22	5.89	0.21	5.33				
GRUPE-125-9-C		0.13	3.18										
GRUPE-187-9-C		0.19	4.75			0.27	6.86	0.28	6.99				
GRUPE-250-9-C		0.25	6.35										
GRFR-040-WH-C	Flame-Retardant White Polyethylene	0.04	1.02			0.04	1.02	0.19	4.83	0.13	3.18		
GRFR-052-WH-C		0.05	1.32										
GRFR-062-WH-C		0.06	1.57	0.05	1.32	0.20	5.08	0.17	4.32				
GRFR-085-WH-C		0.09	2.16										
GRFR-100-WH-C		0.10	2.54			0.22	5.89	0.21	5.33				
GRFR-125-WH-C		0.13	3.18										
GRFR-187-WH-C		0.19	4.75			0.27	6.86	0.28	6.99				
GRFR-250-WH-C		0.25	6.35										

## Wire Protection Products

### Braided Sleeving

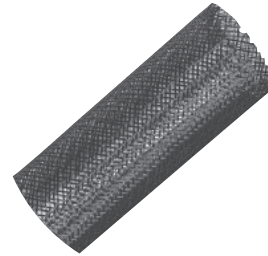
Available in handy mini spools or bulk reels!

Thomas & Betts braided wire protection 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's easily cut with a hot knife, which seals the end, preventing fraying. Ends can be secured using Ty-Rap® cable ties.

Available in:

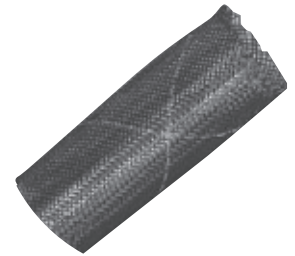
- Handy mini spools or bulk reels
- Eight sizes from 1/8 in. (3.18 mm) to 2-1/2 in. (63.5 mm) nominal I.D. size
- Solid or wraparound hook and loop braided expandable wire sleeving
- Meets UL94V-1
- Meets Federal Motor Vehicle Standard No. FMV SS 302

Types of Materials



**Polyethylene Terephthalate (P.E.T.)**

A black 0.010 in. (0.25mm) polyester monofilament material designed for indoor and outdoor applications. It's rated for continuous operating temp. -75°C to 125°C (-103°F to 257°F).



**F – Flame Retardant Polyethylene Terephthalate (P.E.T.)**

A 0.010 in. (0.25 mm) self-extinguishing polyester monofilament material that can be used indoors and outdoors. It's provided in black with white tracer for identification, and is rated for continuous operating temp. -75°C to 125°C (-103°F to 257°F). Meets UL 94V-1 Flammability Rating.

### Catalogue Number System



Cat. No.	Nominal I.D.		Colour	Nominal Diameter Range		Reel Size	Std. Pkg.
	(in.)	(mm)		(in.)	(mm)		
<b>Braided Expandable Wire Protection Sleeving</b>							
<b>S250PT-0</b>	0.250	6.35	Black	0.125 to 0.375	3.18 to 9.53	M = 1000 ft. D = 500 ft. K = 250 ft. T = 200 ft. C = 100 ft. L = 50 ft.	1
<b>S375PC-0</b>	0.375	9.53		0.187 to 0.625	4.75 to 15.88		1

**S** = Braided Expandable Wire Sleeving

#### Materials

- P** = P.E.T. (Polyethylene Terephthalate)
- F** = Flame-retardant P.E.T.
- PW** = P.E.T. hook & loop wraparound sleeving
- FW** = Flame-retardant P.E.T. hook & loop wraparound sleeving

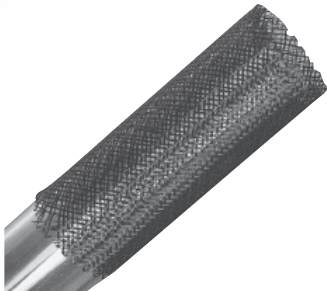
#### Nominal I.D. Equivalents

- 0.125** = 1/8 in.
- 0.250** = 1/4 in.
- 0.375** = 3/8 in.
- 0.500** = 1/2 in.
- 0.750** = 3/4 in.
- 1.250** = 1-1/4 in.
- 1.500** = 1-1/2 in.
- 1.750** = 1-3/4 in.
- 2.000** = 2 in.
- 2.500** = 2-1/2 in.

## Wire Protection Products

### Types of Materials

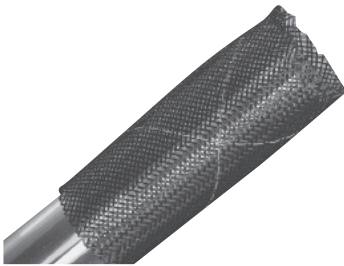
### Braided Sleeving



Cat. No.	Nominal I.D.		Colour	Nominal Diameter Range		Spool Quantity	Std. Pkg.
	(in.)	(mm)		(in.)	(mm)		
<b>P.E.T. Braided Expandable Wire Sleeving — Mini Spool</b>							
<b>S250PT-0</b>	0.25	6.35	Black	0.13 to 0.38	3.18 to 9.53	200 ft. / 60.96 m	1
<b>S375PC-0</b>	0.38	9.53		0.19 to 0.63	4.75 to 15.88	125 ft. / 38.10 m	
<b>S500PC-0</b>	0.50	12.70		0.25 to 0.75	6.35 to 19.05	100 ft. / 30.48 m	
<b>S750PC-0</b>	0.75	19.05		0.50 to 1.25	12.70 to 31.75		
<b>S1250PL-0</b>	1.25	31.75		0.75 to 1.75	19.05 to 44.45	50 ft. / 15.24 m	

NOTE: Order by spool, not per foot.

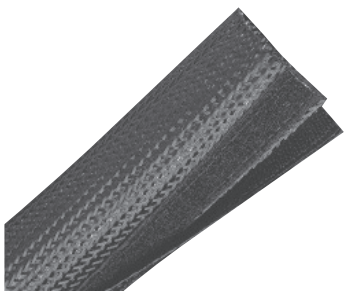
### Safety first!



Cat. No.	Nominal I.D.		Colour	Nominal Diameter Range		Spool Quantity	Std. Pkg.
	(in.)	(mm)		(in.)	(mm)		
<b>Flame Retardant Braided Expandable Wire Sleeving — Mini Spool</b>							
<b>S250FT-0</b>	0.25	6.35	Black with White Tracer	0.13 to 0.38	3.18 to 9.53	200 ft. / 60.96 m	1
<b>S500FC-0</b>	0.50	12.70		0.25 to 0.75	6.35 to 19.05	100 ft. / 30.48 m	
<b>S750FC-0</b>	0.75	19.05		0.50 to 1.25	12.70 to 31.75		
<b>S1250FL-0</b>	1.25	31.75		0.75 to 1.75	19.05 to 44.45	50 ft. / 15.24 m	

NOTE: Order by spool, not per foot.

### Enables for easy wrapping of existing wire harnesses and cables!



Cat. No.	Nominal I.D.		Colour	Nominal Diameter Range		Spool Quantity	Std. Pkg.
	(in.)	(mm)		(in.)	(mm)		
<b>P.E.T. Hook and Loop, Wraparound Sleeving — Mini Spool</b>							
<b>S500PWL-0</b>	0.50	12.70	Black	0.25 to 0.75	6.35 to 19.05	50 ft. / 15.24 m	1
<b>S750PWL-0</b>	0.75	19.05		0.50 to 1.25	12.70 to 31.75		
<b>S1250PWL-0</b>	1.25	31.75		0.75 to 1.75	19.05 to 44.45		
<b>S2000PWL-0</b>	2.00	50.80		1.50 to 3.50	38.10 to 88.90		

NOTE: Order by spool, not per foot.

### Convenient for rework without disrupting existing connection!



- No tools required to close the sleeving
- Hook and loop material is made of 100% nylon



Cat. No.	Nominal I.D.		Colour	Nominal Diameter Range		Spool Quantity	Std. Pkg.
	(in.)	(mm)		(in.)	(mm)		
<b>Flame Retardant Hook and Loop, Wraparound Sleeving — Mini Spool</b>							
<b>S500FWL-0</b>	0.50	12.70	Black with White Tracer	0.25 to 0.75	6.35 to 19.05	50 ft. / 15.24 m	1
<b>S750FWL-0</b>	0.75	19.05		0.50 to 1.25	12.70 to 31.75		
<b>S1250FWL-0</b>	1.25	31.75		0.75 to 1.75	19.05 to 44.45		
<b>S2000FWL-0</b>	2.00	50.80		1.50 to 3.50	38.10 to 88.90		

NOTE: Order by spool, not per foot.

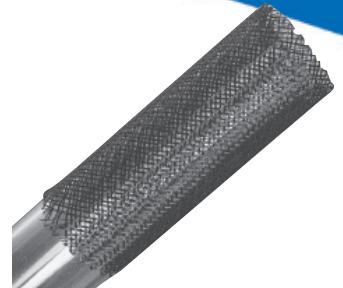
## Wire Protection Products

Buy in bulk and save! **Braided Sleeving**



Cat. No.	Nominal I.D.		Colour	Nominal Diameter Range		Reel Quantity	Std. Pkg.
	(in.)	(mm)		(in.)	(mm)		
<b>P.E.T. Braided Expandable Wire Sleeving — Bulk Reel</b>							
<b>S125PM-0</b>	0.125	3.18	Black	0.09 to 0.250	2.39 to 6.35	1,000 ft. / 304.80 m	1
<b>S250PM-0</b>	0.25	6.35		0.125 to 0.375	3.18 to 9.53		
<b>S375PD-0</b>	0.38	9.53		0.19 to 0.63	4.75 to 15.88	500 ft. / 152.40 m	
<b>S500PD-0</b>	0.50	12.70		0.25 to 0.75	6.35 to 19.05		
<b>S750PK-0</b>	0.75	19.05		0.50 to 1.25	12.70 to 31.75	250 ft. / 76.20 m	
<b>S1250PK-0</b>	1.25	31.75		0.75 to 1.75	19.05 to 44.45		
<b>S1500PT-0</b>	1.50	38.10		1.00 to 2.50	25.40 to 63.50	200 ft. / 60.96 m	
<b>S1750PT-0</b>	1.75	44.45		0.125 to 0.375	31.75 to 59.85		
<b>S2000PT-0</b>	2.00	50.80		1.50 to 3.50	38.10 to 88.90		
<b>S2500PT-0</b>	2.50	63.50		1.75 to 4.50	44.45 to 114.30		

NOTE: Order by spool, not per foot.



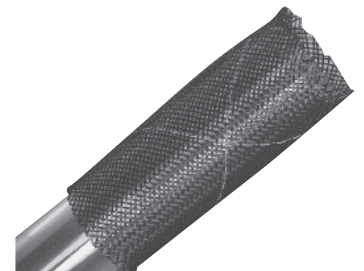
Choose from a variety of reel sizes!



Cat. No.	Nominal I.D.		Colour	Nominal Diameter Range		Reel Quantity	Std. Pkg.
	(in.)	(mm)		(in.)	(mm)		
<b>Flame Retardant Braided Expandable Wire Sleeving — Bulk Reel</b>							
<b>S125FM-0</b>	0.125	3.18	Black with White Tracer	0.09 to 0.250	2.39 to 6.35	1,000 ft. / 304.80 m	1
<b>S250FM-0</b>	0.25	6.35		0.125 to 0.375	3.18 to 9.53		
<b>S375FD-0</b>	0.38	9.53		0.19 to 63	4.75 to 15.88	500 ft. / 152.40 m	
<b>S500FD-0</b>	0.50	12.70		0.25 to 0.75	6.35 to 19.05		
<b>S750FK-0</b>	0.75	19.05	0.50 to 1.25	12.70 to 31.75	250 ft. / 76.20 m		
<b>S750FK-9</b>	0.75	19.05	White with Black Tracer	0.50 to 1.25		12.70 to 31.75	
<b>S1250FK-0</b>	1.25	31.75	Black with White Tracer	0.75 to 1.75	19.05 to 44.45	200 ft. / 60.96 m	
<b>S1750FT-0</b>	1.75	44.45		0.125 to 0.375	31.75 to 59.85		
<b>S1750FT-9</b>	1.75	44.45	White with Black Tracer	0.125 to 0.375	31.75 to 59.85		
<b>S2000FT-0</b>	2.00	50.80	Black with White Tracer	1.50 to 3.50	38.10 to 88.90		
<b>S2500FT-0</b>	2.50	63.50		1.75 to 4.50	44.45 to 114.30		

NOTE: Order by spool, not per foot.

For other colours, lengths, sizes and materials, please Contact your Regional Sales Office.



The right tool for the job!



Cat. No.	Description	Std. Pkg.
<b>Sleeving End Cutter/Sealer Tools</b>		
<b>WTBM</b>	Benchmark End Cutter/Sealer Tool, 110V AC	1

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





## Cable Tie Installation Tools

**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. It's ergonomic with more features than any competing tool on the market. This new and improved Ty-Rap® Cable Tie Installation Tool is the result, and it fits the bill in every aspect. 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 in. — 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

### Specifications

- Dimensions: 7 in. (177 mm) L x 5 in. (127 mm) H x 1-5/8 in. (41.3 mm) W
- Weight: 9 oz. (255 g)

Cat. No.	Description	Std. Pkg.
<b>Ty-Rap® Cable Tie Installation Tool</b>		
<b>ERG50</b>	Tool for 18–50 lb. (80–222 N) Cable Ties	1
<b>ERG120</b>	Tool for 50–120 lb. (222–533 N) Cable Ties	



## Cable Tie Installation Tools

**Lightweight. Economical. Durable. Perfect for spot-tying!**

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

- Installs Ty-Rap® cable ties up to 0.301 in. wide by 0.080 in. thick
- Designed for use by both left- and right-handed operators
- Lightweight, high-impact polymer and steel components



Cat. No.	Description	Tie Body Width		Std. Pkg.
		(in.)	(mm)	
<b>Ty-Rap® Cable Tie Installation Tool — Light Duty</b>				
<b>WT1-TB</b>	Cable Tie Installation Tool, 18–50 lb. (80–222.4 N)	0.09 - 0.18	2.39 - 4.67	1
<b>WT2-TB</b>	Cable Tie Installation Tool, 50–120 lb. (222.4–533.8 N)	0.18 - 0.301	4.67 - 7.65	

### Easy tension adjustment!

- Installs Ty-Rap® cable ties
- Rugged metallic construction
- Pistol-grip installation tool
- Tensions and cut cable tie tail off flush



### Get the job done right!

- Installs Ty-Rap® stainless steel cable ties
- Rugged stainless steel construction
- Pistol-type installation tool
- Adjustable tension settings



Cat. No.	Description	Tie Body Width		Std. Pkg.
		(in.)	(mm)	
<b>Ty-Rap® Heavy-Duty Installation Tool — Mil Spec Approved</b>				
<b>WT199</b>	Installation Tool, 18–50 lb. (80–222.4 N)	0.09 - 0.18	2.39 - 4.67	1
<b>WT197</b>	Installation Tool, 50–120 lb. (222.4–533.8 N)	0.18 - 0.30	4.67 - 7.65	

Mil Spec Approved (WT199 — MS90387-1, WT197 — MS90387-2)

Cat. No.	Description	Tie Body Width		Std. Pkg.
		(in.)	(mm)	
<b>Ty-Rap® Heavy-Duty Installation Tool — Stainless Steel</b>				
<b>DAS250</b>	Stainless Steel Installation Tool	0.31	7.87	1

### Makes tie installation easy!

#### WT3D

- Installs both self-locking Ty-Rap® cable ties and lashing ties

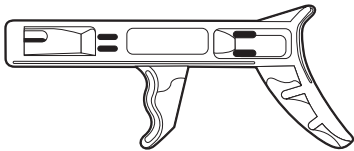


#### WT3S

- Installs stainless steel ties

Cat. No.	Description	Tie Body Width		Std. Pkg.
		(in.)	(mm)	
<b>Ty-Rap® Installation Tool — Deltec™ &amp; Stainless Steel</b>				
<b>WT3D</b>	Deltec™ Installation Tool	0.18 - 0.50	4.67 - 12.70	1
<b>WT3S</b>	Stainless Steel Installation Tool	0.50	12.70	

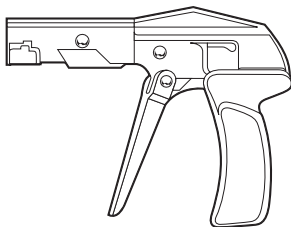
## Cable Tie Installation Tools



QC-100 (plastic)

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.

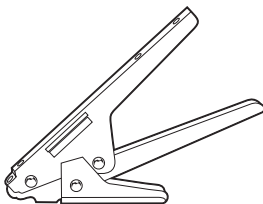
Cat. No.	Description	Tie Body Width (in.)	Std. Pkg.
<b>Cable Tie Tool</b>			
<b>QC-100</b>	Cable Tie Tool, 18-50 lb. tension Plastic Handle	0.094 - 0.184	1



L-200 Metal (steel)

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.

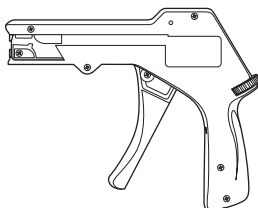
Cat. No.	Description	Tie Body Width (in.)	Std. Pkg.
<b>Cable Tie Tool</b>			
<b>L-200</b>	Cable Tie Tool, 18-50 lb. tension Steel Handle	0.094 - 0.184	1



L300-FR Metal (steel)

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 (in.)	Std. Pkg.
<b>Cable Tie Tool</b>			
<b>L300-FR</b>	Cable Tie Tool, 120-175 lb. tension Steel Handle	0.301 - 0.345	1



L-400-C (plastic)

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 (in.)	Std. Pkg.
<b>Cable Tie Tool</b>			
<b>L-400C</b>	Cable Tie Tool, 18-50 lb. tension Plastic Handle	0.094 - 0.184	1