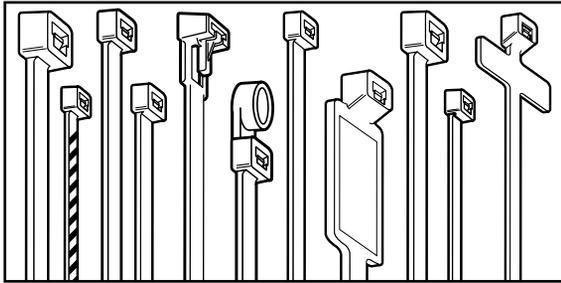


Ty-Fast® Cable Ties



- **MINIATURE**
- **HEAVY DUTY**
- **INTERMEDIATE**
- **EXTRA HEAVY DUTY**
- **STANDARD**
- **RELEASABLE TIES**
- **MOUNTING HEAD**
- **STRIPED TIES**
- **RESTRICTED BUNDLE**
- **IDENTIFICATION TIES**
- **MIL-SPEC TIES**

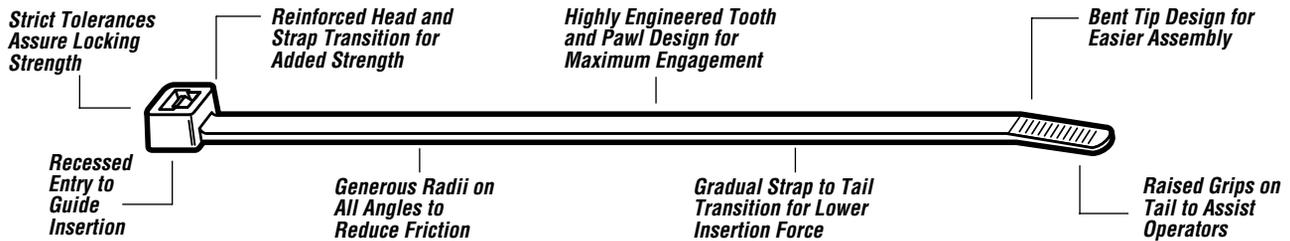
Ty-Fast® Cable Ties are available in lengths from 4" to our exclusive 48" strap. Cable Ties will satisfy bundling requirements from 1/16" to 15" and loop tensile strengths from 18 to 175 pounds.

Cable Ties are stocked in materials and colors as listed. Contact your Ty-Fast® Distributor or Customer Service Representative for availability in special materials and colors.

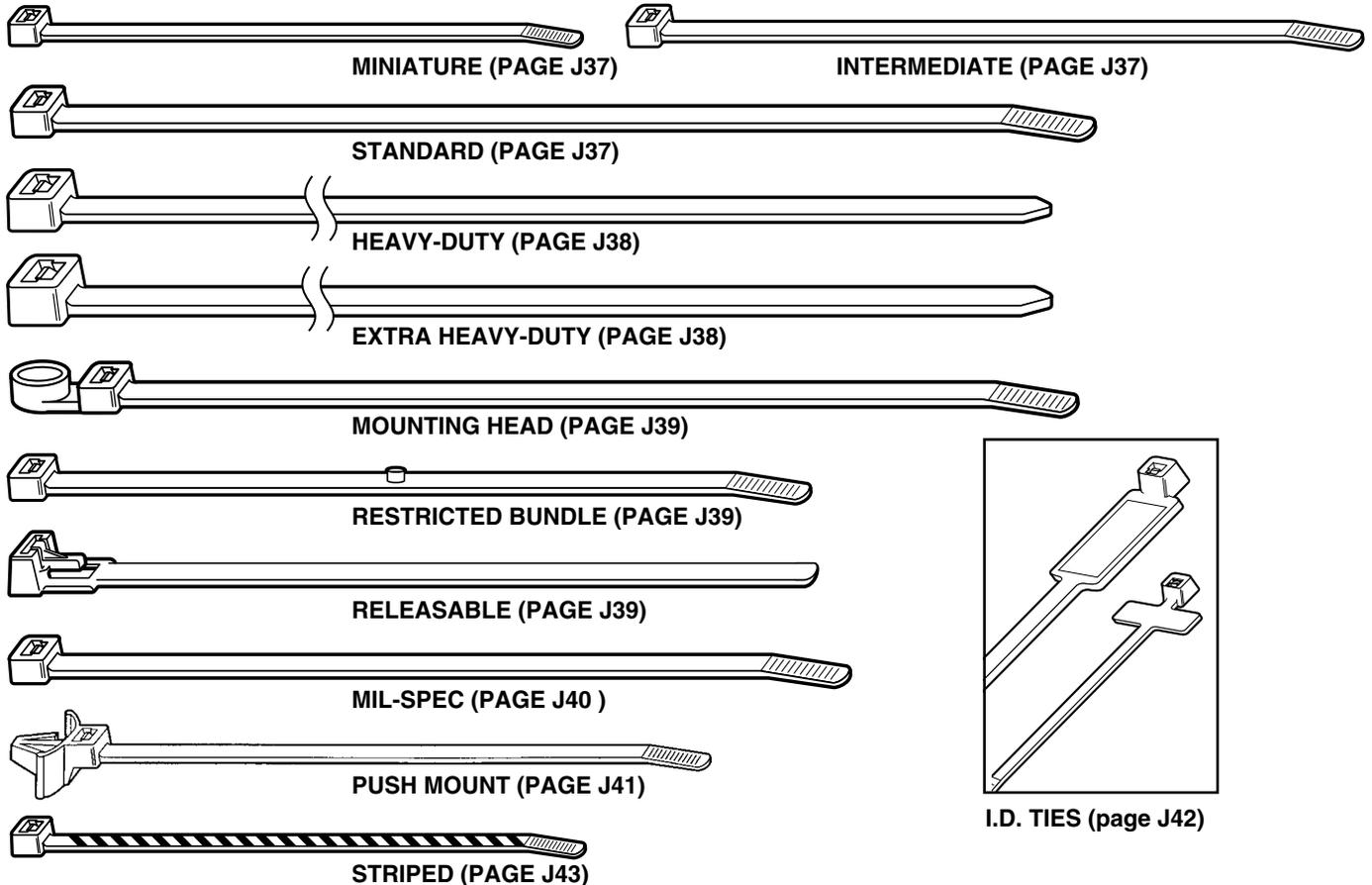
Where applicable, Ty-Fast® Cable Ties are UL Recognized, Mil-Spec Approved and/or QPL Listed.

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

Ty-Fast® products are sold through stocking T&B Distributors.



Ty-Rap®/Ty-Fast®

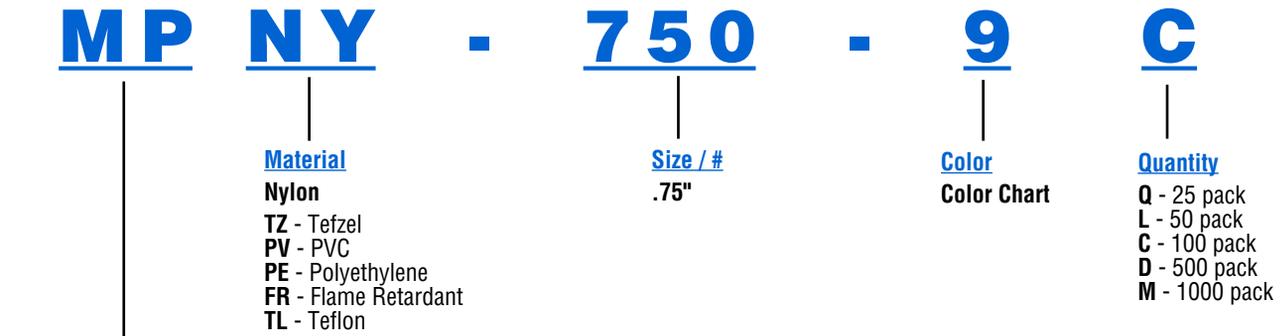
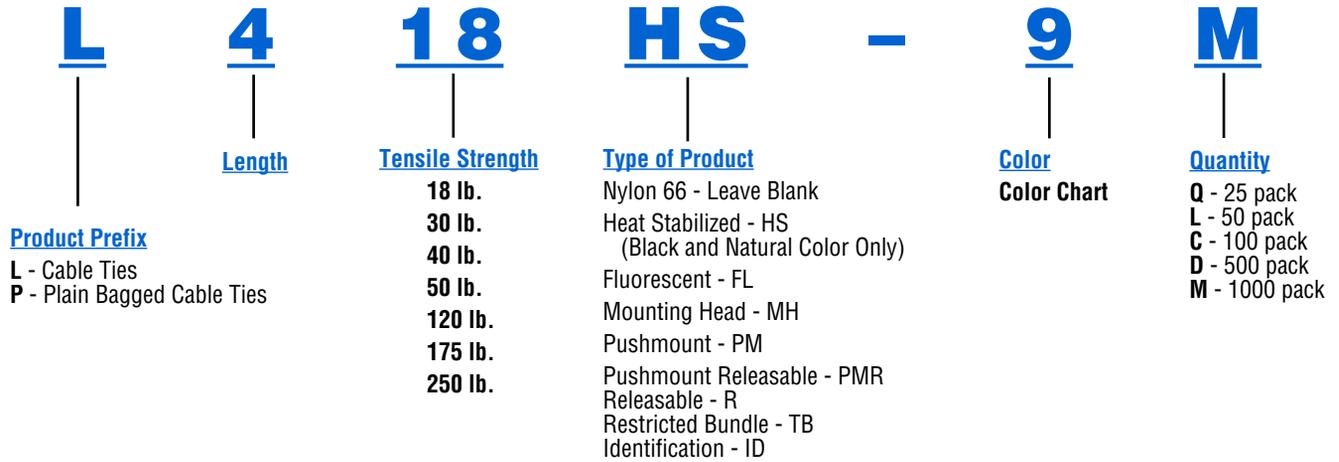


Thomas & Betts

Ty-Fast®

Cable Ties

Part Number Construction



- 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 -
 - 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 - Grommets
 - GR - Extruded Grommets
 - GRU - Extruded Grommets Uncut

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

Ty-Rap®/Ty-Fast®

Materials for Molded Assembly Hardware

Property	ASTM Method	Test Condition	Units	Molded 6/6 Nylon	Heat Stabilized Nylon	UV Black Nylon
Tensile Strength	D638	+73°F; 50% RH	kpsi	11.2	11.2	9.0
Elongation at Break	D638	+73°F; 50% RH	%	≥300	≥300	200
Yield Strength	D638	+73°F; 50% RH	kpsi	8.5	8.5	9.0
Shear Strength	D732	Dry As Molded (DAM)	kpsi	9.6	9.6	10.5
Deformation Under Load	D621	2,000 psi +122°F; DAM	%	1.4	1.4	1.2
IZOD Impact	D256	+73°F; 50% RH	ft lb/in	2.1	2.1	2.0
Tensile Impact Strength	D1822	+73°F; Long Specimen; DAM	ft lb/in 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 . ft ² . °F	1.7	1.7	1.7
Brittleness Temperature	D746	50% RH	°F	-85	-85	-62
Oxygen Index	D2863	DAM 50% RH	%O ₂	28 31	28 31	25 31
UL Flammability	UL 94	DAM 50% RH	– –	V-2 V-2	V-2 V-2	V-2 V-2

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

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 Ty-Fast® Customer Service Representative or your Ty-Fast® Distributor for chemical data relative to your application.

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

NBS Smoke Generation for 6/6 Nylon

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

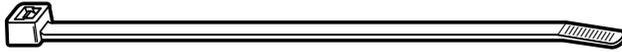
- Results as provided by National Bureau of Standards (NBS). Results may not be directly correlated with larger fires, such as burning buildings. Materials should be tested to your application.

Temperature Index for Molded Nylons

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

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

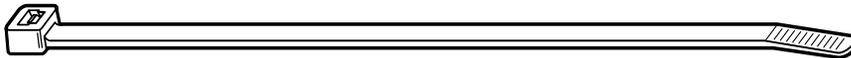
Ty-Fast® Cable Ties



Miniature – Series 18

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

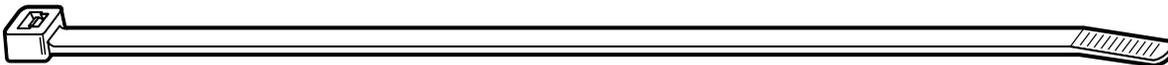
• Use QC-100, L-200, L-400-C, or ERG-299 Installation Tools.
Consult Customer Service for availability and colors.



Intermediate - Series 30

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

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



Standard - Series 50

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

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

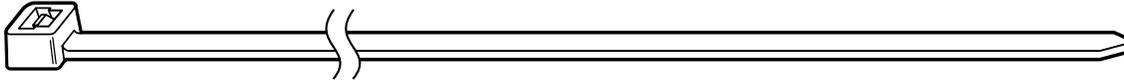
Sample Catalog Order:

L 4 18 9 C = Natural Color Type

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

Thomas & Betts

Ty-Fast® Cable Ties



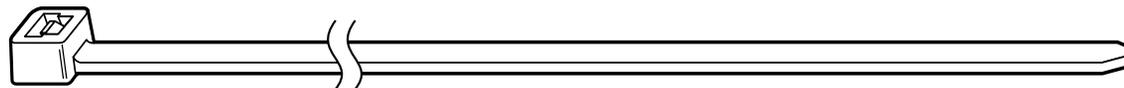
Heavy Duty - Series 120

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

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



Ty-Rap®/Ty-Fast®



Extra Heavy Duty - Series 175

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

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

Sample Catalog Order:

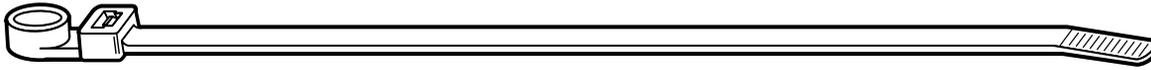
L 4 18 9 C = Natural Color Type

Color Table

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

Thomas & Betts

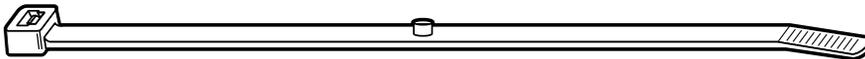
Ty-Fast® Cable Ties



Mounting Head Ties

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

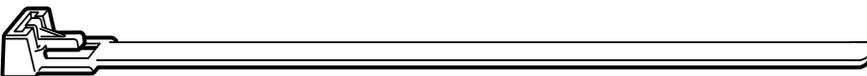
• Use QC-100, L-200, L-400-C, ERG-297, or ERG-299 Installation Tool. Consult Customer Service for availability and colors.



Restricted Bundle

Std. Cat. No.	Cat. No. Bulk	Material	Color	Bundle Diameter		Length		Width		Minimum Loop Tensile		Tab Height		Std. Pkg.	Bulk Pkg.
				Inch	(mm)	Inch	(mm)	Inch	(mm)	LB	(kg)	Inch	(mm)		
TB-5-30TB-3-M		Nylon	Orange	2 1/2 - 1 1/4	(17 - 32)	5.6	(142)	.130	(3)	30	(13.6)	.062	(1.58)	-	1000

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



Releasable Ties

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

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

Sample Catalog Order:

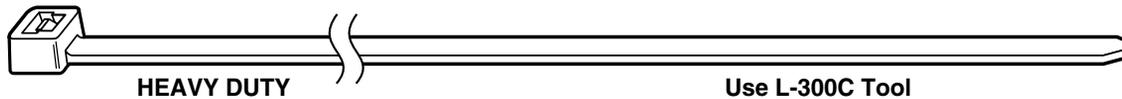
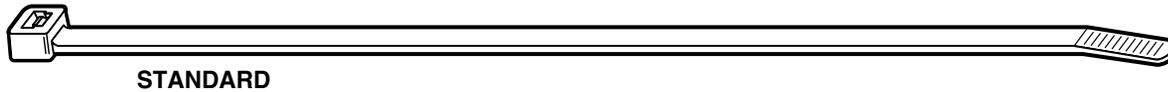
L 4 18 9 C = Natural Color Type

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

Ty-Fast® Cable Ties

Ty-Fast® Military Specification Ties

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



Mil-Spec Cable Ties

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

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

• Ty-Fast® FSCM 65664 QPL Listed

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

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

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

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

Sample Catalog Order:

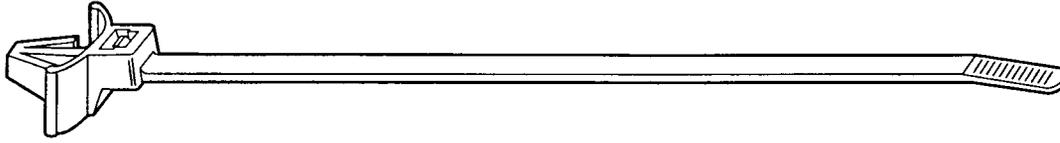
L 4 18 9 C = Natural Color Type

Color Table

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

Ty-Fast®

Cable Ties



Push Mount Cable Ties

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

- For use in .250 mounting hole.
- Maximum panel thickness .105.

Consult Customer Service for availability and colors.

Releasable Push Mount Cable Ties

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

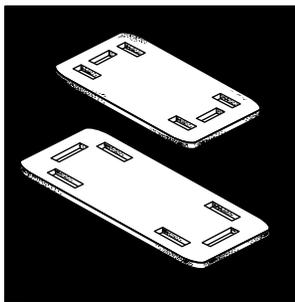
- For use in .250 mounting hole.
- Maximum panel thickness .105.

Consult Customer Service for availability and colors.

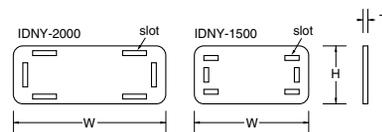


Ty-Rap®/Ty-Fast®

Ty-Fast® Cable Ties



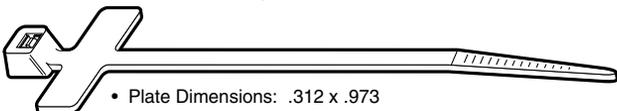
- Two tags for marking bundles to 9" diameters.
- Run ties through opposing mounting holes lengthwise or across the height of tags.
- IDNY-1500 accepts ties to 50 pound tensile; IDNY-2000 accepts ties to 120 pound tensile.
- Stocked in 6/6 Natural Nylon.
- UL Flammability 94 V-2.
- Non-Conductive, Non-Corrosive;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



Identification Tags

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

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

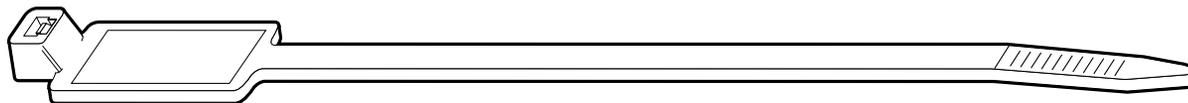


• Plate Dimensions: .312 x .973

Identification Ties

Std. Cat. No.	Bulk Cat. No.	Material	Color	Max. Bundle Diameter		Length		Width		Minimum Loop Tensile		Std. Pkg.	Bulk Pkg.
				Inch	(mm)	Inch	(mm)	Inch	(mm)	LB	(kg)		
L-4-18ID-9-C	L-4-18ID-9-M	Nylon	Natural	¾	(19)	4.0	(102)	.100	(2.54)	18	(8.2)	100	1000

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



• Plate Dimensions: 1.081 x .522

Std. Cat. No.	Bulk Cat. No.	Material	Color	Max. Bundle Diameter		Length		Width		Minimum Loop Tensile		Std. Pkg.	Bulk Pkg.
				Inch	(mm)	Inch	(mm)	Inch	(mm)	LB	(kg)		
L-7-50ID-9-C	L-7-50ID-9-M	Nylon	Natural	1¾	(44)	7.875	(200)	.183	(4.65)	50	(22.7)	100	1000

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



Marking Pens

Cat. No.	Color Ink	Std. Pkg.
WT163M-1	Black Marking Pen	1
WT163M-3	Red Marking Pen	1

Thomas & Betts

Ty-Fast®

Cable Ties



• Striped ties are used to identify wire in bundles.

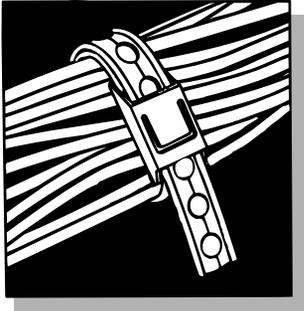
Striped Ties

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

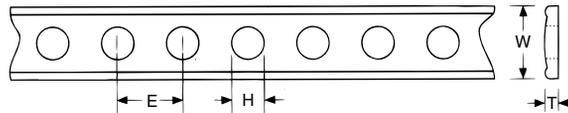
- Also available in bulk packages of 1000.
 - Use QC-100, L-200, L-400-C, or ERG-299 Installation Tool.
- Consult Customer Service for availability and colors.

Ty-Rap®/Ty-Fast®

Ty-Fast® 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 lbs. with BTNY-096).
- Non-Conductive, Non Corrosive; resistant to fuels, lubricants and most chemicals.



Strapping

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

Strapping Accessories Reference

Strapping Number	Strap-Tite Buckle	Mounting Tab	Mounting Cradle	Stud Buttons	Machine Screw
S2NY-096-0-C	N/A	M4NY-203-0-D	C4NY-203-0-D	BTNY-096-0-D	#2
S4NY-128-0-C	N/A	M4NY-203-0-D	C4NY-203-0-D	N/A	#5
S4NY-140-0-C	N/A	M4NY-203-0-D	C4NY-203-0-D	N/A	#6
S4NY-167-0-C	B4NY-167-0-D	M4NY-203-0-D	C4NY-203-0-D	BTNY-167-0-D	#8
S4NY-167X-0-C	B4NY-167-0-D	M4NY-203-0-D	C4NY-203-0-D	BTNY-167-0-D	#8
S6NY-000-0-C	N/A	M6NY-265-0-D	N/A	N/A	N/A
S6NY-167-0-C	N/A	M6NY-265-0-D	N/A	N/A	#8
S6NY-203-0-C	B6NY-203-0-D	M6NY-265-0-D	N/A	BTNY-203-0-D	#10
S6NY-203X-0-C	B6NY-203-0-D	M6NY-265-0-D	N/A	BTNY-203-0-D	#10
S7NY-265-0-C	B7NY-265-0-D	M7NY-328-0-D	N/A	BTNY-265-0-D	#¼
S7NY-265X-0-C	B7NY-265-0-D	M7NY-328-0-D	N/A	BTNY-265-0-D	#¼
S7NY-281-0-C	N/A	M7NY-328-0-D	N/A	N/A	#¼
S9NY-203-0-C	N/A	N/A	N/A	BTNY-203-0-D	#10
S9NY-265-0-C	N/A	N/A	N/A	BTNY-265-0-D	#¼
S9NY-390-0-C	N/A	N/A	N/A	N/A	#¾

Thomas & Betts

Ty-Fast® Cable Ties

Ty-Fast® Cable Ties Industrial Jar



90457-I and 90650-IUV

Features:

- Ties available in natural nylon or black weather-resistant nylon.
- Reusable jar.
- Easily merchandised.
- Great value.
- UL Recognized and Mil-Spec Approved.

CAT-PAK® CABLE TIE ASSORTMENTS

- Four Styles in Convenient Resealable Bags
- Natural or UV Black Nylon
- Point-of-Purchase Display

UL RECOGNIZED

Item Number	Contents	Material	Bags/Case
CAT-711	100 L-7-50-9 50 L-11-60-9	Natural Nylon	25
CAT-4811	100 L-4-18-9 100 L-8-40-9 50 L-11-50-9		35
CAT-5811	200 L-5-30-9 200 L-8-40-9 50 L-11-50-9		30

• For UV Black Assortments, add “-B” to Item Number

Ty-Rap®/Ty-Fast®

Cat. No.	Material	Jar Qty.	Length (inches)	Width	Max. Bundle (inches)	Tensile Strength	Pallet Qty.	
							Mini	Full
90457-I		200	4	.100	5/8 (6.25)	18#	240	400
		100	5.6	.130	1 1/4 (1.25)	30#	240	400
		200	7.5	.187	1 3/4 (1.75)	50#	240	400
90457-IUV		200	4	.100	5/8 (6.25)	18#	240	400
		100	5.6	.130	1 1/4 (1.25)	30#	240	400
		200	7.5	.187	1 3/4 (1.75)	50#	240	400
90650-I		300	4	.100	5/8 (.625)	18#	160	320
		300	7.5	.187	1 3/4 (1.75)	50#	160	320
		50	11.1	.187	3	50#	160	320
90650-IUV		300	4	.100	5/8 (.625)	18#	160	320
		300	7.5	.187	1 3/4 (1.75)	50#	160	320
		50	11.1	.187	3	50#	160	320

Thomas & Betts

Ty-Fast®

Low Profile In-Line Fasteners



Low profile contoured head compared with the profile of the traditional Ty-Fast® Cable Tie.

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

Features

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

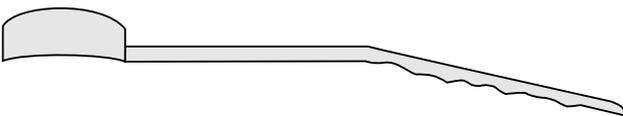
Cable Ties Ordering Information

Std. Cat. No.	Bundle Range Dia. In. (mm)	Tensile Strength Lbs.(Kg)	Tie Length In (mm)	Strap Width In (mm)	Strap Thick In (mm)	Std. Pkg.	Bulk. Pkg.
SF100-18	.125-1.00 (3.17-25.4)	18 (8.16)	4.65 (118.11)	.095 (2.41)	.043 (1.09)	100	1000
SF150-18	.125-1.50 (3.17-38.1)	18 (8.16)	6.45 (163.83)	.095 (2.41)	.043 (1.09)	100	1000
SF200-18	.125-2.00 (3.17-50.8)	18 (8.16)	8.10 (205.74)	.095 (2.41)	.043 (1.09)	100	1000
SF175-50	.187-1.75 (4.74-44.4)	50 (22.68)	7.70 (195.58)	.187 (4.74)	.048 (1.21)	100	1000
SF300-50	.187-3.00 (4.74-76.2)	50 (22.68)	11.33 (287.78)	.187 (4.74)	.052 (1.32)	100	1000
SF400-50	.187-4.00 (4.74-101.6)	50 (22.68)	14.53 (369.06)	.187 (4.74)	.052 (1.32)	100	1000
SF400-120	.375-4.00 (9.52-101.6)	120 (54.43)	14.58 (370.33)	.300 (7.62)	.075 (1.90)	100	1000
SF600-120	.375-6.00 (9.52-152.4)	120 (54.43)	21.00 (533.40)	.300 (7.62)	.075 (1.90)	100	1000
ERG297	Application tool for 50 lbs. to 120 lbs. tensile strength						
ERG299	Application tool for 18 lbs. to 50 lbs. tensile strength						

Material: Natural Nylon 6/6 in accordance with ASTM D4066 PA111. Also available in black outdoor weatherable (suffix "-X").

Dimensions: Designed according to military standards (MS3367) except for the head length, which is slightly larger than MIL spec.

Packaging: Standard package is 1000 pieces.



How to Order Color Cable Ties

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

Packaged for handling convenience.

Natural nylon is standard. For colored Safe-Ty in-line fasteners add the following suffix numbers to catalog numbers. Example: **SF175-50-2** (Red) For Distributor Packs (100), add suffix "-100".

Example: **SF175-50-100**

(Consult customer service for ordering information)

Thomas & Betts

Ty-Fast® Badge Holder



Ty-Fast® 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.

Ty-Fast® Badge Holder offers these prominent advantages:

- Designed specifically for lift ticket attachment to prevent damage to skier's clothing.
- Incorporates a loop diameter restriction device that forms the proper sized 1¼-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 colors to match the resort's color schemes and is made of high quality Nylon 6/6 material to withstand cold temperatures. It is 5 inches long and has a sturdy 30 pound tensile strength rating. Badge Holders may also be heat-stamped with additional identification, such as the resort's name or web site.

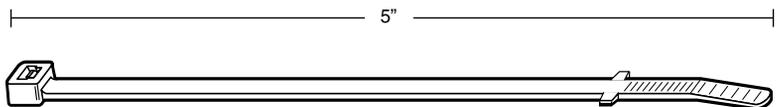
When the snow starts, Badge Holders will be ready to keep things snug, all the way down the mountain!

Ty-Fast® Badge Holder Ordering Information

Cat No.	Description	Qty.	UPC
SJ-5-30SKI-9-M	Ticket Fastener	1000 bag	786210-17017

Natural nylon color. Please consult Customer Service for ordering and availability of colors and heat-stamping.

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



Ty-Rap®/Ty-Fast®

Thomas & Betts