In 1898 Thomas & Betts was founded in New York. The corporate head quarters now reside in Memphis, Tennessee with the company being listed on the New York stock exchange. Thomas & Betts has now over 100 years of experience of successfully supplying quality products to the market by using innovative design and manufacturing techniques. Thomas & Betts is a global player having presence in Europe, North & Central America, Australia and the Far- & Middle East. Worldwide the 12,000 employees are dedicated to ensuring that Thomas & Betts is fast, flexible and customer focused.

The basis of Thomas & Betts product superiority has always been innovative engineering. No other company can match our record of "firsts" in product development that increases performance whilst reducing installation time and human error. To name three:

The first Solderless Lug, a boost to safety in complex electrical installations.

Color-Keyed® system of compression connectors designed to ensure that proper installation procedures were used, quickly became the industry standard.

The original Ty-Rap® cable ties were introduced to manage complex wire harnesses used in aircraft manufacturing. The Ty-Rap® cable ties are designed to make the task of fastening, bundling, clamping and managing wires easier and quicker for professional applications as well as home improvement specialists and do-it-yourself enthusiasts and can be used in the most adverse conditions: heat, humidity, cold…
When reliability and performance are required, knowledgeable professionals turn to the original Ty-Rap® cable tie.

The first Ty-Rap® cable ties were used in 1958, which means that in 2008 we celebrate the 50th anniversary of Ty-Rap®.

The European Headquarters are located at Rhode-St-Genèse near Brussels. From a logistics point of view we have a Centralised European Distribution Centre in La Louvière, Belgium, supplying to our customers throughout Europe. Our manufacturing sites throughout Europe include Germany, France, Hungary, UK and The Netherlands.

Whilst one of our main business remains in the Electrical Products, Thomas & Betts also has leading brands along with significant market share in Emergency Lighting, Safety Systems, Steel Structures, Communications, Electronic Systems Protection, Earthing and Lightning protection.

Maintaining the technical excellence of existing products along with new product innovation is part of our core competence as we continue to provide competitive solutions to our customers across the world.

Thomas&Betts

Your European Connection

CABLE JOINTS, CABLE TERMINATIONS, CABLE GLANDS, CABLE CLEATS
FEEDER PILLARS, FUSE LINKS, ARC FLASH, CABLE ROLLERS, CUT-OUTS

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Make sure it's secure
with Ty-Rap® cable ties

Thomas&Betts

Make sure it's secure with Ty-Rap® cable ties

Thomas & Betts invented the Ty-Rap® cable tie to solve the problem of harnessing the hundreds of wires used in manufacturing aircraft and revolutionised the world of fastening. Today, the Ty-Rap® brand remains the benchmark for excellence and innovation in wire management.

Thomas & Betts' broad offering of cable ties is designed to make the task of fastening, bundling, clamping and managing wires easier and quicker for industrial applications, construction, communications, utility and OEM professionals as well as home improvement specialists and do-it-yourself enthusiasts.

Ty-Rap® Premium Cable Ties with Steel Locking Barb to bundle, secure and manage your cables

When strength, aesthetics, reliability and performance are required, knowledgeable professionals turn to the original and the best source for cable ties and accessories.

The corrosion-proof, non-magnetic stainless steel locking device inside the tie head guarantees the strongest and most durable locking you will ever find on the market. Ty-Rap® can be used in the most adverse conditions: humidity, heat, cold,…

Engineered for labour savings and high performance, Ty-Rap® cable ties are commonly used in a variety of applications.

When you choose a Ty-Rap® cable tie from Thomas & Betts, you can count on quality, performance and innovation to make your work easier.

Thomas&Betts

Features & Benefits
Premium cable ties with steel locking barb

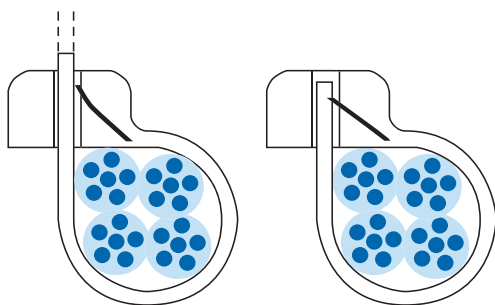**(1)** **"The Grip of Steel" Non-Magnetic Stainless Steel Locking Barb – marine grade type 316** - that firmly anchors inside the tie head, ensures a strong, reliable and long lasting fastening under adverse conditions.

(2) **Rounded Edges,** on the head and the strap, provide a comfortable handling of the ties and prevent sharp edges from damaging the cables. This gradual transition from the strap to the head protects the material against breaking at this most critical point. The edges of the head are also rounded off to offer maximum protection from injury.

(3) **Smooth, Notchless Body,** reduces stress concentration points, making the Ty-Rap® ties stronger and thinner than conventional ties with notched bodies. The low-profile design of the head allows secure tying in tight spaces. No serration, means infinite adjustment (tensioned right every time).

(4) **Ribbed and Stippled Surface,** to prevent the tie from slipping around and along the bundle under vibration conditions and external shock.

(5) **Angled Tail (turned up)** for fast and easy insertion into the locking head and ideally suited to being picked up from a flat work area.

(6) **Non-Slip Tail,** for an easy grip and pulling through the head during tensioning.

(7) **Extensive Range of Approvals:** Germanischer Lloyd, Lloyd's Register of Shipping, Bureau Veritas, UL, VG and MIL.

(8) **Most Extensive Choice of Special Materials:** in addition to Polyamide 6.6 (standard, UV-resistant, heat stabilised, flame retardant, heat stabilised / UV-resistant), Polyamide 4.6 (extra high temperature) and Polyamide 12, the Ty-Rap® ties are available in Polypropylene, Fluoropolymer (ECTFE), Fluoropolymer (ETFE) and the recently introduced Detectable Polyamide 6.6 and Detectable Polypropylene. UL 94 V-0, UL 94 V-2 and UL 94 HB.

E49405

⑥ **⑤**

Wide Range of Size Combinations: **⑨**
several lengths up to 1143 mm, in 6 typical widths with a tensile strength up to 780N, to fasten cable bundles with a diameter up to 330mm.

Wide Choice of Colours: **⑩**
10 standard colours are available, along with a range of special colours and the capability to supply customised pre-printed ties on demand, in any one of the 10 standard colours.

Dedicated Tooling, **⑪**
to ensure that the excess end of the Ty-Rap® tie is automatically cut off and the slight over cut retracts into the head, eliminating the risk of injury from protruding sharp edges.

②

Different Types of Packaging, **⑫**
including the unique "workbench boxes" for fast working without problems or losses. Recyclable packaging for a better contribution to the environment.

④

Outstanding Range of Special Ties, **⑬**
all with the famous stainless steel locking device:
ties with mounting hole or integrated peg/nail,
panel mounting ties, identification ties with integrated label,...

Broad Range of Mounting Bases and Accessories. **⑭**

UV-resistant	Flame retardant	Heat resistant	Weather-proof	Low temperature flexibility	Radiation resistant	Chemically resistant	Low smoke	Detectable

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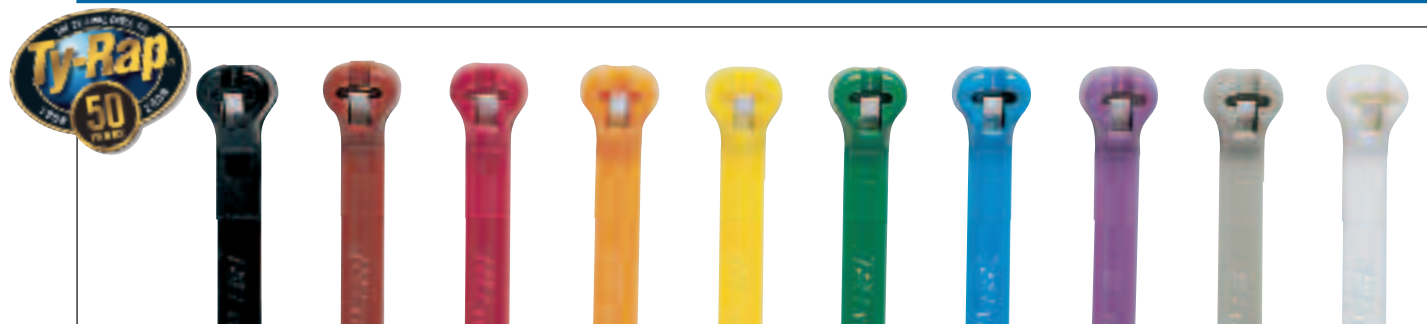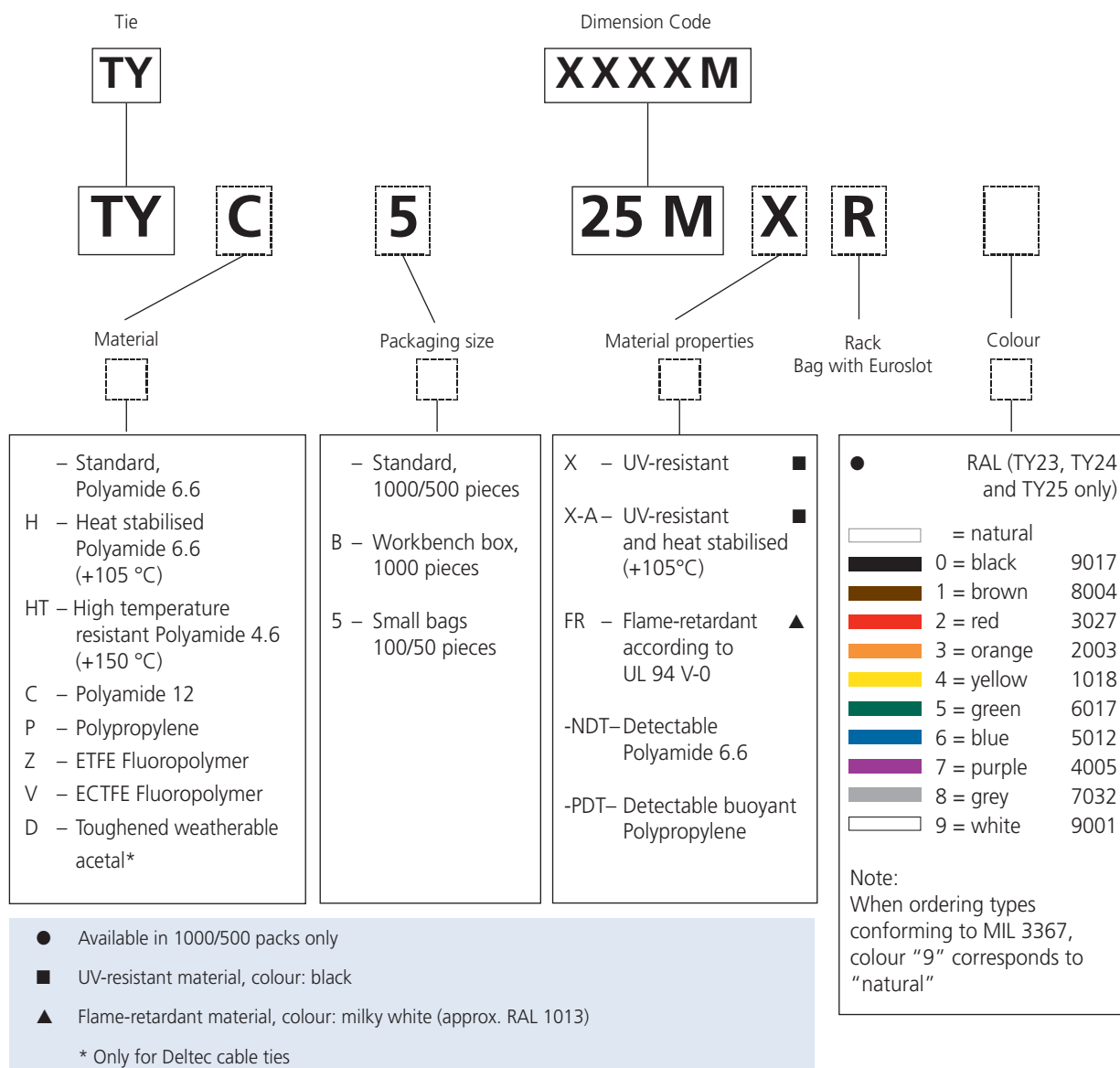
Product reference structure
Premium cable ties with steel locking barb

To the standard Product Reference, you can add special order codes for: material, packaging size, material properties and colours.

Example:

Tie				Dimension Code			
TY				**X X X X M**			

TY	**C**	**5**	**25 M**	**X**	**R**	

| Material | Packaging size | Material properties | Rack Bag with Euroslot | Colour |

Material

– Standard, Polyamide 6.6

H – Heat stabilised Polyamide 6.6 (+105 °C)

HT – High temperature resistant Polyamide 4.6 (+150 °C)

C – Polyamide 12

P – Polypropylene

Z – ETFE Fluoropolymer

V – ECTFE Fluoropolymer

D – Toughened weatherable acetal*

Packaging size

– Standard, 1000/500 pieces

B – Workbench box, 1000 pieces

5 – Small bags 100/50 pieces

Material properties

X – UV-resistant ■

X-A – UV-resistant and heat stabilised (+105°C) ■

FR – Flame-retardant according to UL 94 V-0 ▲

-NDT – Detectable Polyamide 6.6

-PDT – Detectable buoyant Polypropylene

Colour

● RAL (TY23, TY24 and TY25 only)

	= natural
	0 = black	9017
	1 = brown	8004
	2 = red	3027
	3 = orange	2003
	4 = yellow	1018
	5 = green	6017
	6 = blue	5012
	7 = purple	4005
	8 = grey	7032
	9 = white	9001

Note:
When ordering types conforming to MIL 3367, colour "9" corresponds to "natural"

● Available in 1000/500 packs only

■ UV-resistant material, colour: black

▲ Flame-retardant material, colour: milky white (approx. RAL 1013)

* Only for Deltec cable ties

Note: Nylon (Polyamide) is inherently susceptible to environmental conditions. Ty-Rap® cable ties are moisturised 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.
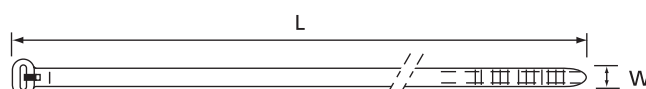
Polyamide 6.6 cable ties - Natural
Premium cable ties with steel locking barb

The main characteristics of the Ty-Rap® cable ties are shown on pages 8 and 9.

- Standard version (Polyamide 6.6), to cover most indoor applications
- Several lengths and 6 typical widths with a tensile strength up to 780N, to cover the most demanding applications
- Wide range of colours
- Packaging: OEM bulk quantities in recyclable polythene bags
- Also available in small bags with Euroslot (see page 13) and in workbench boxes (see page 15)

Technical Information

Material - Moulding	Polyamide 6.6
Material - Locking barb	316 grade stainless steel
Temperature range	-40°C to +85°C
Colour	Natural (other colours see page 16)
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free

E49405

Product Ref.	MIL Spec.	Length L [mm]	Width W [mm]	Thickness [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
TY23M	MS-3367-4	92	2.4	1.0	2 - 16	80	1000	
TY232M	–	203	2.4	1.0	2 - 50	80	1000	
TY234M	–	356	2.4	1.0	2 - 102	80	1000	ERG50
TY24M	MS-3367-5	140	3.6	1.1	2 - 29	180	1000	WT193A
TY242M	–	204	3.6	1.1	2 - 50	180	1000	
TY26M	–	284	3.6	1.1	2 - 76	130	1000	
TY244M	–	368	3.6	1.1	2 - 103	130	1000	
TY25M	MS-3367-1	186	4.8	1.3	3.5 - 45	220	1000	ERG50
TY253M	MS-3367-7	295	4.8	1.3	3.5 - 78	220	1000	ERG120
TY28M	MS-3367-2	361	4.8	1.4	3.5 - 102	220	1000	WT193A
TY271M	–	150	7.6	1.5	6 - 31	540	500	
TY272M	–	223	6.9	1.6	6 - 50	540	500	
TY27M	MS-3367-3	340	6.9	1.6	6 - 90	540	500	ERG120
TY275M	–	457	6.9	1.6	6 - 127	540	500	L-500-EU
TY277M	–	617	6.9	1.6	6 - 177	540	500	
TY29M	MS-3367-6	771	6.9	1.5	6 - 229	540	500	
TY53510M	–	889	8.2	1.7	to 254	780	50	WT3D
TY54513M	–	1143	8.2	1.7	to 330	780	50	L-500-EU

Description of product reference structure: see page 10
Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

* Some approvals may not be applicable to all the Product References. Contact your Sales Office for approvals limitations

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Thomas&Betts

Polyamide 6.6 cable ties - UV-resistant black
Premium cable ties with steel locking barb
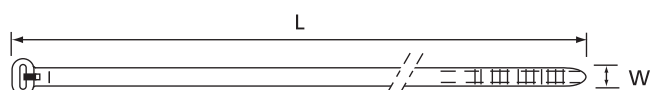
The main characteristics of the Ty-Rap® cable ties are shown on pages 8 and 9.

- UV-resistant version, especially recommended for outdoor applications
- Also available in heat stabilised + UV-resistant version, for outdoor applications that also require a resistance to high temperature (+105 °C). See page 20 (TY...MX-A series)
- Several lengths and 6 typical widths with a tensile strength up to 780N, to cover the most demanding applications
- Packaging: OEM bulk quantities in recyclable polythene bags
- Also available in small bags with Euroslot (see page 14) and in workbench boxes (see page 15)

Technical Information

Material - Moulding	Polyamide 6.6
Material - Locking barb	316 grade stainless steel
Temperature range	-40°C to +85°C
Colour	Black
Flammability rating	UL 94 V-2
Other properties	UV-resistant, Halogen free, Silicone free

E49405

Product Ref.	MIL Spec.	Length L [mm]	Width W [mm]	Thickness [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
TY23MX	MS-3367-4	92	2.4	1.0	2 - 16	80	1000	ERG50 WT193A
TY232MX	–	203	2.4	1.0	2 - 50	80	1000	
TY234MX	–	356	2.4	1.0	2 - 102	80	1000	
TY24MX	MS-3367-5	140	3.6	1.1	2 - 29	180	1000	
TY242MX	–	204	3.6	1.1	2 - 50	180	1000	
TY26MX	–	284	3.6	1.1	2 - 76	130	1000	
TY244MX	–	368	3.6	1.1	2 - 103	130	1000	
TY25MX	MS-3367-1	186	4.8	1.3	3.5 - 45	220	1000	ERG50 ERG120 WT193A
TY253MX	MS-3367-7	295	4.8	1.3	3.5 - 78	220	1000	
TY28MX	MS-3367-2	361	4.8	1.4	3.5 - 102	220	1000	
TY271MX	–	150	7.6	1.5	6 - 31	540	500	ERG120 L-500-EU
TY272MX	–	223	6.9	1.6	6 - 50	540	500	
TY27MX	MS-3367-3	340	6.9	1.6	6 - 90	540	500	
TY275MX	–	457	6.9	1.6	6 - 127	540	500	
TY277MX	–	617	6.9	1.6	6 - 177	540	500	
TY29MX	MS-3367-6	771	6.9	1.5	6 - 229	540	500	
TY53510MX	–	889	8.2	1.7	to 254	780	50	WT3D L-500-EU
TY54513MX	–	1143	8.2	1.7	to 330	780	50	

Description of product reference structure: see page 10
Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

* Some approvals may not be applicable to all the Product References. Contact your Sales Office for approvals limitations

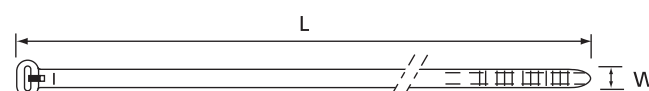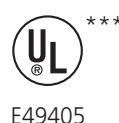# Polyamide 6.6 cable ties - Natural - Euroslot packaging
Premium cable ties with steel locking barb

The main characteristics of the Ty-Rap® cable ties are shown on pages 8 and 9.

- Standard version (Polyamide 6.6), to cover most indoor applications
- Packaging in small polythene bags with Euroslot, ideal for display and point-of-sales promotion (rack)
- Several lengths and 6 typical widths with a tensile strength up to 780N, to cover the most demanding applications
- Very convenient for small series production: 100 pieces (for cable ties from 2.4 mm to 4.8 mm width) or 50 pieces (for cable ties 7.0 mm width and above)

Technical Information

Material - Moulding	Polyamide 6.6
Material - Locking barb	316 grade stainless steel
Temperature range	-40°C to +85°C
Colour	Natural**
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free

E49405

Product Ref.	MIL Spec.	Length L [mm]	Width W [mm]	Thickness [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
TY523MR	MS-3367-4	92	2.4	1.0	2 - 16	80	100	
TY5232MR	–	203	2.4	1.0	2 - 50	80	100	
TY5234M*	–	356	2.4	1.0	2 - 102	80	100	ERG50
TY524MR	MS-3367-5	140	3.6	1.1	2 - 29	180	100	WT193A
TY5242MR	–	204	3.6	1.1	2 - 50	180	100	
TY526MR	–	284	3.6	1.1	2 - 76	130	100	
TY5244MR	–	368	3.6	1.1	2 - 103	130	100	
TY525MR	MS-3367-1	186	4.8	1.3	3.5 - 45	220	100	ERG50
TY5253MR	MS-3367-7	295	4.8	1.3	3.5 - 78	220	100	ERG120
TY528MR	MS-3367-2	361	4.8	1.4	3.5 - 102	220	100	WT193A
TY5271MR	–	150	7.6	1.5	6 - 31	540	50	
TY5272MR	–	223	6.9	1.6	6 - 50	540	50	
TY527MR	MS-3367-3	340	6.9	1.6	6 - 90	540	50	ERG120
TY5275M*	–	457	6.9	1.6	6 - 127	540	50	L-500-EU
TY5277M*	–	617	6.9	1.6	6 - 177	540	50	
TY529M*	MS-3367-6	771	6.9	1.5	6 - 229	540	50	

* Product References TY5234M, TY5275M, TY5277M and TY529M have no Euroslot
** For other colours, please contact your Sales Office
*** Some approvals may not be applicable to all the Product References. Contact your Sales Office for approvals limitations
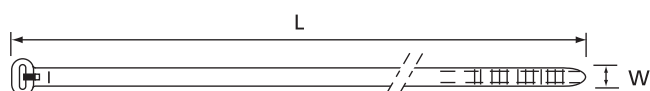
Description of Product Reference structure: see page 10
Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

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1.1 Ty-Rap®

Polyamide 6.6 cable ties - UV-resistant black - Euroslot packaging
Premium cable ties with steel locking barb

UL** E49405   GL**   Lloyd's Register TYPE APPROVED**

The main characteristics of the Ty-Rap® cable ties are shown on pages 8 and 9.

- UV-resistant version, especially recommended for outdoor applications
- Packaging in small polythene bags with Euroslot, ideal for display and point-of-sales promotion (rack)
- Several lengths and 6 typical widths with a tensile strength up to 780N, to cover the most demanding applications
- Very convenient for small series production: 100 pieces (for cable ties from 2.4 mm to 4.8 mm width) or 50 pieces (for cable ties 7.0 mm width and above)

Technical Information

Material - Moulding	Polyamide 6.6
Material - Locking barb	316 grade stainless steel
Temperature range	-40°C to +85°C
Colour	Black
Flammability rating	UL 94 V-2
Other properties	UV-resistant, Halogen free, Silicone free

Product Ref.	MIL Spec.	Length L [mm]	Width W [mm]	Thickness [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
TY523MXR	MS-3367-4	92	2.4	1.0	2 - 16	80	100	ERG50 WT193A
TY5232MXR	–	203	2.4	1.0	2 - 50	80	100	
TY5234MX*	–	356	2.4	1.0	2 - 102	80	100	
TY524MXR	MS-3367-5	140	3.6	1.1	2 - 29	180	100	
TY5242MXR	–	204	3.6	1.1	2 - 50	180	100	
TY526MXR	–	284	3.6	1.1	2 - 76	130	100	
TY5244MXR	–	368	3.6	1.1	2 - 103	130	100	
TY525MXR	MS-3367-1	186	4.8	1.3	3.5 - 45	220	100	ERG50 ERG120 WT193A
TY5253MXR	MS-3367-7	295	4.8	1.3	3.5 - 78	220	100	
TY528MXR	MS-3367-2	361	4.8	1.4	3.5 - 102	220	100	
TY5271MXR	–	150	7.6	1.5	6 - 31	540	50	ERG120 L-500-EU
TY5272MXR	–	223	6.9	1.6	6 - 50	540	50	
TY527MXR	MS-3367-3	340	6.9	1.6	6 - 90	540	50	
TY5275MX*	–	457	6.9	1.6	6 - 127	540	50	
TY5277MX*	–	617	6.9	1.6	6 - 177	540	50	
TY529MX*	MS-3367-6	771	6.9	1.6	6 - 229	540	50	

* Product References TY5234MX, TY5275MX, TY5277MX and TY529MX have no Euroslot
** Some approvals may not be applicable to all the Product References. Contact your Sales Office for approvals limitations

Description of Product Reference structure: see page 10
Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

4 *Thomas & Betts • www.tnb-europe.com*

Polyamide 6.6 cable ties - Workbench boxes
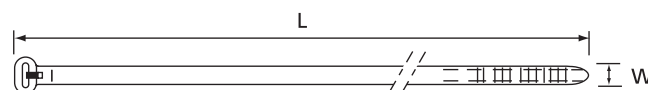*Premium cable ties with steel locking barb*

- An attractive packaging option for high volume manual assembly: 1000 pieces in a workbench box - easy to reach, hence timesaving
- This user-friendly packaging allows fast working without problems or losses

Technical Information

Material - Moulding	Polyamide 6.6
Material - Locking barb	316 grade stainless steel
Temperature range	-40°C to +85°C
Colour	Natural or UV-resistant black**
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free, UV-resistant (black)

E49405

Product Ref.	MIL Spec.	Colour	Length L [mm]	Width W [mm]	Thickness [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
TYB23M	MS-3367-4	natural	92	2.4	1.0	2 - 16	80	1000	
TYB23MX	MS-3367-4	UV-resistant black	92	2.4	1.0	2 - 16	80	1000	
TYB232M	–	natural	203	2.4	1.0	2 - 50	80	1000	
TYB232MX	–	UV-resistant black	203	2.4	1.0	2 - 50	80	1000	ERG50 WT193A
TYB24M	MS-3367-5	natural	140	3.6	1.1	2 - 29	180	1000	
TYB24MX	MS-3367-5	UV-resistant black	140	3.6	1.1	2 - 29	180	1000	
TYB25M	MS-3367-1	natural	186	4.8	1.3	3.5 - 45	220	1000	
									ERG50, ERG120
TYB25MX	MS-3367-1	UV-resistant black	186	4.8	1.3	3.5 - 45	220	1000	WT193A

* Some approvals may not be applicable to all the Product References. Contact your Sales Office for approvals limitations
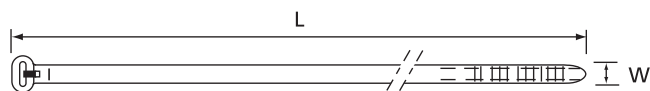** For other colours, please contact your Sales Office.

Description of Product Reference structure: see page 10
Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

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Thomas&Betts

Polyamide 6.6 cable ties - Coloured
Premium cable ties with steel locking barb

- Wide choice of colours: 10 standard colours are available, along with a range of special colours and the capability to supply customised pre-printed ties on demand, in any one of the 10 standard colours.
- Several lengths and 6 typical widths with a tensile strength up to 780N, to cover the most demanding applications

UL ** GL ** Lloyd's Register ** TYPE APPROVED BUREAU VERITAS **

E49405

Technical Information

Material - Moulding	Polyamide 6.6
Material - Locking barb	316 grade stainless steel
Temperature range	-40°C to +85°C
Colour	See table
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free

Product Ref.	MIL Spec.	Length L [mm]	Width W [mm]	Thickness [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
TY23M-*	MS-3367-4	92	2.4	1.0	2 - 16	80	1000	
TY232M-*	–	203	2.4	1.0	2 - 50	80	1000	
TY234M-*	–	356	2.4	1.0	2 - 102	80	1000	ERG50
TY24M -*	MS-3367-5	140	3.6	1.1	2 - 29	180	1000	WT193A
TY242M-*	–	204	3.6	1.1	2 - 50	180	1000	
TY26M-*	–	284	3.6	1.1	2 - 76	130	1000	
TY244M-*	–	368	3.6	1.1	2 - 103	130	1000	
TY25M-*	MS-3367-1	186	4.8	1.3	3.5 - 45	220	1000	ERG50
TY253M-*	MS-3367-7	295	4.8	1.3	3.5 - 78	220	1000	ERG120
TY28M-*	MS-3367-2	361	4.8	1.4	3.5 - 102	220	1000	WT193A
TY271M-*	–	150	7.6	1.5	6 - 31	540	500	
TY272M-*	–	223	6.9	1.6	6 - 50	540	500	
TY27M-*	MS-3367-3	340	6.9	1.6	6 - 90	540	500	ERG120
TY275M-*	–	457	6.9	1.6	6 - 127	540	500	L-500-EU
TY277M-*	–	617	6.9	1.6	6 - 177	540	500	
TY29M-*	MS-3367-6	771	6.9	1.5	6 - 229	540	500	
TY53510M-*	–	889	8.2	1.7	to 254	780	50	WT3D
TY54513M-*	–	1143	8.2	1.7	to 330	780	50	L-500-EU

Description of Product Reference structure: see page 10
Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

For cable ties in a specific colour, replace * in the Product Reference by the colour code:
0 = black, 1 = brown, 2 = red, 3 = orange, 4 = yellow, 5 = green, 6 = blue, 7 = purple, 8 = grey and 9 = white

For example: TY23M-1 defines a brown TY23M cable tie. Contact your Sales Office for product availability.

** Some approvals may not be applicable to all the Product References. Contact your Sales office for approvals limitations

Polyamide 6.6 cable ties - Multi-coloured
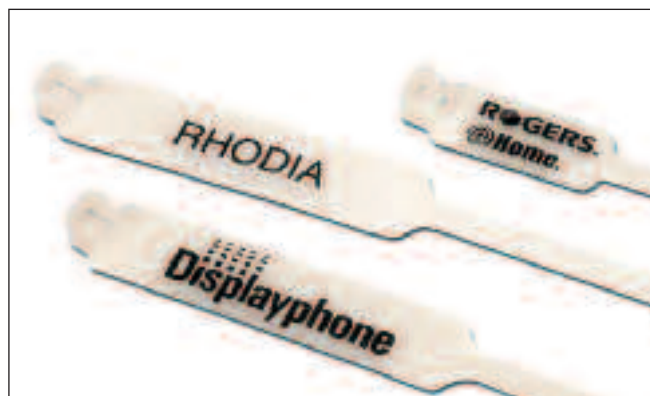*Premium cable ties with steel locking barb*

- Multi-coloured TY25M cable ties in a single, convenient package
- Supplied in bags of 100 ties containing ten ties of each of the ten standard colours (TY25M-0 to TY25M-9)

Technical Information

Material - Moulding	Polyamide 6.6
Material - Locking barb	316 grade stainless steel
Temperature range	-40°C to + 85°C
Colour	Black, brown, red, orange, yellow, green, blue, purple, grey, white (10 ties of each colour)
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free
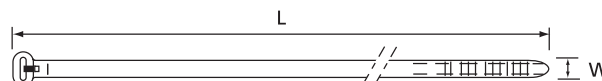
E49405

Product Ref.	Length L [mm]	Width W [mm]	Thickness [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
TY525M-CLRS	186	4.8	1.3	3.5 - 45	220	100	ERG50, ERG120, WT193A

Description of Product Reference structure: see page 10
Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

Printed cable ties
Premium cable ties with steel locking barb

Thomas & Betts extends its highly respected existing capabilities in cable tie manufacture with its in-house printing equipment in order to respond flexibly to customer requirements and to allow rapid delivery. This service is offered for ties having a width of minimum 4.6 mm (batches of minimum 5,000 ties approximately)

- The cable tie is printed using a Hot foil transfer process
- The print is highly durable
- The basic character set is in accordance with DIN1451- (3 mm character height)
- Text colours: Red, Orange, Yellow, Bright-Yellow, Green, Blue, Brown, Dark-Brown, Black, White

Please contact your Sales Office for other character sets and special stamping designs.
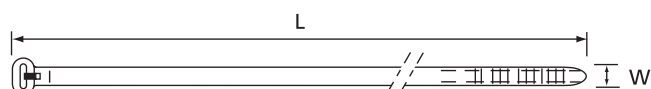
Polyamide 6.6 cable ties - Flame retardant
Premium cable ties with steel locking barb

- Flame retardant version. Ideal for use when low flammability and low smoke are necessary such as public transport, tunnels, etc.

Technical Information

Material - Moulding	Polyamide 6.6
Material - Locking barb	316 grade stainless steel
Temperature range	-40°C to +85°C
Colour	White
Flammability rating	UL 94 V-0
Other properties	Halogen free, Silicone free

E49405

Product Ref.	Length L [mm]	Width W [mm]	Thickness [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
TY23MFR	92	2.4	1.0	2 - 16	80	1000	ERG50 WT193A
TY232MFR	203	2.4	1.0	2 - 50	80	1000	
TY24MFR	140	3.6	1.1	2 - 29	180	1000	
TY25MFR	186	4.8	1.1	3.5 - 45	220	1000	ERG50, ERG120
TY28MFR	360	4.8	1.1	3.5 - 102	220	1000	WT193A
TY27MFR	340	7.0	1.6	6 - 90	540	500	ERG120, L-500-EU

Description of Product Reference structure: see page 10
Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

Polyamide 6.6 cable ties - Heat stabilised
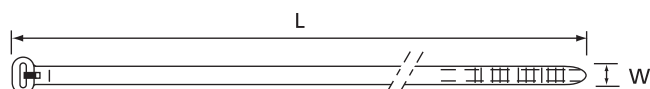*Premium cable ties with steel locking barb*

• Heat stabilised version, for applications up to 105°C.

Technical Information

Material - Moulding	Polyamide 6.6
Material - Locking barb	316 grade stainless steel
Temperature range	-40°C to +105°C
Colour	Natural (may have a greenish tint)
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free
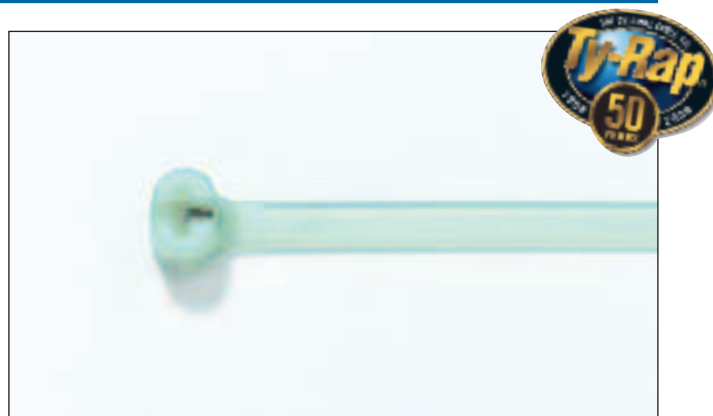
E49405

Product Ref.	Length L [mm]	Width W [mm]	Thickness [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
TYH23M / TYHB23M	92	2.4	1.0	2 - 16	80	1000	ERG50 WT193A
TYH232M	203	2.4	1.0	2 - 50	80	1000	
TYH24M	140	3.6	1.1	2 - 29	130	1000	
TYH242M*	208	3.6	1.1	2 - 50	130	1000	
TYH26M	284	3.6	1.1	2 - 76	130	1000	
TYH25M	186	4.8	1.1	3.5 - 45	220	1000	ERG50 ERG120 WT193A
TYH253M*	290	4.8	1.1	3.5 - 78	220	1000	
TYH28M	360	4.8	1.1	3.5 - 102	220	1000	
TYH272M*	222	7.6	1.6	6 - 50	540	500	ERG120 L-500-EU
TYH27M	340	7.0	1.6	6 - 90	540	500	
TYH29M*	771	6.9	1.5	6 - 229	530	500	

* Not UL recognised

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Thomas&Betts

Ty-Rap®

Polyamide 6.6 cable ties - Heat stabilised + UV-resistant
### Premium cable ties with steel locking barb

- Heat stabilised + UV-resistant version, for outdoor applications that also require a resistance to high temperature (+105°C)
- For OEM and MRO applications like: transportation, lawn / garden / farm / construction equipment, recreational vehicles

Technical Information

Material - Moulding	Polyamide 6.6
Material - Locking barb	316 grade stainless steel
Temperature range	-40°C to +105°C
Colour	Black
Flammability rating	UL 94 V-2
Other properties	UV-resistant, heat stabilised, Halogen free, Silicone free
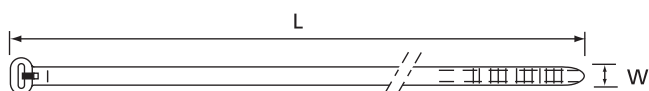
E49405

Product Ref.	Length L [mm]	Width W [mm]	Thickness [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
TY23MX-A	92	2.3	0.9	2 - 16	80	1000	ERG50, ERG120* WT193A
TY24MX-A	140	3.6	1.1	2 - 29	180	1000	
TY25MX-A	186	4.8	1.2	3.5 - 45	220	1000	
TY27MX-A	340	6.9	1.6	6 - 89	540	500	ERG120, L-500-EU

* ERG120 can not be used with TY23MX-A and TY24MX-A

Description of Product Reference structure: see page 10
Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

Polyamide 4.6 cable ties - Extra high temperature
Premium cable ties with steel locking barb

- Extreme continuous temperature rating: -40°C to +150°C (in air)
- For high temperature environments in industrial, OEM, MRO and commercial construction applications such as: metal processing, paper mills, lighting, automotive

Technical Information

Material - Moulding	Polyamide 4.6
Material - Locking barb	316 grade stainless steel
Temperature range	-40°C to +150°C
Colour	Light green
Flammability rating	UL 94 V-2
Other properties	Extra high temperature resistant, Halogen free, Silicon free
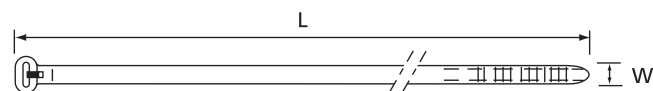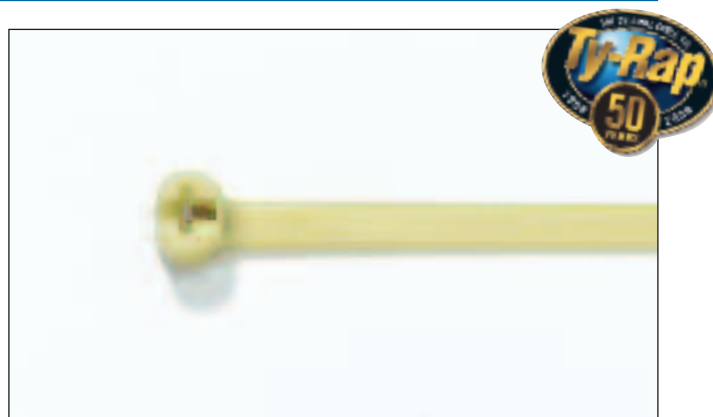
Product Ref.	Length L [mm]	Width W [mm]	Thickness [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
TYHT23M	92	2.3	0.9	2 - 16	80	1000	ERG120*, ERG50 WT193A
TYHT25M	186	4.8	1.2	3.5 - 45	220	1000	
TYHT28M	360	4.8	1.3	3.5 - 102	220	1000	
TYHT27M	340	6.9	1.6	6 - 89	540	500	ERG120, L-500-EU
TYHT277M	617	7.0	1.6	6 - 177	540	500	

* ERG120 can not be used with TYHT23M

Thomas&Betts

Ty-Rap®

Polyamide 12 cable ties - UV-resistant
Premium cable ties with steel locking barb

- Polyamide 12 UV-resistant version, remains flexible in cold & dry environments.
- Ages better and has a better chemical resistance than Polyamide 6.6

Technical Information

Material - Moulding	Polyamide 12
Material - Locking barb	316 grade stainless steel
Temperature range	-40°C to +85°C
Colour	Black
Flammability rating	UL 94 V-2
Other properties	UV-resistant, Halogen free, Silicone free
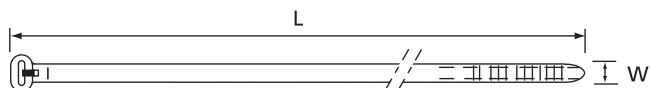
Product Ref.	Length L [mm]	Width W [mm]	Thickness [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
TYC25MX	186	4.8	1.1	3.5 - 45	150	1000	ERG50
TYC525MX	186	4.8	1.1	3.5 - 45	150	100	ERG120
TYC28MX	360	4.8	1.1	3.5 - 102	150	1000	WT193A
TYC272MX	222	7.6	1.6	6 - 50	380	500	
TYC27MX	340	7.0	1.6	6 - 90	380	500	ERG120
TYC527MX	340	7.0	1.6	6 - 90	380	50	L-500-EU
TYC29MX	771	7.6	1.6	6 - 229	380	500	

Description of Product Reference structure: see page 10
Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

Polypropylene cable ties - Weatherable
Premium cable ties with steel locking barb

- Polypropylene weatherable version, for increased resistance to chemicals
- Resistant against inorganic acids, polyhydric alcohols, neutral and basic salts

Technical Information

Material - Moulding	Polypropylene
Material - Locking barb	316 grade stainless steel
Temperature range	-40°C to +85°C
Colour	Black
Flammability rating	UL 94 HB
Other properties	UV-resistant, Halogen free, Silicone free
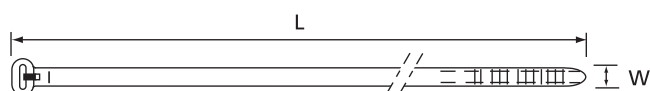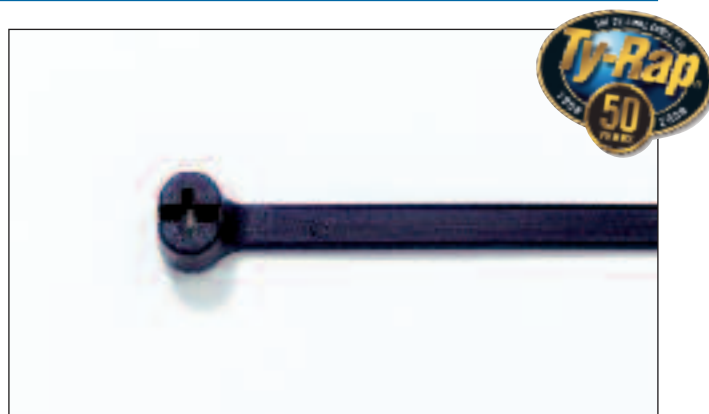
Product Ref.	Length L [mm]	Width W [mm]	Thickness [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
TYP23MX	92	2.4	1.0	2 - 16	50	1000	ERG50 WT193A
TYP25MX	186	4.8	1.1	3.5 - 45	130	1000	ERG50 WT193A
TYP28MX	360	4.8	1.1	3.5 - 102	130	1000	ERG50 WT193A
TYP27MX	340	7.0	1.6	6 - 90	270	500	ERG120, L-500-EU

Description of Product Reference structure: see page 10
Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

Thomas&Betts

Detectable cable ties
*Premium cable ties with steel locking barb*

The new Ty-Rap® Detectable Cable Ties from Thomas & Betts incorporate a unique compound (patent pending) that can be detected by X-Ray equipment, metal detectors and visual inspection equipment.

Particularly recommended for applications in food, pharmaceutical and other contamination-sensitive industries using detection systems, where cable tie installation residuals (cut tails) are not allowed in the finished product.

- Detectable by metal detectors set at minimum 1.5 mm diameter ferrous sphere
- Detectable by X-Ray equipment
- Bright blue colour for an easy visual detection
- Help achieve the HACCP EU-Directive
- Available in standard Polyamide 6.6 or in buoyant Polypropylene version for liquid-processing applications
- Available in 4 different sizes in convenient small bags with Euroslot

Technical Information

Material - Moulding	Polyamide 6.6 or Polypropylene
Material - Locking barb	316 grade stainless steel
Temperature range	-40°C to +85°C
Colour	Bright blue
Flammability rating	UL 94 V-2 (Polyamide 6.6)
	UL 94 HB (Polypropylene)
Other properties	Halogen free, silicone free
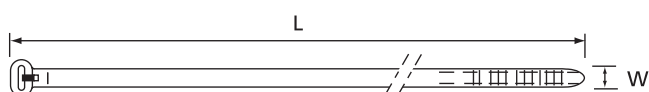
Product Ref.	Material	Length L [mm]	Width W [mm]	Bundle diameter from...to [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
DETECTABLE POLYAMIDE 6.6							
TY523M-NDT	Polyamide 6.6	92	2.4	2 - 16	80	100	ERG50, WT193A
TY525M-NDT	Polyamide 6.6	186	4.8	3.5 - 45	220	100	ERG50, ERG120
TY528M-NDT	Polyamide 6.6	360	4.8	3.5 - 102	220	100	WT193A
TY527M-NDT	Polyamide 6.6	340	7.0	6 - 90	540	50	ERG120, L-500-EU
DETECTABLE POLYPROPYLENE							
TY523M-PDT	Polypropylene	92	2.4	2 - 16	50	100	
TY525M-PDT	Polypropylene	186	4.8	3.5 - 45	130	100	ERG50, WT193A
TY528M-PDT	Polypropylene	360	4.8	3.5 - 102	130	100	
TY527M-PDT	Polypropylene	340	7.0	6 - 90	270	50	ERG120, L-500-EU

Description of Product Reference structure: see page 10
Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

Fluoropolymer cable ties - ECTFE
*Premium cable ties with steel locking barb*

- Outstanding characteristic: lower smoke density when burnt
- Recommended for applications where smoke generation is a concern, such as plenum areas

Technical Information

Material - Moulding	Fluoropolymer ECTFE
Material - Locking barb	316 grade stainless steel
Temperature range	-46°C to +140°C
Colour	Maroon
Flammability rating	UL 94 V-0
Other properties	UV-resistant, low smoke

E49405
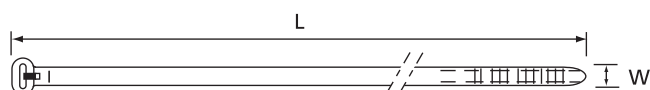
Product Ref.	Length L [mm]	Width W [mm]	Thickness [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
TYV23M	92	2.4	1.0	2 - 16	80	1000	ERG50
TYV523M	92	2.4	1.0	2 - 16	80	100	WT193A
TYV25M	186	4.8	1.1	3.5 - 45	220	1000	ERG50, ERG120
TYV525M	186	4.8	1.1	3.5 - 45	220	100	WT193A

Thomas&Betts

Ty-Rap®

Fluoropolymer cable ties - ETFE
Premium cable ties with steel locking barb
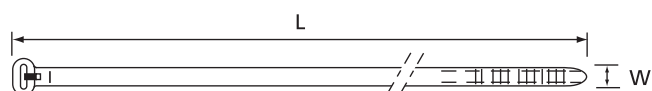
- ETFE Fluoropolymer version, resistant to chemicals and to radiation
- Non-outgassing properties for zero gravity applications
- The best all around plastic material for cable ties
- Typical applications include: nuclear, power plants, space industry, etc.

Technical Information

Material - Moulding	Fluoropolymer ETFE
Material - Locking barb	316 grade stainless steel
Temperature range	-46°C to +150°C
Colour	Aquamarine
Flammability rating	UL 94 V-0
Other properties	UV-resistant, Silicone free, inert to most solvents and chemicals, hydrolytically stable, radiation resistant. Non-outgassing properties for zero gravity applications.

E49405

Product Ref.	Length L [mm]	Width W [mm]	Thickness [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
TYZ23M*	92	2.4	1.0	2 - 16	80	1000	
TYZ523M*	92	2.4	1.0	2 - 16	80	100	
TYZ25M	186	4.8	1.1	3.5 - 45	220	1000	ERG50
TYZ525M	186	4.8	1.1	3.5 - 45	220	100	ERG120**
TYZ28M	360	4.8	1.1	3.5 - 102	220	500	WT193A
TYZ528M	360	4.8	1.1	3.5 - 102	220	100	
TYZ27M	340	7.0	1.6	6 - 90	540	100	ERG120, L-500-EU
TYZ527M	340	7.0	1.6	6 - 90	540	50	

* Product Ref. TYZ23M and TYZ523M are UL listed (E49405), all other items are UL recognized
** ERG120 not to be used on TYZ23M

Description of Product Reference structure: see page 10
Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

Integrated mounting hole cable ties
Special ties with steel locking barb

- Can be directly mounted onto a support with screws, bolts or rivets
- Mounting and bundling in one maintenance-friendly assembly.
- Typical application: cable harness manufacture and pre- and end-mounting of bundles and parts. Maintenance friendly mounting of cables, tubes and parts in all types and sizes of machines and installations - indoor and outdoor.
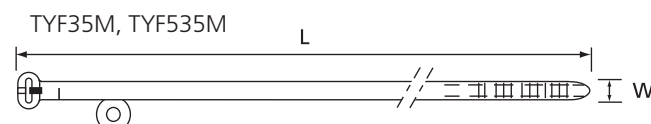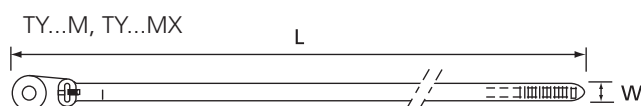
Technical Information

Material - Moulding	Polyamide 6.6
Material - Locking barb	316 grade stainless steel
Temperature range	-40°C to +85°C
Colour	Natural or UV-resistant black (see table)
Flammability rating	UL 94 V-2
Other properties	UV-resistant (black), Halogen free Silicone free

BUREAU VERITAS *

UL * E49405

VG approved * VG95387 part 4, type B

TY...M, TY...MX

TYF35M, TYF535M

Product Ref.	Colour	Diameter of mounting hole [mm]	Length L [mm]	Width W [mm]	Thickness [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
TY33M	natural	3.0	102	2.3	0.9	2 - 16	80	1000	
TY533M	natural	3.0	102	2.3	0.9	2 - 16	80	100	
TY33MX	UV-resistant black	3.0	102	2.3	0.9	2 - 16	80	1000	ERG50
TY533MX	UV-resistant black	3.0	102	2.3	0.9	2 - 16	80	100	WT193A
TY34M	natural	4.4	151	3.5	1.0	2 - 29	180	1000	
TY534M	natural	4.4	151	3.5	1.0	2 - 29	180	100	
TY34MX	UV-resistant black	4.4	151	3.5	1.0	2 - 29	180	1000	
TY534MX	UV-resistant black	4.4	151	3.5	1.0	2 - 29	180	100	
TY635M	natural	4.0	198	4.7	1.1	3.5 - 45	220	1000	
TY635MX	UV-resistant black	4.0	198	4.7	1.1	3.5 - 45	220	1000	
TY35M	natural	5.1	199	4.7	1.1	3.5 - 45	220	1000	ERG50
TY535M	natural	5.1	199	4.7	1.1	3.5 - 45	220	100	ERG120
TY35MX	UV-resistant black	5.1	199	4.7	1.1	3.5 - 45	220	1000	WT193A
TY535MX	UV-resistant black	5.1	199	4.7	1.1	3.5 - 45	220	100	
TY1435M	natural	6.7	198	4.7	1.1	3.5 - 45	220	1000	
TY37M	natural	6.7	356	7.7	2.0	6 - 90	540	500	
TY537M	natural	6.7	356	7.7	2.0	6 - 90	540	50	ERG120
TY37MX	UV-resistant black	6.7	356	7.7	2.0	6 - 90	540	500	L-500-EU
TY537MX	UV-resistant black	6.7	356	7.7	2.0	6 - 90	540	50	
TYF35M	natural	4.0	186	4.7	1.2	3.5 - 45	220	1000	ERG50, ERG120
TYF535M	natural	4.0	186	4.7	1.2	3.5 - 45	220	100	WT193A

* Some approvals may not be applicable to all the Product References. Contact your Sales Office for approvals limitations

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Thomas&Betts

Panel mounting cable ties
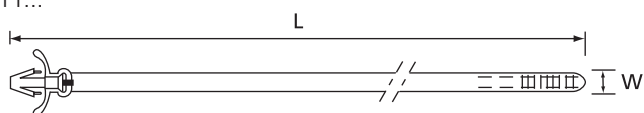*Special ties with steel locking barb*

- Fastening and clip-mounting in one
- Fast pre- or on-site-assembly for a range of panel thickness up to 4.0 mm
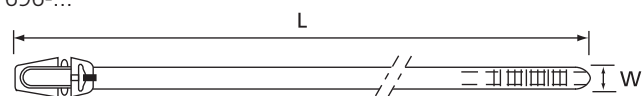- Fast and secure clip-mounting

Technical Information

Material - Moulding	Polyamide 6.6
Material - Locking barb	316 grade stainless steel
Temperature range	-40°C to +85°C
Colour	Natural or UV-resistant black (see table)
Flammability rating	UL 94 V-2
Other properties	UV-resistant (black), Halogen free Silicone free

E49405   BUREAU VERITAS *

TY...

L

W

696-...

L

W

Product Ref.	Colour	Diameter of mounting hole [mm]	Length L [mm]	Width W [mm]	Thickness [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Suitable for board/wall thickness from to [mm]	Quantity [pieces]	Tooling
ANCHOR TYPE										
TY54SM	natural	4.5 - 5.2	150	3.5	1.0	2 - 32	130	0.1 - 2.5	1000	ERG50
TY54SMX	UV-resistant black	4.5 - 5.2	150	3.5	1.0	2 - 32	130	0.1 - 2.5	1000	ERG120**
TY38M	natural	6.4 - 6.7	200	4.7	1.3	3.5 - 44	220	1.0 - 4.0	1000	WT193A
TY38MX	UV-resistant black	6.4 - 6.7	200	4.7	1.3	3.5 - 44	220	1.0 - 4.0	1000	
STANDARD TYPE										
696-41836	natural	5.8 - 7.5	197	4.8	1.1	3.5 - 45	220	2.2 - 3.7	1000	ERG50 , ERG120
696-41836X	UV-resistant black	5.8 - 7.5	197	4.8	1.1	3.5 - 45	220	2.2 - 3.7	1000	WT193A

* Some approvals may not be applicable to all the Product References. Contact your Sales Office for approvals limitations
** ERG120 only to be used with TY38M and TY38MX

Description of Product Reference structure: see page 10
Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

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Blind mounting cable ties
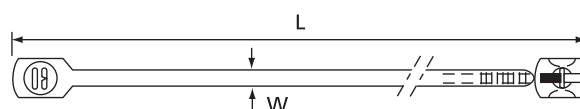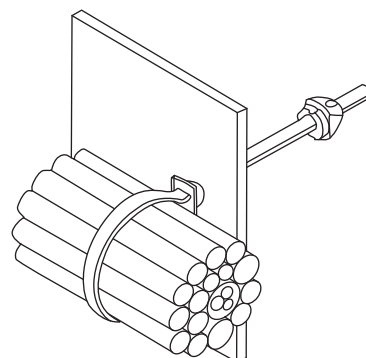## _Special ties with steel locking barb_

- Suitable for hard-to-reach areas
- Fast hidden mounting on walls and vehicle chassis
- Twist off the locking head
- Pull the tie end through the fastening hole
- Place locking head on tie end
- Pull tight and cut off excess
- In the locked state, the locking head neatly covers the mounting hole

Technical Information

Material - Moulding	Polyamide 6.6
Material - Locking barb	316 grade stainless steel
Temperature range	-40°C to +85°C
Colour	Natural or UV-resistant black (see table)
Flammability rating	UL 94 V-2
Other properties	UV-resistant (black), Halogen free
	Silicone free

E49405

Product Ref.	Colour	Diameter of mounting [mm]	Length L [mm]	Width W [mm]	Thickness [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
TYG34M	natural	6.4 - 7.0	160	3.6	1.1	2 - 32	180	1000	ERG50
TYG534M	natural	6.4 - 7.0	160	3.6	1.1	2 - 32	180	100	WT193A
TYG34MX	UV-resistant black	6.4 - 7.0	160	3.6	1.1	2 - 32	180	1000	
TYG534MX	UV-resistant black	6.4 - 7.0	160	3.6	1.1	2 - 32	180	100	

Description of Product Reference structure: see page 10
Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

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Thomas&Betts

# Blind mounting cable ties
Special ties

- Suitable for hard-to-reach areas
- Fast hidden mounting on walls and vehicle chassis
- Ideal for mounting on vehicle chassis. Can still be released before final tensioning
- In the locked state, the locking head neatly covers the mounting hole

Technical Information

Material	Polyamide 6.6
Temperature range	-40°C to +85°C
Colour	UV-resistant black
Flammability rating	UL 94 V-2
Other properties	UV-resistant, Halogen free, Silicone free
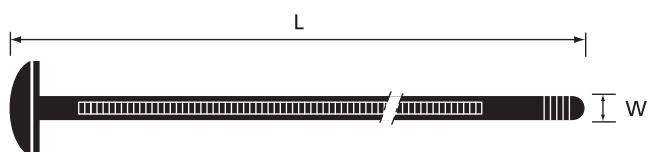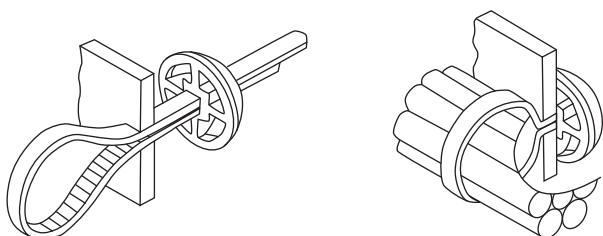
Product Ref.	Diameter of mounting hole [mm]	Length L [mm]	Width W [mm]	Thickness [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
TY41M	8.1 - 17.3	244	5.7	1.7	5 - 60	300	500	ERG120
TY541M	8.1 - 17.3	244	5.7	1.7	5 - 60	300	50	

Description of Product Reference structure: see page 10
Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

Integrated peg / nail cable ties
Special ties with steel locking barb

- TY545MX, with integrated nail for mounting onto wood or similar materials
- TY544MX, with integrated peg for mounting onto porous concrete or similar materials (masonry)
- Very simple application

Technical Information

Material - Moulding	Polyamide 6.6
Material - Locking barb	316 grade stainless steel
Temperature range	-40°C to +85°C
Colour	UV-resistant black
Flammability rating	UL 94 V-2
Other properties	UV-resistant, Halogen free, Silicone free
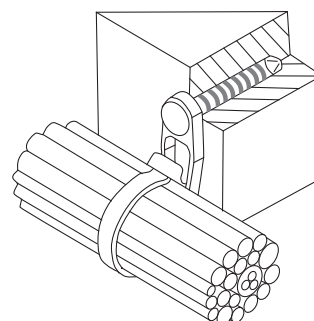
TY544MX

TY545MX

Product Ref.	Diameter of mounting hole [mm]	Length L [mm]	Width W [mm]	Thickness [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Mounting hole depth [mm]	Quantity [pieces]	Tooling
TY544MX	6.4	200	4.6	1.0	3.5 - 45	220	25 min.	50	ERG50, ERG120
TY545MX	–	200	4.7	1.0	4.7 - 38.1	220	–	50	WT193A

Description of Product Reference structure: see page 10
Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

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**Thomas&Betts**

Releasable cable ties
Special ties

- For temporary but strong bundling, especially during control box wiring
- Very simple application
- Available in 2 lengths for different applications
- May be re-used many times
- No tooling necessary

Technical Information

Material	Polyamide 6.6
Temperature range	-40°C to +85°C
Colour	Natural
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free
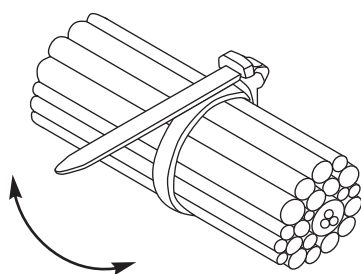
Pull end of tie through head. Turn tie end back on itself and insert into side of clip. To open, release tie end from clip and open tie.
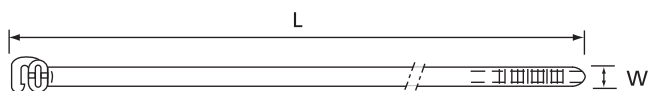
Product Ref.	Length L [mm]	Width W [mm]	Thickness [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]
TYR505	190	4.7	1.19	10 - 44	220	100
TYR508	364	4.7	1.19	10 - 102	220	100

Description of Product Reference structure: see page 10
Description of materials and properties: see pages 134 to 145

# Releasable lashing ties with incorporated fastener
Special ties

- Rugged one-piece construction, for heavy-duty applications
- Releasable and re-usable, ideal for temporary installations
- Fast and durable
- Easy handling
- No tooling necessary
- Specially developed accessories, like the wall plug TC5359 and the mounting bases TC5355 to TC5357 (see page 95 for details)

Technical Information

Material	Polyamide 6.6
Temperature range	-40°C to +85°C
Colour	UV-resistant black
Flammability rating	UL 94 V-2
Other properties	UV-resistant, Halogen free, Silicone free
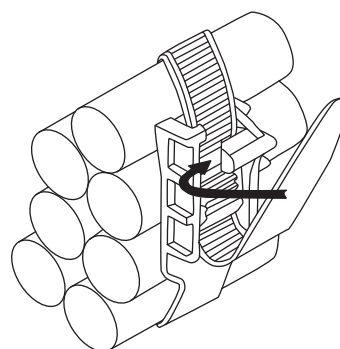
Introduce the cable tie tail into the lower slot in the head. Tighten the tie and pull it back. Slide in the tie under the catch from the side until it snaps into position.
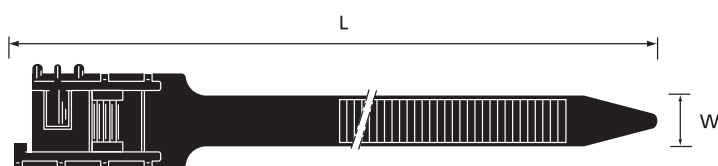
Product Ref.	Length L [mm]	Width W [mm]	Thickness [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]
TY409	483	12.7	2.0	45 - 121	890	100
TY5409	483	12.7	2.0	45 - 121	890	25

Description of Product Reference structure: see page 10
Description of materials and properties: see pages 134 to 145

Releasable 2-piece lashing ties, pre-assembled version
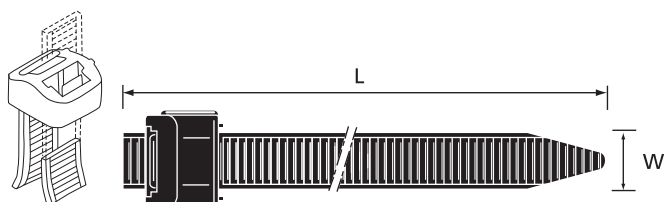*Special ties*

TY54XXPX

TY53418PX
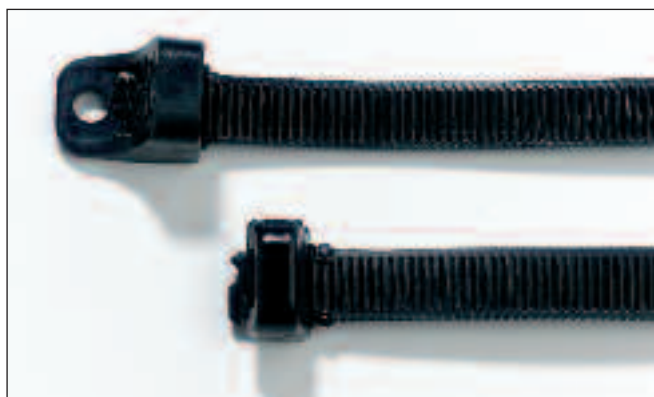
- Heavy-duty lashing ties, in cut lengths with pre-assembled heads
- Also available on reel with separate heads (see page 35)
- UV-resistant Polypropylene, ideal for applications where chemical resistance is important (heads in weatherable rigid Polyamide 6.6)
- Extremely robust (670N)
- Easily releasable & reusable
- 2 types of head: type A: no mounting hole
  type B: with mounting hole
- Typical applications: Indoor and outdoor fastening of cables, pipes and other parts in industry, shipbuilding, chemical industry etc
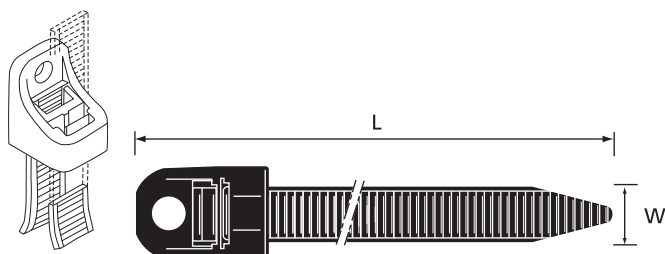
Technical Information

Material - Tie	Weatherable Polypropylene
Material - Head	Polyamide 6.6
Temperature range	Head: -40°C to +85°C
	Tie: -55°C to +110°C
Colour	UV-resistant black
Flammability rating	UL 94 V-2
Other properties	UV-resistant, Halogen free

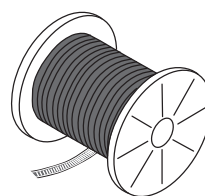| Product Ref.	Diameter of mounting hole [mm]	Length L [mm]	Width W [mm]	Thickness [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]
TY53418PX	6.9	457	13.2	1.9	45 - 127	670	25
TY5418PX	–	457	13.2	1.8	45 - 127	670	25
TY5424PX	–	610	13.2	1.8	10 - 178	670	25
TY5442PX	–	1067	13.2	1.8	10 - 305	670	10
TY5460PX	–	1524	13.2	1.8	10 - 457	670	10

Description of Product Reference structure: see page 10
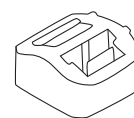Description of materials and properties: see pages 134 to 145

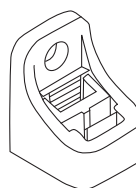# Releasable 2-piece lashing ties on reel with separate heads

Special ties

- Heavy-duty lashing ties on reel with separate heads
- Also available in cut lengths with pre-assembled heads (see page 34)
- UV-resistant Polypropylene, ideal for applications where chemical resistance is important (heads in weatherable rigid Polyamide 6.6)
- Extremely robust (670N)
- Easily releasable & reusable
- 2 types of head: type A: no mounting hole
  - type B: with mounting hole
- Typical applications: Indoor and outdoor fastening of cables, pipes and other parts in industry, shipbuilding, chemical industry etc.
- **Product Ref. 696-41563:** lashing tie on reel (300 m), in weatherable Polypropylene
- **Product Ref. 696-41562:** separate head, type A (no mounting hole), weatherable Polyamide 6.6 (200 pieces)
- **Product Ref. 696-41614:** separate head, type B (with mounting hole), weatherable Polyamide 6.6 (200 pieces) Mounting hole: Ø 6.9 mm
- **Product Ref. TY4100PX:** kit containing 30 m of lashing tie on reel + 50 separate heads, type A
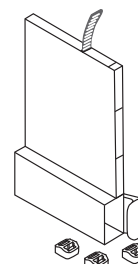
Technical Information

Material - Tie	Weatherable Polypropylene
Material - Head	Polyamide 6.6
Temperature range	Head: -40°C to +85°C
	Tie: -55°C to +110°C
Colour	UV-resistant black
Flammability rating	UL 94 V-2
Other properties	UV-resistant, Halogen free

696-41563

696-41562

696-41614

TY4100PX

696-41563

Product Ref.	Lashing tie, dimensions			Separate locking heads		Min. tensile strength of assembly [N]
	length [mm]	width [mm]	thickness [mm]	Quantity [pieces]	type	
696-41563	300	13.2	1.8	–	–	670
696-41562	–	–	–	200	Type A, no mounting hole	670
696-41614	–	–	–	200	Type B, with mounting hole	670
TY4100PX	30	13.2	1.8	50	Type A, no mounting hole	670

Description of Product Reference structure: see page 10
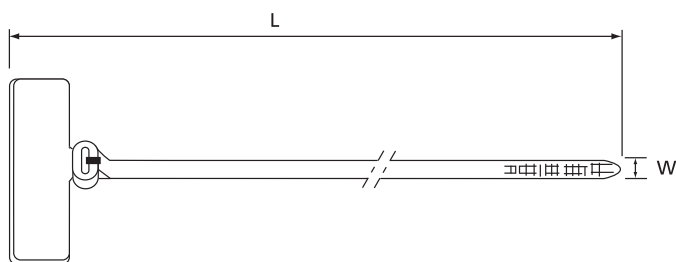Description of materials and properties: see pages 134 to 145

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Cable ties with identification tag
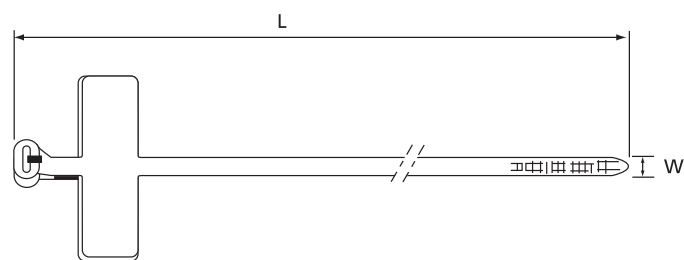*Special ties with steel locking barb*

UL
E49405

TY53M, TY553M, TY532M, TY5532M

TY51M, TY551M, TY512M, TY5512M

- Identification ties with incorporated label for durable marking and tying
- Label forms onto the bundle for types TY512M, TY51M and protrudes for ties TY532M and TY53M
- Type 51M is MIL (MS-3368-5) approved
- Trouble-free installation
- Simple marking on the roughened writing surface using the special marking pen WT163M-1 (black ink) or WT163M-3 (red ink) - See page 38
- All edges are rounded to make installation easier
- Available in bulk packaging (500 / 1000 pieces) or in small packaging (100 pieces)

Technical Information

Material - Moulding	Polyamide 6.6
Material - Locking barb	316 grade stainless steel
Temperature range	-40°C to +85°C
Colour	Natural
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free

Product Ref.	MIL Spec.	Length L [mm]	Width W [mm]	Thickness [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Label dimensions [mm]	Quantity [pieces]	Tooling
TY51M	MS-3368-5	92	2.4	1.0	10 - 16	80	25.4 x 7.9	500	
TY551M	MS-3368-5	92	2.4	1.0	10 - 16	80	25.4 x 7.9	100	
TY512M	–	210	2.4	1.0	10 - 51	80	25.4 x 7.9	1000	
TY5512M	–	210	2.4	1.0	10 - 51	80	25.4 x 7.9	100	ERG50
TY53M	–	102	2.4	1.0	2 - 16	80	20.6 x 9.3	500	WT193A
TY553M	–	102	2.4	1.0	2 - 16	80	20.6 x 9.3	100	
TY532M	–	212	2.4	1.0	2 - 51	80	20.6 x 9.3	1000	
TY5532M	–	212	2.4	1.0	2 - 51	80	20.6 x 9.3	100	

For other materials and colours contact your Sales Office

Description of Product Reference structure: see page 10
Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

Thomas & Betts • www.tnb-europe.com

Cable ties with identification tag
Special ties with steel locking barb

- Identification ties with incorporated label for durable marking and tying
- Label forms onto the bundle
- 5 different versions, up to 4 straps, in bulk and small packaging
- 4 versions (up to 3 straps) are Mil-specified
- Trouble free installation
- Labelling of bundles up to 102 mm diameter
- Simple marking on the roughened writing surface using the special marking pen WT163M-1 / WT163M-3 (black or red)
- All edges are rounded and surfaces smoothed to make installation easier
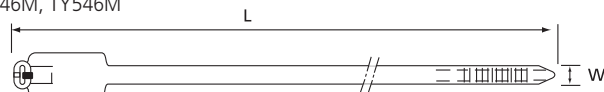
Technical Information

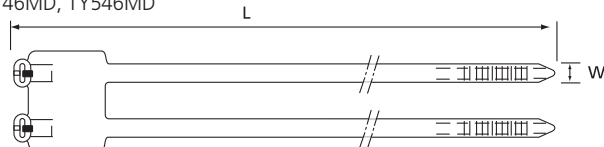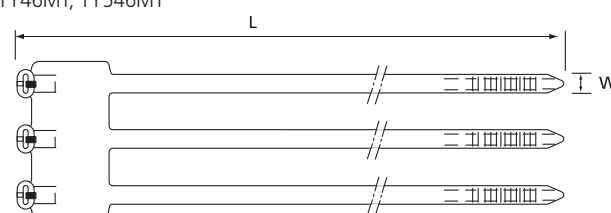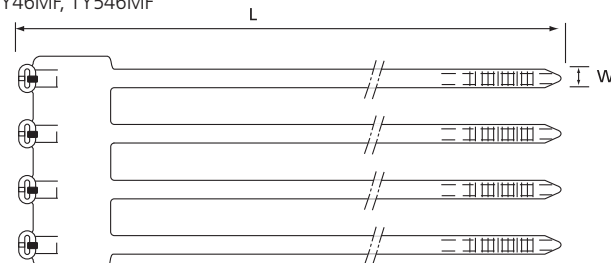|	
Material - Moulding	Polyamide 6.6
Material - Locking barb	316 grade stainless steel
Temperature range	-40°C to +85°C
Colour	Natural
Approvals	MIL: MS-3368 -1, -2, -3, -4
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free

E49405

TY48M, TY548M
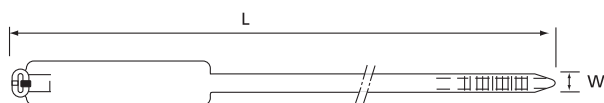
TY46M, TY546M

TY46MD, TY546MD

TY46MT, TY546MT

TY46MF, TY546MF

Product Ref.	MIL Spec.	Length L [mm]	Width W [mm]	Thickness [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Label dimensions [mm]	Quantity [pieces]	Tooling
TY48M	MS-3368-2	360	4.8	1.1	19 - 102	220	13.1 x 57.2	1000	
TY548M	MS-3368-2	360	4.8	1.1	19 - 102	220	13.1 x 57.2	100	
TY46M	MS-3368-1	184	4.8	1.1	9.5 - 45	220	13.1 x 27.0	1000	
TY546M	MS-3368-1	184	4.8	1.1	9.5 - 45	220	13.1 x 27.0	100	ERG50
TY46MD	MS-3368-3	184	4.8	1.1	9.5 - 45	220 x 2	29.7 x 27.0	500	ERG120
TY546MD	MS-3368-3	184	4.8	1.1	9.5 - 45	220 x 2	29.7 x 27.0	50	WT193A
TY46MT	MS-3368-4	184	4.8	1.1	9.5 - 45	220 x 3	46.0 x 27.0	500	
TY546MT	MS-3368-4	184	4.8	1.1	9.5 - 45	220 x 3	46.0 x 27.0	100	
TY46MF	–	184	4.8	1.1	9.5 - 45	220 x 4	63.1 x 27.0	250	
TY546MF	–	184	4.8	1.1	9.5 - 45	220 x 4	63.1 x 27.0	50	

For other materials and colours contact your Sales Office

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Thomas&Betts

Identification tags
Special ties

TC123-TB to
TC128-TB

TC223-TB

TC224-TB to
TC228-TB
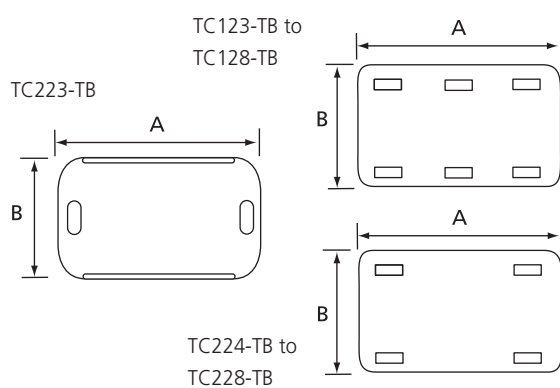
- Tie fastening labels
- For use in combination with the special marking pen WT163M-1 & WT163M-3 from Thomas & Betts, or with a hot foil marking
- For secure labelling of bundles, parts etc
- Available in 3 shapes to suit all design requirements

Technical Information

Material	Polyamide 6.6
Temperature range	-40°C to +85°C
Colour	Natural
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free

Product Ref.	Height A [mm]	Width B [mm]	Label thickness [mm]	Area for label		For tie width up to [mm]	Weight [g/100]	Quantity [pieces]
				height [mm]	width [mm]			
TC123-TB	19.6	32.0	0.3	9.5	32.0	4.8	17	1000
TC124-TB	19.6	38.0	0.3	9.5	38.0	4.8	18	1000
TC125-TB	19.6	44.7	0.3	9.5	44.7	4.8	19	1000
TC126-TB	19.6	51.0	0.3	9.5	51.0	4.8	31	1000
TC128-TB	19.6	63.5	0.3	9.5	63.5	4.8	35	1000
TC223-TB	19.6	32.3	1.0	18.0	24.0	4.8	37	1000
TC224-TB	19.6	38.0	0.5	9.5	38.0	4.8	34	1000
TC225-TB	19.6	44.7	0.5	9.5	44.7	4.8	40	1000
TC226-TB	19.6	51.0	0.5	9.5	51.0	4.8	39	1000
TC228-TB	19.6	63.5	0.5	9.5	63.5	4.8	51	1000

# Special marking pen
Special ties

- Optimally suited for fast and long-lasting writing on Polyamide surfaces
- Fast-drying ink
- The ink is resistant to humidity, oil and light solvents
- Non toxic
- Available in 2 colours of ink
- **Product. Ref.** WT163M-1: black ink
- **Product. Ref.** WT163M-3: red ink

Pre-assembled Deltec cable ties
Cable support system with metallic locking barb

- Provides a strong, long-life and cost saving method of securing communication and overhead cables
- Double locking head with corrosion resistant locking barbs in copper alloy
- Proven years of service: designed to last a minimum of 20 years outdoor
- No sharp edges: operator friendly, cable friendly!
- Easy to install, low installation costs
- Extremely robust ties, with high tensile strength (1110N) after fastening
- Available either in pre-cut and pre-assembled lengths, or on reels with separate heads for total flexibility
- Choice of specific spacers and accessories
- Month and year of manufacture stamped into strap material

Technical Information

Material - Strap & head	Toughened weatherable acetal
Material - Locking barb	Marine grade, corrosion-resistant copper alloy
Temperature range	-40°C to +85°C
Flammability rating	UL 94 HB
Colour	Black
Other properties	UV-resistant, Halogen free, superior resistance to moisture and salt environments
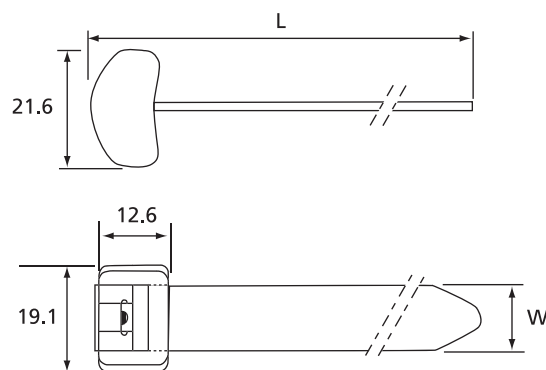
Product Ref.	Length L [mm]	Width W [mm]	Bundle diameter max. [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
TYD510M	1300.5	10.0	390	1110	100	
CSS-100	254.0	12.7	60	1110	50	
TYD5135M	342.9	12.7	90	1110	25	WT3D L-500-EU
CSS-160	406.4	12.7	110	1110	50	
TYD5270M	685.8	12.7	200	1110	10	

For tooling specifications: see pages 122 to 133
Note: the recommended maximum continuous static loading for the Deltec straps is 90 N per strap. For best results suggested spacing is 35 to 40 cm.
It is the responsibility of the user to determine whether or not their application meets our recommendation.

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Strap on reel
Cable support system with metallic locking barb

- Strap on reel, with separate head
- Total flexibility & no waste: cut at the desired length
- Easy to store: reduced inventory
- User friendly

Technical Information

Material	Toughened weatherable acetal
Temperature range	-40°C to +85°C
Flammability rating	UL 94 HB
Colour	Black
Other properties	UV-resistant, Halogen free, superior resistance to moisture and salt environments

| Product Ref.	Length per reel L [m]	Width W [mm]	Minimum tensile strength [N]	Quantity [reels]	Tooling
TYD-50R	15.2	12.7	1110	1	WT3D
696-41794	304.8	12.7	1110	1	L-500-EU

For tooling specifications: see pages 122 to 133
Note: the recommended maximum continuous static loading for the Deltec straps is 90 N per strap. For best results suggested spacing is 35 to 40 cm. It is the responsibility of the user to determine whether or not their application meets our recommendation.

Double locking heads
Cable support system with metallic locking barb

Technical Information

Material - moulding	Toughened weatherable acetal
Material - locking barb	Marine grade, corrosion-resistant copper alloy
Temperature range	-40°C to +85°C
Flammability rating	UL 94 HB
Colour	Black
Other properties	UV-resistant, Halogen free, superior resistance to moisture and salt environments
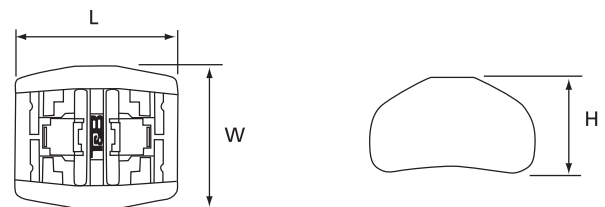
Product Ref.	Length L [mm]	Width W [mm]	Height H [mm]	Quantity [pieces]
TYD-LH	21.6	19.1	12.6	25
696-41795	21.6	19.1	12.6	1000

To be assembled with Deltec strap on reel see page 40

Thomas&Betts

Deltec Kits
Cable support system with metallic locking barb

- Convenient kits containing several reels of strap and separate locking heads, to provide all you need to be efficient on the field
- 2 configurations to match your need

| Product Ref. | Reels | | Locking heads |
	Length per reel [mm]	Quantity [reels]	Quantity [pieces]
CSS-5K	15.2	5	150
CSS-10K	15.2	10	300

Cable spacers
Cable support system with metallic locking barb

- Stackable height in 12.7 mm increments, for any desired spacing and all cable sizes - no need to stock multiple sizes of individual height spacers
- Designed to retain strap on each side and cradle the cable, providing restricted movement of spacer and preventing damage to cable
- Suitable for coaxial cables
- Can be used for parallel routing or for perpendicular cables

Technical Information

Material	Weather-resistant polypropylene
Temperature range	-40°C to +85°C
Flammability rating	UL 94 HB
Colour	Black
Other properties	UV-resistant, Halogen free
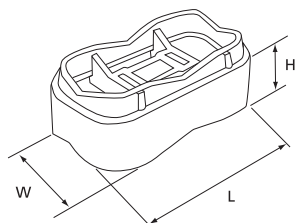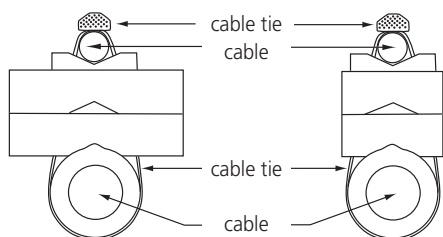
Product Ref.	Length L [mm]	Width W [mm]	Height H [mm]	Quantity [pieces]
TCP5255	53.3	30.5	12.7	25
TCP360	53.3	30.5	12.7	100

Base and hanger
Cable support system with metallic locking barb

• To secure the cables to all types of surfaces

Technical Information

Material	Zinc plated steel
Colour	Metallic
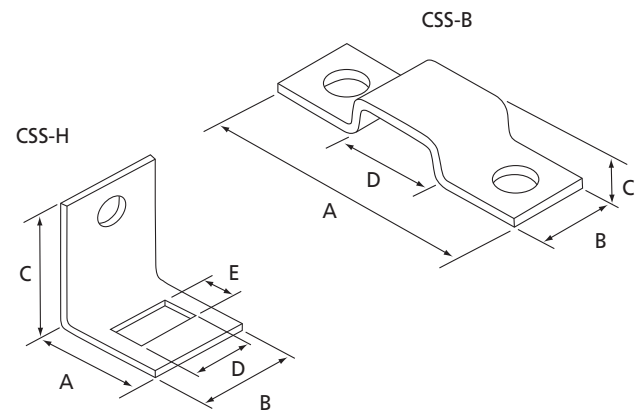
CSS-B

CSS-H

Product Ref.	Dimensions					Mounting hole diameter	Quantity
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	[mm]	[pieces]
CSS-B	48.4	14.3	7.1	15.1	5.6	6.7 (2x)	50
CSS-H	22.5	22.2	29.8	13.6	8.3	6.9	50

Note: see pages 79 to 100 for other mounting bases in Nylon

Thomas&Betts

Ty-Fast®, Col-Ty™, Safe-Ty™ and Ty-Grip™ All plastic cable ties

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Ty-Fast®, Col-Ty™, Safe-Ty™ and Ty-Grip™ All plastic cable ties

Thomas & Betts offers a complete range of all plastic cable ties to cover the most demanding applications.

Ty-Fast® All plastic ties

The all-plastic cable ties are available in lengths from 91 mm to 1214 mm and widths from 2.4 mm to 13.2 mm, offering a loop tensile strength up to 1120 N. Those cable ties will satisfy bundling requirements up to 381 mm. Those cable ties are halogen and silicone free Polyamide 6.6 and are available in 12 different colours.

All plastic ties
Heavy duty installation ties
Low profile inline fasteners
Hook & loop fasteners

Ty-Fast® cable ties meet international standards such as UL, Germanischer Lloyd, Lloyd's Register of Shipping, Bureau Veritas, Mil-Specifications and QPL. State-of-the-art robotic and raw material handling equipment assures product and material integrity throughout the manufacturing process. The integrally formed Polyamide 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. The Sure Grip tab keeps the tail from popping out while being threaded, then holds it securely for final tightening by hand or tool.

Heavy duty installation ties

Col-Ty™ - the heavy-duty installation tie - is mainly used for securing and bundling of cables in the utility and construction industries. Col-Ty™ - made of Polyamide 12 - is ideal for hazardous environments, low temperatures and humidity. Col-Ty™ is conform to EDF HN33/S/62 and its low profile double locking head with serration on the outer side of the tie eliminates the risk of damage to the cable.

Low-profile inline fasteners

The Safe-Ty™ 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-trough in bulkheads and any other tight spaces.
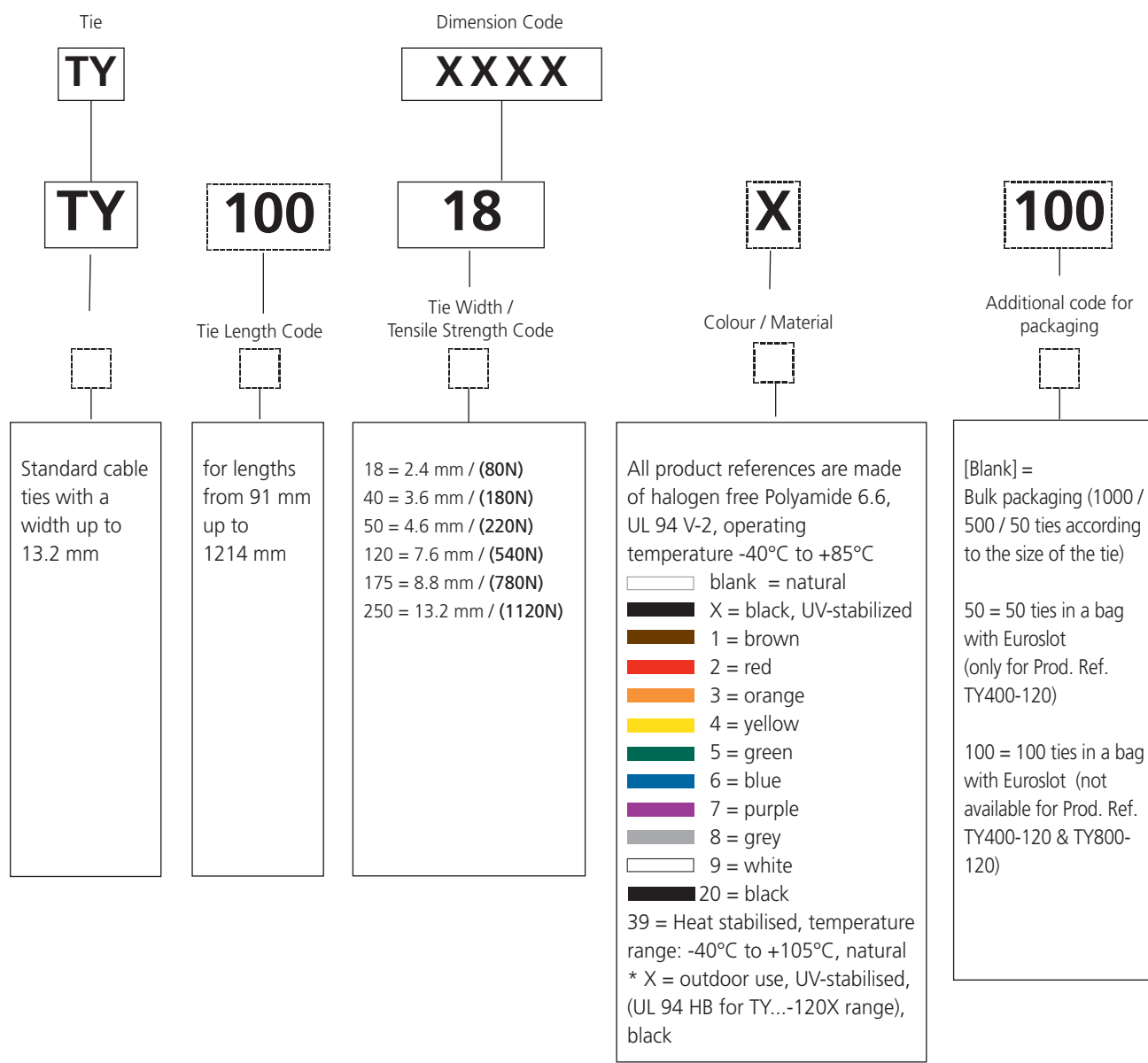
Hook & loop fasteners

Ty-Grip™ cable ties are very easy to release and re-use, making them ideal for applications where changes are anticipated or continuous access is required. There is no risk of over-tightening the cables, which makes the Ty-Grip™ hook & loop fasteners ideal for specific applications in fiber optics, computer network wiring, telecom cables, etc.

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Product reference structure
All-plastic cable ties

Example:

Tie		Dimension Code
TY		**X X X X**

TY	100	18	X	100
	Tie Length Code	Tie Width / Tensile Strength Code	Colour / Material	Additional code for packaging

Standard cable ties with a width up to 13.2 mm

for lengths from 91 mm up to 1214 mm

18 = 2.4 mm / **(80N)**
40 = 3.6 mm / **(180N)**
50 = 4.6 mm / **(220N)**
120 = 7.6 mm / **(540N)**
175 = 8.8 mm / **(780N)**
250 = 13.2 mm / **(1120N)**

All product references are made of halogen free Polyamide 6.6, UL 94 V-2, operating temperature -40°C to +85°C

- blank = natural
- X = black, UV-stabilized
- 1 = brown
- 2 = red
- 3 = orange
- 4 = yellow
- 5 = green
- 6 = blue
- 7 = purple
- 8 = grey
- 9 = white
- 20 = black

39 = Heat stabilised, temperature range: -40°C to +105°C, natural
* X = outdoor use, UV-stabilised, (UL 94 HB for TY...-120X range), black

[Blank] = Bulk packaging (1000 / 500 / 50 ties according to the size of the tie)

50 = 50 ties in a bag with Euroslot (only for Prod. Ref. TY400-120)

100 = 100 ties in a bag with Euroslot (not available for Prod. Ref. TY400-120 & TY800-120)

Note: Nylon (Polyamide) is inherently susceptible to environmental conditions. Ty-Fast® cable ties are moisturised 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.

Standard cable ties
All-plastic cable ties

State-of-the-art robotic and raw material handling equipment assures product and material integrity throughout the manufacturing process.

- The integrally formed Polyamide 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
- Sure Grip tab keeps the tail from popping out while being threaded, then holds it securely for final tightening by hand or tool
- Quick and easy pull through increases productivity, reduces operator fatigue
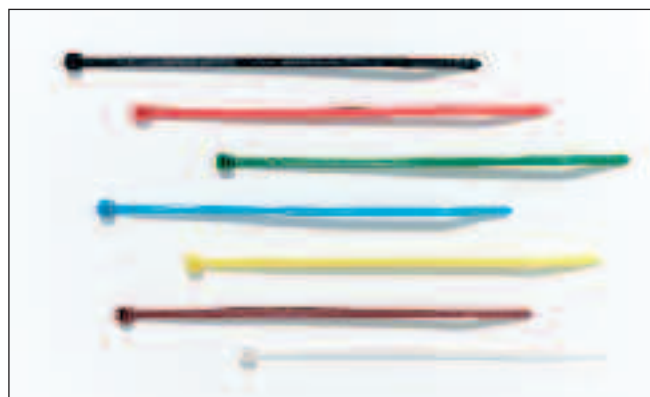
Technical Information

Material	Polyamide 6.6 (*)
Temperature range	-40°C to +85°C
Colour	Natural as standard colour (*)
Approvals	MIL: MS 3367-x (see table)
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free

(*) For other materials and colours see the product reference structure page 48
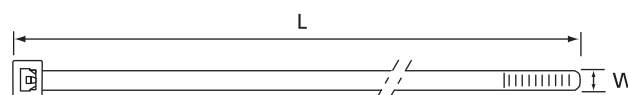
UL **   **GL** **   **Lloyd's Register** TYPE APPROVED **   **BUREAU VERITAS** **

E49405

Product Ref.	MIL Spec.	Length L [mm]	Width W [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
TY075-18	MS-3367-4	91	2.4	1.6 - 20	80	1000	
TY100-18	–	112	2.4	1.6 - 25	80	1000	
TY125-18	–	136	2.4	1.6 - 32	80	1000	
TY200-18	–	203	2.4	1.6 - 50	80	1000	ERG50
TY125-40	MS-3367-5	141	3.5	1.6 - 32	180	1000	WT193A
TY200-40	–	205	3.5	1.6 - 50	180	1000	
TY300-40	–	290	3.5	1.6 - 76	180	1000	
TY400-40	–	368	3.5	1.6 - 102	180	1000	
TY175-50	MS-3367-1	186	4.6	1.6 - 44	220	1000	ERG50
TY225-50	–	226	4.6	1.6 - 57	220	1000	ERG120
TY300-50	–	291	4.6	1.6 - 76	220	1000	WT193A
TY400-50	MS-3367-2	366	4.6	1.6 - 102	220	1000	
TY200-120	–	219	7.6	4.8 - 50	540	500	ERG120
TY400-120	MS-3367-3	375	7.6	4.8 - 102	540	500	L-500-EU
TY800-120	–	706	7.6	4.8 - 203	540	50	WT3D

** Some approvals may not be applicable to all the Product References. Contact your Sales office for approvals limitations

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**Thomas&Betts**

Standard cable ties - Jars
All-plastic cable ties

- Ty-Fast® cable ties packed in an attractive plastic jar
- Ideal product for the distribution market
- Different dimensions in the same packaging: 112 mm x 2.4 mm, 141 mm x 3.6 mm and 186 mm x 4.7 mm
- Tensile strength from 80N to 220N
- Available in 3 different packaging configurations: 1 in natural cable ties and 2 in black cable ties
- Ideal product when small volumes are needed for various applications

Technical Information

Material	Polyamide 6.6
Temperature range	-40°C to +85°C
Colour	Natural or UV-resistant black (see table)
Flammability rating	UL 94 V-2
Other properties	UV-resistant (black) Halogen free, Silicone free

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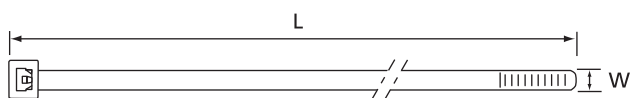
Product Ref.	Content	Colour	Mil Spec.	Length L [mm]	Width W [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
JTN-500	TY100-18-100	natural	-	112	2.4	1.6 - 25	80	2 x 100	ERG50, WT193A
	TY125-40-100	natural	MS-3367-5	141	3.6	1.6 - 32	180	1 x 100	
	TY175-50-100	natural	MS-3367-1	186	4.7	1.6 - 44	220	2 x 100	ERG50, ERG120, WT193A
JTB-500	TY100-18-X-100	UV-resistant black	-	112	2.4	1.6 - 25	80	2 x 100	ERG50, WT193A
	TY125-40-X-100	UV-resistant black	MS-3367-5	141	3.6	1.6 - 32	180	1 x 100	
	TY175-50-X-100	UV-resistant black	MS-3367-1	186	4.7	1.6 - 44	220	2 x 100	ERG50, ERG120, WT193A
JTB1-500	TY100-18-X-100	UV-resistant black	-	112	2.4	1.6 - 25	80	2 x 100	ERG50, WT193A
	TY125-40-X-100	UV-resistant black	MS-3367-5	141	3.6	1.6 - 32	180	2 x 100	
	TY175-50-X-100	UV-resistant black	MS-3367-1	186	4.7	1.6 - 44	220	1 x 100	ERG50, ERG120, WT193A

Description of Product Reference structure: see page 48
Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

Extra-long cable ties
All-plastic cable ties

- Extremely long ties (up to 1214 mm)
- Robust construction (780N), for demanding applications where superior tensile strength is required
- The extra long Ty-Fast® ties are available in natural colour for indoor applications and in UV-resistant black for outdoor applications

Technical Information

Material	Polyamide 6.6
Temperature range	-40°C to +85°C
Colour	Natural or UV-resistant black (see table)
Flammability rating	UL 94 V-2
Other properties	UV-resistant (black)
	Halogen free, Silicone free

Lloyd's Register
TYPE APPROVED

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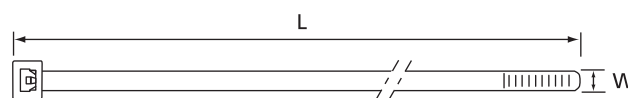
Product Ref.	Colour	Length L [mm]	Width W [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
L-36-175-0-L	UV-resistant black	930	8.8	5 - 273	780	50	
L-36-175-9-L	Natural	930	8.8	5 - 273	780	50	WT3D
L-41-175-0-L	UV-resistant black	1036	8.8	5 - 305	780	50	L300FR
L-41-175-9-L	Natural	1036	8.8	5 - 305	780	50	L-500-EU
L-48-175-0-L	UV-resistant black	1214	8.8	5 - 381	780	50	
L-48-175-9-L	Natural	1214	8.8	5 - 381	780	50	

Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

Thomas&Betts

Heavy-duty cable ties
All-plastic cable ties
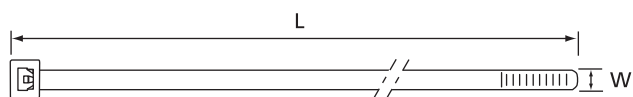
- Extremely robust ties (1120N), for demanding applications where extreme tensile strength is required
- Available in natural colour for indoor applications and in UV-resistant black for outdoor applications

Technical Information

Material	Polyamide 6.6
Temperature range	-40°C to +85°C
Colour	Natural or UV-resistant black (see table)
Flammability rating	UL 94 V-2
Other properties	UV-resistant (black)
	Halogen free, Silicone free

Product Ref.	Colour	Length L [mm]	Width W [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
TYL300M	natural	300	13.2	75	1120	50	
TYL300MX	UV-resistant black	300	13.2	75	1120	50	L-500-EU
TYL546M	natural	546	13.2	140	1120	50	
TYL546MX	UV-resistant black	546	13.2	140	1120	50	

Description of Product Reference structure: see page 48
Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

UL 94 V-0 flame retardant cable ties
All-plastic cable ties

- Similar to our Ty-Rap® range of flame retardant ties, these all-plastic ties are made from low smoke flame retardant Polyamide 6.6 and meet the requirements of UL 94 V-0.
- Ideal for use where low flammability and low smoke are necessary such as public transport / buildings, tunnels etc.

Technical Information

Material	Polyamide 6.6
Temperature range	-40°C to +85°C
Colour	Milky white
Flammability rating	UL 94 V-0
Other properties	Limited fire hazard (low smoke)
	Halogen free, Silicone free
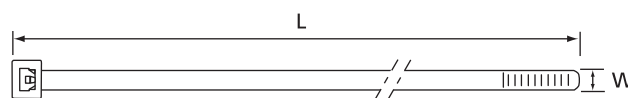
| Product Ref.	Length L [mm]	Width W [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
TS1025HF	100	2.5	2 - 24	90	100	
TS1435HF	140	3.5	2.5 - 36	180	100	ERG50
TS2045HF	200	4.5	3 - 51	220	100	WT193A
TS2845HF	280	4.5	5 - 76	220	100	
TS3645HF	360	4.5	5 - 101	220	100	
TS3675HF	360	7.5	5 - 101	540	100	ERG120, L-500-EU WT3D

Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

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Thomas&Betts

Integrated mounting hole cable ties
Special all-plastic cable ties
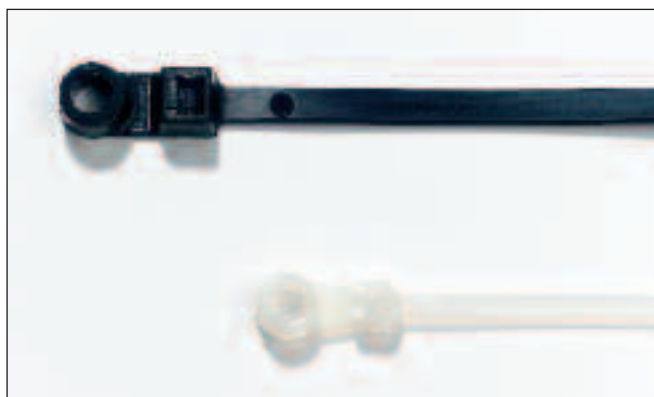
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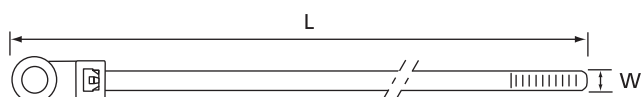
- Cable tie can be directly mounted onto a support with screws, bolts or rivets.
- Mounting and bundling in one maintenance-friendly assembly.
- Cable harness manufacture and pre- and end- mounting of bundles and parts.
- UV-resistant version, especially recommended for outdoor applications

Technical Information

Material	Polyamide 6.6
Temperature range	-40°C to +85°C
Colour	Natural or UV-resistant black (see table)
Flammability rating	UL 94 V-2
Other properties	UV-resistant (black) Halogen free, Silicone free

Product Ref.	Colour	Length L [mm]	Width W [mm]	Fixing screw size	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
L-5-30MH-0-C	UV-resistant black	152	3.3	M4	2 - 32	130	100	ERG50
L-5-30MH-9-C	natural	152	3.3	M4	2 - 32	130	100	WT193A
L-7-50MH-0-C	UV-resistant black	208	4.7	M5	2 - 44	220	100	ERG50
L-7-50MH-9-C	natural	208	4.7	M5	2 - 44	220	100	ERG120
L-11-50MH-0-C	UV-resistant black	314	4.7	M5	2 - 76	220	100	WT193A
L-11-50MH-9-C	natural	314	4.7	M5	2 - 76	220	100	WT3D
L-14-50MH-0-C	UV-resistant black	382	4.7	M5	2 - 102	220	100	
L-14-50MH-9-C	natural	382	4.7	M5	2 - 102	220	100	
L-14-120MH-0-C	UV-resistant black	382	7.6	M6	5 - 102	540	100	ERG120
L-14-120MH-9-C	natural	382	7.6	M6	5 - 102	540	100	L-500-EU, WT3D

Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

Releasable panel mounting cable ties
*Special all-plastic cable ties*

- Fastening and clip-mounting in one
- Fast pre- or on-site-assembly for a range of panel thickness up to 2.7 mm
- Fast and secure clip-mounting
- For use in 6.35 mm mounting hole
- Product References containing xxx-PMR-xxx are releasable

Technical Information

Material	Polyamide 6.6
Temperature range	-40°C to +85°C
Colour	Natural or UV-resistant black (see table)
Flammability rating	UL 94 V-2
Other properties	UV-resistant (black)
	Halogen free, Silicone free

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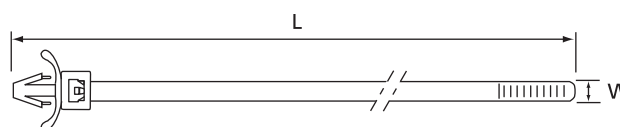
Product Ref.	Colour	Length L [mm]	Width W [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
STANDARD PANEL MOUNTING TIES							
L-5-50PM-0-C	UV-resistant black	147	4.8	2 - 25	220	100	ERG50, ERG120
L-5-50PM-9-D	natural	147	4.8	2 - 25	220	1000	L-500-EU
L-7-50PM-0-C	UV-resistant black	208	4.8	2 - 44	220	100	WT193A
L-7-50PM-9-C	natural	208	4.8	2 - 44	220	100	
RELEASABLE PANEL MOUNTING TIES							
TB-4-50PMR-9-C-EU*	natural	110	4.8	2 - 22	220	100	ERG50, ERG120
L-5-50PMR-0-C	UV-resistant black	147	4.8	2 - 25	220	100	L-500-EU
L-5-50PMR-9-C	natural	147	4.8	2 - 25	220	100	WT193A
L-7-50PMR-0-C	UV-resistant black	208	4.8	2 - 44	220	100	WT1-TB, WT2-TB
L-7-50PMR-9-C	natural	208	4.8	2 - 44	220	100	

Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

* Not UL registered

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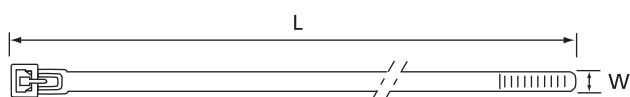
Releasable cable ties
Special all-plastic cable ties

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E49405

- Easy releasable and re-usable. UV-resistant version, especially recommended for outdoor applications.

Technical Information

Material	Polyamide 6.6
Temperature range	-40°C to +85°C
Colour	Natural or UV-resistant black (see table)
Flammability rating	UL 94 V-2
Other properties	UV-resistant (black) Halogen free, Silicone free

Product Ref.	Colour	Length L [mm]	Width W [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
L-5-50R-0-C	UV-resistant black	150	7.5	3 - 32	220	100	
L-5-50R-9-C	natural	150	7.5	3 - 32	220	100	
L-8-50R-0-C	UV-resistant black	198	7.5	3 - 51	220	100	ERG120
L-8-50R-9-C	natural	198	7.5	3 - 51	220	100	L-500-EU
L-10-50R-0-C	UV-resistant black	298	7.5	3 - 76	220	100	WT3D
L-10-50R-9-C	natural	298	7.5	3 - 76	220	100	

Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

Cable ties with identification tag
Special all-plastic cable ties

- Identification ties with incorporated label for durable marking and tying.
- Simple marking on the roughened writing surface using the special marking pen WT163M-1 (black ink) or WT163M-3 (red ink)
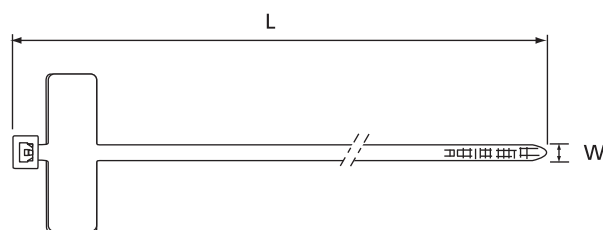
Technical Information

Material	Polyamide 6.6
Temperature range	-40°C to +85°C
Colour	Natural
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free
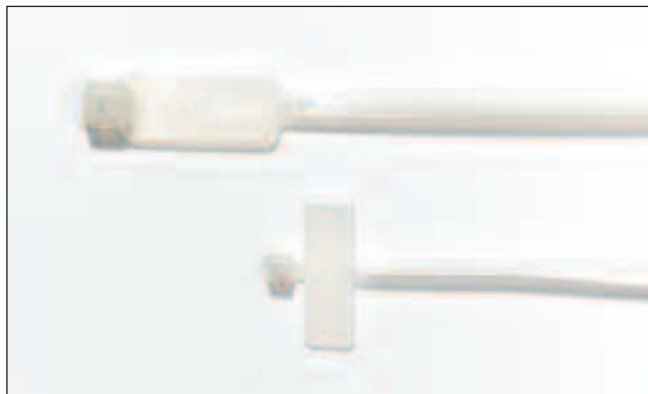
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L-4-18ID-9-C

L-7-50ID-9-C

Product Ref.	Length L [mm]	Width W [mm]	Label dimensions [mm]	Bundle diameter max. [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
L-4-18ID-9-C	102	2.5	7.9 x 24.7	19	80	100	ERG50
L-4-18ID-9-M	102	2.5	7.9 x 24.7	19	80	1000	WT193A
L-7-50ID-9-C	200	4.7	30 x 13.3	44	220	100	ERG50, ERG120
L-7-50ID-9-M	200	4.7	30 x 13.3	44	220	1000	WT193A, L-500-EU

Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

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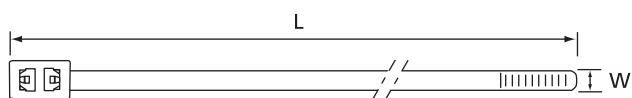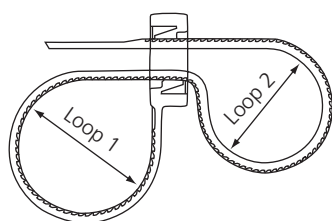
Special double-headed ties
Special all-plastic cable ties

- The double-headed ties allow the parallel routing of two bundles of cable with one single tie.
- Available in 3 different lengths.

Technical Information

Material	Polyamide 6.6
Temperature range	-40°C to +85°C
Colour	Natural
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free

Product Ref.	Length L [mm]	Width W [mm]	Bundle diameter		Minimum tensile strength [N]	Quantity [pieces]	Tooling
			Loop 1 from ... to [mm]	Loop 2 from ... to [mm]			
TB-50RLDH	200	4.8	2.5 - 47	2.0 - 45	220	1000	ERG50, ERG120
TB-12-50RLDH	300	4.8	2.5 - 72	2.0 - 70	220	1000	WT193A
TB-15-50RLDH	370	4.8	2.5 - 100	2.0 - 97	220	1000	L-500-EU

Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

Low profile in-line fasteners
*Special all-plastic cable ties*

The Safe-Ty™ 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.

- 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 various requirements
- Recommended in all applications where the aesthetics and the user's safety can be a concern (thanks to the rounded edges): playgrounds, supermarket displays,...

Technical Information

Material	Polyamide 6.6
Temperature range	-40°C to +85°C
Colour	Natural or UV-resistant (see table)
Flammability rating	UL 94 V-2
Other properties	UV-resistant (black), Halogen free
	Silicone free
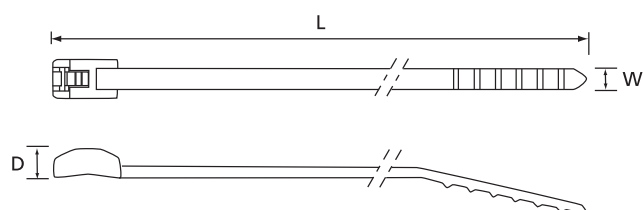
Product Ref.	Colour	Length L [mm]	Width W [mm]	D [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity ** [pieces]	Tooling
SF100-18	natural*	118	2.4	3.2	3.2 - 25.4	80	100 / 1000	ERG50
SF100-18X	UV-resistant black	118	2.4	3.2	3.2 - 25.4	80	100 / 1000	WT193A
SF200-18	natural*	206	2.4	3.2	3.2 - 50.8	80	100 / 1000	
SF200-18X	UV-resistant black	206	2.4	3.2	3.2 - 50.8	80	100 / 1000	
SF175-50	natural*	201	4.7	4.5	4.7 - 44.5	220	100 / 1000	ERG50
SF175-50X	UV-resistant black	201	4.7	4.5	4.7 - 44.5	220	100 / 1000	ERG120
SF300-50	natural*	288	4.7	4.5	4.7 - 76.2	220	100 / 1000	WT193A
SF300-50X	UV-resistant black	288	4.7	4.5	4.7 - 76.2	220	100 / 1000	L-500-EU
SF400-50	natural*	369	4.7	4.5	9.5 - 101.6	220	100 / 1000	
SF400-50X	UV-resistant black	369	4.7	4.5	9.5 - 101.6	220	100 / 1000	
SF400-120	natural*	370	7.6	6.9	9.5 - 101.6	540	100 / 1000	ERG120
SF400-120X	UV-resistant black	370	7.6	6.9	9.5 - 101.6	540	100 / 1000	L-500-EU
SF600-120	natural*	533	7.6	6.9	9.5 - 152.4	540	100 / 1000	WT3D
SF600-120X	UV-resistant black	533	7.6	6.9	9.5 - 152.4	540	100 / 1000	

* For other colours add colour suffix to Product Reference: 0 = black, 1 = brown, 2 = red, 3 = orange, 4 = yellow, 5 = green, 6 = blue, 8 = grey and 9 = white. For example: SF-175-50-2 (red)

** Standard quantity = 1000. For bags of 100 add -100 to the product reference, for example. SF100-18-100.

Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

Note: Nylon (Polyamide) is inherently susceptible to environmental conditions. Safe-Ty™ cable ties are moisturised 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.

Thomas&Betts

Hook & Loop fasteners
Special cable ties

FO series loop ties are ideal for wrapping pre-determined bundle diameters thanks to the convenient slotted head.

FOL series buckle ties provide added strength and stability thanks to the high performance polyamide buckle.

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

- Quick bundling and re-adjustable tension
- No risk of over-tightening the cables, which makes the Ty-Grip™ Hook & Loop fasteners ideal for specific applications in fibre optics, computer network wiring, telecom cables, etc.
- Multiple colours available for identifying specific bundles
- Different sizes available to accommodate varying bundle diameters
- Screw-mount and self-adhesive mounting bases provide multiple mounting options

Technical Information FO Series

Material hook side	Polyamide
Material loop side	Low density Polyethylene
Temperature range	-20°C to +104°C
Colour	Standard colour: black - see note after table
Flammability rating	UL 94 HB
Peel-off strength	0.8N/cm

Technical Information FOL Series

Material hook	Polyamide
Temperature range	-20°C to +93°C
Colour	Standard colour: black - see note after table
Flammability rating	UL 94 HB
Peel-off strength	0.8N/cm

Product Ref.	Maximum bundle ø [mm]	Length [mm]	Width [mm]	Tensile strength [N]	Quantity [pieces]
FO SERIES LOOP TIES					
FO200-40-0	50.8	228.6	12.7	180	10
FO200-50-0	50.8	228.6	19.1	220	10
FO350-40-0	88.9	330.2	12.7	180	10
FO350-50-0	88.9	330.2	19.1	220	10
FOL SERIES BUCKLE TIES					
FOL300-50-0	76.2	304.8	19.1	220	10
FOL500-50-0	127.0	457.2	19.1	220	10

Standard colour: black
Replace "-0" in the Product Reference by the corresponding colour code: 1 = brown, 2 = red, 3 = orange, 4 = yellow,
5 = green, 6 = blue, 8 = grey and 9 = white
For example: FO 200-40-2 defines a red FO200-40 type fastener

Contact your Sales Office for Product Availability in the other colours

Hook & Loop fasteners
Special cable ties

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

- Quick bundling and re-adjustable tension
- No risk of over-tightening the cables, which makes the Ty-Grip™ Hook & Loop fasteners ideal for specific applications in fibre optics, computer network wiring, telecom cables, etc
- Multiple colours available for identifying specific bundles
- Different sizes available to accommodate varying bundle diameters
- Screw-mount and self-adhesive mounting bases provide multiple mounting options

Technical Information FOS and FOR Series

Material hook side	Polyamide
Material loop side	Low density Polyethylene
Temperature range	-20°C to +104°C
Colour	Standard colour: black - see note after table
Flammability rating	UL 94 HB
Peel-off strength	0.8N/cm

FOS series strip ties are pre-cut which makes bundling easy.

FOR series rolled hook and loop allows customers to conveniently cut pieces to desired lengths, eliminating waste.

Product Ref.	Maximum bundle ø [mm]	Length [mm]	Width [mm]	Tensile strength [N]	Quantity [pieces]
FOS SERIES STRIP TIES					
FOS150-50-0	38.1	152.4	19.1	220	10
FOS320-50-0	81.3	304.8	19.1	220	10
FOS500-50-0	127.0	457.2	19.1	220	10
FOR SERIES ROLLED STRIP					
FOR180-50-0	Various	4572.0	19.1	220	1

Standard colour: black
Replace "-0" in the Product Reference by the corresponding colour code: 1 = brown, 2 = red, 3 = orange, 4 = yellow, 5 = green, 6 = blue, 8 = grey and 9 = white
For example: FOS150-50-2 defines a red FOS150-50 type fastener

Contact your Sales Office for Product Availability in the other colours

Thomas&Betts

# Heavy-duty double headed installation ties
Heavy-duty installation ties

- For securing and bundling of cables in the utility and construction industries
- Low profile double locking head*
- Serrations on the outer side of the tie eliminates the risk of damage to the cable
- Ideal for hazardous environments, low temperatures and humidity
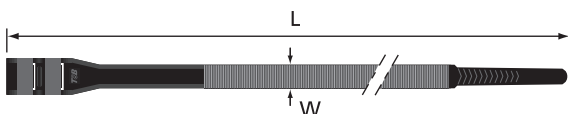- Conform to EDF HN33/S/62

Technical Information

Material	Polyamide 12
Temperature range	-40°C to +80°C
Colour	Black
Flammability rating	UL 94 HB
Other properties	UV-resistant

Single locking head
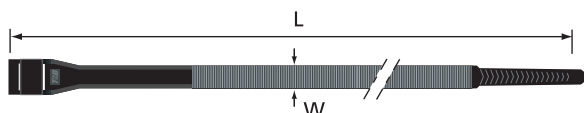
Double locking head

Product Ref.	Length L [mm]	Width W [mm]	Thickness [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
CT-9-180-0-C*	180	9	1.8	10 - 42	440	100	
CT-9-260-0-C	260	9	2.0	15 - 62	520	100	L300-FR
CT-9-360-0-C	360	9	2.0	25 - 92	520	100	L-500-EU
CT-9-500-0-C	510	9	2.4	74 - 140	550	100	WT3D
CT-9-750-0-C	760	9	2.4	74 - 220	550	100	

* Product Ref. CT-9-180-0-C has a single locking head

Description of materials and properties: see pages 134 to 145
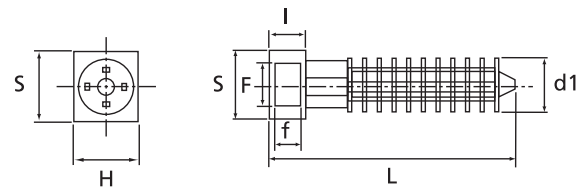For tooling specifications: see pages 122 to 133

Accessories
Heavy-duty installation ties

• Wall plug suitable for ø 8 mm hole
• Simply drill hole and hammer the plug in

Technical Information

Material	Polyamide 11/12
Temperature range	-40°C to +80°C
Colour	Black
Flammability rating	UL 94 HB
Other properties	UV-resistant

Product Ref.	L [mm]	Ød1 [mm]	S [mm]	H [mm]	I [mm]	F [mm]	f [mm]	Quantity [pieces]
CT-5359	43.1	9.6	13.2	16	6.3	9.5	2.4	100

• Use 5 mm screw
• Cradle for ties up to 9 mm wide

Technical Information

Material	Polyamide 11/12
Temperature range	-40°C to +80°C
Colour	Black
Flammability rating	UL 94 HB
Other properties	UV-resistant
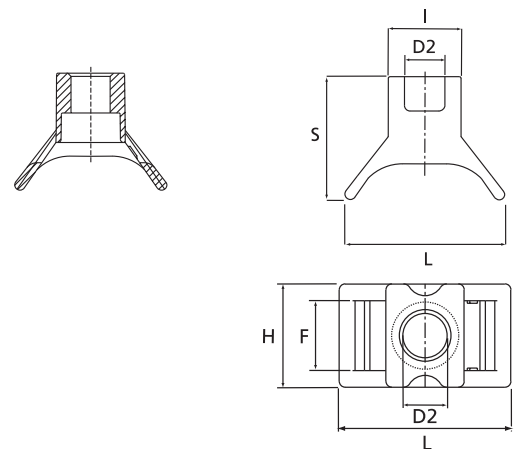
Product Ref.	L [mm]	I [mm]	S [mm]	H [mm]	F [mm]	d2 [mm]	Quantity [pieces]
CT-3401	22.9	10.5	17.6	13.8	9.4	5.9	100

Thomas&Betts

Ty-Met™ Stainless Steel cable ties

Thomas&Betts

Ty-Met™ Stainless Steel cable ties

The Ty-Met™ stainless steel ties are the ultimate solution to install your cables in extreme conditions and hazardous areas, indoor and outdoor, such as the petrochemical and food processing industries, power stations, mining, ship-building, offshore and other aggressive environments.

The **Ty-Met™ stainless steel ties** provide a high mechanical strength combined with chemical durability and temperature resistance.

They are available in three different types:

• Ball-Lock Type: quick and reliable self-locking mechanism

• Ladder Type: easy application and strong locking system

• Releasable Type: can be unfastened for re-use

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Ty-Met™ stainless steel ties: the ultimate solution to install your cables in extreme conditions and hazardous areas

All types are available in a broad range of lengths and two different widths, providing extreme levels of tensile strength. Two grades of non-magnetic stainless steel (304 & 316) and a coated and an uncoated version are available to cover most applications.

Ty-Met™ cable ties have international approvals such as UL, Germanischer Lloyd, Lloyd's Register and Det Norske Veritas.

Two grades of non-magnetic stainless steel are available:
- 304 grade stainless steel, for standard applications
- 316 grade (marine grade) stainless steel, for extra corrosion resistance

Available in uncoated version (for high temperature applications) or in fully coated version with non-toxic, halogen free Polyester coating, for a superior protection of cables and installer's hands and for an improved insulation between dissimilar materials.
Halogen free, corrosion proof and resistant to salt water.
A range of dedicated hand tools completes the product offering.

Thomas&Betts

Features & Benefits
Stainless steel cable ties

The Ty-Met™ stainless steel ties are available in three different types:
- **Ball-Lock Type:** quick and reliable self-locking mechanism
- **Ladder Type:** easy application and strong locking system
- **Releasable Type:** can be unfastened for re-use

Ball-Lock Type

Easy application and strong self-locking mechanism (steel ball), with low insertion force

Rounded edges and smooth surfaces, for fast and safe hand installation

Uncoated or fully coated with non-toxic, Halogen free Polyester

Angled / rounded tail, for safer handling and easier insertion

Ladder Type

Self-locking mechanism (pawl and ratchet)

Low profile, flat head (no sharp edges), for easy and safe installation

Uncoated or fully coated with non-toxic, Halogen free Polyester

Larger slot at the end, allows the use of a hook-type tool

Releasable Type

The unique buckle design allows the tie to be unfastened for re-use

Additional ears can be bent back over the fastened tie to increase the tensile strength
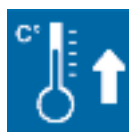
Fully coated with non-toxic, Halogen free Polyester

Can be installed by hand, and if necessary, the slots at the end allow the use of a hook-type tool
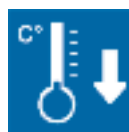
UV-resistant	Fire-proof	Heat resistant	Low temperature flexibility	Weatherproof	Radiation resistant	Chemically resistant

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Ball-Lock Type - uncoated
Stainless steel cable ties

- "Ball-Lock" self-locking mechanism
- Uncoated version, for high temperature applications
- Suitable for indoor and outdoor applications
- Two grades of non-magnetic stainless steel:
  - 304 grade stainless steel, for standard applications
  - 316 grade (marine grade) stainless steel, for extra corrosion resistance
- Dedicated tooling: either Prod. Ref. CT3 for manual cutting, or Prod. Ref. CT6 for tension setting tool with automatic cutting
- Applications: Installation of cables and pipes in extreme conditions and hazardous areas, indoor and outdoor, such as: Petrochemical and food processing industries, power stations, mining, ship-building, offshore, other aggressive environments

Technical Information

Material	A. 304 grade non-magnetic stainless steel
	B. 316 grade non-magnetic stainless steel
Temperature range	-80°C to +538°C
Colour	Metallic
Flammability rating	Absolutely fireproof
Other properties	UV-resistant

E49405*

Some approvals may not be applicable to all the Product References. Contact your Sales Office for approvals limitations

TYPE APPROVED PRODUCTS
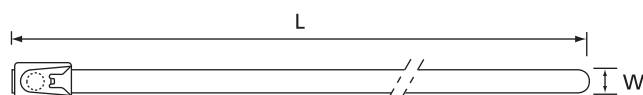
Product Ref. Stainless steel 304	Product Ref. Stainless steel 316	Length x width [mm]	Material thickness [mm]	Max. bundle ø [mm]	Tensile strength [N]	Quantity [pieces]	Tooling
YLS-4.6-100A	YLS-4.6-100B	100 x 4.6	0.26	20	440	100	
YLS-4.6-125A	YLS-4.6-125B	125 x 4.6	0.26	22	440	100	
YLS-4.6-150A	YLS-4.6-150B	150 x 4.6	0.26	24	440	100	
YLS-4.6-200A	YLS-4.6-200B	200 x 4.6	0.26	50	440	100	
YLS-4.6-300A	YLS-4.6-300B	300 x 4.6	0.26	80	440	100	
YLS-4.6-360A	YLS-4.6-360B	360 x 4.6	0.26	100	440	100	
YLS-4.6-520A	YLS-4.6-520B	520 x 4.6	0.26	150	440	100	
YLS-4.6-680A	YLS-4.6-680B	680 x 4.6	0.26	200	440	100	
YLS-4.6-840A	YLS-4.6-840B	840 x 4.6	0.26	250	440	100	
YLS-4.6-1000A	YLS-4.6-1000B	1000 x 4.6	0.26	300	440	100	
YLS-4.6-1200A	YLS-4.6-1200B	1200 x 4.6	0.26	365	440	100	
YLS-4.6-1400A	YLS-4.6-1400B	1400 x 4.6	0.26	425	440	100	CT3
YLS-7.9-100A	YLS-7.9-100B	100 x 7.9	0.26	20	1110	100	CT6
YLS-7.9-125A	YLS-7.9-125B	125 x 7.9	0.26	22	1110	100	
YLS-7.9-150A	YLS-7.9-150B	150 x 7.9	0.26	24	1110	100	
YLS-7.9-200A	YLS-7.9-200B	200 x 7.9	0.26	50	1110	100	
YLS-7.9-300A	YLS-7.9-300B	300 x 7.9	0.26	80	1110	100	
YLS-7.9-360A	YLS-7.9-360B	360 x 7.9	0.26	100	1110	100	
YLS-7.9-520A	YLS-7.9-520B	520 x 7.9	0.26	150	1110	100	
YLS-7.9-680A	YLS-7.9-680B	680 x 7.9	0.26	200	1110	100	
YLS-7.9-840A	YLS-7.9-840B	840 x 7.9	0.26	250	1110	100	
YLS-7.9-1000A	YLS-7.9-1000B	1000 x 7.9	0.26	300	1110	100	
YLS-7.9-1200A	YLS-7.9-1200B	1200 x 7.9	0.26	365	1110	100	
YLS-7.9-1400A	YLS-7.9-1400B	1400 x 7.9	0.26	425	1110	100	

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Description of materials and properties: see pages 134 to 145
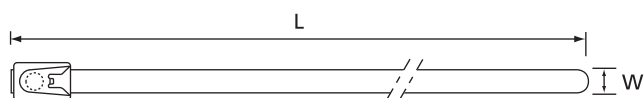For tooling specifications: see pages 122 to 133

Thomas&Betts

Ball-Lock Type - coated
Stainless steel cable ties

- "Ball-Lock" self-locking mechanism
- Fully coated version with non-toxic, halogen free Polyester coating, for a superior protection of cables and installer's hands and for an improved insulation between dissimilar materials.
- Suitable for indoor and outdoor applications
- 316 grade (marine grade) stainless steel, for extra corrosion resistance
- Dedicated tooling: either Prod. Ref. CT3 for manual cutting, or Prod. Ref. CT6 for tension setting tool with automatic cutting
- Applications: Installation of cables and pipes in extreme conditions and hazardous areas, indoor and outdoor, such as: petrochemical and food processing industries, power stations, mining, shipbuilding, offshore, other aggressive environments

Technical Information

Material	316 grade non-magnetic stainless steel
Coating	Polyester
Temperature range	-80°C to +150°C
Colour	Black
Flammability rating	Absolutely fireproof
Other properties	UV-resistant, Halogen free, non toxic

G L * **Lloyd's Register TYPE APPROVED** * **DNV TYPE APPROVED PRODUCTS** *

* Some approvals may not be applicable to all the Product References. Contact your Sales Office for approvals limitations

Product Ref.	Length x width [mm]	Material thickness [mm]	Max. bundle ø [mm]	Tensile strength [N]	Quantity [pieces]	Tooling
YLS-4.6-100BC	100 x 4.6	0.36	20	440	100	
YLS-4.6-125BC	125 x 4.6	0.36	22	440	100	
YLS-4.6-150BC	150 x 4.6	0.36	24	440	100	
YLS-4.6-200BC	200 x 4.6	0.36	50	440	100	
YLS-4.6-300BC	300 x 4.6	0.36	80	440	100	
YLS-4.6-360BC	360 x 4.6	0.36	100	440	100	
YLS-4.6-520BC	520 x 4.6	0.36	150	440	100	
YLS-4.6-680BC	680 x 4.6	0.36	200	440	100	
YLS-4.6-840BC	840 x 4.6	0.36	250	440	100	
YLS-4.6-1000BC	1000 x 4.6	0.36	300	440	100	
YLS-4.6-1200BC	1200 x 4.6	0.36	365	440	100	
YLS-4.6-1400BC	1400 x 4.6	0.36	425	440	100	CT3
YLS-7.9-100BC	100 x 7.9	0.36	20	530	100	CT6
YLS-7.9-125BC	125 x 7.9	0.36	22	530	100	
YLS-7.9-150BC	150 x 7.9	0.36	24	530	100	
YLS-7.9-200BC	200 x 7.9	0.36	50	530	100	
YLS-7.9-300BC	300 x 7.9	0.36	80	530	100	
YLS-7.9-360BC	360 x 7.9	0.36	100	530	100	
YLS-7.9-520BC	520 x 7.9	0.36	150	530	100	
YLS-7.9-680BC	680 x 7.9	0.36	200	530	100	
YLS-7.9-840BC	840 x 7.9	0.36	250	530	100	
YLS-7.9-1000BC	1000 x 7.9	0.36	300	530	100	
YLS-7.9-1200BC	1200 x 7.9	0.36	365	530	100	
YLS-7.9-1400BC	1400 x 7.9	0.36	425	530	100	

Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

Ladder Type - uncoated
Stainless steel cable ties

The Ladder Type stainless steel ties from Thomas & Betts have a flat, low profile head for easy application.

- Strong self-locking mechanism (pawl and ratchet), requires no time consuming crimping or folding operations
- Flat and low profile head (no sharp edge), for easy installation
- Corrosion resistant 316 grade stainless steel for high mechanical and chemical durability
- Uncoated version for high temperature applications
- Increased usable length (slots up to the end of the tail), allows larger bundle diameters with the same tie length
- Larger slot at the end, allows the use of a hook-type tool
- Applications: Installation of cables and pipes in extreme conditions and hazardous areas, indoor and outdoor, such as: petrochemical and food processing industries, power stations, mining, shipbuilding, offshore and other aggressive environments

Technical Information

Material	316 grade stainless steel
Coating	Uncoated
Temperature range	-80°C to +538°C
Colour	Metallic
Flammability rating	Absolutely fireproof
Other properties	UV-resistant

G L *

Lloyd's Register TYPE APPROVED *

DNV TYPE APPROVED PRODUCTS *
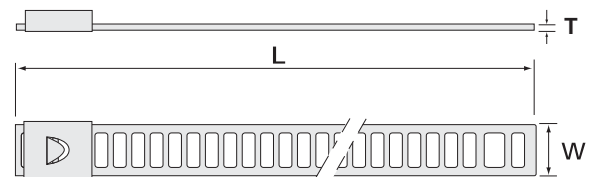
| Product Ref.	Length L [mm]	Width W [mm]	Thickness T [mm]	Max. Bundle diameter [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
YLD-7-150-B	150	7.0	0.30	43	445	100	
YLD-7-225-B	225	7.0	0.30	67	445	100	
YLD-7-300-B	300	7.0	0.30	91	445	100	CT1-TB
YLD-7-450-B	450	7.0	0.30	139	445	100	CT2-TB
YLD-7-610-B	610	7.0	0.30	190	445	100	CT3
YLD-12-150-B	150	12.0	0.35	43	890	100	CT4-TB
YLD-12-225-B	225	12.0	0.35	67	890	100	CT5
YLD-12-300-B	300	12.0	0.35	91	890	100	WT3S
YLD-12-450-B	450	12.0	0.35	139	890	100	
YLD-12-610-B	610	12.0	0.35	190	890	100	

Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

* Some approvals may not be applicable to all the Product References. Contact your Sales Office for approvals limitations

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Thomas&Betts

Ladder Type - coated
Stainless steel cable ties
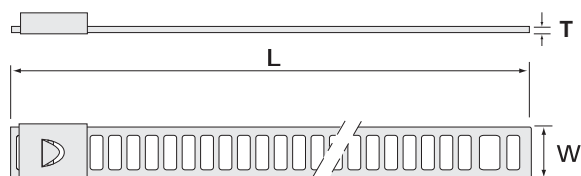
The Ladder Type stainless steel ties from Thomas & Betts have a flat, low profile head for easy application.

- Strong self-locking mechanism (pawl and ratchet), requires no time consuming crimping or folding operations
- Flat and low profile head (no sharp edge), for easy installation
- Corrosion resistant 316 grade stainless steel for high mechanical and chemical durability
- Fully coated version with non-toxic, Halogen free Polyester coating, for a superior protection of cables and installer's hands and for an improved insulation between dissimilar materials
- Increased usable length (slots up to the end of the tail), allows larger bundle diameters with the same tie length
- Larger slot at the end, allows the use of a hook-type tool
- Applications: Installation of cables and pipes in extreme conditions and hazardous areas, indoor and outdoor, such as: petrochemical and food processing industries, power stations, mining, shipbuilding, offshore and other aggressive environments

Technical Information

Material	316 grade stainless steel
Coating	Polyester
Temperature range	-80°C to +150°C
Colour	Black
Flammability rating	Absolutely fireproof
Other properties	UV-resistant, Halogen free, non-toxic

Product Ref.	Length L [mm]	Width W [mm]	Thickness T [mm]	Max. Bundle diameter [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
YLD-7-150-BC	150	7.0	0.41	43	445	100	
YLD-7-225-BC	225	7.0	0.41	67	445	100	
YLD-7-300-BC	300	7.0	0.41	91	445	100	CT1-TB
YLD-7-450-BC	450	7.0	0.41	139	445	100	CT2-TB
YLD-7-610-BC	610	7.0	0.41	190	445	100	CT3
YLD-12-150-BC	150	12.0	0.46	43	890	100	CT4-TB
YLD-12-225-BC	225	12.0	0.46	67	890	100	CT5
YLD-12-300-BC	300	12.0	0.46	91	890	100	WT3S
YLD-12-450-BC	450	12.0	0.46	139	890	100	
YLD-12-610-BC	610	12.0	0.46	190	890	100	

Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

* Some approvals may not be applicable to all the Product References. Contact your Sales Office for approvals limitations

Releasable Type
Stainless steel cable ties

The Releasable Type stainless steel ties from Thomas & Betts have a unique buckle design that allows the ties to be unfastened for re-use.
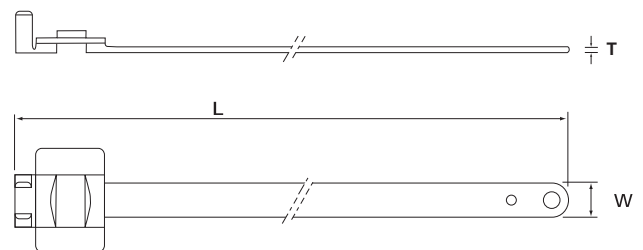
- Releasable and re-usable
- Corrosion resistant 316 grade stainless steel for high mechanical and chemical durability
- Fully coated version with non-toxic, Halogen free Polyester coating, for a superior protection of cables and installer's hands and for an improved insulation between dissimilar materials
- Fast, easy and reliable installation - can be installed by hand and if necessary, the slots at the end of the tie allow the use of a hook-type tool
- The additional ears can be bent back over the fastened tie to increase the tensile strength
- Applications: Installation of cables and pipes in extreme conditions and hazardous areas, indoor and outdoor, such as: petrochemical and food processing industries, power stations, mining, shipbuilding, offshore and other aggressive environments

Technical Information

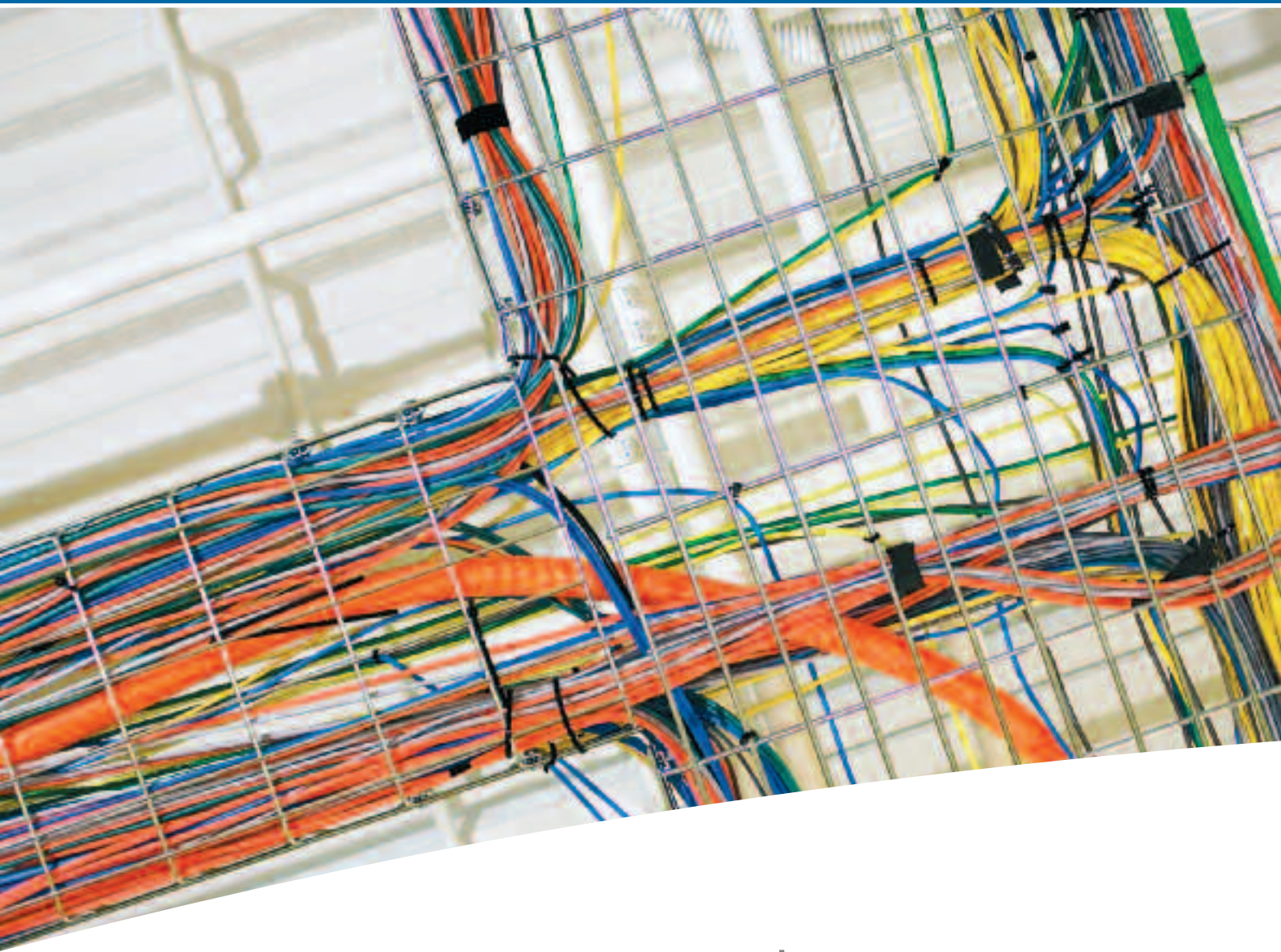| Material	316 grade stainless steel
Coating	Polyester
Temperature range	-80°C to +150°C
Colour	Black
Flammability rating	Absolutely fireproof
Other properties	UV-resistant, Halogen free, non-toxic

Product Ref.	Length L [mm]	Width W [mm]	Thickness T [mm]	Max. Bundle diameter [mm]	Minimum tensile strength [N]	Quantity [pieces]	Tooling
YRL-5-150-BC	150	5.0	0.61	35	334 (1334 for DNV)	100	
YRL-5-230-BC	230	5.0	0.61	60	334 (1334 for DNV)	100	
YRL-5-330-BC	330	5.0	0.61	95	334 (1334 for DNV)	100	
YRL-5-450-BC	450	5.0	0.61	130	334 (1334 for DNV)	100	
YRL-5-650-BC	650	5.0	0.61	195	334 (1334 for DNV)	100	CT1-TB
YRL-10-150-BC	150	10.0	0.61	35	1112 (2000 for DNV)	100	CT2-TB
YRL-10-230-BC	230	10.0	0.61	60	1112 (2000 for DNV)	100	CT4-TB
YRL-10-330-BC	330	10.0	0.61	95	1112 (2000 for DNV)	100	
YRL-10-450-BC	450	10.0	0.61	130	1112 (2000 for DNV)	100	
YRL-10-650-BC	650	10.0	0.61	195	1112 (2000 for DNV)	100	
YRL-10-750-BC	750	10.0	0.61	225	1112 (2000 for DNV)	100	
YRL-10-900-BC	900	10.0	0.61	270	1112 (2000 for DNV)	100	

Description of materials and properties: see pages 134 to 145
For tooling specifications: see pages 122 to 133

* Some approvals may not be applicable to all the Product References. Contact your Sales Office for approvals limitations

Thomas&Betts

Mounting Bases, Cable Clamps & Other Fastening Accessories

Thomas&Betts

Ty-Rap® and Ty-Fast® Accessories

To complement the range of premium cable ties, Thomas & Betts has also developed an extensive range of mounting bases, cable clamps and other fastening accessories, to provide a professional solution to the most demanding applications in cable management.

A wide range of material is offered, from the classic Polyamide 6.6 to the high performance Fluoropolymer ETFE for applications in tough conditions.

To better suit each kind of applications, these products exist in a wide choice of shape & design, and with different mounting methods, from self-adhesive to glue and / or screw mounting.

*Mounting Bases,
Cable Clamps & Other
Fastening Accessories*

In particular, with the new high performance mounting bases (TC345 series), Thomas & Betts is now offering a mounting base that leads the industry with more features and better performance:
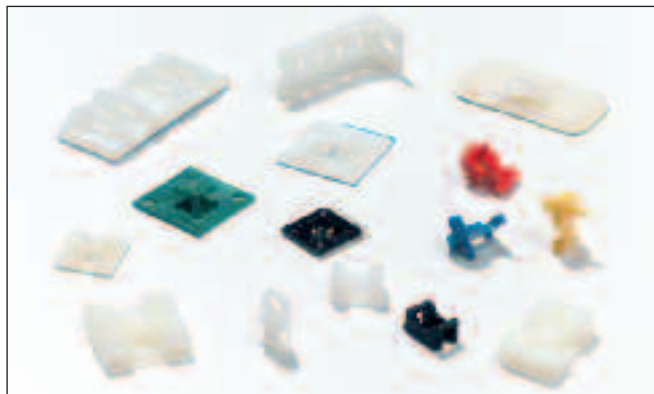- new design & materials, for increased performance
- special adhesive formulation, specifically for Nylon Mounting bases

Typical applications include wiring in:
- control boxes & machine control devices
- office equipment & home appliances
- military & medical equipment
- lighting & electronic equipment

Thomas&Betts

Overview
Mounting Bases & Accessories

Mounting bases

Cable clamps

Self-adhesive mounting bases and clamps for screw and rivet mounting

The main difference between a mounting base and a cable clamp is the way the cable bundle can be mounted: while the cable bundle is attached directly to the clamp, the mounting base requires a cable tie to hold the bundle.

Thomas & Betts offers a wide range of mounting bases and cable clamps, which can be self-adhesive or for screw and rivet mounting.

• Standard material: Polyamide 6.6
• Available in different types / material to suit any application
• Available in a wide range of sizes
• Temperature range: -40°C to +85°C (+105°C for short periods)
• Low profile design
• Easy to install
• Extremely strong and durable adhesive
• The self-adhesive film is foam backed (0.8 mm) to compensate for any irregularities on the mounting surface
• When applicable Thomas & Betts accessories are UL recognised

Typical applications

Wiring of:
• Control boxes
• Vehicles
• Office equipment
• Machine control devices
• Machine construction
• Military equipment
• Aeronautics
• Railway industry
• Electronic equipment
• Home appliances
• Lighting
• Medical equipment

2-way entry
Mounting bases

- Can be used in 2-way entry style for cable ties having a width up to 7.6 mm
- For cable ties having a width up to 4.8 mm, the mounting bases can be used in 4-way entry style
- Choice of 3 materials: standard Polyamide 6.6 (natural), UV-resistant Polyamide 6.6 (black), Polyamide 6.6 flame retardant and ETFE Fluoropolymer (aquamarine)
- Supplied either on a rubber based (synthetic polymer) closed cell foam adhesive (installation: self-adhesive and/or screw) or without self-adhesive (installation: screw and/or 2-component glue*)

### Technical Information TC347, TC347A, TC5347AR, TC347X and TC5347AX

Material	Polyamide 6.6
Temperature range	-40°C to +85°C
	(Self-adhesive version: 0°C to +65°C)
Flammability rating	UL 94 V-2
Colour	(see table)
Other properties	UV-resistant (black), Halogen free, Silicone free

Technical Information TC347FR (Flame retardant)

Material	Polyamide 6.6
Temperature range	-40°C to +85°C
Flammability rating	UL 94 V-0
Colour	Natural
Other properties	Halogen free, Silicone free

Technical Information TCZ347 (Fluoropolymer)

| Material	ETFE Fluoropolymer
Temperature range	-46°C to +150°C
Flammability rating	UL 94 V-0
Colour	Aquamarine
Other properties	Silicone free, inert to most solvents and chemicals, hydrolytically stable, radiation resistant
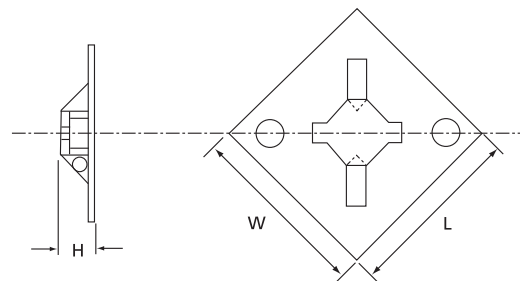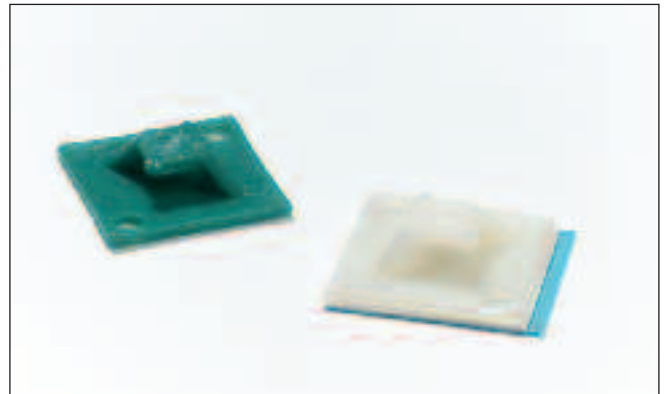
Product Ref.	Colour	Mounting method	Dimensions			For tie width up to	Mounting hole ø	Quantity
			H [mm]	W [mm]	L [mm]	[mm]	[mm]	[pieces]
TC347	natural	screw / glue*	7.8	28.6	28.6	7.6	4.4 (2x)	1000
TC347X	UV-resistant black	screw / glue*	7.8	28.6	28.6	7.6	4.4 (2x)	1000
TC347FR	natural / flame retardant	screw / glue*	7.8	28.6	28.6	7.6	4.4 (2x)	1000
TCZ347	aquamarine	screw / glue*	7.8	28.6	28.6	7.6	4.4 (2x)	500
TC347A	natural	self-adhesive / screw	8.5	29.0	29.0	7.6	4.4 (2x)	1000
TC5347AR	natural	self-adhesive / screw	8.5	29.0	29.0	7.6	4.4 (2x)	100
TC5347AX	UV-resistant black	self-adhesive / screw	8.5	29.0	29.0	7.6	4.4 (2x)	100

* Glue = Product Ref. TC2PA (see page 137 for specifications)

Thomas&Betts

4-way entry - high performance
Mounting bases
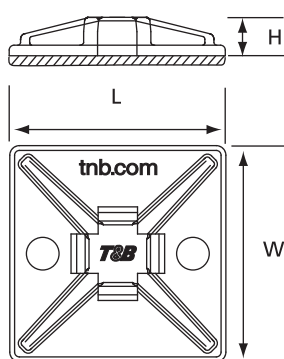
- New design & materials, for increased performance
- Low profile shape (height: 5.1 mm), to save space and reduce the torque forces on the mounting base
- Ramped cable tie entries, for easier insertion of the cable tie
- Longer struts (up to the edges of the base), for better adhesion
- Special adhesive formulation (specifically for Nylon mounting bases) for high pull-off strength
- 2 kinds of self-adhesive material:
  - rubber-based, for immediate adhesion (15 minutes set-up time)
  - acrylic based, to have the possibility of repositioning the mounting base initially (set-up time: 24 to 72 hours)
- Two holes to have the possibility to use additional screws, for even stronger installations when required
- Supplied on two-up lining, for easy removal of the lining

Technical Information

Material - Moulding	Polyamide or UV-resistant Polyamide or flame retardant Polyamide (See table)
Material - Self-adhesive	Rubber based or acrylic based (See table)
Temperature range	-40°C to +85°C (Self-adhesive version: 0°C to +65°C)
Flammability rating	UL 94 V-2 or UL 94 V-0 (for flame retardant Polyamide)
Colours	Natural or UV-resistant black (see table)
Other properties	UV-resistant (black), Halogen free, Silicone free

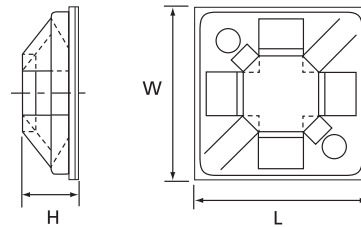| Product Ref.	Colour	Mounting method	L [mm]	W [mm]	H [mm]	For tie width up to [mm]	Mounting holes ø [mm]	Quantity [pieces]
TC345	natural	glue* / screws	28.6	28.6	5.1	5.2	4.0	1000
TC345A	natural	self-adhesive (rubber based) / screws	28.6	28.6	5.1	5.2	4.0	1000
TC5345A	natural	self-adhesive (rubber based) / screws	28.6	28.6	5.1	5.2	4.0	100
TC345AX	UV-resistant black	self-adhesive (rubber based) / screws	28.6	28.6	5.1	5.2	4.0	1000
TC5345AX	UV-resistant black	self-adhesive (rubber based) / screws	28.6	28.6	5.1	5.2	4.0	100
TC345AFR	natural / flame retardant	self-adhesive (rubber based) / screws	28.6	28.6	5.1	5.2	4.0	1000
TC345AHTFR	natural / flame retardant	self-adhesive (acrylic based) / screws	28.6	28.6	5.1	5.2	4.0	1000
TC5345AHTFR	natural / flame retardant	self-adhesive (acrylic based) / screws	28.6	28.6	5.1	5.2	4.0	100

* Glue = Product Ref TC2PA (see page 137 for specifications)

4-way entry
Mounting bases

- Supplied either on a rubber based (synthetic polymer) closed cell foam adhesive or without self adhesive (installation: screw and/or 2 component glue*)
- Available in standard Polyamide 6.6 (natural) or UV-resistant Polyamide 6.6 (black)

Technical Information

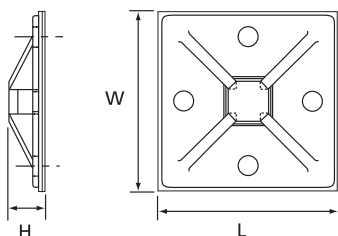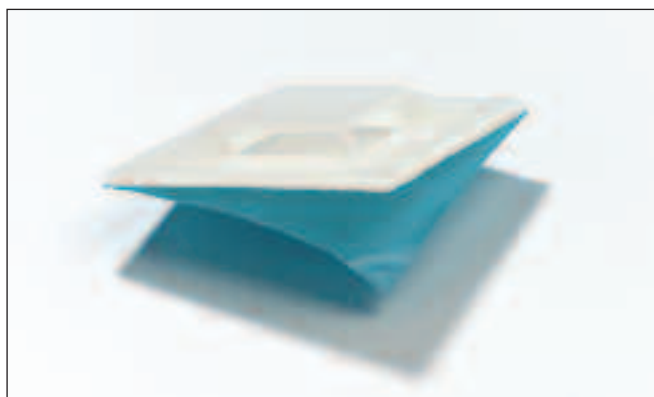| Material	Polyamide 6.6
Temperature range	-40°C to +85°C
	(Self-adhesive version: 0°C to +65°C)
Flammability rating	UL 94 V-2
Colours	Natural or UV-resistant black (see table)
Other properties	UV-resistant (black), Halogen free, Silicone free

Product Ref.	Colour	Mounting method	Dimensions L [mm]	W [mm]	H [mm]	For tie width up to [mm]	Mounting hole ø [mm]	Quantity [pieces]
FOR TIE WIDTH UP TO 3.0 MM								
TC050x050A	natural	self-adhesive	12.7	12.7	4.5	3.0	–	1000
TC050x050A-C	natural	self-adhesive	12.7	12.7	4.5	3.0	–	100
TC050x050AX	UV-resistant black	self-adhesive	12.7	12.7	4.5	3.0	–	1000
TC050x050AX-C	UV-resistant black	self-adhesive	12.7	12.7	4.5	3.0	–	100
FOR TIE WIDTH UP TO 3.6 MM								
TC344	natural	screw / glue*	19.1	19.1	4.9	3.6	3.0	1000
TC5344	natural	screw / glue*	19.1	19.1	4.9	3.6	3.0	100
TC344A	natural	self-adhesive / screw	19.1	19.1	4.9	3.6	3.0	1000
TC5344AR	natural	self-adhesive / screw	19.1	19.1	4.9	3.6	3.0	100
TC344AX	UV-resistant black	self-adhesive / screw	19.1	19.1	4.9	3.6	3.0	1000
TC5344AX	UV-resistant black	self-adhesive / screw	19.1	19.1	4.9	3.6	3.0	100

* Glue = Product Ref TC2PA (see page 137 for specifications)

4-way entry - for wide cable ties
Mounting bases

- Supplied either on a rubber based (synthetic polymer) closed cell foam adhesive or without self adhesive (installation: screw and/or 2 component glue*)
- Available in standard Polyamide 6.6 (natural) or UV-resistant Polyamide 6.6 (black)

Technical Information

Material	Polyamide 6.6
Temperature range	-40°C to +85°C (Self-adhesive version: 0°C to +65°C)
Flammability rating	UL 94 V-2
Colours	Natural or UV-resistant black (see table)
Other properties	UV-resistant (black), Halogen free, Silicone free

Product Ref.	Colour	Mounting method	Dimensions L [mm]	W [mm]	H [mm]	For tie width up to [mm]	Mounting hole ø [mm]	Quantity [pieces]
FOR TIE WIDTH UP TO 7.9 MM (38.1 MM x 38.1 MM BASE)								
TC150x150	natural	screw / glue*	38.1	38.1	7.4	7.9	4.3	500
TC150x150L	natural	screw / glue*	38.1	38.1	7.4	7.9	4.3	50
TC150x150A	natural	self-adhesive / screw	38.1	38.1	7.4	7.9	4.3	500
TC150x150A-L	natural	self-adhesive / screw	38.1	38.1	7.4	7.9	4.3	50
TC150x150AX	UV-resistant black	self-adhesive / screw	38.1	38.1	7.4	7.9	4.3	500
TC150x150AX-L	UV-resistant black	self-adhesive / screw	38.1	38.1	7.4	7.9	4.3	50
FOR TIE WIDTH UP TO 7.9 MM (50.8 MM x 50.8 MM BASE)								
TC200x200	natural	screw / glue*	50.8	50.8	7.4	7.9	4.3	500
TC200x200L	natural	screw / glue*	50.8	50.8	7.4	7.9	4.3	50
TC200x200A	natural	self-adhesive / screw	50.8	50.8	7.4	7.9	4.3	500
TC200x200A-L	natural	self-adhesive / screw	50.8	50.8	7.4	7.9	4.3	50
TC200x200AX	UV-resistant black	self-adhesive / screw	50.8	50.8	7.4	7.9	4.3	500
FOR TIE WIDTH UP TO 19.1 MM (50.8 MM x 50.8 MM BASE)								
TC368	natural	screw / glue*	50.8	50.8	6.6	19.1	4.3	500
TC368A	natural	self-adhesive / screw	50.8	50.8	6.6	19.1	4.3	500

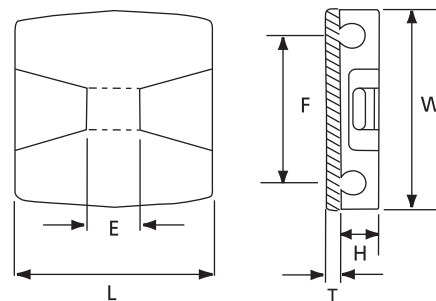* Glue = Product Ref TC2PA (see page 137 for specifications)

Low profile plates
Mounting bases

- Low profile
- Easy to use
- Available in several materials
- Self-adhesive or to be glued with 2-component glue*

Technical Information

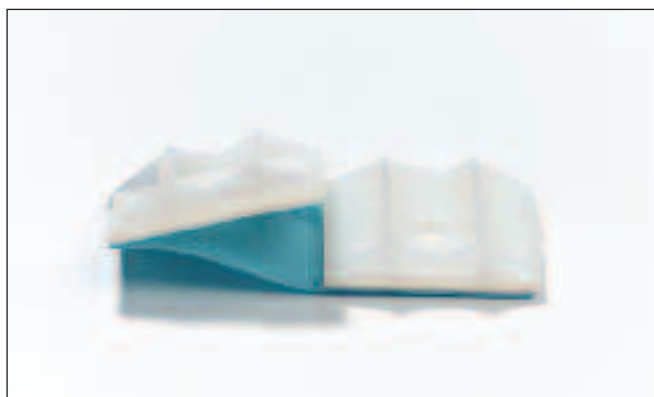| Material	Polyamide 6.6
Temperature range	-40°C to +85°C (Self-adhesive version: 0°C to +65°C)
Colour	Natural or UV-resistant black (see table)
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free, UV-resistant (black)

Product Ref.	Colour	Mounting method	Dimensions						For tie width up to	Weight	Quantity
			H [mm]	T [mm]	W [mm]	L [mm]	E [mm]	F [mm]	[mm]	[g/100]	[pieces]
TC817-TB	natural	glue*	4.8	–	11.0	11.0	–	–	4.8	51	1000
TC342	natural	glue*	5.7	–	29.0	29.0	7.5	21.0	4.8	340	1000
TC342X	UV-resistant black	glue*	5.7	–	29.0	29.0	7.5	21.0	4.8	340	1000
TC342A	natural	self-adhesive	5.7	0.8	29.0	29.0	7.5	21.0	4.8	360	1000
TC5342A	natural	self-adhesive	5.7	0.8	29.0	29.0	7.5	21.0	4.8	360	100
TC342A-X	UV-resistant black	self-adhesive	5.7	0.8	29.0	29.0	7.5	21.0	4.8	360	1000

* Glue = Product Ref. TC2PA (see page 137 for specifications)

Self-adhesive mounting cradle
Mounting bases

- Accepts cable ties to 7.6 mm width
- Supplied "two-up" on closed cell foam with synthetic polymer "rubber" based adhesive
- Use M3.5 self-tapping screw for added strength if desired

Technical Information

Material	Polyamide 6.6
Temperature range	0°C to +65°C
Colour	Natural or UV-resistant black (see table)
Mounting method	Self adhesive and/or screw
Flammability rating	UL 94 V-2
Other properties	UV-resistant (black), Halogen free, Silicone free
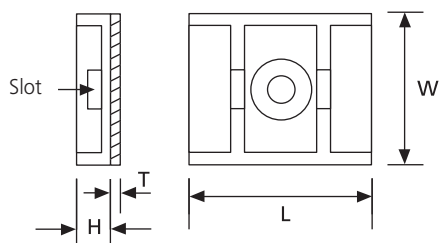
Product Ref.	Colour	Dimensions				For tie width up to	Quantity
		H [mm]	T [mm]	L [mm]	W [mm]	[mm]	[pieces]
MCNY-1250-9-L	natural	7.2	0.8	31.7	25.4	7.6	50
MCNY-1250-9-C	natural	7.2	0.8	31.7	25.4	7.6	100
MCNY-1250-9-D	natural	7.2	0.8	31.7	25.4	7.6	500
MCNY-1250-0-C	UV-resistant black	7.2	0.8	31.7	25.4	7.6	100

* Glue = Product Ref. TC2PA (see page 137 for specifications)
For other colours and quantities please contact your Sales Office

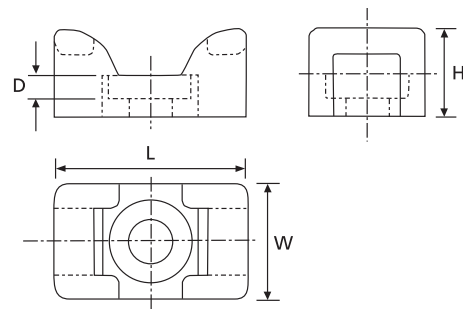## Saddle support
Mounting bases

- Tie mounting bases with supporting saddle
- For screw- or rivet-mounting
- The prism-shape of the saddle prevents twisting around the fixture
- High strength through compact design
- Non-conductive, non-corrosive, resistant to fuels, lubricants and most chemicals
- Available in UV-resistant, heat stabilised black version

Technical Information

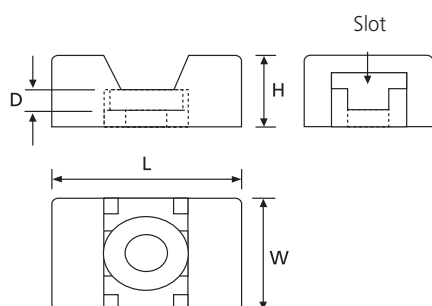| Material	Polyamide 6.6 or heat stabilised Polyamide 6.6
Temperature range	-40°C to +85°C (Natural) -40°C to +105°C (UV-resistant black)
Colour	Natural or UV-resistant black (see table)
Mounting method	Screw
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free, UV-resistant (black)

E49405

Product Ref.	Colour	Dimensions				For tie width up to	Mounting hole ø	Quantity
		H [mm]	W [mm]	L [mm]	D [mm]	[mm]	[mm]	[pieces]
TC140	natural	6.7	8.7	14.2	1.8	2.4	3.0	500
TC5140	natural	6.7	8.7	14.2	1.8	2.4	3.0	100
TC141	natural	7.5	11.1	17.0	2.3	4.8	3.8	500
TC5141	natural	7.5	11.1	17.0	2.3	4.8	3.8	100
TC142	natural	10.7	14.2	23.4	2.9	7.6	5.2	500
TC5142	natural	10.7	14.2	23.4	2.9	7.6	5.2	100
TC142X*	UV-resistant black / heat stabilised	10.7	14.2	23.4	2.9	7.6	5.2	500
TC5142X*	UV-resistant black / heat stabilised	10.7	14.2	23.4	2.9	7.6	5.2	100

For other colours and quantities please contact your Sales Office
* Are not UL recognised

Thomas&Betts

Saddle support
Mounting bases

- Tie mounting bases with supporting saddle
- For screw- or rivet-mounting
- The prism-shape of the saddle prevents twisting around the fixture
- High strength through compact design
- Non-conductive, non-corrosive, resistant to fuels, lubricants and most chemicals
- Available in UV-resistant, heat stabilised black version

Technical Information

Material	Polyamide 6.6 or heat stabilised Polyamide 6.6
Temperature range	-40°C to +85°C (Natural) -40°C to +105°C (UV-resistant black)
Colour	Natural or UV-resistant black
Mounting method	Screw
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free, UV-resistant (black)

Slot

Product Ref.	Colour	Dimensions				For tie width up to [mm]	Mounting hole ø [mm]	Quantity [pieces]
		H [mm]	W [mm]	L [mm]	D [mm]			
SMNY-001-9-D	natural	7.1	9.8	15.2	4.7	4.8	4.2	500
SMNY-001-0-D	UV-resistant black heat stabilised	7.1	9.8	15.2	4.7	4.8	4.2	500

For other colours and quantities please contact your Sales Office

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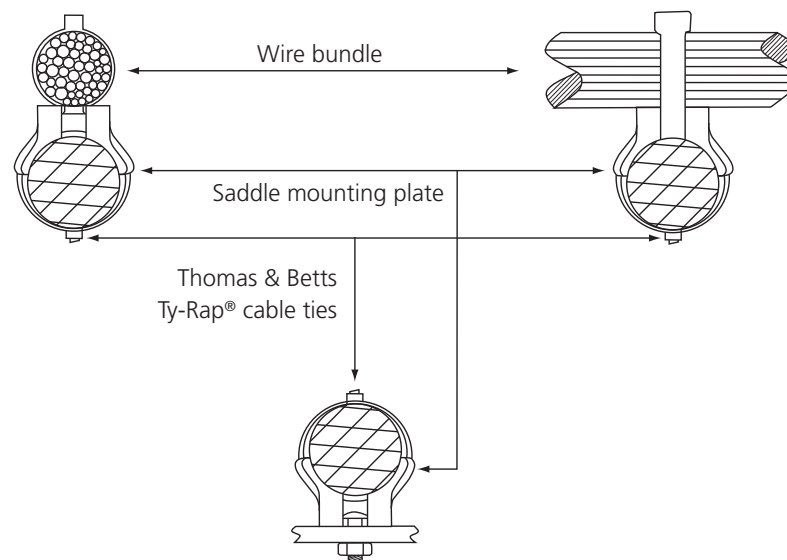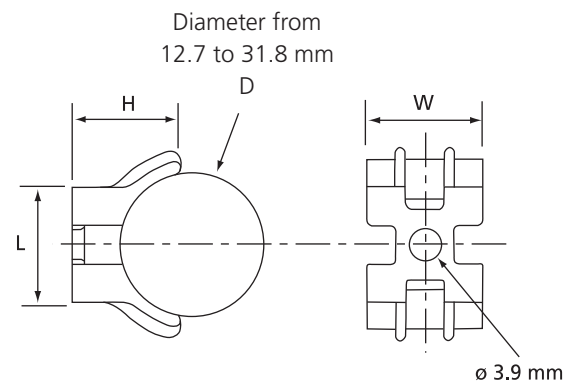## Saddle-type mounting base
Mounting bases

The saddle-type mounting bases allow 3 possible cable mounting:
• the cables can be attached to a flat surface on which the base is screwed
• the cable bundles can be mounted in parallel
• the cable bundles can be mounted crosswise

Can also be used for the mounting of cylindrical objects having a diameter between 12.7 and 31.8 mm

Technical Information

Material	Polyamide 6.6
Temperature range	-40°C to +85°C
Colour	Natural
Mounting method	Screw
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free

Diameter from
12.7 to 31.8 mm
D

H

L

W

ø 3.9 mm

Wire bundle

Saddle mounting plate

Thomas & Betts
Ty-Rap® cable ties

Product Ref.	Dimensions				For tie width up to	Mounting hole ø	Weight	Quantity
	H [mm]	W [mm]	L [mm]	D [mm]	[mm]	[mm]	[g/100]	[pieces]
TC92	14.3	15.1	15.1	12.7 - 31.8	4.8	3.9	143	100

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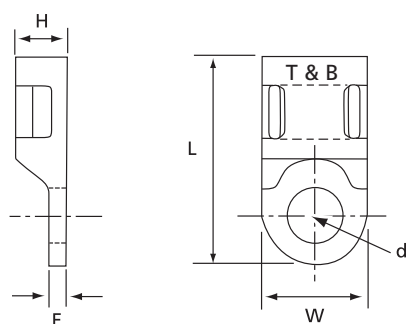
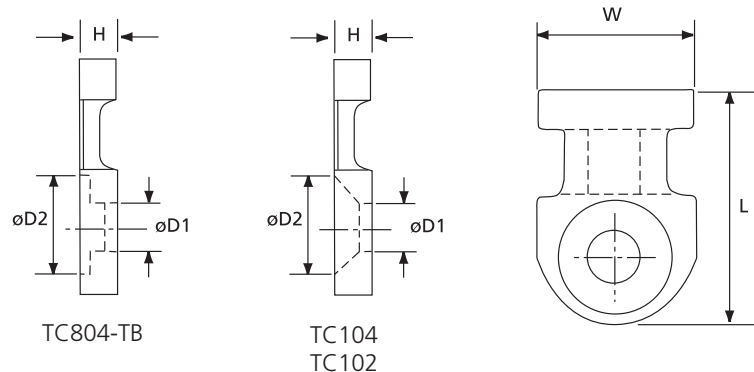## Screw-mounted miniature bases
Mounting bases

- Low profile mounting base
- For screw- or rivet-mounting
- Easy to use thanks to the cable tie insertion guide

Technical Information

Material	Polyamide 6.6
Temperature range	-40°C to +85°C
Colour	Natural
Mounting method	Fillister-head screw
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free

E49405

Product Ref.	Dimensions				For tie width up to	Mounting hole ø d	Weight	Quantity
	H [mm]	W [mm]	L [mm]	E [mm]	[mm]	[mm]	[g/100]	[pieces]
TC814-TB	4.8	9.5	19.1	2.0	4.8	3.3	44	1000
TC112-TB	4.8	9.5	19.1	2.0	4.8	4.4	44	1000
TC812-TB	4.8	9.5	19.1	2.0	4.8	5.1	44	1000

For other colours and quantities please contact your Sales Office

Screw-mounted miniature bases
Mounting bases

- Extremely low profile
- For screw- or rivet-mounting
- Easy to use thanks to the cable tie insertion guide

Technical Information

Material	Polyamide 6.6
Temperature range	-40°C to +85°C
Colour	Natural
Mounting method	Screw
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free

E49405

TC804-TB

TC104
TC102

Product Ref.	Dimensions			For tie width up to	Mounting hole		Weight	Quantity
	H [mm]	W [mm]	L [mm]	[mm]	øD1 [mm]	øD2 [mm]	[g/100]	[pieces]
TC804-TB	2.4	7.9	10.2	2.4	2.3	4.7	11	1000
TC104	2.4	7.9	10.3	2.4	3.4	6.5	11	1000
TC102	3.2	12.7	19.1	4.8	4.4	8.7	50	1000

For other colours and quantities please contact your Sales Office
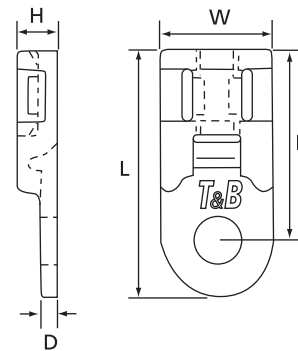
Thomas&Betts

Screw-mounted - for wide cable ties
Mounting bases

- Extremely low profile
- For screw- or rivet-mounting
- Easy to use thanks to the cable tie insertion guide
- Secure fixing with 2 fastening holes

Technical Information

Material	Polyamide 6.6
Temperature range	-40°C to +85°C
Colour	Natural
Mounting method	2 screws
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free

E49405
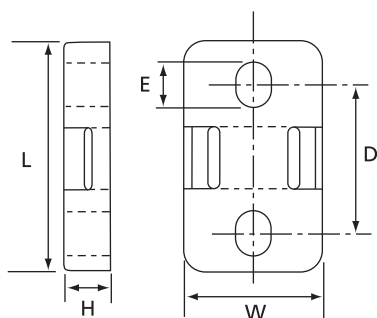
Product Ref.	Dimensions					For tie width up to	Mounting hole ø	Weight	Quantity
	H [mm]	W [mm]	L [mm]	D [mm]	E [mm]	[mm]	[mm]	[g/100]	[pieces]
TC815-TB	6.4	19.1	31.2	19.9	6.4	7.6	5.3	278	500

For other colours and quantities please contact your Sales Office

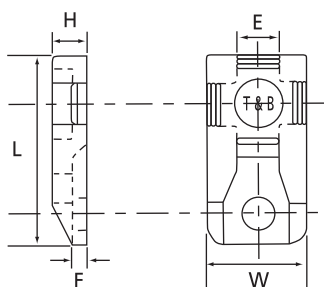## Screw-mounted - for crosswise fastening
Mounting bases

- Extremely low profile
- For screw- or rivet-mounting
- Easy to use thanks to the cable tie insertion guide
- Two ties can be fastened crosswise to securely fix cable intersections

Technical Information

Material	Polyamide 6.6
Temperature range	-40°C to +85°C
Colour	Natural
Mounting method	Screw
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free

E49405

Product Ref.	Dimensions					For tie width up to	Mounting hole ø	Weight	Quantity
	H [mm]	W [mm]	L [mm]	D [mm]	E [mm]	[mm]	[mm]	[g/100]	[pieces]
TC828-TB	3.8	10.1	22.5	1.5	13.4	4.8	4.3	46	1000
TC5828	3.8	10.1	22.5	1.5	13.4	4.8	4.3	46	100

Thomas&Betts

Screw-mounted - for crosswise fastening
Mounting bases

- Extremely low profile
- For screw- or rivet-mounting
- Easy to use thanks to the cable tie insertion guide
- Two ties can be fastened crosswise to securely fix cable intersections

Technical Information

Material	Polyamide 6.6
Temperature range	-40°C to +85°C
Colour	Natural
Mounting method	Screw
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free

E49405

Product Ref.	Dimensions					For tie width up to	Mounting hole ø	Weight	Quantity
	H [mm]	W [mm]	L [mm]	E [mm]	F [mm]	[mm]	[mm]	[g/100]	[pieces]
TC826-TB	5.7	12.7	23.8	5.3	2.0	4.8	4.4	102	1000

For other colours and quantities please contact your Sales Office

## Screw-mounted supporting bases
Mounting bases

- Supporting mounting base with strong hold thanks to 2 mounting holes
- Can be screwed or riveted
- Allows double and/or crosswise (two ties) fixing
- For parallel and through mounting with support
- Suitable for large bundle diameters

Technical Information

Material	Polyamide 6.6
Temperature range	-40°C to +85°C
Colour	Natural
Mounting method	2 screws
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free

E49405
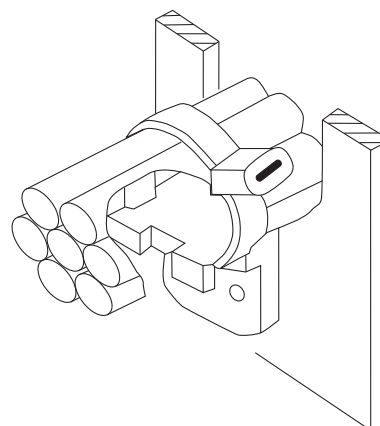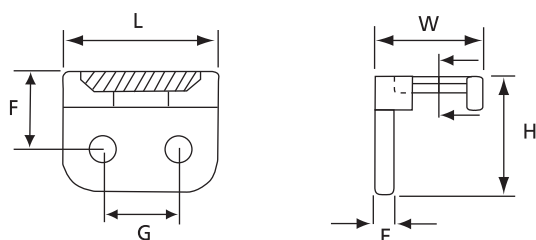
Product Ref.	Dimensions						For tie width up to [mm]	Mounting hole ø [mm]	Weight [g/100]	Quantity [pieces]
	H [mm]	W [mm]	L [mm]	G [mm]	E [mm]	F [mm]				
TC106	25.4	19.1	25.4	12.7	4.6	16.5	7.6	3.3 (x 2)	435	200
TC109	11.1	9.9	14.3	7.1	1.7	7.0	4.8	2.4 (x 2)	45	1000

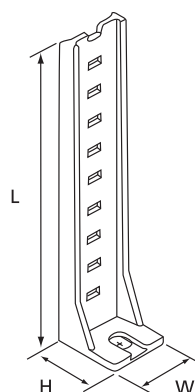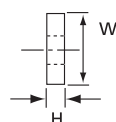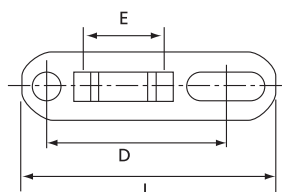## Screw-mounted strips for multiple bundling
Mounting bases

UL
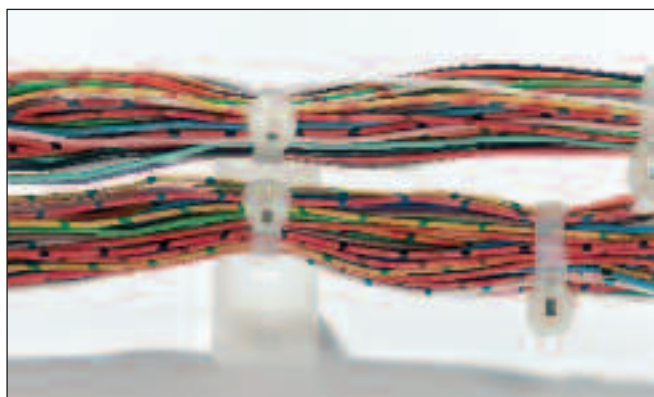
E49405

TC101 & TC103

TC375 &
TC376

- Tie mounting strips for up to 6 bundles simultaneously
- When mounted, the tie is guided through the clamp for fast assembly

Product Ref. TC1101 to TC1117
- Simple and strong flat mounting beams for fixing multiple cables, bundles or components
- Mil. Specified (MS-3339-...-...)
- VG approved (VG 95387, item 2)

Product Ref. TC375 and TC376
- For vertical and double-side mounting

Product Ref. TC101 and TC103
- Elongated fastening hole on one end allows greater flexibility during mounting

Technical Information

Material	Polyamide 6.6
Temperature range	-40°C to +85°C
Colour	Natural
Mounting method	2 screws (1 screw for Prod. Ref. TC376 & TC375)
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free
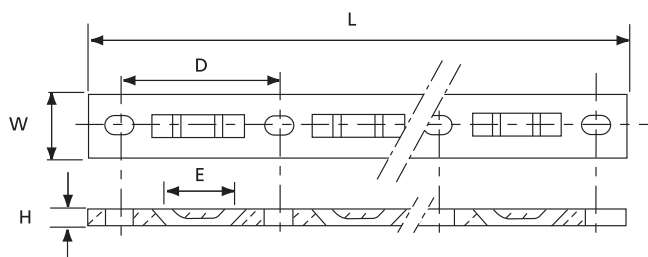
TC1101 ... TC1117

Product Ref.	Mil Spec.	Dimensions					Max. number of bundles	For tie width up to [mm]	Mounting hole ø [mm]	Weight [g/100]	Quantity [pieces]
		H [mm]	W [mm]	L [mm]	D [mm]	E [mm]					
TC101	–	3.2	12.7	50.0	35.6	9.5	1	4.8	5.2	151	1000
TC103	–	5.1	15.8	79.0	59.6	18.6	1	7.6	6.9	505	500
TC1101	MS-3339-1-9	3.2	12.7	44.0	31.8	9.5	1	4.8	3.7	160	100
TC1102	MS-3339-2-9	3.2	12.7	76.0	31.8	9.5	2	4.8	3.7	280	100
TC1103	MS-3339-3-9	3.2	12.7	108.0	31.8	9.5	3	4.8	3.7	400	100
TC1104	MS-3339-4-9	3.2	12.7	140.0	31.8	9.5	4	4.8	3.7	520	100
TC1105	MS-3339-5-9	3.2	12.7	171.0	31.8	9.5	5	4.8	3.7	650	100
TC1112	MS-3339-11-9	5.2	15.9	244.0	38.1	14.3	6	7.6	3.7	1679	100
TC1113	MS-3339-6-9	5.2	15.9	53.3	38.1	14.3	1	7.6	3.7	385	100
TC1114	MS-3339-7-9	5.2	15.9	91.4	38.1	14.3	2	7.6	3.7	658	100
TC1115	MS-3339-8-9	5.2	15.9	130.0	38.1	14.3	3	7.6	3.7	914	100
TC1116	MS-3339-9-9	5.2	15.9	168.0	38.1	14.3	4	7.6	3.7	1190	100
TC1117	MS-3339-10-9	5.2	15.9	206.0	38.1	14.3	5	7.6	3.7	1141	100
TC375	–	19.1	17.5	93.0	–	6.4	5	4.8	4.8	486	100
TC376	–	17.0	17.5	44.0	–	6.4	2	4.8	4.8	253	100

For other colours and quantities please contact your Sales Office

Weather resistant - Heavy-duty
Mounting bases

- Tie mounting base for outdoor installation
- A strong, weatherproof and durable outdoor fastening solution for pipes, hoses, cables, etc.

Product Ref. TC5358 and TC5359
- Built-in plug for mounting into walls
- Easy to install: the plug is simply hammered into a hole
- The lamellar plug ensures high tensile strength and durability

Product Ref. TC5355 to TC5357
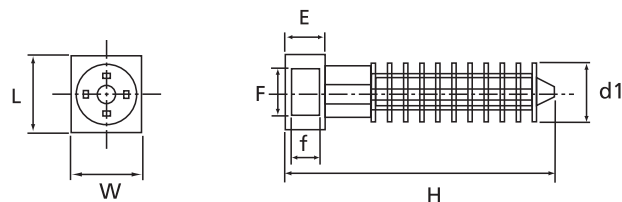- For screw-fastening
- Ergonomically shaped for trouble-free installation

Technical Information

Material	UV-stabilised Polyamide 6.6
Temperature range	-40°C to +85°C
Colour	Black
Mounting method	Screw (for Product ref. TC5355 to TC5357 only)
Flammability rating	UL 94 V-2
Other properties	UV-resistant, Halogen free, Silicone free

TC5355-TC5356-TC5357
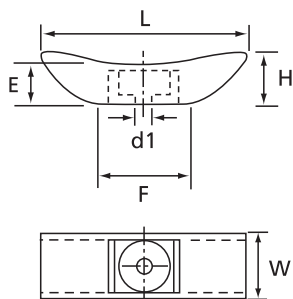
TC5358-TC5359

Product Ref.	Dimensions						For tie width up to	Mounting hole ø d1	Weight	Quantity
	H [mm]	W [mm]	L [mm]	E [mm]	F [mm]	f [mm]	[mm]	[mm]	[g/100]	[pieces]
MOUNTING CRADLE										
TC5355	15.9	19.1	44.5	11.1	28.6	–	12.7	4.6	500	25
TC5356	15.9	19.1	44.5	11.1	28.6	–	12.7	5.2	500	25
TC5357	15.9	19.1	44.5	11.1	28.6	–	12.7	6.7	500	25
WALL PLUG										
TC5358	31.8	9.9	9.9	7.1	5.6	2.3	4.8	6.4 (in wall)	120	100
TC5359	38.4	19.1	19.1	8.1	14.0	3.1	12.7	9.5 (in wall)	320	50

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Clip-in mounting bases for blind mounting
Mounting bases

- Clip-in tie mounting bases for housings, faceplates etc
- With fastening clip for blind-mounting and two openings for two 2.8 mm or 4.8 mm ties
- Low profile

Technical Information

Material	Polyamide 6.6
Temperature range	-40°C to +85°C
Colour	Natural
Mounting method	Clip in
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free
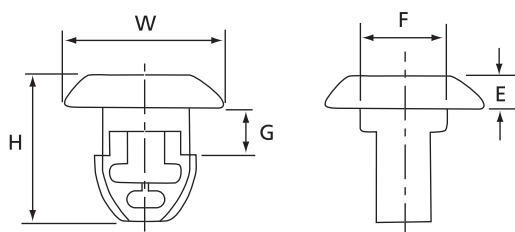
| Product Ref. | Dimensions | | | | | Panel thickness from … to [mm] | For tie width up to [mm] | Mounting hole ø [mm] | Weight [g/100] | Quantity [pieces] |
	H [mm]	W [mm]	G [mm]	E [mm]	F [mm]					
TC121-TB	10.4	11.2	3.4	2.0	6.1	0.1 - 3.2	2.4 and 4.8	6.3	31	1000

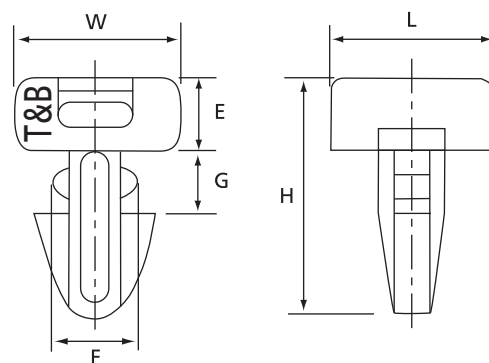## Clip-in mounting bases for surface mounting
Mounting bases

- Clip-in tie mounting bases for housings, faceplates etc
- With fastening clip for surface mounting
- Low profile

Technical Information

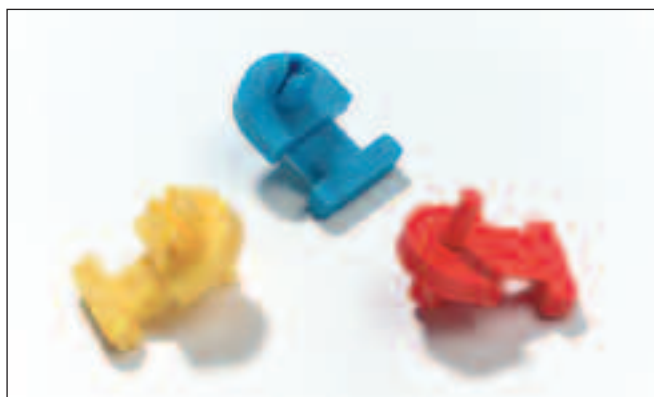| Material	Polyamide 6.6
Temperature range	-40°C to +85°C
Colour	Natural (TC823-TB & TC5823)
	UV-resistant black (TC823X)
Mounting method	Clip in
Flammability rating	UL 94 V-2
Other properties	UV-resistant (black), Halogen free,
	Silicone free

E49405

Product Ref.	Dimensions						Panel thickness from … to	For tie width up to	Mounting hole ø	Weight	Quantity
	H [mm]	W [mm]	L [mm]	G [mm]	E [mm]	F [mm]	[mm]	[mm]	[mm]	[g/100]	[pieces]
TC823-TB	16.8	11.1	11.1	3.6	5.1	5.8	0.1 - 3.2	4.8	6.2 - 6.5	68	1000
TC5823	16.8	11.1	11.1	3.6	5.1	5.8	0.1 - 3.2	4.8	6.2 - 6.5	68	100
TC823X*	16.8	11.1	11.1	3.6	5.1	5.8	0.1 - 3.2	4.8	6.2 - 6.5	68	1000

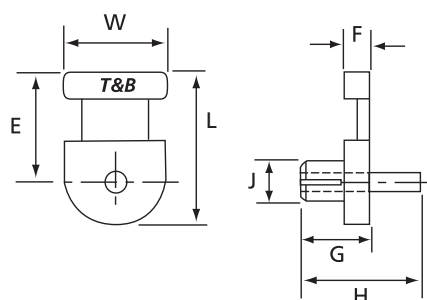For other colours and quantities please contact your Sales Office
* Not UL recognised

Rivet-mounted bases
Mounting bases

E49405

- Low profile mounting base with integrated rivet
- Easy to install into normal or blind holes: just hammer in the expanding harbour
- Parts are colour-coded according to hole diameter to avoid confusion

Technical Information

Material	Polyamide 6.6
Temperature range	-40°C to +85°C
Colour	See table
Mounting method	Rivet mounted
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free

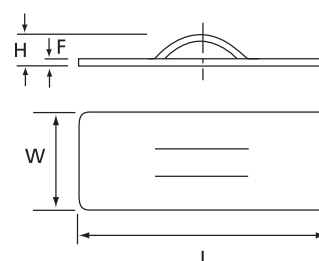| Product Ref.	Colour	Dimensions							For tie width up to [mm]	Mounting hole ø [mm]	Weight [g/100]	Quantity [pieces]
		W [mm]	L [mm]	F [mm]	E [mm]	G [mm]	H [mm]	J [mm]				
TC116-TB	red	12.7	19.1	3.2	13.9	8.6	15	3.9	4.8	3.7	70.5	1000
TC118-TB	blue	12.7	19.1	3.2	13.9	8.6	15	4.5	4.8	4.4	71.0	1000
TC120	yellow	12.7	19.1	3.2	13.9	8.6	15	5.2	4.8	4.9	71.5	1000

Aluminium plates
Mounting bases

- Very strong mounting base for gluing or screw mounting or self-adhesive mounting
- Low profile
- Soft material can be perfectly shaped onto any support
- Lightweight
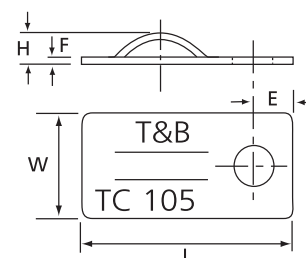- Does not age even under extreme temperatures

Technical Information

|	
Material	Aluminium (3003, ASTMB-209)
Temperature range	-100°C to +450°C
	(Self-adhesive version: 0°C to +65°C)
Colour	Metallic
Mounting method	Glue (*) and / or screw or self-adhesive
Flammability rating	Fire proof
Other properties	UV-resistant

TC824-TB

TC105 and TC105AP

Product Ref.	Mounting method	Dimensions					For tie width up to	Mounting hole ø	Weight	Quantity
		H [mm]	W [mm]	L [mm]	E [mm]	F [mm]	[mm]	[mm]	[g/100]	[pieces]
TC105AP	self-adhesive / screw	3.8	13.2	25.4	4.8	0.8	4.8	4.9	67	1000
TC105	screw	3.8	13.2	25.4	4.8	0.8	4.8	4.9	67	1000
TC5105	screw	3.8	13.2	25.4	4.8	0.8	4.8	4.9	67	100
TC824-TB	2-component glue*	3.8	9.5	34.9	–	0.8	4.8	–	69	1000

* Glue = Product Ref TC2PA (see page 137 for specifications)

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Thomas&Betts

## Special mounting bases for Ty-Rap® cable ties
Mounting bases
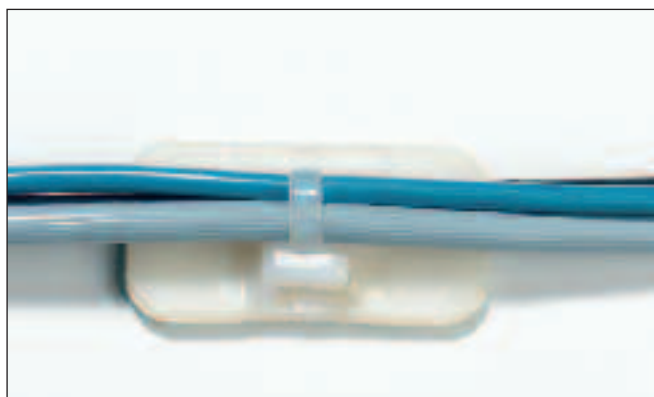
- Easy to install: The Ty-Rap® is slid into the mounting base before its installation
- Recommended for use with Ty-Rap® cable ties TY25M, TY253M and TY28M (see page 11)

Technical Information

Material	Polyamide 6.6
Temperature range	-40°C to +85°C
	(Self-adhesive version: 0°C to +65°C)
Colour	Natural
Mounting method	Self-adhesive and / or screw-mounting
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free
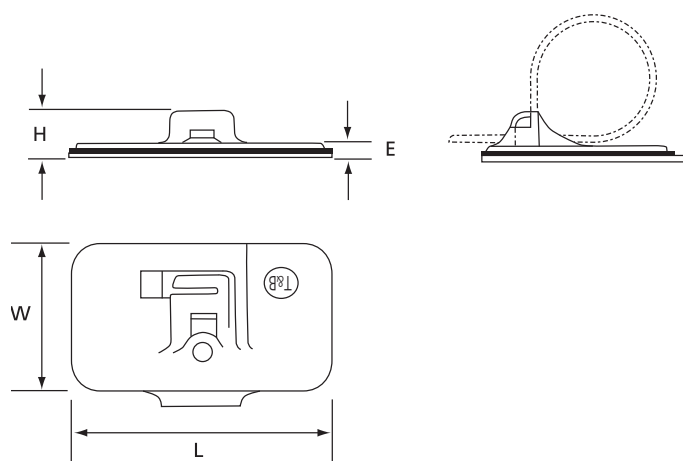
| Product Ref. | Mounting method | Dimensions | | | | For tie width up to [mm] | Adhesive strength on steel [N/cm] | Hole diameter [mm] | Weight [g/100] | Quantity [pieces] |
		H [mm]	W [mm]	L [mm]	E [mm]					
TC353A	self-adhesive / screw	9.1	25.4	50.9	2.5	4.8	72	3.8	320	100
TC5353A	self-adhesive / screw	9.1	25.4	50.9	2.5	4.8	72	3.8	320	25
TC353	screw	8.4	26.5	52.0	1.4	4.8	–	3.8	320	100

See page 137 for self-adhesive material specifications.

Heat stabilised self-aligning clamps
Cable clamps

- Moulded-in saddle washer enhances performance and appearance
- Self-alignment feature makes this clamp ideal for assembly applications
- 14 diameters and 2 widths with mounting holes for M4 and M5 screws
- Item numbers moulded-in for easy identification
- Indoor application

Technical Information

Material	Heat-stabilised Polyamide 6.6
Temperature range	-40°C to +105°C
Colour	Black
Mounting method	Screw
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free
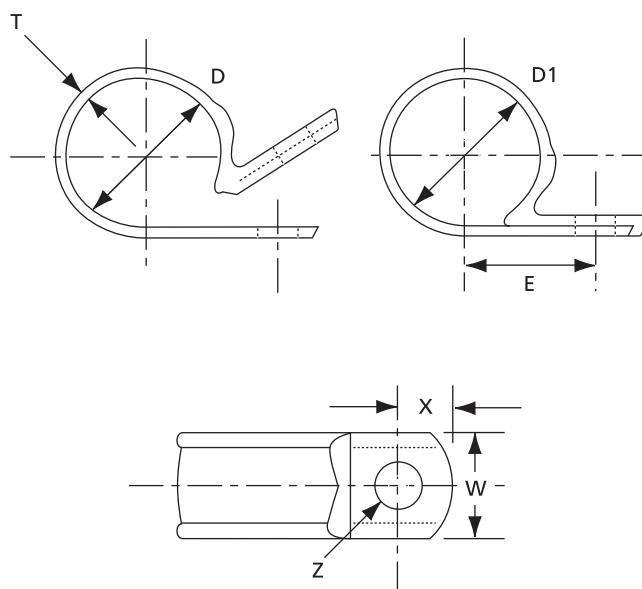
| Product Ref. | Dimensions | | | | | | | Quantity |
	D nominal diameter [mm]	D1 closed diameter [mm]	E [mm]	T [mm]	W [mm]	Z [mm]	X [mm]	[pieces]
W4NY-125-0-C	3.17	2.89	8.46	1.02	9.52	4.24	6.53	100
W4NY-187-0-C	4.76	4.36	9.02	1.02	9.52	4.24	5.53	100
W4NY-250-0-C	6.34	5.94	9.70	1.02	9.52	4.24	4.83	100
W4NY-312-0-C	7.93	7.54	10.71	1.02	9.52	4.24	5.21	100
W4NY-375-0-C	9.52	9.11	11.53	1.02	9.52	4.24	5.33	100
W4NY-500-0-C	12.69	12.29	12.45	1.02	9.52	4.24	6.76	100
W6NY-562-0-C	14.28	13.90	16.68	1.52	12.69	5.15	5.99	100
W6NY-625-0-C	15.87	15.46	16.17	1.52	12.69	5.15	7.37	100
W6NY-687-0-C	17.46	17.06	17.63	1.52	12.69	5.15	8.31	100
W6NY-750-0-C	19.04	18.64	18.44	1.52	12.69	5.15	8.28	100
W6NY-812-0-C	20.63	20.24	19.71	1.52	12.69	5.15	8.20	100
W6NY-875-0-C	22.22	21.81	18.62	1.52	12.69	5.15	7.87	100
W6NY-1000-0-C	25.39	24.99	22.38	1.52	12.69	5.15	7.42	100
W6NY-1250-0-C	31.73	31.16	25.65	1.52	12.69	5.15	8.61	100

Also available in quantities of 1,000 pieces. For other colours please contact your Sales Office
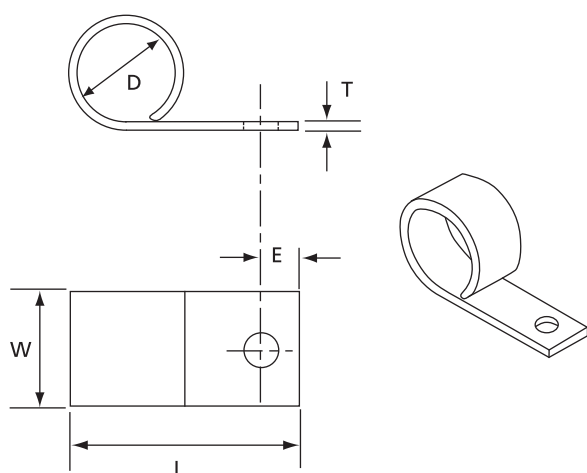
Rigid PVC clamps
Cable clamps

- Open mounting clips
- Easy to use: cables, for example, are simply pushed sideways into the clip one by one

Technical Information

Material	Rigid PVC
Temperature range	-40°C to +50°C
Colour	White
Mounting method	Screw
Flammability rating	UL 94 V-2

Product Ref.	Dimensions					Mounting hole ø	Weight	Quantity
	øD [mm]	W [mm]	L [mm]	T [mm]	E [mm]	[mm]	[g/100]	[pieces]
TC70	6.4	9.9	22.2	1.2	6.4	5.2	49	100
TC71	12.7	9.9	29.0	1.6	6.4	5.2	123	100
TC72	20.6	13.1	36.9	2.0	6.4	5.2	259	100
TC73	25.4	13.1	46.8	2.4	6.4	5.2	399	100
TC74	38.1	13.1	58.3	2.8	6.4	5.2	608	100

For other quantities please contact your Sales Office

Adjustable, ladder style clamps
Cable clamps

- Ladder style fastener is easily released and refastened
- Supplied "single-cut" on a rubber based closed cell foam adhesive
- In addition, can also be mounted with a screw, for improved pull-off strength

Technical Information

Material	Polyamide 6.6
Temperature range	0°C to +65°C
Colour	Grey
Mounting method	Self adhesive and / or screw-mounting
Flammability rating	UL 94 V-2 (clamp)
Other properties	Halogen free, Silicone free
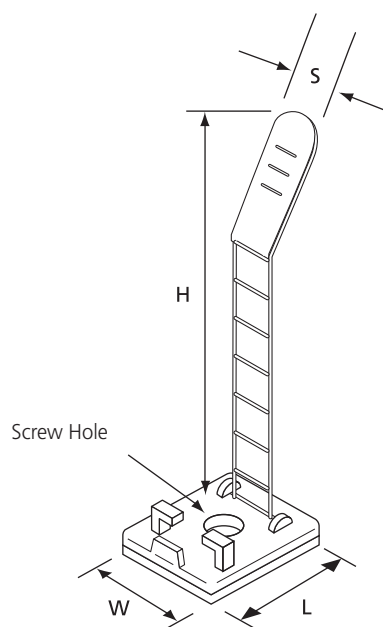
Product Ref.	Dimensions				Bundle diameter range [mm]	Screw hole diameter [mm]	Quantity [pieces]
	H [mm]	W [mm]	L [mm]	S [mm]			
ULNY-013-8-C	59.5	18	25	8	3 - 12.7	2.79	100
ULNY-018-8-C	79.4	21	30	12	5 - 21.0	2.79	100
ULNY-023-8-C	85.5	25	35	14	7 - 25.0	3.43	100

For other quantities please contact your Sales Office

Latching clamps
Cable clamps

- Re-usable tie mounting clamps
- For self-adhesive and / or screw- or rivet mounting
- One-piece design with integrated releasable lock
- The inner profile protects sensitive cables, fibre optics etc
- Desired height can be set in 3 or 6 ratchet steps
- The large base surface area and the strong adhesive film guarantees a high adhesive strength
- The self-adhesive film is foam backed (0.8 mm) to compensate for any irregularities on the mounting surface

Technical Information

Material	Polyamide 6.6
Temperature range	-40°C to +85°C (Self-adhesive version: 0°C to +65°C)
Colour	Natural
Mounting method	Self adhesive or screw-mounting
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free

TC349A-TB
TC5349A-TB

TC350
TC5350
TC350A-TB
TC5350A-TB

| Product Ref.	Mounting method	Dimensions					E Height of clamping area from ... to [mm]	F Width of clamping area [mm]	Mounting hole ø [mm]	Weight [g/100]	Quantity [pieces]
		H max. [mm]	H min. [mm]	W [mm]	L [mm]	D [mm]					
TC349A-TB	self-adhesive	14.5	11.5	25.0	25.0	2.7	6 - 8.5	6	–	120	1000
TC5349A-TB	self-adhesive	14.5	11.5	25.0	25.0	2.7	6 - 8.5	6	–	120	100
TC350A-TB	self-adhesive / screw	22.0	18.0	25.0	25.0	4.7	6 - 12.5	15	4.3	400	1000
TC5350A-TB	self-adhesive / screw	22.0	18.0	25.0	25.0	4.7	6 - 12.5	15	4.3	400	100
TC350	screw	21.3	17.2	25.0	25.0	4.0	6 - 12.5	15	4.3	380	1000
TC5350	screw	21.3	17.2	25.0	25.0	4.0	6 - 12.5	15	4.3	380	100

Re-openable clamps
Cable clamps

- Simple installation
- Can be mounted by clipping-in or gluing
- For series production or as a temporary support during wiring installation
- Clip ends are rounded for comfortable re-opening
- Product Ref. TC95 features 2-stage lock

Technical Information

Material	Polyamide 6.6
Temperature range	-40°C to +85°C
Colour	Natural
Mounting method	Clip in
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free
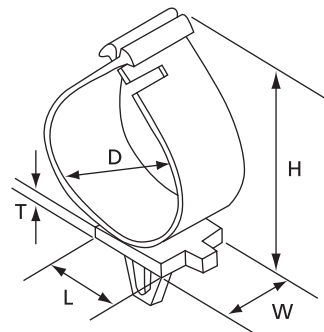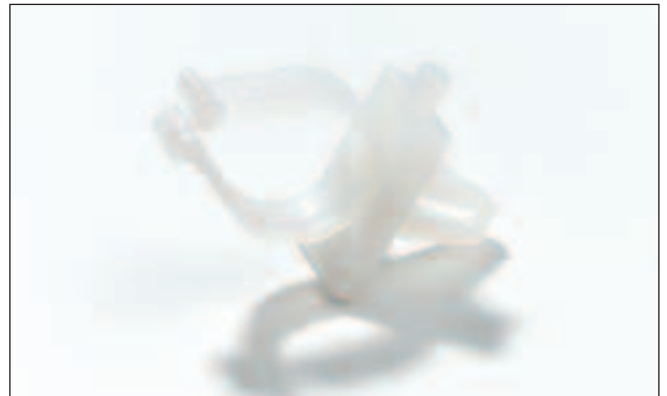
| Product Ref. | Dimensions | | | | | For wall thickness from ... to | Mounting hole ø | Weight | Quantity |
	H [mm]	W [mm]	L [mm]	D [mm]	T [mm]	[mm]	[mm]	[g/100]	[pieces]
TC88	22.6	12.7	19.1	12.7	2.5	2.5 - 3.6	5.7 - 7	115	100
TC95	40.5	12.7	19.1	25.4	2.5	2.5 - 3.6	5.7 - 7	278	100

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Re-openable clamps with springs
Cable clamps

- Holding clips with rubberised fabric tape
- The built-in springs hold the cable bundle safely in the desired position
- The upper clip end is rounded for easy addition of cables
- Strong fixing due to two mounting holes, aligned along the axis of the cable bundle

Technical Information

Material - Body	Polyamide 6.6
Material - Elastic	Rayon & natural rubber
Material - Spring	Steel
Temperature range	-40°C to +85°C
Colour	Natural
Mounting method	2 screws
Flammability rating	UL 94 V-2 (body)
Other properties	Halogen free
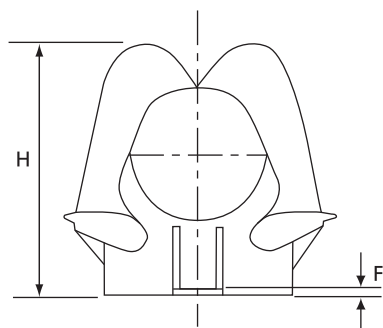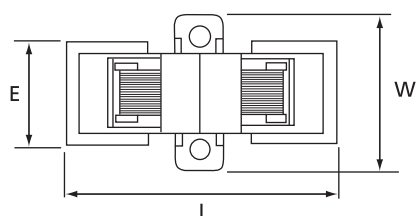
| Product Ref.	Dimensions					Max. bundle ø	Mounting hole ø	Weight	Quantity
	H [mm]	L [mm]	W [mm]	E [mm]	F [mm]	[mm]	[mm]	[g/100]	[pieces]
TC86	46	44.5	31.8	22.2	2.5	19	3.9	860	25
TC87	58	62.7	38.1	25.4	2.5	32	3.9	1950	25

Self-adhesive press clips
Cable clamps

- Available in "full clip" version (PCNY series) or "half clip" version (HCNY series)
- 4 sizes to accommodate bundles up to 12 mm
- Clips are provided "two-up" on a rubber based closed cell foam adhesive

Technical Information

Material	Polyamide 6.6 (clip)
Temperature range	0°C to +65°C
Colour	Natural
Mounting method	Self-adhesive
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free

PCNY

HCNY
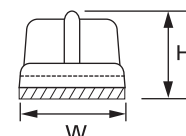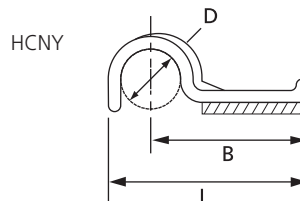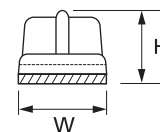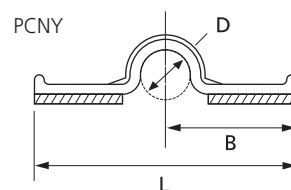
Product Ref.	Dimensions					Quantity
	D [mm]	L [mm]	B [mm]	H [mm]	W [mm]	[pieces]
FULL PRESS CLIPS						
PCNY-125-9-C	3.17	19.30	9.65	5.36	9.52	100
PCNY-125-9-D	3.17	19.30	9.65	5.36	9.52	500
PCNY-250-9-C	6.35	35.05	17.52	8.23	12.69	100
PCNY-250-9-D	6.35	35.05	17.52	8.23	12.69	500
PCNY-375-9-C	9.52	37.32	18.61	11.29	15.87	100
PCNY-375-9-D	9.52	37.32	18.61	11.29	15.87	500
PCNY-500-9-C	12.69	40.57	20.19	14.85	19.05	100
PCNY-500-9-D	12.69	40.57	20.19	14.85	19.05	500
HALF PRESS CLIPS						
HCNY-125-9-C	3.17	12.52	9.65	4.57	9.52	100
HCNY-125-9-M	3.17	12.52	9.65	4.57	9.52	1000
HCNY-250-9-C	6.35	21.97	17.52	8.25	12.69	100
HCNY-250-9-M	6.35	21.97	17.52	8.25	12.69	1000
HCNY-375-9-C	9.52	24.88	19.05	10.54	15.87	100
HCNY-375-9-M	9.52	24.88	19.05	10.54	15.87	1000
HCNY-500-9-C	12.69	28.19	20.83	14.22	19.05	100
HCNY-500-9-M	12.69	28.19	20.83	14.22	19.05	1000

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Self-adhesive clips for round cable
Cable clamps

- Diverse cable clamps for bundle diameters from 4 mm to 15.8 mm
- Clips are provided two-up on a rubber based closed cell foam adhesive
- Flexible centre tongue for removal or addition of cables

Technical Information

Material	Polyamide 6.6 (clip)
Temperature range	0°C to +65°C
Colour	Natural or black
Mounting method	Self-adhesive
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free
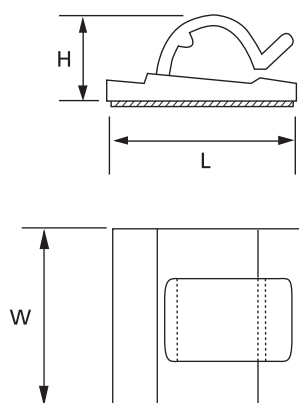
Product Ref.	Colour	Dimensions			Max. bundle ø	Quantity
		H [mm]	L [mm]	W [mm]	[mm]	[pieces]
RANY-160-9-D	natural	6.4	16.0	14.8	4.0	500
RANY-280-9-D	natural	10.4	25.4	25.4	7.1	500
RANY-280-0-D	black	10.4	25.4	25.4	7.1	500
RANY-530-9-D	natural	15.8	25.4	25.4	13.5	500
RANY-620-9-D	natural	14.2	31.8	28.5	15.8	500

For other quantities please contact your Sales Office

Cable clamps
Accessories for flat cables

- This system allows the secure and neat fixing of between 1 and 25 ribbon cables
- Clamp height adapts accurately to the desired number of ribbon cables
- Suitable for ribbon cables up to 60 conductors with a pitch of 1.27 mm (76.2 mm wide)
- Can be re-opened for later addition or removal of a cable
- Very strong hold
- All versions can be mounted with countersunk-head screws or rivets
- Some versions have an additional self-adhesive foam, for fast mounting
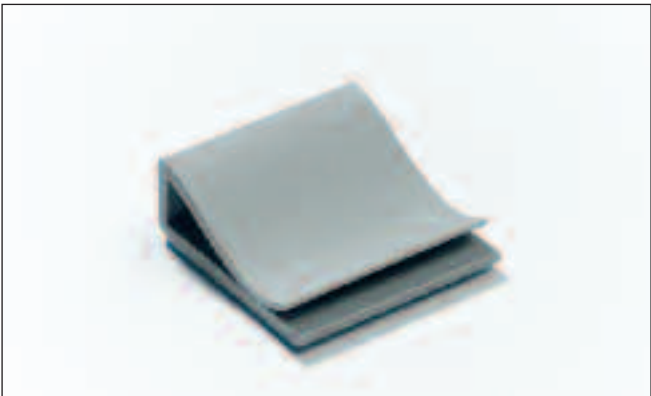
Technical Information

Material	Polyamide 6.6 (clip)
Temperature range	-40°C to +85°C (Self-adhesive version: 0°C to +65°C)
Colour	Natural
Mounting method	Self-adhesive and / or for screw- or rivet-mounting
Flammability rating	UL 94 V-2
Other properties	Halogen free, Silicone free
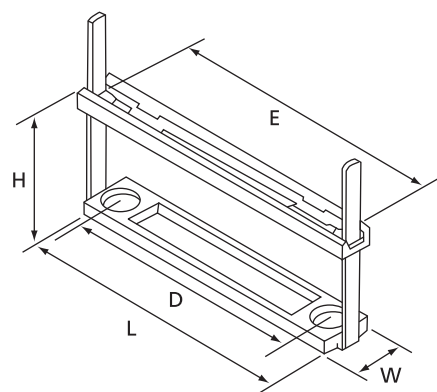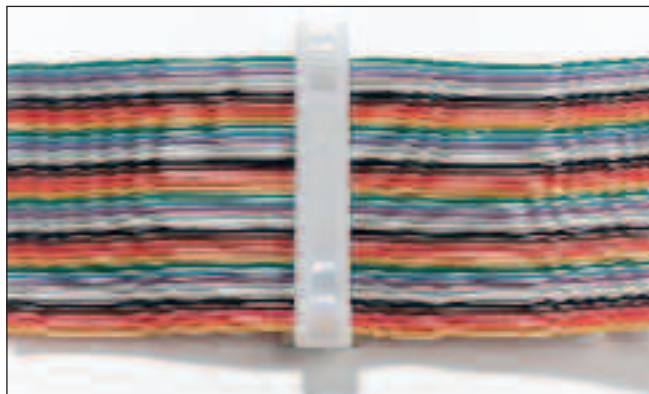
| Product Ref.	Mounting method	Dimensions						Adhesive strength on steel/ fastening hole	Weight	Quantity
		H max. [mm]	H min. [mm]	W [mm]	L [mm]	D mounting centres from ... to [mm]	E inner width [mm]		[g/100]	[pieces]
FCC-1	countersunk screws	21.0	8.0	12.7	32.5	–	25.4	M4	260	50
FCC-1A	countersunk screws / self-adhesive	21.0	8.8	12.7	32.5	–	25.4	76 N/cm	275	50
FCC-2	countersunk screws	36.0	8.0	12.7	57.9	39.1	50.8	M4	340	50
FCC-2A	countersunk screws / self-adhesive	36.0	8.8	12.7	57.9	39.1	50.8	76 N/cm	390	50
FCC-3	countersunk screws	36.0	8.0	12.7	83.3	64.5	76.2	M4	475	50
FCC-3A	countersunk screws / self-adhesive	36.0	8.8	12.7	83.3	64.5	76.2	76 N/cm	490	50

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PVC cable-clips
Accessories for flat cables

- Low profile clip for single or multiple layers of flat ribbon cable
- "Single cut" on a rubber based closed cell foam adhesive

Technical Information

Material	PVC (clip)
Temperature range	0°C to +65°C
Colour	Grey
Mounting method	Self-adhesive
Flammability rating	UL 94 V-0 (clip)
Other properties	UV-resistant
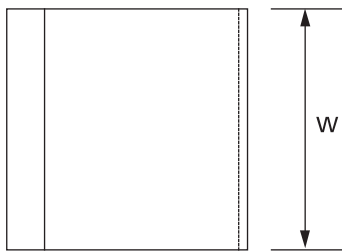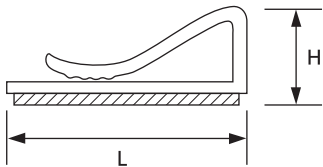
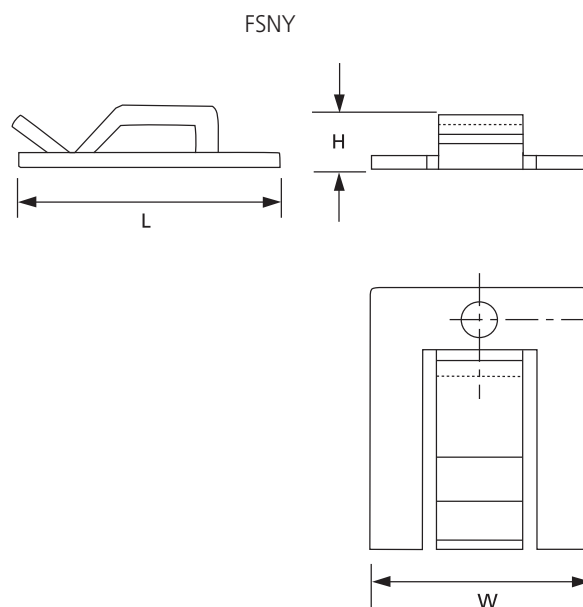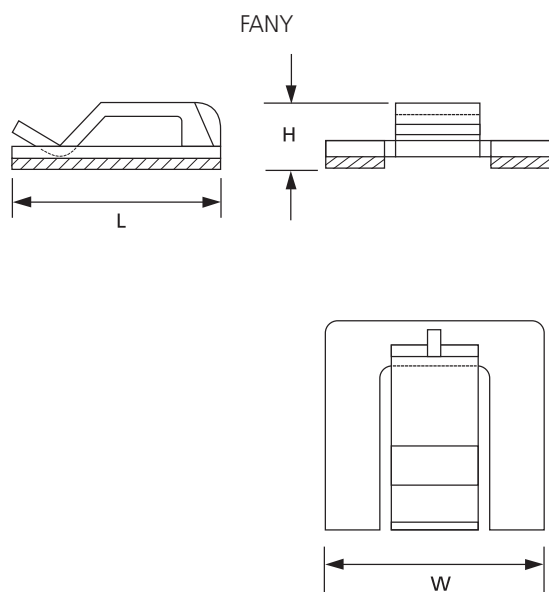| Product Ref.	Dimensions			Quantity
	H [mm]	L [mm]	W [mm]	[pieces]
FRPV-1000-8-C	5.8	27	25.4	100
FRPV-1000-8-D	5.8	27	25.4	500

Clips with flexible leg
Accessories for flat cables

- Low profile clip for single or multiple layers of flat ribbon cable
- Flexible centre leg allows for easy removal and replacement of desired cable
- Non-conductive, non-corrosive, resistant to fuels, lubricants and most chemicals
- FANY supplied "two-up" on a rubber based closed cell foam adhesive
- FSNY type has an additional mounting hole for screw mounting (M4 screw)

Technical Information

Material	Polyamide 6.6 (clip)
Temperature range	-40°C to +85°C
	(Self-adhesive version: 0°C to +65°C)
Colour	Natural
Mounting method	Self-adhesive or screw
Flammability rating	UL 94 V-2 (clip)
Other properties	Halogen free, Silicone free

FANY

FSNY

Product Ref.	Mounting method	Dimensions			Quantity
		H [mm]	L [mm]	W [mm]	[pieces]
FSNY-812-9-C	M4 screw	3.17	30.15	25.40	100
FANY-812-9-C	self-adhesive	7.14	25.40	25.40	100
FANY-812-9-D	self-adhesive	7.14	25.40	25.40	500

For other quantities please contact your Thomas & Betts Sales Office

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