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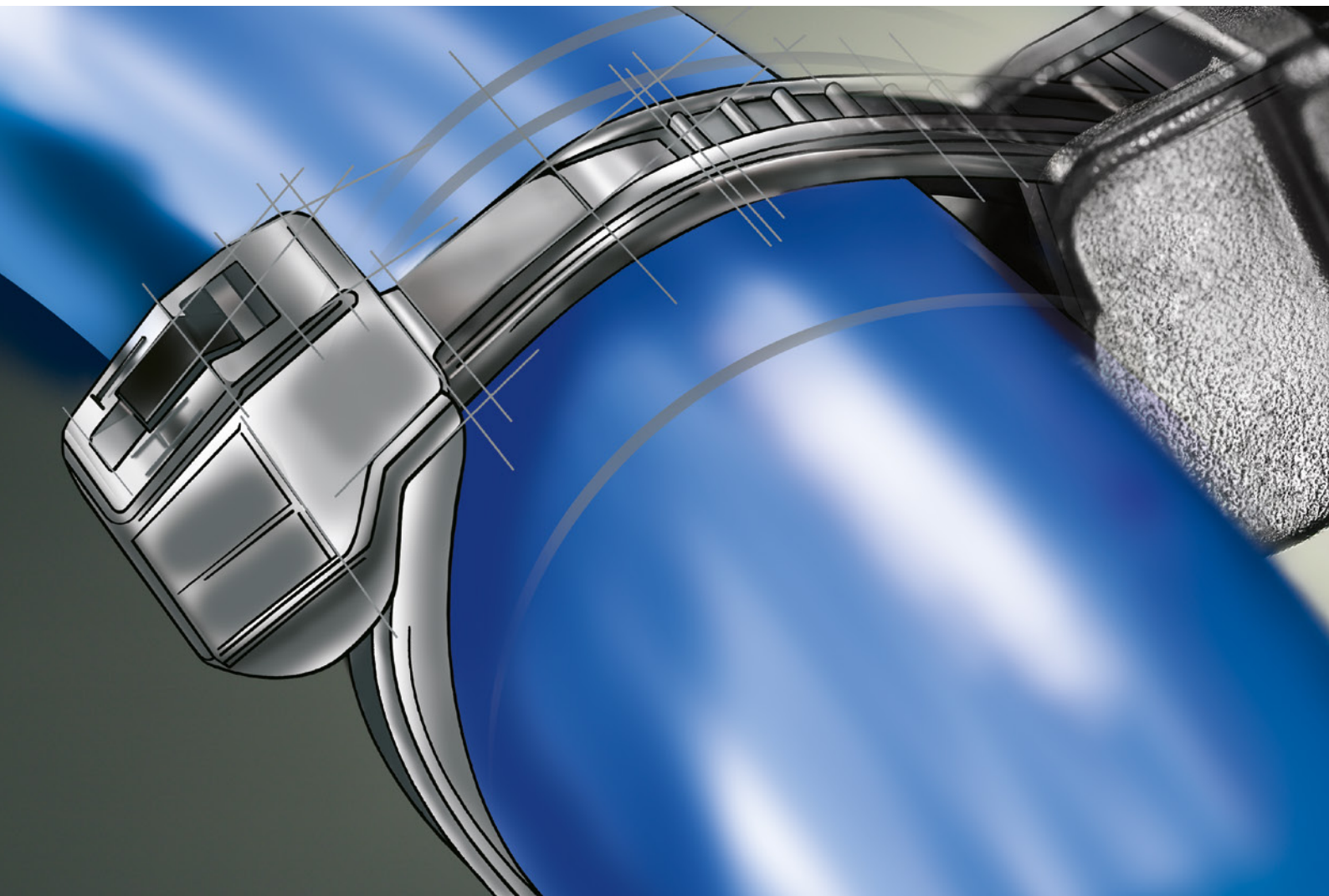


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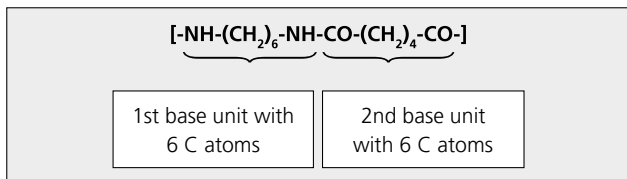
## Properties of polyamide PA66

Polyamides are among the most important thermoplastic synthetic materials. Thermoplastics can be reshaped by heating as often as required without undergoing chemical decomposition or other negative changes. This makes polyamide ideal for processing via injection moulding into high quality products. About 90% of cable ties and fixings from HellermannTyton are made from this material.

Polyamide is also known under the brand name of Nylon®, which was introduced by the Dupont company.

The inner structure of polyamide displays a partial order of polymer chains, i.e. polyamides are partially crystalline. Due to the tighter packing of the individual molecular chains polyamide only has limited transparency to light. The plastic is therefore described as translucent

## The molecular chains of PA66 are made from two base units:



Each base unit contains 6 carbon atoms (C). Hence the name PA66.

The polyamide PA66 has many properties which are highly advantageous for HellermannTyton cable ties and fixings, such as:

- High strength, rigidity and hardness
- High dimensional stability, even under the effect of heat
- High abrasion resistance

Having a wide range of polyamides and additives allows for an optimum adaptation of the properties of the finished product to suit the respective requirements.

The following PA66 variants are used for HellermannTyton products:

- Polyamide 6.6 standard (PA66) for temperature conditions of up to +85 °C
- Polyamide 6.6 Heat Stabilised (PA66HS) for temperature conditions of up to +105 °C
- Polyamide 6.6 UV Stabilised (PA66W) for exterior use
- Polyamide 6.6 Heat Stabilised and UV Stabilised (PA66HSW) for exterior use up to +105 °C
- Polyamide 6.6 Impact Resistant (PA66HIR) for high elasticity requirements
- Polyamide 6.6 Impact Resistant and Heat Stabilised (PA66HIRHS) for high elasticity requirements and temperatures up to +105 °C
- Polyamide 6.6 V0 for high standards of fire protection

## Water content in polyamide

Polyamide is a hygroscopic material - this means that it absorbs and releases water. The mechanical properties are significantly affected by the water content – especially flexibility and minimum tensile strength.

In a standard atmosphere of 23 °C and 50% relative humidity, the degree of water saturation of polyamide is around 2.5%. For optimal processing of cable ties it is therefore important that the polyamide has a water content of approximately 2.5% in a state of equilibrium.

The quality and functionality of the products are thus affected by the water content, therefore the correct storage of our products is crucial. Please read our separate instructions on storage.

### Since humidity is so critical to the quality of the tie, the question arises: What happens if the tie is installed and the water content in the tie alters?

The water content determines the flexibility and strength of a tie. At a water content of approximately 2.5% the tie has the ideal flexibility for installation. When the strap is being threaded through the head of the tie, the pawl must be flexible enough to 'see-saw' over the serration of the strap without breaking. On the other hand, there must also be adequate material rigidity for the serrations of the pawl to engage with the serrations of the strap during the tying process so that a 'positive locking' action is achieved. After achieving the positive locking action the tie is in a static condition. Changes in the mechanical properties of the tie as a function of water content are insignificant during this status.

### Properties of UV-stabilised polyamide (PA66W)

The question constantly arises as to whether a black cable tie is suitable for use outside. This is dependant on the application of the tie, but in general the following statements can be made:

A black cable tie made of polyamide 6.6 standard (PA66) is only coloured black with a low proportion of carbon black. This is not sufficient to protect the material from damage caused by UV-radiation in the long term.

Products made from UV-stabilised polyamide PA66W are produced in accordance with ASTM standard D6779 with a higher carbon black percentage of approx. 2%. So they resist UV-radiation in the European area for a considerably longer period than standard PA66.

This is clearly illustrated by the comparison of the two images:

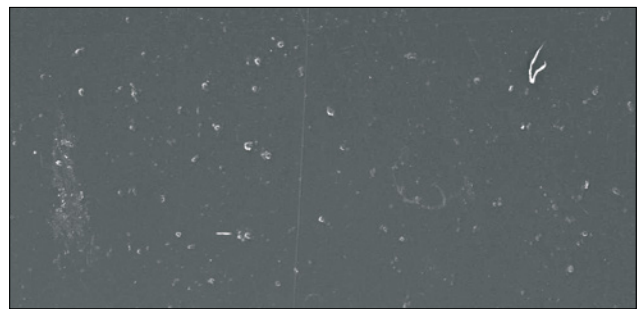
### After 500 hours of UV- radiation exposure

Polyamide 6.6 standard (PA66) dyed black:



The joint has been damaged throughout by UV-radiation.

Polyamide 6.6 UV-stabilised (PA66W) with approx. 2% carbon black:

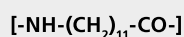


The joint has only been altered at isolated points by the UV-radiation.

**For outdoor use, therefore, we recommend our range of products made from UV-stabilised polyamide (PA66W).**

### Properties of polyamide PA12

Apart from PA66, there are polyamides which are less hygroscopic. These include PA12, which has a molecular chain made of a base unit with 12 carbon atoms:



### PA12 has the following advantages over PA66:

- Less hygroscopic - saturation at 23 °C and 50% relative humidity is approximately 1%
- Better impact performance
- Good weather resistance, even without a special additive

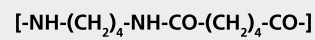
These three properties make PA12 ideal for use outdoors, in particular when requirements may include impact resistance.

The water absorption of PA12 is not only less than that of PA66 but also slower. This is the requirement where the mechanical properties need to remain relatively unaffected by changing environmental conditions

### Properties of polyamide PA46

Polyamide PA66, despite the use of additives, is not suitable for long-term use in temperatures of +105 °C. Due to considerably better heat resistance, polyamide PA46 is more suitable for temperatures of up to and exceeding 150 °C (depending on the length of time of operation).

The molecular chain of PA46 is composed of two base units:



1st base unit with  
4 C atoms

2nd base unit  
with 6 C atoms

### Advantages of PA46 over PA66:

- Greater rigidity, even at higher temperatures
- Higher operating temperature ranges of up to +150 °C (5,000 hours)
- Greater form stability at higher temperatures
- Excellent chemical resistance

### A simple practical test: 'the hammer test'

You can quickly determine whether or not a cable tie is UV stabilised. Strike with a hammer the tail of the strap on the tie. Hold up this flattened end to the light. Cable ties with a carbon black content of about 2% allow no light through and look black throughout. Standard black ties, however, are transparent on the flattened end.



## Material Specification Overview

Material	Shortcut	Operating Temperature	Colour**	Flammability	Material Properties*	
Aluminium-alloy	AL	-40 °C to +180 °C	Natural (NA)		<ul style="list-style-type: none"> <li>Corrosion resistant</li> <li>Antimagnetic</li> </ul>	RoHS
Chloroprene	CR	-20 °C to +80 °C	Black (BK)		<ul style="list-style-type: none"> <li>Weather-resistant</li> <li>High yield strength</li> </ul>	RoHS
Ethylenterafluorineethylen	E/TFE	-80 °C to +170 °C	Blue (BU)	UL94 V0	<ul style="list-style-type: none"> <li>Resistance to radioactivity</li> <li>UV-resistant, not moisture sensitive</li> <li>Good chemical resistance to: acids, bases, oxidizing agents</li> </ul>	RoHS
Polyacetal	POM	-40 °C to +90 °C, (+110 °C, 500 h)	Natural (NA)	UL94 HB	<ul style="list-style-type: none"> <li>Limited brittleness sensitivity</li> <li>Flexible at low temperature</li> <li>Not moisture sensitive</li> <li>Robust on impacts</li> </ul>	RoHS
Polyamide 11	PA11	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK)	UL94 HB	<ul style="list-style-type: none"> <li>Bio-plastic, derived from vegetable oil</li> <li>Strong impact resistance at low temperature</li> <li>Very low moisture absorption</li> <li>Weather-resistant</li> <li>Good chemical resistance</li> </ul>	RoHS HF
Polyamide 12	PA12	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK)	UL94 HB	<ul style="list-style-type: none"> <li>Good chemical resistance to: acids, bases, oxidizing agents</li> <li>UV-resistant</li> </ul>	RoHS HF
Polyamide 4.6	PA46	-40 °C to +150 °C (5000 h), +195 °C (500 h)	Natural (NA), Grey (GY)	UL94 V2	<ul style="list-style-type: none"> <li>Resistance to high temperatures</li> <li>Very moisture sensitive</li> <li>Low smoke sensitive</li> </ul>	RoHS HF LFH
Polyamide 6	PA6	-40 °C to +80 °C	Black (BK)	UL94 V2	<ul style="list-style-type: none"> <li>High yield strength</li> </ul>	RoHS
Polyamide 6.6	PA66	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK), Natural (NA)	UL94 V2	<ul style="list-style-type: none"> <li>High yield strength</li> </ul>	RoHS HF
Polyamide 6.6, Glassfibre reinforced	PA66GF13, PA66GF15	-40 °C to +105 °C	Black (BK)	UL94 HB	<ul style="list-style-type: none"> <li>Good resistance to: lubricants, vehicle fuel, salt water and many solvents</li> </ul>	RoHS HF
Polyamide 6.6 heat and UV stabilised	PA66HSW	-40 °C to +105 °C	Black (BK)	UL94 V2	<ul style="list-style-type: none"> <li>High yield strength</li> <li>Modified elevated max. temperature</li> <li>UV-resistant</li> </ul>	RoHS HF
Polyamide 6.6 Heat Stabilised	PA66HS	-40 °C to +105 °C	Black (BK), Natural (NA)	UL94 V2	<ul style="list-style-type: none"> <li>High yield strength</li> <li>Modified elevated max. temperature</li> </ul>	RoHS HF
Polyamide 6.6 High Imp. Mod., Heat Stab.	PA66HIRHS	-40 °C to +105 °C	Black (BK)	UL94 HB	<ul style="list-style-type: none"> <li>Limited brittleness sensitivity</li> <li>Higher flexibility at low temperature</li> <li>Modified elevated max. temperature</li> </ul>	RoHS
Polyamide 6.6 High Imp. Mod. scan black	PA66HIR(S)	-40 °C to +80 °C, (+105 °C, 500 h)	Black (BK)	UL94 HB	<ul style="list-style-type: none"> <li>Limited brittleness sensitivity</li> <li>Higher flexibility at low temperature</li> </ul>	RoHS HF
Polyamide 6.6 High Impact Modified	PA66HIR	-40 °C to +80 °C, (+105 °C, 500 h)	Black (BK)	UL94 HB	<ul style="list-style-type: none"> <li>Limited brittleness sensitivity</li> <li>Higher flexibility at low temperature</li> </ul>	RoHS

Tefzel® is a registered trademark of DuPont.  
General linguistic usage for cable ties made from raw material E/TFE is Tefzel®-Tie. In addition to Tefzel® from DuPont HellermannTyton is also using equivalent E/TFE raw material from other suppliers.

\*\*More colours on request.

\*These details are only rough guide values. They should be regarded as a material specification and are no substitute for a suitability test. Please see our datasheets for further details.

= Minimum Tensile Strength

## Material Specification Overview

Material	Shortcut	Operating Temperature	Colour**	Flammability	Material Properties*	RoHS	HF	LFH
<b>Polyamide 6.6</b> high impact modified, heat and UV stabilised	PA66-HIRHSW	-40 °C to +110 °C	Black (BK)	UL94 HB	<ul style="list-style-type: none"> <li>Limited brittleness sensitivity</li> <li>Higher flexibility at low temperature</li> <li>Modified elevated max. temperature</li> <li>High yield strength, UV-resistant</li> </ul>	RoHS	HF	
<b>Polyamide 6.6</b> UV Resistant	PA66W	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK)	UL94 V2	<ul style="list-style-type: none"> <li>High yield strength</li> <li>UV-resistant</li> </ul>	RoHS	HF	
<b>Polyamide 6.6 V0</b>	PA66V0	-40 °C to +85 °C	White (WH)	UL94 V0	<ul style="list-style-type: none"> <li>High yield strength</li> <li>Low smoke emission</li> </ul>	RoHS	HF	LFH
<b>Polyamide 6.6 V0</b> High Oxygen Index	PA66-V0-HOI	-40 °C to +85 °C, (+105 °C, 500 h)	White (WH)	UL94 V0	<ul style="list-style-type: none"> <li>High yield strength</li> <li>Low smoke emissions</li> </ul>	RoHS	HF	LFH
<b>Polyamide 6.6</b> with metal particles	PA66MP	-40 °C to +85 °C, (+105 °C, 500 h)	Blue (BU)	UL94 HB	<ul style="list-style-type: none"> <li>High yield strength</li> </ul>	RoHS	HF	
<b>Polyamide 6</b> high impact modified	PA6HIR	-40 °C to +80 °C	Black (BK)	UL94 HB	<ul style="list-style-type: none"> <li>Limited brittleness sensitivity</li> <li>Higher flexibility at low temperature</li> </ul>	RoHS		
<b>Polyester</b>	SP	-50 °C to +150 °C	Black (BK)		<ul style="list-style-type: none"> <li>UV-resistant</li> <li>Good chemical resistance to: most acids, alkalis and oils</li> </ul>	RoHS	HF	LFH
<b>Polyetheretherketone</b>	PEEK	-55 °C to +240 °C	Beige (BGE)	UL94 V0	<ul style="list-style-type: none"> <li>Resistance to radioactivity</li> <li>Not moisture sensitive</li> <li>Good chemical resistance to: acids, bases, oxidizing agents</li> </ul>	RoHS	HF	LFH
<b>Polyethylene</b>	PE	-40 °C to +50 °C	Black (BK), Grey (GY)	UL94 HB	<ul style="list-style-type: none"> <li>Low moisture absorption</li> <li>Good chemical resistance to: most acids, alcohol and oils</li> </ul>	RoHS	HF	
<b>Polyolefin</b>	PO	-40 °C to +90 °C	Black (BK)	UL94 V0	<ul style="list-style-type: none"> <li>Low smoke emissions</li> </ul>	RoHS	HF	LFH
<b>Polypropylene</b>	PP	-40 °C to +115 °C	Black (BK), Natural (NA)	UL94 HB	<ul style="list-style-type: none"> <li>Floats in water</li> <li>Moderate yield strength</li> <li>Good chemical resistance to: organic acids</li> </ul>	RoHS	HF	
<b>Polypropylene, Ethylene-Propylene-Dien-Terpolymer-rubber free of Nitrosamine</b>	PP, EPDM	-20 °C to +95 °C	Black (BK)	UL94 HB	<ul style="list-style-type: none"> <li>Good resistance to high temperatures</li> <li>Good chemical and abrasion resistance</li> </ul>	RoHS	HF	
<b>Polyvinylchloride</b>	PVC	-10 °C to +70 °C	Black (BK), Natural (NA)	UL94 V0	<ul style="list-style-type: none"> <li>Low moisture absorption</li> <li>Good chemical resistance to: acids, ethanol, oil</li> </ul>	RoHS		

Tefzel® is a registered trademark of DuPont.

General linguistic usage for cable ties made from raw material E/TFE is Tefzel®-Tie. In addition to Tefzel® from DuPont HellermannTyton is also using equivalent E/TFE raw material from other suppliers.

\*These details are only rough guide values. They should be regarded as a material specification and are not substitute for a suitability test. Please see our datasheets for further details.

\*\*More colours on request.



= Minimum Tensile Strength

# Discover the HellermannTyton product world on the web!

**HellermannTyton**

www.hellermanntyton.co.uk | Competences | Cable Ties and Fixings

## Cable Ties and fixing elements for your applications!

Intro | Product range | Selected products | Technical information | Storage conditions

**Cable ties and fixing elements from HellermannTyton – for a good reason.**

Cable ties and fixing elements have to be able to meet the most varied demands in the widest range of operations – from the simple bundling of cables to the specific use of cable ties under extreme conditions. As one of the leading manufacturers of fixing elements, HellermannTyton sets the standards in the production of intelligent, releasable cable ties and cable ties without serration. The range is completed by fixing, cable ties made of stainless steel and also cable ties with fixing elements.

With its high-quality cable ties and fixing elements, HellermannTyton proves itself practically any challenge. They do not just fulfil the most up to date requirements, but HellermannTyton constantly pushes back the boundaries of what is possible.

developed jointly with customers which can be used in a wide variety of applications. Cable ties and fixing elements from HellermannTyton offer a wide variety of selections of colour and size of cable ties. The latest example of innovative cable tie design, which is ideally suited for the blind application of cable ties, is the MCT-Series, which are defined and monitored by international standards.

With such excellent quality assurance behind every situation.

### Cable Ties and fixing elements tailored to your requirements

Intro | Product range | Selected products | Technical information | Storage conditions

**Cable ties and fixing elements tailored to your requirements**

A cable tie, also known as a zip tie or zipper tie, is used to bundle and organize cables and wires. Cable ties and fixing elements are used in harness making in the construction of environmental conditions like in the automotive industry.

HellermannTyton is a global manufacturer of cable ties and fixing elements. For our customers we develop solutions to diverse markets. For our customers we develop solutions to diverse markets. For our customers we develop solutions to diverse markets.

- Cable Ties inside serrated**  
Plastic cable ties are suitable for bundling materials, lengths and colours.
- Cable Ties outside serrated**  
Outside serrated cable ties are particularly suitable for different remarks, materials, lengths and colours.
- Releasable cable ties**  
Releasable cable ties can be produced in various lengths and colours. Releasable cable ties are available in various lengths and colours.
- Cable Ties without serration**  
The robust cable ties without serration are suitable for bundling materials with large diameters.
- Cable Ties for direct fixing**  
Cable ties for direct fixing are available in various lengths and colours.
- Stainless Steel Cable Ties**  
Stainless steel cable ties are available in various lengths and colours.
- Cable Ties with fixing elements**  
Optimal fixing solutions for each case offer the cable ties with fixing elements in different remarks, materials, lengths and colours.
- Cable Tie Mounts**  
Cable Tie Mounts are available in either screw or self adhesive mounting. Different sizes and designs of cable tie mounts offer a secure fixing with a wide variety of cable ties.
- Fixing Elements**  
A wide variety of fixing elements offer a direct fixation in holes of a panel or at the edges.

### The new cable tie system Q-Series offers intelligent, innovative fixing solutions with tailor-made

**Cable Ties SOFTFIX**  
SOFTFIX cable ties are elastic, tear-proof and weather-resistant. In addition, these cable ties can be removed and thus used multiple times. The SOFTFIX cable ties are often used for temporary tie-offs in service or maintenance work.

The SOFTFIX cable tie range offers solutions to numerous bundling applications. The soft, flexible material makes these cable ties particularly suitable for use on data and fibre-optic cables. The elasticity of the material makes the SOFTFIX cable ties ideal for securing young trees to support poles, and other applications within the gardening and landscaping industry as well as bundling cables in temporary applications such as musical events, theatres, cable harnesses. Due to larger packaging units SOFTFIX cable ties can also be delivered in industry quantities.

**Cable Ties KR-Series**  
The special curved head design of the KR cable ties ensures a seal around the full circumference of the hose/pipe. The patented design of this cable tie offers a smooth strap which is locked into place with a glass fibre reinforced pin, and when assembled the cable tie offers a very secure and vibration resistant fixing.

In addition to offering a secure method of bundling cables the design of the KR cable ties make them ideal for use as a method of securing bellows on steering racks, water hoses and vacuum lines.

**Stainless Steel Cable Ties MBT-FC-Series**  
The rustproof MBT stainless steel cable ties resist acids and high temperature. These cable ties are available both coated and uncoated. Their patented, non-releasable locking mechanism with one or two balls is a major safety feature.

Stainless Steel cable ties with a polyester coating are chosen when a high tensile strength is demanded and a coal mining or in the petrochemical industry. These cable ties are used in various industries, like shipbuilding, theatres or at bars.

**Cable Ties OS-Series**  
The ever increasing demands within the mass transit, automotive and data cable installation industries for lighter bundles has led to problems with the conventional inside serrated cable tie design causing damage to cable insulation. The design of these cable ties offers high tensile strengths, low insertion forces and an even surface to the cable insulation - minimising any indentation or damage. The curved shape of the head allows the cable tie to follow the contours of the cable and takes up less space than other designs of cable ties.

Designed originally for the automotive market these cable ties are now being used in many areas where thin-walled or soft insulation wires and cable are being installed, e.g. railways, aircraft, data cable installations, electronics. With TSOLOS a minimum bundle diameter of 1.5 mm is possible. The T120RCS is suitable for heavy bundles with a minimum tensile strength of 535 N.

**Cable Ties MCT-Series**  
The Metal Content Tie is a cable tie specifically designed for use in the food & pharmaceutical processing industries. A unique manufacturing process, involving the inclusion of a metallic pigment, enables even small metal content dispersed throughout the head and strap of the cable tie. The MCT cable ties have the HACCP process. The 'unique' blue colour of the cable ties assists in the visual detection and greatly reduces the risk of contamination.

The Metal Content Tie is a cable tie specifically designed for use in the food & pharmaceutical processing industries. Ideally suited for the installation of cabling in and around the manufacturing process.



One Step to the Web!

www.HellermannTyton.co.uk  
**HellermannTyton**

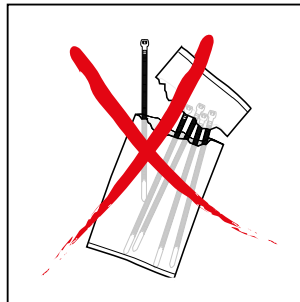
### Optimum storage conditions for cable ties made of polyamide (PA)

HellermannTyton cable ties, fastenings and fixings are manufactured from high-quality polyamide (PA). This industrial synthetic material is mainly processed using injection moulding, but can also be extruded.

Polyamide is a hygroscopic material. This means that the material absorbs and loses moisture. For optimum handling of cable ties it is important that the material is in a condition of equilibrium with a water content of approximately 2.5%.

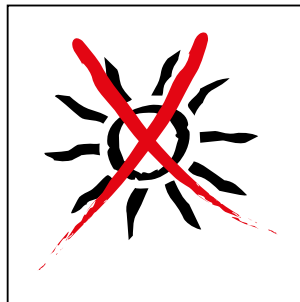
The packaging used by HellermannTyton ensures that the water content in the material remains constant. Therefore, it is important to store the products in their original packaging to preserve the quality of the ties.

1. Once opened you should use the ties as quickly as possible.



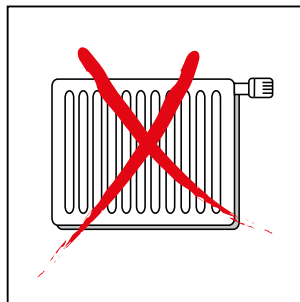
2. Always store ties in the sealed plastic bag made of polyethylene!

3. Do not expose the product to direct sunlight!



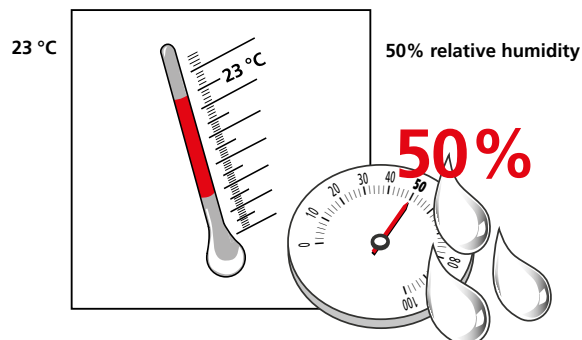
4. Do not store the product in sunlight; for example, on the windowsill.

5. Store the product away from direct sources of heat.

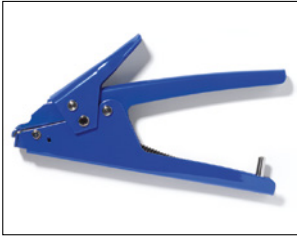


6. Avoid contact with heat: for example, do not place on the radiators.

7. The ideal storage conditions are those of the central European standard climate:



## Application Tooling for Cable Ties



**MK10-SB**  
see page 306.



**MK20, MK21**  
see page 306.



**MK3SP**  
see page 307.



**MK3PNSP2**  
see page 307.



**EVO7 / EVO7SP**  
see page 308.



**MK7**  
see page 309.



**MK7HT**  
see page 309.



**MK7P**  
see page 310.



**MK6**  
see page 311.



**MK9**  
see page 311.



**MK9HT**  
see page 312.



**MK9P**  
see page 313.

## Processing Tools for Metal Ties



**MK9SST**  
see page 314.



**MK9PSST**  
see page 314.



**HDT16**  
see page 315.



**KST-STG200.**  
see page 315.

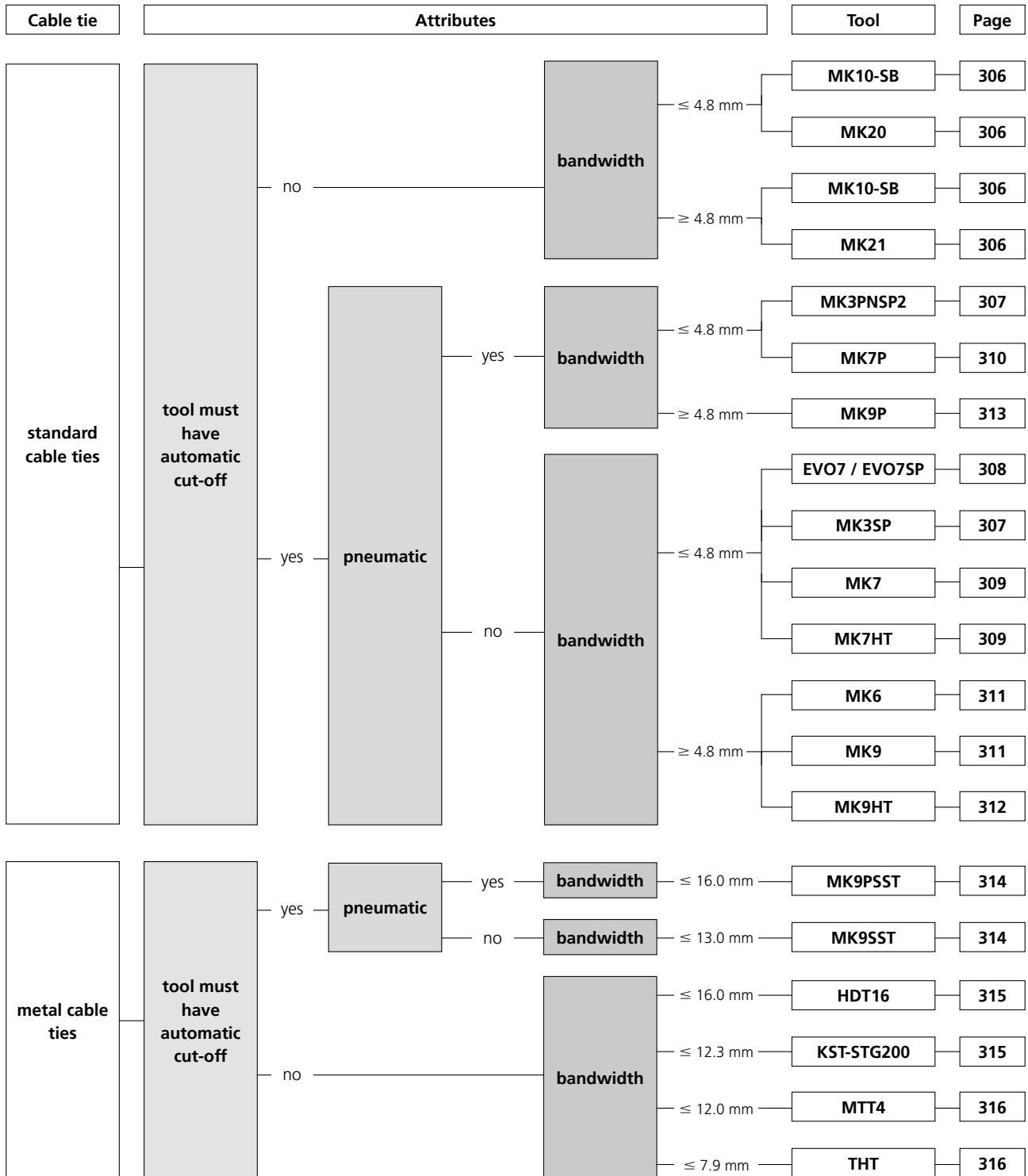


**MTT4**  
see page 316.



**THT**  
see page 316.

## Product Selection





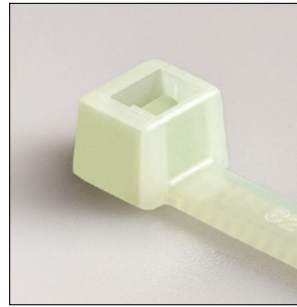
## Cable Ties Polyamide 6.6 standard

### • T-Series in PA66 natural

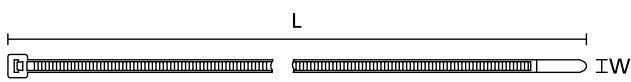
These cable ties are used for routing, bundling and securing cables, pipes and hoses.

#### Features and Benefits

- Standard natural cable tie available in a wide range of sizes
- Made from 100% high quality plastic, allows for good recycling
- Inside serration for a strong hold around bundles
- Easy application either manually or with a processing tool
- Simple to insert due to the ergonomically bent tail



T-Series.



T-Series

**Application tools  
please see page 302.**

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
T18S	2.3	83.0	16.0	80	PA66	Natural (NA)	1,000	111-02809
T18R	2.5	100.0	22.0	80	PA66	Natural (NA)	100	111-01919
T18I	2.5	145.0	35.0	80	PA66	Natural (NA)	100	111-02319
T18L	2.5	205.0	55.0	80	PA66	Natural (NA)	100	111-02119
T25L	2.8	240.0	65.0	110	PA66	Natural (NA)	100	111-02519
T25LL	2.8	330.0	95.0	110	PA66	Natural (NA)	100	111-02619
T30R	3.5	150.0	35.0	135	PA66	Natural (NA)	100	111-03219
T30L	3.5	198.0	50.0	135	PA66	Natural (NA)	100	111-03419
T30LL	3.5	290.0	80.0	135	PA66	Natural (NA)	100	111-03529
T40R	4.0	175.0	40.0	180	PA66	Natural (NA)	100	111-03819
T50S	4.6	150.0	35.0	225	PA66	Natural (NA)	100	111-05819
T50R	4.6	200.0	50.0	225	PA66	Natural (NA)	100	111-05013
T50M	4.6	245.0	65.0	225	PA66	Natural (NA)	100	111-06201
T50I	4.6	300.0	85.0	225	PA66	Natural (NA)	100	111-05219
T50L	4.6	390.0	110.0	225	PA66	Natural (NA)	100	111-05409
T80R	4.7	210.0	55.0	355	PA66	Natural (NA)	100	111-05019
T80I	4.7	300.0	85.0	355	PA66	Natural (NA)	100	111-08229
T80L	4.7	390.0	110.0	355	PA66	Natural (NA)	100	111-05419
T120S	7.6	225.0	55.0	535	PA66	Natural (NA)	50	111-12829
T120I	7.6	300.0	80.0	535	PA66	Natural (NA)	100	111-12219
T150R	7.6	365.0	100.0	670	PA66	Natural (NA)	100	111-14819
T120R(E)	7.6	387.0	100.0	535	PA66	Natural (NA)	100	111-12019
T120M	7.6	460.0	125.0	535	PA66	Natural (NA)	100	111-12619
T120XM	7.6	600.0	175.0	535	PA66	Natural (NA)	50	111-12704
T120L	7.6	760.0	225.0	535	PA66	Natural (NA)	50	111-12429
T150L	8.8	820.0	245.0	780	PA66	Natural (NA)	25	111-15419
T150M	8.9	530.0	150.0	780	PA66	Natural (NA)	25	111-15619

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



### Cable Ties Polyamide 6.6 standard

- T-Series in PA66 natural

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
T150XL	8.9	1,095.0	330.0	780	PA66	Natural (NA)	25	111-15519
T150XLL	8.9	1,325.0	405.0	780	PA66	Natural (NA)	25	111-15304
T250S	12.5	225.0	55.0	1,115	PA66	Natural (NA)	100	111-24705
T250R	12.5	515.0	125.0	1,115	PA66	Natural (NA)	25	111-24803
T250M	12.5	565.3	150.0	1,115	PA66	Natural (NA)	25	111-25002
T250I	12.5	730.0	203.0	1,115	PA66	Natural (NA)	25	111-25219
T250XL	12.5	1,030.0	305.0	1,115	PA66	Natural (NA)	25	111-00466

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.

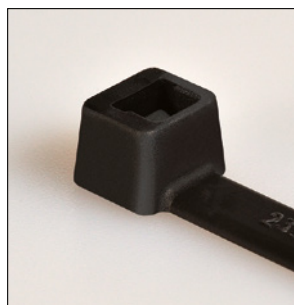
### Cable Ties for outdoor use (UV-resistant)

- T-Series in PA66W black

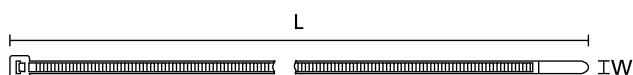
These cable ties are used for routing, bundling and securing of cables, pipes and hoses.

#### Features and Benefits

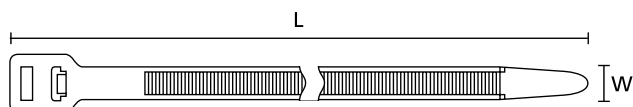
- Weather-resistant black cable tie available in a wide range of sizes
- Made from 100% high quality plastic, allows for good recycling
- Inside serration for a strong hold onto bundles
- Easy application either manually or with a processing tool
- Simple to insert due to the ergonomically bent tail
- UV-resistant



T-Series.



T-Series



T250-series

**Material specification please see page 22.**

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
T18R	2.5	100.0	22.0	80	PA66W	Black (BK)	100	111-01960
T18I	2.5	145.0	35.0	80	PA66W	Black (BK)	100	111-02360
T18L	2.5	205.0	55.0	80	PA66W	Black (BK)	100	111-02160

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.






## Cable Ties for outdoor use (UV-resistant)

- T-Series in PA66W black

Application tools  
please see page 302.

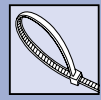
TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
T25LL	2.8	330.0	95.0	110	PA66W	Black (BK)	100	111-02660
T30R	3.5	150.0	35.0	135	PA66W	Black (BK)	100	111-03260
T30L	3.5	198.0	50.0	135	PA66W	Black (BK)	100	111-03460
T30LL	3.5	290.0	80.0	135	PA66W	Black (BK)	100	111-03570
T40R	4.0	175.0	40.0	180	PA66W	Black (BK)	100	111-03860
T50S	4.6	150.0	35.0	225	PA66W	Black (BK)	100	111-05860
T50R	4.6	200.0	50.0	225	PA66W	Black (BK)	100	111-04889
T50M	4.6	245.0	65.0	225	PA66W	Black (BK)	100	111-06206
T50I	4.6	300.0	85.0	225	PA66W	Black (BK)	100	111-05260
T50L	4.6	390.0	110.0	225	PA66W	Black (BK)	100	111-05440
T50LL	4.6	445.0	130.0	225	PA66W	Black (BK)	100	111-06000
T80R	4.7	210.0	55.0	355	PA66W	Black (BK)	100	111-05060
T80I	4.7	300.0	85.0	355	PA66W	Black (BK)	100	111-08290
T80L	4.7	390.0	110.0	355	PA66W	Black (BK)	100	111-05460
T120S	7.6	225.0	55.0	535	PA66W	Black (BK)	50	111-12830
T120I	7.6	300.0	80.0	535	PA66W	Black (BK)	100	111-12230
T150R(H)	7.6	365.0	100.0	670	PA66W	Black (BK)	100	111-14860
T120R(E)	7.6	387.0	100.0	535	PA66W	Black (BK)	100	111-12060
T120M	7.6	460.0	125.0	535	PA66W	Black (BK)	100	111-12660
T120L	7.6	760.0	225.0	535	PA66W	Black (BK)	50	111-12430
T150L	8.8	820.0	245.0	780	PA66W	Black (BK)	25	111-15460
T150M	8.9	530.0	150.0	780	PA66W	Black (BK)	25	111-15660
T150XL	8.9	1,095.0	330.0	780	PA66W	Black (BK)	25	111-15502
T150XLL	8.9	1,325.0	405.0	780	PA66W	Black (BK)	25	111-15305
T250R	12.5	515.0	125.0	1,115	PA66HIRHSUV	Black (BK)	25	111-24805

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



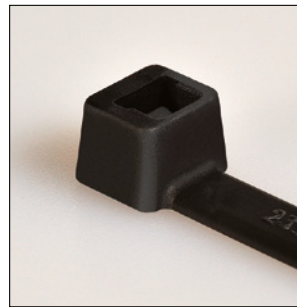
### Cable Ties Polyamide 6.6 standard

- T-Series in PA66 black

These cable ties are used for routing, bundling and securing cables, pipes and hoses.

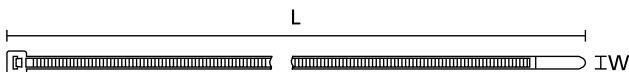
#### Features and Benefits

- Standard black cable tie available in a wide range of sizes
- Made from 100% high quality plastic, allows for good recycling
- Inside serration for a strong hold around bundles
- Easy application either manually or with a processing tool
- Simple to insert due to the ergonomically bent tail

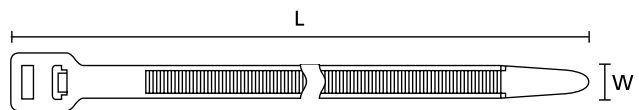


T-Series.

**Material specification please see page 22.**



T-Series



T250-series

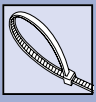
TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
T18R	2.5	100.0	22.0	80	PA66	Black (BK)	100	111-01910
T18I	2.5	145.0	35.0	80	PA66	Black (BK)	100	111-02370
T18L	2.5	205.0	55.0	80	PA66	Black (BK)	100	111-02110
T25L	2.8	240.0	65.0	110	PA66	Black (BK)	100	111-02500
T30R	3.5	150.0	35.0	135	PA66	Black (BK)	100	111-03210
T30L	3.5	198.0	50.0	135	PA66	Black (BK)	100	111-03410
T30LL	3.5	290.0	80.0	135	PA66	Black (BK)	100	111-03500
T50S	4.6	150.0	35.0	225	PA66	Black (BK)	100	111-05810
T50R	4.6	200.0	50.0	225	PA66	Black (BK)	100	111-05000
T50M	4.6	245.0	65.0	225	PA66	Black (BK)	100	111-06200
T50I	4.6	300.0	85.0	225	PA66	Black (BK)	100	111-05210
T50L	4.6	390.0	110.0	225	PA66	Black (BK)	100	111-05400
T50LL	4.6	445.0	130.0	225	PA66	Black (BK)	500	111-06002
T80R	4.7	210.0	55.0	355	PA66	Black (BK)	100	111-08010
T80I	4.7	300.0	85.0	355	PA66	Black (BK)	100	111-08210
T80L	4.7	390.0	110.0	355	PA66	Black (BK)	100	111-05410
T120I	7.6	300.0	80.0	535	PA66	Black (BK)	100	111-12210
T150R	7.6	365.0	100.0	670	PA66	Black (BK)	100	111-14810
T120R(E)	7.6	387.0	100.0	535	PA66	Black (BK)	100	111-12010
T120M	7.6	460.0	125.0	535	PA66	Black (BK)	100	111-12610
T120XM	7.6	600.0	175.0	535	PA66	Black (BK)	50	111-12701
T120L	7.6	760.0	225.0	535	PA66	Black (BK)	50	111-12403
T150L	8.8	820.0	245.0	780	PA66	Black (BK)	25	111-15405

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.




Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



### Cable Ties Polyamide 6.6 standard

#### • T-Series in PA66 black

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
T150M	8.9	530.0	150.0	780	PA66	Black (BK)	25	111-00124
T150XL	8.9	1,095.0	330.0	780	PA66	Black (BK)	25	111-15500
T150XLL	8.9	1,325.0	405.0	780	PA66	Black (BK)	25	111-15300
T250X	12.5	370.0	100.0	1,115	PA66	Black (BK)	100	111-25102
T250M	12.5	565.3	150.0	1,115	PA66	Black (BK)	25	111-25001
T250L	12.5	880.0	254.0	1,115	PA66	Black (BK)	25	111-24601
T250XL	12.5	1,030.0	305.0	1,115	PA66	Black (BK)	25	111-25200

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.

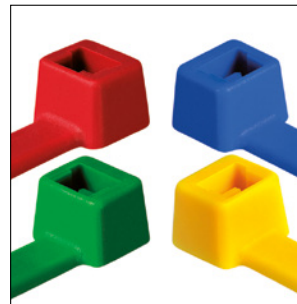
### Cable Ties Polyamide 6.6 standard

#### • T-Series in PA66 coloured

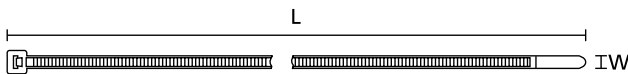
These cable ties are used for routing, bundling and securing cables, pipes and hoses.

#### Features and Benefits

- Coloured cable ties available in a wide range of sizes
- Made from 100% high quality plastic, allows for good recycling
- Inside serration for a strong hold around bundles
- Easy application either manually or with a processing tool
- Simple to insert due to the ergonomically bent tail




T-Series.



T-Series

**Application tools  
please see page 302.**

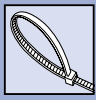
TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
T18R	2.5	100.0	22.0	80	PA66	Blue (BU)	100	116-01816
	2.5	100.0	22.0	80	PA66	Green (GN)	100	116-01815
	2.5	100.0	22.0	80	PA66	Red (RD)	100	116-01812
	2.5	100.0	22.0	80	PA66	Yellow (YE)	100	116-01814
T30R	3.5	150.0	35.0	135	PA66	Blue (BU)	100	111-03008
	3.5	150.0	35.0	135	PA66	Green (GN)	100	111-03014
	3.5	150.0	35.0	135	PA66	Red (RD)	100	111-03004
	3.5	150.0	35.0	135	PA66	Yellow (YE)	100	111-03006

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.




Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



## Cable Ties Polyamide 6.6 standard

- T-Series in PA66 coloured

Material specification  
please see page 22.

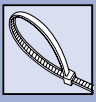
TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
T50R	4.6	200.0	50.0	225	PA66	Blue (BU)	100	111-04800
	4.6	200.0	50.0	225	PA66	Green (GN)	100	111-04801
	4.6	200.0	50.0	225	PA66	Red (RD)	100	111-04804
	4.6	200.0	50.0	225	PA66	Yellow (YE)	100	111-04805
T50L	4.6	390.0	110.0	225	PA66	Blue (BU)	100	111-05404
	4.6	390.0	110.0	225	PA66	Green (GN)	100	111-05402
	4.6	390.0	110.0	225	PA66	Red (RD)	100	111-05406
	4.6	390.0	110.0	225	PA66	Yellow (YE)	100	111-05428
T80R	4.7	210.0	55.0	355	PA66	Blue (BU)	100	116-08016
	4.7	210.0	55.0	355	PA66	Green (GN)	100	116-08015
	4.7	210.0	55.0	355	PA66	Red (RD)	100	116-08012
	4.7	210.0	55.0	355	PA66	Yellow (YE)	100	116-08014
T80L	4.7	390.0	110.0	355	PA66	Blue (BU)	100	116-05416
	4.7	390.0	110.0	355	PA66	Green (GN)	100	116-05415
	4.7	390.0	110.0	355	PA66	Red (RD)	100	116-05412
	4.7	390.0	110.0	355	PA66	Yellow (YE)	100	116-05414
T150R(H)	7.6	365.0	100.0	670	PA66	Blue (BU)	100	116-15016
	7.6	365.0	100.0	670	PA66	Red (RD)	100	116-15012
	7.6	365.0	100.0	670	PA66	Yellow (YE)	100	116-15014
T120R(E)	7.6	387.0	100.0	535	PA66	Green (GN)	100	111-12001
	7.6	387.0	100.0	535	PA66	Red (RD)	100	111-12002

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



Please note! Not all products listed on this page may have this approval.  
For product specific approvals please refer to the Appendix.



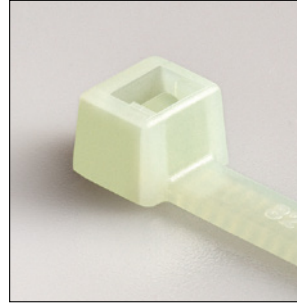
### Cable Ties for temperatures up to + 105°C (heat stabilised)

- T-Series in PA66HS natural

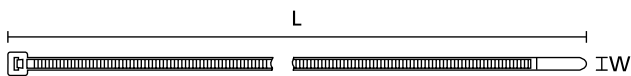
These cable ties are used for routing, bundling and securing cables, pipes and hoses.

#### Features and Benefits

- Heat stabilised cable tie available in a wide range of sizes
- Made from 100% high quality plastic, allows for good recycling
- Inside serration for a strong hold around bundles
- Easy application either manually or with a processing tool
- Simple to insert due to the ergonomically bent tail
- Higher temperature resistance up to +105 °C




T-Series.



T-Series

**Application tools  
please see page 302.**

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
T18R	2.5	100.0	22.0	80	PA66HS	Natural (NA)	100	111-01959
T18I	2.5	145.0	35.0	80	PA66HS	Natural (NA)	1,000	111-02359
T18L	2.5	205.0	55.0	80	PA66HS	Natural (NA)	100	111-02159
T30R	3.5	150.0	35.0	135	PA66HS	Natural (NA)	100	111-03259
T30L	3.5	198.0	50.0	135	PA66HS	Natural (NA)	100	111-03459
T30LL	3.5	290.0	80.0	135	PA66HS	Natural (NA)	100	111-03569
T40R	4.0	175.0	40.0	180	PA66HS	Natural (NA)	100	111-03859
T50S	4.6	150.0	35.0	225	PA66HS	Natural (NA)	100	111-05859
T50I	4.6	300.0	85.0	225	PA66HS	Natural (NA)	100	111-05259
T50L	4.6	390.0	110.0	225	PA66HS	Natural (NA)	100	111-05436
T80R	4.7	210.0	55.0	355	PA66HS	Natural (NA)	100	111-05059
T80I	4.7	300.0	85.0	355	PA66HS	Natural (NA)	100	111-08259
T80L	4.7	390.0	110.0	355	PA66HS	Natural (NA)	100	111-05459
T120S	7.6	225.0	55.0	535	PA66HS	Natural (NA)	50	111-12824
T150R(H)	7.6	365.0	100.0	670	PA66HS	Natural (NA)	100	111-15069
T120R(E)	7.6	387.0	100.0	535	PA66HS	Natural (NA)	100	111-12059
T120XM	7.6	600.0	175.0	535	PA66HS	Natural (NA)	50	111-12719
T120L	7.6	760.0	225.0	535	PA66HS	Natural (NA)	50	111-12449

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



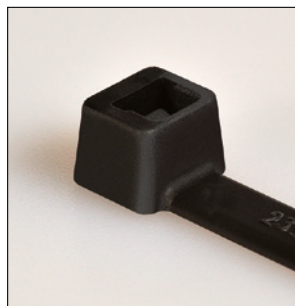
### Cable Ties for temperatures up to + 105°C (heat stabilised)

- **T-Series in PA66HS black**

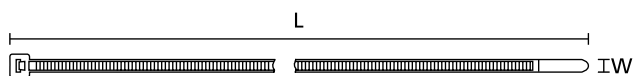
These cable ties are used for routing, bundling and securing cables, pipes and hoses.

#### Features and Benefits

- Heat stabilised black cable tie available in a wide range of sizes
- Made from 100% high quality plastic, allows for good recycling
- Inside serration for a strong hold around bundles
- Easy application either manually or with a processing tool
- Simple to insert due to the ergonomically bent tail
- Higher temperature resistance up to +105 °C



T-Series.



T-Series

**Application tools please see page 302.**

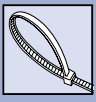
TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
T18R	2.5	100.0	22.0	80	PA66HS	Black (BK)	100	111-01950
T18I	2.5	145.0	35.0	80	PA66HS	Black (BK)	100	111-02358
T18L	2.5	205.0	55.0	80	PA66HS	Black (BK)	100	111-02049
T30R	3.5	150.0	35.0	135	PA66HS	Black (BK)	100	111-03050
T30L	3.5	198.0	50.0	135	PA66HS	Black (BK)	100	111-03450
T30LL	3.5	290.0	80.0	135	PA66HS	Black (BK)	1,000	111-03660
T40R	4.0	175.0	40.0	180	PA66HS	Black (BK)	100	111-03970
T50S	4.6	150.0	35.0	225	PA66HS	Black (BK)	100	111-05850
T50R	4.6	200.0	50.0	225	PA66HS	Black (BK)	100	111-04950
T50I	4.6	300.0	85.0	225	PA66HS	Black (BK)	100	111-05250
T50L	4.6	390.0	110.0	225	PA66HS	Black (BK)	100	111-05450
T80R	4.7	210.0	55.0	355	PA66HS	Black (BK)	1,000	117-08070
T80I	4.7	300.0	85.0	355	PA66HS	Black (BK)	100	111-08250
T80L	4.7	390.0	110.0	355	PA66HS	Black (BK)	100	111-00388
T120S	7.6	225.0	55.0	535	PA66HS	Black (BK)	50	111-12850
T150R(H)	7.6	365.0	100.0	670	PA66HS	Black (BK)	100	111-15050
T120R(E)	7.6	387.0	100.0	535	PA66HS	Black (BK)	100	111-12050
T120M	7.6	460.0	125.0	535	PA66HS	Black (BK)	100	111-00153
T120XM	7.6	600.0	175.0	535	PA66HS	Black (BK)	50	111-12700
T120L	7.6	760.0	225.0	535	PA66HS	Black (BK)	50	111-12440
T150L	8.8	820.0	245.0	780	PA66HS	Black (BK)	100	111-15410
T150M	8.9	530.0	150.0	780	PA66HS	Black (BK)	25	111-15609
T150XL	8.9	1,095.0	330.0	780	PA66HS	Black (BK)	25	111-15510

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



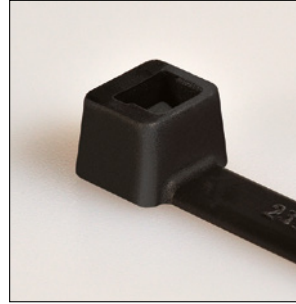
## Cable Ties for higher impact resistant Polyamide 6.6 ScanBlack

### • T-Series in PA66HIR(S)

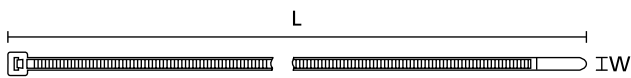
These cable ties are used for routing, bundling and securing cables, pipes and hoses.

#### Features and Benefits

- Impact resistant black cable tie available in a wide range of sizes
- Made from 100% high quality plastic, allows for good recycling
- Inside serration for a strong hold around bundles
- Easy application either manually or with a processing tool
- Simple to insert due to the ergonomically bent tail
- Higher flexibility in cold environments




T-Series.



T-Series

**Material specification  
please see page 22.**

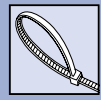
TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
T50R	4.6	200.0	50.0	225	PA66HIR(S)	Black (BK)	100	111-04890
T50I	4.6	300.0	85.0	225	PA66HIR(S)	Black (BK)	100	111-00222
T50L	4.6	390.0	110.0	225	PA66HIR(S)	Black (BK)	100	111-05441
T120I	7.6	300.0	80.0	535	PA66HIR(S)	Black (BK)	100	111-12203
T120R(E)	7.6	387.0	100.0	535	PA66HIR(S)	Black (BK)	100	111-12032
T120L	7.6	760.0	225.0	535	PA66HIR(S)	Black (BK)	50	111-12402

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



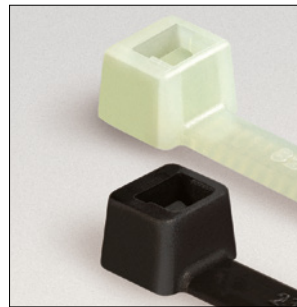
### Cable Ties in-between size to T-Series

- **LK-Series**

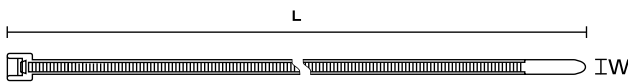
For routing, bundling and securing of cables, pipes and hoses.

#### Features and Benefits

- Wide range of materials and sizes
- Inside serrated ties for a strong hold around bundles
- High tensile strength with very low insertion force
- Simple and quick to install
- Easy application either manually or with a processing tool



LK-Series.



LK-Series

**Material specification  
please see page 22.**

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
LK2A	4.6	270.0	73.0	225	PA66	Black (BK)	100	111-60110
	4.6	270.0	73.0	225	PA66	Natural (NA)	100	111-60119
	4.6	270.0	73.0	225	PA66HS	Black (BK)	100	111-60150
	4.6	270.0	73.0	225	PA66HS	Natural (NA)	100	111-60159
	4.6	270.0	73.0	225	PA66W	Black (BK)	100	111-60160
LK2	4.8	120.0	28.0	135	PA66	Natural (NA)	200	111-60219
LK5	13.2	535.0	150.0	1,115	PA66	Black (BK)	50	111-60510
	13.2	535.0	150.0	1,115	PA66	Natural (NA)	50	111-60519
	13.2	535.0	150.0	1,115	PA66HS	Natural (NA)	50	111-60559
	13.2	535.0	150.0	1,115	PA66W	Black (BK)	50	111-60560

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.





## Cable Ties for food industry, detectable

The Metal Content Tie is a cable tie specifically designed for use in the food and pharmaceutical processing industries. A unique manufacturing process, involving the inclusion of a metallic pigment, enables even small 'cut-off' sections of the tie to be detected by standard metal-detecting equipment. Ideally suited for the installation of cabling in and around the manufacturing process.

### Features and Benefits

- Total metal dispersion throughout the tie
- Available in a wide range of sizes
- Usable as part of HACCP process\*
- Unique blue colour for easy visual detection
- Greatly reduces risk of contamination
- Magnetic detectable

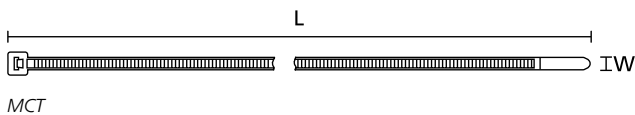


The MCT with metal content.

Application tools  
please see page 302.



One Step to the Web!




MCT



A safe and contamination free production process with MCT.


### • MCT-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
MCT18R	2.5	100.0	22.0	80	PA66MP	Blue (BU)	100	111-01225
MCT30R	3.5	150.0	35.0	135	PA66MP	Blue (BU)	100	111-00829
MCT50R	4.6	202.0	50.0	225	PA66MP	Blue (BU)	100	111-00830
MCT50L	4.7	380.0	110.0	225	PA66MP	Blue (BU)	100	111-00831
MCT120R	7.6	387.0	100.0	535	PA66MP	Blue (BU)	100	111-01136

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

### • MCT-Series releasable

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
MCTRELK2M	4.6	250.0	65.0	225	PA66MP	Blue (BU)	100	111-00937

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

\*HACCP stands for Hazard Analysis Critical Control Points. It is a method of identifying and eliminating potential hazards in food production. Those hazards that cannot be eliminated are controlled in such a way that the consumer is protected. These controls are known as Critical Control Points (CCPs). They are CRITICAL because if they fail or are not carried out, the risk of the product harming the customer increases.

# Be the fastest with HellermannTyton: More than a 25% time saving with Q-series!

Extensive customer trials and speed tests fully audited and approved by DEKRA.

## Test our Q-series!



More information on the world wide web.

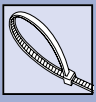


[www.HellermannTyton.co.uk](http://www.HellermannTyton.co.uk)

**HellermannTyton**



One Step to the Web!

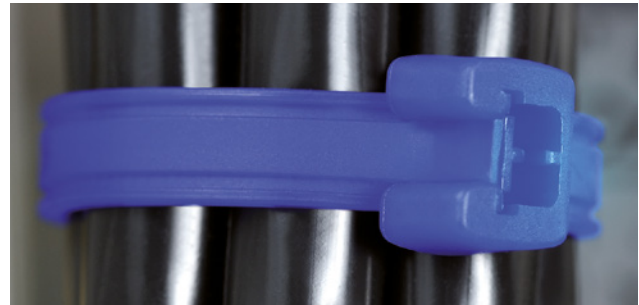


### Cable Ties, Q-tie

#### Innovative – Effective – Safe!

The new Q-tie has not only an innovative but also a revolutionary design. The open head of the cable tie enables a simple and quick installation. Just insert the ergonomically bent tail into the open side of the head and tighten the cable tie.

With Q-ties you can save time and money!



*Q-ties in different colours are ideal for marking and bundling in one step.*

#### Easy application for every situation!

Q-tie is the perfect product solution for applications under difficult working conditions. It is designed for use in applications where working with gloves is necessary or for blind applications with a limited view of the work.

The new Q-tie allows a quick and simple installation even with work gloves and restricted view.

Features for quick and easy application:

- Curved and large ribbed tail
- Open head with easily detectable slot

This saves time and trouble!



*One Step to the Web!*

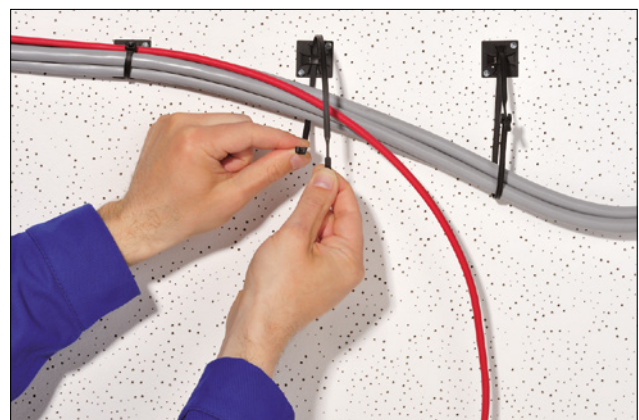


*Even under difficult circumstances the Q-tie cable tie is very fast and easy to apply.*

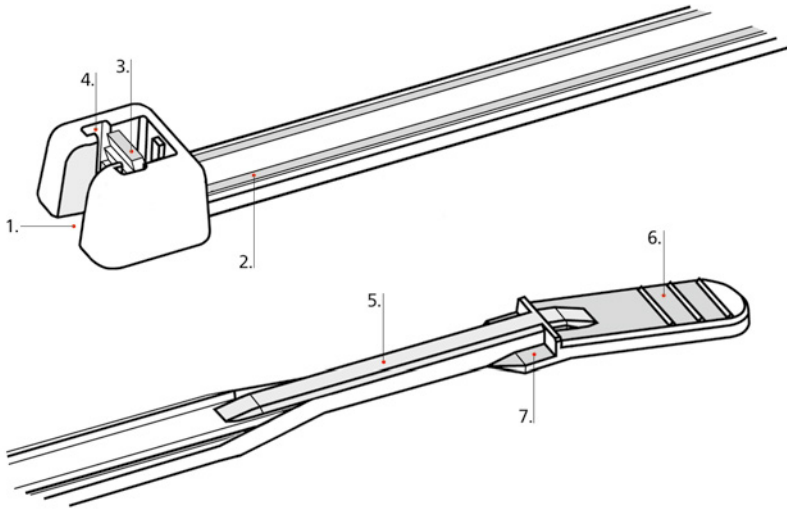
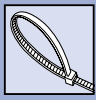
#### Integrated Pre-Locking Functionality!

Due to several simultaneous working processes, it is not always possible to install all cables and conduits in one single step. Thus, working with standard cable ties means either destroying the cable tie of the first installation or applying additional cable ties. The integrated pre-locking function of the Q-tie offers both temporary and final cable fastening solution.

This saves material and time!



*Without additional effort only Q-ties can be used for temporary and final cable bundling.*



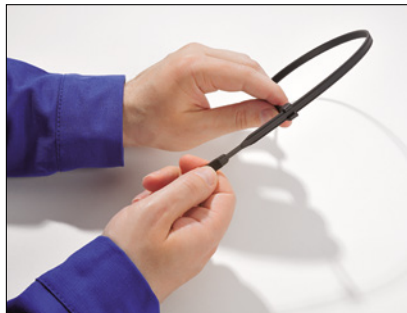
### Features of Q-ties:

1. Open lock head for quick and easy insertion.
2. Two rails on the strap ensure perfect guidance for the tracks in the head.
3. The locking device interacts safely with the serration of the cable tie.
4. The tracks prevent a deformation of the head under load.
5. The thin part of the cable tie can be simply placed into the open lock head.
6. The large ribbed tail allows a safe and ergonomic installation.
7. Integrated pre locking feature (starts with type Q30).

### Application Method:



1. Insert the thin part of the cable tie into the open lock head.



2. Pull the tie through the head until the bundle is fixed.

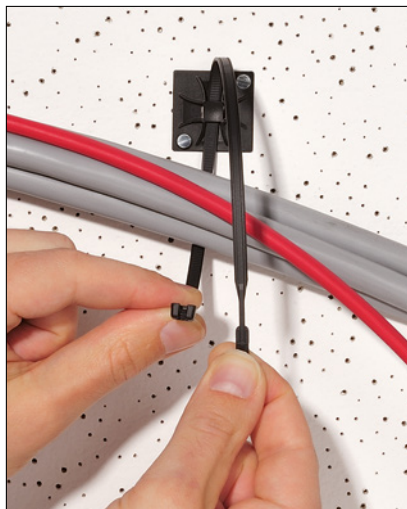
3. Cut off the remaining part of the tie with an application tool.

**Please find more Q-Series products for your system solution on page 77, 78 and 256.**

### Pre-locking Function of the Q-tie:



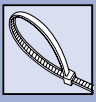
1. Insert tail into the open head and push the tail partly into the head.



2. To release the tie push tail end slightly out of head.



3. When the installation is complete, the Q-tie can be tightened and cut off - either manually or with an application tool.



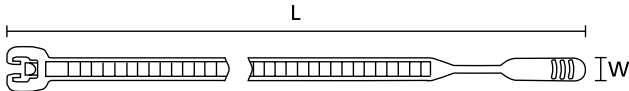
### Cable Ties with open head

- Q-ties, Polyamide 6.6 (PA66), natural and black

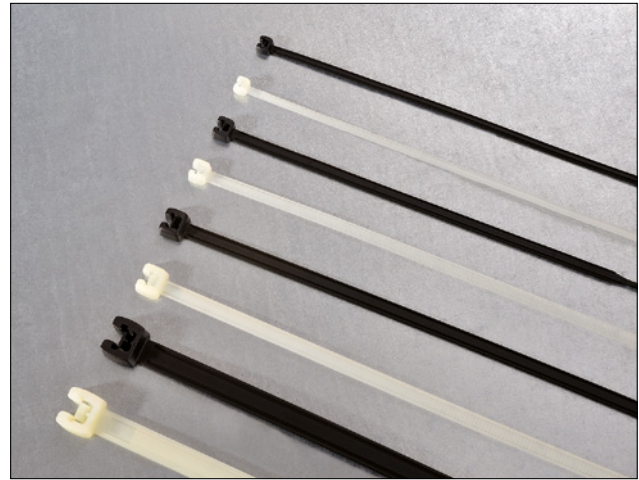


Material specification  
please see page 22.

One Step to the Web!



Q-tie cable tie

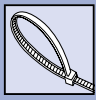


Q-tie cable ties: choose from a wide product range in different materials.

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
Q18R	2.6	105.0	24.0	80	PA66	Black (BK)	100	109-00030
	2.6	105.0	24.0	80	PA66	Natural (NA)	100	109-00001
Q18I	2.6	155.0	40.0	80	PA66	Black (BK)	100	109-00033
	2.6	155.0	40.0	80	PA66	Natural (NA)	100	109-00004
Q18L	2.6	195.0	50.0	80	PA66	Black (BK)	100	109-00036
	2.6	195.0	50.0	80	PA66	Natural (NA)	100	109-00007
Q30R	3.6	160.0	38.0	130	PA66	Black (BK)	100	109-00039
	3.6	160.0	38.0	130	PA66	Natural (NA)	100	109-00010
Q30L	3.6	200.0	50.0	130	PA66	Black (BK)	100	109-00041
	3.6	200.0	50.0	130	PA66	Natural (NA)	100	109-00012
Q30LR	3.6	250.0	65.0	130	PA66	Black (BK)	100	109-00043
	3.6	250.0	65.0	130	PA66	Natural (NA)	100	109-00014
Q50R	4.7	210.0	50.0	220	PA66	Black (BK)	100	109-00047
	4.7	210.0	50.0	220	PA66	Natural (NA)	100	109-00018
Q50I	4.7	290.0	75.0	220	PA66	Black (BK)	100	109-00049
	4.7	290.0	75.0	220	PA66	Natural (NA)	100	109-00020
Q50L	4.7	410.0	110.0	220	PA66	Black (BK)	100	109-00051
	4.7	410.0	110.0	220	PA66	Natural (NA)	100	109-00022
Q120I	7.7	300.0	70.0	530	PA66	Black (BK)	100	109-00053
	7.7	300.0	70.0	530	PA66	Natural (NA)	100	109-00024
Q120R	7.7	420.0	110.0	530	PA66	Black (BK)	100	109-00055
	7.7	420.0	110.0	530	PA66	Natural (NA)	100	109-00026
Q120M	7.7	520.0	130.0	530	PA66	Black (BK)	100	109-00057
	7.7	520.0	130.0	530	PA66	Natural (NA)	100	109-00028

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

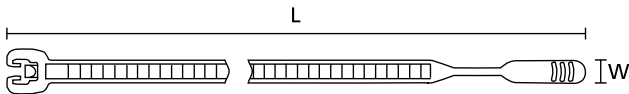


### Cable Ties with open head

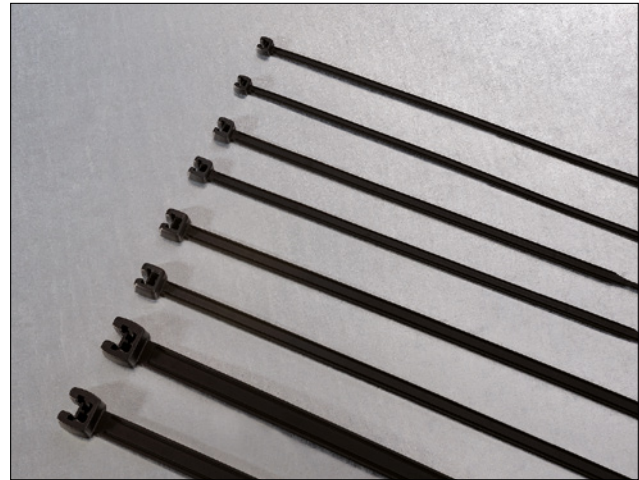
- Q-ties, Polyamide 6.6 UV-resistant (PA66W), black

**Application tools  
please see page 302.**

**Please find more Q-Series products for your  
system solution on page 77, 78 and 256.**



Q-tie cable tie

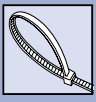


Q-tie cable ties: choose from a wide product range in different sizes.

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
Q18R	2.6	105.0	24.0	80	PA66W	Black (BK)	100	109-00059
Q18I	2.6	155.0	40.0	80	PA66W	Black (BK)	100	109-00062
Q18L	2.6	195.0	50.0	80	PA66W	Black (BK)	100	109-00065
Q30R	3.6	160.0	38.0	130	PA66W	Black (BK)	100	109-00068
Q30L	3.6	200.0	50.0	130	PA66W	Black (BK)	100	109-00070
Q30LR	3.6	250.0	65.0	130	PA66W	Black (BK)	100	109-00072
Q50R	4.7	210.0	50.0	220	PA66W	Black (BK)	100	109-00076
Q50I	4.7	290.0	75.0	220	PA66W	Black (BK)	100	109-00078
Q50L	4.7	410.0	110.0	220	PA66W	Black (BK)	100	109-00080
Q120I	7.7	300.0	70.0	530	PA66W	Black (BK)	100	109-00082
Q120R	7.7	420.0	110.0	530	PA66W	Black (BK)	100	109-00084
Q120M	7.7	520.0	130.0	530	PA66W	Black (BK)	100	109-00086

All dimensions in mm. Subject to technical changes.

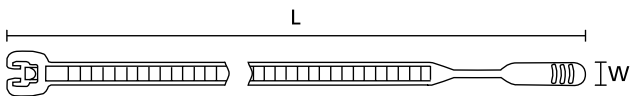
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



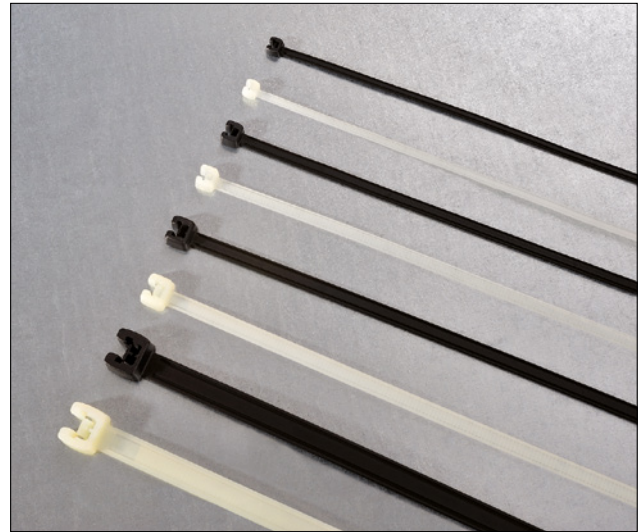
### Cable Ties with open head

- Q-ties, Polyamide 6.6 heat stabilised (PA66HS), natural and black


Material specification please see page 22.



Q-tie cable tie



Q-tie cable ties: choose from a wide product range in different materials.

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
Q18R	2.6	105.0	24.0	80	PA66HS	Black (BK)	100	109-00088
	2.6	105.0	24.0	80	PA66HS	Natural (NA)	100	109-00117
Q18I	2.6	155.0	40.0	80	PA66HS	Black (BK)	100	109-00091
	2.6	155.0	40.0	80	PA66HS	Natural (NA)	100	109-00120
Q18L	2.6	195.0	50.0	80	PA66HS	Black (BK)	100	109-00094
	2.6	195.0	50.0	80	PA66HS	Natural (NA)	100	109-00123
Q30R	3.6	160.0	38.0	130	PA66HS	Black (BK)	100	109-00097
	3.6	160.0	38.0	130	PA66HS	Natural (NA)	100	109-00126
Q30L	3.6	200.0	50.0	130	PA66HS	Black (BK)	100	109-00099
	3.6	200.0	50.0	130	PA66HS	Natural (NA)	100	109-00128
Q30LR	3.6	250.0	65.0	130	PA66HS	Black (BK)	100	109-00101
	3.6	250.0	65.0	130	PA66HS	Natural (NA)	100	109-00130
Q50R	4.7	210.0	50.0	220	PA66HS	Black (BK)	100	109-00105
	4.7	210.0	50.0	220	PA66HS	Natural (NA)	100	109-00134
Q50I	4.7	290.0	75.0	220	PA66HS	Black (BK)	100	109-00107
	4.7	290.0	75.0	220	PA66HS	Natural (NA)	100	109-00136
Q50L	4.7	410.0	110.0	220	PA66HS	Black (BK)	100	109-00109
	4.7	410.0	110.0	220	PA66HS	Natural (NA)	100	109-00138
Q120I	7.7	300.0	70.0	530	PA66HS	Black (BK)	100	109-00111
	7.7	300.0	70.0	530	PA66HS	Natural (NA)	100	109-00140
Q120R	7.7	420.0	110.0	530	PA66HS	Black (BK)	100	109-00113
	7.7	420.0	110.0	530	PA66HS	Natural (NA)	100	109-00142
Q120M	7.7	520.0	130.0	530	PA66HS	Black (BK)	100	109-00115
	7.7	520.0	130.0	530	PA66HS	Natural (NA)	100	109-00144

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

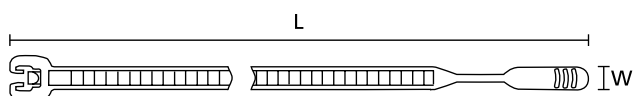


### Cable Ties with open head

- Q-ties, Polyamide 6.6 (PA66), coloured

**Application tools  
please see page 302.**

**Please find more Q-Series products for your  
system solution on page 77, 78 and 256.**



Q-tie cable tie

Q-ties in different colours are ideal for marking and bundling in one step.

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
Q18R	2.6	105.0	24.0	80	PA66	Blue (BU)	100	109-00147
	2.6	105.0	24.0	80	PA66	Brown (BN)	100	109-00146
	2.6	105.0	24.0	80	PA66	Green (GN)	100	109-00148
	2.6	105.0	24.0	80	PA66	Red (RD)	100	109-00149
	2.6	105.0	24.0	80	PA66	Yellow (YE)	100	109-00150
Q18I	2.6	155.0	40.0	80	PA66	Blue (BU)	100	109-00152
	2.6	155.0	40.0	80	PA66	Brown (BN)	100	109-00151
	2.6	155.0	40.0	80	PA66	Green (GN)	100	109-00153
	2.6	155.0	40.0	80	PA66	Red (RD)	100	109-00154
	2.6	155.0	40.0	80	PA66	Yellow (YE)	100	109-00155
Q18L	2.6	195.0	50.0	80	PA66	Blue (BU)	100	109-00157
	2.6	195.0	50.0	80	PA66	Brown (BN)	100	109-00156
	2.6	195.0	50.0	80	PA66	Green (GN)	100	109-00158
	2.6	195.0	50.0	80	PA66	Red (RD)	100	109-00159
	2.6	195.0	50.0	80	PA66	Yellow (YE)	100	109-00160
Q30R	3.6	160.0	38.0	130	PA66	Blue (BU)	100	109-00162
	3.6	160.0	38.0	130	PA66	Brown (BN)	100	109-00161
	3.6	160.0	38.0	130	PA66	Green (GN)	100	109-00163
	3.6	160.0	38.0	130	PA66	Red (RD)	100	109-00164
	3.6	160.0	38.0	130	PA66	Yellow (YE)	100	109-00165
Q30L	3.6	200.0	50.0	130	PA66	Blue (BU)	100	109-00167
	3.6	200.0	50.0	130	PA66	Brown (BN)	100	109-00166
	3.6	200.0	50.0	130	PA66	Green (GN)	100	109-00168
	3.6	200.0	50.0	130	PA66	Red (RD)	100	109-00169
	3.6	200.0	50.0	130	PA66	Yellow (YE)	100	109-00170

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.






## Cable Ties with open head

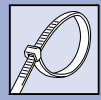
- Q-ties, Polyamide 6.6 (PA66), coloured

Material specification  
please see page 22.

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
Q30LR	3.6	250.0	65.0	130	PA66	Blue (BU)	100	109-00172
	3.6	250.0	65.0	130	PA66	Brown (BN)	100	109-00171
	3.6	250.0	65.0	130	PA66	Green (GN)	100	109-00173
	3.6	250.0	65.0	130	PA66	Red (RD)	100	109-00174
	3.6	250.0	65.0	130	PA66	Yellow (YE)	100	109-00175
Q50R	4.7	210.0	50.0	220	PA66	Blue (BU)	100	109-00182
	4.7	210.0	50.0	220	PA66	Brown (BN)	100	109-00181
	4.7	210.0	50.0	220	PA66	Green (GN)	100	109-00183
	4.7	210.0	50.0	220	PA66	Red (RD)	100	109-00184
	4.7	210.0	50.0	220	PA66	Yellow (YE)	100	109-00185
Q50I	4.7	290.0	75.0	220	PA66	Blue (BU)	100	109-00187
	4.7	290.0	75.0	220	PA66	Brown (BN)	100	109-00186
	4.7	290.0	75.0	220	PA66	Green (GN)	100	109-00188
	4.7	290.0	75.0	220	PA66	Red (RD)	100	109-00189
	4.7	290.0	75.0	220	PA66	Yellow (YE)	100	109-00190
Q50L	4.7	410.0	110.0	220	PA66	Blue (BU)	100	109-00192
	4.7	410.0	110.0	220	PA66	Brown (BN)	100	109-00191
	4.7	410.0	110.0	220	PA66	Green (GN)	100	109-00193
	4.7	410.0	110.0	220	PA66	Red (RD)	100	109-00194
	4.7	410.0	110.0	220	PA66	Yellow (YE)	100	109-00195
Q120I	7.7	300.0	70.0	530	PA66	Blue (BU)	100	109-00197
	7.7	300.0	70.0	530	PA66	Brown (BN)	100	109-00196
	7.7	300.0	70.0	530	PA66	Green (GN)	100	109-00198
	7.7	300.0	70.0	530	PA66	Red (RD)	100	109-00199
	7.7	300.0	70.0	530	PA66	Yellow (YE)	100	109-00200
Q120R	7.7	420.0	110.0	530	PA66	Blue (BU)	100	109-00202
	7.7	420.0	110.0	530	PA66	Brown (BN)	100	109-00201
	7.7	420.0	110.0	530	PA66	Green (GN)	100	109-00203
	7.7	420.0	110.0	530	PA66	Red (RD)	100	109-00204
	7.7	420.0	110.0	530	PA66	Yellow (YE)	100	109-00205
Q120M	7.7	520.0	130.0	530	PA66	Blue (BU)	100	109-00207
	7.7	520.0	130.0	530	PA66	Brown (BN)	100	109-00206
	7.7	520.0	130.0	530	PA66	Green (GN)	100	109-00208
	7.7	520.0	130.0	530	PA66	Red (RD)	100	109-00209
	7.7	520.0	130.0	530	PA66	Yellow (YE)	100	109-00210

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



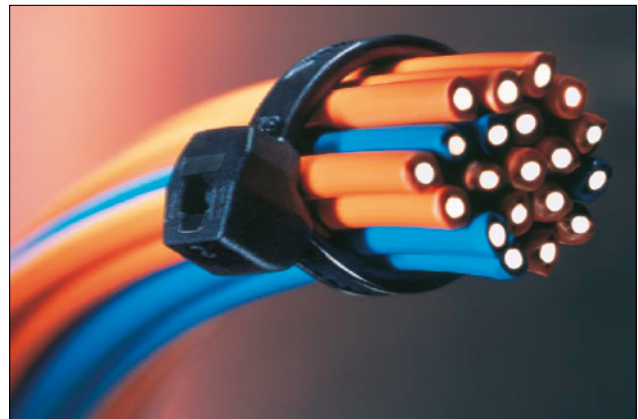
### Cable Ties for thin-walled bundles

- OS-Series

OS-Series cable ties are used in many areas where thin-walled or soft insulation wires and cable are being installed, e. g. automotive and aircraft industry. OS ties made from PA66V0 material are suitable for applications where safety regulations are required, e.g. reduction of smoke and dangerous gases.

#### Features and Benefits

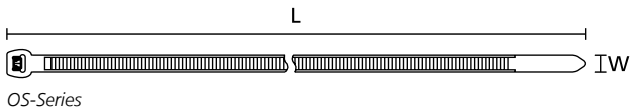
- Outside serrated cable tie with smooth surface to the bundle
- Tie follows the contours of the cable bundle perfectly
- Takes up less space due to curved head
- Easy insertion and high tensile strength
- For higher temperature or Limited Fire Hazard demand: Material PA46 or PA66V0
- Easy application either manually or with a processing tool



The contoured head needs less installation space, provides low insertion force and offers high strength.



The new head design of the OS Series



**Application tools**  
please see page 302.

TYPE	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
T18ROS	2.5	100.0	1.6	20.0	80	PA66HS	Black (BK)	500	118-04701
	2.5	100.0	1.6	20.0	80	PA66HS	Natural (NA)	1.000	118-00035
T30ROS	3.4	145.0	1.6	35.0	135	PA66HS	Natural (NA)	100	118-00064
	3.4	145.0	1.6	35.0	135	PA66HS	Black (BK)	100	118-04800
T30LOS	3.4	200.0	1.6	50.0	135	PA66HS	Natural (NA)	100	118-00044
	3.4	200.0	1.6	50.0	135	PA66HS	Black (BK)	100	118-04900
T50SOS	4.6	150.0	1.6	35.0	225	PA66HS	Black (BK)	100	118-05850
T50ROS	4.6	200.0	1.6	50.0	225	PA66HS	Black (BK)	500	118-05040
	4.6	200.0	1.6	50.0	225	PA66HS	Natural (NA)	100	118-05059
T50MOS	4.6	245.0	1.6	66.0	225	PA66HS	Black (BK)	100	118-00018
	4.6	245.0	1.6	66.0	225	PA66HS	Natural (NA)	100	118-00055
T50LOS	4.6	384.0	1.6	110.0	225	PA66HS	Black (BK)	100	118-05900
T120ROS	7.6	385.0	5.0	105.0	535	PA66HS	Black (BK)	100	118-00066
	7.6	385.0	5.0	105.0	535	PA66HS	Natural (NA)	100	118-00067

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



### Cable ties with low profile head

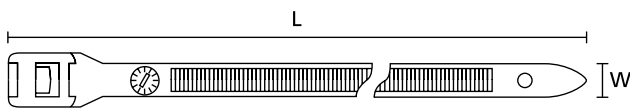
Designed primarily for use within the electrical supply industry these ties are particularly useful in areas with limited space. Due to their low profile head the coloured cable ties are ideal for securing foam padding to playground equipment. This ensures that there are no sharp edges and ultimate safety.

#### Features and Benefits

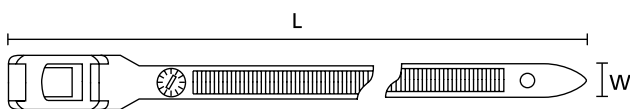
- Outside serrated cable tie with a smooth surface to the bundle
- Protects against damage to insulation
- Broad contact area with cable, minimising risk of damage
- PE/RPE-range partly approved by E.R.D.F. (French Electricity Board)
- Low profile head for use in restricted areas
- Parallel bundling for secure applications



RPE, PE Series.



PE-Series



RPE-Series

**Material specification  
please see page 22.**

#### • PE-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
PE400	9.0	400.0	116.0	445	PA66	Blue (BU)	100	112-18101
	9.0	400.0	116.0	445	PA66	Green (GN)	100	112-18100
	9.0	400.0	116.0	445	PA66	Red (RD)	100	112-18102
	9.0	400.0	116.0	445	PA66	Yellow (YE)	100	112-18103

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

#### • PE-Series E.R.D.F. approved

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
PE180	9.0	180.0	42.0	445	PA66HSW	Black (BK)	100	112-18060
PE530	9.0	535.0	146.0	445	PA66HSW	Black (BK)	100	112-53060

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

#### • RPE-Series releasable E.R.D.F. approved

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
RPE275	9.0	275.0	69.0	445	PA66HSW	Black (BK)	100	112-27560
RPE350	9.0	350.0	92.0	445	PA66HSW	Black (BK)	100	112-35060

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



**E.R.D.F.**

Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



### Cable ties with low profile head

- **LPH-Series**

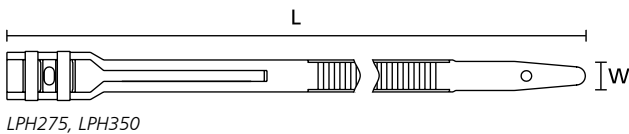
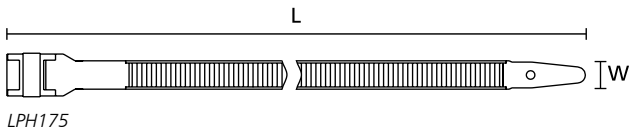
Designed primarily for use within the electrical supply industry, these ties are particularly useful in areas with limited space due to their low profile head.

#### Features and Benefits


- Outside serrated cable tie with a smooth surface to the bundle
- Protects against damage to insulation
- Broad contact area with cable, minimising risk of damage
- Low profile head for use in restricted areas
- Parallel bundling for secure applications



LPH-Series.



**Application tools  
please see page 302.**

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
LPH175	9.0	175.0	40.0	310	PA66	Black (BK)	100	112-00203
LPH275	9.0	265.0	62.0	480	PA66	Black (BK)	100	112-00303
LPH350	9.0	355.0	92.0	480	PA66	Black (BK)	100	112-00403

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



### Cable ties with low profile head

- Robusto-Series**

Robusto cable ties have many technical features which make them suitable for use in many applications for fixing and supporting cables, pipes and other elements. The polyamide 11 used to manufacture these ties offers excellent resistance to chemicals in even the most challenging environments such as offshore, oil rigs, construction vehicles, trucks and trailers.

These cable ties have excellent UV resistance as well as being highly resistant to chemicals like chlorides: recommended for use on galvanised steel, especially on solar panel installations.

In addition, the material has a high impact resistance to low temperatures which enables Robusto ties to be used in areas where it is cold, for example at high altitudes or Nordic countries.



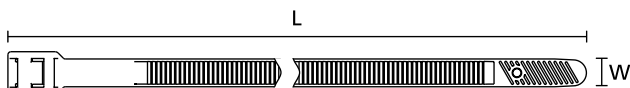
Low profile head cable tie, Robusto-Series.

#### Features and Benefits

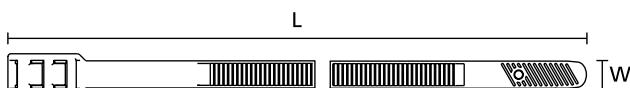
- Made of polyamide 11, a completely sustainable bioplastic derived from vegetable oil
- Outside serrated with a round, innovative head and one or two flexible stop pawls
- Low insertion force for manual, tool-free application
- High tensile strength
- Soft material for easy handling without damaging cables
- High UV resistance for long-term outdoor application
- Stable technical performance even at very low temperatures
- High resistance to chemicals, including chlorides
- Low water absorption rate for consistent technical performance and high durability
- Pre-locking feature



One Step to the Web!




LPH942



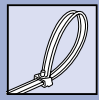
LPH962/LPH992

**Material specification please see page 22.**

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
LPH942	9.0	180.0	42.0	360	PA11	Black (BK)	100	112-00011
LPH962	9.0	260.0	62.0	530	PA11	Black (BK)	100	112-00012
LPH992	9.0	355.0	92.0	530	PA11	Black (BK)	100	112-00013

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



### Endless cable ties with separate head and spacer

- **EL-TY-Series**

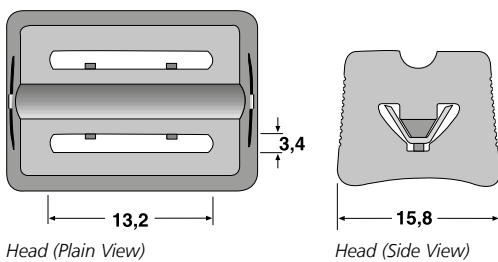
These robust cable ties are particularly suitable for use with larger diameter cables, pipes and hoses. Designed originally for securing overhead catenary cables (when used with the spacers) they are now used in many industries from the building sector, through to the chemical industry, to the installation of signs for traffic management.

#### Features and Benefits

- Made of very strong Acetal (POM)
- Continuous strap, spacers and heads (with stainless steel pawls)
- Very secure fixing and good resistance to ageing and sunlight
- Suits any bundle diameter and reduces inventory

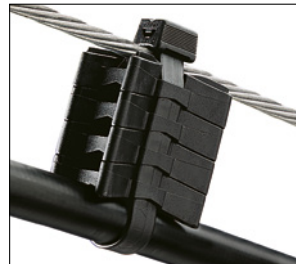


The EL-Ty can be cut to suit any bundle.

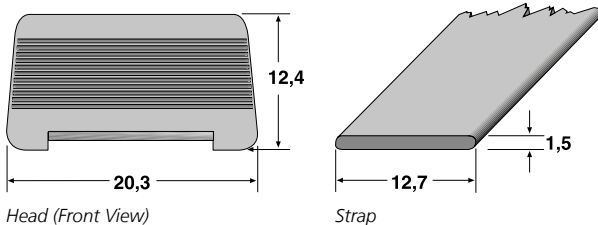
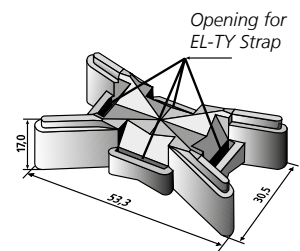


Head (Plain View)

Head (Side View)



Spacer.



Head (Front View)

Strap

**Application tools  
please see page 302.**

TYPE	Width (W)	Length (L)		Material	Colour	Content Proposal	Article-No.
TELS1	12.7	15.2 m	1,112	POM	Black (BK)	15m strap, 30 heads	111-30000
TELSH	20.3	15.8	-	POM	Black (BK)	25 Heads	111-31000
TELS-SPK2	30.5	53.3	-	PP	Black (BK)	50 Spacer	111-32000

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

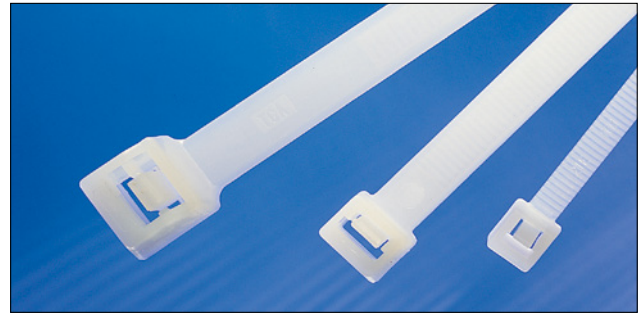


### Cable Ties inside serrated

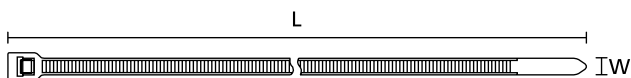
Used in a wide range of industries, these releasable and reusable ties are ideal where temporary installation or the addition or removal of cables is required, e. g. theatres, outdoor events or prototype harness work.

#### Features and Benefits

- Releasable and reusable cable tie available in black and natural colours
- Extended trigger for simple and quick release of ties
- Inside serration for a strong hold around the bundle
- Available in various lengths



The RELK and RLT cable ties can be re-opened and re-used.



RELK-, RLT-Series

**Material specification  
please see page 22.**

#### • RELK-Series up to 200 N loop tensile strength

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
RELK2R	4.6	200.0	50.0	200	PA66	Natural (NA)	100	115-02202
RELK2M	4.6	250.0	65.0	200	PA66	Black (BK)	100	115-02000
	4.6	250.0	65.0	200	PA66	Natural (NA)	100	115-06729
RELK2I	4.6	300.0	81.0	200	PA66	Black (BK)	100	115-06760
	4.6	300.0	81.0	200	PA66	Natural (NA)	100	115-02101
RELK2L	4.6	350.0	95.0	200	PA66	Black (BK)	100	115-02300
	4.6	350.0	95.0	200	PA66	Natural (NA)	100	115-06919

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.

#### • RLT-Series up to 670 N loop tensile strength

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
RLT120	7.6	340.0	90.0	535	PA66	Black (BK)	100	111-70361
	7.6	340.0	90.0	535	PA66	Natural (NA)	100	111-70319
RLT150	8.9	770.0	225.0	670	PA66	Black (BK)	50	111-70110
	8.9	770.0	225.0	670	PA66	Natural (NA)	50	111-70119
	8.9	770.0	225.0	670	PA66HS	Natural (NA)	50	111-70159
	8.9	770.0	225.0	670	PA66W	Black (BK)	50	111-70160

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



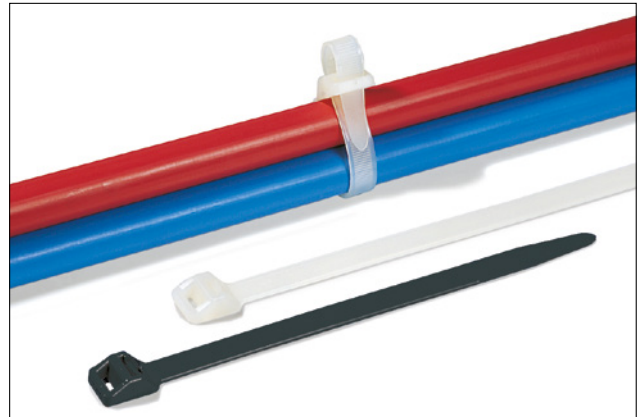
### Cable Ties inside serrated with tuckaway

- RT250-Series

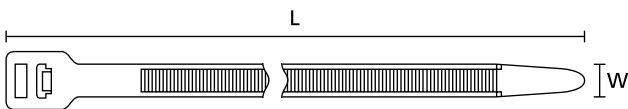
Used in a wide range of industries, these releasable and reusable ties are ideal where temporary installation or the addition or removal of cables is required, e.g. theatres, outdoor events or harness work.

#### Features and Benefits


- Extended trigger for simple and quick release of ties
- Eyelet allows excess tail to be tucked neatly away
- Trigger protected from accidental release



*Ideal for larger or heavier bundles these ties can be opened and reused.*



T250-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
RT250M	12.5	565.3	150.0	1,115	PA66	Black (BK)	25	131-75610
	12.5	565.3	150.0	1,115	PA66	Natural (NA)	25	131-75619
	12.5	565.3	150.0	1,115	PA66W	Black (BK)	25	131-75620
RT250XL	12.5	1,030.0	305.0	1,115	PA66	Black (BK)	25	131-75510
	12.5	1,030.0	305.0	1,115	PA66	Natural (NA)	25	131-75519

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.





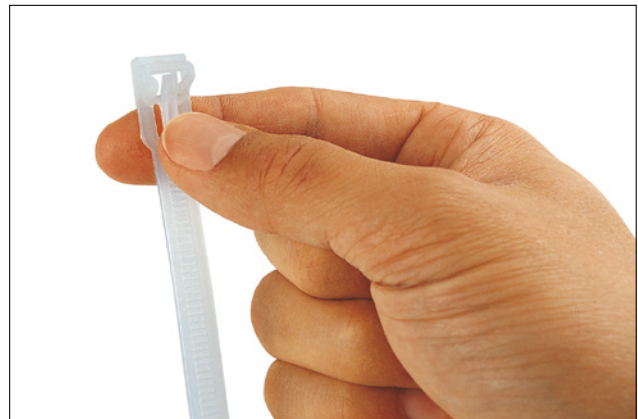
### Cable Ties inside serrated with kickdown lever

- **REL-Series**

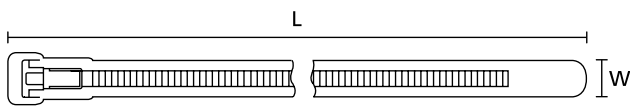
Ideal for use where there is the need to repeatedly open and close the tie.

#### Features and Benefits

- Releasable and reusable cable tie available in black and natural colours (including UV-resistant)
- Simple and effective release mechanism
- Can be opened quickly and easily with one hand
- Inside serrated cable tie



Releasable and reusable cable tie, REL-Series.



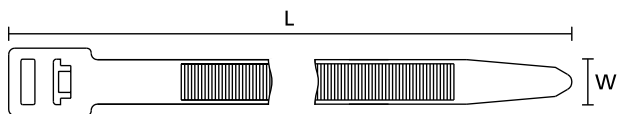
REL-Series

**Material specification please see page 22.**

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
REL180	6.5	180.0	46.0	150	PA66	Black (BK)	100	115-00027
REL100	6.7	100.0	21.0	180	PA66	Black (BK)	100	131-21010
	6.7	100.0	21.0	180	PA66	Natural (NA)	100	131-21019
REL140	7.6	150.0	35.0	200	PA66	Black (BK)	100	131-21410
	7.6	150.0	35.0	200	PA66	Natural (NA)	100	131-21419
REL250	7.6	250.0	68.0	200	PA66	Black (BK)	100	131-22510
	7.6	250.0	68.0	200	PA66	Natural (NA)	100	131-22519
	7.6	250.0	68.0	200	PA66W	Black (BK)	100	131-22560

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



REL250S, REL250X

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
REL250S	12.2	230.0	50.0	1,115	PA66HIR(S)	Black (BK)	50	111-00074
REL250X	12.2	385.0	100.0	1,115	PA66HIR(S)	Black (BK)	50	111-00075

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



### Cable Ties outside serrated for marking

- LR55-Series

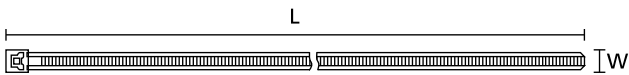
These releasable and reusable ties are ideal where temporary installation or the addition or removal of cables is required, e.g. logistic identification (colour coding), packaging industries or cable harness manufacturing.

#### Features and Benefits

- Releasable and reusable cable tie available in various colours
- Extended trigger for quick and easy release of ties
- Various colours ideal for applications that require colour coding
- Outside serration, minimising the risk of cable insulation damage



The LR55 cable ties are reusable and ideal for colour coding.



LR55 Series

**Material specification  
please see page 22.**

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
LR55R	4.7	195.0	50.0	245	PA66	Blue (BU)	25	115-00006
	4.7	195.0	50.0	245	PA66	Green (GN)	25	115-00005
	4.7	195.0	50.0	245	PA66	Natural (NA)	25	115-00008
	4.7	195.0	50.0	245	PA66	Red (RD)	25	115-00003
	4.7	195.0	50.0	245	PA66	Yellow (YE)	25	115-00004
	4.7	195.0	50.0	245	PA66HS	Black (BK)	25	115-00002

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



### Cable Ties without serration in flexible TPU

The soft, flexible material makes these ties particularly suitable for use on sensitive wires, e.g. fibre-optic cables.

#### Features and Benefits

- Elastic and flexible cable ties with rounded and smooth edges
- Releasable and reusable
- Double slotted head with fixing pawl
- Flexibility ensures steady and evenly distributed pressure
- Tight fixation even in a vertical position: prevents sliding or loose bundles
- Suitable for moving elements and vibrating applications such as windmills, machines, robotics, pulsating tubing and conduits
- Ideal for temporarily fixings suitable for presentations, concerts, theatres and exhibitions
- Long lifetime when used indoors
- Remains flexible even at cold temperatures (-20°C)



The elasticity of the SOFTFIX ties makes them suitable for use in many applications.

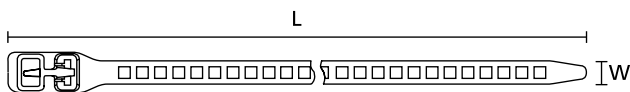
**With 2nd loop to run bundles in parallel!**



One Step to the Web!



SOFTFIX ties available in small quantities.



SRT Series

#### • SRT-Series for industry quantities

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
SRT1807	7.0	180.0	45.0	57	TPU	Black (BK)	50	115-07189
SRT2607	7.0	260.0	79.0	57	TPU	Black (BK)	50	115-07269
SRT26011	11.0	260.0	55.0	123	TPU	Black (BK)	50	115-11269
SRT34011	11.0	340.0	90.0	123	TPU	Black (BK)	50	115-11349
SRT58028	28.0	580.0	150.0	360	TPU	Black (BK)	10	115-28589
SRT88028	28.0	880.0	240.0	360	TPU	Black (BK)	180	115-28889

All dimensions in mm. Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

#### • SOFTFIX-Family

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
SOFTFIX XS	7.0	180.0	45.0	57	TPU	Black (BK)	16	115-07190
SOFTFIX S	7.0	260.0	79.0	57	TPU	Black (BK)	12	115-07270
SOFTFIX M	11.0	260.0	55.0	123	TPU	Black (BK)	8	115-11270
SOFTFIX L	11.0	340.0	90.0	123	TPU	Black (BK)	6	115-11350
SOFTFIX XL	28.0	580.0	150.0	360	TPU	Black (BK)	3	115-28590

All dimensions in mm. Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



### Cable Ties inside serrated with one-hand release mechanism

- **REZ-Series**

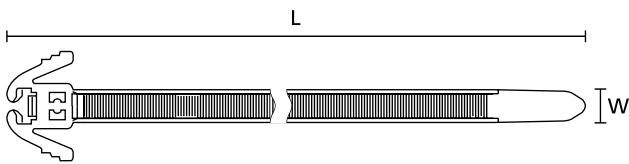
Perfect for use in the packaging industry for tying up bags that may need to be reopened and resealed again, e.g. milk powder in the catering industry.

#### Features and Benefits


- Releasable and reusable cable tie
- Patented head design for simple and rapid use
- Quick-release mechanism for one-hand operation, even under tension
- Inside serrated
- Can be opened with gloves



REZ ties have a simple one-hand release mechanism.



REZ-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
REZ200	4.7	200.0	50.0	135	PA66	Black (BK)	100	115-40200
REZ300	4.7	305.0	80.0	135	PA66	Black (BK)	100	115-40300

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



### Cable Tie with quick release mechanism Speedy-Click

- SpeedyTie

The versatility of the SpeedyTie means that it is suitable for a multitude of applications, such as electrical installations, heating and ventilation, construction, exhibitions and trade fairs. Whether it is used for permanent or temporary solutions, the SpeedyTie provides a helping hand in every situation.

#### Features and Benefits

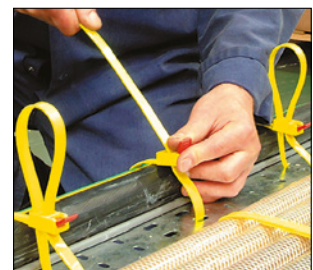
- Releasable cable tie
- Removable, patented 'Speedy-Click' rapid closure
- Bears loads of up to 888 N (approx. 90 kg)
- 750 mm long for use in a wide variety of applications
- Easy to handle when wearing protective gloves
- Available in signal yellow and black



Patented quick release mechanism for quick and easy application.



SpeedyTie® - Quick and easy.

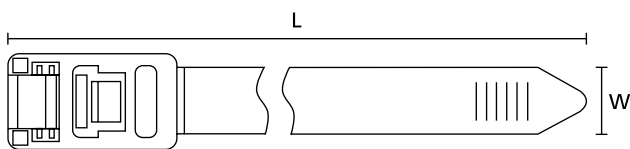


Excess Tails can be neatly tucked away.

**Material specification  
please see page 22.**



SpeedyTie® is particularly suited for temporary but safe bundling or fixing.



SpeedyTie

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
RTT750HR	13.0	752.0	210.0	888	PA66	Yellow (YE), Red (RD)	5	115-00001
	13.0	752.0	210.0	888	PA66	Yellow (YE), Red (RD)	25	115-00000
	13.0	752.0	210.0	888	PA66HIR(S)	Black (BK)	5	115-00030

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



### Hook and Loop Ties

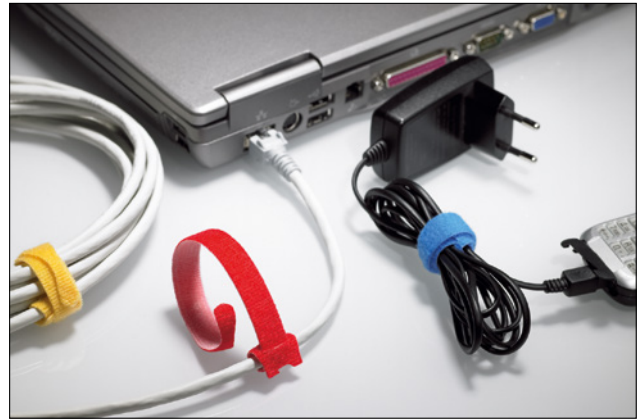
- **TEXTIE-Series**

As cables use thinner and softer insulation, and as fibre optic cables become more common, there is a need for a 'soft' method of bundling. TEXTIEs are ideal for use on telephone cables, optical fibre and network cables. In addition, they are perfect for use in temporary installations such as theatre stage construction or the manufacture of prototype cable harnesses.

TEXTIEs can also be used in many domestic and office applications, too.

#### Features and Benefits

- Quick and simple to use without tools
- No waste
- Resistant to ageing with no corrosion
- Re-usable up to 400 times
- Various colours for easy identification of multiple cable runs



Due to the functional cable tie design the TEXTIE is fixed on the cable and can't get lost.



One Step to the Web!



The TEXTIE-Series is available in different colours and lengths.

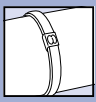


TEXTIE-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	Material Loop	Material Hook	Colour	Pack Cont.	Article-No.
TEXTIE S	12.5	150.0	45.0	Polyamide (PA)	Polypropylene (PP)	Black (BK)	10	130-00012
TEXTIE M	12.5	200.0	60.0	Polyamide (PA)	Polypropylene (PP)	Black (BK)	10	130-00013
	12.5	200.0	60.0	Polyamide (PA)	Polypropylene (PP)	Blue (BU)	10	130-00018
	12.5	200.0	60.0	Polyamide (PA)	Polypropylene (PP)	Green (GN)	10	130-00017
	12.5	200.0	60.0	Polyamide (PA)	Polypropylene (PP)	Red (RD)	10	130-00014
	12.5	200.0	60.0	Polyamide (PA)	Polypropylene (PP)	White (WH)	10	130-00021
	12.5	200.0	60.0	Polyamide (PA)	Polypropylene (PP)	Yellow (YE)	10	130-00016
TEXTIE L	12.5	330.0	100.0	Polyamide (PA)	Polypropylene (PP)	Black (BK)	10	130-00019
TEXTIE 5M	12.5	5,000.0	-	Polyamide (PA)	Polypropylene (PP)	Black (BK)	1	130-00020
TEXTIE 25M	13.0	25,000.0	-	Polyamide (PA)	Polypropylene (PP)	Black (BK)	1	130-00022

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



### Cable Ties with Ball-Lock

- **MBT-Series**

Metal ties are ideal for all applications that require high strength, reliability and fire resistance. The MBT range of stainless steel cable ties can be used in chemical industries and on oil platforms as well as in mass transit, shipbuilding and mining industries. MBT ties are also suitable for machine building, apparatus construction and in the outside area of radio technology. Additionally, MBT ties are ideal for securing lighting in theatres and exhibition halls.

#### Features and Benefits

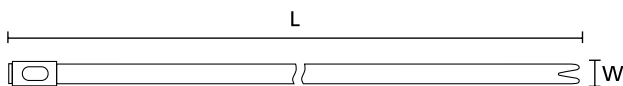
- MBT cable ties made from stainless steel 304
- Patented non-releasable locking feature
- Corrosion resistant
- Weather resistant
- Outstanding chemical resistance
- Antimagnetic
- High temperature resistance
- Non-burning



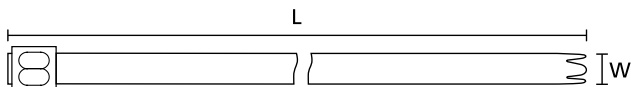
MBT\_SS, MBT\_HS.



MBT\_XHS.



MBT\_SS, MBT\_HS



MBT\_XHS

**Material specification please see page 22.**

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Pack Cont.	Article-No.
MBT5SS	4.6	127.0	25.0	900	SS304	100	111-93058
MBT8SS	4.6	201.0	50.0	900	SS304	100	111-93088
MBT14SS	4.6	362.0	102.0	900	SS304	100	111-93148
MBT20SS	4.6	521.0	152.0	900	SS304	100	111-93208
MBT27SS	4.6	685.0	203.0	900	SS304	100	111-93278
MBT33SS	4.6	838.0	254.0	900	SS304	100	111-93338
MBT8HS	7.9	201.0	50.0	2,000	SS304	50	111-94088
MBT14HS	7.9	362.0	102.0	2,000	SS304	50	111-94148
MBT20HS	7.9	521.0	152.0	2,000	SS304	50	111-94208
MBT27HS	7.9	685.0	203.0	2,000	SS304	50	111-94278
MBT33HS	7.9	838.0	254.0	2,000	SS304	50	111-94338
MBT14XHS	12.3	362.0	102.0	2,700	SS304	50	111-95148
MBT20XHS	12.3	521.0	152.0	2,700	SS304	50	111-95208
MBT27XHS	12.3	681.0	203.0	2,700	SS304	50	111-95278
MBT33XHS	12.3	838.0	254.0	2,700	SS304	50	111-95338

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



### MBT-Kit

The MBT range of stainless steel cable ties can be used in the most arduous of conditions or where the additional security, strength and fire resistance of a metal fixing is required. Used in all industries from mass transit and ship building to automotive and high temperature applications.

#### Features and Benefits

- Handy kit for on-site installations in harsh environments
- MBT-kit consists of:
  - A carry case
  - An assortment of five sizes of MBT ties (SS304)
  - THT application tool



MBT-Kit, an assortment of different sizes of MBT cable ties.

**Application tools**  
please see page 302.

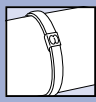
**Material specification**  
please see page 22.



TYPE	Content	Length (L)	Width (W)	Bundle Ø max.		Article-No.	Page
<b>MBT-KIT-304-BASIC</b>						<b>111-01422</b>	
<b>Content</b>							
<b>THT Tool</b>	1					110-09970	60
<b>MBT8SS</b>	20	201.0	4.6	50.0	900.0	111-93088	
<b>MBT8HS</b>	20	201.0	7.9	50.0	2,000.0	111-94088	
<b>MBT5SS</b>	20	127.0	4.6	25.0	900.0	111-93058	
<b>MBT14SS</b>	30	362.0	4.6	102.0	900.0	111-93148	
<b>MBT14HS</b>	30	362.0	7.9	102.0	2,000.0	111-94148	

All dimensions in mm. Subject to technical changes.





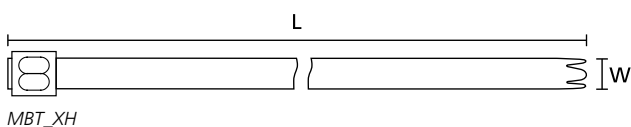
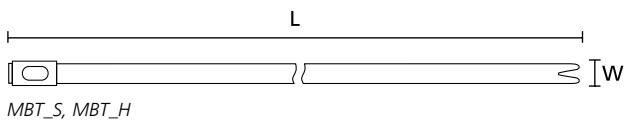
### Cable Ties with Ball-Lock

- **MBT-Series**

Metal ties are ideal for all applications that require high strength, reliability and fire resistance. The MBT range of stainless steel cable ties can be used in chemical industries and on oil platforms as well as in mass transit, shipbuilding and mining industries. MBT ties are also suitable for machine building, apparatus construction and in the outside area of radio technology. Additionally, MBT ties are ideal for securing lighting in theatres and exhibition halls.

#### Features and Benefits

- MBT cable ties made from stainless steel 316
- Patented non-releasable locking feature
- Corrosion resistant
- Weather resistant
- Outstanding chemical resistance
- Antimagnetic
- High temperature resistance
- Non-burning



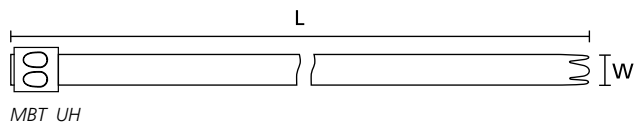
MBT\_S, MBT\_H.



MBT\_XH.



MBT\_UH.



TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Pack Cont.	Article-No.
MBT5S	4.6	127.0	25.0	900	SS316	100	111-93059
MBT8S	4.6	201.0	50.0	900	SS316	100	111-93089
MBT14S	4.6	362.0	102.0	900	SS316	100	111-93149
MBT20S	4.6	521.0	152.0	900	SS316	100	111-93209
MBT27S	4.6	685.0	203.0	900	SS316	100	111-93279
MBT33S	4.6	838.0	254.0	900	SS316	100	111-93339
MBT8H	7.9	201.0	50.0	2,000	SS316	50	111-94089
MBT14H	7.9	362.0	102.0	2,000	SS316	50	111-94149
MBT20H	7.9	521.0	152.0	2,000	SS316	50	111-94209
MBT27H	7.9	685.0	203.0	2,000	SS316	50	111-94279
MBT33H	7.9	838.0	254.0	2,000	SS316	50	111-94339
MBT14XH	12.3	362.0	102.0	2,700	SS316	50	111-95149
MBT20XH	12.3	521.0	152.0	2,700	SS316	50	111-95209
MBT27XH	12.3	681.0	203.0	2,700	SS316	50	111-95279
MBT33XH	12.3	838.0	254.0	2,700	SS316	50	111-95339
MBT14UH	16.0	362.0	102.0	4,100	SS316	50	111-01301
MBT20UH	16.0	521.0	152.0	4,100	SS316	50	111-01302
MBT27UH	16.0	681.0	203.0	4,100	SS316	50	111-01303
MBT33UH	16.0	838.0	254.0	4,100	SS316	50	111-01304
MBT43UH	16.0	1,092.0	330.0	4,100	SS316	25	111-01305
MBT49UH	16.0	1,245.0	380.0	4,100	SS316	25	111-01306

All dimensions in mm. Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



### Cable Ties with Ball-Lock and Coating

- **MBT-FC-Series**

#### Features and Benefits

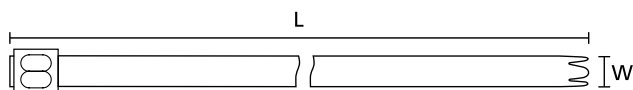
- Fully coated MBT, made from type 316 stainless steel with polyester coating
- Patented non-releasable locking feature
- Coated cable tie with smooth edges
- Comfortable handling and installation
- Eliminates contact corrosion between dissimilar materials during application



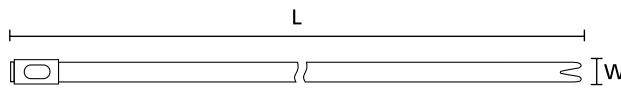
MBT\_SFC, MBT\_HFC.



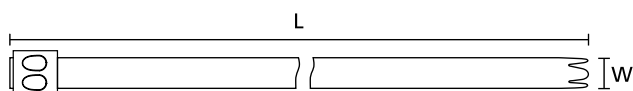
MBT\_XHFC.



MBT\_XHFC



MBT\_SFC, MBT\_HFC



MBT\_UHFC

**Application tools  
please see page 302.**

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Pack Cont.	Article-No.
MBT5SFC	4.6	127.0	25.0	540	SS316, SP	100	111-00288
MBT8SFC	4.6	201.0	50.0	540	SS316, SP	100	111-00289
MBT14SFC	4.6	362.0	102.0	540	SS316, SP	100	111-00290
MBT20SFC	4.6	521.0	152.0	540	SS316, SP	100	111-00291
MBT27SFC	4.6	681.0	203.0	540	SS316, SP	100	111-00292
MBT33SFC	4.6	838.0	254.0	540	SS316, SP	100	111-00293
MBT8HFC	7.9	201.0	50.0	1,020	SS316, SP	50	111-00294
MBT14HFC	7.9	362.0	102.0	1,020	SS316, SP	50	111-00295
MBT20HFC	7.9	521.0	152.0	1,020	SS316, SP	50	111-00296
MBT27HFC	7.9	681.0	203.0	1,020	SS316, SP	50	111-00297
MBT33HFC	7.9	838.0	254.0	1,020	SS316, SP	50	111-00298
MBT14XHFC	12.3	362.0	102.0	1,620	SS316, SP	50	111-00299
MBT17XHFC	12.3	434.0	125.0	1,620	SS316, SP	50	111-01500
MBT20XHFC	12.3	521.0	152.0	1,620	SS316, SP	50	111-00300
MBT23XHFC	12.3	575.0	168.0	1,620	SS316, SP	50	111-01501
MBT27XHFC	12.3	681.0	203.0	1,620	SS316, SP	50	111-00301
MBT30XHFC	12.3	754.0	225.0	1,620	SS316, SP	50	111-01502
MBT33XHFC	12.3	838.0	254.0	1,620	SS316, SP	50	111-00302
MBT43XHFC	12.3	1,092.0	330.0	1,620	SS316, SP	25	111-01503
MBT49XHFC	12.3	1,245.0	380.0	1,620	SS316, SP	25	111-01504
MBT14UHFC	16.0	362.0	102.0	2,500	SS316, SP	50	111-01512
MBT17UHFC	16.0	434.0	125.0	2,500	SS316, SP	50	111-01513
MBT20UHFC	16.0	521.0	152.0	2,500	SS316, SP	50	111-01514
MBT23UHFC	16.0	575.0	168.0	2,500	SS316, SP	50	111-01515
MBT27UHFC	16.0	681.0	203.0	2,500	SS316, SP	50	111-01516


All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



## Cable Ties with Ball-Lock and Coating

### • MBT-FC-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Pack Cont.	Article-No.
MBT30UHFC	16.0	754.0	225.0	2,500	SS316, SP	50	111-01517
MBT33UHFC	16.0	838.0	254.0	2,500	SS316, SP	50	111-01518
MBT43UHFC	16.0	1,092.0	330.0	2,500	SS316, SP	25	111-01519
MBT49UHFC	16.0	1,245.0	380.0	2,500	SS316, SP	25	111-01520

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.

## Double Wrap Cable Ties with Ball-Lock

### • MBTXHD- / MBTUHD-Series

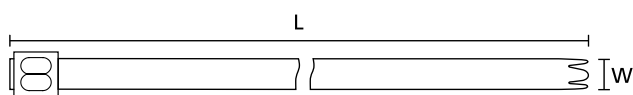
The double wrap ties of the MBT-series are used in applications where a fixing requires an extraordinary high tensile strength.

#### Features and Benefits

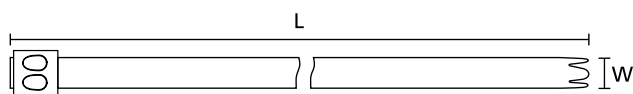
- Stainless steel MBT ties with double wrap operation
- Wraps around the bundle and passes through the head twice
- Very high tensile strength to carry enormous applied loads
- Head with two locking balls
- Resistant to arduous conditions and environments



MBT\_UHD.



MBT\_XHD



MBT\_UHD



MBT\_UHD Double Band.

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Pack Cont.	Article-No.
MBT27XHD	12.3	681.0	100.0	5,000	SS316	50	111-01307
MBT33XHD	12.3	838.0	120.0	5,000	SS316	50	111-01308
MBT43XHD	12.3	1,092.0	160.0	5,000	SS316	25	111-01309
MBT49XHD	12.3	1,245.0	180.0	5,000	SS316	25	111-01310
MBT60XHD	12.3	1,524.0	230.0	5,000	SS316	25	111-01311
MBT27UHD	16.0	681.0	100.0	7,000	SS316	50	111-01312
MBT33UHD	16.0	838.0	120.0	7,000	SS316	50	111-01313
MBT43UHD	16.0	1,092.0	160.0	7,000	SS316	25	111-01314
MBT49UHD	16.0	1,245.0	180.0	7,000	SS316	25	111-01315
MBT60UHD	16.0	1,524.0	230.0	7,000	SS316	25	111-01316

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



### Double Wrap Cable Ties with Ball-Lock and Coating

- **MBTXHDFC- / MBTUHDFC-Series**

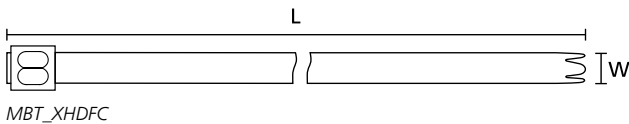
The MBT range of stainless steel cable ties can be used in the most arduous of conditions or where the additional security, strength and fire resistance of a metal fixing is required. Used in all industries from mass transit, ship building, oil rigs, mining and chemical industry, theatres and exhibition halls. In the event of a fire, cables will remain securely held in place and will not fall to block emergency exits.

#### Features and Benefits

- MBT cable ties, made from stainless steel SS316 with a polyester coating
- Patented non-releasable locking feature
- Double wrap operation
- Corrosion resistant
- Weather resistant
- Outstanding chemical resistance
- Antimagnetic
- High temperature resistant
- Non-burning

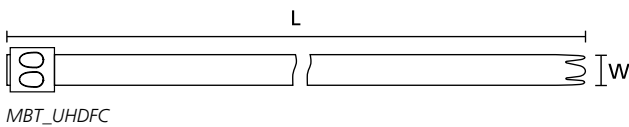


MBT\_UHDFC.




MBT\_XHDFC

**Material specification  
please see page 22.**



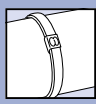
MBT\_UHDFC

**Application tools  
please see page 302.**

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Pack Cont.	Article-No.
MBT27XHDFC	12.3	681.0	100.0	2,500	SS316, SP	50	111-01505
MBT33XHDFC	12.3	838.0	120.0	2,500	SS316, SP	50	111-01506
MBT43XHDFC	12.3	1,092.0	160.0	2,500	SS316, SP	25	111-01507
MBT49XHDFC	12.3	1,245.0	180.0	2,500	SS316, SP	25	111-01508
MBT60XHDFC	12.3	1,524.0	230.0	2,500	SS316, SP	25	111-01509
MBT27UHDFC	16.0	681.0	100.0	5,000	SS316, SP	50	111-01521
MBT33UHDFC	16.0	838.0	120.0	5,000	SS316, SP	50	111-01522
MBT43UHDFC	16.0	1,092.0	160.0	5,000	SS316, SP	25	111-01523
MBT49UHDFC	16.0	1,245.0	180.0	5,000	SS316, SP	25	111-01524
MBT60UHDFC	16.0	1,524.0	230.0	5,000	SS316, SP	25	111-01525

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

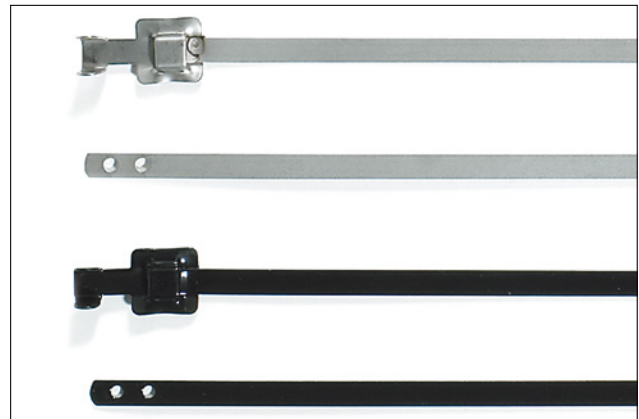


### Cable Ties with Fold Locking

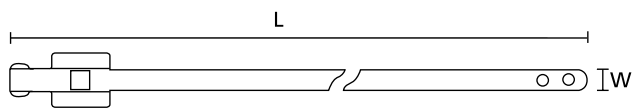
The MLT range of stainless steel cable ties can be used in the most arduous of conditions or where the additional security, strength and fire resistance of a metal fixing is required. Used in all industries from mass transit, ship building, oil rigs, mining and chemical industry, theatres and exhibition halls. In the event of a fire, cables will remain securely held in place and will not fall to block emergency exits.

#### Features and Benefits

- Releasable stainless steel buckle tie, MLT-series
- Heavy-duty type 316 stainless steel
- Can be re-opened and re-used
- Available also with polyester coating which prevents corrosion between dissimilar materials




These Metal ties are available with and without coating.



MLT-Series

**Material specification  
please see page 22.**


#### • MLT-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Pack Cont.	Article-No.
MLT8SS5	5.0	230.0	60.0	420	SS316	100	111-94080
MLT12SS5	5.0	330.0	90.0	420	SS316	100	111-94120
MLT16SS5	5.0	430.0	120.0	420	SS316	100	111-94161
MLT24SS5	5.0	630.0	180.0	420	SS316	100	111-91400
MLT8SS10	10.0	230.0	60.0	850	SS316	100	111-95080
MLT12SS10	10.0	330.0	90.0	850	SS316	100	111-95120
MLT16SS10	10.0	430.0	120.0	850	SS316	100	111-91300
MLT24SS10	10.0	630.0	180.0	850	SS316	100	111-95241

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

#### • MLT-C-Series coated

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Pack Cont.	Article-No.
MLT8SSC5	5.3	230.0	60.0	420	SS316, SP	100	111-91000
MLT12SSC5	5.3	330.0	90.0	420	SS316, SP	100	111-91121
MLT16SSC5	5.3	430.0	120.0	420	SS316, SP	100	111-91161
MLT24SSC5	5.3	630.0	180.0	420	SS316, SP	100	111-91180
MLT8SSC10	10.3	230.0	60.0	850	SS316, SP	100	111-91001
MLT12SSC10	10.3	330.0	90.0	850	SS316, SP	100	111-91123
MLT16SSC10	10.3	430.0	120.0	850	SS316, SP	100	111-91163
MLT24SSC10	10.3	630.0	180.0	850	SS316, SP	100	111-91181

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.

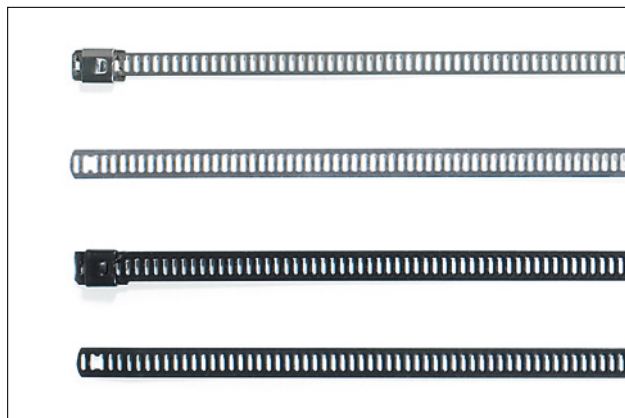


### Cable Ties with Raster Locking

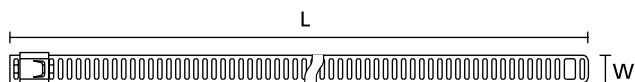
The MAT range of stainless steel cable ties can be used in the most arduous of conditions or where the additional security, strength and fire resistance of a metal fixing is required. Used in all industries from mass transit, ship building, oil rigs, mining and chemical industry, theatres and exhibition halls. In the event of a fire, cables will remain securely held in place and will not fall to block emergency exits.

#### Features and Benefits

- Stainless steel ladderstyle cable tie, MAT-series
- Similar to conventional 'plastic' cable ties
- Works on a ratchet system
- Type 316 stainless steel
- Available also with polyester coating which prevents corrosion between dissimilar materials



Stainless Steel Cable Ties can be used at temperatures up to 538° C.



MAT-Series

**Application tools  
please see page 302.**

#### • MAT-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Pack Cont.	Article-No.
MAT8SS7	7.0	230.0	60.0	445	SS316	100	111-92080
MAT12SS7	7.0	330.0	90.0	445	SS316	100	111-92120
MAT16SS7	7.0	430.0	120.0	445	SS316	100	111-92160
MAT24SS7	7.0	630.0	180.0	445	SS316	100	111-92240

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

#### • MAT-C-Series coated

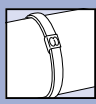
TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Pack Cont.	Article-No.
MAT8SSC7	7.0	230.0	60.0	445	SS316, SP	100	111-92004
MAT12SSC7	7.0	330.0	90.0	445	SS316, SP	100	111-96120
MAT16SSC7	7.0	430.0	120.0	445	SS316, SP	100	111-92162
MAT24SSC7	7.0	630.0	180.0	445	SS316, SP	100	111-92200

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



### Protective Channel for Stainless Steel Ties

- LFPC

When used in conjunction with the MBT range of stainless steel cable ties this channel gives the cable protection against chafing, vibration and shock. Ideal for use in arduous conditions such as those found on board ships, oil rigs or in nuclear power stations.

#### Features and Benefits

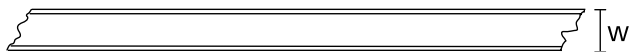
- LFPC channel, manufactured from Polyolefin
- Works with MBT- and AMT-Series
- Smooth surface protects bundle against chafing caused by vibrations and shocks
- Can be cut from roll (50 m) to any length
- Halogenfree
- Flame retardant



Cable tie MBTXH with LFPC Protective Channel.

The fire protection properties of the material relate to the test performed on defined test samples. This is a test under laboratory conditions and not directly transferable to the product made from this material.

Material specification please see page 22.



LFPC

TYPE	Width (W)	For Ties	Material	Pack Cont.	Article-No.
LFPC70	7.0	MBTS	PO	25 m	111-93000
LFPC83	8.3	MBTH	PO	25 m	111-00257
LFPC103	10.3	MBTH	PO	25 m	111-94000
LFPC129	12.9	MBTXH	PO	50 m	111-00253
LFPC132	13.2	MBTXH	PO	25 m	111-00254
LFPC150	15.0	MBTXH	PO	25 m	111-95000
LFPC163	16.3	AMT, MBTUH	PO	50 m	111-00255

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



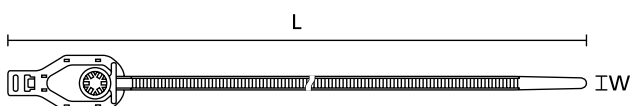
Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



### 1-Piece Fixing Ties for Weld Studs in the strap

#### Features and Benefits

- For 5 mm studs or 5 mm ISO threaded studs
- Soft-push versions for easy assembly, without tool
- Eyelet allows excess tail to be tucked neatly away



T50RS5, RT50RS

With the RT50RS5 and the SB14/172 you can mount pipes or cables to a weld stud.

TYPE	Width (W)	Length (L)	Height (H2)	Bundle Ø max.		Material	Colour	Article-No.
T50RS5	4.6	190.0	14.5	40.0	222	PA66	Black (BK)	111-07110

All dimensions in mm. Subject to technical changes.

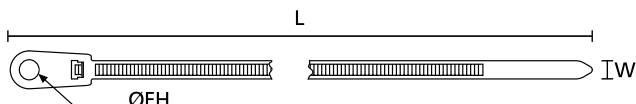
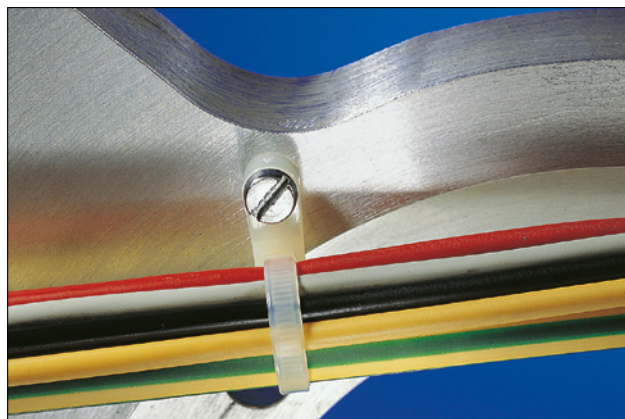
### 1-Piece Fixing Ties with Mounting Head for Screws

This range of one piece cable ties have a built in mounting hole and once fastened around the cables it can be simply secured to the panel with a screw or bolt.

The tie is first fitted to the panel and then the cables can be added.

#### Features and Benefits

- One-piece bundling and fixing tie
- Quick and easy installation

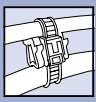


The mounting head ties can be easily screwed onto a panel.

TYPE	Width (W)	Length (L)	Bundle Ø max.		Hole Ø (FH)	Material	Colour	Article-No.
T18MR	2.5	110.0	20.0	80	3.1	PA66	Black (BK)	113-01810
	2.5	110.0	20.0	80	3.1	PA66	Natural (NA)	113-01819
T30MR9	3.5	160.0	32.0	135	4.3	PA66	Natural (NA)	113-03019
	3.5	160.0	32.0	135	4.3	PA66HS	Black (BK)	113-03010
T50MS	4.6	165.0	32.0	225	5.3	PA66	Natural (NA)	113-05819
	4.6	165.0	32.0	225	5.3	PA66	Black (BK)	113-05820
T50MR	4.7	215.0	45.0	225	5.4	PA66W	Black (BK)	113-05060
	4.7	215.0	45.0	225	5.4	PA66	Natural (NA)	113-05019
	4.7	215.0	45.0	225	5.4	PA66	Black (BK)	113-05010
T50ML	4.7	390.0	100.0	225	5.5	PA66	Natural (NA)	113-05419
T120MR	7.6	395.0	102.0	535	6.5	PA66HIRHSUV	Black (BK)	113-12060
	7.6	395.0	102.0	535	6.5	PA66HS	Black (BK)	113-12020
	7.6	395.0	102.0	535	6.5	PA66	Natural (NA)	113-12029

All dimensions in mm. Subject to technical changes.





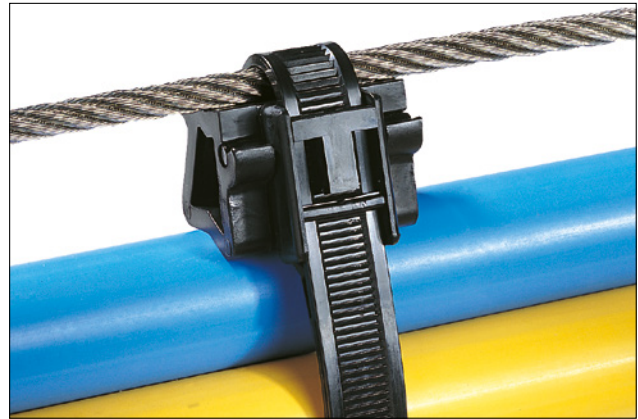
### Cable Ties outside serrated for parallel routing

- **TAS-Series**

Designed for use with catenary wire the TAS system is simple to use and an effective method of installing cables. Typical applications are the suspension of cables between buildings, the support of satellite cables and installation of railway signalling cables.

#### Features and Benefits

- Halogen-free
- Suitable for installation in public areas, road or railway tunnels
- Built-in spacer for easy and quick installation
- Easy to re-open and re-use



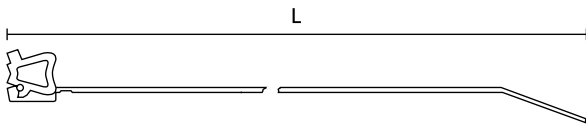
The TAS-range is used for supporting antenna cables.

**Application tools**  
please see page 302.

**Material specification**  
please see page 22.



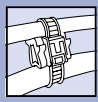
Tunnels a common application.



TAS-series

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Article-No.
TAS100RWS	12.7	210.8	44.5	445	PA66HIRHSUV, PP	Black (BK)	111-98501
TAS100MWS	12.7	271.8	69.9	445	PA66HIRHSUV, PP	Black (BK)	111-98500
TAS100LWS	12.7	421.6	114.3	445	PA66HIRHSUV, PP	Black (BK)	111-98502

All dimensions in mm. Subject to technical changes.



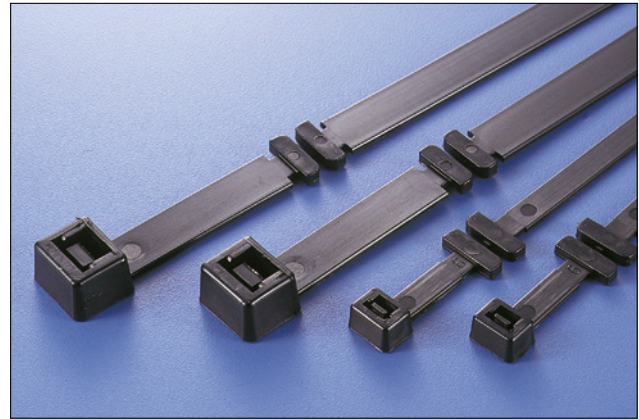
### Cable Ties inside serrated for cable tray

- CTF-Series

The CTF Fixing Ties are designed specifically for use with cable tray.

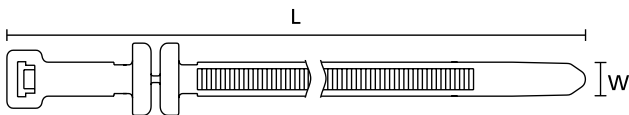
#### Features and Benefits

- Usable with common styles of cable tray
- Meets rated break point to provide easy installation
- No pulling of cable tie underneath cable harness

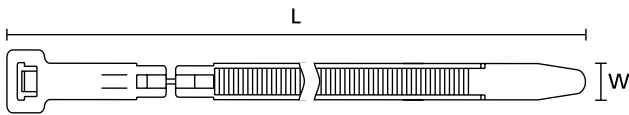


Cable tray ties.

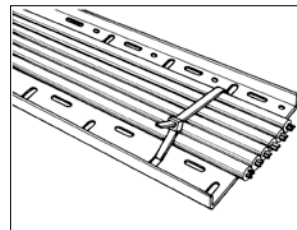
**Application tools  
please see page 302.**



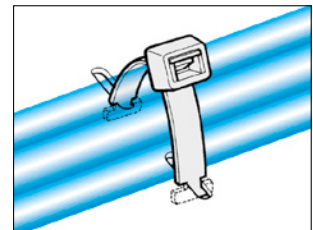
CTF120, CTF250



CTF12090



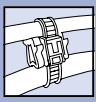
Cable tray ties in application.



CTF with unique footing for use with cable tray.

TYPE	Width (W)	Length (L)		Material	Colour	Article-No.
CTF120	7.6	320.0	535	PA66	Black (BK)	111-98121
CTF12090	7.6	320.0	535	PA66	Black (BK)	111-98100
CTF250	13.0	355.0	1,115	PA66	Black (BK)	111-98160

All dimensions in mm. Subject to technical changes.  
CTF12090 = 90° Angle

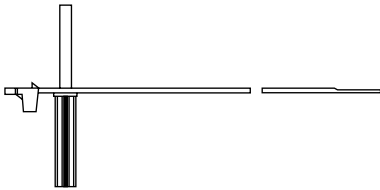


### 1-Piece Fixing Ties with rivet, releasable

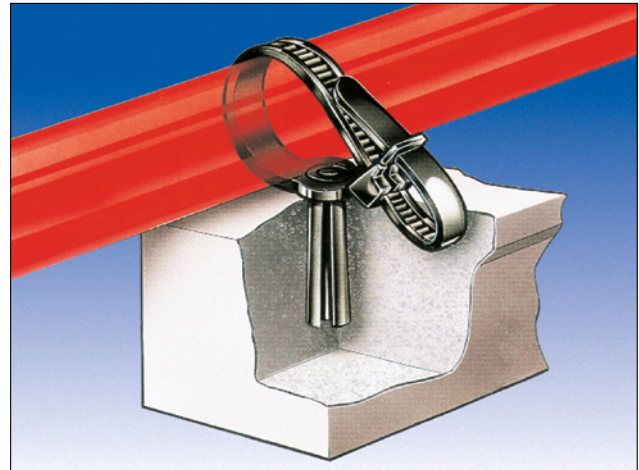
Simply drill an 8 mm hole and knock in the peg. Used to fasten cables, pipes or hoses in place.

#### Features and Benefits

- One-piece for fixing to brick, cement or wood
- Practical for the construction industry
- Time saving and versatile
- Depth of drill hole: 13.0 mm



WPT230



Wall plug tie in application.

TYPE	Width (W)	Length (L)	Bundle Ø max.	Hole Ø (FH)	Material	Colour	Article-No.
WPT230	8.0	230.0	59.0	8.0	PA66HIR	Black (BK)	126-00020

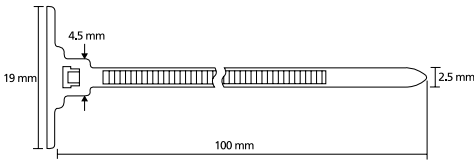
All dimensions in mm. Subject to technical changes.

### 1-Piece Fixing Tie with Self Adhesive Socket

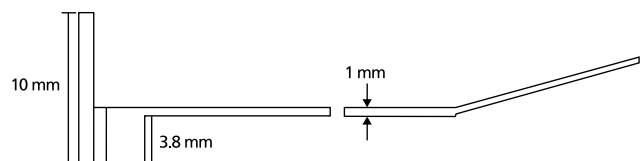
#### Features and Benefits

- Bundling and fixing solution
- Ideal combination of materials and design
- Different positions of the fixing anchor are available to fit installation space

Material specification please see page 22.



T18RSA



T18RSA

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Article-No.
T18RSA	2.5	100.0	16.0	80	PA66	Natural (NA)	148-00001

All dimensions in mm. Subject to technical changes.

## Information and installation instructions for self-adhesive mounting bases

HellermannTyton uses two different types of adhesives for self-adhesive bases: acrylate and synthetic rubber. These differ in the operating temperature range and the 'pull off' force of the adhesive. Synthetic rubber has an excellent initial grip, allowing for almost immediate use. Acrylate adhesive has less initial grip, so there is a need to wait for a few hours before use, but has a higher 'pull off' force than synthetic rubber. This enables a permanent fixing lasting

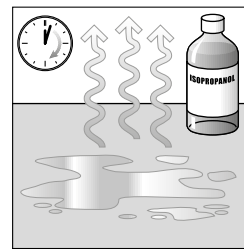
months or even years. To use these adhesives the surface must be dry, and free of dust, oil, oxides, parting agents and other impurities. For this the use of isopropane/water (50/50) is recommended. After cleaning allow the surface to dry completely. Peel off the protective backing on the self-adhesive base, ensuring the adhesive is not touched. Apply the part to the surface and press down firmly for several seconds.

ADHESIVE		Adhesive Operating Temperature
Synthetic rubber with base of polyethylene foam	Synthetic rubber	-20 °C to +50 °C
		-40 °C to +60 °C
Acrylate with base of polyurethane foam	Acrylate	to +105 °C
Acrylate with base of acrylic foam	mod. Acrylate	-40 °C to +90 °C

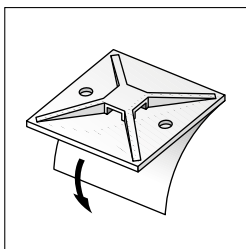
### Instructions for use



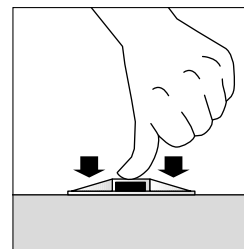
1. The surface must be dry, free from dust, oil, oxides, parting agents and other impurities. The surface to be glued should be cleaned using a clean cloth and isopropanol /water (50/50). When using other appropriate cleaning agents, ensure that they do not attack the surface nor leave any residues.



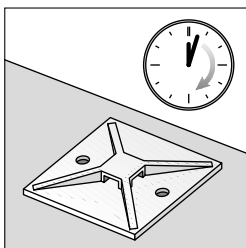
2. After cleaning allow the surface to air-dry completely.



3. Peel off protective backing and ensure the adhesive area is not touched.

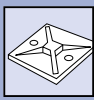


4. Press down firmly on the base with the thumbs for several seconds.



5. Depending on the type of adhesive, wait for several minutes (synthetic rubber) or hours (acrylate) so that the adhesive can bond completely with the surface.

We will be happy to send you on request an up-to-date technical datasheet for whichever adhesive you are using.



### Fixing Parts with Special Adhesive

- **SolidTack-Series**

These products work on varnished and powder coated surfaces as used in the railway, aviation or automotive industry. They can also be used on plastic covers, cases and parts as used in a variety of other industries.

#### Features and Benefits

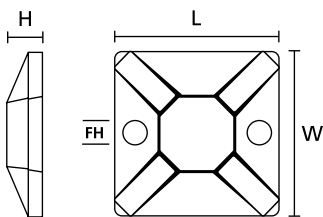
- MB mounts with homogeneous system of acrylic adhesive
- Very good initial adhesion, increases with time
- High cohesive strength combined with good weathering resistance
- Innovative fixing solution for low energy surfaces like PP, PE or painted / varnished surfaces
- Protective, easy peel backing



SolidTack products work on varnished and powder coated surfaces.

For more information on the types of adhesive please see page 73.

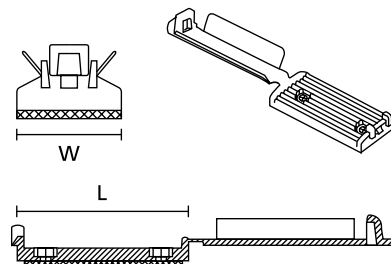
Material specification please see page 22.



Cable Tie Mounts MB3, MB4, MB5



One Step to the Web!



Flat Ribbon Cables FKH Series

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	For Cable Width max.	Material	Colour	Adhesive	Pack Cont.	Article-No.
MB3APT	19.0	19.0	3.8	3.1	4.1	-	PA66	Black (BK)	mod. Acrylate	100	151-00432
	19.0	19.0	3.8	3.1	4.1	-	PA66	Natural (NA)	mod. Acrylate	100	151-00514
MB4APT	28.0	28.0	4.7	4.0	5.4	-	PA66	Black (BK)	mod. Acrylate	100	151-00433
	28.0	28.0	4.7	4.0	5.4	-	PA66	Natural (NA)	mod. Acrylate	100	151-00587
MB5APT	38.0	38.0	6.4	4.7	10.0	-	PA66	Black (BK)	mod. Acrylate	100	151-00434
FKH50AVHB	25.0	56.5	-	3.1	-	50.0	PA66HIR	Black (BK)	mod. Acrylate	100	151-00312
FKH80AVHB	25.0	86.0	-	3.1	-	80.0	PA66HIR	Black (BK)	mod. Acrylate	100	151-00313

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



### Self Adhesive, Screw Fixing Cable Tie Mounts

Where speed, simplicity and a firm fixing base are required these self adhesive clips are ideal. Particularly suitable for use in control cabinets, telecoms equipment or domestic appliances where the use of holes, screws or nuts and bolts are impractical or undesirable.

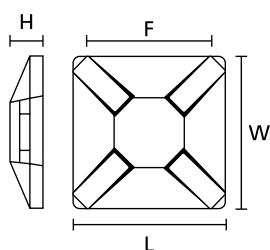
#### Features and Benefits

- Screw or self-adhesive versions
- Simple to install with a screw or bolt
- Excellent security, particularly in areas of high vibration
- Maximum adhesive surface area to achieve high pull-off force
- 4-way entry for cable tie for quicker and more flexible installation

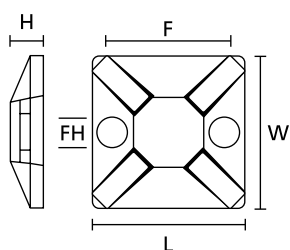


Cable Tie Mounts MB and TY.

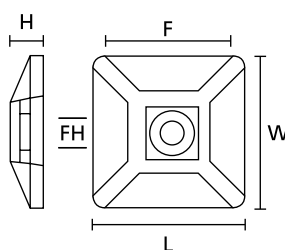
For more information on the types of adhesive please see page 73.



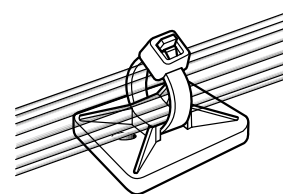
Cable Tie Mounts MB2A



Cable Tie Mounts MB3-5(A)



Cable Tie Mounts MB4CA



Cable Tie Mounts MB3A

#### • MB-Series Square-Cut, self adhesive, screwable

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Adhesive	Pack Cont.	Article-No.
MB2A	13.0	13.0	4.1	-	2.7	PA66	Natural (NA)	Synthetic rubber	100	151-01802
MB3A	19.0	19.0	3.8	3.1	4.1	PA66	Black (BK)	Synthetic rubber	100	151-28320
	19.0	19.0	3.8	3.1	4.1	PA66	Natural (NA)	Synthetic rubber	100	151-28349
MB4A3	28.0	28.0	4.7	4.0	5.4	PA66	Black (BK)	Acrylate	100	151-28430
MB4A	28.0	28.0	4.7	4.0	5.4	PA66	Black (BK)	Synthetic rubber	100	151-28412
	28.0	28.0	4.7	4.0	5.4	PA66	Natural (NA)	Synthetic rubber	100	151-28469
MB4CAS	29.0	29.0	5.7	4.2	5.4	PA66	Natural (NA)	Synthetic rubber	100	151-28449
MB4CA	29.0	29.0	5.7	4.2	5.4	PA66	Natural (NA)	Synthetic rubber	100	151-28459
MB5A	37.7	37.7	7.1	4.8	8.9	PA66	White (WH)	Synthetic rubber	100	151-28529
MB5A3	38.0	38.0	6.4	4.7	10.0	PA66	Black (BK)	Acrylate	100	151-28530

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

#### • MB-Series Square-Cut, screwable

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
MB3	19.0	19.0	3.8	3.1	4.1	PA66	Natural (NA)	100	151-28359
MB4	28.0	28.0	4.7	4.0	5.4	PA66	Natural (NA)	100	151-28479
MB5	37.7	37.7	6.2	4.8	8.9	PA66	White (WH)	100	151-00324

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



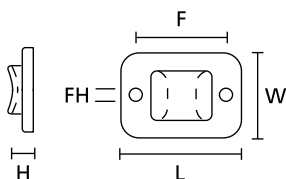
## Self Adhesive, Screw Fixing Cable Tie Mounts

### Features and Benefits

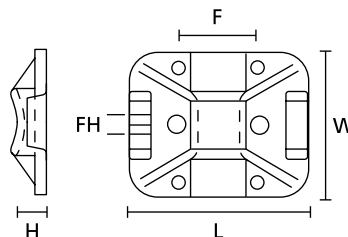
- Screwable or self-adhesive versions
- Concave design to support larger diameter cables and bundles
- 2-way mounting base for safe guiding of cables and conduits
- Suitable for applications with minimal space
- Mounted before cable installation
- Usable with standard cable ties

Material specification  
please see page 22.

For more information on the types  
of adhesive please see page 73.



Cable Tie Mounts TY3G1 (S)



Cable Tie Mounts TY8G1 (S)

### • TY-Series Rectangle Design, screwable

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
TY3G1	14.0	20.0	3.7	2.2	4.0	PA66	Natural (NA)	100	151-21319
TY8G1	25.0	32.0	5.2	3.2	8.0	PA66	Natural (NA)	100	151-21819

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

### • TY-Series Rectangle Design, self adhesive, screwable

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Adhesive	Pack Cont.	Article-No.
TY3G1S	14.0	20.0	3.7	2.2	4.0	PA66	Natural (NA)	Acrylate	100	151-11319
	14.0	20.0	3.7	2.2	4.0	PA66W	Black (BK)	Acrylate	100	151-11310
TY8G1S	25.0	32.0	5.2	3.2	8.0	PA66	Natural (NA)	Acrylate	100	151-11819
	25.0	32.0	5.2	3.2	8.0	PA66W	Black (BK)	Acrylate	100	151-11810

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

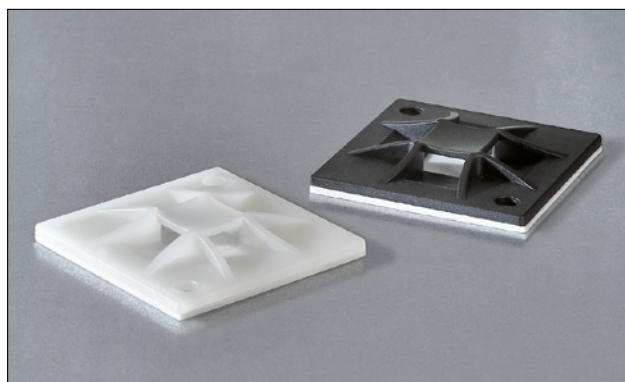


### Q-Series

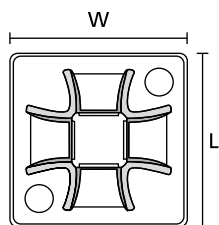
#### Features and Benefits

- Screw or self adhesive versions
- Perfect for combination with Q-ties
- 4-way entry for Q-tie
- Adhesive with high pull-off force
- Q-Mount base secures the Q-tie in a vertical position, leaving the hands free to apply cables

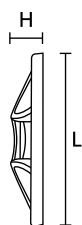
Please find more Q-Series products for your system solution on page 78 and 256.



Q-mount QM, 4-way entry, adhesive, screwable.



Mounting Base Q-mount



Mounting Base Q-mount



The Q-mount base locks the Q-tie in vertical position, leaving the hands free to apply the cables.



One Step to the Web!

#### • Q-mount Series QMA, self adhesive, screwable

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Adhesive	Pack Cont.	Article-No.
QM20A	20.0	20.0	3.7	3.1	4.0	PA66	Black (BK)	Synthetic rubber	100	151-10914
	20.0	20.0	3.7	3.1	4.0	PA66	Natural (NA)	Synthetic rubber	100	151-10904
QM30A	30.0	30.0	4.5	4.1	5.1	PA66	Black (BK)	Synthetic rubber	100	151-10915
	30.0	30.0	4.5	4.1	5.1	PA66	Natural (NA)	Synthetic rubber	100	151-10905
QM40A	40.0	40.0	5.5	4.1	8.4	PA66	Black (BK)	Synthetic rubber	50	151-10916
	40.0	40.0	5.5	4.1	8.4	PA66	Natural (NA)	Synthetic rubber	50	151-10906

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

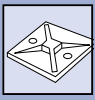
#### • Q-mount Series QM, screwable

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
QM20	20.0	20.0	3.7	3.1	4.0	PA66	Black (BK)	100	151-10911
	20.0	20.0	3.7	3.1	4.0	PA66	Natural (NA)	100	151-10901
QM30	30.0	30.0	4.5	4.1	5.1	PA66	Black (BK)	100	151-10912
	30.0	30.0	4.5	4.1	5.1	PA66	Natural (NA)	100	151-10902
QM40	40.0	40.0	5.5	4.1	8.4	PA66	Natural (NA)	50	151-10903
	40.0	40.0	5.5	4.1	8.4	PA66	Black (BK)	50	151-10913

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.





### Screw Fixing Cable Tie Mounts CTQM

- Q-Mount Series CTQM

#### Features and Benefits

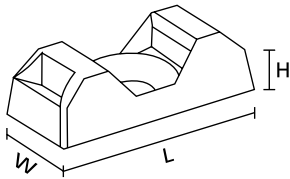
- 2-way mounting base for safe guiding of cables and conduits
- For cable ties up to 5 mm wide
- Uses screw with countersunk head (max.  $\varnothing$  of head: 8.0 mm)
- Perfect for combination with Q-ties
- Pre-assembly feature
- Provides a secure hold with Q-ties, particularly in difficult situations such as vertical mounting positions

**Material specification please see page 22.**

**Please find more Q-Series products for your system solution on page 77 and 256.**



Q-mount, CTQM 2-way entry, screwable.



Mounting base CTQM

TYPE	Width (W)	Length (L)	Height (H)	Hole $\varnothing$ (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
CTQM5	9.5	21.0	6.7	4.5	5.0	PA66	Black (BK)	100	151-10930
	9.5	21.0	6.7	4.5	5.0	PA66	Natural (NA)	100	151-10920

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



### Paste Adhesive Mount

- **PMB5**

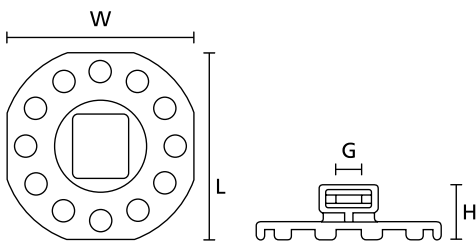
The PMB5 mount offers a fixing solution for applications where a screw fixing is not possible. Due to a larger diameter the mount can even be installed onto uneven surfaces. PMB5 mounts are used in the railway industry as well as in the renewable energy industry. Further applications can be seen in the ship building and electrical industries and the production of switching cabinets.

#### Features and Benefits

- PMB5 paste adhesive mount for fixings with paste / liquid adhesive
- Mount geometry offers a good form closure with cured adhesive
- Can even be installed onto uneven surfaces due to large diameter
- Can also be applied in combination with hot-melt adhesive, as mount is made of heat resistant PA66



PMB5 mount with paste adhesive.

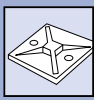


PMB5

TYPE	Width (W)	Length (L)	Height (H)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
PMB5	36.0	36.0	10.7	4.8	PA66HS	Black (BK)	100	151-00498

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



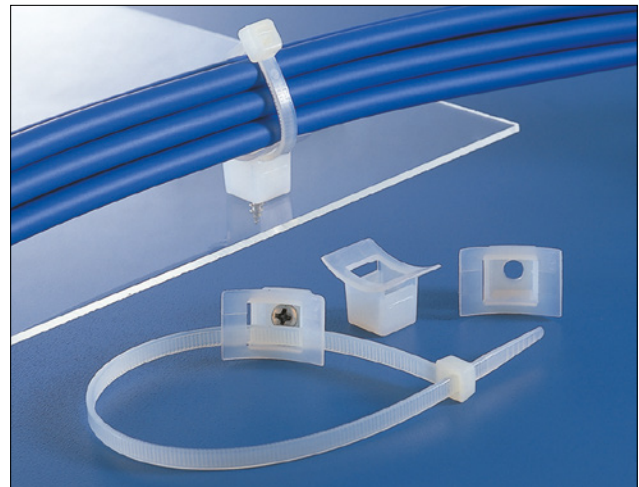
### Screw Fixing Mounts

- LKC with overlapping curved design

Designed specifically for holding heavier cable bundles these mounting bases can be used in many industries from agriculture to truck manufacture. They offer a very secure fixing and can be used with a wide variety of heavy duty cable ties up to 13mm wide.

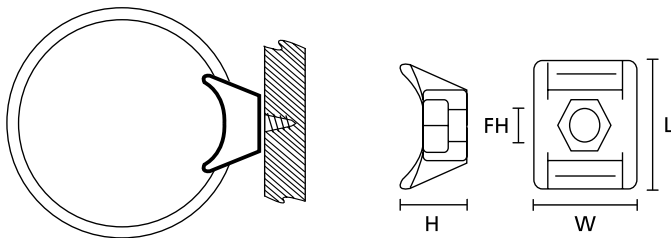
#### Features and Benefits

- Curved design for additional cable support
- Simple to install with a screw or bolt
- Excellent security, particularly in areas of high vibration



Cable Tie Mounts LKC Series.

**Material specification please see page 22.**



Wall fastening

NY3256

TYPE	Drawing	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
LKC		17.0	25.0	13.5	5.5	8.0	PA66	Black (BK)	100	151-27010
		17.0	25.0	13.5	5.5	8.0	PA66	Natural (NA)	100	151-27019
LKCSF1		19.0	40.0	16.8	6.0	13.0	PA66	Natural (NA)	100	151-27219
		19.0	40.0	16.8	6.0	13.0	PA66	Black (BK)	100	151-27202
NY3256		12.0	13.5	7.8	3.0	8.0	PA66	Natural (NA)	1,000	151-25219

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



### Screw Fixing Mounts

- with curved design

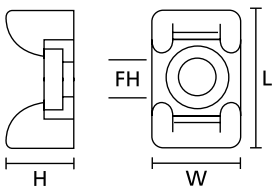
Designed specifically for holding heavier cable bundles these mounting bases can be used in many industries from agriculture to truck manufacture. They offer a very secure fixing and can be used with a wide variety of heavy duty cable ties up to 7.6mm wide.

#### Features and Benefits

- Curved design for additional cable support
- Simple to install with a screw or bolt
- Excellent security, particularly in areas of high vibration



Cable Tie Mounts KR6G5, KR8G5 and CTM.



Cable Tie Mounts KR6G5, KR8G5 and CTM

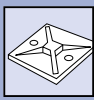
TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
KR6G5	12.0	18.0	9.0	4.5	6.0	PA66	Natural (NA)	100	151-24619
	12.0	18.0	9.0	4.5	6.0	PA66W	Black (BK)	100	151-24660
KR8G5	14.5	25.0	12.0	6.5	8.0	PA66	Natural (NA)	100	151-24819
	14.5	25.0	12.0	6.5	8.0	PA66HS	Black (BK)	100	151-24850
CTM3	15.5	21.8	9.4	5.1	7.9	PA66	Black (BK)	100	151-30600
	15.5	21.8	9.4	5.1	7.9	PA66	White (WH)	100	151-30605

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



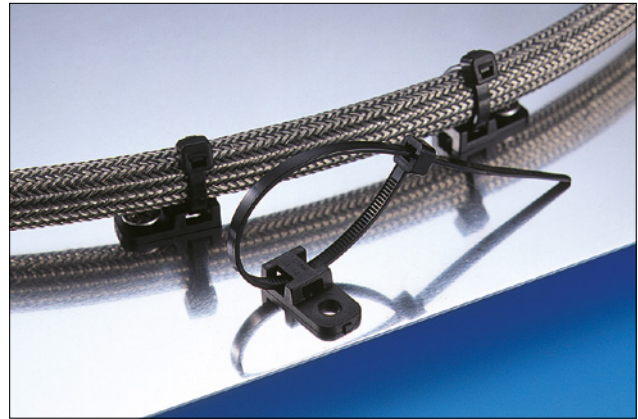
### Screw Fixing Mounts

- For applications where space is limited

Each of these products offer particular benefits, but all are designed for simple, yet robust, installation in a wide variety of applications. Particularly used in telecoms equipment, switchgear and control cabinets.

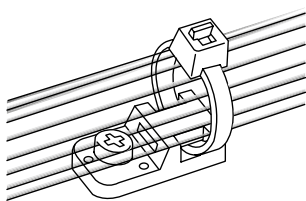
#### Features and Benefits

- Suitable for applications with minimal space
- Mounted before cable installation and in line with cable
- CTAM has 4-way entry design for use in line or at 90° angle to cable run

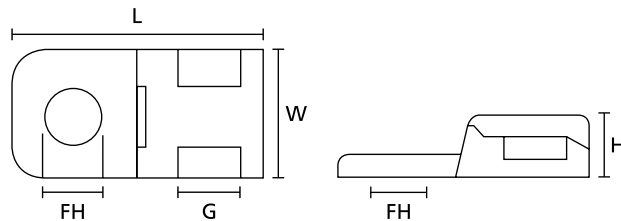


Cable Tie Mounts CTAM.

**Material specification please see page 22.**



Cable Tie Mounts CTAM1/CTAM2



TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
CTAM1	10.2	20.4	5.1	4.3	5.0	PA66	White (WH)	100	151-31103
CTAM2	10.2	20.4	5.1	5.2	5.0	PA66	White (WH)	100	151-31203

All dimensions in mm. Subject to technical changes.  
 Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



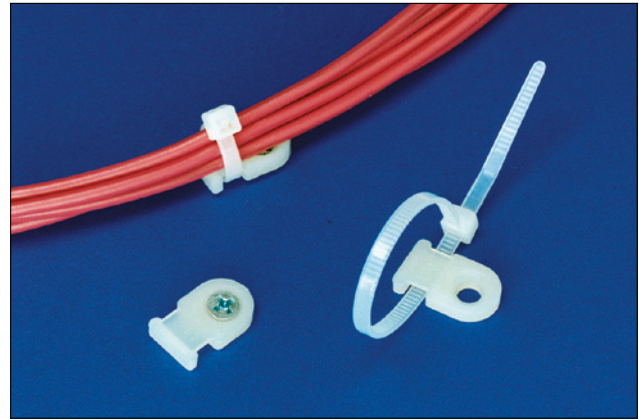
### Mounts for Screw Fixing

- MB-, TY- Series Curved Design, screwable

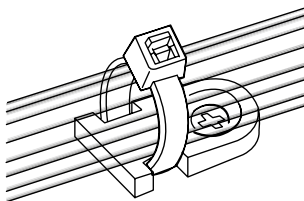
These products are designed for simple, yet robust, installation in a wide variety of applications - particularly used in telecoms equipment, switchgear and control cabinets.

#### Features and Benefits

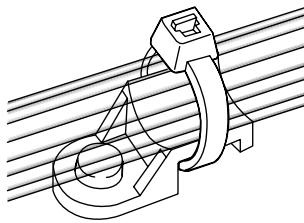
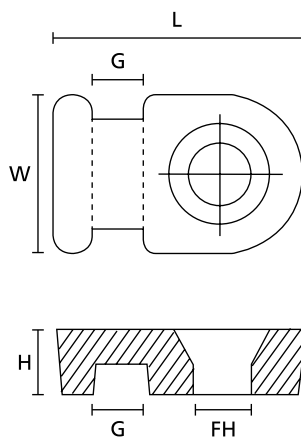
- Simple to install with a screw or bolt
- Excellent security, particularly in areas of high vibration
- Single hole fixing with two-way entry for cable tie



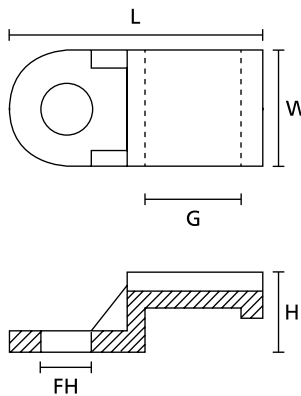
Screw fix cable tie mounts MB1.



Cable Tie Mounts MB1/MB2



Cable Tie Mounts TY3/TY8



TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
MB1	8.0	12.5	3.5	2.9	2.6	PA66	Natural (NA)	100	151-28119
TY3F1	8.0	19.0	7.2	3.5	5.0	PA66	Natural (NA)	1,000	151-23319
TY8F1	10.0	22.4	7.2	4.5	8.0	PA66	Natural (NA)	1,000	151-23819
MB2	12.5	20.5	3.3	5.0	5.0	PA66	Black (BK)	100	151-28210
	12.5	20.5	3.3	5.0	5.0	PA66	Natural (NA)	100	151-28219

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



### Screw Fixing Mounts

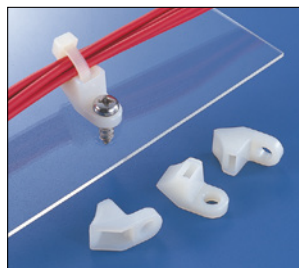
- LKM / CL / FH with curved design for sideways fixing

In areas with limited space these mounting bases allow the cable to be offset from the fixing hole, and can be installed in the equipment prior to the cable installation. A major cost saving can be made by using these products as many different sizes of standard cable ties can be used, reducing the need to stock a wide range of specific fixing ties.

#### Features and Benefits

- Screw mounts for fixing cable sideways
- Ideal for securing large, heavier bundles
- Suitable for cable ties up to 8 mm wide

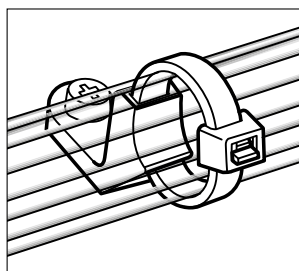
**Material specification please see page 22.**



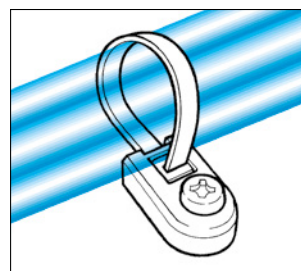
LKM/CL8 Cable Tie Mounts.



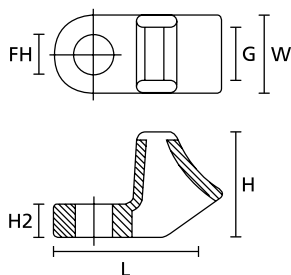
FH Cable Tie Mounts.



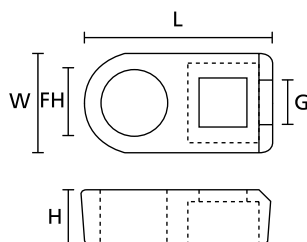
LKM/CL8 Cable Tie Mounts.



FH cable tie mount.



LKM/CL8 Cable Tie Mounts

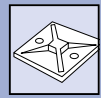


FH Cable Tie Mounts

TYPE	Width (W)	Length (L)	Height (H)	Height (H2)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
FH18	7.1	13.3	4.0	-	3.7	2.5	PA66	Natural (NA)	500	151-61119
FH30	9.5	17.9	4.7	-	5.5	3.5	PA66	Natural (NA)	500	151-61319
FH50	11.3	22.2	6.2	-	7.1	4.6	PA66	Natural (NA)	500	151-61519
LKM	12.0	27.0	16.0	5.0	6.0	7.6	PA66	Natural (NA)	100	151-26304
	12.0	27.0	16.0	5.0	6.0	7.6	PA66	Black (BK)	100	151-26301
CL8	12.5	27.3	16.0	5.0	6.5	8.0	PA66	Natural (NA)	100	151-26819
	12.5	27.3	16.0	5.0	6.5	8.0	PA66W	Black (BK)	100	151-26860

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



### Screw Fixing Mounts

- **Stainless Steel 316 mounts for MBT Ties**

Suitable for the secure fixing of cables, tubing, conduits and pipes within the most arduous of environments. Providing a complete fastening and fixing solution when used in conjunction with the stainless steel MBT-S and MBT-H ties, they are ideal for use within shipbuilding, oil and gas (offshore), industrial machinery & vehicles, food & beverage, power, renewable energy and process industries.

#### Features and Benefits

- 2-way fixing for MBT-S and MBT-H ties
- High performance stainless steel 316 material
- 10mm slot width
- Single 4mm, 5mm or 6mm fixing hole
- Heavy duty design
- Robust and durable solution
- Resistant to a range of materials and conditions
- Quick and easy to install
- Safe and secure solution for cables, tubing, conduits and pipes
- Ideal for a range of industries and applications



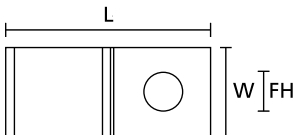
Stainless Steel P-mount SSPC.



One Step to the Web!

**Material specification  
please see page 22.**

**The SSPC-Mounts can ideally  
be combined with the MBT  
cable ties on page 60.**



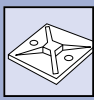
SSPC-Series

TYPE	Length (L)	Width (W)	Height (H)	Hole Ø (FH)	Material	Colour	Pack Cont.	Article-No.
SSPC4	23.0	10.2	4.5	4.2	SS316	Metal (ML)	100	151-00837
SSPC5	23.0	10.2	4.5	5.3	SS316	Metal (ML)	100	151-00838
SSPC6	23.0	10.2	4.5	6.3	SS316	Metal (ML)	100	151-00839

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.





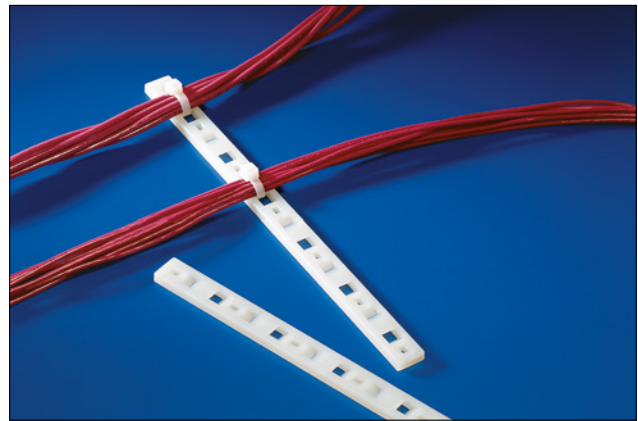
### Mounting Plates for Screw Fixing

- MP-Series
- MSMP-Series

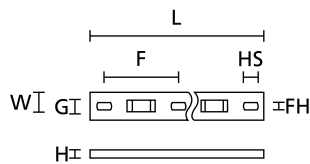
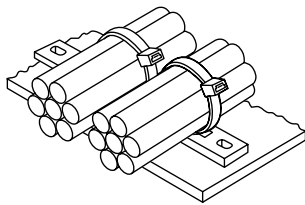
Many applications require each cable run to be firmly held in place but separately from adjacent cable runs (example - control cabinets, machinery and military systems). The MP series of mounts helps to achieve this.

#### Features and Benefits

- Allow multiple cables to be run in parallel
- Simple to fix with two screws
- Cables are fixed by using a cable tie through any combination of the available slots



Mounting plates types MP and MSMP.



**Material specification please see page 22.**

Mounting Plates Types MP and MSMP    Mounting Plates Types MP and MSMP

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	No. of bundles	Material	Colour	Pack Cont.	Article-No.
MP2M3	12.7	76.2	3.2	3.7	5.2	2	PA66	Natural (NA)	100	151-24219
MP3M3	12.7	108.0	3.2	3.7	5.2	3	PA66	Natural (NA)	100	151-24319
MP4M3	12.7	139.8	3.2	3.7	5.2	4	PA66	Natural (NA)	100	151-24419
MP5M3	12.7	171.6	3.2	3.7	5.2	5	PA66	Natural (NA)	100	151-24519
MSMP5/10	15.8	204.5	5.3	5.1	7.6	5	PA66	Natural (NA)	100	151-25519
MSMP6/6	15.8	244.0	5.3	3.8	7.6	6	PA66	Natural (NA)	100	151-25619
MSMP4	15.9	167.0	5.2	5.1	8.2	4	PA66	Natural (NA)	500	150-83499

All dimensions in mm. Subject to technical changes.  
 Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



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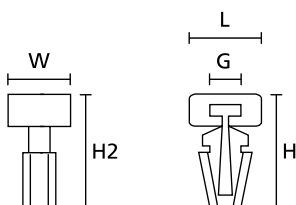
### Cable Fixing Cradle

- **TM1SF** for cable ties width up to 5.2 mm

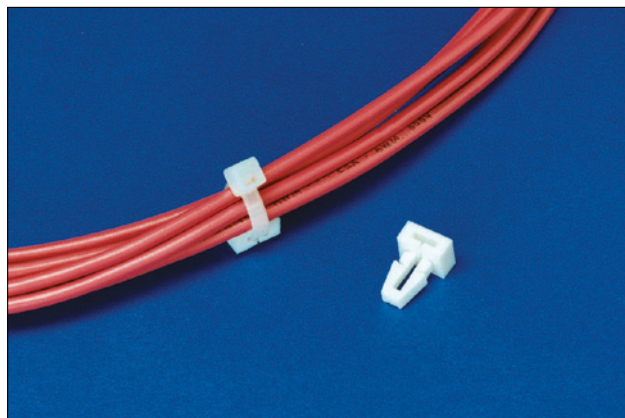
Offering simple and easy methods of securing cables or pipes these fixing accessories have many applications within a wide range of industries.

#### Features and Benefits

- Ideal mount for space-saving applications with restricted access
- Arrowhead for very secure fixing



TM1SF Fixing Base



TM1SF Fixing Base for pre-drilled or pre-punched holes.

TYPE	Width (W)	Length (L)	Height (H)	Height (H2)	Hole Ø (FH)	Panel Thickness	Strap Width max. (G)	Material	Colour	Article-No.
TM1SF	10.2	15.8	4.6	4.6	6.35	3.4 - 3.3	5.0	PA66	White (WH)	151-40119

All dimensions in mm. Subject to technical changes.

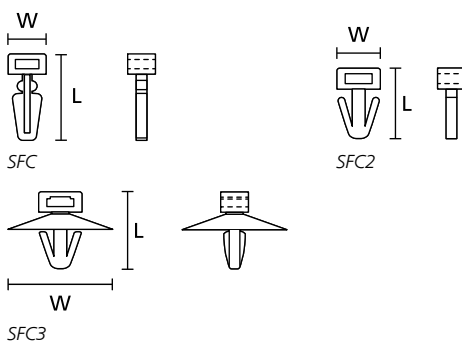
### Arrowhead Cradle

- **SFC**

Offering simple and easy methods of securing cables or pipes these fixing accessories have many applications within a wide range of industries.

#### Features and Benefits

- Arrowhead fixing for use in pre-drilled or punched holes
- SFC and SFC2 for ties up to 5.3 mm wide
- SFC3 for ties up to 8.6 mm wide



Securely fix and route cables and pipes with SFC3.

TYPE	Width (W)	Length (L)	Hole Ø (FH)	Panel Thickness	Strap Width max. (G)	Material	Colour	Article-No.
SFC2	6.0	14.5	6.0	0.8 - 1.0	5.3	PA66	Natural (NA)	151-02000
SFC	11.0	18.0	6.0	3.0 - 3.2	5.3	PA66	Natural (NA)	151-01600
SFC3	22.0	15.5	6.3	0.8 - 1.8	8.6	PA66	Black (BK)	151-01906
	22.0	15.5	6.3	0.8 - 1.8	8.6	PA66	Natural (NA)	151-01909

All dimensions in mm. Subject to technical changes.



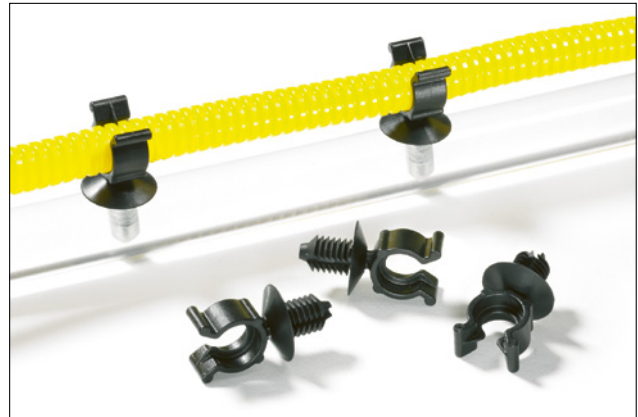
### Fixing Elements for Corrugated Tubing, with Fir Tree

- CTC-Series

CTC clamps are used in the automotive, harness making and electrical industries and wherever corrugated tubing has to be quickly and firmly fixed.

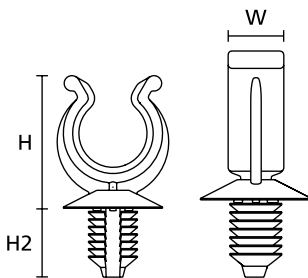
#### Features and Benefits

- Available for a variety of nominal diameters
- Fir tree foot part can be used for a variety of panel thicknesses
- Suitable for use within threaded holes
- Tube is guided accurately, clipping into place
- Movement is prevented by the inside profile of the clamp



The tubing clips into the CTC clamp and is held firmly.

Material specification  
please see page 22.



CTC10FT6LG

TYPE	Width (W)	Height (H)	Height (H2)	Nominal Ø	Disc Ø	Hole Ø (FH)	Panel Thickness	Material	Colour	Article-No.
CTC7.5FT6LG	8.0	18.6	11.1	7.5	16.0	6.5 - 7.0	0.8 - 6.0	PA66HIRHS	Black (BK)	151-14313
CTC7.5FT9	8.0	19.9	12.2	7.5	23.0	8.7 - 9.0	3.0 - 5.0	PA66HIRHS	Black (BK)	155-31602
CTC10FT6LG	8.0	21.4	11.1	10.0	16.0	6.5 - 7.0	0.8 - 6.0	PA66HIRHS	Black (BK)	151-00018
CTC10FT9	8.0	22.7	12.2	10.0	23.0	8.7 - 9.0	3.0 - 5.0	PA66HIRHS	Black (BK)	155-17801
CTC13FT6	8.0	25.2	7.5	13.0	16.0	6.5 - 7.0	0.8 - 3.0	PA66HIRHS	Black (BK)	151-14312
CTC13FT6LG	8.0	25.2	11.1	13.0	16.0	6.5 - 7.0	0.8 - 6.0	PA66HIRHS	Black (BK)	151-00019
CTC22FT9	8.0	37.7	12.2	22.0	23.0	8.7 - 9.0	3.0 - 5.0	PA66HIRHS	Black (BK)	155-25201
CTC4.5FT6LG	10.0	16.1	11.1	4.5	16.0	6.5 - 7.0	0.8 - 6.0	PA66HIRHS	Black (BK)	151-14314

All dimensions in mm. Subject to technical changes.



## Fixing Elements for Weld Studs

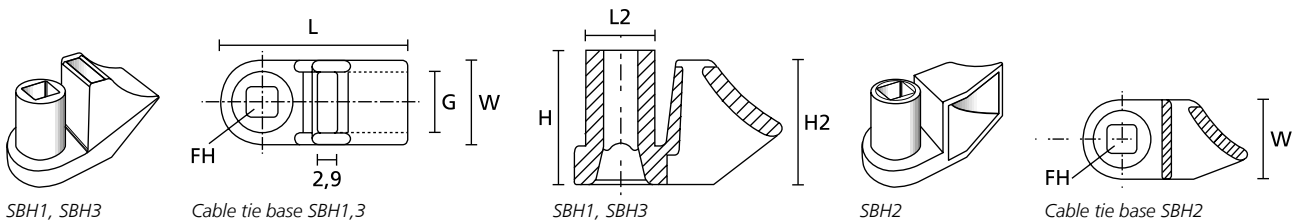
- **SB-Series**

Many industries (but specifically the automotive market) use 'weld studs' as the standard method of attaching components. Simply hammered onto the stud, these parts provide ideal fixing bases for attaching cables, pipes or hoses. The use of weld studs avoids the problems associated with 'holes' (ingress of moisture, corrosion etc).

### Features and Benefits

- Simple and quick method of fixing
- SBH types simply hammered onto the stud
- SBH1 and SBH3 allow cables to run across the panel
- SBH2 allow cables to run at 90° to the panel

**Material specification  
please see page 22.**



TYPE	Width (W)	Length (L)	Length (L2)	Height (H)	Height (H2)	Stud Ø	Strap Width max. (G)	Material	Colour	Article-No.
SBH1	12.5	26.8	9.0	13.9	15.9	5.0	8.5	PA66	Black (BK)	151-26150
SBH2	12.5	26.8	9.0	14.0	12.5	5.0	8.5	PA66	Black (BK)	151-26250
SBH3	12.5	26.8	9.0	18.0	15.9	5.0	8.5	PA66	Black (BK)	150-18900

All dimensions in mm. Subject to technical changes.



### Fixing Base

- LOK-Series

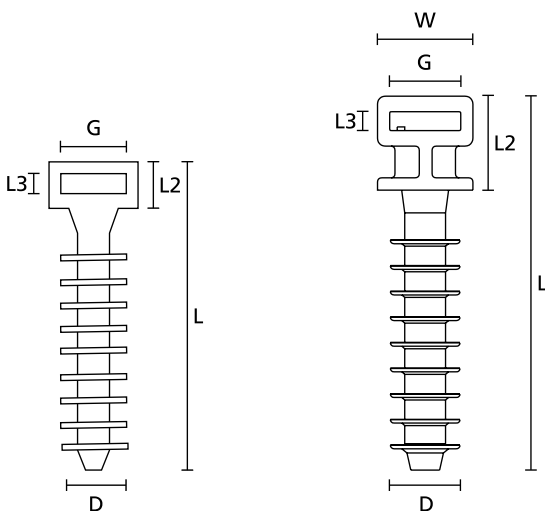
The LOK mounts, in conjunction with a cable tie, can be used either indoors or outdoors for a diverse range of applications from holding climbing plants, to securing cables running between buildings.

#### Features and Benefits

- LOK01 - LOK05 usable with any cable ties up to 9 mm wide
- Suitable for wide range of materials, including concrete, brick, block and wood
- Installed by knocking into 7 mm or 8 mm diameter hole
- LOK01B is designed for soft brickwork and 6 mm holes
- Elongated head of LOK05 for setting bundles at a distance from brickwork



LOK01, LOK01B, LOK01S fixing bases.



LOK01, LOK01B, LOK01S Fixing Base      LOK05 Fixing Base

The LOK fixing bases can ideally be combined with the PE-, RPE-, and LPH-cable ties, see pages and . 48 - 50.

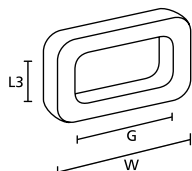
TYPE	Width (W)	Length (L)	Length (L2)	Length (L3)	Ø D	Strap Width max. (G)	Hole Ø (FH)	Material	Colour	Article-No.
LOK01B	12.0	30.0	6.5	2.5	7.2	9.0	6.0	PA6HIR	Black (BK)	151-80500
LOK01S	12.0	34.0	6.5	2.5	9.2	9.0	7.0 - 8.0	PA6HIR	Black (BK)	151-80600
LOK01	12.0	44.0	6.5	2.5	9.2	9.0	7.0 - 8.0	PA6HIR	Black (BK)	151-80110
LOK05	12.0	49.0	12.5	2.5	9.2	9.0	7.0 - 8.0	PA6HIR	Black (BK)	151-80700

All dimensions in mm. Subject to technical changes.



### Fixing Base

- LOK04



LOK04

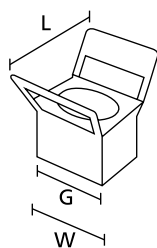


LOK04 - for parallel routing.

TYPE	Width (W)	Length (L3)	Strap Width max. (G)	Material	Colour	Article-No.
LOK04	16.0	4.0	9.0	PA66	Black (BK)	151-80400

All dimensions in mm. Subject to technical changes.

- LOK02



LOK02 Fixing Base

**Material specification please see page 22.**

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Article-No.
LOK02	14.0	21.0	18.0	5.1	9.0	PA6HIR	Black (BK)	151-80210

All dimensions in mm. Subject to technical changes.

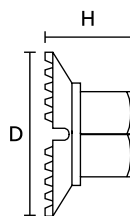
### Plastic Nuts

- KM

KM plastic nuts can be used in virtually all applications where metal nuts may have been used. Offering benefits in speed of application, weight saving and corrosion resistance they also offer a secure fixing when subject to vibration. Typical applications can be found in a wide variety of industries from automotive to white goods (domestic appliances).

#### Features and Benefits

- Faster assembly than traditional metal hexagonal nuts
- Simply pushed onto bolt by hand
- Easily opened at any time using a standard spanner
- Available for both 5 mm and 6 mm ISO threaded bolts



Plastic Nuts KM5, 6

TYPE	Ø D	Height (H)	Nut Size (NS)	Material	Colour	Article-No.
KM5	17.5	9.5	10.0	PA66HIRHS	Black (BK)	150-51910
KM6	17.5	9.6	10.0	PA66	Black (BK)	150-61910

All dimensions in mm. Subject to technical changes.



### Self Adhesive / Screw Clips

- **TY8H1(S) with flat design**

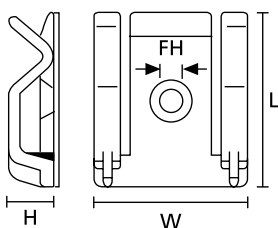
Ideal for holding ribbon cables in computer equipment, gaming machines or domestic appliances.

#### Features and Benefits

- Designed to hold cables, tubes or conduits without cable tie
- Simply screwed or stuck (TY8H1S) onto panel
- Side gripping fingers exert firm hold but allow for easy cable removal



Fixing clip TY8H1(S) - screw fix or self adhesive.



Fixing clip TY8H1(S)

For more information on the types of adhesive please see page 73.

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Bundle Ø max.	Adhesive	Material	Colour	Article-No.
TY8H1	23.0	26.0	6.5	3.2	3.0	-	PA66	Natural (NA)	151-22819
TY8H1S	23.0	26.0	6.5	3.2	3.0	Acrylate	PA66	Natural (NA)	151-12819

All dimensions in mm. Subject to technical changes.

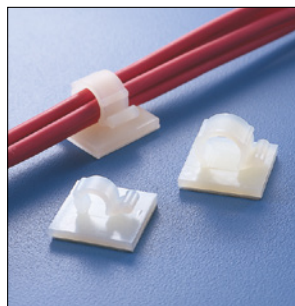


### Self Adhesive Clips

These clips are ideal for use in applications which are difficult to access, or for areas where self adhesive is the only possible fixing method (for example where fixing 'holes' would be unacceptable).

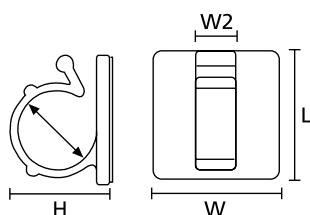
#### Features and Benefits

- One-piece self-adhesive fixing clips for quick and easy installation
- Designed to hold wires, cables or hoses without cable tie
- Different sizes for various bundle diameters



One piece fixing clips Type RA - quick and easy installation.

#### • RA-Series with round design



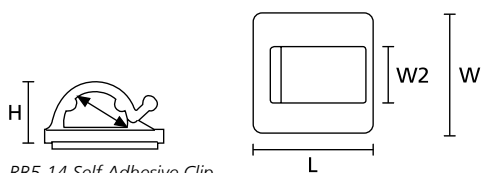
RA3-18 Self Adhesive Clip

For more information on the types of adhesive please see page 73.

TYPE	Width (W)	Width (W2)	Length (L)	Height (H)	Bundle Ø max.	Adhesive	Material	Colour	Article-No.
RA3	13.0	5.0	13.0	5.0	3.0	Synthetic rubber	PA66	Natural (NA)	151-13018
RA6	19.0	5.0	19.0	9.0	6.0	Synthetic rubber	PA66	Natural (NA)	151-13019
RA9	19.0	7.5	19.0	12.5	9.0	Synthetic rubber	PA66	Natural (NA)	151-13020
RA13	25.0	10.0	25.0	16.5	13.0	Synthetic rubber	PA66	Natural (NA)	151-13021
RA18	28.5	10.0	28.5	23.0	18.0	Synthetic rubber	PA66	Natural (NA)	151-13119

All dimensions in mm. Subject to technical changes.

#### • RB-Series with flat design



RB5-14 Self Adhesive Clip

Material specification please see page 22.

TYPE	Width (W)	Width (W2)	Length (L)	Height (H)	Bundle Ø max.	Material	Colour	Adhesive	Article-No.
RB5	19.0	9.7	19.0	6.0	5.0	PA66	Black (BK)	Synthetic rubber	151-14000
	19.0	9.7	19.0	6.0	5.0	PA66	Natural (NA)	Synthetic rubber	151-14059
RB8	25.0	12.7	25.0	11.5	8.0	PA66	Black (BK)	Synthetic rubber	151-13601
	25.0	12.7	25.0	11.5	8.0	PA66	Natural (NA)	Synthetic rubber	151-13606

All dimensions in mm. Subject to technical changes.





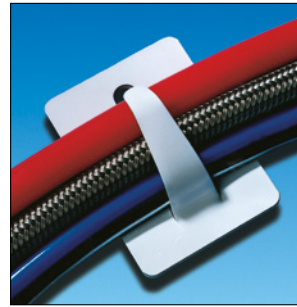
### Self Adhesive Clips

- SAC with flexible flat design

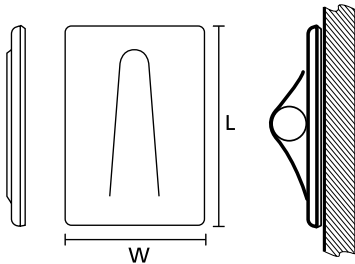
These clips are ideal for use in applications which are difficult to access, or for areas where self adhesive is the only possible fixing method (for example 'holes' would be unacceptable). Typically applications include domestic appliances and trailers.

#### Features and Benefits

- Bendable metal 'tongue' for any shape or configuration of wires or cables
- Cost effective with easy application on smooth, clean surfaces



Malleable tongue allows for a variety of sizes per clip.



SAC-Series Self Adhesive Clip

Material specification please see page 22.

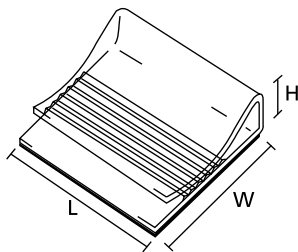
TYPE	Width (W)	Length (L)	Bundle Ø max.	Adhesive	Material	Colour	Article-No.
SAC0	15.0	20.0	3.0	Acrylate	ST	White (WH)	151-00033
SAC1	20.0	30.0	4.0	Acrylate	ST	White (WH)	151-00100
SAC2	25.0	35.0	8.0	Acrylate	ST	White (WH)	151-00200
SAC3	31.0	43.0	12.0	Acrylate	ST	White (WH)	151-00300
SAC4	38.0	51.0	16.0	Acrylate	ST	White (WH)	151-00400

All dimensions in mm. Subject to technical changes.

- 130100 for Flat Ribbon Cables

#### Features and Benefits

- Self-adhesive clip with integrated clamp for holding flat cables
- Manufactured from PVC



130100 Self Adhesive Clip

For more information on the types of adhesive please see page 73.

TYPE	Width (W)	Length (L)	Height (H)	Adhesive	Material	Colour	Article-No.
130100	25.0	25.0	9.1	Acrylate	PVC	White (WH)	154-01119

All dimensions in mm. Subject to technical changes.



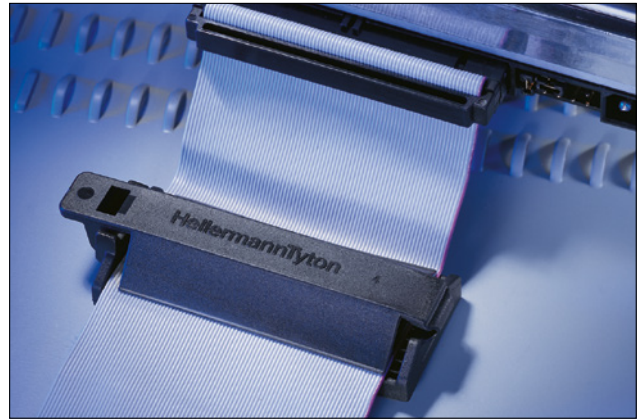
### Flat Ribbon Cables Self Adhesive / Screw Fixing

- **FKH-Series**

These clips are ideal for use in applications which are difficult to access, or for areas where self adhesive is the only possible fixing method (for example 'holes' would be unacceptable). The FKH clips are designed to retain flat ribbon cables - ideal for use in computer equipment, gaming machines and domestic appliances. Available in self-adhesive mount or screw mount.

#### Features and Benefits

- One-piece fixing clips for flat ribbon cables
- Quick and easy installation
- Easily releasable and re-usable

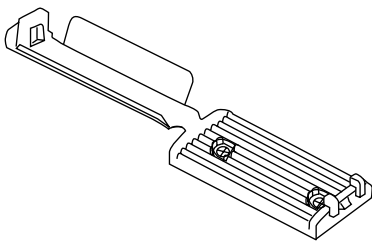


Based on extremely soft wings any flat cable is gently fastened.

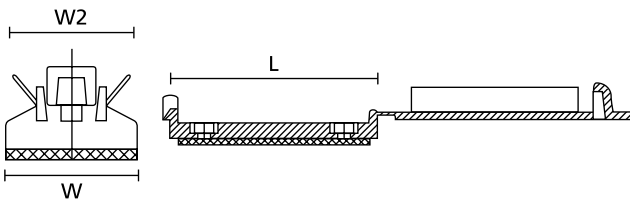
**For more information on the types of adhesive please see page 73.**



The flat ribbon cables are available in 4 different sizes.



Fixation can be realised with M3 screws or acrylic adhesive backing



TYPE	Width (W)	Length (L)	Width (W2)	Hole Ø (FH)	Adhesive	Material	Colour	Article-No.
FKH25	25.0	31.0	22.0	3.1	-	PA66HIR	Black (BK)	151-16250
FKH25A	25.0	31.0	22.0	3.1	Acrylate	PA66HIR	Black (BK)	151-15250
FKH30	25.0	35.0	22.0	3.1	-	PA66HIR	Black (BK)	151-16300
FKH30A	25.0	35.0	22.0	3.1	Acrylate	PA66HIR	Black (BK)	151-15300
FKH50	25.0	56.5	22.0	3.1	-	PA66HIR	Black (BK)	151-16500
FKH50A	25.0	56.5	22.0	3.1	Acrylate	PA66HIR	Black (BK)	151-15500
FKH80	25.0	86.0	22.0	3.1	-	PA66HIR	Black (BK)	151-16800
FKH80A	25.0	86.0	22.0	3.1	Acrylate	PA66HIR	Black (BK)	151-15800

All dimensions in mm. Subject to technical changes.



### Wire Push In Clips

- WPC

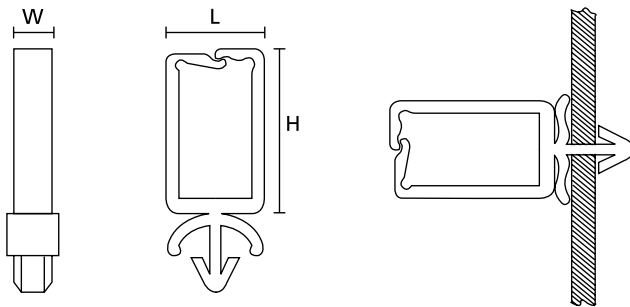
With the increased complexity of electronic and electrical installations the use of the WPC clips enable cables to be installed using the minimum amount of space. Typical applications can be seen in the frames/rails of control cabinets.

#### Features and Benefits

- Accepts single or multiple wires
- Simply push wires into place
- Self-locking to prevent accidental removal
- Arrowhead design for simple and secure installation
- Access to panel from one side



WPC - Wire Push In Clip.



WPC Wire Push In Clip

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Panel Thickness	Material	Colour	Article-No.
WPC5	5.3	15.0	12.7	4.7	0.8 - 4.0	PA66	Natural (NA)	151-75059
WPC10	5.3	15.0	17.7	4.7	0.8 - 4.0	PA66	Natural (NA)	151-75109
WPC15	5.3	15.0	22.7	4.7	0.8 - 4.0	PA66	Natural (NA)	151-75159
WPC20	5.3	15.0	27.7	4.7	0.8 - 4.0	PA66	Natural (NA)	151-75209

All dimensions in mm. Subject to technical changes.



### Plastic Rivets

- TY

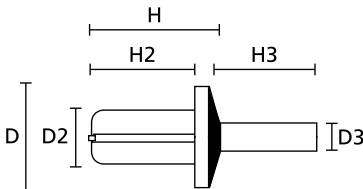
These simple to use plastic rivets are ideal for improving productivity in the working environment, saving time and money over more conventional jointing methods. Ideal for joining panels, or components to panels in a wide range of industries from automotive to panel building.

#### Features and Benefits

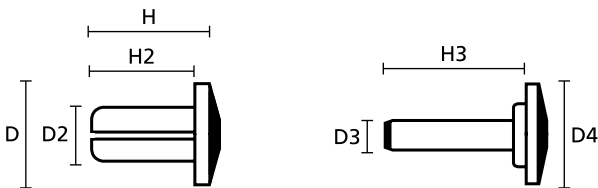
- One Piece
- Simply push pin into body of rivet
- TY3P1 and TY8P1 pins inserted using rivet placement tool
- TY8P2 has 'mushroom' head so pin is simply hammered in
- TY8P2 consists of two unattached parts



Plastic Rivets TY8P1.



Plastic Rivets TY3P1/8P1

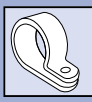


Plastic Rivets TY8P2

**Material specification  
please see page 22.**

TYPE	Height (H)	Height (H2)	Height (H3)	Ø D	Ø D2	Ø D3	Ø D4	Material	Colour	Article-No.
TY3P1	7.5	6.0	5.3	6.0	3.0	1.7	-	PA66	Natural (NA)	241-11319
	7.5	6.0	5.3	6.0	3.0	1.7	-	PA66	Black (BK)	241-11310
TY8P1	10.0	8.0	7.5	8.0	4.0	2.6	-	PA66	Black (BK)	241-11810
	10.0	8.0	7.5	8.0	4.0	2.6	-	PA66	Natural (NA)	241-11819
TY8P2	10.0	8.0	11.5	8.0	4.0	2.6	8.0	PA66	Natural (NA)	241-11829
	10.0	8.0	11.5	8.0	4.0	2.6	8.0	PA66	Black (BK)	241-11820

All dimensions in mm. Subject to technical changes.



### Aluminium P-Clips

- ALU-P-Clip with / without chloroprene Insert

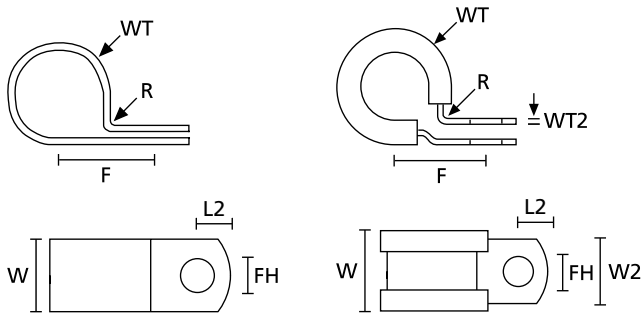
Manufactured from a high quality aluminium these P-Clips provide flexibility and yet give a permanent fixing in the most arduous of environments. The addition of a Chloroprene insert provides the cable or pipe bundle with a high degree of protection against vibration, reduces noise and also offers electrical isolation.

#### Features and Benefits

- Simple, secure pipe or cable fixing (e. g. caravan construction)
- Combine with chloroprene insert for vibration resistance (e. g. retain capacitors on PCB)
- Ideal for use in high temperatures
- Suitable for applications needing strength of metal components



P-Clips manufactured in polyamide, aluminium or aluminium with a chloroprene insert.



Aluminium P Clips

Aluminium P Clips with a Chloroprene insert

**Material specification please see page 22.**

TYPE	Width (W)	Width (W2)	Wall (WT)	Wall (WT2)	Hole Ø (FH)	Bundle Ø max.	Fixing Hole Centres (F2)	Radius (R)	Material	Colour	Article-No.
ALU4	12.7	-	0.80	-	5.2	6.4	11.6	1.6	AL	Natural (NA)	211-10040
ALU5	12.7	-	0.80	-	5.2	8.0	12.6	1.6	AL	Natural (NA)	211-10050
ALU6	12.7	-	0.80	-	5.2	9.5	13.4	1.6	AL	Natural (NA)	211-10060
ALU7	12.7	-	0.80	-	5.2	11.1	14.2	1.6	AL	Natural (NA)	211-10070
ALU8	12.7	-	0.80	-	5.2	12.7	15.0	1.6	AL	Natural (NA)	211-10080
ALU10	12.7	-	0.80	-	5.2	15.9	16.6	1.6	AL	Natural (NA)	211-10100
ALU11	12.7	-	1.30	-	5.2	17.5	19.1	2.8	AL	Natural (NA)	211-10110
ALU12	12.7	-	1.30	-	5.2	19.1	19.9	2.8	AL	Natural (NA)	211-10120
ALU13	12.7	-	1.30	-	5.2	20.6	20.7	2.8	AL	Natural (NA)	211-10130
ALU4C	16.3	12.7	3.70	0.8	5.2	3.2	11.6	1.6	AL, CR	Black (BK)	211-15040
ALU5C	16.3	12.7	3.70	0.8	5.2	4.8	12.6	1.6	AL, CR	Black (BK)	211-15050
ALU6C	16.3	12.7	3.70	0.8	5.2	6.4	13.4	1.6	AL, CR	Black (BK)	211-15060
ALU7C	16.3	12.7	3.70	0.8	5.2	8.0	14.2	1.6	AL, CR	Black (BK)	211-15070
ALU8C	16.3	12.7	3.70	0.8	5.2	9.5	15.0	1.6	AL, CR	Black (BK)	211-15080
ALU9C	16.3	12.7	3.70	0.8	5.2	11.1	15.8	1.6	AL, CR	Black (BK)	211-15090
ALU10C	16.3	12.7	3.70	0.8	5.2	12.7	16.6	1.6	AL, CR	Black (BK)	211-15100

All dimensions in mm. Subject to technical changes.

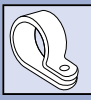


## Aluminium P-Clips

- ALU-P-Clip with / without chloroprene Insert

TYPE	Width (W)	Width (W2)	Wall (WT)	Wall (WT2)	Hole Ø (FH)	Bundle Ø max.	Fixing Hole Centres (F2)	Radius (R)	Material	Colour	Article-No.
ALU11C	16.3	12.7	4.50	1.3	5.2	14.3	19.1	2.8	AL, CR	Black (BK)	211-15110
ALU12C	16.3	12.7	4.50	1.3	5.2	15.9	19.9	2.8	AL, CR	Black (BK)	211-15120
ALU13C	16.3	12.7	4.50	1.3	5.2	17.5	20.7	2.8	AL, CR	Black (BK)	211-15130
ALU14C	16.3	12.7	4.50	1.3	5.2	19.1	21.5	2.8	AL, CR	Black (BK)	211-15140
ALU15C	16.3	12.7	4.50	1.3	5.2	20.6	22.3	2.8	AL, CR	Black (BK)	211-15150
ALU16C	16.3	12.7	4.50	1.3	5.2	22.2	23.1	2.8	AL, CR	Black (BK)	211-15160
ALU17C	16.3	12.7	4.50	1.3	5.2	23.8	23.9	2.8	AL, CR	Black (BK)	211-15170
ALU18C	16.3	12.7	4.50	1.3	5.2	25.4	24.6	2.8	AL, CR	Black (BK)	211-15180
ALU19C	16.3	12.7	4.50	1.3	5.2	27.0	25.5	2.8	AL, CR	Black (BK)	211-15190
ALU20C	16.3	12.7	4.50	1.6	5.2	28.6	27.0	3.2	AL, CR	Black (BK)	211-15200
ALU22C	16.3	12.7	4.50	1.6	5.2	31.8	28.6	3.2	AL, CR	Black (BK)	211-15220
ALU23C	16.3	12.7	4.50	1.6	5.2	33.3	29.4	3.2	AL, CR	Black (BK)	211-15230
ALU25C	16.3	12.7	4.50	1.6	5.2	36.5	30.8	3.2	AL, CR	Black (BK)	211-15250
ALU26C	16.3	12.7	4.50	1.6	5.2	38.1	31.7	3.2	AL, CR	Black (BK)	211-15260
ALU28C	16.3	12.7	4.50	1.6	5.2	41.3	33.3	3.2	AL, CR	Black (BK)	211-15280
ALU29C	16.3	12.7	4.50	1.6	5.2	42.9	34.1	3.2	AL, CR	Black (BK)	211-15290
ALU30C	16.3	12.7	4.50	1.6	5.2	44.5	34.9	3.2	AL, CR	Black (BK)	211-15300
ALU34C	16.3	12.7	4.50	1.6	5.2	50.8	38.1	3.2	AL, CR	Black (BK)	211-15340
ALU24C	16.3	12.7	4.50	1.6	5.2	34.9	30.2	3.2	AL, CR	Black (BK)	211-15240

All dimensions in mm. Subject to technical changes.



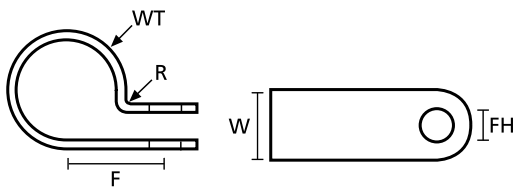
## Plastic P-Clips

### • HP-Series

For permanent or semi-permanent cable fixings, this range of P-Clips can be used in a variety of industries. Their light weight makes them particularly suitable for use in the aerospace industry where minimising weight, but retaining a strong fixing is vitally important.

### Features and Benefits

- Manufactured from Polyamide
- Good temperature resistance and high strength
- Wide range of sizes for every application



P-Clip H1P - H18P



P-Clip HP.

TYPE	Width (W)	Wall (WT)	Hole Ø (FH)	Bundle Ø max.	Fixing Hole Centres (F)	Radius (R)	Material	Colour	Article-No.
H1P	10.0	0.80	4.2	3.2	8.5	0.5	PA66	Natural (NA)	211-60019
	10.0	0.80	4.2	3.2	8.5	0.5	PA66HS	Black (BK)	211-60000
H2P	10.0	1.00	4.2	5.0	9.5	1.0	PA66	Natural (NA)	211-60029
	10.0	1.00	4.2	5.0	9.5	1.0	PA66HS	Black (BK)	211-60001
H3P	10.0	1.00	4.2	6.5	10.0	1.0	PA66	Natural (NA)	211-60039
	10.0	1.00	4.2	6.5	10.0	1.0	PA66HS	Black (BK)	211-60002
H4P	10.0	1.20	4.2	8.0	10.0	1.0	PA66	Natural (NA)	211-60049
	10.0	1.20	4.2	8.0	10.0	1.0	PA66HS	Black (BK)	211-60003
H5P	10.0	1.20	4.2	9.5	11.0	1.0	PA66	Natural (NA)	211-60059
	10.0	1.20	4.2	9.5	11.0	1.0	PA66HS	Black (BK)	211-60004
H6P	10.0	1.20	4.2	11.0	13.0	1.0	PA66	Natural (NA)	211-60069
	10.0	1.20	4.2	11.0	13.0	1.0	PA66HS	Black (BK)	211-60005
H7P	10.0	1.20	4.2	12.5	14.0	1.5	PA66	Natural (NA)	211-60079
	10.0	1.20	4.2	12.5	14.0	1.5	PA66HS	Black (BK)	211-60006
H8P	10.0	1.50	4.2	14.0	15.0	1.5	PA66	Natural (NA)	211-60089
	10.0	1.50	4.2	14.0	15.0	1.5	PA66HS	Black (BK)	211-60007
H9P	10.0	1.50	4.2	16.0	16.0	1.5	PA66	Natural (NA)	211-60099
	10.0	1.50	4.2	16.0	16.0	1.5	PA66HS	Black (BK)	211-60008
H10P	10.0	1.50	4.2	17.5	17.0	1.5	PA66	Natural (NA)	211-60109
	10.0	1.50	4.2	17.5	17.0	1.5	PA66HS	Black (BK)	211-60009
H11P	10.0	1.50	4.2	19.0	18.0	2.0	PA66	Natural (NA)	211-60119
	10.0	1.50	4.2	19.0	18.0	2.0	PA66HS	Black (BK)	211-60120
H12P	10.0	1.50	4.2	20.5	19.0	2.0	PA66	Natural (NA)	211-60129
H13P	12.0	1.50	5.2	22.0	20.5	2.0	PA66	Natural (NA)	211-60139
H14P	12.0	1.50	5.2	24.0	21.5	2.0	PA66	Natural (NA)	211-60149
H15P	12.0	1.50	5.2	25.5	23.0	2.5	PA66	Natural (NA)	211-60159
H16P	12.0	1.50	5.2	28.5	24.0	2.5	PA66	Natural (NA)	211-60169
H17P	12.0	1.50	5.2	31.5	26.0	2.5	PA66	Natural (NA)	211-60179
H18P	12.0	1.50	5.2	35.0	27.5	2.5	PA66	Natural (NA)	211-60189

All dimensions in mm. Subject to technical changes.



### Clips with elasticated loop

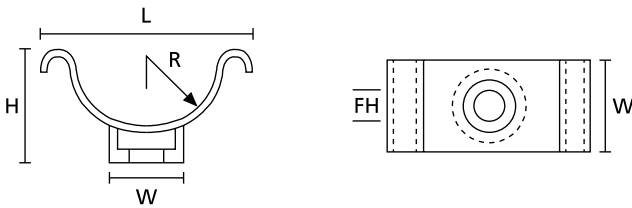
- **Cradle Clip**

#### Features and Benefits

- 2-piece fixing part
- Suitable for pre-assembly and prototyping
- Useful for applications requiring addition or removal of cables
- Simply stretch loop over clip for simple and quick cable containment



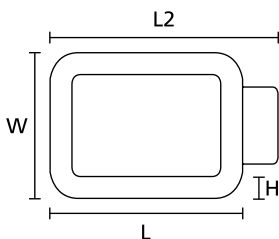
C3-N66-BK.



Cradle Clip C1 - 3

TYPE	Width (W)	Length (L)	Height (H)	Radius (R)	Hole Ø (FH)	Material	Colour	Article-No.
C1	12.7	25.0	14.0	6.3	4.8	PA66	Black (BK)	201-10010
C2	12.7	35.0	18.0	11.0	4.8	PA66	Black (BK)	201-10020
C3	12.7	48.0	25.0	17.5	4.8	PA66	Black (BK)	201-10030

All dimensions in mm. Subject to technical changes.



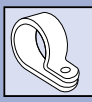
Retaining Ring R1 - 3

**Material specification please see page 22.**

TYPE	Width (W)	Length (L)	Length (L2)	Height (H)	Material	Colour	Article-No.
R1	23.8	16.0	22.0	3.2	PVC	Black (BK)	201-20010
R2	23.8	22.0	29.0	3.2	PVC	Black (BK)	201-20020
R3	23.8	33.0	39.0	3.2	PVC	Black (BK)	201-20030

All dimensions in mm. Subject to technical changes.





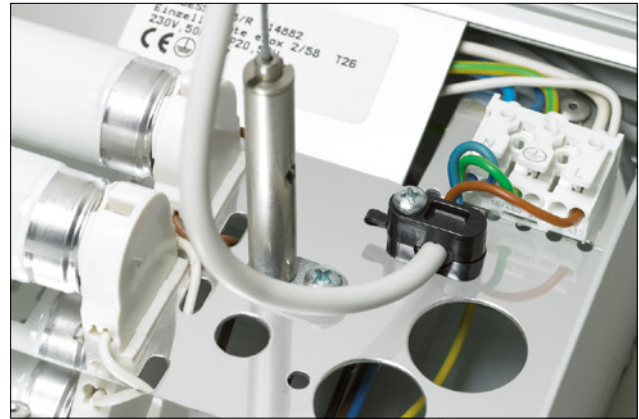
### Strain Relief Clips

- Klam-Klip (KK)

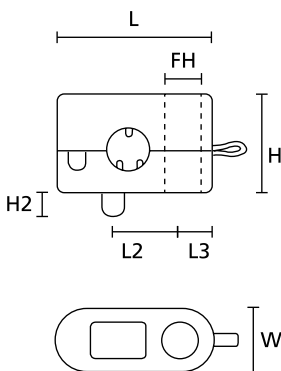
#### Features and Benefits

- Simple 1-screw fixing to guide and secure leads
- Two halves of the clip are linked to ensure no loss of parts during re-wiring
- Anti-rotation pin prevents leads from twisting

**Material specification please see page 22.**



Klam-Klip KK1-4.



Klam-Klip Cable Restraints



Klam-Klip KK1 - 4.

TYPE	Width (W)	Length (L)	Height (H)	Height (H2)	Hole Ø (FH)	Bundle Ø min.	Bundle Ø max.	Material	Colour	Article-No.
KK1	8.8	22.0	14.0	3.5	5.0	4.5	5.7	PA6HIR	Black (BK)	234-10100
KK2	8.8	22.0	14.0	3.5	5.0	5.5	6.7	PA6HIR	Black (BK)	234-10200
KK3	8.8	22.0	14.0	3.5	5.0	6.5	7.7	PA6HIR	Black (BK)	234-10300
KK4	8.8	22.0	14.0	3.5	5.0	7.5	8.5	PA6HIR	Black (BK)	234-10400

All dimensions in mm. Subject to technical changes.



### Maintenance Kit

- **BMS-100**

Ideal for use by electrical installers, maintenance engineers or laboratories.

#### Features and Benefits

- Practical 195-piece kit with snapper hose clips, aluminium and plastic P-Clips
- Variety of cable tie mounting bases and self adhesive clips



195-piece fixings kit, BMS-100.

Description	Type	Content	Article-No.	Page
<b>Maintenance Kit</b>	<b>BMS-100</b>	-	<b>151-00000</b>	
Aluminium P-Clips	ALU8C	5	211-15080	98
Clips with elastically loop	C1	8	201-10010	101
	R2	8	201-20020	101
Plastic P-Clips	H8P	7	211-60007	100
Rivet Mount	TY5K2	10	152-11209	-
Screw Fixing Mounts	CL8	10	151-26860	84
	CTAM2	40	151-31203	82
	KR6G5	20	151-24660	81
	LKC	10	151-27019	80
Self Adhesive, Screw Fixing Cable Tie Mounts	MB3A	10	151-28349	73
	MB4CA	7	151-28459	75
	TY8G1S	10	151-11819	76
Self Adhesive / Screw Clips	TY8H1S	10	151-12819	92
Self Adhesive Clips	RA13	5	151-13021	93
Snapper Hose Clips for Tubes and Harnesses	SNP10(E)	10	191-10100	-
Strain Relief Clips	KK2	10	234-10200	102
Wire Push In Clips	WPC15	15	151-75159	96

Subject to technical changes.