













Inspired by design

EdgeClips were developed for a luxury car. The cables needed to be routed precisely along an edge where neither drilling nor welding was permitted. The newly developed EdgeClip solved the problem so brilliantly that this smart cable routing solution was quickly applied to other models all over the world. We now offer around 90 different versions that are used in different industries.

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Material Specification Overview

MATERIAL	Material Shortcut	Operating Temperature	Colour**	Flammability	Material Properties*	Material Specifications
Aluminium alloy	AL	-40 °C to +180 °C	Natural (NA)		<ul style="list-style-type: none"> Corrosion resistant Antimagnetic 	RoHS
Chloroprene Rubber	CR	-20 °C to +80 °C	Black (BK)		<ul style="list-style-type: none"> Weather resistant High yield strength 	RoHS
Ethylene Tetrafluoroethylene (Tefzel®)	E/TFE	-80 °C to +170 °C	Blue (BU)	UL 94 V0	<ul style="list-style-type: none"> Resistance to radioactivity UV resistant, not moisture sensitive Good chemical resistance to acids, bases, oxidizing agents 	RoHS
Polyacetal	POM	-40 °C to +90 °C, (+110 °C, 500 h)	Natural (NA)	UL 94 HB	<ul style="list-style-type: none"> Limited brittleness sensitivity Flexible at low temperature Not moisture sensitive Robust on impact 	RoHS
Polyamide 11	PA11	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK)	UL 94 HB	<ul style="list-style-type: none"> Bio-plastic, derived from vegetable oil Strong impact resistance at low temperature Very low moisture absorption Weather resistant Good chemical resistance 	HF RoHS
Polyamide 12	PA12	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK)	UL 94 HB	<ul style="list-style-type: none"> Good chemical resistance to acids, bases, oxidizing agents UV resistant 	HF RoHS
Polyamide 4.6	PA46	-40 °C to +130 °C, (+150 °C, 5000 h; +195 °C, 500 h)	Natural (NA), Grey (GY)	UL 94 V2	<ul style="list-style-type: none"> Resistance to high temperatures Very moisture sensitive Low smoke sensitivity 	HF LFH RoHS
Polyamide 6	PA6	-40 °C to +80 °C	Black (BK)	UL 94 V2	<ul style="list-style-type: none"> High yield strength 	RoHS
Polyamide 6, high impact modified	PA6HIR	-40 °C to +80 °C	Black (BK)	UL 94 HB	<ul style="list-style-type: none"> Limited brittleness sensitivity Higher flexibility at low temperature 	RoHS
Polyamide 6.6	PA66	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK), Natural (NA)	UL 94 V2	<ul style="list-style-type: none"> High yield strength 	HF RoHS
Polyamide 6.6, glass-fibre reinforced	PA66GF13	-40 °C to +105 °C	Black (BK)	UL 94 HB	<ul style="list-style-type: none"> Good resistance to lubricants, fuels, salt water and solvents 	HF RoHS
Polyamide 6.6, heat and UV-stabilised	PA66HSUV	-40 °C to +105 °C	Black (BK)	UL 94 V2	<ul style="list-style-type: none"> High yield strength Modified elevated maximum temperature UV resistant 	HF RoHS
Polyamide 6.6, heat stabilised	PA66HS	-40 °C to +105 °C	Black (BK), Natural (NA)	UL 94 V2	<ul style="list-style-type: none"> High yield strength Modified elevated maximum temperature 	HF RoHS
Polyamide 6.6, high impact modified	PA66HIR	-40 °C to +80 °C, (+105 °C, 500 h)	Black (BK)	UL 94 HB	<ul style="list-style-type: none"> Limited brittleness sensitivity Higher flexibility at low temperature 	RoHS
Polyamide 6.6, high impact modified, heat and UV-stabilised	PA66HIRHSUV	-40 °C to +110 °C	Black (BK)	UL 94 HB	<ul style="list-style-type: none"> Limited brittleness sensitivity Higher flexibility at low temperature Modified elevated maximum temperature High yield strength, UV resistant 	RoHS
Polyamide 6.6, high impact modified, heat stabilised	PA66HIRHS	-40 °C to +105 °C	Black (BK)	UL 94 HB	<ul style="list-style-type: none"> Limited brittleness sensitivity Higher flexibility at low temperature Modified elevated maximum temperature 	RoHS
Polyamide 6.6, high impact modified, scan black)	PA66HIR(S)	-40 °C to +80 °C, (+105 °C, 500 h)	Black (BK)	UL 94 HB	<ul style="list-style-type: none"> Limited brittleness sensitivity Higher flexibility at low temperature 	RoHS
Polyamide 6.6, UV-resistant	PA66W	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK)	UL 94 V2	<ul style="list-style-type: none"> High yield strength UV resistant 	HF RoHS

MATERIAL	Material Shortcut	Operating Temperature	Colour**	Flammability	Material Properties*	Material Specifications
Polyamide 6.6 , with metal particles	PA66MP	-40 °C to +85 °C, (+105 °C, 500 h)	Blue (BU)	UL 94 HB	• High yield strength • Metal and X-Ray detectable	HF RoHS
Polyamide 6.6 , with metal particles	PA66MP+	-40 °C to +85 °C	Blue (BU)	not flame-retardant	• High yield strength • Metal and X-Ray detectable	HF RoHS
Polyamide 6.6 V0	PA66V0	-40 °C to +85 °C	White (WH)	UL 94 V0	• High yield strength • Low smoke emission	HF LFH RoHS
Polyester	SP	-50 °C to +150 °C	Black (BK)		• UV resistant • Good chemical resistance to most acids, bases and oils	HF LFH RoHS
Polyetheretherketone	PEEK	-55 °C to +240 °C	Beige (BGE)	UL 94 V0	• Resistance to radioactivity • Not moisture sensitive • Good chemical resistance to acids, bases, oxidising agents	HF LFH RoHS
Polyethylene	PE	-40 °C to +50 °C	Black (BK), Grey (GY)	UL 94 HB	• Low moisture absorption • Good chemical resistance to most acids, bases, alcohol, oils	HF RoHS
Polyolefin	PO	-40 °C to +90 °C	Black (BK)	UL 94 V0	• Low smoke emissions	HF LFH RoHS
Polypropylene	PP	-40 °C to +115 °C	Black (BK), Natural (NA)	UL 94 HB	• Floats in water • Moderate yield strength • Good chemical resistance to acids, bases and solvents	HF RoHS
Polypropylene, Ethylene Propylene Diene Terpolymer rubber free of Nitrosamine	PP, EPDM	-20 °C to +95 °C	Black (BK)	UL 94 HB	• Good resistance to high temperature • Good chemical and abrasion resistance	HF RoHS
Polypropylene with metal particles	PPMP	-40 °C to +115 °C	Blue (BU)	UL 94 HB	• Metal and X-Ray detectable • Heat resistant • Moderate yield strength • Good chemical resistance	RoHS
Polypropylene with metal particles	PPMP+	-40 °C to +85 °C	Blue (BU)	not flame-retardant	• High yield strength • Metal and X-Ray detectable	HF RoHS
Polyvinylchloride	PVC	-10 °C to +70 °C	Black (BK), Natural (NA)	UL 94 V0	• Low moisture absorption • Good chemical resistance to acids, bases, salts, alcohol, oils	RoHS
Stainless Steel, Stainless Steel	SS304, SS316	-80 °C to +538 °C	Natural (NA)	non-burning	• Corrosion resistant • Antimagnetic • Weather resistant • Chemical resistance • SS316 also resistant against seawater, salt spray and anorganic acids	HF LFH RoHS
Thermoplastic Polyurethane	TPU	-40 °C to +85 °C	Black (BK)	UL 94 HB	• High elasticity • Good chemical resistance to acids, bases and oxidising agents	HF 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 also uses equivalent E/TFE raw material from other suppliers.

**Further colours available on request.

*These details are only guide values. They should not be regarded as a exhaustive material specification and are no substitute for suitability tests. Please see our datasheets for further details.

HF = Halogenfree

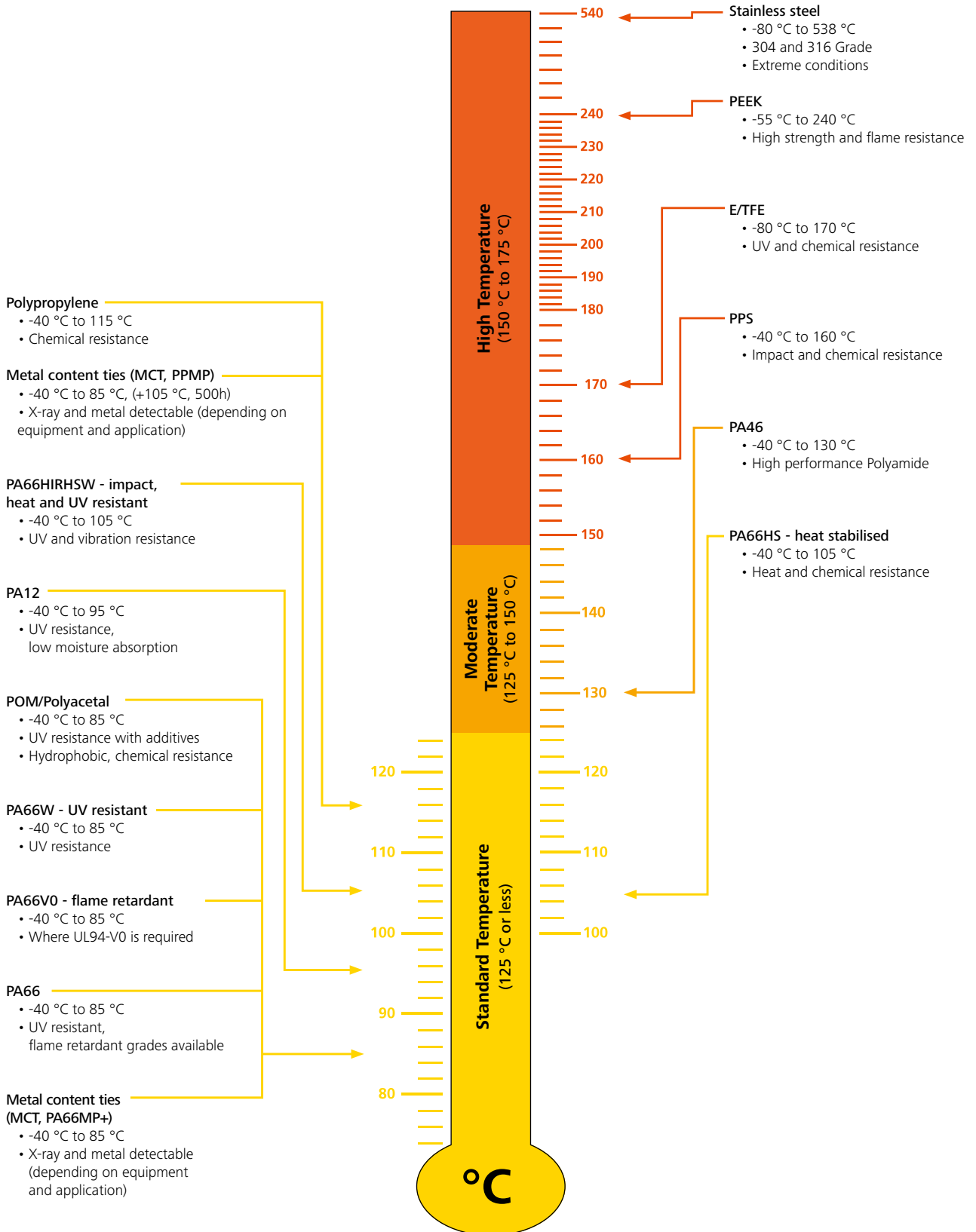
LFH = Limited Fire Hazard

RoHS = Restriction of Hazardous Substances

 = Minimum Loop Tensile Strength for Cable Ties (newton)

Operating temperature ranges of cable tie materials

This Material Selection Guide illustrates the minimum and maximum operating temperatures for cable ties according to the material from which we manufacture them. It gives an overview of materials HellermannTyton uses to manufacture cable ties. Please contact our sales team to check availability of products in your preferred material.



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.

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 we recommend our range of products made from UV-stabilised polyamide (PA66W).

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.

Properties of Polyamide PA11/PA12

Apart from PA66, there are polyamides which are less hygroscopic. These include PA11/PA12.

PA11/PA12 have 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 PA11/PA12 ideal for use outdoors, in particular when requirements may include impact resistance.

The water absorption of PA11/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).

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

Properties of Polyetheretherketone PEEK

PEEK, a linear aromatic polymer is semi-crystalline and is widely regarded as the highest performance thermoplastic material currently available. A summary of key physical properties is as follows:

High temperature performance

- Melting temperature of +343 °C
- Continuous use temperature of +240 °C (UL 746B)

Wear resistance

- Outstanding wear resistance over wide ranges of pressure, velocity, temperature and counter facial roughness

Chemical resistance

- Excellent resistance to a wide range of chemical environments, even at elevated temperatures
- The only common environment that dissolves it is concentrated sulfuric acid

Fire, smoke and toxicity

- Highly stable and requires no flame-retardant additives to achieve a UL94 V0 rating at 1.45 mm thickness
- The composition and inherent purity of the material results in extremely low smoke and toxic gas emission in fire situations

Hydrolysis resistance

- PEEK is not attacked by water or pressurized steam
- Components that are constructed from these materials retain a high level of mechanical properties when continuously conditioned in water at elevated temperatures and pressures

Radiation resistance

- Excellent radiation resistance due to the energetically stable chemical structure of PEEK

Purity

- PEEK materials are inherently pure with exceptionally low levels of ionic extractables
- Excellent out gassing characteristics

This makes PEEK the right choice for any high performance application in any industry with a clearly outstanding continuous use temperature of +240 °C.

Properties of Ethylene Tetrafluoroethylene (E/TFE) - Tefzel®

E/TFE can be best described as a rugged thermoplastic with an outstanding balance of properties.

Mechanically, it is tough, has medium stiffness, impact and abrasion resistance.

E/TFE can perform successfully in applications where other materials are lacking in mechanical toughness, broad thermal capability, ability to meet severe environmental conditions.

Tefzel® is a registered trademark of DuPont.

Summary of key properties:

- No load continuous use temperature of +170 °C
- Weather resistant
- Inert to most solvents and chemicals
- Hydrolytically stable
- Substantially better resistance to radiation than other plastic materials

HellermannTyton cable ties conform to IEC62275 standard

HellermannTyton is a global manufacturer of cable management products who specialise in high performance fastening, connecting, routing, protecting and identifying solutions to diverse markets. The extensive product portfolio reflects our long-standing industry expertise. HellermannTyton has provided outstanding product quality and has met the high requirements of various industries for 80 years. Cable ties from the inside serrated (T-Series, Q-Series), the outside serrated (OS-Series) as well as our metal cable ties (MBT-Series and MST-Series) have been tested in accordance with the international cable tie standard IEC 62275 (Cable management systems - Cable ties for electrical installations).

Cable ties manufactured from the standard material Polyamide 6.6 (PA66), heat-stabilised Polyamide 6.6 (PA66HS), UV-stabilised Polyamide 6.6 (PA66W) and Stainless Steel grades SS304 and SS316 have been successfully tested and approved.

The standard includes the following tests:

- Installation test on minimum and maximum specified bundle diameters
- Installation test at minimum specified installation temperature
- Impact test at minimum specified operating temperature
- Minimum tensile strength (in the standard this is described as the loop test)
- Loop tensile test after heat ageing at the specified operating temperature
- Loop tensile test after heat cycling at the minimum and maximum operating temperatures
- Loop tensile test after humidity and heat cycling at the minimum and maximum operating temperatures
- Contribution to the spread of fire on both the actual product and test (tissue paper) substrate
- Loop tensile and visual tests after exposure to ultraviolet light radiation for PA66W ties
- Resistance to corrosion (dependent on material)
- Loop tensile test after vibration test for metallic cable ties

The following cable ties have been tested and certified

- T-Series inside-serrated in PA66-NA, PA66-BK, PA66HS-NA, PA66HS-BK, PA66W
- OS-Series outside-serrated in PA66-NA, PA66-BK, PA66HS-NA, PA66HS-BK, PA66W
- Q-Series inside-serrated in PA66-NA, PA66-BK, coloured PA66, PA66HS-NA, PA66HS-BK
- MBT-Series, uncoated in SS316 material grade
- MST-Series, uncoated in SS304 material grade



Material specification please see page 16.

In addition to the IEC62275, we are proud to offer our customers products which have been certified by well known and independent laboratories such as:



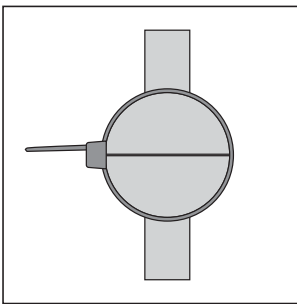
Profit from the knowledge and experience of HellermannTyton and the high-quality of our cable management solutions for your particular industry and market.

Determination of minimum tensile strength

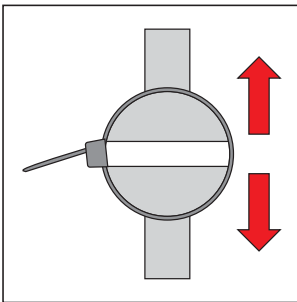
The minimum tensile strength is a critical selection criteria for cable ties. It expresses how much loading a cable tie can bear.

The test procedure to determine minimum tensile strength:

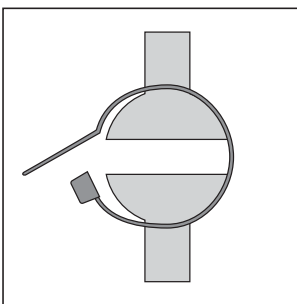
- Stabilisation to achieve equilibrium moisture content
- Set-up of the tensile test fixture
- Application of the tie on a split mandrel fixture
- Test speed



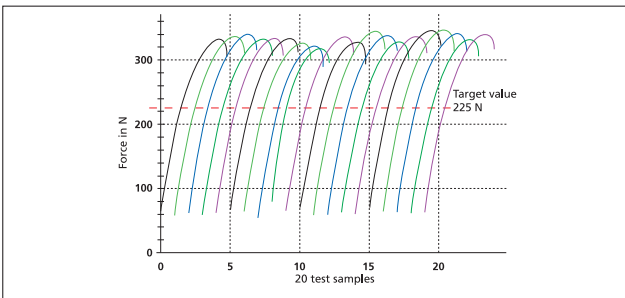
The cable tie is fixed onto a split mandrel fixture with the suitable cable tie application tool.



The mandrel is opened at a defined speed.



The loading at which the cable tie fails is determined. This value is stated in Newtons (N) and is recorded through a computer programme reading the tests. This programme produces graphs as outlined below.



Typical measurement protocol of a T50R made of PA66 with a minimum tensile strength of 225 N.

Explanation of minimum tensile strengths

What does a minimum tensile strength of 225 N (50 lbs) mean?

To explain what this value means, the mass with which the tie can be loaded is calculated. The unit of measurement of the mass is stated in kg. To do so, the unit Newton (N) is shown in the following way:

$$[N] = [kg * m/s^2]$$

The formula for calculating the mass is:

$$\text{Mass} = \text{minimum tensile strength} / \text{acceleration due to gravity}$$

The acceleration due to gravity is 9.81 m/s^2

$$\text{Mass} = \text{minimum tensile strength} / [kg * m/s^2] / 9.81 [m/s^2]$$

At a minimum tensile strength of 225 N (50 lbs) the mass is:

$$\text{Mass} = 225 [kg * m/s^2] / 9.81 [m/s^2]$$

The units m/s^2 cancel each other out, leaving the unit [kg] for the mass. Thus:

$$\text{Mass} = 225 / 9.81 \text{ kg} = 22.9 \text{ kg}$$

Therefore, a T50R cable tie with a minimum tensile strength of 225 N (50 lbs) can be loaded with 22.9 kg.

Conversely, with the required loading capacity the minimum tensile strength can be calculated by a mass:

$$\text{Min. tensile strength} = \text{mass} * 9.81 [m/s^2]$$

If the tie is to be loaded with, for example, 53 kg this produces:

$$\text{Minimum tensile strength} = [53 \text{ kg}] * 9.81 [m/s^2] = 520 \text{ N}$$

In order to withstand a load of 53 kg, the tie must therefore have a minimum tensile strength of 520 N. In this case, select our T120R with a minimum tensile strength of 535 N (120 lbs).



$$225 \text{ N} / 9.81 = 22.9 \text{ kg}$$



$$53 \text{ kg} * 9.81 = 520 \text{ N}$$



= Minimum Loop Tensile Strength for Cable Ties (Newton)

Introduction to the main locking technologies used for cable ties

HellermannTyton offers a wide range of cable ties for use in different applications. By constantly refining our products and satisfying the ever-changing demands of the market, various locking technologies have been developed. Below you will find a brief overview of three most common locking technologies and their characteristics.

Cable ties with plastic pawls

This technology is used in 90% of all polyamide (PA) cable ties applied by HellermannTyton. In order to cover a variety of applications, there are different variants of this system, for example: releasable versions, in-line versions, open head versions.

These are one-piece cable ties, the pawl is moulded as an integral part of the cable tie, thereby building in inherent strengths.

Locking technology

Positive locking is achieved by engaging the pawl with the strap serrations. This allows the cable tie to perform to the published minimum tensile strength, that is the loading that the cable tie can hold under application.

KR series cable ties

This cable tie is distinguished by its smooth strap and unique locking mechanism. With the KR series the chamfered head achieves an especially firm fit around the bundled material.

Locking technology

This locking technology takes advantage of the excellent deformation properties of polyamide (PA). Here, the glass fibre-reinforced locking pin (yellow) is forced into the strap by the use of an application tool - either the KR6/8 or KR8PNSE. The strap is deformed into the head of the tie by the application of the pin, thereby locking the cable tie in position and allowing the bundling of heavy loads.

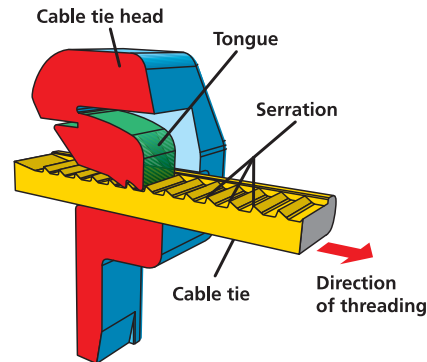
SST series of cable ties

Made of stainless steel grade 304 or 316, the MBT range of cable ties have no serrations on the strap and are threaded parallel through the head, gliding under a metal ball-bearing locking mechanism. By using an appropriate application tool like our MK9SST the cable tie is tensioned and the strap cut to a flush finish.

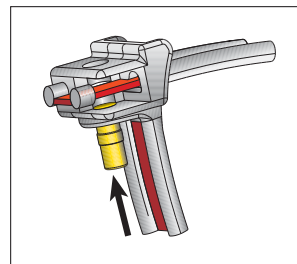
Locking technology

The strap is locked into the head by means of the small ball-bearing. The ball locks into the small end of the wedged shaped housing, forming a positive locking with the strap.

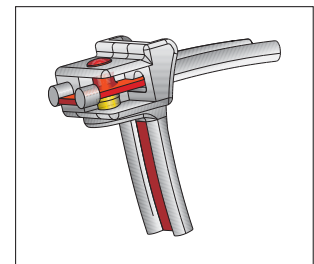
This cable tie is not suitable for rigid objects. Retraction of the ball-bearing (see drawing) is required into the small end of the wedged shaped housing to allow for a positive locking of the strap and also having a flush cut off at the end of the strap. This retraction cannot be ensured when bundling around inflexible materials such as metal pipes. The force by cutting the cable tie might end up in a rebound that could allow the ball moving back slightly. For rigid objects we therefore recommend a protective channel (LFPC) to be laid between strap and bundled object in order to compensate the rebound. The MBT locking technology allows for minimum tensile strengths of up to 7,000 Newton.



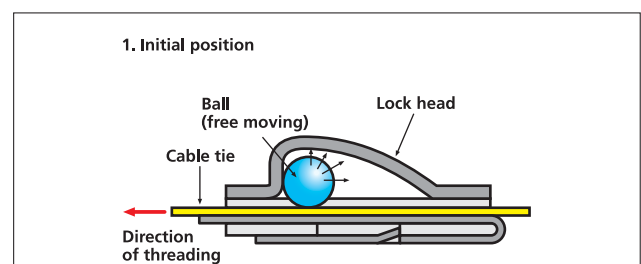
Locking technology of an outside serrated tie.



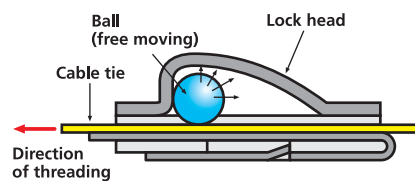
The unopened head of a KR-tie.



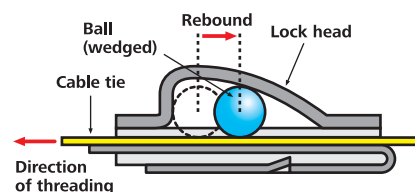
The cable tie (red) is locked into place with the pin.



1. Initial position






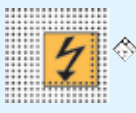
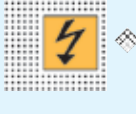






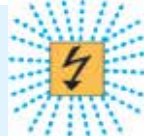




2. Ball locks cable tie by wedging.



Enclosures

IP Ratings

First numeral	
Protection against solid bodies	
IP	
0	 No protection
1	 Protected against solid bodies greater than 50 mm (e.g. involuntary hand contact)
2	 Protected against solid bodies greater than 12 mm (e.g. fingers)
3	 Protected against solid bodies greater than 2.5 mm (e.g. tools, cables...)
4	 Protected against solid bodies greater than 1 mm (e.g.: small tools, fine cables...)
5	 Protected against dust (no harmful deposits)
6	 Fully protected against dust

Second numeral	
Protection against liquids	
IP	
0	 No protection
1	 Protected against dripping water (condensation)
2	 Protected against falling water up to 15° from the vertical
3	 Protected against rain water up to 60° from the vertical
4	 Protected against water splashing in all directions.
5	 Protected against water jets from all directions
6	 Protected against wave-like water jets from all directions
7	 Protected against immersion
8	 Protected against the effects of prolonged immersion under water



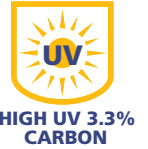
Cable Ties for outdoor use (UV-resistant)

T-Series in PA66W black

T-Series cable ties for bundling and securing cables, pipes and hoses. These cable ties can be used for almost any type of application.

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 around bundles
- Easy application either manually or with a processing tool
- Simple to insert due to the ergonomically bent tail
- UV-resistant



UV-resistant T-Series cable ties (PA66W).

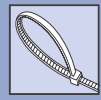


T-Series

PART NO.	Length (L)	Width (W)	Bundle Ø max.	N	Material	Colour	Pack Qty	Article-No.
T18RBK/W	100.0	2.5	22.0	80	PA66W	Black (BK)	100 pcs.	111-01960
T18RBK/W-1000	100.0	2.5	22.0	80	PA66W	Black (BK)	1,000 pcs.	111-01867
T18IBK/W	145.0	2.5	35.0	80	PA66W	Black (BK)	100 pcs.	111-02360
T18LBK/W	205.0	2.5	55.0	80	PA66W	Black (BK)	100 pcs.	111-02160
T25LBK/W	240.0	2.8	65.0	110	PA66W	Black (BK)	100 pcs.	111-02560
T30RBK/W	150.0	3.5	36.0	135	PA66W	Black (BK)	100 pcs.	111-03260
T30RBK/W-1000	150.0	3.5	35.0	135	PA66W	Black (BK)	1,000 pcs.	111-03280
T30LBK/W	198.0	3.5	50.0	135	PA66W	Black (BK)	100 pcs.	111-00947
T30LBK/W-1000	198.0	3.5	50.0	135	PA66W	Black (BK)	1000 pcs.	-
T30LLBK/W	290.0	3.5	80.0	135	PA66W	Black (BK)	100 pcs.	111-03580
T50S/W	150.0	4.6	35.0	225	PA66W	Black (BK)	100 pcs.	111-05860
T50RBK/W	200.0	4.6	50.0	225	PA66W	Black (BK)	100 pcs.	111-04860
T50RBK/W-1000	200.0	4.6	50.0	225	PA66W	Black (BK)	1,000 pcs.	111-00984
LK2ABK/W	270.0	4.6	73.0	225	PA66W	Black (BK)	100 pcs.	111-60160
T50IBK/W	300.0	4.6	85.0	225	PA66W	Black (BK)	100 pcs.	111-00952
T50IBK/W-1000	300.0	4.6	85.0	225	PA66W	Black (BK)	1,000 pcs.	111-05263
T50LBK/W	390.0	4.6	110.0	225	PA66W	Black (BK)	100 pcs.	111-05710
T50LBK/W-1000	390.0	4.6	110.0	225	PA66W	Black (BK)	1,000 pcs.	111-01610
T50LLBK	445.0	4.6	125.0	250	PA66	Black (BK)	500 pcs.	111-06002
T60RBK/W	300.0	4.8	85.0	250	PA66W	Black (BK)	100 pcs.	111-00751
T120IBK/W	300.0	7.6	80.0	535	PA66W	Black (BK)	100 pcs.	111-12160
T150RBK/W	365.0	7.6	100.0	670	PA66W	Black (BK)	100 pcs.	111-14860
T120RBK/W	387.0	7.6	100.0	535	PA66W	Black (BK)	100 pcs.	111-00944
T120MBK	460.0	7.6	125.0	535	PA66	Black (BK)	100 pcs.	111-12610
T120XMBK	600.0	7.6	175.0	535	PA66	Black (BK)	100 pcs.	111-12701
T120LBK/W	760.0	7.6	225.0	535	PA66W	Black (BK)	50 pcs.	111-12460
T150LBK/W	820.0	8.9	245.0	780	PA66W	Black (BK)	25 pcs.	111-15460
T150MBK/W	530.0	8.9	150.0	780	PA66W	Black (BK)	25 pcs.	111-15660
T150XLBK/W	1,095.0	8.9	330.0	780	PA66W	Black (BK)	25 pcs.	111-15502
T250MBK/W	565.0	12.4	150.0	1115	PA66W	Black (BK)	25 pcs.	111-25001
T250IBK	730.0	12.4	203.0	1,115	PA66	Black (BK)	25 pcs.	111-00507
LK5BK/SCAN	535.0	13.2	150.0	1,115	PA66HIR	Black (BK)	50 pcs.	111-60501
LK5BK/W	535.0	13.2	150.0	1,115	PA66W	Black (BK)	50 pcs.	111-60560

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.





Cable Ties Polyamide 6.6 standard (Natural)

T-Series in PA66 natural

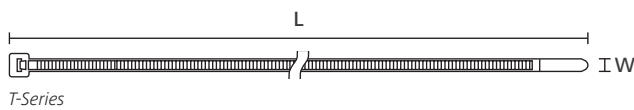
T-Series cable ties for bundling and securing cables, pipes and hoses. These cable ties can be used for almost any type of application.

Features and Benefits

- Natural 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



Standard T-Series cable ties – for almost any type of application (PA66).



**Material specification
please see page 14.**

PART NO.	Length (L)	Width (W)	Bundle Ø max.	N	Material	Colour	Pack Qty	Article-No.
T18RNA	100.0	2.5	22.0	80	PA66	Natural (NA)	100 pcs.	111-01919
T18RNA-1000	100.0	2.5	22.0	80	PA66	Natural (NA)	1,000 pcs.	111-01929
T18INA	145.0	2.5	35.0	80	PA66	Natural (NA)	100 pcs.	111-02319
T18LNA	205.0	2.5	55.0	80	PA66	Natural (NA)	100 pcs.	111-02119
T25LNA	240.0	2.8	65.0	110	PA66	Natural (NA)	100 pcs.	111-02519
T30RNA	150.0	3.5	35.0	135	PA66	Natural (NA)	100 pcs.	111-03219
T30RNA-1000	150.0	3.5	35.0	135	PA66	Natural (NA)	1,000 pcs.	111-03039
T30LLNA	290.0	3.5	80.0	135	PA66	Natural (NA)	100 pcs.	111-03549
T50SNA	150.0	4.6	35.0	225	PA66	Natural (NA)	100 pcs.	111-05819
T50RNA	200.0	4.6	50.0	225	PA66	Natural (NA)	100 pcs.	111-04819
T50RNA-1000	200.0	4.6	50.0	225	PA66	Natural (NA)	1,000 pcs.	111-01153
T50INA	300.0	4.6	85.0	225	PA66	Natural (NA)	100 pcs.	111-00951
T50INA-1000	300.0	4.6	85.0	225	PA66	Natural (NA)	1,000 pcs.	-
T50LNA	390.0	4.6	110.0	225	PA66	Natural (NA)	100 pcs.	111-05619
T50LNA-1000	390.0	4.6	110.0	225	PA66	Natural (NA)	1,000 pcs.	-
T60RNA	300.0	4.8	85.0	290	PA66	Natural (NA)	100 pcs.	111-00744
T120INA	300.0	7.6	80.0	535	PA66	Natural (NA)	100 pcs.	111-12119
T120RNA	387.0	7.6	100.0	535	PA66	Natural (NA)	100 pcs.	111-00942
T120MNA	460.0	7.6	125.0	535	PA66	Natural (NA)	100 pcs.	111-12619
T150LNA	820.0	8.8	245.0	780	PA66	Natural (NA)	25 pcs.	111-15419
T150MNA	530.0	8.9	150.0	780	PA66	Natural (NA)	25 pcs.	111-15619
T150LLNA	925.0	8.9	300.0	225	PA66	Natural (NA)	25 pcs.	111-15719
T150XLNA	1,095.0	8.9	330.0	780	PA66	Natural (NA)	25 pcs.	111-15519
T150XLLNA	1,325.0	8.9	405.0	780	PA66	Natural (NA)	25 pcs.	111-15304

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.





Cable Ties Polyamide 6.6 standard (Coloured)

T-Series in PA66 coloured

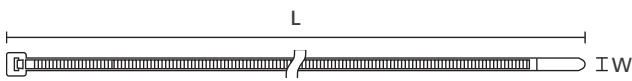
T-Series cable ties for bundling and securing cables, pipes and hoses. These cable ties can be used for almost any type of application.

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
- Other colours are available on request



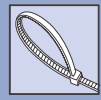
T-Series cable ties – ideally suited for colour coding.



T-Series

PART NO.	Length (L)	Width (W)	Bundle Ø max.		Material	Colour	Pack Qty	Article-No.
T30RBL	150.0	3.5	35.0	135	PA66	Blue (BU)	100 pcs.	116-03016
T30RGN	150.0	3.5	35.0	135	PA66	Green (GN)	100 pcs.	116-03015
T30RRD	150.0	3.5	35.0	135	PA66	Red (RD)	100 pcs.	116-03012
T30ROR	150.0	3.5	35.0	135	PA66	Orange (OR)	100 pcs.	116-03013
T30RYL	150.0	3.5	35.0	135	PA66	Yellow (YE)	100 pcs.	116-03014
T50RBU	200.0	4.6	50.0	225	PA66	Blue (BU)	100 pcs.	116-05016
T50RGN	200.0	4.6	50.0	225	PA66	Green (GN)	100 pcs.	116-05015
T50RRD	200.0	4.6	50.0	225	PA66	Red (RD)	100 pcs.	116-05012
T50ROG	200.0	4.6	50.0	225	PA66	Orange (OR)	100 pcs.	116-05013
T50RWH	200.0	4.6	50.0	225	PA66	White (WH)	100 pcs.	116-05019
T50RYE	200.0	4.6	50.0	225	PA66	Yellow (YE)	100 pcs.	116-05014
T50RVT	200.0	4.6	50.0	225	PA66	Violet (VT)	100 pcs.	111-04875
T50RBN	200.0	4.6	50.0	225	PA66	Brown (BR)	100 pcs.	116-05011
T25LRD	240.0	2.8	65.0	110	PA66	Red (RD)	100 pcs.	111-00188
T50IBU	300.0	4.6	86.0	225	PA66	Blue (BU)	100 pcs.	111-00916
T50IBN	300.0	4.6	86.0	225	PA66	Brown (BR)	100 pcs.	111-03211
T50IGN	300.0	4.6	86.0	225	PA66	Green (GN)	100 pcs.	111-01118
T50IRD	300.0	4.6	86.0	225	PA66	Red (RD)	100 pcs.	111-00518
T50IOE	300.0	4.6	86.0	225	PA66	Orange (OR)	100 pcs.	111-05200
T50IVT	300.0	4.6	86.0	225	PA66	Violet (VT)	100 pcs.	111-05240

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.



Cable Ties for food industry, detectable

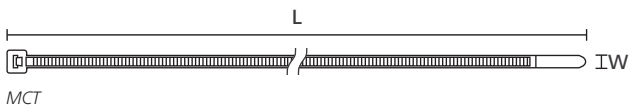
The Metal Content Tie is a cable tie specifically designed for use in the food and pharmaceutical processing industries. A unique manufacturing process, involving the inclusion of a metallic pigment, enables even small 'cut-off' sections of the tie to be detected by standard metal-detecting equipment.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

Features and Benefits


- Total metal dispersion throughout the tie
- Usable as part of HACCP process*
- Blue colour most common for easy visual detection
- Greatly reduces risk of contamination
- Magnetic and X-Ray detectable (detection level depending on specific application)
- Available in a wide range of sizes and colours



Our detectable MCT(S) cable ties used in the food and pharmaceutical industry.



Supports quality processes around the production of food stuffs, such as e.g. HACCP.

PART NO.	Length (L)	Width (W)	Bundle Ø max.		Material	Colour	Pack Qty	Article-No.
MCT18RBL	100.0	2.5	22.0	80	PA66MP	Blue (BU)	100 pcs.	111-01225
MCT30RBL	150.0	3.5	35.0	135	PA66MP	Blue (BU)	100 pcs.	111-00829
MCT50RBL	203.0	4.6	50.0	225	PA66MP	Blue (BU)	100 pcs.	111-00830
MCT50LBL	380.0	4.7	110.0	225	PA66MP	Blue (BU)	100 pcs.	111-00831
MCT120RBL	387.0	7.6	100.0	535	PA66MP	Blue (BU)	100 pcs.	111-01136

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

*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.





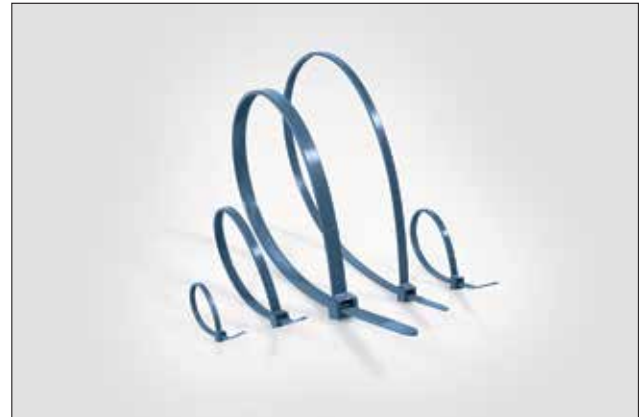
Cable Ties for food industry, detectable

MCT-Series / MCTS-Series PPMP

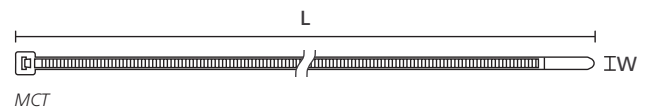
The Metal Content Tie is a cable tie specifically designed for use in the food and pharmaceutical processing industries. A unique manufacturing process, involving the inclusion of a metallic pigment, enables even small 'cut-off' sections of the tie to be detected by standard metal-detecting equipment.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


Features and Benefits

- High chemical and temperature resistance
- Blue color for easy visual detection
- Greatly reduces risk of contamination
- Magnetic and X-Ray detectable (detection level depending on specific application)
- MCTS ties have very good corrosion resistance
- Usable as part of HACCP process*
- PP cable ties tend to float in various liquids



MCTPP ties will float to the surface of liquids so they can easily be seen and removed.



TYPE	Length (L)	Width (W)	Bundle Ø max.		Material	Colour	Pack Qty	Article-No.
MCTPP18R	100.0	2.5	22.0	85	PPMP	Blue (BU)	100 pcs.	111-01664
MCTPP30R	150.0	3.5	35.0	130	PPMP	Blue (BU)	100 pcs.	111-01665
MCTPP50R	200.0	4.6	50.0	150	PPMP	Blue (BU)	100 pcs.	111-01666
MCTPP50L	390.0	4.6	110.0	150	PPMP	Blue (BU)	100 pcs.	111-01667
MCTS200	201.0	4.7	50.0	140	PPMP+	Blue (BU)	100 pcs.	111-01386
MCTPP120R	387.0	7.6	100.0	380	PPMP	Blue (BU)	100 pcs.	111-01668

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 Biodegradable


BDG - Series

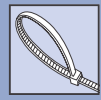
Cables ties made of Polylactic acid, a sustainable bioplastic from vegetable oil contributes to the formation of a recycling-oriented society. When treated in an appropriate environment such as a composting device, hydrolysis due to the effects of temperature and humidity, followed by biodegradation by microorganisms, and finally almost all of it decomposes into water and carbon dioxide.

Features

- Made of Polylactic acid, a sustainable bioplastic from vegetable oil
- Contributes to CO2 reduction
- Decomposes into water and carbon dioxide by composting equipment



TYPE	Length (L)	Width (W)	Bundle Ø max.		Material	Colour	Pack Qty	Article-No.
BDG100	100.0	2.5	22.0	85	PLA	White (WH)	100 pcs.	111-90010
BDG150	153.0	3.5	35.0	130	PLA	White (WH)	100 pcs.	111-90015
BDG200	202.0	4.7	50.0	150	PLA	White (WH)	100 pcs.	111-90020
BDG250	252.0	4.8	65.0	250	PLA	White (WH)	100 pcs.	111-90025



Cable Ties for higher chemical resistance and for temperatures up to +170 °C in Ethylene Tetrafluoroethylene

T-Series in E/TFE (Tefzel®) blue

T-Series cable ties for bundling and securing of cables, pipes and hoses. These cable ties can be used for almost any type of application, especially when a high chemical resistance is required.

Features and Benefits

- Blue high chemical resistance 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
- Simply to insert due to the ergonomically bent tail
- High temperature resistance
- No moisture absorption



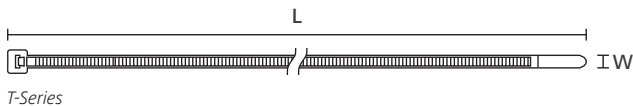
T-Series E/TFE cable ties – for higher chemical resistance up to +170 °C.



Material specification
please see page 14.



For more information on E/TFE mounts
please refer to KR-Series on page 60.



PART NO.	Length (L)	Width (W)	Bundle Ø max.	N	Material	Colour	Pack Qty	Article-No.
T18R-TZ	100.0	2.5	22.0	80	E/TFE	Blue (BU)	100 pcs.	111-02446
T30R-TZ	150.0	3.5	36.0	133	E/TFE	Blue (BU)	100 pcs.	111-00698
T50R-TZ	201.0	4.7	50.0	222	E/TFE	Blue (BU)	100 pcs.	111-00732
T50I-TZ	300.0	4.6	85.0	222	E/TFE	Blue (BU)	100 pcs.	111-01603
T50L-TZ	382.0	4.7	105.0	222	E/TFE	Blue (BU)	100 pcs.	111-00718
T120R-TZ	387.0	7.4	105.0	535	E/TFE	Blue (BU)	50 pcs.	111-01125

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. 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.





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

T-Series in PA66HS natural and black

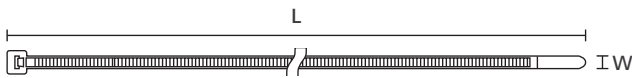
T-Series cable ties for bundling and securing cables, pipes and hoses. These cable ties can be used for almost any type of application.

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
- Simply to insert due to the ergonomically bent tail
- Higher temperature resistance up to +105 °C



Heat stabilised T-Series cable ties up to +105 °C.



T-Series

TYPE	Length (L)	Width (W)	Bundle Ø max.	N	Material	Colour	Pack Qty	Article-No.
T18S	83.0	2.3	16.0	80	PA66HS	Natural (NA)	1000 pcs.	111-00962
T18R	100.0	2.5	22.0	80	PA66HS	Black (BK)	100 pcs.	111-01950
	100.0	2.5	22.0	80	PA66HS	Natural (NA)	1,000 pcs.	111-01866
T18I	145.0	2.5	35.0	80	PA66HS	Black (BK)	100 pcs.	111-02358
	145.0	2.5	35.0	80	PA66HS	Natural (NA)	1,000 pcs.	111-02359
T18L	205.0	2.5	55.0	80	PA66HS	Black (BK)	100 pcs.	111-02049
	205.0	2.5	55.0	80	PA66HS	Natural (NA)	100 pcs.	111-02159
T30R	150.0	3.5	35.0	135	PA66HS	Natural (NA)	100 pcs.	111-03259
	150.0	3.5	35.0	135	PA66HS	Black (BK)	100 pcs.	111-03250
	150.0	3.5	35.0	135	PA66HSW	Black (BW)	100 pcs.	111-01211
T30L	198.0	3.5	50.0	135	PA66HS	Black (BK)	100 pcs.	111-03450
	198.0	3.5	50.0	135	PA66HS	Natural (NA)	100 pcs.	111-03459
T30LL	290.0	3.5	80.0	135	PA66HS	Black (BK)	1,000 pcs.	111-03640
	290.0	3.5	80.0	135	PA66HS	Natural (NA)	100 pcs.	111-01555
T40R	175.0	4.0	40.0	180	PA66HS	Black (BK)	100 pcs.	111-01618
	175.0	4.0	40.0	180	PA66HS	Natural (NA)	100 pcs.	111-03859
T50S	150.0	4.6	35.0	225	PA66HS	Natural (NA)	100 pcs.	111-05859
	150.0	4.6	35.0	225	PA66HS	Black (BK)	100 pcs.	111-05850
T50R	200.0	4.6	50.0	225	PA66HSW	Black (BK)	100 pcs.	111-01278
	200.0	4.6	50.0	225	PA66HS	Natural (NA)	100 pcs.	111-04855
T50I	300.0	4.6	85.0	225	PA66HS	Black (BK)	100 pcs.	111-05250
	300.0	4.6	85.0	225	PA66HS	Natural (NA)	100 pcs.	111-00953
	300.0	4.6	85.0	225	PA66HSW	Black (BK)	100 pcs.	111-00954

All dimensions in mm. Subject to technical changes.

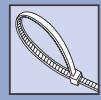
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Note:

Please see below information on why the HS(heat stabilised) cable ties discolour over time.

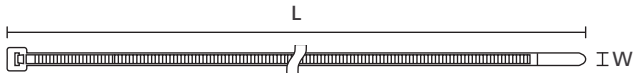
The reason the PA66 HS changes colour is that the heat stabiliser used is based on copper additives, as these are exposed to light and moisture they change colour towards a green/brown colour, this changes overtime depending upon length of time and the amount of light they have been exposed to.

The colour change does not alter the performance of the product. The different grades used and particular tie shapes and sizes also impact how this appears in the final product.



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

T-Series in PA66HS natural and black



T-Series

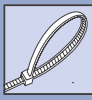


Material specification please see page 14.

TYPE	Length (L)	Width (W)	Bundle Ø max.	N	Material	Colour	Pack Qty	Article-No.
T50L	390.0	4.6	110.0	225	PA66HS	Black (BK)	100 pcs.	111-05450
	390.0	4.6	110.0	225	PA66HS	Natural (NA)	100 pcs.	111-05655
	390.0	4.6	110.0	225	PA66HSW	Black (BK)	100 pcs.	111-01226
T80R	210.0	4.7	55.0	355	PA66HS	Black (BK)	1,000 pcs.	117-08005
	210.0	4.7	55.0	355	PA66HS	Natural (NA)	100 pcs.	111-05059
T80I	300.0	4.7	85.0	355	PA66HS	Black (BK)	100 pcs.	111-08250
	300.0	4.7	85.0	355	PA66HS	Natural (NA)	100 pcs.	111-08259
T80L	390.0	4.7	110.0	355	PA66HS	Black (BK)	100 pcs.	111-00388
	390.0	4.7	110.0	355	PA66HS	Natural (NA)	100 pcs.	111-05459
T120S	225.0	7.6	55.0	535	PA66HS	Black (BK)	50 pcs.	111-12850
	225.0	7.6	55.0	535	PA66HS	Natural (NA)	50 pcs.	111-12824
T150R	365.0	7.6	100.0	670	PA66HS	Black (BK)	100 pcs.	111-01636
T150R(H)	365.0	7.6	100.0	670	PA66HS	Black (BK)	100 pcs.	111-01156
	365.0	7.6	100.0	670	PA66HS	Natural (NA)	100 pcs.	111-15069
T120R(E)	387.0	7.6	100.0	535	PA66HS	Black (BK)	100 pcs.	111-12050
	387.0	7.6	100.0	535	PA66HS	Natural (NA)	100 pcs.	111-12059
T120M	460.0	7.6	125.0	535	PA66HS	Black (BK)	100 pcs.	111-00153
T120XM	600.0	7.6	175.0	535	PA66HS	Black (BK)	50 pcs.	111-12700
	600.0	7.6	175.0	535	PA66HS	Natural (NA)	50 pcs.	111-12719
T120L	760.0	7.6	225.0	535	PA66HS	Black (BK)	50 pcs.	111-12440
	760.0	7.6	225.0	535	PA66HS	Natural (NA)	50 pcs.	111-12449
T150L	820.0	8.8	245.0	780	PA66HS	Black (BK)	25 pcs.	111-15410
T150M	530.0	8.9	150.0	780	PA66HS	Black (BK)	25 pcs.	111-15609
T150XL	1,095.0	8.9	330.0	780	PA66HS	Black (BK)	25 pcs.	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.





Cable Ties for parallel routing

DH-Series

Ideal for running two cables in parallel that need to be separated. These ties allow for installation of a second cable run without the need for additional cable ties.

The DH ties are also widely used within the packaging industry - the first loop closes and secures the bag, whilst the second loop can be made into a carrying handle (subject to weight).

Features and Benefits

- Available in a wide range of materials
- Cable tie designed with two heads which creates an inside and outside serrated loop
- For parallel routing of two bundles with only one cable tie
- Bundles can be of different diameter
- Easy application either manually or with a processing tool



DH-Series cable ties for parallel routing.



DH-Series

PART NO.	Length (L)	Width (W)	Ø max. side loops		Min. Tensile Strength 2nd loop (N)	Material	Colour	Pack Qty	Article-No.
T50RDHBK	210.0	4.7	19.0	225	180 N	PA66	Black (BK)	100 pcs.	117-05004
T50LDHBK/W	395.0	4.7	50.8	225	180 N	PA66W	Black (BK)	100 pcs.	117-05460

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 material PA66V0 are suitable for applications where safety regulations, e. g. reduction of smoke and dangerous gases, are required.

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



Outside serrated OS-Series cable tie with smooth surface to the bundle.



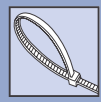
OS-Series



The curved head design of the OS-Series

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

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 kickdown lever

REL-Series

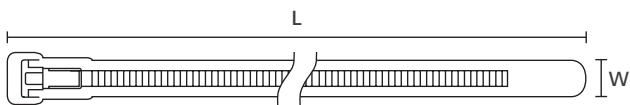
Ideal for use in applications where there is the need to repeatedly open and close the tie.

Features and Benefits

- Releasable and reusable cable tie in black and natural colour (even UV-resistant)
- Extremely easy-to-operate release mechanism
- Opens simply and quickly with one hand
- Inside serrated



Releasable and reusable cable tie, REL-Series.



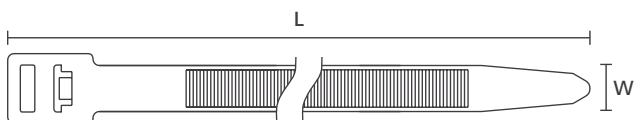
REL-Series

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

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.



Releasable cable tie REL250-Series.



Releasable cable tie REL250-Series

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



Cable Tie with quick release mechanism Speedy-Click

SpeedyTie

The versatility of the SpeedyTie means that it is suitable for a multitude of applications like: electroinstallations, heating and ventilation, construction and exhibitions and trade fairs. Whether it is used for permanent or temporary solutions the SpeedyTie is 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 wide variety of applications
- Easy to handle wearing work gloves
- Available in signal yellow and in black



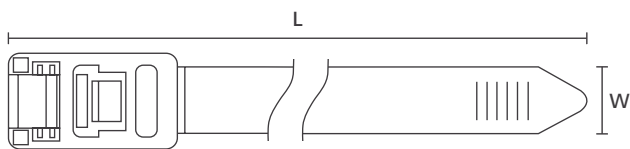
Patented



SpeedyTie - Patented quick release mechanism for quick and easy application.



Excess tails can be neatly tucked away.



SpeedyTie



SpeedyTie - Quick and easy.



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

PART NO.	Length (L)	Width (W)	Bundle Ø max.	N	Material	Colour	Pack Qty	Article-No.
RTT750YERD	752.0	13.0	210.0	888	PA66	Yellow (YE), Red (RD)	25 pcs.	115-00000
RTT750HR-BK	752.0	13.0	210.0	888	PA66HIR(S)	Black (BK)	5 pcs.	115-00030
RTM250M-BK	565.0	12.5	150.0	1115	PA66	Black (BK)	25 pcs.	131-75610

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 locked by glass fibre pin

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

Features and Benefits

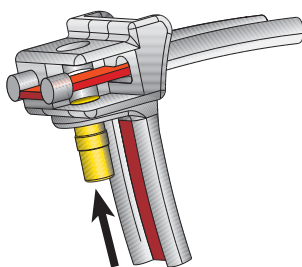
- Patented cable tie system
- Smooth strap which is locked into place with a glass-fibre reinforced pin
- For assembly a special KR-tool is needed
- Very secure and vibration resistant fixing
- KR-ties up to 426 mm are made as one piece
- Available in various materials, even in PA12, which is less hygroscopic



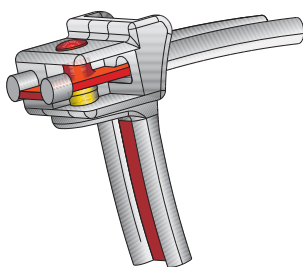
The KR-Series has been repeatedly proven in high vibration applications.



Patented



The unlocked head of a KR-tie.



The cable tie (red) is locked into place with the pin.



KR-Series is available in different sizes.

KR-Series, 1-Piece



Cable tie KR-Series

TYPE	Length (L)	Width (W)	Bundle Ø max.	N	Material	Colour	Pack Qty	Article-No.
KR6/35	360.0	6.1	93.0	490	PA66	Natural (NA)	50 pcs.	121-63519
	360.0	6.1	93.0	490	PA66HS	Natural (NA)	50 pcs.	121-63555
	360.0	6.1	93.0	490	PA66W	Black (BK)	50 pcs.	121-63560
KR8/21	210.0	8.0	47.0	785	PA66HS	Natural (NA)	50 pcs.	121-82155
	210.0	8.0	47.0	785	PA66	Natural (NA)	50 pcs.	121-82119
	210.0	8.0	47.0	785	PA66W	Black (BK)	50 pcs.	121-82160

All dimensions in mm. Subject to technical changes.

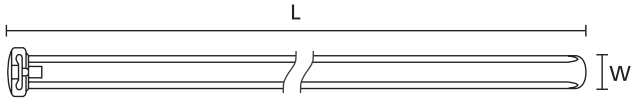
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.





Cable Tie locked by glass fibre pin

KR-Series, 1-Piece



Cable tie KR-Series

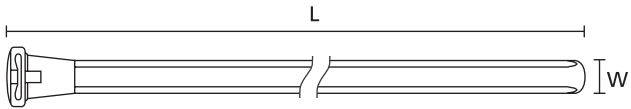
TYPE	Length (L)	Width (W)	Bundle Ø max.	N	Material	Colour	Pack Qty	Article-No.
KR8/33	337.0	8.0	86.0	390	PA12	Black (BK)	50 pcs.	121-83380
	337.0	8.0	86.0	785	PA66	Natural (NA)	50 pcs.	121-83319
	337.0	8.0	86.0	785	PA46	Grey (GY)	50 pcs.	121-83378
	337.0	8.0	86.0	785	PA66HS	Natural (NA)	50 pcs.	121-83355
	337.0	8.0	86.0	785	PA66W	Black (BK)	50 pcs.	121-83360
KR8/43	426.0	8.0	105.0	785	PA66HS	Black (BK)	50 pcs.	121-74360
	426.0	8.0	105.0	785	PA66HS	Natural (NA)	50 pcs.	121-74359

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



For product specific approvals and specifications please refer to the Appendix.

KR-Series, ultrasonic welded



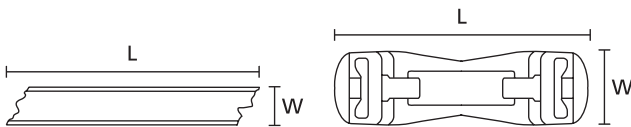
Cable tie KR-Series, ultrasonic welded

i Other dimensions are available on request.

TYPE	Length (L)	Width (W)	Bundle Ø max.	N	Material	Colour	Pack Qty	Article-No.
KR8/50	500.0	8.0	152.0	785	PA66	Natural (NA)	50 pcs.	121-05019
KR8/60	600.0	8.0	184.0	785	PA66W	Black (BK)	50 pcs.	121-06060

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

KR-Series, endless



Cable tie KR8S1

Double-head KR8C5

TYPE	Length (L)	Width (W)	N	Material	Colour	Pack Qty	Article-No.
KR8/S1	50.0 m	8.0	785	PA66HS	Natural (NA)	50.0 m	121-98151
	50.0 m	8.0	785	PA66W	Black (BK)	50.0 m	121-98160
KR8/C5	38.0	11.7	-	PA66HS	Natural (NA)	200 pcs.	121-58551
	38.0	11.7	-	PA66W	Black (BK)	200 pcs.	121-58560

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

SST-Series, Stainless Steel SS316

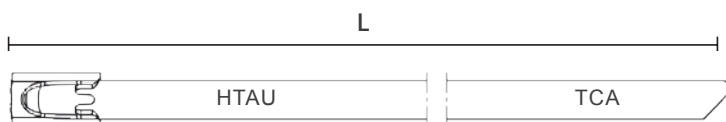
Metal ties are ideal for all applications that require high strength, reliability and fire resistance. The SST range of stainless steel cable ties can be used in chemical industries and on oil platforms as well as in mass transit, shipbuilding and mining industries. SST ties are also suitable for machine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

Features and Benefits

- Cable ties SST, made from stainless steel 316
- Patented non-releasable locking feature
- Corrosion resistant
- Weather resistant
- Outstanding chemical resistance
- High temperature resistant -80 °C to +538 °C
- Non-burning
- Non-flammable
- UL62275



Stainless Steel Cable Ties, uncoated.



SST-Series 4.6 mm and 7.9 mm width



Material specification please see page 15.

PART NO.	Length (L)	Width (W)	Bundle Ø max.	N	Material	Pack Qty
SST125X4.6	125	4.6	38	890	SS316	100 pcs.
SST150X4.6	150	4.6	46	890	SS316	100 pcs.
SST200X4.6	200	4.6	61	890	SS316	100 pcs.
SST290X4.6	290	4.6	90	890	SS316	100 pcs.
SST360X4.6	360	4.6	112	890	SS316	100 pcs.
SST520X4.6	520	4.6	163	890	SS316	100 pcs.
SST680X4.6	680	4.6	214	890	SS316	100 pcs.
SST840X4.6	840	4.6	265	890	SS316	100 pcs.
SST1050X4.6	1050	4.6	332	890	SS316	100 pcs.
SST200X7.9	200	7.9	62	1600	SS316	100 pcs.
SST360X7.9	360	7.9	112	1600	SS316	100 pcs.
SST520X7.9	520	7.9	163	1600	SS316	100 pcs.
SST680X7.9	680	7.9	214	1600	SS316	100 pcs.
SST840X7.9	840	7.9	265	1600	SS316	100 pcs.
SST1050X7.9	1050	7.9	332	1600	SS316	100 pcs.

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

Stainless Steel 316

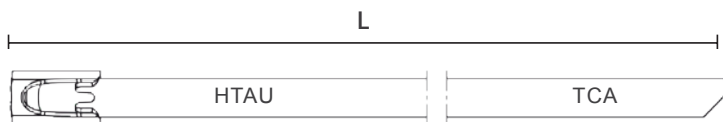
The range of stainless steel cable ties can be used in the most arduous of conditions or where the additional security, strength and fire resistance of a metal fixing is required. Used in all industries from mass transit, ship building, oil rigs, mining and chemical industry, theatres and exhibition 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

- Cable ties made from type 316 stainless steel
- Patented non-releasable locking feature
- Coated cable tie with smooth edges
- Comfortable handling and installation
- Eliminates contact corrosion between dissimilar materials during application
- Coated with polyester for insulation and outdoor applications
- UL62775



Stainless Steel Cable Ties, coated



SST-Series 4.6 mm and 7.9 mm width



Material specification
please see page 15.

PART NO.	Length (L)	Width (W)	Bundle Ø max.	N	Material	Pack Qty
SSCCTB125X4.6	125	4.6	38	890	SS316	100 pcs.
SSCCTB150X4.6	150	4.6	46	890	SS316	100 pcs.
SSCCTB200X4.6	200	4.6	61.9	890	SS316	100 pcs.
SSCCTB290X4.6	290	4.6	90.6	890	SS316	100 pcs.
SSCCTB360X4.6	360	4.6	112.8	890	SS316	100 pcs.
SSCCTB520X4.6	520	4.6	163.8	890	SS316	100 pcs.
SSCCTB680X4.6	680	4.6	214.8	890	SS316	100 pcs.
SSCCTB840X4.6	840	4.6	265.7	890	SS316	100 pcs.
SSCCTB200X7.9	200	7.9	61.9	1600	SS316	100 pcs.
SSCCTB290X7.9	290	7.9	90.6	1600	SS316	100 pcs.
SSCCTB360X7.9	360	7.9	112.8	1600	SS316	100 pcs.
SSCCTB520X7.9	520	7.9	163.8	1600	SS316	100 pcs.
SSCCTB680X7.9	680	7.9	214.8	1600	SS316	100 pcs.
SSCCTB840X7.9	840	7.9	265.7	1600	SS316	100 pcs.



Cable Ties for single hole application (Chassis Tie)

Button Head Ties

Button Head ties provide a one-piece mounting solutions for bundles, eliminating the need for additional mounts and fasteners. The strap contains serrations on both sides and has two opposing pawls recessed within the domed head, enabling the strap to be directed either way through the buttonhead.

Features and Benefits

A. Pilot Bushing

Protects the strap from abrasion on the mounting hold edge

B. Ribs

Add stability on the bottom of the head

C. Strap

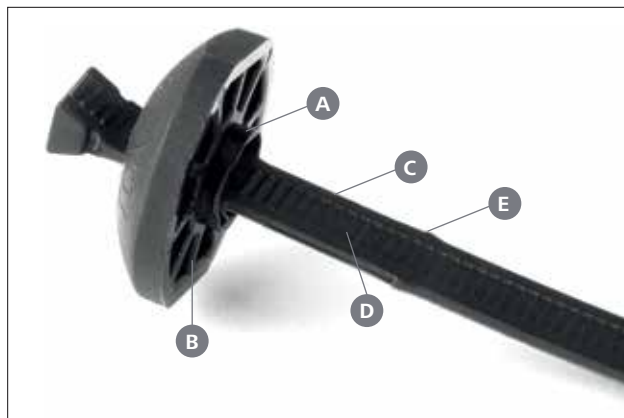
Enhances flexibility due to its edge radiuses

D. Serrations and Wedge

Provides optimal strength when the strap serrations are seated in the head

E. Lower Retainers

Holds HellermannTyton's MSBT120 saddle mounts in place during assembly (BT130 only)




BT375MBK - Button head tie with pilot bushing



BT375MBK - used for mounting cables via a single hole.



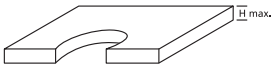
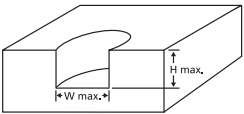

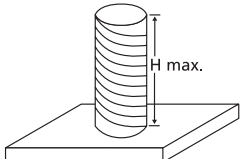
Fixing tie with deep hole anchor

PART NO.	Description	Length (L)	Width (W)	Bundle Ø max.		Material	Colour	Pack Qty	Article-No.
BHT375MBK	Button Head Ties with Retainers and Pilot Bushing	375	7.6	100	700	PA66HIRHS	Black (BK)	250 pcs.	150-47595

All dimensions in mm. Subject to technical changes.

Note: In order to assure the strap is fully locked in its final secure position, the installer must make sure that the "wedge" located at the end of the strap is fully seated in the button and flush with the top of the bottom. The EVO9 cable tie tool is recommended and end use testing is advised.

User guide for fixing ties

Application	Arrowhead	Fir Tree Mount	Rivet Wall Plug	Screw Mount	EdgeClip	Weld Stud Mount
	•	•		•		
		•	•	•		
					•	
						•



Arrowhead

This fixing tie is based on an arrowhead offering high extraction forces. The arrowhead is securely in place when a click can be heard and felt by the user.



Arrowhead with disc

The disc minimises the ingress of dust, dirt and water. Furthermore a safe fixation inside the drill hole is assured that withstands pressure from various directions.



Arrowhead with supporting legs

Arrowhead fixings with supporting legs offer good and stable fixation in drilled holes. The supporting legs generate additional pressure to assure a firm and secure fixing while taking up any variation in panel thickness. These ties are also suitable in high vibration applications.



Arrowhead without supporting legs

The arrowhead design assures good fixation while utilising lowest possible space.



Fir Tree Mount

Fir Tree Mounts can be pushed into pre-punched holes easily in panels or threaded, blind holes based on the low insertion forces. The design is ideally suited for a wide range of sheet thicknesses. The disc on top of the fir tree covers the hole and minimises the ingress of dust, dirt and water.



Weld Stud Mount

Many of the HellermannTyton weld stud mounts can easily be attached by hand ("soft push"). The design offers very low insertion forces that require no tools. The mounts can be removed by twisting to the left.



Weld Stud Fixings with Lateral Adjustment

The special oval shape of these mounts provides a 5-6 mm lateral adjustment to cater for any misalignment of the stud or incorrect positioning of ties on the cables. The bundle can therefore be moved when mounted.



EdgeClip

The EdgeClips are specifically designed to bundle and guide cable and wires on edges. Cost intensive drill holes for fixing are no longer required. EdgeClips are easily mounted by hand, the integrated metal clamp, securely keeping the clips on the edge.



EdgeClip Twistable

Ideally suited for fixations where bundles need to be flexibly guided. These EdgeClips are available with facilities for 90° or 360° rotation.



Cable and Hose Attachment

Excellent solution for subsequent attachment of pipes and wires to installed tubes.



Heavy Duty Application

These sturdy fixing ties can withstand vibrations. They are easy to apply and give a secure alignment to the bundle. There will be high tightening torque through metal bushing.



Two Piece Fixing Ties with Clip Coupler

The Coupler is an article to connect two cable ties for parallel bundling of tubes, harnesses or cables. Its design enables the cable ties to rotate up to 90° and allows flexible installations.



1-Piece Fixing Ties with Mounting Head for Screws

Screw Mount Ties

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

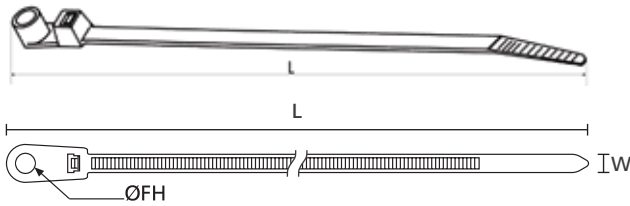
The tie is fitted to the panel first and then the cables can be added.

Features and Benefits

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



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



T()MR Series with Mounting Head for Screw fixing



Material specification please see page 14.

TYPE	Length (L)	Width (W)	Bundle Ø max.	N	Hole Ø (FH)	Mounting	Material	Colour	Pack Qty	Article-No.
T18MR	110.0	2.5	20.0	80	3.1	# 4 screw	PA66	Black (BK)	100 pcs.	113-00022
	110.0	2.5	20.0	80	3.1		PA66	Black (BK)	1000 pcs.	113-00024
	110.0	2.5	20.0	80	3.1		PA66	Natural (NA)	100 pcs.	113-00026
	110.0	2.5	20.0	80	3.1		PA66	Natural (NA)	1000 pcs.	113-00028
T30MR	160.0	3.5	32.0	135	4.3	# 8 screw	PA66	Black (BK)	100 pcs.	113-03010
	160.0	3.5	32.0	135	4.3		PA66	Natural (NA)	100 pcs.	113-03019
T50MR	215.0	4.7	45.0	225	5.4	# 10 screw	PA66	Black (BK)	100 pcs.	113-05000
	215.0	4.7	45.0	225	5.4		PA66	Natural (NA)	100 pcs.	113-05004
T50MI	315.0	4.7	85.0	225	5.5	# 10 screw	PA66W	Natural (NA)	100 pcs.	113-00032
	215.0	4.7	45.0	225	5.5		PA66W	Black (BK)	100 pcs.	113-00038
T50ML	390.0	4.7	100.0	225	5.5	# 10 screw	PA66	Natural (NA)	100 pcs.	113-05419
T120ML T120MR	395.0	7.6	102.0	535	6.5	# 1/4" screw	PA66	Black (BK)	50 pcs.	113-12020
	395.0	7.6	102.0	535	6.5		PA66	Black (BK)	50 pcs.	113-00001

All dimensions in mm. Subject to technical changes.



For product specific approvals and specifications please refer to the Appendix.



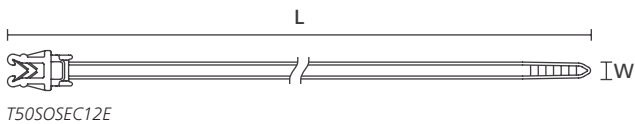
Fixing Ties for Edges

EdgeClip-Family

These cable ties and EdgeClip assemblies are ideal for use where holes are not acceptable or where due to temperature problems adhesives will fail. Once the cable tie is fastened around the cables the EdgeClip is presented ready for attaching to the panel. Widely used within the automotive and panel building industries these cable ties and EdgeClips save time and money.

Features and Benefits

- Easy assembly, just clip on per hand
- For edges of 1 – 3 mm or 3 – 6 mm
- Integrated metal clamp holds clip firmly in place
- Clamp consists of double tempered steel spring
- Ideal for applications where holes or adhesives are not suitable



T50ROSEC10 fitted onto a plastic panel to hold a Ø 6 mm harness.



Pre-assembled 2-Piece Fixing Tie with Edge Clip for edges of 1-3 mm.



1-Piece Fixing Tie T50SOSEC12 can be pushed easily on edges.



EdgeClips are also available on request for panel thickness from 4 - 7 mm.

TYPE	Drawing	Length (L)	Width (W)	Bundle Ø max.	N	Panel Thickness	Material	Colour	Article-No.
T50SOSEC12E		160.0	4.6	35.0	180	1.0 - 3.0	PA66HS	Black (BK)	148-00200
T50SOSEC13E		160.0	4.6	35.0	180	1.0 - 3.0	PA66HS	Black (BK)	126-00000
T40XEC5SP-E		85.0	4.0	15.0	178	1.0 - 3.0	PA66HS	Black (BK)	133-00059
T50SOSEC34E		155.0	4.6	35.0	180	1.0 - 3.0	PA66HS	Black (BK)	126-00036
T50SOSEC20-E		161.0	4.6	35.0	180	3.0 - 6.0	PA66HS	Black (BK)	126-00235

All dimensions in mm. Subject to technical changes.

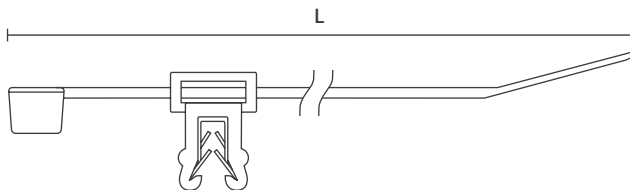


2-Piece Fixing Ties for Edges, 1.0 - 3.0 mm, Top Fixing

EdgeClip-Family

Features and Benefits

- Pre-assembled 2-piece fixing tie with EdgeClip
- Cable tie head can be moved after bundling
- EC9, EC10, EC21 and EC22 are for minimum bundle diameters of 1 mm
- For edges of 1 – 3 mm



Fixing Tie with EC4



T50ROSEC10 fitted onto a plastic panel to hold a Ø 6 mm harness.

TYPE	Drawing	Length (L)	Width (W)	Bundle Ø max.	N	Material Cable Tie	Material Foot Part	Colour	Article-No.
T30REC4A		148.0	3.6	33.0	135	PA66HS	PA66HIRHS	Black (BK)	156-00811
T50SOSEC4A		150.0	4.6	35.0	225	PA66HS	PA66HIRHS	Black (BK)	150-76093
T50ROSEC4A		200.0	4.6	45.0	225	PA66HS	PA66HIRHS	Black (BK)	156-00461
T50ROSEC4A-W		200.0	4.6	45.0	225	PA66W	PA66W	Black (BK)	156-00570
T50REC4A		202.0	4.6	45.0	225	PA66HS	PA66HIRHS	Black (BK)	156-01114
T30REC4B		148.0	3.6	35.0	135	PA66HS	PA66HIRHS	Black (BK)	156-00893
T50SOSEC4B		150.0	4.6	35.0	225	PA66HS	PA66HIRHS	Black (BK)	156-00109
T50ROSEC4B		200.0	4.6	45.0	225	PA66HS	PA66HIRHS	Black (BK)	156-00462
T18REC10SD		100.0	2.5	22.0	80	PA66HS	PA66HIRHS	Black (BK)	156-01253
T50SOSEC10		150.0	4.6	31.0	225	PA66HS	PA66HIRHS	Black (BK)	156-00015
T50ROSEC10		200.0	4.6	45.0	225	PA66HS	PA66HIRHS	Black (BK)	156-05904
T18REC9SD		100.0	2.5	22.0	80	PA66HS	PA66HIRHS	Black (BK)	156-01255
T50SOSEC9SD		150.0	4.6	31.0	225	PA66HS	PA66HIRHS	Black (BK)	156-00019
T50ROSEC9		200.0	4.6	45.0	225	PA66HS	PA66HIRHS	Black (BK)	156-05903
T50REC9SD		200.0	4.6	45.0	225	PA66HS	PA66HIRHS	Black (BK)	156-01280
Q50REC4A		210.0	4.7	45.0	220	PA66W	PA66W	Black (BK)	156-01085
Q50REC4B		210.0	4.7	45.0	220	PA66W	PA66W	Black (BK)	156-01086

All dimensions in mm. Subject to technical changes.



2-Piece Fixing Ties for Edges, 1.0 - 3.0 mm, Side Fixing

EdgeClip-Family

Features and Benefits

- Pre-assembled 2-piece fixing tie with EdgeClip
- Cable tie head can be moved after bundling
- EC9, EC10, EC21 and EC22 are for minimum bundle diameters of 1 mm
- For edges of 1 – 3 mm



T50ROSEC23 - the cable bundle runs parallel with the edge.

TYPE	Drawing	Length (L)	Width (W)	Bundle Ø max.	N	Material Cable Tie	Material Foot Part	Colour	Article-No.
T30REC5A		148.0	3.6	33.0	135	PA66HS	PA66HIRHS	Black (BK)	156-00003
T40REC5A		175.0	4.0	45.0	180	PA66HS	PA66HIRHS	Black (BK)	156-00559
T50SOSEC5A		150.0	4.6	31.0	225	PA66HS	PA66HIRHS	Black (BK)	156-00788
T50ROSEC5A		200.0	4.6	45.0	225	PA66HS	PA66HIRHS	Black (BK)	156-00463
T50REC5A		200.0	4.6	45.0	225	PA66HS	PA66HIRHS	Black (BK)	156-01037
T50SOSEC5B		150.0	4.6	31.0	225	PA66HS	PA66HIRHS	Black (BK)	156-00789
T50REC5B		200.0	4.6	45.0	225	PA66HS	PA66HIRHS	Black (BK)	150-40582
T50ROSEC5B		200.0	4.6	45.0	225	PA66HS	PA66HIRHS	Black (BK)	156-00464
T18REC21		100.0	2.5	18.0	80	PA66W	PA66HIRHS	Black (BK)	156-01258
T50SOSEC21		150.0	4.6	35.0	225	PA66HS	PA66HIRHS	Black (BK)	156-00017
T50ROSEC21		200.0	4.6	45.0	225	PA66HS	PA66HIRHS	Black (BK)	156-00951
T18REC21		100.0	2.5	20.0	80	PA66HS	PA66HIRHS	Black (BK)	156-01254
T50ROSEC22		200.0	4.6	45.0	225	PA66HS	PA66HIRHS	Black (BK)	156-00011
T50REC22		200.0	4.6	45.0	225	PA66W	PA66HIRHS	Black (BK)	156-00576
Q50REC5A		210.0	4.7	45.0	220	PA66W	PA66W	Black (BK)	156-01087
Q50REC5B		210.0	4.7	45.0	220	PA66W	PA66W	Black (BK)	156-01088

All dimensions in mm. Subject to technical changes.



2-Piece Fixing Ties for Edges, 3.0 - 6.0 mm, Top Fixing

EdgeClip-Family

Features and Benefits

- Pre-assembled 2-piece fixing tie with EdgeClip
- Cable tie head can be moved after bundling
- For minimum bundle diameters of 1 mm
- For edges of 3 – 6 mm



Pre-assembled 2-piece fixing tie with EdgeClip.

TYPE	Drawing	Length (L)	Width (W)	Bundle Ø max.	N	Material Cable Tie	Material Foot Part	Colour	Article-No.
T18ROSEC19		100.0	2.5	20.0	80	PA66HS	PA66HIRHS	Black (BK)	156-04600
T50SOSEC19		150.0	4.6	35.0	225	PA66HS	PA66HIRHS	Black (BK)	156-01309
T50REC19		200.0	4.6	45.0	225	PA66HS	PA66HIRHS	Black (BK)	156-00907
T50ROSEC19		200.0	4.6	45.0	225	PA66HS	PA66HIRHS	Black (BK)	156-01038
T50SOSEC20		150.0	4.6	35.0	225	PA66HS	PA66HIRHS	Black (BK)	156-00016
T50ROSEC20		200.0	4.6	45.0	225	PA66HS	PA66HIRHS	Black (BK)	156-00834

All dimensions in mm. Subject to technical changes.



Other combinations between cable tie and foot part available on request.

2-Piece Fixing Ties for Edges, 3.0 - 6.0 mm, Side Fixing

TYPE	Drawing	Length (L)	Width (W)	Bundle Ø max.	N	Material Cable Tie	Material Foot Part	Colour	Article-No.
T50ROSEC23		200.0	4.6	45.0	225	PA66HS	PA66HIRHS	Black (BK)	156-00774
T50ROSEC24		200.0	4.6	45.0	225	PA66HS	PA66HIRHS	Black (BK)	156-00775

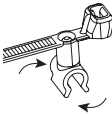
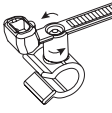
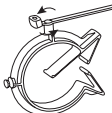
All dimensions in mm. Subject to technical changes.



Comprehensive brochure available on request.

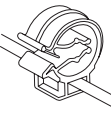


2-Piece Fixing Ties with Pipe Clip, twistable 360°

TYPE	Drawing	Length (L)	Width (W)	Bundle Ø max.	Attach to Ø	Material	Colour	Article-No.
T50SVC4S		155.0	4.7	35.0	3,8 - 4,2	PA66HS, PP	Black (BK), Natural (NA)	156-00447
T50SVC6,5		155.0	4.7	35.0	6,5 - 8,0	PA66HS, PA66HIRHS	Black (BK)	156-01371
T50SVCOC10-14		155.0	4.7	35.0	10,0 - 14,0	PA46	Grey (GY)	156-00134
T50SVCOC19-24,5		155.0	4.7	35.0	19,0 - 24,5	PA66HS, PA66HIRHS	Black (BK)	156-00136

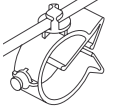
All dimensions in mm. Subject to technical changes.

2-Piece Fixing Ties with Pipe Clip

TYPE	Drawing	Length (L)	Width (W)	Bundle Ø max.	Attach to Ø	Material	Colour	Article-No.
T50ROC1B		202.0	4.6	45.0	4,0 - 10,0	PA66HS, PA66HIRHS	Black (BK)	156-00306

All dimensions in mm. Subject to technical changes.

2-Piece Fixing Ties with Pipe, twistable 90°

TYPE	Drawing	Length (L)	Width (W)	Bundle Ø max.	Attach to Ø	Material	Colour	Article-No.
T50ROC15CBTO-SD-SET		202.0	4.6	45.0	15,0 - 18,0	PA66HS, PA66HIRHS	Black (BK)	156-00419

All dimensions in mm. Subject to technical changes.



Fixing Parts with Special Adhesive

FlexTack-Series FMB for round and angled surfaces

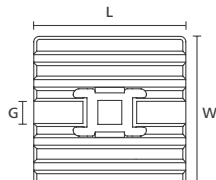
FlexTack cable tie mounts offering an innovative fixing solution especially for round and angled low energy surfaces like PP, PE or if drilling a hole is not possible. Suitable for a wide range of in- and outdoor applications on varnished or plastic or metal surfaces in many areas e. g. electrical cabinet, railway, aerospace, automotive and agriculture machinery.

Features and Benefits

- Flexible Mount for round and angled surfaces
- FMB mounts with homogeneous system of acrylic adhesive
- Allows greater design freedom and offers uniform stress distribution along with weight reduction
- High cohesive strength combined with good weathering resistance
- Innovative fixing solution for low energy surfaces like PP, PE or painted / varnished surfaces
- Protection foil with finger lift for easy peel off
- Temperature resistance up to +105°C



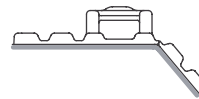
Flexible cable tie mount (FlexTack) in a concave application.



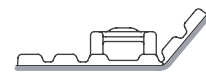
Flexible Adhesive Mount FMB4APT-I (plan view)



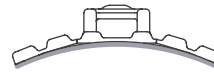
Flexible Adhesive Mount FMB4APT-I (side view)



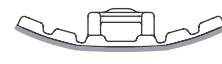
Flexible Adhesive Mount FMB4APT-I (down angled, side view)



Flexible Adhesive Mount FMB4APT-I (up angled, side view)



Flexible Adhesive Mount FMB4APT-I (convex, side view)



Flexible Adhesive Mount FMB4APT-I (concave, side view)

PART NO.	Length (L)	Width (W)	Height (H)	Strap Width max. (G)	Material	Colour	Adhesive	Pack Qty	Article-No.
FMB4APT-1-BK	28.0	28.0	6.3	5.4	PA66HS	Black (BK)	mod. Acrylate	100 pcs.	151-02219
FMB4APT-1-WT	28.0	28.0	6.3	5.4	PA66HS	White (WH)	mod. Acrylate	100 pcs.	151-01528

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 mount for uneven surfaces

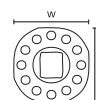
PMB5 pasty mount offers a fixing solution wherever screw fixing is not allowed. Due to a larger diameter the mount can even be installed onto uneven surfaces. PMB5 pasty mount is used in the railway industry as well as in the renewable energy industry. Further applications are in the ship building industry, in the electrical industry and the production of switching cabinets.

Features and Benefits

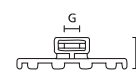
- PMB5 paste adhesive mount for fixings with paste / liquid adhesive
- Mount geometry offers a good form closure with cured adhesive
- Can even be installed onto uneven surfaces due to large diameter
- Can also be applied in combination with hot-melt adhesive, as mount is made of heat resistant PA66



PMB5 mount with paste adhesive.



PMB5 Mount (plan view)



PMB5 Mount (front view)

TYPE	Length (L)	Width (W)	Height (H)	Strap Width max. (G)	Material	Colour	Pack Qty	Article-No.
PMB5BK	36.0	36.0	10.7	4.8	PA66HS	Black (BK)	100 pcs.	151-02255

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



Fixing Parts with Special Adhesive

SolidTack mounts offering an innovative fixing solution especially for low energy surfaces like PP, PE or if drilling a hole is not possible. Suitable for a wide range of in- and outdoor applications on varnished or plastic or metal surfaces in many areas e. g. electrical cabinet, railway, aerospace, automotive and agriculture machinery.

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
- Protection foil with finger lift for easy peel off

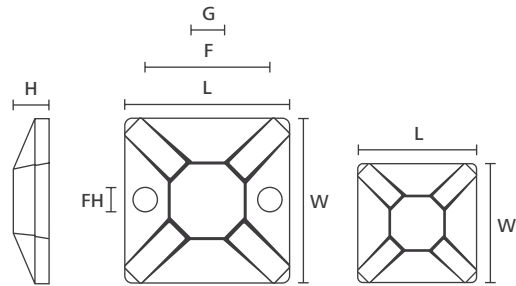


SolidTack products work on varnished and powder coated surfaces.

SolidTack-Series MB



One Step to the Web!



MB3-MB5 (side view)

MB3-MB5 (plan view)

Cable Tie Mount MB2A (plan view)

PART NO.	Length (L)	Width (W)	Height (H)	Hole Ø (FH)	Fixing Hole Centres (F)	Strap Width max. (G)	Material	Colour	Adhesive	Pack Qty	Article-No.
MB3APT	19.0	19.0	3.8	3.1	13.2	4.4	PA66	Black (BK)	mod. Acrylate	100 pcs.	115-02554
MB4APT	28.0	28.0	4.7	4.0	20.2	5.6	PA66	Black (BK)	mod. Acrylate	100 pcs.	115-02556
MB5APT	38.0	38.0	6.3	4.7	25.3	10.0	PA66	Black (BK)	mod. Acrylate	100 pcs.	151-01561

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

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 is impractical or undesirable.

Features and Benefits

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



MB-Series Mounts with square design / screwable, self adhesive.

MB-Series Square-Cut, screwable

PART NO.	Length (L)	Width (W)	Height (H)	Fixing Hole Centres (F)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Qty	Article-No.
MB3ANA	19.0	19.0	3.8	13.2	3.1	4.1	PA66	White (WH)	100 pcs.	151-28349
MB3ABK	19.0	19.0	3.8	13.2	3.1	4.1	PA66	Black (BK)	100 pcs.	151-28320
MB4ANA	28.0	28.0	4.7	20.0	4.0	5.4	PA66	White (WH)	100 pcs.	151-28469
MB4ABK	28.0	28.0	4.7	20.0	4.0	5.4	PA66	Black (BK)	100 pcs.	151-28412
MB5ANA	37.7	37.7	7.1	25.3	4.8	8.9	PA66	White (WH)	100 pcs.	151-28529
MB5ABK	37.7	37.7	7.1	25.3	4.8	8.9	PA66	Black (BK)	100 pcs.	151-28602

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.



Cable Tie Mounts for food industry, detectable

MCMB-Series, screwable

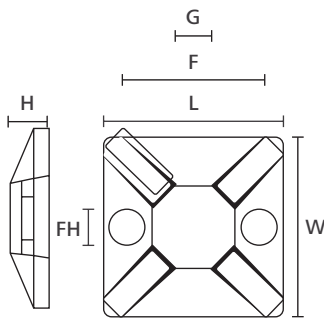
MCMB mounts are ideally suited for holding MCT-Series cable ties in position, even in areas of high vibration such as food manufacturing equipment and automated packaging machines.

Features and benefits

- Distinctive blue colour for easy visual detection
- Simple to install with a screw or bolt
- Provides a secure fixing solution for routing cables, tubes and hoses
- 4-way entry for the cable tie leads to a quicker and more flexible installation
- Magnetic and X-Ray detectable – perfect for use with food and pharmaceutical grade detection equipment
- Total metal dispersion provides consistent detectability, even for small cut-off pieces
- Greatly reduced risk of contamination within food products
- Can support quality assurance in the production of food stuffs, for example HACCP



Detectable fixing solution containing of MCMB mount and MCT cable tie.



MCMB Mount (side and plan view)

PART NO.	Length (L)	Width (W)	Height (H)	Fixing Hole Centres (F)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Qty	Article-No.
MCMB3	19.0	19.0	3.8	13.2	3.1	3.5	PA66MP	Blue (BU)	100 pcs.	151-01169
MCMB4	28.0	28.0	4.7	20.0	4.0	4.7	PA66MP	Blue (BU)	100 pcs.	151-01170

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.



Screw Fixing Mounts

LKC- and NY-Series with overlapping curved design

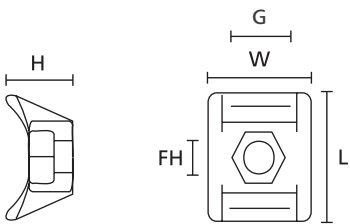
Designed specifically for holding heavier cable bundles, these mounting bases can be used in many industries from agriculture to truck manufacturing, they offer a very secure fixing and can be used with a wide variety of heavy duty cable ties up to 13 mm width.

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.

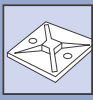


NY3256 (side view)

NY3256 (plan view)

TYPE	Drawing	Length (L)	Width (W)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Qty	Article-No.
LKC		25.0	17.0	13.5	5,5	8.0	PA66	Black (BK)	100 pcs.	151-27010
		25.0	17.0	13.5	5,5	8.0	PA66	Natural (NA)	100 pcs.	151-27019
LKCSF1		40.0	19.0	16.0	6,0	13.0	PA66W	Black (BK)	100 pcs.	151-01679
		40.0	19.0	16.8	6,0	13.0	PA66	Natural (NA)	100 pcs.	151-27219
		40.0	19.0	16.8	6,0	13.0	PA66	Black (BK)	100 pcs.	151-27202

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.



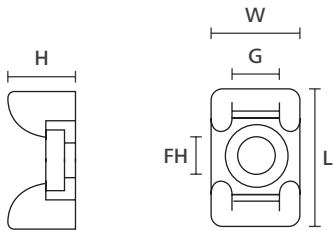
Screw Fixing Mounts

Cable Tie 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 8.3 mm width.

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



KR6G5, KR8G5 and CTM (side view)

KR6G5, KR8G5 and CTM (plan view)



Cable Tie Mounts KR6G5, KR8G5 and CTM.



The KR-E/TFE mounts can ideally be combined with the E/TFE-cable ties on page 30.



Supports quality processes around the production of food stuffs, such as e.g. HACCP.*

PART NO.	Length (L)	Width (W)	Material	Colour	Pack Qty	Article-No.
KR6G5BK/W	18.0	12.0	PA66	Natural (NA)	100 pcs.	151-24660

All dimensions in mm. Subject to technical changes.

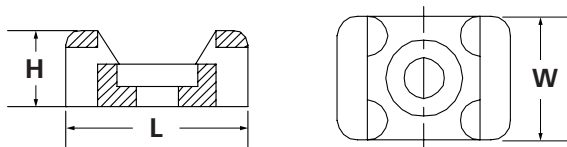
Screw Mounting Bases

Cable Tie Mounts

Designed specifically for holding heavier cable bundles, these mounting bases can be used in many industries from agriculture to truck manufacturing, they offer a very secure fixing and can be used with a wide variety of heavy duty cable ties up to 8.3 mm width.

Features and benefits

- The CTM series is designed to provide stability to wire bundles
- These mounts can accommodate miniature, intermediate, or standard cross-section cable ties.
- Each mount is secured with a single screw.



Cable Tie Mount CTM2WH.

PART NO.	Cable Tie Series	Mounting Screw Type	Length (L)	Width (W)	Height (H)	Material	Colour	Pack Qty	Article-No.
CTM20C2	T18 - T120	#8 (M4) Screw	21.8	15.5	9.4	PA66	Black (BK)	100 pcs.	151-30500
CTM2WH	T18 - T120	#8 (M4) Screw	21.8	15.5	9.4	PA66	White (WH)	100 pcs.	151-30504

All dimensions in mm. Subject to technical changes.





Harness Clip for Heavy Duty Applications, for Screws or threaded Bolts

These heavy duty mounts (HDM) have been primarily designed for use in the automotive and truck industry. Nowadays they can be found in a variety of applications requiring heavy duty mounting in areas like the railway, defence and/or agriculture industry.

Features and benefits

- Design offers secure alignment to the bundle
- Possible replacement of cushion clamps and/or metal clamps
- Eliminates the needs for multiple sized fix diameter clamps
- For heavy duty cable ties up to 12.7 mm width
- High tightening torque
- Easy maintenance of bundle by simply changing the cable tie



Heavy Duty Mounts HDM-Series, patent number US5820083.

Standard Torque Mounts

PART NO.	Drawing	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Qty	Article-No.
HDM19BK		19.3	36.3	16.7	4.7	12.7	PA66HIRHSUV	Black (BK)	100 pcs.	151-00134
HDM25BK		19.3	36.3	16.7	6.2	12.7	PA66HIRHSUV	Black (BK)	100 pcs.	151-00437
HDM312BK-100		19.3	36.3	16.7	7.8	12.7	PA66HIRHSUV	Black (BK)	100 pcs.	151-00439

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Medium Torque Mounts

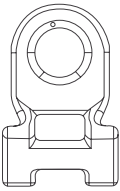
PART NO.	Drawing	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Qty	Article-No.
HDM321		24.0	46.0	20.7	8.31	12.7	PA66HIRHSUV	Black (BK)	500 pcs.	151-07100
HDM401		24.0	46.0	20.7	10.29	12.7	PA66HIRHSUV	Black (BK)	500	151-07300
HDM501		24.0	46.0	20.7	12.7	12.7	PA66HIRHSUV	Black (BK)	500 pcs.	151-07500

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.



High Torque Mounts (metal bushing)

The high torque mount is designed for use with power-assisted impact wrenches and is molded with a metal housing to withstand the forces required to tighten grade 8 bolts. The arched "H" profile of the saddle surface allows for a broad surface contact with the bundle, minimizing pinching and crushing of bundles, and it adjusts to a wide variety of bundle diameters.


TYPE	Drawing	Length (L)	Width (W)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Qty	Article-No.
HDM320		47.0	25.0	20.7	8,31	12.7	PA66HIR	Black (BK)	500 pcs.	151-07000
HDM400		47.0	25.0	20.7	10,29	12.7	PA66HIRHSW	Black (BK)	500 pcs.	151-07200
HDM500		47.0	25.0	20.7	12,95	12.7	PA66HIRHSW	Black (BK)	500 pcs.	151-07400

All dimensions in mm. Subject to technical changes.

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

High Torque Double Mounts (metal bushing)

This mount is designed for use with power-assisted impact wrenches and is molded with a metal brushing to withstand the forces required to tighten grade 8 bolts. The high torque double mount secures the bundle directly over the mounting fastener. The arched saddle surface allows for a broad surface contact with the bundle, minimising pinching and crushing of the paddles, and accommodates a wide variety of bundle diameters.


TYPE	Drawing	Length (L)	Width (W)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Qty	Article-No.
HDM375		89.0	34.5	25.2	10,29	12.7	PA66HIRHSW	Black (BK)	100 pcs.	151-00756

All dimensions in mm. Subject to technical changes.

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

Low Profile Mount

The Low Profile Mount is used in conjunction with a cable tie to attach a bundle to a flat surface, making it ideal for application where space is limited for positioning a bundle. This device is secured to the mounting surface with a mechanical fastener and features a counter bore for easy access with a socket. HellermannTyton cable ties, up to 12.7mm wide, are used to fasten bundles to the Low Profile Mount. Single bundles can be positioned on top of the mount, or two bundles can be separated using the two side saddles.

TYPE	Drawing	Length (L)	Width (W)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Qty	Article-No.
LPM25		45.1	24.9	16.7	6.7	12.7	PA66HIRHSUV	Black (BK)	500 pcs.	151-01122

All dimensions in mm. Subject to technical changes.

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



High Torque Mounts

PART NO.	Drawing	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Qty	Article-No.
HDM320		25.0	47.0	20.7	8.31	12.7	PA66HIRHSUV	Black (BK)	500 pcs.	151-02094
HDM400		25.0	47.0	20.7	10.29	12.7	PA66HIRHSUV	Black (BK)	500 pcs.	151-01224
HDM500		25.0	47.0	20.7	12.7	12.7	PA66HIRHSUV	Black (BK)	500 pcs.	151-02096
HDM375BDM4W		35.6	89.0	25.2	10.29	12.7	PA66HIRHSUV	Black (BK)	100 pcs.	151-02104

All dimensions in mm. Subject to technical changes.

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

Two Way Saddle Mount for heavy duty applications, for parallel separation

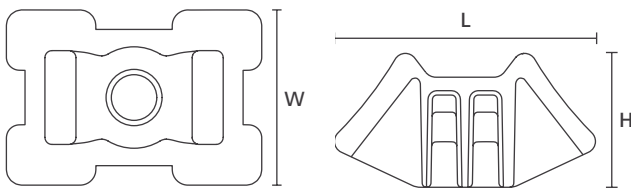
Heavy duty saddle mounts can be installed between two bundles to separate them and prevent chafing and wear. Fastened to a frame rail or mounting bracket, the special profile on the saddle mount provides a tight circumferential loop on large and small bundles. The saddle mount is an ideal assistant in many applications within the railway, truck and agricultural vehicle construction as well as in the ship building industry.

Features and benefits

- For parallel routing of different bundles to avoid wear and chafing
- Offers secure alignment to the bundle
- Can be used in combination with heavy duty cable ties
- Easy maintenance of bundle by simply changing the cable tie
- Made from impact modified, heat stabilized material



This saddle mount is installed between two bundles to separate them and prevent chafing and wear.



S2CM25

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Bundle Ø max.	Material	Colour	Pack Qty	Article-No.
S2CM25	30.0	45.0	23.0	6.0	12.7	89.0	PA66HIRHS	Grey (GY)	500 pcs.	151-29400
S2HM25	30.0	45.0	23.0	6.0	12.7	89.0	PA66HIRHSUV	Black (BK)	500 pcs.	151-29403

All dimensions in mm. Subject to technical changes.

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



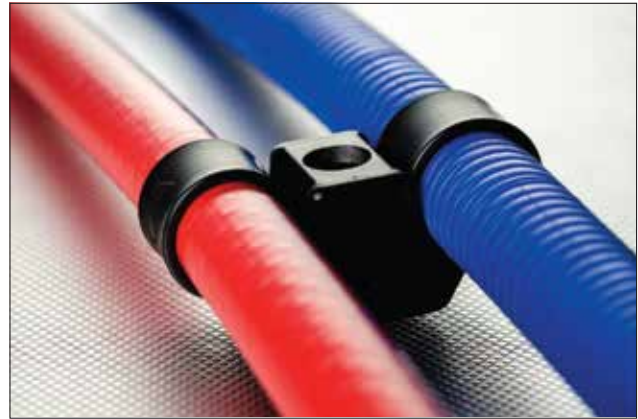
Dual Clamp Ties

Dual Clamp Ties

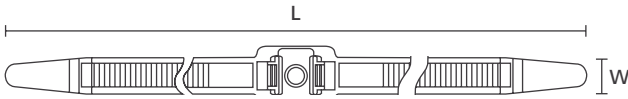
HellermannTyton's Dual-Clamp Ties are designed to provide parallel separation between hoses, wires, cables, and tubing to protect them from abrasion. These ties have an optional mounting hole for securing bundles along the chassis of trucks, trailers, and heavy duty equipment. The unique one-piece design features the dual head centered on the strap.

Features and Benefits

- Provides dual separation between bundles to prevent abrasion.
- High tensile strength delivers reliable performance for heavy duty applications.
- Wide strap is designed to minimize pinching of soft hoses and convoluted tubing.



Dual Clamp Tie, DCT90HIRH1.



PART NO.	Length (L)	Width (W)	Bundle Ø max.	N	Stud Ø	Material	Colour	Pack Qty	Article-No.
DCT9	331.0	12.7	33.0	667	M6	PA66HIRHSUV	Black (BK)	50 pcs.	115-30900
DCT11-50	487.7	12.7	58.0	667	M6	PA66HIRHSUV	Black (BK)	50 pcs.	115-31100
DCT11-500	487.7	12.7	58.0	667	M6	PA66HIRHSUV	Black (BK)	500 pcs.	115-31101

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Dual Clamp Ties

Stand Off Mounting Dual Clamp Tie

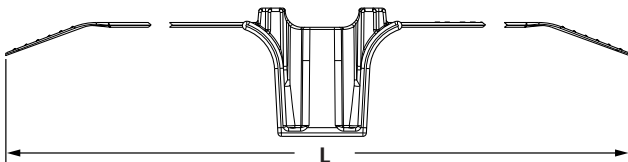
HellermannTyton's Stand Off Dual Clamp Ties offer the same features as the standard dual clamp tie, with a standoff mount that secures the bundle away from the surface. This protects the bundles from bolts and other protrusions.

Features and Benefits

- Wide strap minimizes pinching of soft hoses and convoluted tubing.
- Locking stud mount pawls allow for easy hand insertion.
- Nut or weld nesting counterbore provides flush mounting at the base.



Standoff Mounting Dual Clamp Tie, SDCTR312.



PART NO.	Length (L)	Width (W)	Bundle Ø max.	N	Stud Ø	Material	Colour	Pack Qty	Article-No.
SDCTR312	510.5	12.7	58.4	445	M8	PA66HIRHSUV	Black (BK)	250 pcs.	117-00012
SDCTL	663.0	12.7	86.4	445	M8	PA66HIRHSUV	Black (BK)	250 pcs.	157-00060

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.



Dual Swivel Saddle Spacers

DSWS4 Series

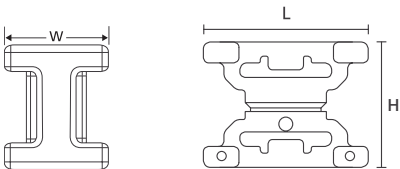
These saddle spacers are installed between two bundles (such as wires, cables, hoses, tubing, conduit, etc.) to separate and prevent chafing and wear. The mounts can be easily rotated by hand, allowing the bundles to be crossed and rotated at any angle. Cable ties, which secure the bundles, are used with the mounts. The dual swivel saddle spacers accommodate cable ties up to 12.7mm wide.

Features and Benefits

- H-profile of the saddles allows for broad surface contact with the bundle, which minimizes pinching and crushing of the bundle.
- Swivels in 360-degree motion to accommodate any area.
- Accommodates T50–T250 ties to handle both light-duty and heavy-duty applications.



DSWS4 - The spacers can be easily rotated by hand, allowing the bundles to be crossed and rotated at any angle.



PART NO.	Length (L)	Width (W)	Height (H)	Bundle Ø min.	Bundle Ø max.	Cable Tie Series	Material	Colour	Pack Qty	Article-No.
DSWS4-50	23.6	20.3	18.0	6.0	76.0	T50 - T250	PA66HS, POM	Black (BK)	50 pcs.	151-00644
DSWS4-2200	23.6	20.3	18.0	6.0	76.0	T50 - T250	PA66HS, POM	Black (BK)	2200 pcs.	151-06500

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Dual Swivel Saddle Spacers

DSWS5 Series

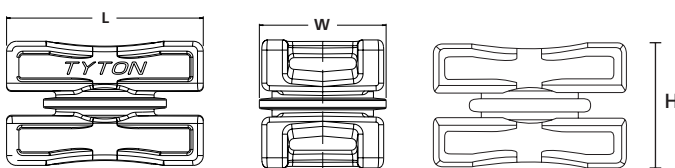
These saddle spacers are installed between two bundles (such as wires, cables, hoses, tubing, conduit, etc.) to separate and prevent chafing and wear. The mounts can be easily rotated by hand, allowing the bundles to be crossed and rotated at any angle. Cable ties, which secure the bundles, are used with the mounts. The dual swivel saddle spacers accommodate cable ties up to 12.7mm wide.

Features and Benefits

- H-profile of the saddles allows for broad surface contact with the bundle, which minimizes pinching and crushing of the bundle.
- Swivels in 360-degree motion to accommodate any area.
- Accommodates T50–T250 ties to handle both light-duty and heavy-duty applications.



DSWS5 provides a 23.6mm separation between bundles.



PART NO.	Length (L)	Width (W)	Height (H)	Bundle Ø min.	Bundle Ø max.	Cable Tie Series	Material	Colour	Pack Qty	Article-No.
DSWS5	40.6	25.4	23.6	16.0	152.0	T50 - T250	PA46	Black (BK)	50 pcs.	151-06502

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.



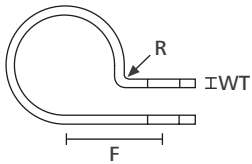
Plastic P-Clips

HP-Series

For permanent, or semi-permanent, cable fixings this range of P-Clips can be used in many industries, their light weight makes them particularly suitable for use in areas such as aircraft and aerospace 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 (side view)



P-Clip H1P - H18P (plan view)



P-Clips H1P - H18P in different dimensions.

Part NO.	Width (W)	Wall (WT)	Hole Ø (FH)	Bundle Ø max.	Fixing Hole Centres (F)	Radius (R)	Material	Colour	Article-No.
H1PBK	10.0	0.80	4,2	3.2	8.5	0.5	PA66HS	Black (BK)	211-60000
H2PBK	10.0	1.00	4,2	5.0	9.5	1.0	PA66HS	Black (BK)	211-60001
H3PBK	10.0	1.00	4,2	6.5	10.0	1.0	PA66HS	Black (BK)	211-60002
H4PBK	10.0	1.20	4,2	8.0	10.0	1.0	PA66HS	Black (BK)	211-60003
H5PBK	10.0	1.20	4,2	9.5	11.0	1.0	PA66HS	Black (BK)	211-60004
H7PBK	10.0	1.20	4,2	12.5	14.0	1.5	PA66HS	Black (BK)	211-60006
H8PBK	10.0	1.50	4,2	14.0	15.0	1.5	PA66HS	Black (BK)	211-60007
H9PBK	10.0	1.50	4,2	16.0	16.0	1.5	PA66HS	Black (BK)	211-60008
NX11BK	12.6	1.30	4,0	20	-	-	PA66	Natural (NA)	211-00901
NX14BK	16.0	1.50	4,3	25.4	-	-	PA66	Natural (NA)	221-10140

All dimensions in mm. Subject to technical changes.



Snapper Hose Clips for Tubes and Harnesses

SNP-Series

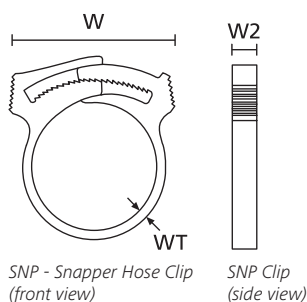
SNP range may replace metal hose clamps. Snapper can be used in markets as diverse as automotive, agriculture, white goods, venting systems, pumps and hydraulic systems to medical engineering.

Features and Benefits

- Releasable and reusable plastic hose clamps
- Self-locking
- Releasable by giving a lateral movement to the 'head'
- Installation by hand possible
- Installation with processing tool for a secure tensioning
- For higher operating temperatures: Glass Filled PA66



SNP - Snapper Hose Clips range.



TYPE	Bundle Ø min.	Bundle Ø max.	Width (W) min.	Width (W) max.	Width (W2)	Wall (WT)	Material	Colour	Article-No.
SNP1	6.0	6.5	8.33	11.73	3.8	1.00	POM	White (WH)	190-00022
	6.0	6.8	8.56	11.79	3.8	1.00	PA66GF13	Black (BK)	192-10010
SNP2	9.3	10.5	12.22	17.48	5.9	1.70	PA66GF13	Black (BK)	190-00099
SNP6	11.7	13.3	14.71	21.54	5.9	1.70	PA66GF13	Black (BK)	192-00185
SNP8	13.1	15.0	16.69	24.89	5.7	1.70	PA66GF13	Black (BK)	192-10080
SNP10	14.5	16.6	17.60	26.90	5.9	1.80	PA66GF13	Black (BK)	192-10100
SNP14	18.1	19.9	19.00	24.00	6.0	1.80	POM	Natural (NA)	191-00303

All dimensions in mm. Subject to technical changes.



1	S3STM500HIRHSF1	Fir Tree Saddle Mount Elevates bundles from frame rails • 12.7 mm mounting hole • 200 pounds extraction force • Works with cable ties up to 0.5" wide
2	SAOM820HIRHSH1	Axial Oval Mount Stands off bundles from frame rails and cross members • 8.0 mm mounting hole • Works with cable ties up to 0.5" wide
3	151-00978	Axial Mount Stands off bundles from frame rails and cross members • Metal bushing allows high impact installation • Available for 8.0, 10.0 and 13.0 mm hole diameters
4	S2HM250HIRHSH1	Two-Way Saddle Mount Separates two bundles • 0.25" stud diameter • Works with cable ties up to 0.5" wide
5	132-00009	Button Head Tie Harnesses bundles without additional fasteners • Serrations on both sides • Holds bundles up to 4.3" in diameter
6	MSBT1200HIRHSH1	Saddle Mount for Button Head Tie Secures up to three bundles • 0.5" mounting hole • For panel thicknesses 0.075" - 0.5"
7	HDM250HIRC2	Heavy Duty Mount Eliminates need for multiple sized p-clamps • Provides 115 inch pounds of torque • Available for 5.0, 6.0 and 8.0 mm hole diameters
8	HDM400BHIHSUVH4	Heavy Duty Mount w/ Metal Bushing Eliminates need for multiple sized p-clamps • Provides 114 foot pounds of torque • Available for 8.0, 9.5 and 12.7 mm hole diameters
9	WSM60IMHSUVH1	Weld Stud Mount Welds to painted frame rails without the need to grind surface • Secures bundles up to 6.0" • 0.25" stud diameter
10	151-00663	Bundling Clip Works with cables ties or tape • Available for mounting hole diameters 6.2 - 6.8 mm • For panel thicknesses 0.7 - 5.75 mm
11	151-00813	H-Mount Fastens onto bolts and secures up to three bundles • Installs quickly with drill and HBIT • Available in 0.375", 0.5", 0.625" and 0.75" hole diameters
12	151-01122	Low Profile Mount Low profile design for tight spaces • Mounts and separates bundles • 0.25" mounting hole diameter
13	133-00993	HC Clamp Separates and secures two or three bundles • Secures bundles up to 1.0" in diameter
14	151-01231	Heavy Duty Hinge Clamp Separates and secures bundles • Hinge and snap features allow quick and easy installation • High heat resistance up to 275°F
15	151-01390	Ratchet P Clamp Offered in four clamp sizes ranging from ¼" to 2.0" and several mounting configurations • One-piece adjustable clamp closes to the desired diameter • Non-destructive, releasable design
16	151-01857	Wide Strap Adhesive Mount Provides stability when securing bundles • For use with 120 pound wide-strap cable ties • Features 3M™ VHB™ (Very High Bond) adhesive





FASTENERS

17 SR255X0HIHSUVH1	Heavy Duty Releasable Tie Designed for easy removal and reuse • 250 pound tensile strength • Available in 9.0" and 14.0" length
18 MBT8S	Stainless Steel Tie Excellent resistance to salt and chemicals • Withstands temperatures up to 1,000°F • 202 pound tensile strength • Available in various lengths and tensile strengths
19 FT9A0IMHSUVH4 20 FT9B0IMHSUVH4	Heavy Duty Fir Tree For use with heavy duty cable ties • Fits mounting hole diameters 8.75 - 9.25 mm • Works on panel thicknesses 1.0 - 6.5 mm or 1.0 - 15.8 mm
21 111-12302	Heavy Duty Wide Strap Cable Tie Heavy duty 120 pound tensile strength • Wide 0.5" strap to prevent pinching • Available in 9.0", 12.0" and 15.0" lengths
22 111-85871	Fir Tree with Cable Tie Provides low insertion force with high extraction force • Serves as a locating feature in blind assembly applications • Disc provides additional stability in high vibration applications • Available in various hole sizes and cable tie lengths
23 156-00539	Edge Clip with Cable Tie Fastens onto plastic or metal sheets without a mounting hole • Provides low insertion force and high extraction force • Clip slides up and down tie to allow proper orientation • Available in various orientations and thickness
24 157-00097	Fir Tree Mount Cable Tie One piece design for fast and simple application • Disc feature covers holes to minimize ingress of water and dirt • Mount slides up and down tie to allow proper orientation • Available in various hole sizes
25 111-01670	PAEK Cable Tie Extreme heat resistance up to 392° F (200° C) • 100 pound tensile strength in small footprint • Available in various lengths
26 157-00286	Wide Strap Stud Mount Cable Tie Mount provides low insertion and high extraction forces • Thinner strap provides increased flexibility for improved ergonomics • Tie utilizes a strong hinge between the stud mount and strap head to provide superior holding ability
27 151-01566	Wedge Clip Edge clip for use with heavy duty cable ties • Closes with adjustable ratcheting action that creates extreme hold • Fits edge and rail thicknesses up to 51 mm • Available in three sizes

SEPARATORS

28 DSWS50SH1 29 151-06500	Dual Swivel Saddle Spacer "H" saddle-style profile minimizes pinching and crushing of bundles • Swivels 360 degrees to accommodate any orientation • Works with cable ties up to 0.5" wide
30 DCT110HIRK2	Dual Clamp Tie Separates two parallel bundles • 150 pound tensile strength • Available in 13.0" and 19.0" lengths
31 117-00012	Standoff Mounting Dual Clamp Tie Stands off and separates two parallel bundles • 150 pound tensile strength • Available in 20.0" and 26.0" lengths
32 ISO4X250H1	Isolator Aligns and separates up to four 1/4" tubes or brake lines • Dampens vibration • TPV material withstands temperatures up to 329°F





Edge Clips

Heavy Duty Wedge Clips

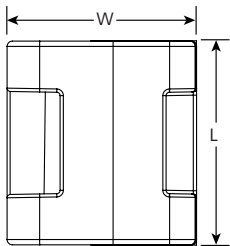
The Wedge Clip, paired with any HellermannTyton heavy duty Cable Tie, routes cables along a frame or rail in vertical or horizontal applications. A robust design and durable materials make it ideal for extreme-duty applications. The integrated wedge mechanism slides along a stepped grade until snug against the mounting surface. Inside the clip is a 3M™ VHB™ (Very High Bond) adhesive pad, which actually builds strength over time. This holds the clip to the work surface instantly, enabling installers to place it into position without worrying about it falling off prior to fastening. The combination of adhesive and the clip's vice-like compression result in incredible extraction force without the need to drill holes. The Wedge Clip is offered in three sizes.



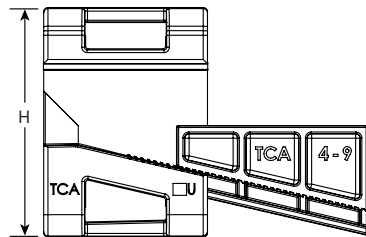
The Wedge Clip is offered in three sizes.

Features and Benefits

- Two-piece ratcheting wedge design allows for easy, positive-locking size adjustment.
- Peel and stick 3M™ VHB™ adhesive inside clip increases grip and enables one-hand installation.
- Heat-stabilized, glass-filled PA66 assembly delivers remarkable extraction force without drilling.
- Three sizes cover a wide range of mounting thicknesses, reducing part inventory.
- 4-way, wide slot accommodates our heavy-duty and Wide-Strap Series Cable Ties.



Wedge Clip, Side view



Wedge Clip, Front view

TYPE	Length (L)	Width (W)	Height (H)	Panel Thickness	Material	Colour	Article-No.
BCAA	30.8	28.6	43.1	0.0 - 5.0	PA66HSGF30	Black (BK), Green (GN)	151-01565
BCBLGA	30.8	28.6	43.1	4.0 - 9.0	PA66HSGF30	Black (BK)	151-01566
BCCLGA	30.8	28.6	43.1	8.0 - 13.0	PA66HSGF30	Black (BK), Gray (GY)	151-01567

All dimensions in mm. Subject to technical changes.



Ratchet P-Clamp

The Ratchet P-Clamp family offers versatility when managing wires, cables and hoses. The robust design and durable materials make it ideal for heavy duty applications, both in- and outdoors. The one-piece adjustable clamp can be closed by hand to the desired diameter. The release feature provides easy and nondestructive removal of cables simply by using a flat-head screwdriver. This nondestructive release allows the clamp to be reused without removing or replacing any bolts or screws. The Ratchet P-Clamp is offered in four sizes and multiple mounting configurations.

Features and benefits

- One-piece ratchet closure design allows for easy installation during pre- or final assembly
- Multiple configurations handle a wide range of diameters and applications, reducing part inventory
- Clamp interior is designed to guide and center bundle to reduce pinching
- Easy release feature allows for quick adjustments and maintenance
- Impact modified, heat and UV stabilized PA66 provides long-term durability, in- and outdoors
- Steel mounting plate tolerates high torque mounting and is treated to resist chemicals and salt spray

Multiple configurations

The wiring schemes in heavy duty applications become more complex day after day. Using a single mounting point, you can combine Ratchet P-Clamps to match the number, position and diameters of the wires or bundles inherent to today's wire management challenges. You will see

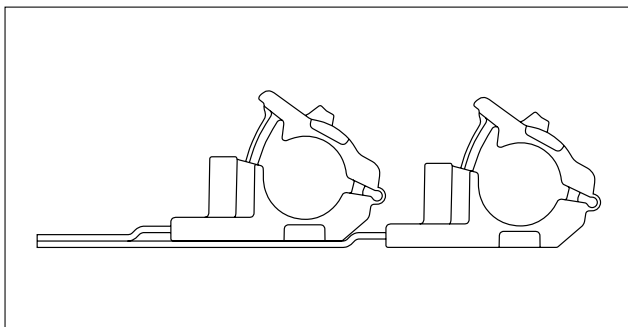


Ratchet P-Clamp - A more versatile way to mount and clamp cables.

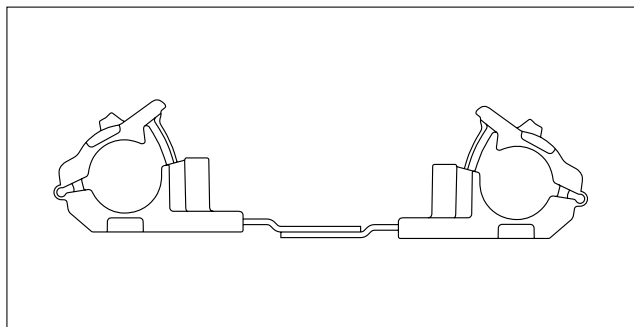
Comprehensive brochure available on request.



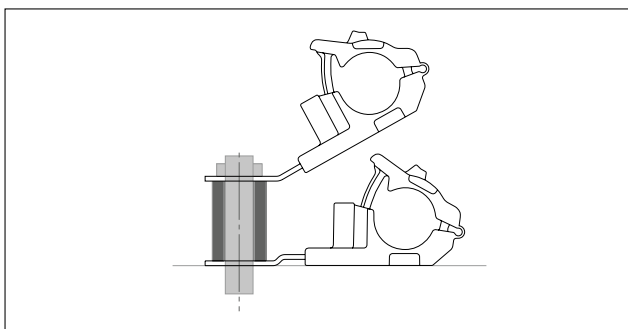
below just a few of the nearly endless number of configurations you can arrange by mixing Ratchet P-Clamps of varying sizes and different mounting plates.



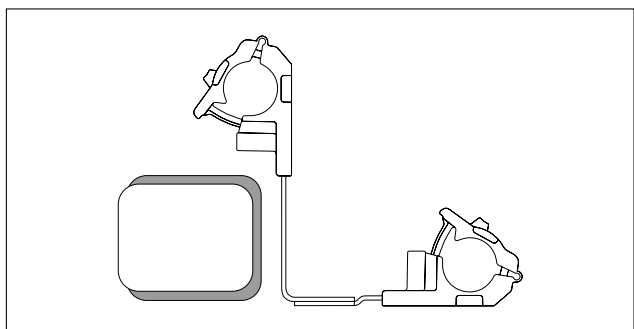
You can piggy-back Ratchet P-Clamps by using different length mounting plates to secure parallel cable configurations.



Ratchet P-Clamp mounting plates are shaped to allow face-to-face positioning. By using different length mounting plates, you can vary the distance between bundles and take advantage of the optimal routing path.



Add a spacer between Ratchet P-Clamps to speed installation and maintenance of stacked wire bundles.



90° angle mounting plates enable you to work around obstacles and protect wire from contacting moving parts.



How to Choose a Ratchet P-Clamp

STEP 1: Determine bundle diameter

Match the bundle diameter range to the wire bundles you use.

SIZE	BUNDLE DIAMETER RANGE
A	0.24" - 0.54" (6.2mm - 13.7mm)
B	0.50" - 0.77" (12.7mm - 19.5mm)
C	0.76" - 1.42" (19.4mm - 36.0mm)
D	1.42" - 2.0" (36.0mm - 51.0mm)

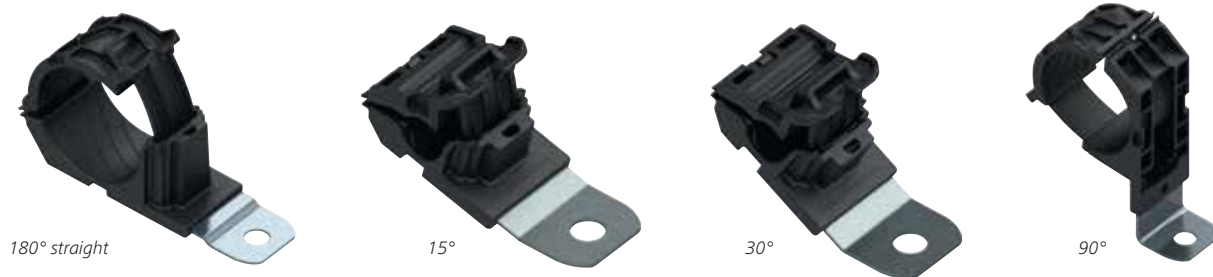


STEP 2: Select mounting plate material

The coated, high-grade steel mounting plate is suited for most applications. Opt for the stainless steel mounting plate when conditions are exceptionally severe or galvanic corrosion is possible.

STEP 3: Choose routing orientation/variant

Choose from 180° straight, 15°, 30° or 90° angles.



STEP 4: Specify the length of the mounting plate

We designed the mounting plate specification to be equal to the distance from center of clamp to center of mounting hole. (Some angles/variants are not offered in all three lengths.)



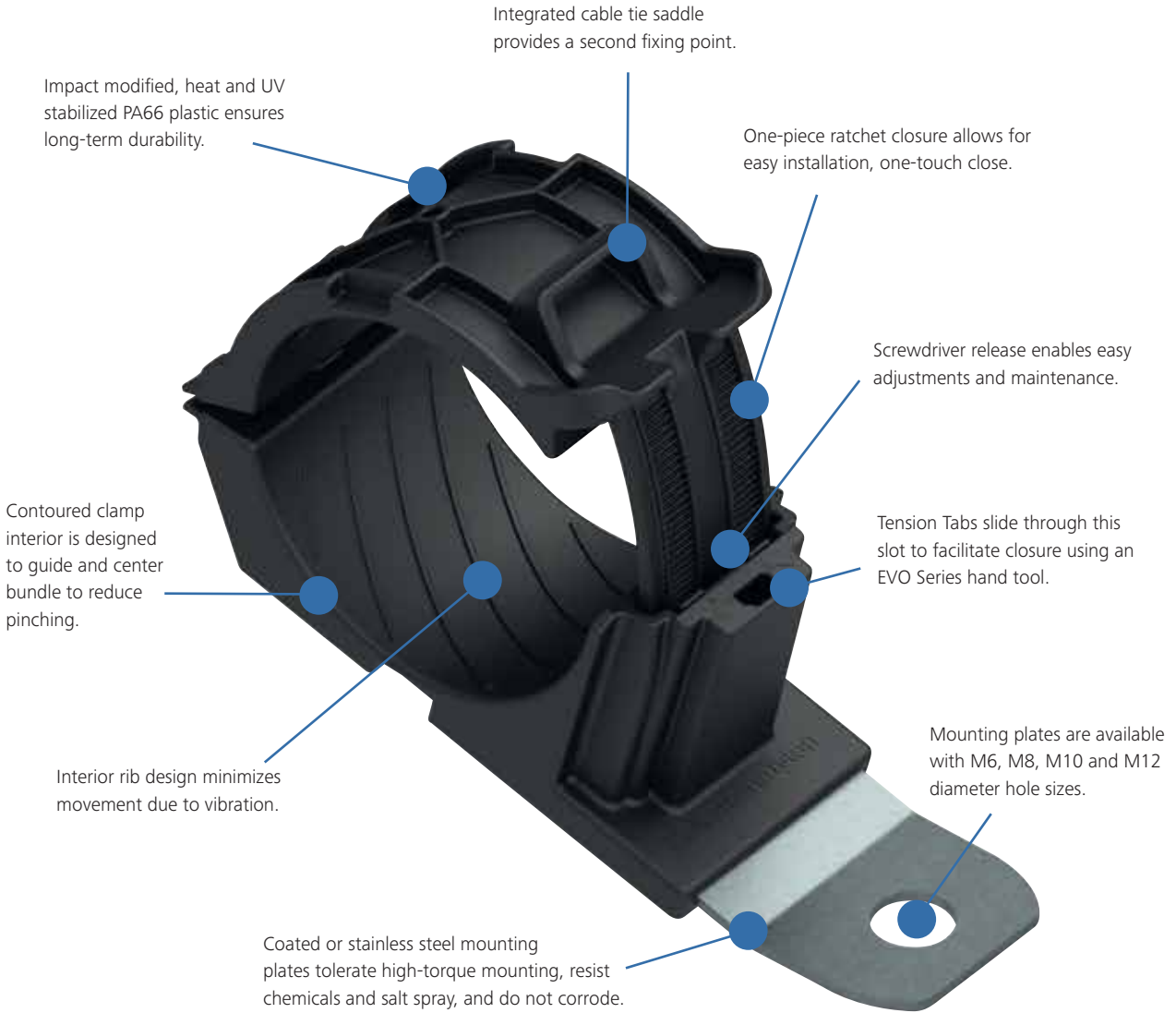
STEP 5: Choose bolt size/mounting hole diameter

Each mounting plate option is offered in four different mounting hole diameters to accommodate the most common bolt sizes: M6 (6mm), M8 (8mm), M10 (10mm) and M12 (12mm).





Features





Ratchet P-Clamp

For bundle diameters from 6.2 mm to 13.7 mm, A-Series

TYPE	Drawing	Width (W)	Length (L2)	Bundle Ø min.	Bundle Ø max.	Hole Ø (FH)	Fixing Hole Centres (F)	Variant	Material	Colour	Article-No.
RCA180LM6		34.9	134.1	6.2	13.7	6,5	101.5	Long	PA66HIRHSUV, ST, ZN	Black (BK)	151-01639
RCA180MM6		34.9	105.1	6.2	13.7	6,5	72.5	Medium	PA66HIRHSUV, ST, ZN	Black (BK)	151-01638
RCA180SM6		34.9	83.1	6.2	13.7	6,5	50.5	Short	PA66HIRHSUV, ST, ZN	Black (BK)	151-01637
RCA180SM8		34.9	83.1	6.2	13.7	8,31	50.5	Short	PA66HIRHSUV, ST, ZN	Black (BK)	151-01416
RCA90LM6		34.9	96.8	6.2	13.7	6,5	24.9	Long	PA66HIRHSUV, ST, ZN	Black (BK)	151-01644
RCA90LM8		34.9	96.8	6.2	13.7	8,31	24.9	Long	PA66HIRHSUV, ST, ZN	Black (BK)	151-01437
RCA90SM6		34.9	68.8	6.2	13.7	6,5	24.9	Short	PA66HIRHSUV, ST, ZN	Black (BK)	151-01643

All dimensions in mm. Subject to technical changes.

Available in packs of 10.

For bundle diameters from 12.7 mm to 19.5 mm, B-Series

TYPE	Drawing	Width (W)	Length (L2)	Bundle Ø min.	Bundle Ø max.	Hole Ø (FH)	Fixing Hole Centres (F)	Variant	Material	Colour	Article-No.
RCB180LM6		34.9	134.1	12.7	19.5	6,5	103.8	Long	PA66HIRHSUV, ST, ZN	Black (BK)	151-01647
RCB180SM6		34.9	83.1	12.7	19.5	6,5	52.8	Short	PA66HIRHSUV, ST, ZN	Black (BK)	151-01645
RCB180SM8		34.9	83.1	12.7	19.5	8,31	52.8	Short	PA66HIRHSUV, ST, ZN	Black (BK)	151-01440
RCB180SM10		34.9	83.1	12.7	19.5	10,29	52.8	Short	PA66HIRHSUV, ST, ZN	Black (BK)	151-01390
RCB180SM12		34.9	83.1	12.7	19.5	12,95	52.8	Short	PA66HIRHSUV, ST, ZN	Black (BK)	151-01441
RCB90LM6		34.9	96.8	12.7	19.5	6,5	26.7	Long	PA66HIRHSUV, ST, ZN	Black (BK)	151-01652
RCB90LM8		34.9	96.8	12.7	19.5	8,31	26.7	Long	PA66HIRHSUV, ST, ZN	Black (BK)	151-01460
RCB90SM6		34.9	68.8	12.7	19.5	6,5	26.7	Short	PA66HIRHSUV, ST, ZN	Black (BK)	151-01651
RCB90SM8		34.9	68.8	12.7	19.5	8,31	26.7	Short	PA66HIRHSUV, ST, ZN	Black (BK)	151-01457

All dimensions in mm. Subject to technical changes.

Available in packs of 10.



Ratchet P-Clamp

For bundle diameters from 19.4 mm to 36.0 mm, C-Series

TYPE	Drawing	Width (W)	Length (L2)	Bundle Ø min.	Bundle Ø max.	Hole Ø (FH)	Fixing Hole Centres (F)	Variant	Material	Colour	Article-No.
RCC180LM6		34.9	154.0	19.4	36.0	6,5	113.3	Long	PA66HIRHSUV, ST, ZN	Black (BK)	151-01655
RCC180SM6		34.9	103.0	19.4	36.0	6,5	62.3	Short	PA66HIRHSUV, ST, ZN	Black (BK)	151-01653
RCC180SM8		34.9	103.0	19.4	36.0	8,31	62.3	Short	PA66HIRHSUV, ST, ZN	Black (BK)	151-01474
RCC90LM6		34.9	129.2	19.4	36.0	6,5	39.9	Long	PA66HIRHSUV, ST, ZN	Black (BK)	151-01660
RCC90LM8		34.9	129.2	19.4	36.0	8,31	39.9	Long	PA66HIRHSUV, ST, ZN	Black (BK)	151-01495
RCC90SM6		34.9	101.2	19.4	36.0	6,5	39.9	Short	PA66HIRHSUV, ST, ZN	Black (BK)	151-01659
RCC90SM8		34.9	101.2	19.4	36.0	8,31	39.9	Short	PA66HIRHSUV, ST, ZN	Black (BK)	151-01492

All dimensions in mm. Subject to technical changes.

Available in packs of 10.

For bundle diameters from 36.0 mm to 51.0 mm, D-Series

TYPE	Drawing	Width (W)	Length (L2)	Bundle Ø min.	Bundle Ø max.	Hole Ø (FH)	Fixing Hole Centres (F)	Variant	Material	Colour	Article-No.
RCD180SM8		34.9	115.5	36.0	51.0	8,31	70.0	Short	PA66HIRHSUV, ST, ZN	Black (BK)	151-01499
RCD90LM8		34.9	116.7	36.0	51.0	8,31	42.4	Long	PA66HIRHSUV, ST, ZN	Black (BK)	151-01521

All dimensions in mm. Subject to technical changes.

Available in packs of 10.



Ratchet P-Clamp accessories

Protection inserts

Soft material inserts snap precisely into the body of the clamp to provide an enhanced level of protection for applications with movement, high vibration or soft cable bundles. An integrated rib on the top of the insert prevents a lateral displacement of the corrugated tube, for e.g. acceleration. This provides secure fastenings of a corrugated tube with vertical and horizontal alignment.



Ratchet P-Clamps soft inserts offering an additional level of protection.

Features and benefits

- Soft inserts (for A - D Series) for an additional level of protection
- Torque support for defined contact pressure
- Use of manual processing Tool EVO possible
- CT-Insert offers low fire hazard and is conform to low smoke generation requirements (UL94 V0)
- CT-Insert offers low evolution of toxic gases and corrosive acids in event of an fire



Soft Insert

TYPE	Bundle Ø min.	Bundle Ø max.	Description	Material	Pack Qty	Colour	Article-No.
RCINSERTA	3.2	10.7	For A-Series	TPE	100	Black (BK)	151-01530
RCINSERTB	8.7	15.5	For B-Series	TPE	100	Black (BK)	151-01531
RCINSERTC	15.4	32.0	For C-Series	TPE	100	Black (BK)	151-01532
RCINSERTD	32.0	47.0	For D-Series	TPE	100	Black (BK)	151-01533

All dimensions in mm. Subject to technical changes.

Available in packs of 10.

EN 45545-2



For product specific approvals and specifications please refer to the Appendix.

Ratchet P-Clamp accessories

Tension tab

The Tension Tab enables installers to apply a specific clamp tension when used with manual processing Tool of the EVO Series hand tools.

Features and benefits

- For pre-determined clamp pressure, a tension tab is available
- Tension tab for use with our EVO-Series hand tools
- Built-in channel on Ratchet P-Clamp makes using Tension Tabs quick and easy



Tension tab can be used to ensure specific tension.



Tension Tab

TYPE	Material	Colour	Article-No.
RCTT	PA66HIRHSUV	Black (BK)	151-01529

All dimensions in mm. Subject to technical changes.



Heavy Duty Metal Edge Clip

MSC2

HellermannTyton's Heavy Duty Metal Edge Clip provides an excellent alternative to managing wire and PV cables where plastic fasteners are not the preferred method. Designed for effortless insertion, the Metal Edge Clip has a high extraction force that tolerates extreme environments and provides assurance that the cables are secure on a panel. The Metal Edge Clip is simple to install and can easily be removed with a flathead screwdriver.

Features and Benefits

- Integrated design allows for easy insertion by hand.
- 1–3mm panel thickness range allows for multiple applications.
- Double-compression design that accommodates various sizes of wire and cable.
- Presents a high extraction force for withstanding extreme conditions.



MSC2 fitted onto a metal panel to hold a cable bundle.

MATERIAL	Stainless Steel (SS304)
Operating Temperature	-80 °C to 538 °C



PART NO.	Length (L)	Width (W)	Bundle Ø min.	Bundle Ø max.	Panel Thickness	Material	Colour	Pack Qty	Article-No.
MSC2SS	24.0	13.0	5.0	7.6	1.0 - 3.0	SS304	Metal (ML)	100 pcs.	151-00982

All dimensions in mm. Subject to technical changes.

90° Metal Edge Clip

MSC90

Designed for more confined areas, HellermannTyton's Low Profile Metal Edge Clip provides an excellent alternative to managing wire and PV cables where plastic fasteners are not the preferred method. Designed for effortless insertion, the Metal Edge Clip has a high extraction force that tolerates extreme environments and provides assurance that the cables are secure on a panel. The Metal Edge Clip is simple to install and can easily be removed with a flathead screwdriver.

Features and Benefits

- Integrated design allows for easy insertion by hand.
- 1.5–2.0mm panel thickness range allows for multiple applications.
- Double-compression design that accommodates various sizes of wire and cable.
- Presents a high extraction force for withstanding extreme conditions.



MSC90 fitted onto a metal panel.

MATERIAL	Stainless Steel (SS304)
Operating Temperature	-80 °C to 538 °C



PART NO.	Length (L)	Width (W)	Bundle Ø min.	Bundle Ø max.	Panel Thickness	Material	Colour	Pack Qty	Article-No.
MSC90SS	18.44	11.57	4.1	7.0	1.5 - 2.0	SS304	Metal (ML)	100 pcs.	151-02189
MSC90SS-5000	18.44	11.57	4.1	7.0	1.5 - 2.0	SS304	Metal (ML)	5,000 pcs.	151-02291
MSC2LP/SS	17.0	9.5	4.1	7.0	1.5 - 2.0	SS304	Metal (ML)	100 pcs.	151-01699

All dimensions in mm. Subject to technical changes.



Which is Better: Plastic or Metal?

There was a time when metal rivaled available plastics in withstanding the harsh conditions delivered by Mother Nature. Today, however, we're making highly sophisticated plastics for the most extreme industrial applications, including heavy equipment, military, aerospace – and yes, solar. Which is better depends on your application and, just as important, your supplier. Metal offers long service life, and so do the engineered plastics HellermannTyton makes for solar. Metal is conductive, and plastic is not. If a cable becomes nicked by the fastener, metal can cause a short. Our metal fasteners have coined edges to reduce the chances of this happening. Plastic is softer than metal and less likely to slice through a cable jacket. When opting for plastic, controlling O&M costs requires choosing a material engineered for tough solar conditions. Climate and site conditions will determine which products make the most sense for a given application.

How Our Materials Compare

Consider the environmental factors working against the wire management in a PV system. Temperatures alone routinely reach 150 degrees Fahrenheit at the module – and 170 F at the racking. Fasteners must be able to consistently withstand exposure to UV light, moisture, chemicals and more, and only those engineered for the harshest weather will suffice. Extreme cold also takes its toll on wire management products. Fasteners can become brittle and dry, leading to premature failure.

UV exposure can be an issue even on the back of a panel. Up to 40 percent of the sunlight hitting the front of the panel can be deflected off the ground, especially where there is bright sand, soil or a lack of vegetation.

PA66HIRHSUV

As a base material, PA66 is a weak UV resistant material. HellermannTyton's unique blend includes an added UV stabilizer, high-impact resin and heat stabilizers. This material offers excellent cost savings while withstanding the everyday wear and tear in most solar applications.



POMUV

Also known as Polyacetal, a crystalline copolymer. With added UV stabilizers, this material delivers predictable, long-term performance over a wide range of temperatures. It has good chemical resistance with increased strength and rigidity.



Nylon 12

This material absorbs minimal moisture, even in environments with frequent humidity cycling. Basic PA12 provides strong resistance to chemicals, oils and salts, while providing excellent UV resistance. We add UV and heat stabilizers to enhance strength and durability.



PVDF

Our fluoropolymer-based material provides some of the highest UV, chemical and thermal resistance of any plastic resin. Tough and extraordinarily long lasting, PVDF is designed to virtually eliminate wire management failure over the life of a PV system.



Moisture Resistance



UV Resistance





Chemical Resistance



Cost



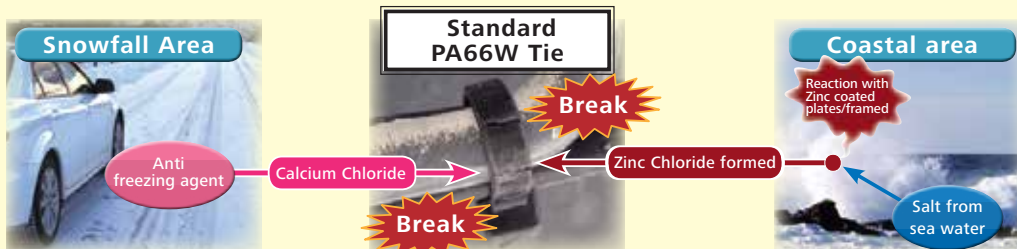
Temperature Range

 Featured Solar Tie Material
 PA66 Cable Tie



Why are GalvaLok ties necessary?

Most polyamide 66 (PA66) cable ties are affected by zinc chloride, calcium chloride, and other chemical substances (corrosive agents). Polyamide 66 cable ties have low resistance to certain chemical substances and may deteriorate or break when solvent cracking occurs*.

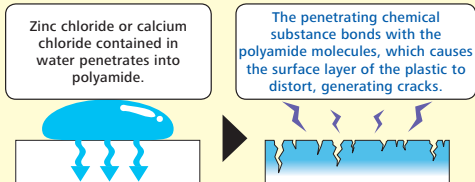


When the zinc of a zinc coated steel sheet and the salt in seawater react, zinc chloride is generated, which causes a polyamide 66 cable tie to deteriorate and break in a short time. Calcium chloride, the main ingredient in snow-melting and de-icing agents used in snowy areas and mountainous areas, also causes polyamide 66 cable ties to deteriorate and break.

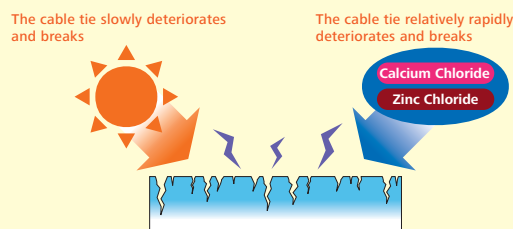
Risk of solvent cracking

*Solvent cracking

A phenomenon called environmental stress cracking or chemical cracking that causes a plastic material to generate cracks when a chemical substance penetrates into the plastic.

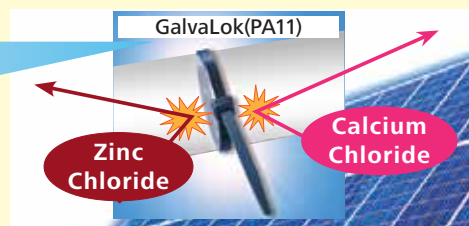


There are two main reasons for polyamide 66 cable ties breaking: solvent cracking due to the effect of salt damage and breaking because of the deterioration of their weather resistance due to ultraviolet rays.



GalvaLok is Promising!!

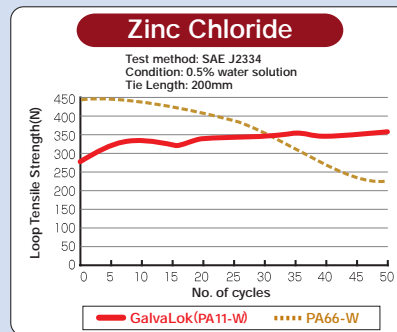
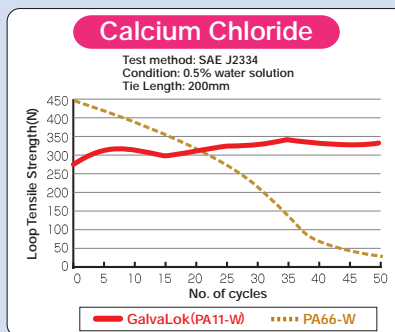
GalvaLok, which is made of polyamide11(PA11), will maintain its strength for a long period of time without being affected by corrosion organisms such as calcium chloride and zinc chloride.



Salt damage resistance: Combined cycle test

While the strength of a conventional polyamide 66 cable tie dropped sharply, GalvaLok maintained its initial strength, demonstrating excellent salt damage resistance.

Generally, the salt damage resistance / corrosion resistance evaluation performed by a combined cycle test is considered to be the closest to use in an actual outdoor environment in coastal areas.

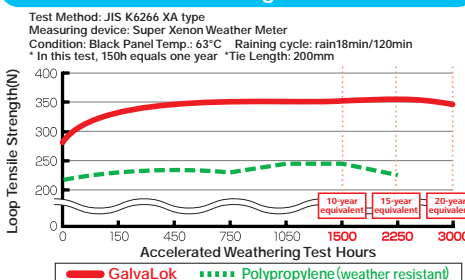


Accelerated weathering test

GalvaLok showed almost no deterioration of strength even after an accelerated weathering test equivalent to approximately 20 years of weather exposure.

GalvaLok has exceedingly superior mechanical strength and weather resistance compared to polypropylene cable ties with the same salt damage resistance as polyamide 11 GalvaLok.

Accelerated Weathering Test: 3000Hours(20 years)



Caution: The specified data are measured values and are not guaranteed. Note that they are reference data obtained under certain conditions and they do not indicate the durability (service life) in actual use.



Cable Ties for bundling wires in solar power systems

GalvaLok-Series in PA11 black

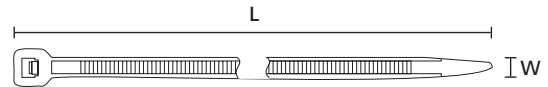
GalvaLok® is a cable tie that has excellent weather resistance, salt damage resistance, and mechanical strength, making it perfect for cabling work around solar panel base frames and galvanized steel plates.

Features and Benefits

- Manufactured from polyamide 11
- High UV resistance for long-term outdoor applications
- Measures against salt damage
- Protection from calcium chloride contained in snow-melting and de-icing agents
- Stable technical performance even at very low temperatures
- Demonstrated almost no deterioration of strength even after an accelerated weathering test equivalent to approximately 20 years of exposure to the elements.



GalvaLok-Series cable ties - ideally suited for solar panel cabling work.



Galvalok-Series

PART NO.	Length (L)	Width (W)	Bundle Ø max.	N	Material	Colour	Pack Qty	Article-No.
T18RPA11	100	2.5	22.0	80	PA11	Black (BK)	100 pcs.	111-01718
T30RPA11	150	3.5	36.0	113	PA11	Black (BK)	100 pcs.	111-01719
T50SPA11	150	4.6	35.0	225	PA11	Black (BK)	100 pcs.	111-01720
T50RPA11	300	4.6	85.0	225	PA11	Black (BK)	100 pcs.	111-02425
T50IPA11	300	4.6	85.0	225	PA11	Black (BK)	100 pcs.	111-02426

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

2-Piece Fixing Ties for Edges

GalvaLok® Edge Clip

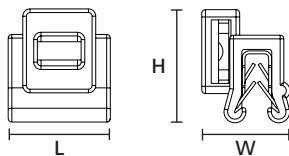
By simply clipping this product to the edge of a base frame, you can easily secure a GalvaLok cable tie. Its polyamide 11 housing with insulating properties has excellent weather resistance, salt damage resistance, and chemical resistance. Eliminating the need to make holes and tighten screws, this product improves your work efficiency. You can insert GalvaLok cable ties into a GalvaLok Edge Clip from any direction.

Features and Benefits

- GalvaLok cable ties can be inserted into the Edge Clip from any direction that make cable management more flexible.



GLEC5-S — the cable bundle runs parallel with the edge.



GLEC5-S

TYPE	Length (L)	Width (W)	Height (H)	Panel Thickness	Applicable GalvaLok Ties	Material	Colour	Pack Qty	Article-No.
GLEC5-S	14.0	12.0	15.5	1.0 - 3.0	GL100 - GL300	PA11	Black (BK)	100 pcs.	151-01181
GLEC1640-S	153	3.5	36.0	1.6 - 4.0	GL100 - GL380	PA11	Black (BK)	100 pcs.	151-01590

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.



Endless Strap

EL-TY®

With its superior strength, this reel strap type cable tie is perfect for firmly fixing large diameter trunk cables and pipes. This product is made of waterproof polyacetal, which shows almost no deterioration of strength even after an accelerated weathering test equivalent to approximately 20 years of weather exposure. As this product is a reel strap, you can use it by cutting it into pieces of any desired length.

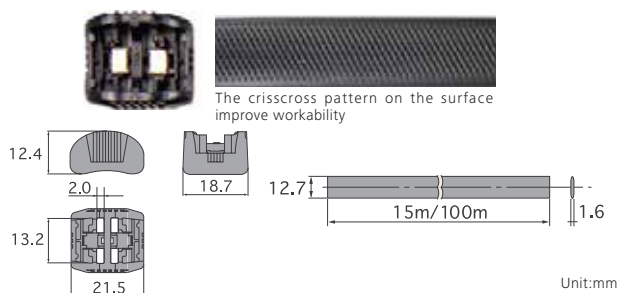
Features and Benefits

- Consists of a smooth strap and a separate, compact plastic head
- Encloses a copper alloy gripper
- Strength properties retained even after 20 years of outdoor exposure
- Combine with Reel Cable Tie
- Excellent durability and workability
- Weather resistance feature withstand long-term outdoor use



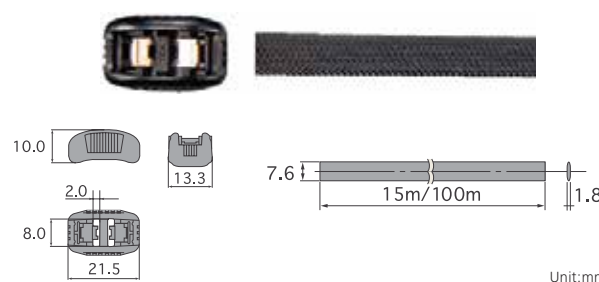
Reel strap cable tie, EL-R2-15.

EL-TY (Wide width type)



Unit:mm

Small EL-TY (Slim width type)



Unit:mm

Locking Head

TYPE		Material	Pack Qty	Article-No.
EL-H3	1,110	POM	25 pcs.	111-01450

Locking Head

PART NO.		Material	Pack Qty	Article-No.
SEL-H2	780	POM	25 pcs.	111-01451

Reel Strap

TYPE	Length	Material	Pack Qty	Article-No.
EL-R2-15	15m	POM	10	111-01445
EL-R2-100	100m	POM	5	111-01444

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Reel Strap

PART NO.	Length	Material	Pack Qty	Article-No.
SEL-R1-15	15m	POM	10	111-01446
SEL-R1-100	100m	POM	5	111-01447

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.