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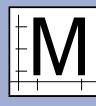
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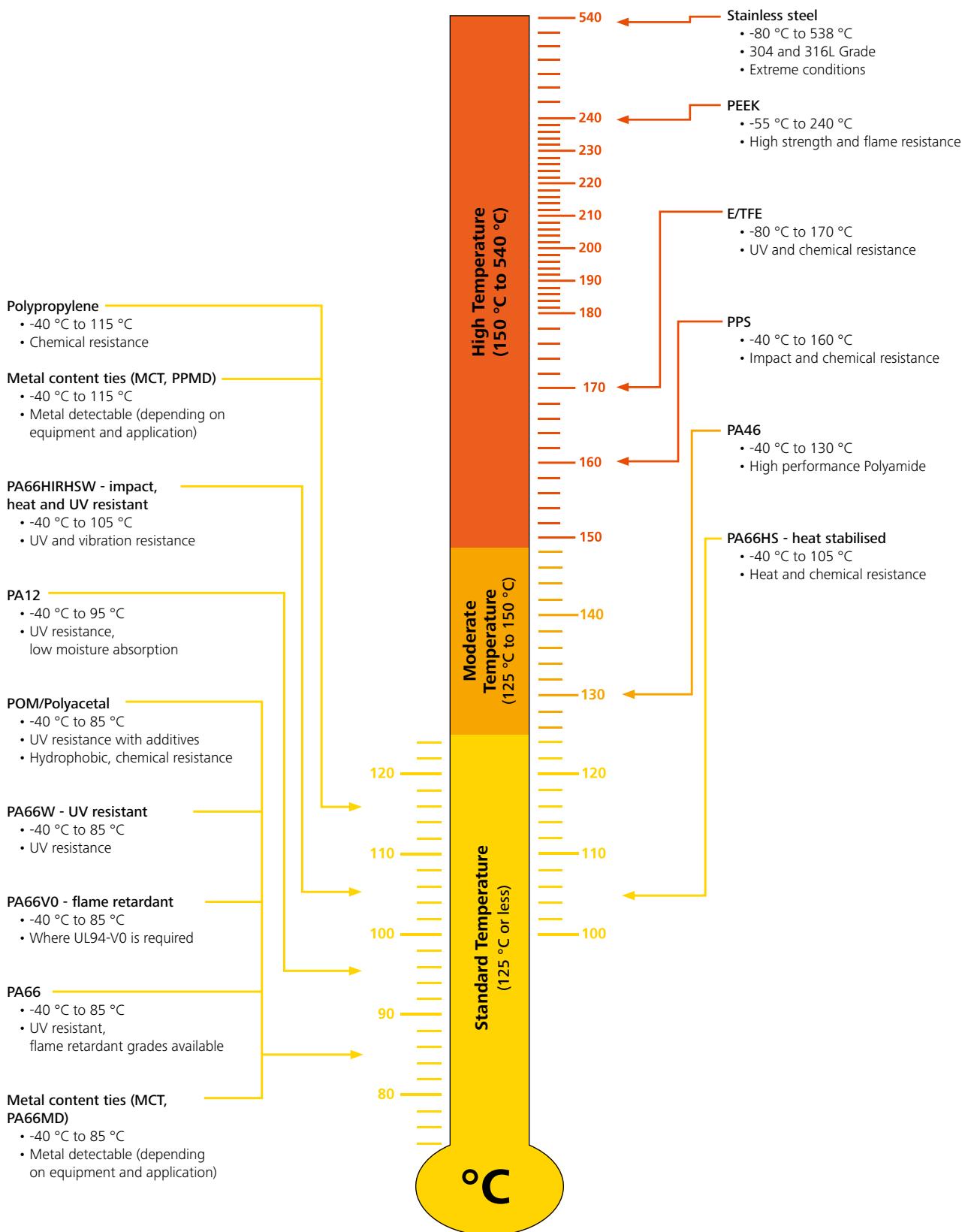
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## Operating temperature ranges of cable tie materials

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.



## 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.

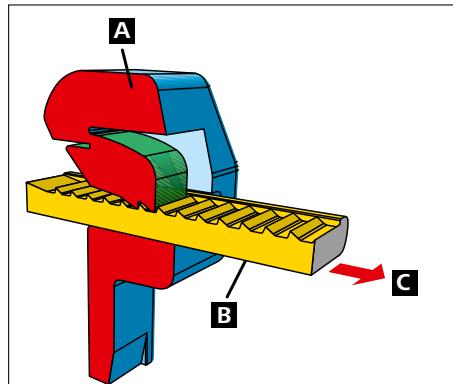
### MBT series cable ties

Made of stainless steel grade 304 or 316L, the MBT range of cable ties has no serrations on the strap and is 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 easily and quickly tensioned, with the strap cut to a flush finish.

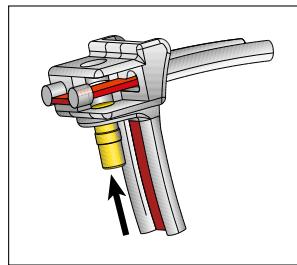
### Locking technology

The strap is locked into the head via a ball bearing. The ball locks into the small end of the wedged shaped housing, forming a positive lock with strap.

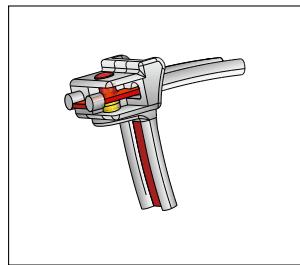
For rigid objects such as metal pipes, we would recommend our protective channelling (LFPC) to be laid between the bundled object and tie strap. This not only provides protection against galvanic corrosion, but also ensures a better engagement with the bundle. The MBT locking technology keep the minimum tensile strength of up to 7,000 Newtons and standard strap lengths of up to 1.5 m.



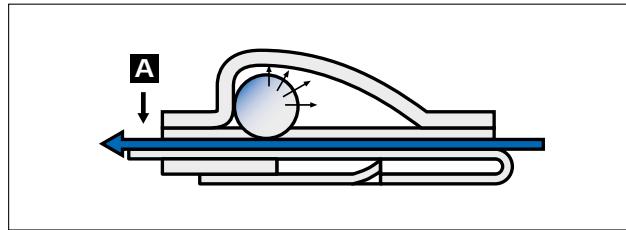
Locking technology of an outside serrated tie. A: Cable tie head B: Cable tie C: Direction of thread



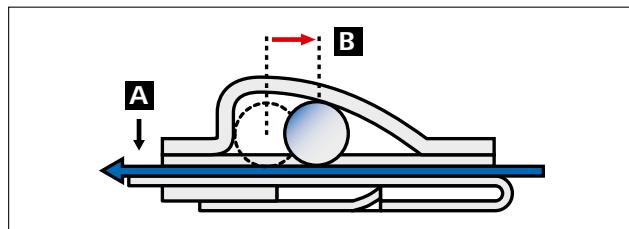
The unlocked head (yellow) of a KR-tie.



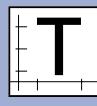
The cable tie (red) is locked into place with the pin.



1. Initial position, ball bearing moves freely. A: Cable tie (inserting)



2. Ball rebounds and wedges tie in place. A: Cable tie (tightening) B: Ball (wedged)



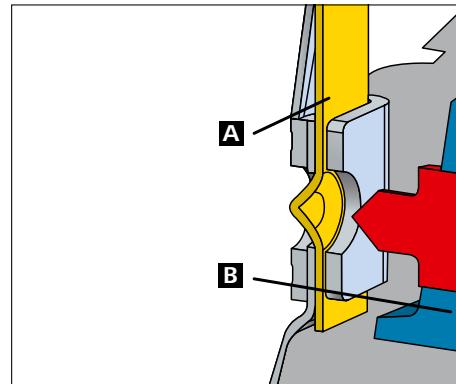
## Introduction to the main locking technologies used for cable ties

### MST series cable ties

MST cable ties are made of stainless steel 304. They offer similar features to MBT products but with a different head design and closure. Where space is tight the flat head allows for space savings. MST cable ties are not only weather-resistant but also highly resistant to heat, fire, and radiation. It can be used in challenging environments including indoor, outdoor and underground installations.

### Locking technology

The punch-locking mechanism keeps the lock tight even in challenging areas with very high vibration such as on trains. Our MST application tools (MST6/MST9) have been specifically developed for tightening and cutting MST cable ties. This tool is mandatory to apply and lock these stainless steel cable ties properly.



Punch-locking mechanism of the MST-Series. A: Cable tie  
B: Application tool

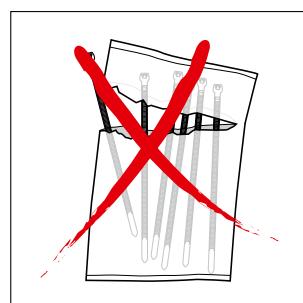
## Optimum storage conditions for cable ties made of Polyamide (PA)

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

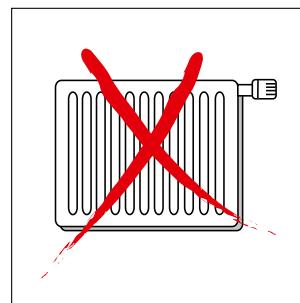
Polyamide is a hygroscopic material. This means that the material absorbs and loses moisture. For optimum handling of cable ties it is

important that the material is in a condition of equilibrium with a water content of approximately 2.5 %.

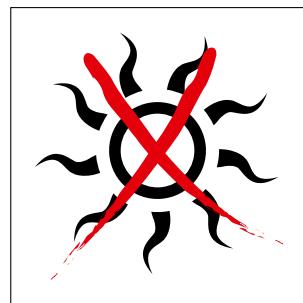
The packaging used by HellermannTyton ensures that the water content in the material remains constant. Therefore, it is important to store the products in their original packaging to preserve the quality of the ties.



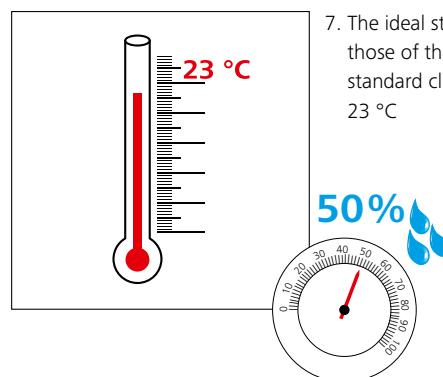
1. Once opened you should use the ties as quickly as possible.
2. Always store ties in the sealed plastic bag.



5. Store the product away from direct sources of heat.
6. Avoid contact with heat: for example, do not place on the radiators.



3. Do not expose the product to direct sunlight.
4. Do not store the product in sunlight; for example, on the windowsill.



7. The ideal storage conditions are those of the central European standard climate:  
23 °C

**Cable ties polyamide 6.6 standard****T-Series in PA66 natural and black**

T-Series cable ties for bundling and securing of cables, pipes and hoses. These cable ties can be used for nearly all kind of applications.

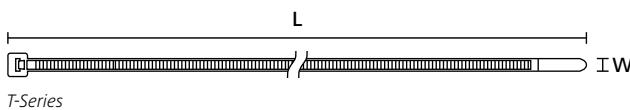
**Features and benefits**

- Available in a wide range of materials and sizes
- High tensile strength with very low insertion force
- Only high quality plastic is used meeting recycling targets
- Inside serrated cable ties for a strong hold onto bundles
- Ergonomic bent tail offers quick and simple installation
- Easy application either manually or with an application tool

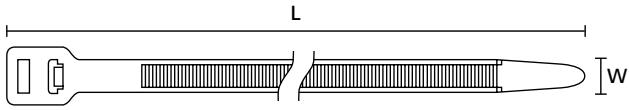


Standard T-Series cable ties – for almost any type of application.

**Material specifications: See Article-No. on our website.**



T-Series



T250-series

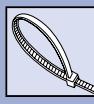
TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Tools	Article-No.
<b>T18S</b>	2.3	83.0	16.0	80	PA66	Natural (NA)	1000 pcs.	1-2;4-5;25	111-02809
<b>T18R</b>	2.5	100.0	22.0	80	PA66	Black (BK)	100 pcs.	1-2;4-5;25	111-01910
	2.5	100.0	22.0	80	PA66	Natural (NA)	100 pcs.	1-2;4-5;25	111-01919
<b>T18I</b>	2.5	145.0	35.0	80	PA66	Black (BK)	100 pcs.	1-2;4-5;25	111-02370
	2.5	145.0	35.0	80	PA66	Natural (NA)	100 pcs.	1-2;4-5;25	111-02319
<b>T18L</b>	2.5	205.0	50.0	80	PA66	Black (BK)	100 pcs.	1-2;4-5;25	111-02110
	2.5	205.0	50.0	80	PA66	Natural (NA)	100 pcs.	1-2;4-5;25	111-02119
<b>T25L</b>	2.8	240.0	65.0	110	PA66	Black (BK)	100 pcs.	1-2;4-5;25	111-02500
	2.8	240.0	65.0	110	PA66	Natural (NA)	100 pcs.	1-2;4-5;25	111-02519
<b>T25LL</b>	2.8	330.0	95.0	110	PA66	Natural (NA)	100 pcs.	1-2;4-5;25	111-02619
<b>T30R</b>	3.5	150.0	35.0	135	PA66	Black (BK)	100 pcs.	1-2;4-5;25	111-03210
	3.5	150.0	35.0	135	PA66	Natural (NA)	100 pcs.	1-2;4-5;25	111-03009
<b>T30L</b>	3.5	198.0	50.0	135	PA66	Black (BK)	100 pcs.	1-2;4-5;25	111-03410
	3.5	198.0	50.0	135	PA66	Natural (NA)	100 pcs.	1-2;4-5;25	111-03419
<b>T30LL</b>	3.5	290.0	80.0	135	PA66	Black (BK)	100 pcs.	1-2;4-5;25	111-03500
	3.5	290.0	80.0	135	PA66	Natural (NA)	100 pcs.	1-2;4-5;25	111-03529
<b>T40R</b>	4.0	175.0	40.0	180	PA66	Natural (NA)	100 pcs.	1-2;4-5;25	111-01626
<b>T50S</b>	4.6	150.0	35.0	225	PA66	Black (BK)	100 pcs.	1-2;4-7;25	111-05810
	4.6	150.0	35.0	225	PA66	Natural (NA)	100 pcs.	1-2;4-7;25	111-05819

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.  
N = Minimum Loop Tensile Strength for Cable Ties (newton)

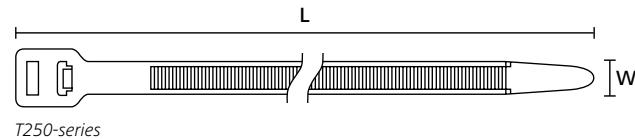
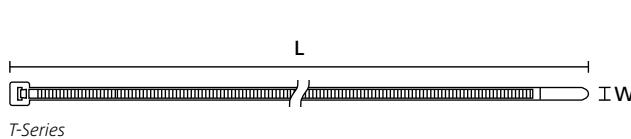


Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## Cable ties polyamide 6.6 standard

T-Series in PA66 natural and black



TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Tools	Article-No.
T50R	4.6	200.0	50.0	225	PA66	Black (BK)	100 pcs.	1-2-4-7;25	111-05000
	4.6	200.0	50.0	225	PA66	Natural (NA)	100 pcs.	1-2-4-7;25	111-05013
T50M	4.6	245.0	65.0	225	PA66	Black (BK)	100 pcs.	1-2-4-7;25	111-06200
	4.6	245.0	65.0	225	PA66	Natural (NA)	100 pcs.	1-2-4-7;25	111-06201
T50I	4.6	300.0	85.0	225	PA66	Black (BK)	100 pcs.	1-2-4-7;25	111-05210
	4.6	300.0	85.0	225	PA66	Natural (NA)	100 pcs.	1-2-4-7;25	111-05219
T50L	4.6	390.0	110.0	225	PA66	Black (BK)	100 pcs.	1-2-4-7;25	111-05400
	4.6	390.0	110.0	225	PA66	Natural (NA)	100 pcs.	1-2-4-7;25	111-05409
T80R	4.7	205.0	55.0	355	PA66	Black (BK)	100 pcs.	1-2-4-7;25	111-08010
	4.7	205.0	55.0	355	PA66	Natural (NA)	100 pcs.	1-2-4-7;25	111-05019
T80I	4.7	305.0	85.0	355	PA66	Black (BK)	100 pcs.	1-2-4-7;25	111-08210
	4.7	305.0	85.0	355	PA66	Natural (NA)	100 pcs.	1-2-4-7;25	111-08229
T80L	4.7	390.0	110.0	355	PA66	Black (BK)	100 pcs.	1-2-4-7;25	111-05410
	4.7	390.0	110.0	355	PA66	Natural (NA)	100 pcs.	1-2-4-7;25	111-05419
T120S	7.6	225.0	55.0	535	PA66	Natural (NA)	50 pcs.	1;3;6-7;9-10;25	111-12829
T120I	7.6	300.0	80.0	535	PA66	Black (BK)	100 pcs.	1;3;6-7;9-10;25	111-12210
	7.6	300.0	80.0	535	PA66	Natural (NA)	100 pcs.	1;3;6-7;9-10;25	111-12219
T150R	7.6	365.0	100.0	670	PA66	Black (BK)	100 pcs.	1;3;6-7;9-10;25	111-14810
	7.6	365.0	100.0	670	PA66	Natural (NA)	100 pcs.	1;3;6-7;9-10;25	111-14819
T120R(E)	7.6	387.0	100.0	535	PA66	Black (BK)	100 pcs.	1;3;6-7;9-10;25	111-12010
	7.6	387.0	100.0	535	PA66	Natural (NA)	100 pcs.	1;3;6-7;9-10;25	111-12019
T120M	7.6	460.0	125.0	535	PA66	Black (BK)	100 pcs.	1;3;6-7;9-10;25	111-12610
	7.6	460.0	125.0	535	PA66	Natural (NA)	100 pcs.	1;3;6-7;9-10;25	111-12619
T120XM	7.6	600.0	175.0	535	PA66	Black (BK)	50 pcs.	1;3;6-7;9-10;25	111-12701
	7.6	600.0	175.0	535	PA66	Natural (NA)	50 pcs.	1;3;6-7;9-10;25	111-12704
T120L	7.6	760.0	225.0	535	PA66	Black (BK)	50 pcs.	1;3;6-7;9-10;25	111-12403
	7.6	760.0	225.0	535	PA66	Natural (NA)	50 pcs.	1;3;6-7;9-10;25	111-12429
T150M	8.9	530.0	150.0	780	PA66	Black (BK)	25 pcs.	1;6-7;9-10	111-00124
	8.9	530.0	150.0	780	PA66	Natural (NA)	25 pcs.	1;6-7;9-10	111-15619
T150L	8.9	820.0	245.0	780	PA66	Black (BK)	25 pcs.	1;6-7;9-10	111-15405
	8.9	820.0	245.0	780	PA66	Natural (NA)	25 pcs.	1;6-7;9-10	111-15419
T150XL	8.9	1095.0	330.0	780	PA66	Black (BK)	25 pcs.	1;6-7;9-10	111-15500
	8.9	1095.0	330.0	780	PA66	Natural (NA)	25 pcs.	1;6-7;9-10	111-15519

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.  
N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**Cable ties polyamide 6.6 standard**

T-Series in PA66 natural and black

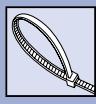
TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
<b>T150XLL</b>	8.9	1325.0	405.0	780	PA66	Black (BK)	25 pcs.	1;6-7;9-10	111-15300
<b>T250R</b>	12.4	515.0	125.0	1115	PA66	Natural (NA)	25 pcs.	6-7;9-10	111-24803
<b>T250M</b>	12.4	565.3	150.0	1115	PA66	Black (BK)	25 pcs.	6-7;9-10	111-25001
	12.4	565.3	150.0	1115	PA66	Natural (NA)	25 pcs.	6-7;9-10	111-25002
<b>T250I</b>	12.4	730.0	203.0	1115	PA66	Natural (NA)	25 pcs.	6-7;9-10	111-25219
<b>T250L</b>	12.4	880.0	254.0	1115	PA66	Black (BK)	25 pcs.	6-7;9-10	111-24601
<b>T250XL</b>	12.4	1030.0	305.0	1115	PA66	Black (BK)	25 pcs.	6-7;9-10	111-25200
<b>T250X</b>	12.5	370.0	100.0	1115	PA66	Black (BK)	100 pcs.	6-7;9-10	111-25102

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.  
N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**Cable ties polyamide 6.6 standard****T-Series in PA66 coloured**

Coloured T-Series cable ties are ideally suited for marking purposes. They can be used to secure and/or identify different kinds of bundles at the same time.

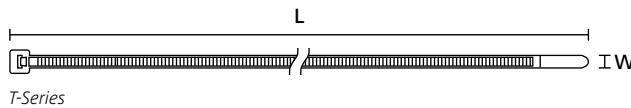
**Features and benefits**

- Available in a wide range of colours and sizes
- Strong cable tie to permanently mark or identify bundles
- Easy application either manually or with a processing tool
- Coloured T-Series cable ties provide an inside serration



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

**Material specifications: See Article-No. on our website.**



T-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
T18R	2.5	100.0	22.0	80	PA66	Blue (BU)	100 pcs.	1-2;4-5;25	116-01816
	2.5	100.0	22.0	80	PA66	Green (GN)	100 pcs.	1-2;4-5;25	116-01815
	2.5	100.0	22.0	80	PA66	Red (RD)	100 pcs.	1-2;4-5;25	116-01812
	2.5	100.0	22.0	80	PA66	Yellow (YE)	100 pcs.	1-2;4-5;25	116-01814
T30R	3.5	150.0	35.0	135	PA66	Blue (BU)	100 pcs.	1-2;4-5;25	111-03008
	3.5	150.0	35.0	135	PA66	Green (GN)	100 pcs.	1-2;4-5;25	111-03014
	3.5	150.0	35.0	135	PA66	Red (RD)	100 pcs.	1-2;4-5;25	111-03004
	3.5	150.0	35.0	135	PA66	Yellow (YE)	100 pcs.	1-2;4-5;25	111-03006
T50R	4.6	200.0	50.0	225	PA66	Blue (BU)	100 pcs.	1-2;4-7;25	111-04800
	4.6	200.0	50.0	225	PA66	Green (GN)	100 pcs.	1-2;4-7;25	111-04801
	4.6	200.0	50.0	225	PA66	Red (RD)	100 pcs.	1-2;4-7;25	111-04804
	4.6	200.0	50.0	225	PA66	Yellow (YE)	100 pcs.	1-2;4-7;25	111-04805
T50L	4.6	390.0	110.0	225	PA66	Blue (BU)	100 pcs.	1-2;4-7;25	111-05404
	4.6	390.0	110.0	225	PA66	Green (GN)	100 pcs.	1-2;4-7;25	111-05402
	4.6	390.0	110.0	225	PA66	Red (RD)	100 pcs.	1-2;4-7;25	111-05406
	4.6	390.0	110.0	225	PA66	Yellow (YE)	100 pcs.	1-2;4-7;25	111-05428
T80R	4.7	205.0	55.0	355	PA66	Blue (BU)	100 pcs.	1-2;4-7;25	116-08016
	4.7	210.0	55.0	355	PA66	Green (GN)	100 pcs.	1-2;4-7;25	116-08015
	4.7	210.0	55.0	355	PA66	Red (RD)	100 pcs.	1-2;4-7;25	116-08012
	4.7	210.0	55.0	355	PA66	Yellow (YE)	100 pcs.	1-2;4-7;25	116-08014

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**Cable ties polyamide 6.6 standard**

T-Series in PA66 coloured

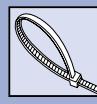
TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
T80L	4.7	390.0	110.0	355	PA66	Blue (BU)	100 pcs.	1-2;4-7;25	116-05416
	4.7	390.0	110.0	355	PA66	Green (GN)	100 pcs.	1-2;4-7;25	116-05415
	4.7	390.0	110.0	355	PA66	Red (RD)	100 pcs.	1-2;4-7;25	116-05412
	4.7	390.0	110.0	355	PA66	Yellow (YE)	100 pcs.	1-2;4-7;25	116-05414
T150R(H)	7.6	365.0	100.0	670	PA66	Blue (BU)	100 pcs.	1;3;6-7;9-10;25	116-15016
	7.6	365.0	100.0	670	PA66	Red (RD)	100 pcs.	1;3;6-7;9-10;25	116-15012
	7.6	365.0	100.0	670	PA66	Yellow (YE)	100 pcs.	1;3;6-7;9-10;25	116-15014
T120R(E)	7.6	387.0	100.0	535	PA66	Green (GN)	100 pcs.	1;3;6-7;9-10;25	111-12001
	7.6	387.0	100.0	535	PA66	Red (RD)	100 pcs.	1;3;6-7;9-10;25	111-12002

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



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

### T-Series in PA66W/UV black

These inside serrated cable ties are made of UV-resistant Polyamide 6.6 (PA66W) and thus suitable for outdoor applications. UV stabilised cable ties resist UV radiation for a considerably longer period compared to standard PA66 cable ties. They can easily be used for bundling and securing cables, pipes and hoses especially in outdoor areas.

#### Features and benefits

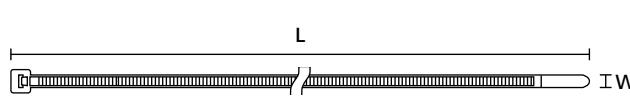
- UV-resistant black cable tie available in a wide range of sizes
- Made from 100 % high quality plastic, allows for good recycling
- Inside serration for a strong hold onto bundles
- Easy application either manually or with a processing tool
- Simple to insert due to bent tail



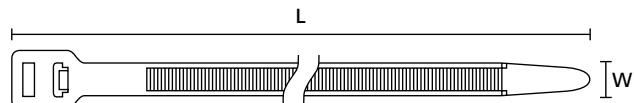
UV-resistant T-Series cable ties (PA66W/UV).

**Specific part numbers according to  
EN45545 available on request.**

**Material  
specifications: See  
Article-No. on our  
website.**



T-Series



T250-series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
<b>T18R</b>	2.5	100.0	22.0	80	PA66W	Black (BK)	100 pcs.	1-2;4-5;25	111-01960
<b>T18I</b>	2.5	145.0	35.0	80	PA66W	Black (BK)	100 pcs.	1-2;4-5;25	111-02360
<b>T18L</b>	2.5	205.0	50.0	80	PA66W	Black (BK)	100 pcs.	1-2;4-5;25	111-02160
<b>T25LL</b>	2.8	330.0	95.0	110	PA66W	Black (BK)	100 pcs.	1-2;4-5;25	111-02660
<b>T30R</b>	3.5	150.0	35.0	135	PA66W	Black (BK)	100 pcs.	1-2;4-5;25	111-03260
<b>T30L</b>	3.5	198.0	50.0	135	PA66W	Black (BK)	100 pcs.	1-2;4-5;25	111-03460
<b>T30LL</b>	3.5	290.0	80.0	135	PA66W	Black (BK)	100 pcs.	1-2;4-5;25	111-03570
<b>T40R</b>	4.0	175.0	40.0	180	PA66W	Black (BK)	100 pcs.	1-2;4-5;25	111-01625
<b>T50S</b>	4.6	150.0	35.0	225	PA66W	Black (BK)	100 pcs.	1-2;4-7;25	111-05860
<b>T50R</b>	4.6	200.0	50.0	225	PA66W	Black (BK)	100 pcs.	1-2;4-7;25	111-04889
<b>T50M</b>	4.6	245.0	65.0	225	PA66W	Black (BK)	100 pcs.	1-2;4-7;25	111-06206
<b>T50I</b>	4.6	300.0	85.0	225	PA66W	Black (BK)	100 pcs.	1-2;4-7;25	111-05260
<b>T50L</b>	4.6	390.0	110.0	225	PA66W	Black (BK)	100 pcs.	1-2;4-7;25	111-05440

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



**Cable ties for outdoor use  
(UV-resistant)**

T-Series in PA66W/UV black

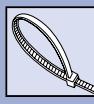
TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Tools	Article-No.
<b>T80R</b>	4.7	205.0	55.0	355	PA66W	Black (BK)	100 pcs.	1-2;4-7;25	111-05060
<b>T80I</b>	4.7	305.0	85.0	355	PA66W	Black (BK)	100 pcs.	1-2;4-7;25	111-08290
<b>T80L</b>	4.7	390.0	110.0	355	PA66W	Black (BK)	100 pcs.	1-2;4-7;25	111-05460
<b>T120S</b>	7.6	225.0	55.0	535	PA66W	Black (BK)	50 pcs.	1;3;6-7;9-10;25	111-12830
<b>T120I</b>	7.6	300.0	80.0	535	PA66W	Black (BK)	100 pcs.	1;3;6-7;9-10;25	111-12230
<b>T150R(H)</b>	7.6	365.0	100.0	670	PA66W	Black (BK)	100 pcs.	1;3;6-7;9-10;25	111-14860
<b>T120R(E)</b>	7.6	387.0	100.0	535	PA66W	Black (BK)	100 pcs.	1;3;6-7;9-10;25	111-12060
<b>T120M</b>	7.6	460.0	125.0	535	PA66W	Black (BK)	100 pcs.	1;3;6-7;9-10;25	111-12660
<b>T120L</b>	7.6	760.0	225.0	535	PA66W	Black (BK)	50 pcs.	1;3;6-7;9-10;25	111-12430
<b>T150M</b>	8.9	530.0	150.0	780	PA66W	Black (BK)	25 pcs.	1;6-7;9-10	111-15660
<b>T150L</b>	8.9	820.0	245.0	780	PA66W	Black (BK)	25 pcs.	1;6-7;9-10	111-15460
<b>T150XL</b>	8.9	1095.0	330.0	780	PA66W	Black (BK)	25 pcs.	1;6-7;9-10	111-15502
<b>T150XLL</b>	8.9	1325.0	405.0	780	PA66W	Black (BK)	25 pcs.	1;6-7;9-10	111-15305
<b>T250R</b>	12.4	515.0	125.0	1115	PA66HIRHSUV	Black (BK)	25 pcs.	6-7;9-10	111-24805

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 8=EVO9iHT, 10=MK9P, 25=EVOCut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



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

### T-Series in PA66HS natural and black

These inside serrated cable ties are made from heat stabilised Polyamide 6.6 (PA66HS). They can be applied in environments with continuous temperatures up to +105 °C. T-Series cable ties can be easily installed by hand or using an application tool to ensure consistency of installation.

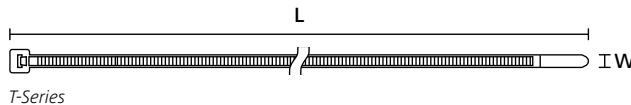
#### Features and benefits

- Heat stabilised cable ties (PA66HS) for temperatures up to +105 °C
- Available in a wide range of sizes to cover almost every application
- Inside serration provides a strong hold onto bundles
- Manual and/or pneumatic tools available for greater process reliability
- Commonly offered in natural and black, other colours available on request



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

**Material specifications: See Article-No. on our website.**



T-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
T18R	2.5	100.0	22.0	80	PA66HS	Black (BK)	100 pcs.	1-2;4-5;25	111-01950
	2.5	100.0	22.0	80	PA66HS	Natural (NA)	100 pcs.	1-2;4-5;25	111-01959
T18I	2.5	145.0	35.0	80	PA66HS	Black (BK)	100 pcs.	1-2;4-5;25	111-02358
	2.5	145.0	35.0	80	PA66HS	Natural (NA)	1000 pcs.	1-2;4-5;25	111-02359
T18L	2.5	205.0	50.0	80	PA66HS	Black (BK)	100 pcs.	1-2;4-5;25	111-02049
	2.5	205.0	50.0	80	PA66HS	Natural (NA)	100 pcs.	1-2;4-5;25	111-02159
T30ROS	3.4	145.0	35.0	135	PA66HS	Black (BK)	100 pcs.	1-2;4-5;25	118-04800
T30R	3.5	150.0	35.0	135	PA66HS	Black (BK)	100 pcs.	1-2;4-5;25	111-03050
	3.5	150.0	35.0	135	PA66HS	Natural (NA)	100 pcs.	1-2;4-5;25	111-03259
T30L	3.5	198.0	50.0	135	PA66HS	Black (BK)	100 pcs.	1-2;4-5;25	111-03450
	3.5	198.0	50.0	135	PA66HS	Natural (NA)	100 pcs.	1-2;4-5;25	111-03459
	3.5	198.0	50.0	135	PA66W	Black (BK)	100 pcs.	1-2;4-5;25	111-03460
T30LL	3.5	290.0	80.0	135	PA66HS	Black (BK)	1000 pcs.	1-2;4-5;25	111-03660
	3.5	290.0	80.0	135	PA66HS	Natural (NA)	100 pcs.	1-2;4-5;25	111-03569
T40R	4.0	175.0	40.0	180	PA66HS	Black (BK)	100 pcs.	1-2;4-5;25	111-03970
	4.0	175.0	40.0	180	PA66HS	Natural (NA)	100 pcs.	1-2;4-5;25	111-01627
T50S	4.6	150.0	35.0	225	PA66HS	Black (BK)	100 pcs.	1-2;4-7;25	111-05850
	4.6	150.0	35.0	225	PA66HS	Natural (NA)	100 pcs.	1-2;4-7;25	111-05859
T50R	4.6	200.0	50.0	225	PA66HS	Black (BK)	100 pcs.	1-2;4-7;25	111-04950

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOCut. For more information on toolings please refer to the Application Tooling chapter on page 593.

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 website. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



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

T-Series in PA66HS natural and black

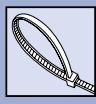
TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
<b>T50ROS</b>	4.6	200.0	50.0	225	PA66HS	Black (BK)	500 pcs.	1-2;4-7;25	118-05040
<b>T50MOS</b>	4.6	245.0	66.0	225	PA66HS	Black (BK)	100 pcs.	1-2;4-5;25	118-00018
<b>T50I</b>	4.6	300.0	85.0	225	PA66HS	Natural (NA)	100 pcs.	1-2;4-7;25	111-05259
	4.6	305.0	80.0	225	PA66HS	Black (BK)	100 pcs.	1-2;4-7;25	111-05250
<b>T50L</b>	4.6	390.0	110.0	225	PA66HS	Black (BK)	100 pcs.	1-2;4-7;25	111-05450
	4.6	390.0	110.0	225	PA66HS	Natural (NA)	100 pcs.	1-2;4-7;25	111-05436
<b>T80R</b>	4.7	205.0	55.0	355	PA66HS	Natural (NA)	100 pcs.	1-2;4-7;25	111-05059
<b>T80I</b>	4.7	305.0	85.0	355	PA66HS	Natural (NA)	100 pcs.	1-2;4-7;25	111-08259
<b>T80L</b>	4.7	390.0	110.0	355	PA66HS	Black (BK)	100 pcs.	1-2;4-7;25	111-00388
	4.7	390.0	110.0	355	PA66HS	Natural (NA)	100 pcs.	1-2;4-7;25	111-05459
<b>T150R(H)</b>	7.6	365.0	100.0	670	PA66HS	Black (BK)	100 pcs.	1;3;6-7;9-10;25	111-15050
	7.6	365.0	100.0	670	PA66HS	Natural (NA)	100 pcs.	1;3;6-7;9-10;25	111-15069
<b>T120R(E)</b>	7.6	387.0	100.0	535	PA66HS	Black (BK)	100 pcs.	1;3;6-7;9-10;25	111-12050
	7.6	387.0	100.0	535	PA66HS	Natural (NA)	100 pcs.	1;3;6-7;9-10;25	111-12059
<b>T120M</b>	7.6	460.0	125.0	535	PA66HS	Black (BK)	100 pcs.	1;3;6-7;9-10;25	111-00153
<b>T120XM</b>	7.6	600.0	175.0	535	PA66HS	Black (BK)	50 pcs.	1;3;6-7;9-10;25	111-12700
	7.6	600.0	175.0	535	PA66HS	Natural (NA)	50 pcs.	1;3;6-7;9-10;25	111-12719
<b>T120L</b>	7.6	760.0	225.0	535	PA66HS	Black (BK)	50 pcs.	1;3;6-7;9-10;25	111-12440
	7.6	760.0	225.0	535	PA66HS	Natural (NA)	50 pcs.	1;3;6-7;9-10;25	111-12449
<b>T150M</b>	8.9	530.0	150.0	780	PA66HS	Black (BK)	25 pcs.	1;6-7;9-10	111-15609
<b>T150L</b>	8.9	820.0	245.0	780	PA66HS	Black (BK)	25 pcs.	1;6-7;9-10	111-15410
<b>T150XL</b>	8.9	1095.0	330.0	780	PA66HS	Black (BK)	25 pcs.	1;6-7;9-10	111-15510

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

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 website. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**Cable ties for higher impact resistant polyamide****6.6 ScanBlack****T-Series in PA66HIR(S) black**

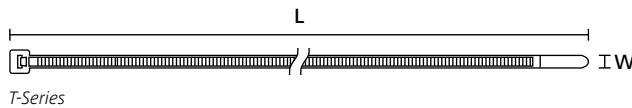
Impact resistant T-Series cable ties are manufactured from PA66HIR(S) – an impact modified material formulation. This high performance material offers limited brittleness sensitivity and a higher flexibility even at low temperatures. PA66HIR(S) cable ties meet increasing requirements like in the chemical, medical and/or automotive industry.

**Features and benefits**

- Impact resistant cable tie in black colour
- For bundling and securing cables, pipes and hoses
- Available in different sizes
- Higher flexibility especially in cold environments
- Limited brittleness sensitivity

*Impact resistant T-Series cable tie (PA66HIR(S)).*

**Material specifications: See Article-No. on our website.**



TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
<b>T50R</b>	4.6	200.0	50.0	225	PA66HIR(S)	Black (BK)	100 pcs.	1-2;4-7;25	111-04890
<b>T50I</b>	4.6	300.0	85.0	225	PA66HIR(S)	Black (BK)	100 pcs.	1-2;4-7;25	111-00222
<b>T50L</b>	4.6	390.0	110.0	225	PA66HIR(S)	Black (BK)	100 pcs.	1-2;4-7;25	111-05441
<b>T120I</b>	7.6	300.0	80.0	535	PA66HIR(S)	Black (BK)	100 pcs.	1;3;6-7;9-10;25	111-12203
<b>T120R(E)</b>	7.6	387.0	100.0	535	PA66HIR(S)	Black (BK)	100 pcs.	1;3;6-7;9-10;25	111-12032
<b>T120L</b>	7.6	760.0	225.0	535	PA66HIR(S)	Black (BK)	50 pcs.	1;3;6-7;9-10;25	111-12402

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## Cable ties made from post-industrial recycled polyamide 6.6

### T-Series in PA66HIRHS(REC) black

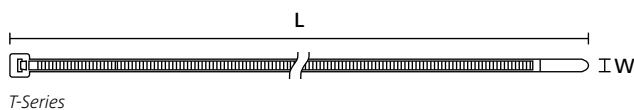
T-Series cable ties are ideal for bundling and securing cables, pipes and hoses. These cable ties can be used for nearly all kinds of applications, offering high performance along good thermal resistance. PIR range gives you the choice to make a sustainable difference in your cable management without compromising on performance.

#### Features and benefits

- Manufactured from Post Industrial Recycled (PIR) PA66
- Heat stabilised, impact modified material
- High tensile strength with very low insertion force
- Inside serrated cable ties for a strong hold onto bundles
- Ergonomic bent tail offers quick and simple installation
- Easy application either manually or with an application tool



T-Series cable ties made from post-industrial recycled PA66 – heat stabilised and impact modified.



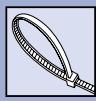
TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
<b>T18R</b>	2.5	100.0	22.0	80	PA66HIRHS(REC)	Black (BK)	100 pcs.	1-2;4-5;25	111-00000
<b>T30R</b>	3.5	150.0	35.0	135	PA66HIRHS(REC)	Black (BK)	100 pcs.	1-2;4-5;25	111-03083
<b>T50R</b>	4.6	200.0	50.0	225	PA66HIRHS(REC)	Black (BK)	100 pcs.	1-2;4-7;25	111-05018
<b>T120R</b>	7.6	387.0	105.0	535	PA66HIRHS(REC)	Black (BK)	100 pcs.	1;3;6-7;9-10;25	111-00447

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**Cable ties for higher fire-protection****T-Series in PA66V0 white**

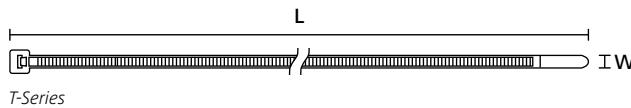
T-Series cable ties for bundling and securing cables, pipes and hoses. These cable ties can be used for almost any type of application especially where safety regulations are high and the reduction of smoke and dangerous gases is required. PA66V0 products are most critically used within public sector areas – particularly in the rail, construction and defence industry.

**Features and benefits**

- White cable tie for higher fire-protection
- Conform to low smoke generation requirements (UL94 V0)
- Low evolution of toxic gases and corrosive acids in event of a fire
- PA66V0 cable ties are available in different sizes
- High safety rating due to low fire hazard

*Flame retardant cable tie made from PA66V0 material.*

**Material specifications: See Article-No. on our website.**



T-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
<b>T18R</b>	2.5	100.0	22.0	80	PA66V0	White (WH)	100 pcs.	1-2;4-5;25	111-91819
<b>T18L</b>	2.5	203.2	55.0	80	PA66V0	White (WH)	1000 pcs.	1-2;4-5;25	111-02043
<b>T30R</b>	3.6	150.0	35.0	135	PA66V0	White (WH)	100 pcs.	1-2;4-5;25	111-93019
<b>T50R</b>	4.6	200.0	50.0	225	PA66V0	White (WH)	100 pcs.	1-2;4-7;25	111-95019
<b>T50I</b>	4.6	300.0	85.0	225	PA66V0	White (WH)	100 pcs.	1-2;4-7;25	111-00317
<b>T50L</b>	4.7	390.0	110.0	225	PA66V0	White (WH)	100 pcs.	1-2;4-7;25	111-05438
<b>T120R(E)</b>	7.6	387.0	100.0	535	PA66V0	White (WH)	100 pcs.	1;3;6-7;9-10;25	111-91210

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOCut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



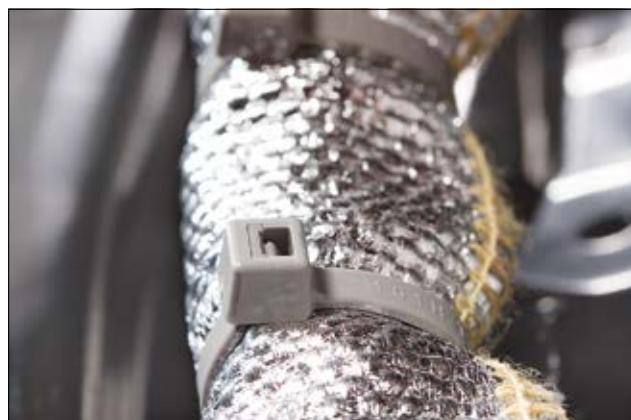
## Cable ties for temperatures up to +150 °C (5000 h) in polyamide 4.6

### T-Series in PA46 natural and grey

These inside serrated cable ties are made from Polyamide 4.6 (PA46). They can be applied in environments with temperatures up to +195 °C (for 500 hours) which makes them suitable for applications where a broader temperature range is required. Polyamide 4.6 is a well known material in the automotive, railway or white goods area. An application tool is recommended to ensure greater process reliability while installing cable ties.

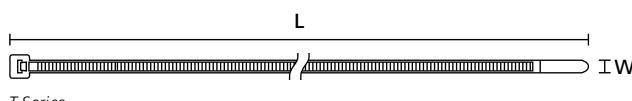
#### Features and benefits

- Cable tie for high temperature applications up to +150 °C (5000 h) and +195 °C (500 h)
- Available in different sizes to cover various bundle diameters
- Low smoke generation in the event of a fire
- PA46 is a moisture sensitive material
- Inside serrated cable tie offers strong hold around bundles
- Easy application either manually or with an application tool



T-Series cable ties – higher temperature resistance up to +150 °C for 5000 hours (PA46).

#### Material specifications: See Article-No. on our website.



T-Series

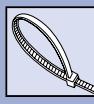
TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
<b>T18R</b>	2.5	100.0	22.0	80	PA46	Natural (NA)	1000 pcs.	1-2;4-5;25	114-01879
<b>T30R</b>	3.5	150.0	35.0	135	PA46	Grey (GY)	100 pcs.	1-2;4-5;25	111-00264
	3.5	150.0	35.0	135	PA46	Natural (NA)	100 pcs.	1-2;4-5;25	114-03079
<b>T50R</b>	4.6	202.0	50.0	225	PA46	Grey (GY)	100 pcs.	1-2;4-7;25	111-00824
	4.6	202.0	50.0	225	PA46	Natural (NA)	100 pcs.	1-2;4-7;25	111-00525
<b>T50I</b>	4.6	300.0	85.0	225	PA46	Natural (NA)	100 pcs.	1-2;4-7;25	111-05220
<b>T50L</b>	4.6	390.0	110.0	225	PA46	Natural (NA)	100 pcs.	1-2;4-7;25	111-00526
<b>T120R(E)</b>	7.6	387.0	100.0	535	PA46	Grey (GY)	100 pcs.	1;3;6-7;9-10;25	111-00819
	7.6	387.0	100.0	535	PA46	Natural (NA)	100 pcs.	1;3;6-7;9-10;25	114-12179

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



### Cable ties for higher chemical resistance and temperatures of -80° to +170 °C

#### T-Series in E/TFE (Tefzel®) blue

E/TFE or Tefzel® cable ties are used when higher chemical resistance and/or temperatures up to +170 °C are required. These ties are most likely chosen for challenging applications in industries like food and beverage, aerospace, automotive or railway.

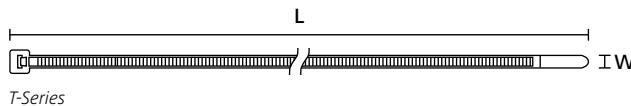
#### Features and benefits

- Blue cable tie offering high chemical resistance
- Suitable for applications with temperatures of -80° to +170 °C
- Resistant to radioactivity and UV light
- E/TFE is a non hydroscopic material, no moisture absorption
- Complying with UL94 V0 requirements



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

**Material specifications: See Article-No. on our website.**



T-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
<b>T18R</b>	2.5	100.0	22.0	80	E/TFE	Blue (BU)	100 pcs.	2;5	111-00659
<b>T30R</b>	3.5	150.0	36.0	133	E/TFE	Blue (BU)	100 pcs.	1-2;4-5;25	111-00698
<b>T50R</b>	4.7	202.0	50.0	222	E/TFE	Blue (BU)	100 pcs.	1-2;4-7;25	111-00732
<b>T50L</b>	4.7	381.0	105.0	225	E/TFE	Blue (BU)	100 pcs.	1-2;4-7;25	111-00718
<b>T120R</b>	7.4	387.0	105.0	535	E/TFE	Blue (BU)	50 pcs.	1;3;6-7;9-10;25	111-01125

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. 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. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## Polypropylene cable ties for higher chemical resistance and temperatures up to +115 °C

### T-Series in PP natural and black

T-Series cable ties made from Polypropylene (PP) are less hydroscopic and offer a higher chemical resistance and temperature range compared to a standard Polyamide 6.6 (PA66) material. Cable ties from Polypropylene can withstand continuous operating temperatures up to +115 °C. These cable ties are used to bundle and secure cables, pipes and/or hoses.

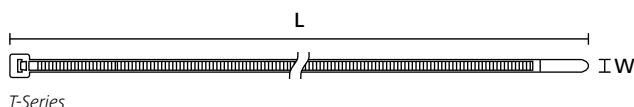
#### Features and benefits

- Polypropylene cable ties for higher chemical resistance
- Can withstand continuous operating temperatures up to +115 °C
- Different sizes available in black and natural colour
- Due to its low density PP cable ties can float on water
- Less hydroscopic material, almost no water absorption
- Polypropylene is a lightweight material due to its density
- The production of polypropylene generally requires less energy compared to other plastics



T-Series cable ties for higher chemical resistance and temperatures up to +115 °C (PP).

#### Material specifications: See Article-No. on our website.



T-Series

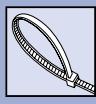
TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
T18R	2.5	100.0	19.0	36	PP	Black (BK)	100 pcs.	1-2;4-5;25	111-01917
	2.5	100.0	19.0	36	PP	Natural (NA)	1000 pcs.	1-2;4-5;25	111-01922
T30R	3.6	148.0	32.0	89	PP	Natural (NA)	100 pcs.	1-2;4-5;25	111-03017
T50R	4.6	202.0	44.5	110	PP	Black (BK)	100 pcs.	1-2;4-7;25	111-04928
	4.6	202.0	44.5	110	PP	Natural (NA)	100 pcs.	1-2;4-7;25	111-04931
T120R	7.6	387.0	104.0	270	PP	Black (BK)	100 pcs.	1;3;6-7;9-10;25	111-08313

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOut. For more information on tooling please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton).



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**Cable ties made from sustainable bioplastic****T-Series in PA11 black**

T-Series cable ties manufactured from PA11 have many technical features making them suitable for use in a variety of applications to fix and support cables, pipes and other elements. They offer an excellent resistance to chemicals in most challenging environments like offshore or on oil rigs and construction vehicles. In addition the very good UV resistance makes it a perfect choice for solar panel cable installations.

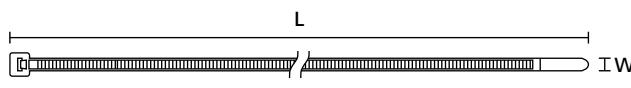
**Features and benefits**

- Made of Polyamide 11 – a sustainable bioplastic from vegetable oil
- Very good UV resistance and durability in outdoor applications
- Stable technical performance even at very low temperatures
- High resistance to chemicals including chlorides
- Low water absorption rate offers consistent technical performance



A sustainable T-Series cable tie with high resistance to chemicals and UV light.

**Material specifications: See Article-No. on our website.**



T-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
<b>T18R</b>	2.5	100.0	22.0	80	PA11	Black (BK)	100 pcs.	1-2;4-5;25	111-01718
<b>T30R</b>	3.5	150.0	35.0	130	PA11	Black (BK)	100 pcs.	1-2;4-5;25	111-01719
<b>T50S</b>	4.6	150.0	35.0	170	PA11	Black (BK)	100 pcs.	1-2;4-7;25	111-01720
<b>T50R</b>	4.6	200.0	50.0	170	PA11	Black (BK)	100 pcs.	1-2;4-7;25	111-01721
<b>T50I</b>	4.6	300.0	85.0	225	PA11	Black (BK)	100 pcs.	1-2;4-7;25	111-02217

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**Cable ties in-between size to T-Series****LK-Series**

For bundling and securing cables, pipes, hoses and other elements.

These cable ties can be used for a countless number of applications. The LK-Series is similar to T-Series but offers in-between sizes to fit individual customer needs.

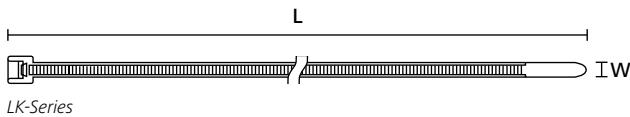
**Features and benefits**

- Inside serrated cable ties for a strong hold around bundles
- Various materials and sizes are available
- High tensile strength with very low insertion force
- Easy application either manually or with an application tool



LK-Series – in-between size to T-Series.

**Material specifications: See Article-No. on our website.**



LK-Series

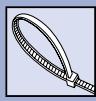
TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
LK2A	4.6	270.0	73.0	225	PA66	Black (BK)	100 pcs.	1-2;4-5;25	111-60110
	4.6	270.0	73.0	225	PA66	Blue (BU)	100 pcs.	1-2;4-5;25	111-60104
	4.6	270.0	73.0	225	PA66	Natural (NA)	100 pcs.	1-2;4-5;25	111-60119
	4.6	270.0	73.0	225	PA66	Red (RD)	100 pcs.	1-2;4-5;25	111-60106
	4.6	270.0	73.0	225	PA66	Yellow (YE)	100 pcs.	1-2;4-5;25	111-60108
	4.6	270.0	73.0	225	PA66HIR	Black (BK)	500 pcs.	1-2;4-5;25	111-00118
	4.6	270.0	73.0	225	PA66HIR(S)	Black (BK)	100 pcs.	1-2;4-5;25	111-00127
	4.6	270.0	73.0	225	PA66HS	Black (BK)	100 pcs.	1-2;4-5;25	111-60150
	4.6	270.0	73.0	225	PA66HS	Brown (BN)	100 pcs.	1-2;4-5;25	111-60136
	4.6	270.0	73.0	225	PA66W	Black (BK)	100 pcs.	1-2;4-5;25	111-60160
LK2	4.8	120.0	28.0	135	PA66	Natural (NA)	200 pcs.	1-2;4-5;25	111-60219
LK5	13.2	535.0	150.0	1115	PA66	Black (BK)	50 pcs.	1;3;6-7;9-10;25	111-60510
	13.2	535.0	150.0	1115	PA66	Natural (NA)	50 pcs.	1;3;6-7;9-10;25	111-60519
	13.2	535.0	150.0	1115	PA66HIR(S)	Black (BK)	50 pcs.	1;3;6-7;9-10;25	111-60501
	13.2	535.0	150.0	1115	PA66HS	Natural (NA)	50 pcs.	1;3;6-7;9-10;25	111-60559
	13.2	535.0	150.0	1115	PA66W	Black (BK)	50 pcs.	1;3;6-7;9-10;25	111-60560

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



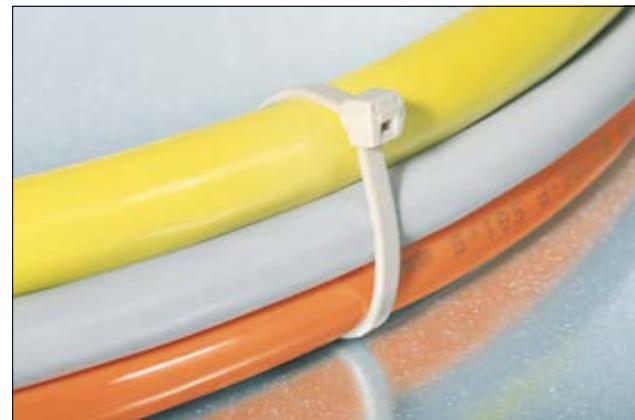
## Cable ties for high temperature applications up to +240 °C

### PEEK Ties, inside serrated

PEEK Ties have been designed for use in hazardous environments. Their suitability for high temperature applications makes them ideal for use in the drilling industry, railway, offshore or automotive industry. The excellent chemical and radium ray resistance is predestined for applications in medical engineering, chemical industry and power stations. Within the aerospace industry, PEEK ties are suitable due to their good ratio weight to tensile strength. Because of this combination of different properties, PEEK ties can replace metal solutions.

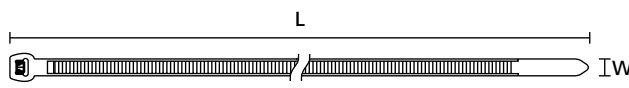
#### Features and benefits

- For high temperature applications from -55 °C up to +240 °C
- Close fit to the cable bundle due to the deepening head shape
- Easy insertion combined with high tensile strength
- Takes up less space due to curved head design
- Combines the performance of a metal tie with the ease of use of a polyamide cable tie
- Manual and/or pneumatic tools available for greater process reliability



The PEEK cable tie PT220 for high temperature applications.

**Material specifications: See Article-No. on our website.**



PEEK-Series

TYPE	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
PT220	4.7	220.0	8.0	56.0	380	PEEK	Beige (BGE)	100 pcs.	1-2;4-5;25	111-01235

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



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## Cable ties with smart design

### X-Series

The X-Series range of cable ties provides a new and improved design compared with standard cable ties, delivering a range of benefits and enhanced performance. With a new streamlined design and smaller head, the X-Series cable ties provide a superior fixing solution for tight applications, whilst also benefiting from a better grip around the bundle. This professional cable tie range is available in weather resistant and high impact / heat stabilised materials, ensuring these fixings consistently perform well both at high temperatures and in cold environments.

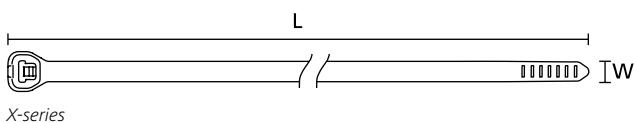
### Features and benefits

- Inside serrated cable tie
- High tensile strength around cable bundles
- Smooth, rounded head design
- Space saving solution
- Improved ergonomic design
- Provides a secure fastening with no lateral movement



X-Series provides a superior fixing solution for tight applications.

**Material specifications: See Article-No. on our website.**



X-series

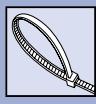
TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
X80R	4.7	200.0	50.0	355	PA66HIRHS	Black (BK)	100 pcs.	1-2;4-5;25	108-00004
X80I	4.7	300.0	84.0	355	PA66HIRHS	Black (BK)	100 pcs.	1-2;4-5;25	108-00018
X80L	4.7	385.0	110.0	355	PA66HIRHS	Black (BK)	100 pcs.	1-2;4-5;25	108-00028
X120R	7.7	369.0	100.0	535	PA66HIRHS	Black (BK)	100 pcs.	1;3;6-7;9-10;25	108-00040
X250R	13.0	535.0	150.0	1115	PA66HIRHS	Black (BK)	50 pcs.	1;3;6-7;9-10;25	108-00050
	13.0	535.0	150.0	1115	PA66W	Black (BK)	50 pcs.	1;3;6-7;9-10;25	108-00052
X250I	13.0	715.0	205.0	1115	PA66HIRHS	Black (BK)	50 pcs.	1;3;6-7;9-10;25	108-00045

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**Cable ties for hose and garter****CTT-Series natural and black**

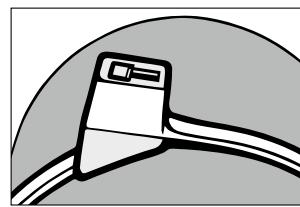
CTT is designed to secure pipes, hoses and garters where low pressures are being secured. These ties can be used in many different industries including automotive, white goods manufacturing, medical industry and construction.

**Features and benefits**

- Curved head design offers a good fit to the bundle
- Inside serration for a strong hold onto bundles
- Easy application either manually or with a processing tool

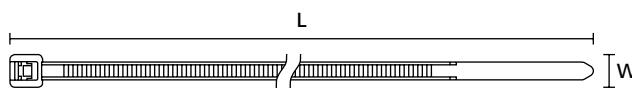


CTT ties installed on flexible garters.

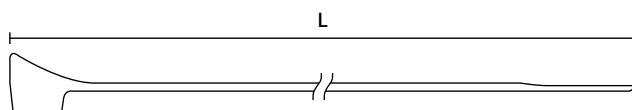


For secure fixing of round and solid shapes.

**Material specifications: See Article-No. on our website.**



CTT series



CTT Hose Ties

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
CTT20R	2.5	100.0	13.0	89	PA66HS	Black (BK)	1000 pcs.	1-2;4-5;25	112-51960
	2.5	100.0	13.0	90	PA66	Natural (NA)	100 pcs.	1-2;4-5;25	112-51919
CTT60R	4.7	205.0	45.0	267	PA66	Black (BK)	100 pcs.	1-2;4-5;25	112-56019
	4.7	205.0	45.0	267	PA66HS	Black (BK)	100 pcs.	1-2;4-5;25	112-52112
CTT150L	8.3	784.0	230.0	535	PA66HS	Black (BK)	50 pcs.	1;3;10	112-00024

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



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**Cable ties for parallel routing****DH-Series**

Double loop head ties are ideal for separation of two cable runs without the need for additional cable ties. Additionally these ties are 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).

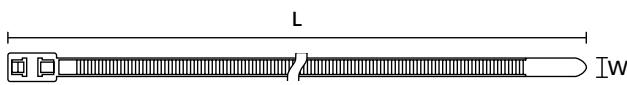
**Features and benefits**

- Possibility to separate bundles with only one cable tie
- Cable tie with two heads creating an inside and outside serrated loop
- Available in a wide range of materials
- Bundles can be of different diameter
- Maximum bundle diameter is a maximum combined bundle
- Easy application either manually or with a processing tool

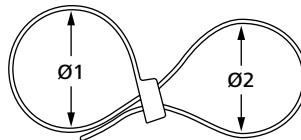


DH-Series cable ties for parallel routing.

**Material specifications: See Article-No. on our website.**



DH-Series



DH-Series maximum combined bundle diameter

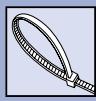
TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Min. Tensile Strength 2nd loop	Material	Colour	Pack Cont.	Tools	Article-No.
T50RDH	4.7	210.0	38.0	225	180 N	PA46	Grey (GY)	100 pcs.	1-2;4-7;25	117-05168
	4.7	210.0	38.0	225	180 N	PA66	Black (BK)	100 pcs.	1-2;4-7;25	117-05000
	4.7	210.0	38.0	225	180 N	PA66	Natural (NA)	100 pcs.	1-2;4-7;25	117-05002
	4.7	210.0	38.0	225	180 N	PA66HS	Black (BK)	100 pcs.	1-2;4-7;25	117-05050
	4.7	210.0	38.0	225	180 N	PA66W	Black (BK)	500 pcs.	1-2;4-7;25	117-05060
T50IDH	4.7	305.0	76.2	225	180 N	PA66HS	Black (BK)	1000 pcs.	1-2;4-7;25	117-05350
	4.7	305.0	76.2	225	180 N	PA66W	Black (BK)	100 pcs.	1-2;4-7;25	117-05360
T50LDH	4.7	395.0	100.0	225	180 N	PA66HS	Black (BK)	100 pcs.	1-2;4-7;25	117-00008

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**Cable ties for food industry, detectable****MCT-Series**

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.

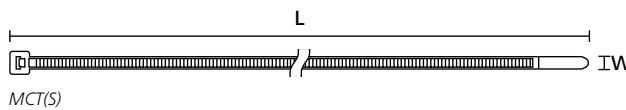
**Features and benefits**

- Total metal dispersion throughout the tie
- Can support quality assurance in the production of food stuffs, for example HACCP
- Blue colour for easy visual detection
- Greatly reduces risk of contamination
- Metal detectable (detection level depending on specific application and equipment)



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

**Material specifications: See Article-No. on our website.**



MCT(S)

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
<b>MCT18R</b>	2.5	100.0	22.0	80	PA66MD	Blue (BU)	100 pcs.	1-2;4-5;25	111-01225
<b>MCT30R</b>	3.5	150.0	35.0	135	PA66MD	Blue (BU)	100 pcs.	1-2;4-5;25	111-00829
<b>MCT50R</b>	4.6	203.2	50.0	225	PA66MD	Blue (BU)	100 pcs.	1-2;4-5;25	111-00830
<b>MCT50L</b>	4.7	380.0	110.0	225	PA66MD	Blue (BU)	100 pcs.	1-2;4-5;25	111-00831
	4.7	380.0	110.0	225	PA66MD	Yellow (YE)	100 pcs.	1-2;4-5;25	111-01168
<b>MCT120R</b>	7.6	387.0	100.0	535	PA66MD	Blue (BU)	100 pcs.	1;3;6-7;9-10;25	111-01136

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



## Cable ties for food industry, detectable

### MCTS-Series, corrosion resistant

Our MCTS cable ties have been specifically developed to be used in the food and beverage as well as in the pharmaceutical industry. A unique manufacturing process in combination with a unique material formulation is offering outstanding performance in line with high corrosion resistance. This makes the MCTS an ideal product even for very humid environments. In addition the MCTS ties manufactured from a polypropylene base material are offering very good chemical resistance.

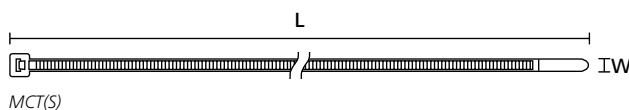
#### Features and benefits

- Total metal dispersion throughout the tie
- Can support quality assurance in the production of food stuffs, for example HACCP
- Blue colour for easy visual detection
- Greatly reduces risk of contamination
- Metal detectable (detection level depending on specific application and equipment)
- MCTS ties have very good corrosion resistance



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

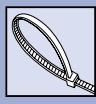
#### Material specifications: See Article-No. on our website.



TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
<b>MCTS100</b>	2.5	100.0	22.0	60	PA66MD	Blue (BU)	100 pcs.	1-2;4-5;25	111-01341
<b>MCTS150</b>	3.5	153.0	36.0	110	PA66MD	Blue (BU)	100 pcs.	1-2;4-5;25	111-01342
	3.5	153.0	36.0	110	PA66MD	Mustard (MST)	100 pcs.	1-2;4-5;25	111-01381
<b>MCTS200</b>	4.7	202.0	50.0	150	PA66MD	Blue (BU)	100 pcs.	1-2;4-5;25	111-01343
	4.7	202.0	50.0	150	PA66MD	Mustard (MST)	100 pcs.	1-2;4-5;25	111-01382
	4.7	202.0	50.0	150	PA66MD	Russet (RUS)	100 pcs.	1-2;4-5;25	111-01385
<b>MCTS300</b>	4.8	301.0	80.0	150	PA66MD	Blue (BU)	100 pcs.	1-2;4-5;25	111-01399
	4.8	301.0	80.0	150	PA66MD	Mint Green (MGN)	100 pcs.	1-2;4-5;25	111-01400
	4.8	301.0	80.0	150	PA66MD	Mustard (MST)	100 pcs.	1-2;4-5;25	111-01401
	4.8	301.0	80.0	150	PA66MD	Russet (RUS)	100 pcs.	1-2;4-5;25	111-01402

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



## Cable ties for food industry, detectable

### MCTPP-Series

The Metal Content cable tie is designed for use in the food and pharmaceutical processing industries. The ties material include metallic pigments, so it enables even small 'cut-off's to be detected by standard metal-detecting equipment. Ideally suited for the installaton of cabling in and around the manufacturing process.

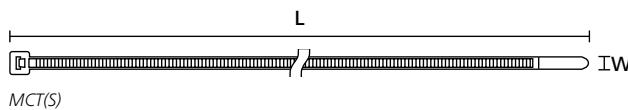
#### Features and benefits

- Manufactured from metal content Polypropylene
- High chemical and temperature resistance
- Blue colour for easy visual detection
- Greatly reduces risk of contamination
- Metal detectable (detection level depending on specific application and equipment)
- Can support quality assurance in the production of food stuffs, for example HACCP



*MCTPP ties have a high chemical and temperature resistance.*

**Material**  
**specifications:** See  
**Article-No. on our**  
**website.**



TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
<b>MCTPP18R</b>	2.4	100.0	22.0	85	PPMD	Blue (BU)	100 pcs.	1-2;4-5;25	111-01664
<b>MCTPP30R</b>	3.5	150.0	35.0	130	PPMD	Blue (BU)	100 pcs.	1-2;4-5;25	111-01665
<b>MCTPP50R</b>	4.6	203.2	50.0	150	PPMD	Blue (BU)	100 pcs.	1-2;4-5;25	111-01666
<b>MCTPP50L</b>	4.6	390.0	110.0	150	PPMD	Blue (BU)	100 pcs.	1-2;4-5;25	111-01667
<b>MCTPP120R</b>	7.6	387.0	100.0	380	PPMD	Blue (BU)	100 pcs.	1;3;6-7;9-10;25	111-01668

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



## 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, for instance automotive and electrical industry.

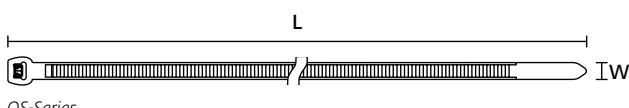
#### Features and benefits

- 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 design
- Easy insertion combined with high tensile strength
- PA46 material for higher temperatures up to +195 °C (500 h)
- PA66V0 cable ties fulfill Limited Fire Hazard requirements
- Easy application either manually or with a processing tool



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

**Material specifications: See Article-No. on our website.**



OS-Series



The curved head design of the OS-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
T18ROS	2.5	100.0	20.0	80	PA66HS	Black (BK)	500 pcs.	1-2;4-5;25	118-04701
	2.5	100.0	20.0	80	PA66HS	Natural (NA)	1000 pcs.	1-2;4-5;25	118-00035
	2.5	100.0	20.0	80	PA66V0	White (WH)	100 pcs.	1-2;4-5;25	118-00079
T30ROS	3.4	145.0	35.0	135	PA66HS	Black (BK)	100 pcs.	1-2;4-5;25	118-04800
T30LOS	3.4	200.0	50.0	135	PA66HS	Black (BK)	100 pcs.	1-2;4-5;25	118-04900
	3.4	200.0	50.0	135	PA66HS	Natural (NA)	100 pcs.	1-2;4-5;25	118-00044
	3.4	200.0	50.0	135	PA66V0	White (WH)	100 pcs.	1-2;4-5;25	118-00080
T50SOS	4.6	150.0	35.0	225	PA66HS	Black (BK)	100 pcs.	1-2;4-7;25	118-05850
T50ROS	4.6	200.0	50.0	225	PA46	Grey (GY)	500 pcs.	1-2;4-7;25	118-05078
	4.6	200.0	50.0	225	PA66HS	Black (BK)	500 pcs.	1-2;4-7;25	118-05040
	4.6	200.0	50.0	225	PA66HS	Natural (NA)	100 pcs.	1-2;4-7;25	118-05059
	4.6	200.0	50.0	225	PA66W	Black (BK)	100 pcs.	1-2;4-7;25	118-00127
	4.6	203.2	50.0	225	PA66HIRHS(REC)	Black (BK)	100 pcs.	1-2;4-7;25	118-00149
T50MOS	4.6	245.0	66.0	225	PA66HIRHS(REC)	Black (BK)	100 pcs.	1-2;4-5;25	118-00173
	4.6	245.0	66.0	225	PA66HS	Black (BK)	100 pcs.	1-2;4-5;25	118-00018
	4.6	245.0	66.0	225	PA66V0	White (WH)	100 pcs.	1-2;4-5;25	118-00081
	4.6	245.0	66.0	225	PA66W	Black (BK)	100 pcs.	1-2;4-5;25	118-00128
T50LOS	4.6	384.0	110.0	225	PA66HS	Black (BK)	100 pcs.	1-2;4-7;25	118-05900

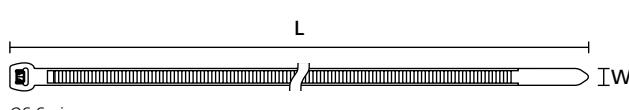
Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

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EN 45545-2

Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**Cable ties for thin-walled bundles****OS-Series**

OS-Series

The curved head  
design of the OS-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
T120ROS	7.6	385.0	105.0	535	PA66HIRHS(REC)	Black (BK)	100 pcs.	1;3;6-7;9-10;25	118-00174
	7.6	385.0	105.0	535	PA66HS	Black (BK)	100 pcs.	1;3;6-7;9-10;25	118-00066
	7.6	385.0	105.0	535	PA66HS	Natural (NA)	100 pcs.	1;3;6-7;9-10;25	118-00067
	7.6	385.0	105.0	535	PA66V0	White (WH)	100 pcs.	1;3;6-7;9-10;25	118-00082
	7.6	385.0	105.0	535	PA66W	Black (BK)	100 pcs.	1;3;6-7;9-10;25	118-00130

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)

**EN 45545-2**

Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



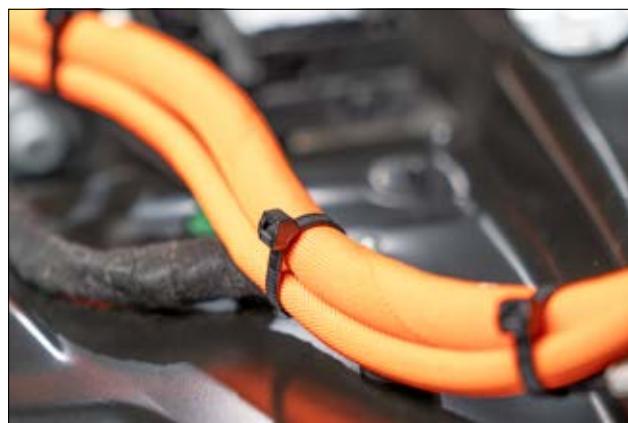
## Cable ties made from post-industrial recycled polyamide 6.6

### OS-Series in PA66HIRHS(REC) black

OS-Series cable ties deliver high performance with resistance to abrasion, petrol and oil. Made from a more sustainable, durable polymer that requires no moisture conditioning, they are ideal for a wide range of workflows and applications even in tough conditions and demanding environments.

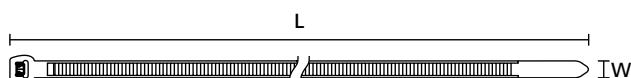
#### Features and benefits

- Manufactured from Post Industrial Recycled (PIR) PA66
- Heat stabilised, impact modified material
- Easy insertion combined with high tensile strength
- 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 design
- Easy application either manually or with a processing tool



OS-Series cable ties made from post-industrial recycled PA66 – heat stabilised and impact modified.

**Material specifications: See Article-No. on our website.**



OS-Series



The curved head design of the OS-Series

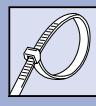
TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
<b>T50ROS</b>	4.6	203.2	50.0	225	PA66HIRHS(REC)	Black (BK)	100 pcs.	1-2;4-7;25	118-00149
<b>T50MOS</b>	4.6	245.0	66.0	225	PA66HIRHS(REC)	Black (BK)	100 pcs.	1-2;4-5;25	118-00173
<b>T120ROS</b>	7.6	385.0	105.0	535	PA66HIRHS(REC)	Black (BK)	100 pcs.	1;3;6-7;9-10;25	118-00174

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**Cable ties for thin-walled bundles****S-Series, Polypropylene (PP)**

S-Series cable ties made from Polypropylene (PP) are non hydroscopic, offer a higher chemical resistance and reduced CO<sub>2</sub> footprint compared to a standard cable tie material. These cable ties are used to bundle and secure cables, pipes and/or hoses.

**Features and benefits**

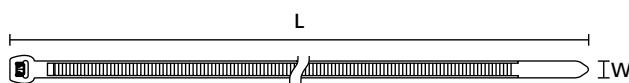
- The S50ROS features a significantly lower CO<sub>2</sub> footprint compared to cable ties made of standard material, in line with sustainability goals in various industries
- The outside serration design ensures gentle handling of sensitive cables and bundles, reducing the risk of damage during installation and maintenance
- With an anti-slip feature on the inside, the S50ROS prevents undesired lateral movement of cables and bundles, maintaining tidy and organized cable management within vehicles
- Resistant to various chemicals including salt and acid, the S50ROS is ideal for automotive applications where exposure to harsh environments is common, ensuring long-lasting performance and reliability



S-Series cable ties provide more sustainable and reliable bundling in harsh environments.

**Please find more details on  
[www.HellermannTyton.com/S50ROS](http://www.HellermannTyton.com/S50ROS)**

**Material  
specifications: See  
Article-No. on our  
website.**



OS-Series



The curved head  
design of the OS-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
S50ROS	4.9	200.0	50.0	185	PP	Black (BK)	100 pcs.	5	118-00272
	4.9	200.0	50.0	185	PP	Black (BK)	1000 pcs.	5	118-00270

**Recommended Tools: 5=EVO7i. For more information on toolings please refer to the Application Tooling chapter on page 593.**

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## Cable ties for high temperature applications up to +240 °C

### PEEK Ties, outside serrated

PEEK Ties have been designed for use in hazardous environments. Their suitability for high temperature applications makes them ideal for use in the drilling industry, railway, offshore or automotive industry. The excellent chemical and radium ray resistance is predestined for applications in medical engineering, chemical industry and power stations. Within the aerospace industry, PEEK ties are suitable due to their good ratio weight to tensile strength. Because of this combination of different properties, PEEK ties can replace metal solutions.

### Features and benefits

- For high temperature applications from -55 °C up to +240 °C
- Outside serrated cable tie with smooth surface to the bundle
- Close fit to the cable bundle due to the deepening head shape
- Easy insertion combined with high tensile strength
- Takes up less space due to curved head design
- Combines the performance of a metal tie with the ease of use of a polyamide cable tie
- Manual and/or pneumatic tools available for greater process reliability

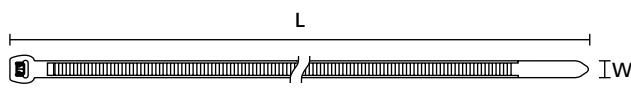


Outside serrated Cable Tie and Identification tag HFTP48 made from PEEK.



A clearly better way of identifying cables and pipes with HFTP PEEK tags.

**Material specifications: See Article-No. on our website.**



PEEK-Series

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
PT2A		3.4	145.0	4.0	35.0	230	PEEK	Beige (BGE)	100 pcs.	1-2;4-5;25	118-00032
PT3B		4.7	250.0	4.0	65.0	300	PEEK	Beige (BGE)	100 pcs.	1-2;4-5;25	118-00116

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton).



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

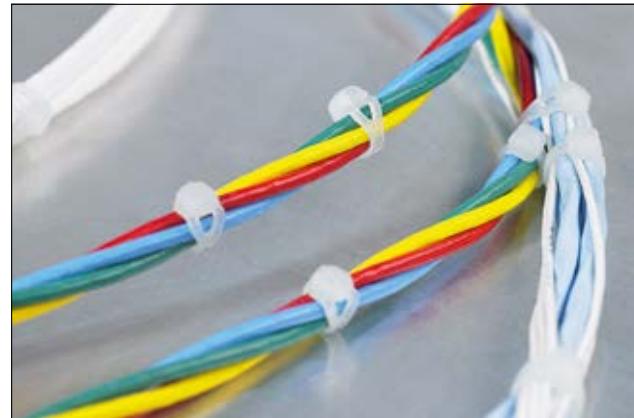
**Cable ties with 90° angled head****V-Series**

Due to its low profile head, V-Series outside serrated cable ties are perfectly suited for applications with restricted space, such as camera, alarm and automation systems (Remote I/O Systems).

Where bundles are fed through a grommet or ductwork, V-Series provides a practical solution due to its unique rounded design.

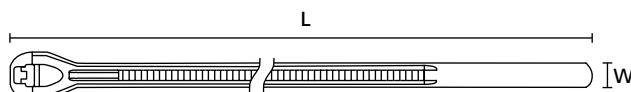
**Features and benefits**

- Outside serrated cable tie with smooth surface to the bundle
- The 90° angled head perfectly fits onto the bundle
- Rounded head design minimises the risk of damage to insulation, especially of parallel routed bundles
- Low profile head takes up less space above the bundle
- Easy insertion and high tensile strength
- Easy application either manually or with a processing tool

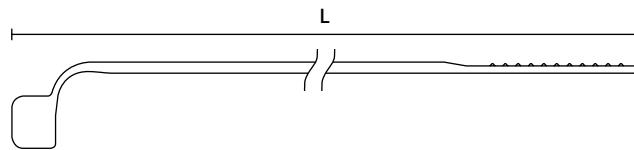


V-Series - the 90° angled head perfectly fits onto the bundle.

**Material specifications: See Article-No. on our website.**



V-Series



Where bundles are fed through a grommet or ductwork, V-Series provides a practical solution due to its unique rounded design.

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
<b>V150R</b>	3.3	150.0	35.0	150	PA66HS	Natural (NA)	100 pcs.	1-2;4-5;25	118-00089

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



## Cable ties with low profile head

### PE-Series

These ties are particularly useful in areas with restricted space. The low profile design ensures that nothing snags on the heads. Coloured low profile cable ties are ideal for securing foam padding to playground equipment or as a simple means of identifying equipment.

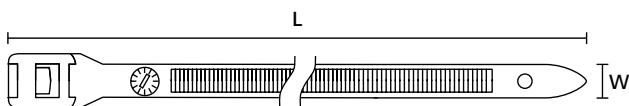
#### Features and benefits

- Outside serrated cable tie with a smooth surface to the bundle
- Coloured cable ties can be used for identification
- Broad contact area with the bundle minimises risk of damage
- Low profile head for ideal use in restricted spaces
- Parallel entry for optimal fit around circular bundles



PE400SH-Series - low head profile cable ties for secure fastening and identification in narrow spaces.

**Material specifications: See Article-No. on our website.**



PE-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
PE180	9.0	180.0	42.0	445	PA66HS	Black (BK)	100 pcs.	1;6-7;9-10	112-18061
	9.0	180.0	42.0	445	PA66HSW	Black (BK)	100 pcs.	1;6-7;9-10	112-18060
PE400SH	9.0	400.0	116.0	445	PA66	Blue (BU)	100 pcs.	1;6-7;9-10	112-18201
	9.0	400.0	116.0	445	PA66	Green (GN)	100 pcs.	1;6-7;9-10	112-18200
	9.0	400.0	116.0	445	PA66	Red (RD)	100 pcs.	1;6-7;9-10	112-18202
	9.0	400.0	116.0	445	PA66	Yellow (YE)	100 pcs.	1;6-7;9-10	112-18203
PE530	9.0	535.0	146.0	445	PA66HSW	Black (BK)	100 pcs.	1;6-7;9-10	112-53060

Recommended Tools: 1=MK10-SB, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P. For more information on toolings please refer to the Application Tooling chapter on page 593.

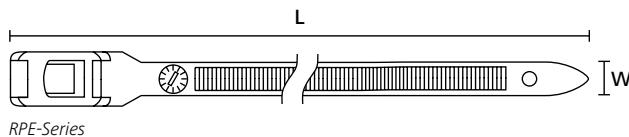
All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



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## RPE-Series releasable



RPE-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
RPE275	9.0	275.0	69.0	445	PA66HSW	Black (BK)	100 pcs.	112-27560
RPE350	9.0	350.0	92.0	445	PA66HSW	Black (BK)	100 pcs.	112-00006
	9.0	350.0	92.0	445	PA66HSW	Black (BK)	100 pcs.	112-35060

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



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## Cable ties with low profile head

### LPH-Series

LPH cable ties are made of Polyamide 6.6 materials. The design with its serration on the outside provides a smooth surface to the bundle. Any damage to the insulation can be avoided. The flat head is ideal in areas with restricted space. They are mainly used within the electrical industry but the tough design is perfectly suited to a variety of indoor and outdoor applications.

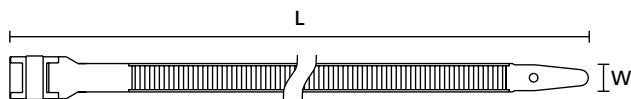
#### Features and benefits

- High impact modified cable ties are also available
- Good tensile strength with a single – or a double bridged head
- Outside serration allows for a smooth surface to the bundle
- Design protects against damage to cable insulation
- Low profile head for optimised use especially in restricted spaces
- Strap is threaded parallel through the low profile head

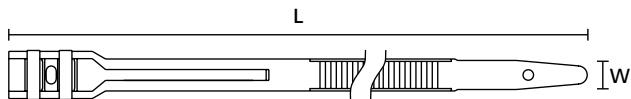


LPH-Series with a smooth surface to the bundle.

**Material specifications: See Article-No. on our website.**



LPH123, LPH175



LPH275, LPH350, LPH500 and LPH750

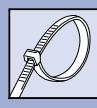
TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
<b>LPH175</b>	9.0	175.0	40.0	310	PA66	Black (BK)	100 pcs.	1;6-7;9-10	112-00203
<b>LPH275</b>	9.0	265.0	62.0	480	PA66HIR(S)	Black (BK)	100 pcs.	1;6-7;9-10	112-00303
<b>LPH350</b>	9.0	355.0	92.0	480	PA66HIR(S)	Black (BK)	100 pcs.	1;6-7;9-10	112-00403
<b>LPH500</b>	9.0	505.0	140.0	540	PA66HIR(S)	Black (BK)	100 pcs.	1;6-7;9-10	112-00033
<b>LPH750</b>	9.0	752.0	220.0	540	PA66HIR(S)	Black (BK)	100 pcs.	1;6-7;9-10	112-00034

Recommended Tools: 1=MK10-SB, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**Cable ties with low profile head****SPH-Series**

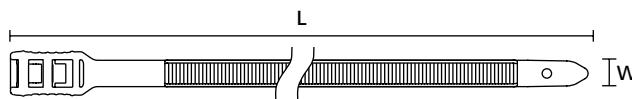
The low profile head cable ties from the SPH-Series meet a wide range of needs. They can be installed both indoors and outdoors, thanks to their UV resistance. They are particularly valued for cable tray installations as well as in the construction sector. These ties are also increasingly used in industrial applications.

**Features and benefits**

- Made from a blend of post-industrial and post-consumer recycled PA66
- Excellent UV resistance for long-term outdoor use (20 years)
- Outside serration design with an anti-slip feature on the inside to prevent lateral movement of sensitive cables and bundles
- Low profile head, ideal for use in narrow spaces
- Low insertion force enables quick, tool-free manual installation
- Pre-locking position supports secure placement before final installation
- Installer-friendly packaging: belt clip and multiple openings



Application of SPH-Series cable tie with LOK02.



TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
<b>SPH175</b>	9.0	185.0	42.0	500	PA66HIRUV(REC)	Black (BK)	100 pcs.	112-00082
<b>SPH275</b>	9.0	262.0	62.0	800	PA66HIRUV(REC)	Black (BK)	100 pcs.	112-00083
<b>SPH350</b>	9.0	350.0	92.0	800	PA66HIRUV(REC)	Black (BK)	100 pcs.	112-00084

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



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## Cable ties for strong hold on smooth bundles

### Soft Grip-Series

Soft Grip cable ties are 2-component or "twin-shot" ties (that combine PA66HS with a soft TPE inner layer). It is designed for the flexible and easy bundling and fastening of smooth and sensitive bundles, such as pipes in vehicle fluid management applications. It has a pre-locking feature and can also be re-opened with a screwdriver. Soft Grip cable ties can be used in combination with specially developed mounts with standardised tie head retention and customisable footparts.

### Features and benefits

- 2-component cable tie (PA66HS and TPE) assures high protection of sensitive harnesses and fluid system tubes
- Soft TPE inner layer inhibits lateral movements on the bundle, especially on smooth tubing
- Pre-locking feature holds the cable tie in place before it is tensioned
- Soft Grip cable tie can be removed with a screwdriver for maintenance
- EVO9 SG application tool with adjusted nose piece available

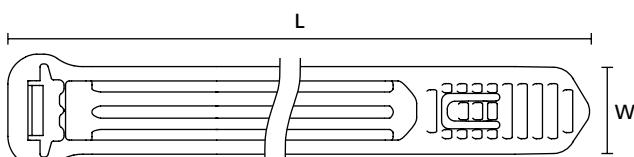


Soft Grip Cable Ties (2-component cable ties).



Soft Grip Cable Ties (2-component cable ties).

**Material**  
**specifications:** See  
**Article-No.** on our  
**website.**

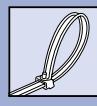


SGT100S

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
SGT100S	12.7	140.0	25.4	315	PA66HIRHSUV TPE	Black (BK), Blue (BU)	500 pcs.	8	111-50001
	12.7	140.0	25.4	445	PA66HS TPE	Black (BK), Blue (BU)	500 pcs.	8	111-50000

Recommended Tools: 8=EVO9SG. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)

**Cable tie locked by glass fibre pin****KR-Series, 1-Piece**

This cable tie is distinguished by its smooth strap and unique locking mechanism. The chamfered head of the KR-Series allows for a firm fit around the bundled element. Due to its special design KR-Series cable ties can be used as a safety method to bundle any cable and to also secure bellows on steering racks, water hoses or vacuum lines. The endless strap version is fairly flexible and can be cut to any length required. Separate heads are available to fix the strap.

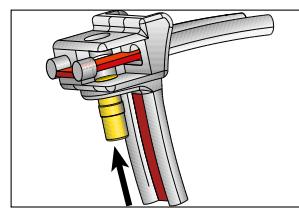
**Features and benefits**

- Cable tie without serration to avoid any damage to cables
- Strap is locked into place with a glass-fibre reinforced pin
- Very secure and vibration resistant fixing
- Available in various materials, colours and almost every length
- Cable ties from PA12 are highly resistant to chemicals, impact and UV light
- KR-ties up to 426 mm are made as one piece
- For assembly a special KR-tool is needed

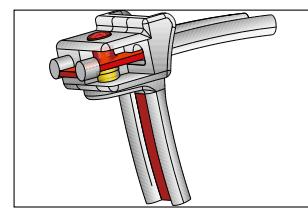
**Material specifications:** See Article-No. on our website.



KR-Series ties applied on a cable tray.



The unlocked head (yellow) of a KR-tie.



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

**Specific part numbers according to EN45545 available on request.**



Cable tie KR-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
KR6/35	6.1	360.0	93.0	490	PA66	Natural (NA)	50 pcs.	11-13	121-63519
	6.1	360.0	93.0	490	PA66HS	Natural (NA)	50 pcs.	11-13	121-63555
	6.1	360.0	93.0	490	PA66UV	Black (BK)	50 pcs.	11-13	121-63560
KR8/21	8.0	210.0	47.0	785	PA66	Natural (NA)	50 pcs.	11-13	121-82119
	8.0	210.0	47.0	785	PA66HS	Natural (NA)	50 pcs.	11-13	121-82155
	8.0	210.0	47.0	785	PA66UV	Black (BK)	50 pcs.	11-13	121-82160
KR8/33	8.0	337.0	86.0	390	PA12	Black (BK)	50 pcs.	11-13	121-83380
	8.0	337.0	86.0	785	PA46	Grey (GY)	50 pcs.	11-13	121-83378
	8.0	337.0	86.0	785	PA66	Natural (NA)	50 pcs.	11-13	121-83319
	8.0	337.0	86.0	785	PA66HS	Natural (NA)	50 pcs.	11-13	121-83355
	8.0	337.0	86.0	785	PA66UV	Black (BK)	50 pcs.	11-13	121-83360
KR8/43	8.0	426.0	105.0	785	PA66HS	Black (BK)	50 pcs.	11-13	121-74360
	8.0	426.0	105.0	785	PA66HS	Natural (NA)	50 pcs.	11-13	121-74359

Recommended Tools: 11=KR6/8, 12=EVO-KR, 13=KR8PNSE. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton).

**EN 45545-2** 

Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## Cable tie locked by glass fibre pin

### KR-Series, ultrasonic welded

This cable tie is distinguished by its smooth strap and unique locking mechanism. The chamfered head of the KR-Series allows for a firm fit around the bundled element. Due to its special design KR-Series cable ties can be used as a safety method to bundle any cable and to also secure bellows on steering racks, water hoses or vacuum lines. The endless strap version is fairly flexible and can be cut to any length required. Separate heads are available to fix the strap.

#### Features and benefits

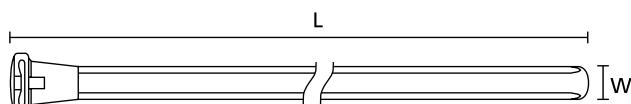
- Cable tie without serration to avoid any damage to cables
- Strap is locked into place with a glass-fibre reinforced pin
- Very secure and vibration resistant fixing
- Lengths over 500 mm have an ultrasonic welded head
- For assembly a special KR-tool is needed
- Available in various materials and colours



Cable Ties KR-Series.

**Other dimensions are available on request.**

**Material specifications:** See Article-No. on our website.

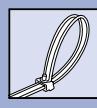


Cable tie KR-Series, ultrasonic welded

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
<b>KR8/50</b>	8.0	500.0	152.0	785	PA66	Natural (NA)	50 pcs.	11-13	121-05019
<b>KR8/60</b>	8.0	600.0	184.0	785	PA66	Natural (NA)	50 pcs.	11-13	121-06019
	8.0	600.0	184.0	785	PA66W	Black (BK)	50 pcs.	11-13	121-06060

**Recommended Tools:** 11=KR6/8, 12=EVO-KR, 13=KR8PNSE. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)

**Cable tie locked by glass fibre pin****KR-Series, endless**

This cable tie is distinguished by its smooth strap and unique locking mechanism. The chamfered head of the KR-Series allows for a firm fit around the bundled element. Due to its special design KR-Series cable ties can be used as a safety method to bundle any cable and to also secure bellows on steering racks, water hoses or vacuum lines. The endless strap version is fairly flexible and can be cut to any length required. Separate heads are available to fix the strap.

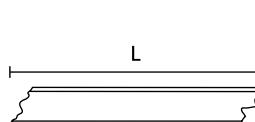
**Features and benefits**

- Cable tie without serration to avoid any damage to cables
- Strap is locked into place with a glass-fibre reinforced pin
- Very secure and vibration resistant fixing
- Endless strap (50 m per reel) and separate heads for large bundle diameters
- Offers high flexibility and can be cut to suit any bundle
- For assembly a special KR-tool is needed

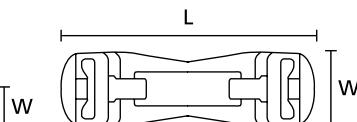


KR-Series cable ties can be cut to any desired length and then be locked with separate cable tie heads.

**Material specifications: See Article-No. on our website.**



Cable tie KR8S1



Double-head KR8C5

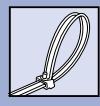
TYPE	Width (W)	Length (L)	N	Material	Colour	Pack Cont.	Tools	Article-No.
KR8/S1	8.0	50.0 m	785	PA66HS	Natural (NA)	50.0 m	11;13	121-98151
	8.0	50.0 m	785	PA66W	Black (BK)	50.0 m	11;13	121-98160
KR8/C5	11.7	38.0	-	PA66HS	Natural (NA)	200 pcs.	11;13	121-58551
	11.7	38.0	-	PA66W	Black (BK)	200 pcs.	11;13	121-58560

**Recommended Tools: 11=KR6/8, 13=KR8PNSE.** For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**Endless cable ties with separate head and spacer****EL-TY-Series**

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

**Features and benefits**

- Made of very strong Polyacetal (POM)
- System consists of endless strap, spacers and heads
- Head includes stainless steel pawls for a proper fixation
- Very secure fixing and good resistance to ageing and UV light
- Suits any bundle diameter and reduces inventory

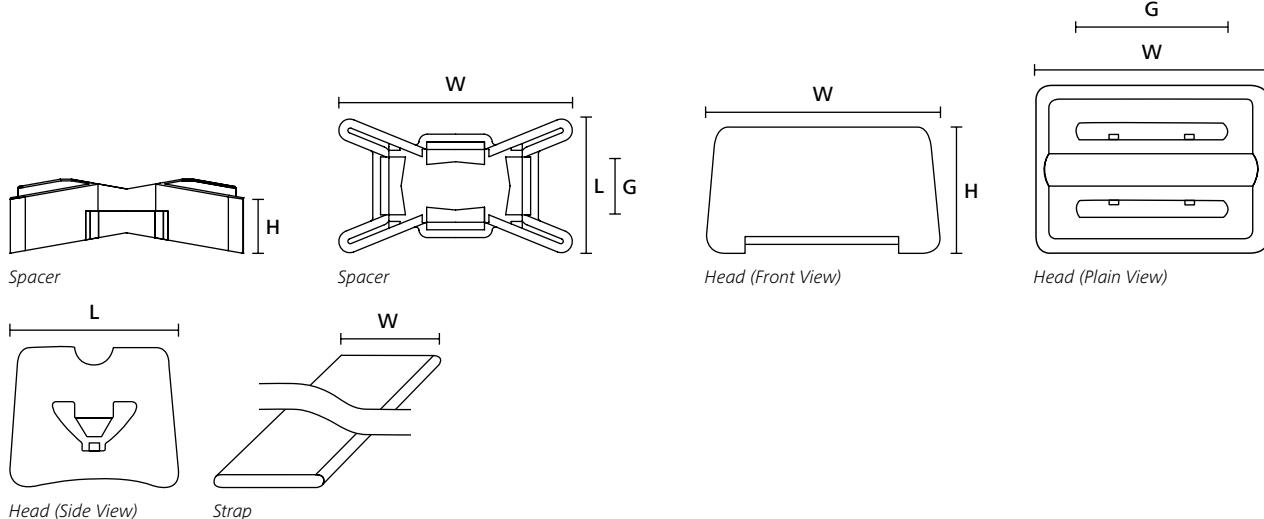
**Material specifications:** See Article-No. on our website.



EL-TY straps can be cut to suit any bundle.



Spacer.



TYPE	Width (W)	Length (L)	Height (H)	N	Strap Width max. (G)	Material	Colour	Content	Tools	Article-No.
<b>TELS-1</b>	12.7	15.2 m	-	1115	-	POM	Black (BK)	15m Strap, 30 Heads	6-7;9	111-30000
<b>EL-TY (TELSH)</b>	20.3	15.8	12.4	1115	12.7	POMUVSS	Black (BK)	25 Heads	6-7;9	111-31000
<b>EL-TY (TELS-SPK2)</b>	53.3	30.5	17.0	1115	12.7	PP	Black (BK)	50 Spacers	6-7;9	111-32000

Recommended Tools: 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT. For more information on tooling please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



### Cable ties inside serrated

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

Used in a wide range of industries these releasable and reusable ties are ideal where changes are anticipated. This includes temporary installation and the addition or removal of elements. These releasable cable ties are commonly used to fix stage equipment, for cable management at outdoor events or prototype harnessing work. The extended pawl is simply pushed down with a finger to release the strap.

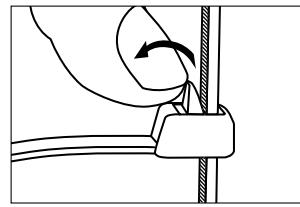
#### Features and benefits

- Releasable and reusable cable tie
- Available in black and natural colour
- Extended trigger for simple and quick release of ties
- RELK cable ties are inside serrated
- Different lengths are available

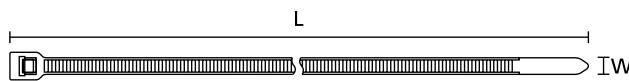
**Material specifications:** See Article-No. on our website.



RELK releasable cable ties for temporary bundling.



The closure function of the reopnable cable tie from the RELK-series.



RELK-, RLT-Series

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

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



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## Cable ties inside serrated, releasable

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

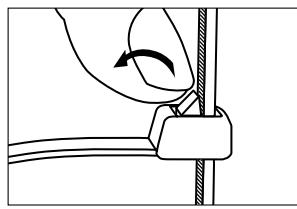
Used in a wide range of industries these releasable and reusable ties are ideal where changes are anticipated. This includes temporary installation and the addition or removal of elements. These releasable cable ties are commonly used to fix stage equipment, for cable management at outdoor events or prototype harnessing work. The extended pawl is simply pushed down with a finger to release the strap.

#### Features and benefits

- Releasable and reusable cable tie
- Multiple grades of PA66 for indoors, outdoors or at high temperatures
- Available in black and natural colour
- Extended trigger for simple and quick release of ties
- Inside serrated cable tie
- Different lengths available

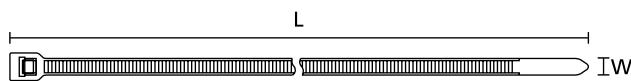


Releasable and reusable cable tie, RLT-Series.



The closure function of the resealable cable tie from the RLT-series.

**Material specifications: See Article-No. on our website.**



RELK-, RLT-Series

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

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**Cable ties inside serrated with tuckaway****RT250-Series up to 1115 N loop tensile strength**

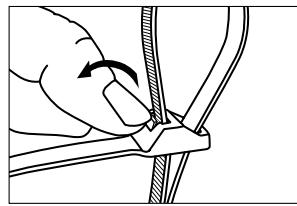
The RT250 is a releasable cable tie. Due to its minimum loop tensile strength of 1,115 N the cable tie is perfectly suited to fix larger and/or heavier bundles. RT250 can be opened and reused. UV-resistant cable ties manufactured from PA66W are recommended for outdoor applications. For shorter lengths REL250-Series can be offered.

**Features and benefits**

- Releasable and reusable cable tie
- Suitable for larger and/or heavier bundles
- Eyelet allows excess tail to be tucked neatly away
- Available in black and natural colour
- Extended trigger for simple and quick release of ties
- Protected trigger to avoid accidental release
- RT250 cable ties are inside serrated

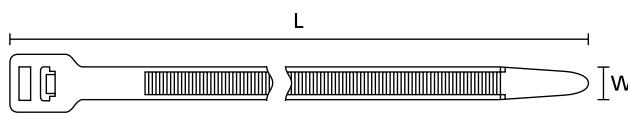


RT250 Cable Ties: Ideal for larger or heavier bundles these ties can be opened and reused.



The closure function of the reopenable cable tie from the RT250-series.

**Material specifications: See Article-No. on our website.**



RT250-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
RT250M	12.5	565.3	150.0	1115	PA66	Black (BK)	25 pcs.	131-75610
	12.5	565.3	150.0	1115	PA66	Natural (NA)	25 pcs.	131-75619
	12.5	565.3	150.0	1115	PA66W	Black (BK)	25 pcs.	131-75620
RT250XL	12.5	1030.0	305.0	1115	PA66	Black (BK)	25 pcs.	131-75510
	12.5	1030.0	305.0	1115	PA66	Natural (NA)	25 pcs.	131-75519

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



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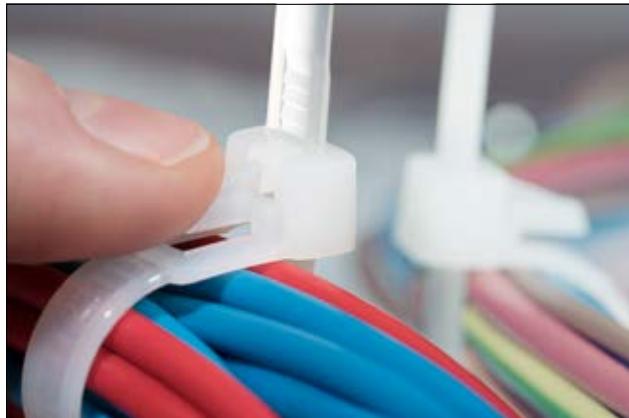
## Cable ties inside serrated with kickdown lever

### REL-Series

The REL-Series is ideally used in applications where changes are anticipated and a tie needs to be opened and closed repeatedly. The release mechanism of an REL cable tie allows simple and quick opening with only one hand. UV resistant cable ties manufactured from PA66W are recommended for outdoor applications.

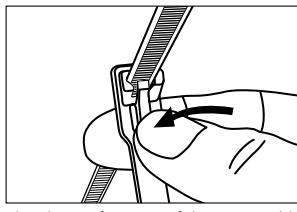
#### Features and benefits

- Releasable and reusable cable tie for medium-weight loads
- Extremely easy-to-operate release mechanism
- Opens simply and quickly with only one hand
- Also available in PA66W for outdoor applications
- REL cable ties have their serration on the inside

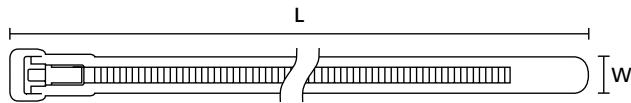


Releasable and reusable cable tie, REL-Series.

**Material specifications:** See Article-No. on our website.



The closure function of the reopenable cable tie from the REL-series.



REL-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
REL180	6.5	180.0	46.0	150	PA66	Black (BK)	100 pcs.	115-00027
REL100	6.7	100.0	21.0	180	PA66	Black (BK)	100 pcs.	131-21010
	6.7	100.0	21.0	180	PA66	Natural (NA)	100 pcs.	131-21019
REL140	7.6	150.0	35.0	200	PA66	Black (BK)	100 pcs.	131-21410
	7.6	150.0	35.0	200	PA66	Natural (NA)	100 pcs.	131-21419
REL250	7.6	250.0	68.0	200	PA66	Black (BK)	100 pcs.	131-22510
	7.6	250.0	68.0	200	PA66	Natural (NA)	100 pcs.	131-22519
	7.6	250.0	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. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## Cable ties outside serrated for marking, releasable

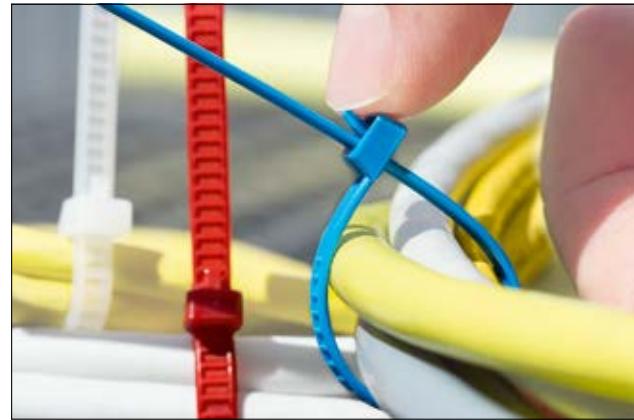
### LR55-Series

Releasable cable ties of our LR55-Series offer some extra benefits. Their serration is on the outside of the cable tie. This will minimise the risk of damage to cables or other elements. Additionally LR55 cable ties are available in different colours – optimally suited for temporary identification within logistic, packaging, cable harness production or for testing purposes. The strap is released when pushing the extended pawl upwards. The risk of opening the cable tie accidentally is minimised.

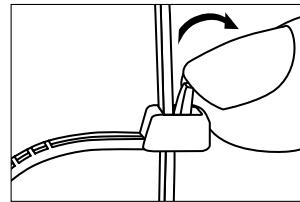
#### Features and benefits

- Releasable and reusable cable tie
- Various colours for applications needing colour coding
- Extended trigger for simple and quick release of ties
- Risk of accidental release is minimised
- Outside serration prevents damage to cable insulation

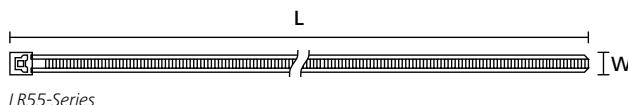
**Material specifications:** See Article-No. on our website.



Releasable and outside serrated LR55 cable ties are ideal suited for colour coding.



The closure function of the reopenable cable tie from the LR55-series.



LR55-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
LR55R	4.7	196.0	50.0	245	PA66	Green (GN)	25 pcs.	115-00005
	4.8	195.0	50.0	245	PA66	Blue (BU)	25 pcs.	115-00006
	4.8	196.0	50.0	245	PA66	Natural (NA)	25 pcs.	115-00008
	4.8	196.0	50.0	245	PA66	Red (RD)	25 pcs.	115-00003
	4.8	196.0	50.0	245	PA66	Yellow (YE)	25 pcs.	115-00004
	4.8	196.0	50.0	245	PA66HS	Black (BK)	25 pcs.	115-00002

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



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## Cable tie outside serrated with lever lock

### ORF-Series up to 135 N loop tensile strength

The ORF-Series with lever lock has been designed for easy removal and reuse without a knife or side cutter, but conveniently with a lever. The outside serration minimises the risk of damage to cables and other elements.

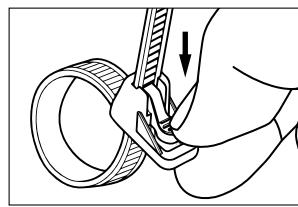
#### Features and benefits

- Designed for easy release with one-hand
- Suitable for temporary colour coding
- Gentle on the bundled material thanks to outside serration

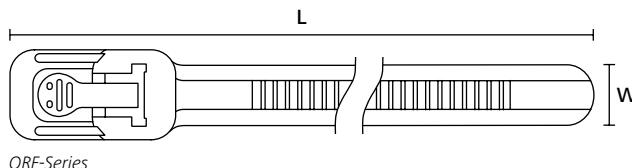


Reusable ORF-Tie with lever lock.

**Material specifications:** See Article-No. on our website.



The closure function of the reopenable cable tie from the ORF-series.



ORF-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
ORF150-S	4.7	150.0	36.0	135	PA66W	Black (BK)	100 pcs.	115-00161

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



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**Cable ties without serration in flexible TPU****SRT-Series for industry quantities**

The soft, flexible material makes these ties particularly suitable for use on sensitive wires, for instance fibre-optic cables. Additionally they are suitable for moving elements and vibrating applications. The double slotted head allows for parallel bundling.

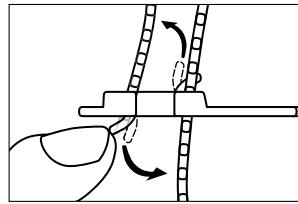
**Features and benefits**

- Elastic and flexible cable ties with rounded and smooth edges
- Releasable and reusable
- Double slotted head with fixation pawl
- Flexibility ensures steady and evenly distributed pressure
- Tight fixation even in vertical position: prevent sliding down or loosing bundle
- Suitable for moving elements and vibrating applications like windmills, machines, robotics, pulsating tubing and conduits
- Ideal use for temporarily fixation for presentations, concerts, theatres, exhibitions
- Long lifetime when used indoor
- Remains flexible even at cold temperatures (-20 °C)

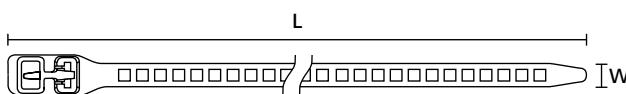
**Material specifications:** See Article-No. on our website.



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



The closure function of the reopenable cable tie from the Softfix-series.



SRT- and SOFTFIX-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
<b>SRT1807</b>	7.0	180.0	45.0	57	TPU	Black (BK)	50 pcs.	115-07189
<b>SRT2607</b>	7.0	260.0	70.0	57	TPU	Black (BK)	50 pcs.	115-07269
<b>SRT26011</b>	11.0	260.0	65.0	123	TPU	Black (BK)	50 pcs.	115-11269
<b>SRT34011</b>	11.0	340.0	90.0	123	TPU	Black (BK)	50 pcs.	115-11349
<b>SRT58028</b>	28.0	580.0	150.0	360	TPU	Black (BK)	10 pcs.	115-28589
<b>SRT88028</b>	28.0	880.0	240.0	360	TPU	Black (BK)	180 pcs.	115-28889

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



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## Cable ties without serration in flexible TPU

### SOFTFIX-Family

The soft, flexible material makes these ties particularly suitable for use on sensitive wires, for instance fibre-optic cables. Additionally they are suitable for moving elements and vibrating applications. The double slotted head allows for parallel bundling.

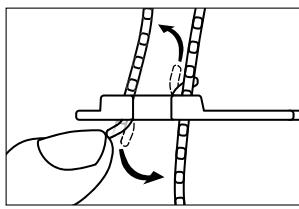
#### Features and benefits

- Elastic and flexible cable ties with rounded and smooth edges
- Releasable and reusable
- Double slotted head with fixation pawl
- Flexibility ensures steady and evenly distributed pressure
- Tight fixation even in vertical position: prevent sliding down or loosening bundle
- Suitable for moving elements and vibrating applications like windmills, machines, robotics, pulsating tubing and conduits
- Ideal use for temporarily fixation for presentations, concerts, theatres, exhibitions
- Long lifetime when used indoor
- Remains flexible even at cold temperatures (-20 °C)

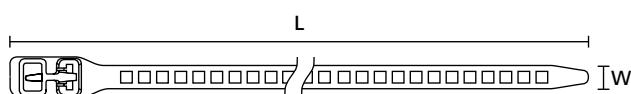
**Material**  
**specifications: See**  
**Article-No. on our**  
**website.**



SOFTFIX ties available in small packaging units.



The closure function of the reopenable cable tie from the Softfix-series.



SRT- and SOFTFIX-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
<b>SOFTFIX XS</b>	7.0	180.0	45.0	57	TPU	Black (BK)	16 pcs.	115-07190
<b>SOFTFIX S</b>	7.0	260.0	70.0	57	TPU	Black (BK)	12 pcs.	115-07270
<b>SOFTFIX M</b>	11.0	260.0	65.0	123	TPU	Black (BK)	8 pcs.	115-11270
<b>SOFTFIX L</b>	11.0	340.0	90.0	123	TPU	Black (BK)	6 pcs.	115-11350
<b>SOFTFIX XL</b>	28.0	580.0	150.0	360	TPU	Black (BK)	3 pcs.	115-28590
<b>SOFTFIX XXL</b>	28.0	880.0	240.0	360	TPU	Black (BK)	3 pcs.	115-28898

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

### REZ-Series

Thanks to its innovative head design, the REZ-Series cable ties can be released using only two fingers. By applying pressure to the integrated wings, the tie can be quickly and securely disengaged without damage. The REZ cable tie provides a reliable and reusable fastening solution suitable for a wide range of applications, especially in temporary setups and areas with limited accessibility.

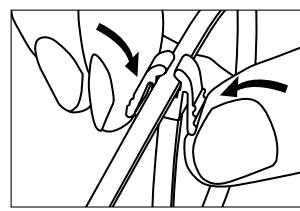
#### Features and benefits

- REZ-Series can be released and reused
- Unique head design for simple and rapid use
- Quick-release mechanism for one-hand operation
- Cable tie can be opened even when under tension
- Can still be released when working with gloves

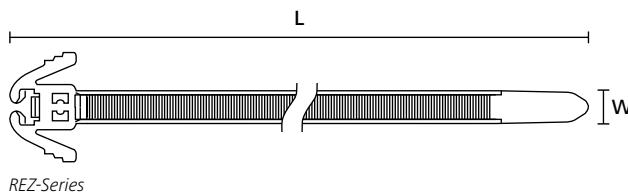
**Material specifications:** See Article-No. on our website.



Reopenable cable tie of the REZ-series.



The closure function of the reopenable cable tie from the REZ-series.



REZ-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
REZ200	4.7	200.0	50.0	135	PA66	Black (BK)	100 pcs.	115-40200
	4.7	200.0	50.0	135	PA66	Fluorescent Pink (FLPK)	100 pcs.	115-00147
	4.7	200.0	50.0	135	PA66	Green (GN)	100 pcs.	115-00106
	4.7	200.0	50.0	135	PA66	Orange (OG)	100 pcs.	115-00132
REZ300	4.7	305.0	80.0	135	PA66	Black (BK)	100 pcs.	115-40300
	4.7	305.0	80.0	135	PA66	Fluorescent Pink (FLPK)	100 pcs.	115-00138
	4.7	305.0	80.0	135	PA66	Red (RD)	100 pcs.	115-00043

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## Cable ties for food industry, detectable, reusable

### MCT-Series releasable

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. The MCTRELK ties do have a releasable function thus they can be reopened and reused.

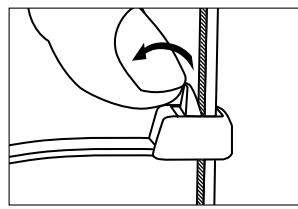
#### Features and benefits

- Total metal dispersion throughout the tie
- Can be reopened and reused
- Supports quality processes around the production of food stuffs
- Blue colour most common for easy visual detection
- Greatly reduces risk of contamination
- Metal detectable (detection level depending on specific application)

**Material specifications:** See Article-No. on our website.

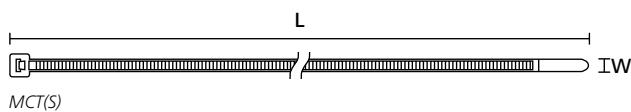


*Detectable and reusable Cable Ties for temporary closure.*



*The closure function of the detectable and reopenable cable ties.*

**Can support quality assurance in the production of food stuffs, for example HACCP.**



TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
MCTRELK2M	4.6	250.0	65.0	225	PA66MD	Blue (BU)	100 pcs.	111-00937

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



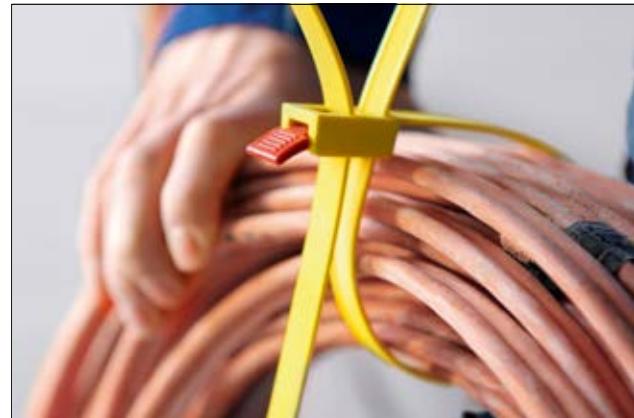
### Cable ties with quick release mechanism, parallel bundling

#### SpeedyTie

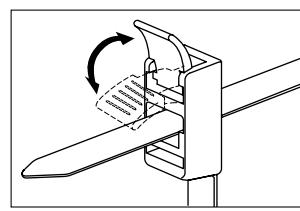
The versatility of the SpeedyTie means that it is suitable for a multitude of applications like electro installations, heating and ventilation, construction, exhibitions and trade fairs. Whether it is used for permanent or temporarily solutions the SpeedyTie is a very strong helping hand in every situation.

#### Features and benefits

- Releasable and reusable cable tie
- Bears loads of up to 888 N (approx. 90 kg)
- 750 mm long for use in a wide variety of applications
- Can be used for parallel bundling
- Easy to handle when wearing work gloves
- Available in signal yellow and in black

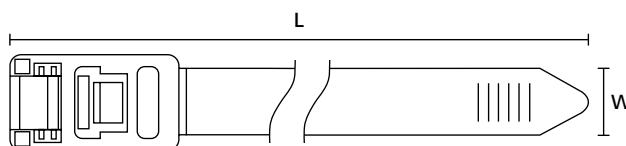


Excess tails can be neatly tucked away.



The closure function of the reopenable cable tie from the SpeedyTie-series.

**Material specifications: See Article-No. on our website.**



SpeedyTie

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

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## Hook and loop ties

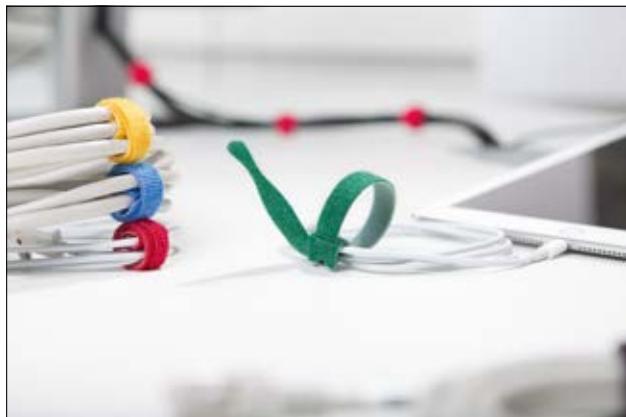
### TEXTIE-Series

The TEXTIE-Series offers a soft bundling method and is ideal for use on telephone cables, optical fibre and network cables. These cable ties can be reopened and reused up to 400 times. A perfect solution for temporary installations and cable management for stage equipment, at outdoor events or for prototype harnessing. Also suitable for use in private or office applications. TEXTIE cable ties are available in various colours and can be used to colour-code cables and/or wires.

#### Features and benefits

- Quick and simple to use without tools
- Reusable up to 400 times
- Various colours for easy identification
- For indoor and outdoor use
- Can be attached to the bundle permanently
- Resistant to ageing, no corrosion

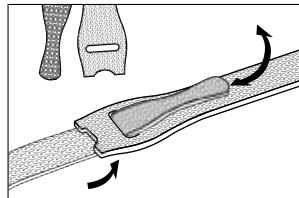
**Material specifications:** See Article-No. on our website.



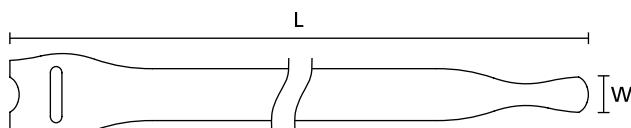
Due to the functional cable tie design the TEXTIE is fixed on the cable and cannot get lost.



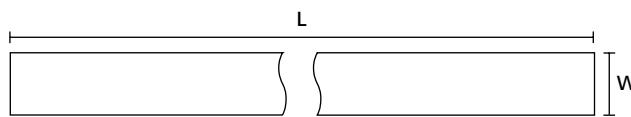
The TEXTIE-Series is available in different colours and lengths.



The closure function of the reopenable cable tie from the TexTie-series.



TEXTIE -Series S, M and L



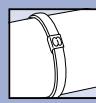
TEXTIE-Series 5 and 25 m

TYPE	Width (W)	Length (L)	Bundle Ø max.	Material Loop	Material Hook	Colour	Pack Cont.	Article-No.
TEXTIE S	12.5	150.0	45.0	Polyamide 6.6 (PA66)	Polypropylene (PP)	Black (BK)	10 pcs.	130-00012
TEXTIE M	12.5	200.0	60.0	Polyamide 6.6 (PA66)	Polypropylene (PP)	Black (BK)	10 pcs.	130-00013
	12.5	200.0	60.0	Polyamide 6.6 (PA66)	Polypropylene (PP)	Blue (BU)	10 pcs.	130-00018
	12.5	200.0	60.0	Polyamide 6.6 (PA66)	Polypropylene (PP)	Green (GN)	10 pcs.	130-00017
	12.5	200.0	60.0	Polyamide 6.6 (PA66)	Polypropylene (PP)	Red (RD)	10 pcs.	130-00014
	12.5	200.0	60.0	Polyamide 6.6 (PA66)	Polypropylene (PP)	White (WH)	10 pcs.	130-00021
	12.5	200.0	60.0	Polyamide 6.6 (PA66)	Polypropylene (PP)	Yellow (YE)	10 pcs.	130-00016
TEXTIE L	12.5	330.0	100.0	Polyamide 6.6 (PA66)	Polypropylene (PP)	Black (BK)	10 pcs.	130-00019
TEXTIE 5M	12.5	5000.0	-	Polyamide 6.6 (PA66)	Polypropylene (PP)	Black (BK)	1 pc.	130-00020
TEXTIE 25M	13.0	25000.0	-	Polyamide 6.6 (PA66)	Polypropylene (PP)	Black (BK)	1 pc.	130-00022

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



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## Metal Ball Locking Cable Tie MBT-Series

A highly innovative solution from HellermannTyton

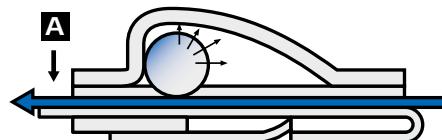
### MBT series cable ties

Made of stainless steel grade 304 or 316L, the MBT range of cable ties has no serrations on the strap and is 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 easily and quickly tensioned, with the strap cut to a flush finish.

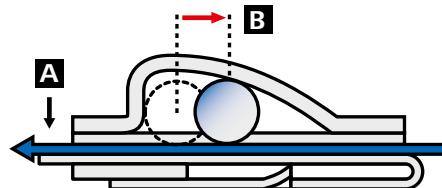
### Locking technology

The strap is locked into the head via a ball bearing. The ball locks into the small end of the wedged shaped housing, forming a positive lock with strap.

For rigid objects such as metal pipes, we would recommend our protective channelling (LFPC) to be laid between the bundled object and tie strap. This not only provides protection against galvanic corrosion, but also ensures a better engagement with the bundle. The MBT locking technology keep the minimum tensile strength of up to 7,000 Newtons and standard strap lengths of up to 1.5 m.



1. Initial position, ball bearing moves freely. A: Cable tie (inserting)



2. Ball rebounds and wedges tie in place. A: Cable tie (tightening) B: Ball (wedged)

### Locking Mechanism for Metal Cable Ties

PRODUCT TYPE NAME	TYPE NAME MEANING	MATERIAL CABLE TIE	MATERIAL COATING	PUNCH-LOCK	FOLD-LOCK	BALL-LOCK	TENSIONING TOOLS	Special feature
<b>MBT</b>	Metal Ball Ties	SS304, SS316L	–	–	–	Yes	$\leq 12.3 \text{ mm}   \text{KST-STG200}$ $\leq 16.0 \text{ mm}   \text{MK9SST}   \text{HDT16}$ $\leq 16.0 \text{ mm}   \text{MK9PSST}$	Closed head for higher tensile strength, Fork end for easy assembly
<b>MBT-XHD</b>	Metal Ball Ties, Extra Heavy Duty	SS304, SS316L	–	–	–	Yes		Double loop for extreme high tensile strength
<b>MBT-FC</b>	Metal Ball Ties, Fully Coated	SS316L	Polyester	–	–	Yes		Polyester coating eliminates potential for contact corrosion between dissimilar materials
<b>MBT-XHDFC</b>	Metal Ball Ties, Extra Heavy Duty, Fully Coated	SS316L	Polyester	–	–	Yes		Polyester coating eliminates potential for contact corrosion between dissimilar materials
<b>MST</b>	Metal Steel Ties	SS304	–	Yes	–	–	$= 5.9 \text{ mm}   \text{MST6}$ $= 8.9 \text{ mm}   \text{MST9}$	Best Seller, classic standard product
<b>MLT</b>	Metal Locking Ties	SS316L	–	–	Yes	–	$\leq 16.0 \text{ mm}   \text{HDT16}$	Can be re-opened
<b>MLT-C</b>	Metal Locking Ties, Coated	SS316L	Polyester	–	Yes	–		Polyester coating eliminates potential for contact corrosion between dissimilar materials
<b>LFPC</b>	Low Flammability Protection Channel	Polyolefin (PO)	–	–	–	–	–	Protective channel for Stainless Steel ties to protect cable bundles chafing caused by vibrations and shocks



## SCT – Short circuit test

The perfect alternative to cable cleats

### Short Circuit Test (SCT)

MBT and AMT metal cable ties

Testobjects: Stainless steel cable ties from HellermannTyton

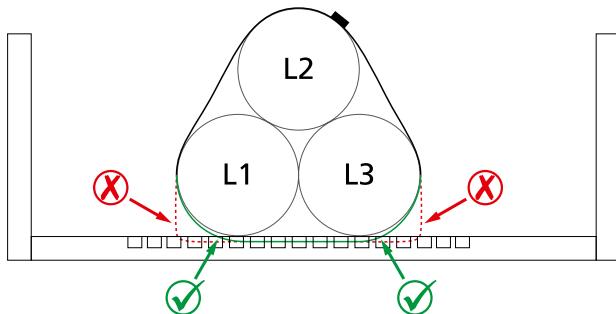
Productseries: MBT-, MBTXHD-, MBTUHD-Cable ties

HellermannTyton's single and double wrap Metal Ball (MBT) and Buckle Ties (AMT) fully withstand the maximum force of short circuits in trefoil formation according to the results of laboratory tests performed using the parameters outlined in the IEC 61914 cable cleat standard.

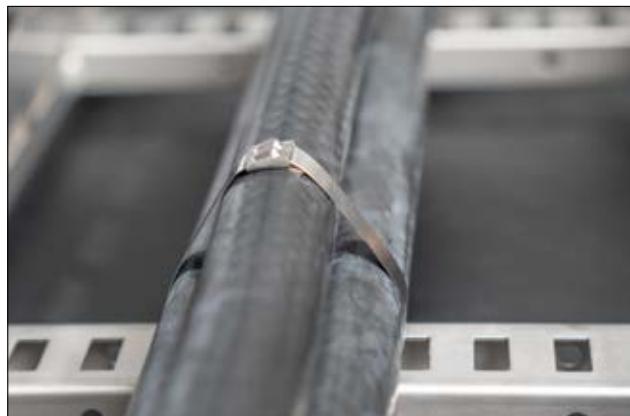
The tests conducted by the NEFI High Power Laboratory in Norway – a member of the Scandinavian Association for Testing of Electric Power Equipment (SATS) – demonstrated that our MBT and AMT stainless steel cable ties resist the huge forces unleashed by power cables in the event of a short circuit, even when they are installed in a 'worst case' trefoil formation scenario (see drawing below).

### Construction of the HellermannTyton SCT

The MBT and AMT metal ties were insulated from the cable jackets with LFPC polyolefin protective channels as an added layer of protection. Two different cable sizes, Ø 36 mm (300 mm<sup>2</sup>) and Ø 13 mm (50 mm<sup>2</sup>), each with 3 cables 8 m in length in trefoil formation, were tested with short circuit times between 0.2 and 0.5 seconds at various current levels with peak currents from 25,9 kA up to 77,8 kA.



Best practice for installation in trefoil formation. Ties should be bundled as closely as possible to the cables for a smooth loop and to avoid sharp edges.



Stainless steel metal ball cable ties mounted on a cable tray.

### Results of the HellermannTyton SCT

- We ensure that our single and double wrap Metal Ball (MBT) and Buckle Ties (AMT) withstand a short circuit application
- We provide a viable fixing solution for low voltage cables
- We offer an cost-effective alternative to cable cleats

### Advantages of using HellermannTyton stainless steel cable ties over cable cleats:

- Suitable for indoor and outdoor environments
- Very good heat and chemical resistance
- Due to the range of strap lengths and widths it is easy to choose a solution for every application
- Only one cable tie for many different cable diameters
- Lower installation costs
- Low inventory value and quicker installation time

### Conclusion

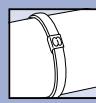
- With the SCT we have proven that our MBT and AMT cable ties are suitable for low and medium voltage cable and withstand a defined level of short circuit currents.

**The stainless steel cable ties from HellermannTyton are a time saving solution with a low price and low installation cost.**

Please note that the information provided here is no substitute for a suitability test of your individual application.

$$F_t = 0.17 \times i_p^2 / S$$

Formula for calculating maximum force on conductors according to IEC 61914.

**Cable ties with ball-lock****MBT-Series, stainless steel 304**

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

**Features and benefits**

- Cable ties MBT, made from stainless steel 304
- Non-releasable locking feature
- Corrosion resistant
- Weather resistant
- Outstanding chemical resistance
- High temperature resistant
- Non-burning



Stainless steel cable ties, uncoated, MBT\_SS, MBT\_HS.

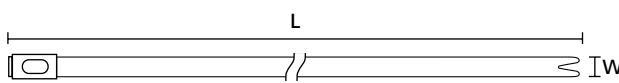


Stainless Steel Cable Ties, uncoated, MBT\_XHS.

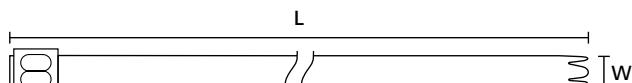
**Material specifications:** See Article-No. on our website.

**Can support quality assurance in the production of food stuffs, for example HACCP.**

**For hard, smooth surface applications, we recommend the use of our LFPC protective channels.**



MBT-Series 4.6 mm and 7.9 mm width



MBT-Series 12.3 mm width

TYPE	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.	N	Material	Pack Cont.	Tools	Article-No.
<b>MBT5SS</b>	4.6	127.0	12.0	25.0	900	SS304	100 pcs.	15-18	111-93058
<b>MBT8SS</b>	4.6	201.0	17.0	50.0	900	SS304	100 pcs.	15-18	111-93088
<b>MBT14SS</b>	4.6	362.0	17.0	102.0	900	SS304	100 pcs.	15-18	111-93148
<b>MBT20SS</b>	4.6	521.0	17.0	152.0	900	SS304	100 pcs.	15-18	111-93208
<b>MBT27SS</b>	4.6	685.0	17.0	203.0	900	SS304	100 pcs.	15-18	111-93278
<b>MBT33SS</b>	4.6	838.0	17.0	254.0	900	SS304	100 pcs.	15-18	111-93338
<b>MBT8HS</b>	7.9	201.0	17.0	50.0	2000	SS304	50 pcs.	15-18	111-94088
<b>MBT14HS</b>	7.9	362.0	17.0	102.0	2000	SS304	50 pcs.	15-18	111-94148
<b>MBT20HS</b>	7.9	521.0	17.0	152.0	2000	SS304	50 pcs.	15-18	111-94208
<b>MBT27HS</b>	7.9	685.0	17.0	203.0	2000	SS304	50 pcs.	15-18	111-94278
<b>MBT33HS</b>	7.9	838.0	17.0	254.0	2000	SS304	50 pcs.	15-18	111-94338

Recommended Tools: 15=MK9SST, 16=MK9PSST, 17=HDT16, 18=KST-STG200. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton).



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## Cable ties with ball-lock

### MBT-Series, stainless steel 304

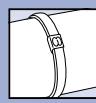
TYPE	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.	N	Material	Pack Cont.	Tools	Article-No.
<b>MBT14XHS</b>	12.3	362.0	17.0	102.0	2700	SS304	50 pcs.	15-18	111-95148
<b>MBT20XHS</b>	12.3	521.0	17.0	152.0	2700	SS304	50 pcs.	15-18	111-95208
<b>MBT27XHS</b>	12.3	681.0	17.0	203.0	2700	SS304	50 pcs.	15-18	111-95278
<b>MBT33XHS</b>	12.3	838.0	17.0	254.0	2700	SS304	50 pcs.	15-18	111-95338

Recommended Tools: 15=MK9SST, 16=MK9PSST, 17=HDT16, 18=KST-STG200. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**Cable ties with ball-lock****MBT-Series, stainless steel 316L**

Metal ties are predestined for all areas with requirements for high holding force, reliability and fire resistance. The MBT range of stainless steel cable ties can be used in chemical industry and on oil platform as well as in mass transit, shipbuilding and mining industry. MBT ties are also suitable for machine building, apparatus construction and in the outside area of radio technology. Additionally MBT ties are a good solution to fix lighting in theatres and exhibition halls.

**Features and benefits**

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

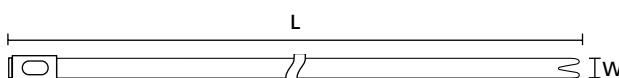


Stainless steel cable ties, uncoated, MBT\_XH.

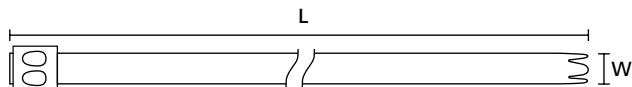
**For hard, smooth surface applications, we recommend the use of our LFPC protective channels.**

**Material specifications:** See Article-No. on our website.

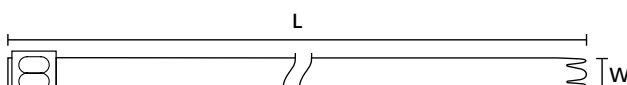
**Can support quality assurance in the production of food stuffs, for example HACCP.**



MBT-Series 4.6 mm and 7.9 mm width



MBT-Series 16.0 mm width



MBT-Series 12.3 mm width

TYPE	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.	N	Material	Pack Cont.	Tools	Article-No.
<b>MBT5S</b>	4.6	127.0	12.0	25.0	900	SS316L	100 pcs.	15-18	111-93059
<b>MBT8S</b>	4.6	201.0	12.0	50.0	900	SS316L	100 pcs.	15-18	111-93089
<b>MBT14S</b>	4.6	362.0	12.0	102.0	900	SS316L	100 pcs.	15-18	111-93149
<b>MBT20S</b>	4.6	521.0	12.0	152.0	900	SS316L	100 pcs.	15-18	111-93209
<b>MBT27S</b>	4.6	685.0	12.0	203.0	900	SS316L	100 pcs.	15-18	111-93279
<b>MBT33S</b>	4.6	838.0	12.0	254.0	900	SS316L	100 pcs.	15-18	111-93339
<b>MBT8H</b>	7.9	201.0	12.0	50.0	2000	SS316L	50 pcs.	15-18	111-94089

Recommended Tools: 15=MK9SST, 16=MK9PSST, 17=HDT16, 18=KST-STG200. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**Cable ties with ball-lock****MBT-Series, stainless steel 316L**

TYPE	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.	N	Material	Pack Cont.	Tools	Article-No.
<b>MBT14H</b>	7.9	362.0	12.0	102.0	2000	SS316L	50 pcs.	15-18	111-94149
<b>MBT20H</b>	7.9	521.0	12.0	152.0	2000	SS316L	50 pcs.	15-18	111-94209
<b>MBT27H</b>	7.9	685.0	12.0	203.0	2000	SS316L	50 pcs.	15-18	111-94279
<b>MBT33H</b>	7.9	838.0	12.0	254.0	2000	SS316L	50 pcs.	15-18	111-94339
<b>MBT14XH</b>	12.3	362.0	12.0	102.0	2700	SS316L	50 pcs.	15-18	111-95149
<b>MBT20XH</b>	12.3	521.0	12.0	152.0	2700	SS316L	50 pcs.	15-18	111-95209
<b>MBT27XH</b>	12.3	681.0	12.0	203.0	2700	SS316L	50 pcs.	15-18	111-95279
<b>MBT33XH</b>	12.3	838.0	12.0	254.0	2700	SS316L	50 pcs.	15-18	111-95339
<b>MBT14UH</b>	16.0	362.0	12.0	102.0	4100	SS316L	50 pcs.	15;17	111-01301
<b>MBT20UH</b>	16.0	521.0	12.0	152.0	4100	SS316L	50 pcs.	15;17	111-01302
<b>MBT33UH</b>	16.0	838.0	12.0	254.0	4100	SS316L	50 pcs.	15;17	111-01304
<b>MBT43UH</b>	16.0	1092.0	12.0	330.0	4100	SS316L	25 pcs.	15;17	111-01305
<b>MBT49UH</b>	16.0	1245.0	12.0	380.0	4100	SS316L	25 pcs.	15;17	111-01306

Recommended Tools: 15=MK9SST, 16=MK9PSST, 17=HDT16, 18=KST-STG200. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**Double wrap cable ties with ball-lock****MBTXHD- / MBTUHD-Series, stainless steel 316L**

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

**Features and benefits**

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

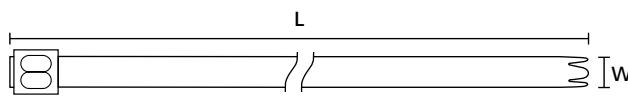


Double wrap stainless steel cable ties, uncoated, MBT\_UHD.

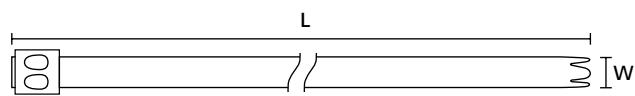
**Material specifications:** See Article-No. on our website.

**Can support quality assurance in the production of food stuffs, for example HACCP.**

**For hard, smooth surface applications, we recommend the use of our LFPC protective channels.**



MBT-Series 12.3 mm width



MBT-Series 16.0 mm width

TYPE	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.	N	Material	Pack Cont.	Tools	Article-No.
<b>MBT27XHD</b>	12.3	681.0	17.0	100.0	5000	SS316L	50 pcs.	15-18	111-01307
<b>MBT60XHD</b>	12.3	1524.0	17.0	230.0	5000	SS316L	25 pcs.	15-18	111-01311
<b>MBT27UHD</b>	16.0	681.0	25.0	100.0	7000	SS316L	50 pcs.	15;17	111-01312
<b>MBT33UHD</b>	16.0	838.0	25.0	120.0	7000	SS316L	50 pcs.	15;17	111-01313

Recommended Tools: 15=MK9SST, 16=MK9PSST, 17=HDT16, 18=KST-STG200. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## Cable ties with ball-lock and coating

### MBT-FC-Series, stainless steel 316L

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

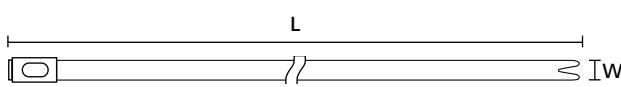
#### Features and benefits

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

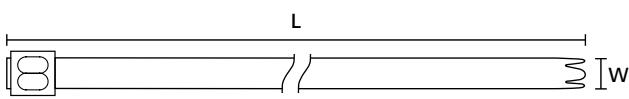


*Stainless steel cable ties, coated, MBT\_SFC, MBT\_HFC.*

**For hard, smooth surface applications, we recommend the use of our LFPC protective channels.**



*MBT-Series 4.6 mm and 7.9 mm width*



*MBT-Series 12.3 mm width*



*MBT-Series 16.0 mm width*

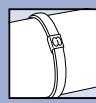
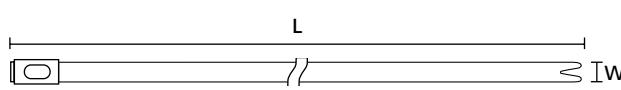
TYPE	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.	N	Material	Pack Cont.	Tools	Article-No.
<b>MBT5SFC</b>	4.6	127.0	15.0	25.0	540	SS316L SP	100 pcs.	15-18	111-00288
<b>MBT8SFC</b>	4.6	201.0	17.0	50.0	540	SS316L SP	100 pcs.	15-18	111-00289
<b>MBT14SFC</b>	4.6	362.0	17.0	102.0	540	SS316L SP	100 pcs.	15-18	111-00290
<b>MBT20SFC</b>	4.6	521.0	17.0	152.0	540	SS316L SP	100 pcs.	15-18	111-00291
<b>MBT27SFC</b>	4.6	681.0	17.0	203.0	540	SS316L SP	100 pcs.	15-18	111-00292
<b>MBT33SFC</b>	4.6	838.0	17.0	254.0	540	SS316L SP	100 pcs.	15-18	111-00293
<b>MBT8HFC</b>	7.9	201.0	17.0	50.0	1020	SS316L SP	50 pcs.	15-18	111-00294
<b>MBT14HFC</b>	7.9	362.0	17.0	102.0	1020	SS316L SP	50 pcs.	15-18	111-00295
<b>MBT20HFC</b>	7.9	521.0	17.0	152.0	1020	SS316L SP	50 pcs.	15-18	111-00296

Recommended Tools: 15=MK9SST, 16=MK9PSST, 17=HDT16, 18=KST-STG200. For more information on toolings please refer to the Application Tooling chapter on page 593.

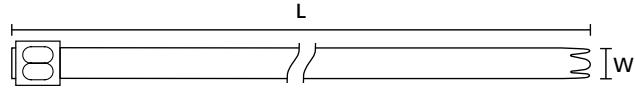
All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



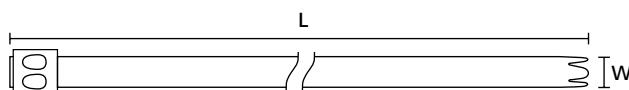
Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**Cable ties with ball-lock and coating****MBT-FC-Series, stainless steel 316L**

MBT-Series 4.6 mm and 7.9 mm width



MBT-Series 12.3 mm width



MBT-Series 16.0 mm width

TYPE	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.	N	Material	Pack Cont.	Tools	Article-No.
<b>MBT27HFC</b>	7.9	681.0	17.0	203.0	1020	SS316L SP	50 pcs.	15-18	111-00297
<b>MBT33HFC</b>	7.9	838.0	17.0	254.0	1020	SS316L SP	50 pcs.	15-18	111-00298
<b>MBT14XHFC</b>	12.3	362.0	17.0	102.0	1620	SS316L SP	50 pcs.	15-18	111-00299
<b>MBT17XHFC</b>	12.3	434.0	17.0	125.0	1620	SS316L SP	50 pcs.	15-18	111-01500
<b>MBT20XHFC</b>	12.3	521.0	17.0	152.0	1620	SS316L SP	50 pcs.	15-18	111-00300
<b>MBT27XHFC</b>	12.3	681.0	17.0	203.0	1620	SS316L SP	50 pcs.	15-18	111-00301
<b>MBT33XHFC</b>	12.3	838.0	17.0	254.0	1620	SS316L SP	50 pcs.	15-18	111-00302
<b>MBT43XHFC</b>	12.3	1092.0	17.0	330.0	1620	SS316L SP	25 pcs.	15-18	111-01503
<b>MBT14UHFC</b>	16.0	362.0	25.0	102.0	2500	SS316L SP	50 pcs.	15;17	111-01512
<b>MBT17UHFC</b>	16.0	434.0	25.0	125.0	2500	SS316L SP	50 pcs.	15;17	111-01513
<b>MBT20UHFC</b>	16.0	521.0	25.0	152.0	2500	SS316L SP	50 pcs.	15;17	111-01514
<b>MBT23UHFC</b>	16.0	575.0	25.0	168.0	2500	SS316L SP	50 pcs.	15;17	111-01515
<b>MBT27UHFC</b>	16.0	681.0	25.0	203.0	2500	SS316L SP	50 pcs.	15;17	111-01516
<b>MBT33UHFC</b>	16.0	838.0	25.0	254.0	2500	SS316L SP	50 pcs.	15;17	111-01518

Recommended Tools: 15=MK9SST, 16=MK9PSST, 17=HDT16, 18=KST-STG200. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## Double wrap cable ties with ball-lock and coating

### MBTUHDFC-Series, stainless steel 316L

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

#### Features and benefits

- MBT cable ties, made from stainless steel SS316L with a polyester coating
- Non-releasable locking feature
- Double wrap operation
- Corrosion resistant
- Weather resistant
- Outstanding chemical resistance
- High temperature resistant
- Non-burning

**Material specifications:** See Article-No. on our website.



*Stainless steel cable ties, coated, MBT\_UHDFC.*

**For hard, smooth surface applications, we recommend the use of our LFPC protective channels.**



*MBT-Series 16.0 mm width*

TYPE	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.	N	Material	Pack Cont.	Tools	Article-No.
MBT27UHDFC	16.0	681.0	25.0	100.0	5000	SS316L SP	50 pcs.	15;17	111-01521

**Recommended Tools:** 15=MK9SST, 17=HDT16. For more information on toolings please refer to the Application Tooling chapter on page 593.

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**Cable ties with punch-locking mechanism****MST-Series, stainless steel 304**

Stainless steel cable ties are designed for fixing loads and cables securely in hazardous industrial environments such as railway carriages, jet engines, inside power plants or on offshore drilling platforms, where exposure to extremes of weather, saltwater and temperature are common. The MST-Series tie with its new punch-locking mechanism is an excellent choice especially for environments which require high resistance to vibrations.

**Features and benefits**

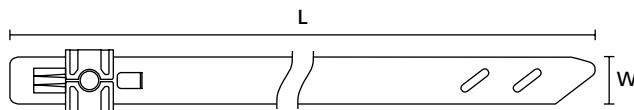
- MST-Series cable ties are made from stainless steel 304
- No loosening after bundling
- Corrosion and weather resistant
- Significantly improved vibration resistance
- Outstanding chemical resistance
- Space saving solution
- Safe cut-off (no sharp edges)
- High temperature resistant
- Non-burning



Stainless Steel Cable Ties MST-Series.

**Can support quality assurance in the production of food stuffs, for example HACCP.**

**Material specifications:** See Article-No. on our website.



MST tie

TYPE	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.	N	Material	Pack Cont.	Tools	Article-No.
<b>MST200S</b>	5.9	207.0	5.0	50.0	900	SS304	100 pcs.	19	111-01549
<b>MST360S</b>	5.9	360.0	5.0	100.0	900	SS304	100 pcs.	19	111-01550
<b>MST500S</b>	5.9	500.0	5.0	145.0	900	SS304	100 pcs.	19	111-01551
<b>MST700S</b>	5.9	700.0	5.0	205.0	900	SS304	100 pcs.	19	111-01552
<b>MST360M</b>	8.9	369.0	8.0	100.0	1500	SS304	50 pcs.	20	111-01631
<b>MST500M</b>	8.9	509.0	8.0	145.0	1500	SS304	50 pcs.	20	111-01632
<b>MST700M</b>	8.9	700.0	8.0	205.0	1500	SS304	50 pcs.	20	111-01633

**Recommended Tools:** 19=MST6, 20=MST9. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



## Cable ties with fold locking

### MLT-Series, stainless steel 316L

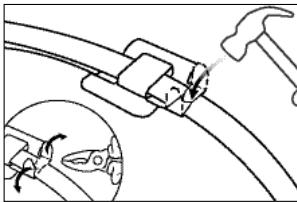
The MLT range of stainless steel cable ties can be used in the most arduous of conditions or where the additional security, strength and fire resistance of a metal fixing is required. Used in all industries from mass transit, ship building, oil rigs, mining and chemical industry, theatres and exhibition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

#### Features and benefits

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



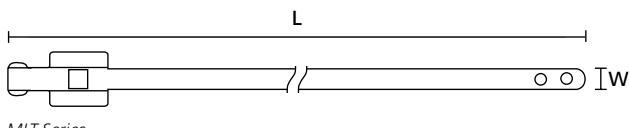
MLT-Series. Releasable stainless steel buckle tie with and without coating.



The closure function of the reusable cable tie from the MLT-series.

**Material specifications:** See Article-No. on our website.

For hard, smooth surface applications, we recommend the use of our LFPC protective channels.



MLT-Series

TYPE	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.	N	Material	Pack Cont.	Tools	Article-No.
<b>MLT12SS5</b>	5.0	330.0	20.0	90.0	420	SS316L	100 pcs.	17	111-94120
<b>MLT24SS5</b>	5.0	630.0	20.0	180.0	420	SS316L	100 pcs.	17	111-91400
<b>MLT12SS10</b>	10.0	330.0	25.0	90.0	850	SS316L	100 pcs.	17	111-95120

Recommended Tools: 17=HDT16. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)



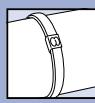
Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

### MLT-C-Series coated, stainless steel 316L

TYPE	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.	N	Material	Pack Cont.	Tools	Article-No.
<b>MLT8SSC5</b>	5.3	230.0	20.0	60.0	420	SS316L SP	100 pcs.	17	111-91000
<b>MLT12SSC5</b>	5.3	330.0	20.0	90.0	420	SS316L SP	100 pcs.	17	111-91121

Recommended Tools: 17=HDT16. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)

**Cable ties with fold locking and coating****MLT-C-Series coated, stainless steel 316L**

TYPE	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.		Material	Pack Cont.	Tools	Article-No.
<b>MLT16SSC5</b>	5.3	430.0	20.0	120.0	420	SS316L SP	100 pcs.	17	111-91161
<b>MLT12SSC10</b>	10.3	330.0	25.0	90.0	850	SS316L SP	100 pcs.	17	111-91123
<b>MLT16SSC10</b>	10.3	430.0	25.0	120.0	850	SS316L SP	100 pcs.	17	111-91163
<b>MLT24SSC10</b>	10.3	630.0	25.0	180.0	850	SS316L SP	100 pcs.	17	111-91181

Recommended Tools: 17=HDT16. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton)

**Protective channel for stainless steel ties****LFPC-Series**

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

**Features and benefits**

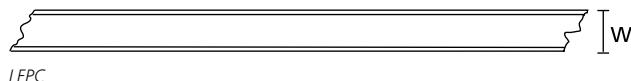
- LFPC channel, manufactured from Polyolefin
- Works with MBT-, MST-, MLT- and AMT-Series
- Smooth surface protects bundle against chafing caused by vibrations and shocks
- Can be cut from roll to any length
- Halogenfree
- Flame retardant

**Material specifications:** See Article-No. on our website.



Protective channel LFPC, polyolefin, black.

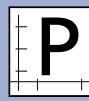
**The fire protection properties of the material relate to the test performed on defined test samples. This is a test under laboratory conditions and not directly transferable to the product made from this material.**



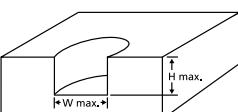
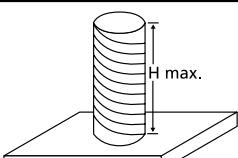
LFPC

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

All dimensions in mm. Subject to technical changes.



### Selection 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 wings

Arrowhead fixings with supporting wings offer good and stable fixation in drilled holes. The supporting wings 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 wings

The arrowhead design ensures good fixation and takes up minimal 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.



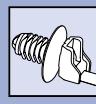
### Heavy Duty Application

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 arrowhead, with disc in the strap

#### for round holes

These fixing ties are ideal for use in many different industries, including automotive, aerospace, rail and panel building.

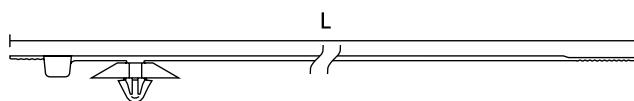
#### Features and benefits

- Easy to assemble without the need for a tool
- Arrowhead simply locks into place
- Disc adjusts tie for pressures from various directions and minimises access of dust and dirt
- Cable tie head always situated in defined position
- Bundle runs directly across fixing point
- Simple assembly due to tab at the end of the head

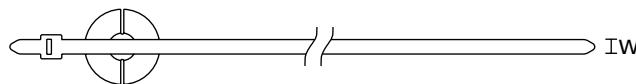


*The 'tab' on the head of the tie makes it easy to locate and lift the head for assembly.*

**Material specifications: See Article-No. on our website.**



T80RSFT



T80RSFT with flexible disc.

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T80RSFT		5.7 - 6.3	1.0 - 3.5	4.6	190.0	45.0		PA66HS	BK	1-2;4-7;25	150-15493

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



## 1-piece fixing ties with arrowhead, with disc

### for round holes

With a diverse range of fixing possibilities these ties are ideal for use in many different industries, including automotive, aerospace, white goods manufacture and panel building. This fastening solution is used to secure cable harnesses. We offer a variety of panel thicknesses and hole sizes to suit all kinds of application.

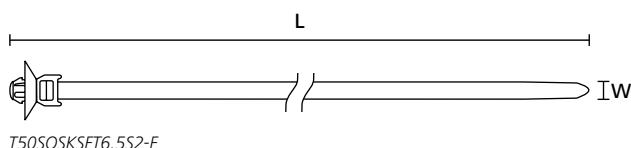
#### Features and benefits

- Easy to install without the need for a tool
- Arrowhead simply locks into place
- Disc adjusts tie for pressures from various directions and minimises ingress of dust and dirt
- Cable tie head always situated in a defined position
- KSFT-types with specially rounded arrowhead minimise the assembly height



The disc at the head of the T50SOSKSFT6.5E protects the bore against dirt and splashes.

**Material specifications: See Article-No. on our website.**

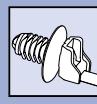


T50SOSKSFT6.5S2-E

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	Material	Colour	Tools	Article-No.
PT2ASFT6.5PT0.7-1.5-E		6.3 - 6.7	0.7 - 1.5	3.4	112.7	20.0	PEEK	BGE	1-2;4-5;25	126-00183
T50SOSKSFT6.5E		6.3 - 6.7	1.9 - 2.5	4.6	158.8	30.0	PA66HS	BK	1-2;4-7;25	126-03102
T50SOSKSFT6.5E		6.3 - 6.7	0.7 - 1.3	4.6	156.0	35.0	PA66HS	BK	1-2;4-7;25	126-00081
T50SOSKSFT5S-E		4.8 - 5.2	0.7 - 1.3	4.6	156.0	35.0	PA66HS	BK	1-2;4-7;25	126-00099
T50SOSKSFT5.4E		5.2 - 5.6	0.7 - 1.3	4.6	156.0	35.0	PA66HS	BK	1-2;4-7;25	126-00075
T50SOSKSFT6.5S2-E		6.3 - 6.7	1.7 - 2.3	4.6	157.5	35.0	PA66HS	BK	1-2;4-7;25	126-00086
T50SST5		6.1 - 6.5	0.7 - 1.5	4.6	170.0	31.0	PA66	NA	1-2;4-7;25	126-02300
T50SST5		6.1 - 6.5	0.7 - 1.5	4.6	170.0	31.0	PA66HS	BK	1-2;4-7;25	126-00017
T30SOS-AS-SFT6.5-E		6.5 - 7.0	0.8 - 1.5	3.5	126.4	25.0	PA66HS	BK	1-2;4-5;25	126-00255
T30SOSASSFT6.5x4.0E		6.5 6.5 x 4.0	2.4 - 3.0	3.5	126.7	25.0	PA66HS	BK	1-2;4-5;25	126-00341

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes.



## 2-piece fixing ties with arrowhead, with disc

### for round holes

Primarily designed for fixing cable harnesses in the automotive industry, their simplicity and ease of use has resulted in these parts being used in other industries, for example aviation, switch gear and white goods manufacturing.

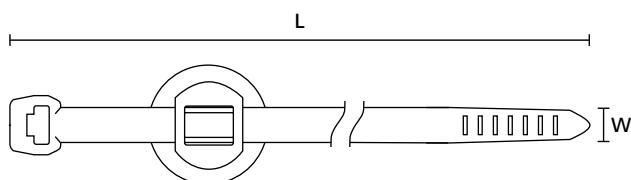
#### Features and benefits

- Pre-assembled 2-piece fixing tie with arrowhead foot part
- Cable tie head can be moved after bundling
- Easy to assemble without the need for a tool
- Arrowhead simply locks into place
- Disc adjusts tie for pressure from various directions and minimises access of dust and dirt

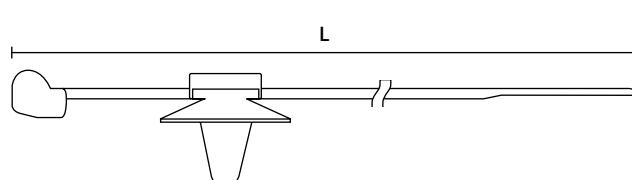


*Being a two-piece assembly allows the tie head to be located in the most convenient position.*

**Material specifications: See Article-No. on our website.**



T50ROSSFT6.5



T50ROSSFT6.5 16-3

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
<b>T50ROSSFT6.5-16-3</b>		6.3 - 6.7	2.5 - 3.5	4.6	200.0	45.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	150-37791
<b>T50RSFT6.5 16-3</b>		6.3 - 6.7	2.5 - 3.5	4.6	200.0	49.0	222	PA66HS PA66HIRHS	BK	1-2;4-7;25	150-37792
<b>T50SOSSFT6.5-D16-2</b>		6.3 - 6.7	1.5 - 2.2	4.6	150.0	35.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	150-93130
<b>T50RSFT6.5D18</b>		6.5 - 6.8	0.4 - 1.6	4.6	200.0	45.0	200	PA66HS PA66HIRHS	BK	1-2;4-7;25	150-37691
<b>T50RSFT6.5</b>		6.3 - 6.7	0.7 - 2.0	4.6	200.0	45.0	225	PA66HS	BK	1-2;4-7;25	156-01697

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



## 2-piece fixing ties for strong hold on smooth bundles

### with arrowhead, with disc, for round holes

Soft Grip mounts are especially designed for use with Soft Grip ties. The versatile combinations provide a variety of flexible fastening options for fluid management / cooling systems in vehicles. The Soft Grip Series is a unique semi-customised part solution and designed to save time, money and development effort. The foot parts of the mounts can be adjusted to individual customer requirements.

In the event of maintenance, the cable tie can be easily removed using a screwdriver. Only the cable tie then needs to be replaced, not the whole fixing element.

#### Features and benefits

- Suitable for a variety of fastening requirements thanks to different foot parts (for holes, for studs, for screw fixings)
- Soft Grip cable ties assure high protection of sensitive harnesses and fluid system tubes
- Soft TPE inner layer inhibits lateral movements of the bundle, especially on smooth tubing
- Pre-locking feature holds the cable tie in place before it is tensioned
- Soft Grip cable ties can be removed with a screwdriver for maintenance
- EVO9SG application tool with adjusted nose piece available

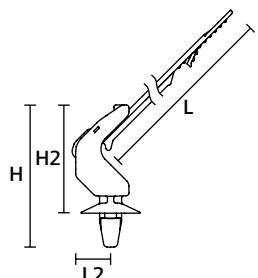


Soft Grip Cable Tie assembled with Soft Grip Mount for holes (arrowhead) and a hose for fluid management.



Soft Grip Cable Tie assembled with Soft Grip Mount for holes (arrowhead).

**Material specifications: See Article-No. on our website.**

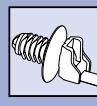


SGT100SAHD6.5S2.0

TYPE	Hole Ø (FH)	Panel Thickness	Height (H)	Height (H2)	Length (L)	Length (L2)	Bundle Ø max.	Material	Colour	Tools	Article-No.
SGT100SAHD6.5S2.0	6.3 - 6.7	1.7 - 2.3	38.7	29.5	140.0	9.5	25.4	PA66HS TPE	BK, BU	8	156-04097

Recommended Tools: 8-EVO9SG. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes.



### 1-piece fixing ties for high temperature applications up to +240 °C

#### With arrowhead, with disc, for round holes

This fastening solution is especially suitable for high temperature areas like the engine bay or exhaust area. The outside serrated cable tie protects the insulation of cable bundles.

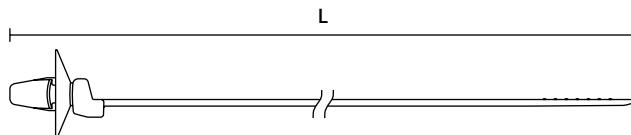
#### Features and benefits

- -55 °C to +240 °C operating temperature
- Excellent resistance against chemicals and gamma radiation
- Easy to install without the need for a tool
- Arrowhead simply locks into place
- Disc adjusts tie for pressures from various directions and minimises access of dust and dirt
- Cable tie head always situated in a defined position



One piece fixing tie with arrowhead, outside serrated.

**Material specifications: See Article-No. on our website.**



PT2ASFT6.5PT0.7-1.5-E

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	Material	Colour	Tools	Article-No.
PT2ASFT6.5PT0.7-1.5-E		6.3 - 6.7	0.7 - 1.5	3.4	112.7	20.0	PEEK	BGE	1-2;4-5;25	126-00183

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, MK7P, 25=EVOCut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes.



## 2-piece fixing ties for high temperature applications up to +240 °C

### With arrowhead, with disc, for round holes

The ties with fixing element are ideal when the requirement for temperature or chemical resistance is very high. They are used for cable harnesses in the automotive industry.

#### Features and benefits

- -55 °C to +240 °C operating temperature
- Excellent resistance against chemicals and gamma radiation
- Pre-assembled 2-piece fixing tie with arrowhead foot part
- Cable tie head can be moved after bundling
- Easy to assemble without the need for a tool
- Arrowhead simply locks into place
- Disc adjusts tie for pressure from various directions and minimises ingress of dust and dirt



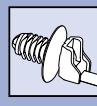
PEEK fixing ties can be used for small diameters from 1,0 mm.

**Material specifications: See Article-No. on our website.**

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T50ROSP2SFT6.5		6.3 - 6.7	1.7 - 2.3	4.6	200.0	45.0	225	PA46 PEEK	GY, BGE	1-2;4-7;25	156-00456
PT2AP1SFT6.5		6.3 - 6.7	0.7 - 1.3	3.4	145.0	35.0	230	PEEK	BGE	1-2;4-5;25	156-01090
PT2AP2SFT6.5		6.3 - 6.7	1.7 - 2.3	3.4	145.0	35.0	230	PEEK	BGE	1-2;4-5;25	156-01091
PT2AP3SFT6.5		6.3 - 6.7	1.2 - 1.8	3.4	145.0	32.0	230	PEEK	BGE	1-2;4-5;25	156-01146

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



### 1-piece fixing tie with arrowhead, with disc

#### for round holes, releasable

With a diverse range of fixing possibilities are ideal for use in many different industries, including automotive, aerospace and panel building.

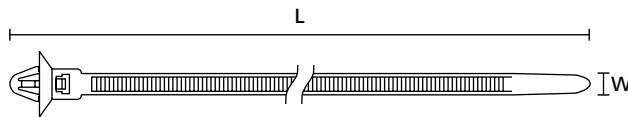
#### Features and benefits

- Easy to install without the need for a tool
- Arrowhead simply locks into place
- Disc adjusts tie for pressures from various directions and minimises access of dust and dirt
- Cable tie head always situated in a defined position
- Releasable and therefore reusable



RT50SD6.

**Material specifications: See Article-No. on our website.**



RT50SD6

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
RT50SD6		6.3 - 7.5	0.6 - 1.8	5.0	160.0	31.0	225	PA66HS	BK	1;3;6-7;9-10;25	111-85480

Recommended Tools: 1=MK10-SB, 3=MK21, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



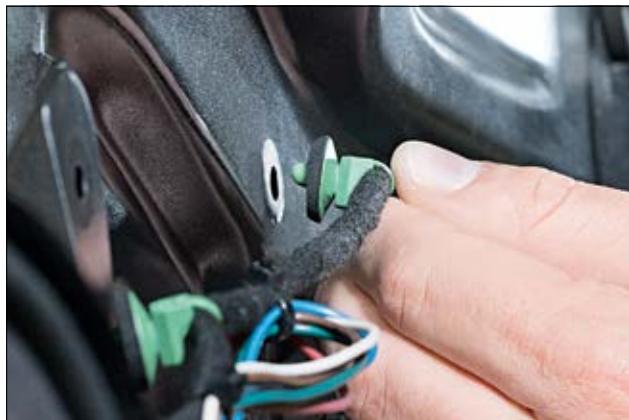
## 1-piece fixing ties with arrowhead, with disc

### for round holes, sealed

The parts are mainly used in the automotive industry. This fastening solution is used to secure cable harnesses e.g. in car doors. We offer a variety of panel thicknesses and hole sizes to suit all kinds of application. The seal protects the interior and surrounding cables among other things from splash water.

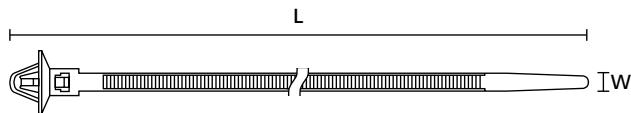
#### Features and benefits

- One-piece fixing ties with cellular rubber disc
- Especially suitable for door and tailgate harnesses used for car body applications
- Made from PA66 heat-stabilised material
- Cellular rubber disc minimises ingress of dust, dirt and splash water



*The additional seal protects against the ingress of moisture.*

**Material specifications: See Article-No. on our website.**

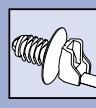


One piece fixing tie with arrowhead and disc, standard design

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
<b>T50SOSSFT6.5E-MS-MD</b>		6.1 - 6.6 (hexagonal) 6.25 - 6.75	0.7 - 1.6	4.6	163.0	35.0	180	PA66HS	NA	1-2;4-7;25	126-00065
<b>T50ROSSFT6.5-E-MDL</b>		6.1 - 6.6 (hexagonal) 6.25 - 6.75	1.2 - 2.1	4.6	200.0	45.0	200	PA66HS	BK	1-2;4-7;25	156-00379
<b>T50SOSSFT6.5E-MDL</b>		6.3 - 6.7	0.6 - 1.8	4.6	158.8	30.0	225	PA66HS	BK	1-2;4-7;25	156-00264
		6.3 - 6.7	0.6 - 1.8	4.6	158.8	30.0	225	PA66HS	GN	1-2;4-7;25	126-03100

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



## 2-piece fixing ties with arrowhead, with disc

### for round holes, sealed

The parts are mainly used in the automotive industry. This fastening solution is used to secure cable harnesses e.g. in car doors. We offer a variety of panel thicknesses and hole sizes to suit all kinds of application. The seal protects the interior and surrounding cables among other things from splash water.

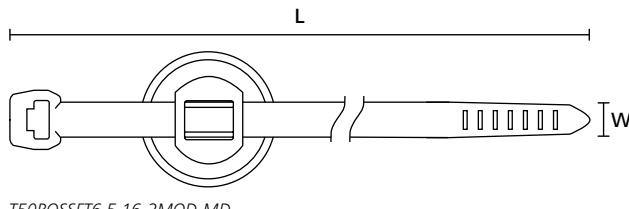
#### Features and benefits

- Pre-assembled 2-piece fixing tie with arrowhead foot part
- Cable tie head can be moved after bundling
- Easy to assemble without the need for a tool
- Arrowhead simply locks into place
- Disc adjusts tie for pressure from various directions
- Seal protects against splash water

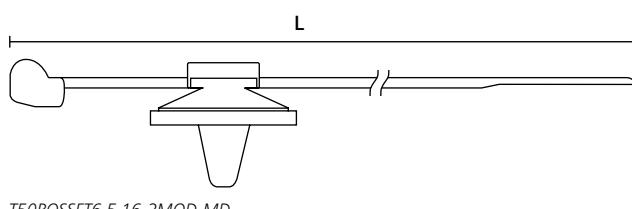


*The additional seal protects against the ingress of moisture.*

**Material specifications: See Article-No. on our website.**



T50ROSSFT6.5-16-2MOD-MD



T50ROSSFT6.5-16-2MOD-MD

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	Material	Colour	Tools	Article-No.
<b>T50ROSSFT6.5 16-3MD</b>		6.1 - 7.0	2.5 - 3.0	4.6	200.0	45.0	PA66HS PA66HIRHS	BK	1-2;4-7;25	150-37799
<b>T50ROSSFT6.5S-16-2MD</b>		6.3 - 6.7	0.7 - 1.2	4.6	200.0	45.0	PA66HS PA66HIRHS	BK	1-2;4-7;25	155-42002
<b>T50ROSSFT6.5-D16-2 MD</b>		6.3 - 6.7	0.7 - 1.8	4.6	200.0	45.0	PA66HS PA66HIRHS	BK	1-2;4-7;25	150-93100

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes.



## 1-piece fixing ties with arrowhead, with disc

### for round holes

With a diverse range of fixing possibilities these ties are ideal for use in many different industries, including automotive, aerospace, white goods manufacture and panel building. This fastening solution is used to secure cable harnesses. We offer a variety of panel thicknesses and hole sizes to suit all kinds of application.

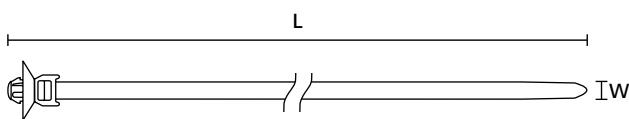
### Features and benefits

- Easy to install without the need for a tool
- Arrowhead simply locks into place
- Disc adjusts tie for pressures from various directions and minimises ingress of dust and dirt
- Cable tie head always situated in a defined position



T30SOS-AS-SFT6.5x4E, 1 piece fixing tie with AntiSlip engraving for a round hole 6.5 mm or a square hole 6.5x4 mm.

**Material specifications: See Article-No. on our website.**

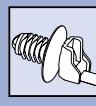


T50SOSKSFT6.5S2-E

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	Material	Colour	Tools	Article-No.
T30SOSASSFT6.5x4.0E		6.5 6.5 x 4.0	2.4 - 3.0	3.5	126.7	25.0	PA66HS	BK	1-2;4-5;25	126-00341

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, MK7P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes.



### 1-piece fixing ties with arrowhead, with wings

#### for round holes

For bundling and fixing of cable harnesses, pipes and hoses in many different industries, including automotive, aerospace, white goods manufacturing and panel building.

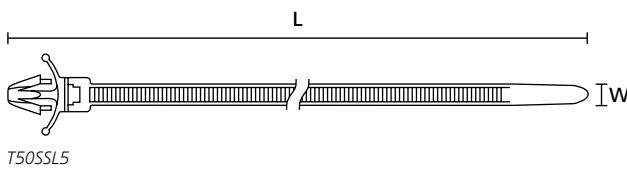
#### Features and benefits

- Easy to assemble without the need for a tool
- Cable tie head always situated in defined position
- Arrowhead simply locks into place
- Supporting legs provide a secure and firm fixing in areas where space is limited



A wide range of arrowhead fixing ties which are suitable for different panel thicknesses and hole diameters.

**Material specifications: See Article-No. on our website.**



TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.	
T18RSF		4.65 - 4.85	0.8 - 3.0	2.5	100.0	16.0	80	PA66HS	NA	1-2;4-5;25	126-00416	
		4.65 - 4.85	1.0 - 3.0	2.5	100.0	16.0	80	PA46	NA	1-2;4-5;25	126-00419	
T50RSFM		6.0 - 6.6	0.7 - 3.0	4.6	205.0	45.0	225	PA66HS	BK	1-2;4-7;25	111-85720	
T50SSL5		6.1 - 6.5	0.5 - 2.7	4.6	135.0	27.0	225	PA46	GY	1-2;4-7;25	111-85395	
		6.1 - 6.5	0.5 - 2.7	4.6	135.0	27.0	225	PA66	NA	1-2;4-7;25	111-85339	
T50SSFM		6.0 - 6.6	0.7 - 3.0	4.6	160.0	35.0	222	PA66	NA	1-2;4-7;25	111-85739	
		6.0 - 6.6	0.7 - 3.0	4.6	160.0	35.0	222	PA66HS	NA	1-2;4-7;25	126-01104	
T50RSFM		6.0 - 6.6	0.7 - 3.0	4.6	160.0	35.0	225	PA66	NA	1-2;4-7;25	126-00327	
		6.0 - 6.6	0.7 - 3.0	4.6	205.0	45.0	225	PA66	NA	1-2;4-7;25	111-85729	
T50SAH		6.0 - 6.6	0.7 - 3.0	4.6	160.0	25.0	225	PA66HS	BK	1-2;4-5;25	126-00163	
		6.0 - 6.6	0.7 - 3.0	4.6	160.0	25.0	225	PA66HS	NA	1-2;4-5;25	155-41102	
T50SL8		8.0	0.8 - 1.5	4.6	165.0	35.0	225	PA66	BK	2;4-5	126-01900	

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



## 1-piece fixing ties with arrowhead, with wings

### for oval holes

With a diverse range of fixing possibilities are ideal for use in many different industries, including automotive, aerospace, white goods manufacture and panel building.

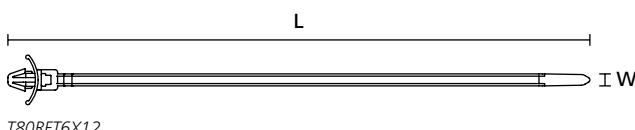
#### Features and benefits

- Easy to assemble without the need for a tool
- Cable tie head always situated in defined position
- Arrowhead simply locks into place
- Supporting legs provide a secure and firm fixing in areas where space is limited
- Versions for oval holes feature anti-twist protection



A wide range of arrowhead fixing ties which are suitable for different panel thicknesses and hole diameters.

**Material specifications: See Article-No. on our website.**

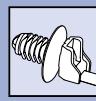


T80RFT6X12

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T80RFT6X12		6.3 x 12.3	0.6 - 3.0	4.6	228.0	45.0	222	PA46	GY	1-2;4-7;25	150-48397
		6.3 x 12.3	0.6 - 3.0	4.6	228.0	45.0	222	PA66	BK	1-2;4-7;25	150-48396

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



## 2-piece fixing ties with arrowhead, with disc, for round holes

### S50ROS series with fixing element

S-Series cable ties made from Polypropylene (PP) are non hydroscopic, offer a higher chemical resistance and reduced CO<sub>2</sub> footprint compared to a standard cable tie material. These cable ties are used to bundle and secure cables, pipes and/or hoses.

#### Features and benefits

- Pre-assembled 2-piece fixing tie with arrowhead foot part
- Cable tie head can be moved after bundling
- Easy to assemble without the need for a tool
- Arrowhead simply locks into place
- Disc adjusts tie for pressure from various directions and minimises access of dust and dirt



S50ROS made from Polypropylene combined with our fir tree parts for round holes.

TYPE	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Tools	Article-No.
<b>S50ROSSFT6.5</b>	6.4 - 6.6	0.7 - 2.0	4.9	200.0	45.0	185	PP PA66HS	BK	5	156-03590

Recommended Tools: 5=EVO7i. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

## 2-piece fixing ties with arrowhead, with wings

### for oval holes

Primarily designed for fixing cable harnesses in the automotive industry, their simplicity and ease of use has resulted in these parts being used in other industries, for example aviation, switch gear manufacturer, white goods manufacturer.

#### Features and benefits

- Pre-assembled 2-piece fixing tie with arrowhead foot part
- Cable tie head can be moved after bundling
- Easy to assemble without the need for a tool
- Arrowhead simply locks into place
- Versions for oval holes feature anti-twist protection



T50RFT60VAL for oval holes 6.3 x 12.2 mm.

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Tools	Article-No.
<b>T50RFT60VAL</b>		6.3 x 12.2	0.6 - 3.0	4.6	202.0	45.0	222	PA66HS PA66HIRHS	BK	1-2;4-7;25	150-37591
<b>T50RFT62x122HR</b>		6.3 x 12.2	0.6 - 3.0	4.6	202.0	45.0	225	PA46	GY	1-2;4-7;25	156-00446

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



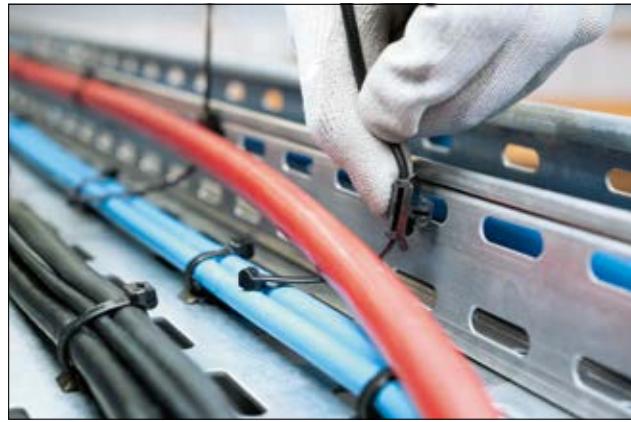
## 2-piece fixing ties with arrowhead, with disc

### for oval holes

Primarily designed for fixing cable harnesses in the automotive industry, their simplicity and ease of use has resulted in these parts being used in other industries, for example aviation, switch gear manufacturer, white goods manufacturer.

#### Features and benefits

- Pre-assembled 2-piece fixing tie with arrowhead foot part
- Cable tie head can be moved after bundling
- Easy to assemble without the need for a tool
- Arrowhead simply locks into place
- Versions for oval holes feature anti-twist protection

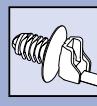


Our 2-Piece Fixing Tie T50RSFT725 is specially designed for railway application with an fixing hole of 7 x 25 mm.

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
One Click FERRO-T50ROSSFT725		7.0 x 50.0	1 - 2	4.6	200.0	50.0	225	PA66HS PA66W	BK	1-2;4-5;25	156-01577

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



### 1-piece fixing ties with arrowhead, with wings

for round holes, releasable

With a diverse range of fixing possibilities are ideal for use in many different industries, including automotive, aerospace and panel building.

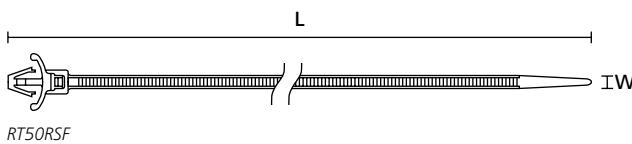
#### Features and benefits

- Easy to assemble without the need for a tool
- Cable tie head always situated in defined position
- Arrowhead simply locks into place
- Supporting legs provide a secure and firm fixing in areas where space is limited
- Releasable and therefore reusable



A wide range of arrowhead fixing ties which are suitable for different panel thicknesses and hole diameters.

**Material specifications: See Article-No. on our website.**



RT50RSF

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
YQR10016		6.9 - 7.1	1.60 - 4.00	4.6	165.0	34.0	225	PA66	GY	1-2;4-5;25	126-03000
RT50RSF		7.8 - 8.2	0.8 - 2.5	4.6	215.0	50.0	225	PA66	BK	1-2;4-5;25	115-07010
RT50SFK		6.4 - 7.0	0.8 - 3.0	5.0	225.0	50.0	225	PA66	BK	1;3;6-7;9-10;25	115-06960

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



### 1-piece fixing ties with arrowhead

#### without wings and disc, for round holes

The arrowhead design is useful in areas with limited space.

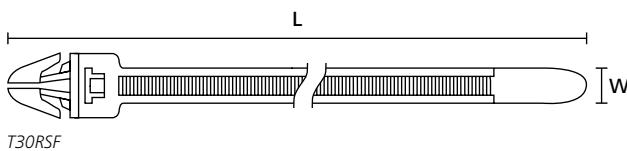
#### Features and benefits

- Easy to assemble without the need for a tool
- Fixing tie with arrowhead without wings
- Arrowhead simply locks into place
- Cable tie head always situated in defined position



*The arrowhead design allows these fixing ties to be used in areas with limited space.*

**Material specifications: See Article-No. on our website.**



T30RSF

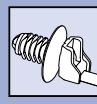
TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T30RSF		4.7 - 5.6	0.9 - 2.4	3.6	158.0	32.0	135	PA66	NA	1-2;4-5;25	126-00330
		4.7 - 5.6	0.9 - 2.4	3.6	158.0	32.0	135	PA66HS	BK	1-2;4-5;25	126-00329

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## 2-piece fixing ties with arrowhead, with disc

### for round holes, for parallel routing

Primarily designed for fixing cable harnesses in the automotive industry their simplicity, and ease of use, has seen these parts used in everything from aircraft, to switch-gear, to washing machines.

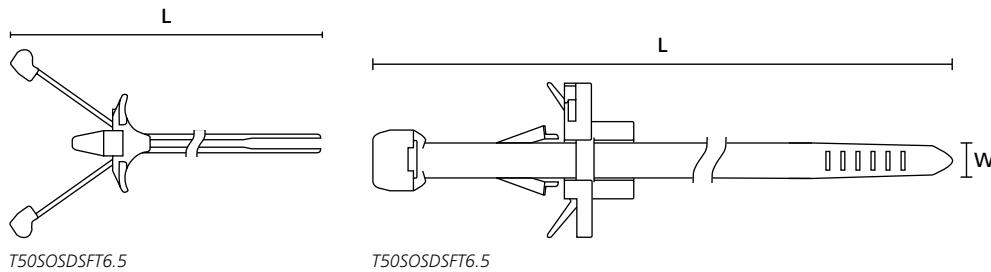
#### Features and benefits

- Pre-assembled 2-piece fixing tie with arrowhead foot part
- Cable tie head can be moved after bundling
- Easy to assemble without the need for a tool
- Arrowhead simply locks into place



T50SOSDSFT6.5 for parallel routing.

**Material specifications: See Article-No. on our website.**



T50SOSDSFT6.5

T50SOSDSFT6.5

TYPE	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
<b>T50SOSDSFT6.5</b>	6.3 - 6.7	0.7 - 1.5	4.6	150.0	15.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	156-00133

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



## 1-piece fixing ties with fir tree, with disc, for round holes

### Fir tree parts FT5

Primarily designed for fixing cable harnesses in the automotive industry, their simplicity and ease of use has resulted in these parts being used in other industries, for example aviation, switch gear manufacturer, white goods manufacturer.

#### Features and benefits

- Cable tie head always situated in defined position
- Easy to assemble without the need for a tool
- Disc adjusts tie for pressure from various directions and minimises ingress of dust and dirt
- Fir tree foot part can be used for a variety of panel thicknesses
- Suitable for use within threaded holes
- Parts with an anti-slip engraving, such as the T30SOS-AS-FT5-E, to prevent the harness from slipping sideways



Fir tree foot parts can be used for a variety of panel thicknesses.

**Material specifications: See Article-No. on our website.**

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T18RDP5		4.9 - 5.1	3.0 - 4.0	2.5	110.0	20.0	80	PA66	BK	1-2;4-5;25	150-55610
T30SOS-AS-FT5-E		4.8 - 5.2 M6	0.7 - 4.5	3.5	129.0	25.0	200	PA46	GY	1-2;4-5;25	157-00448

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)

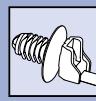
## 1-piece fixing ties with fir tree, with disc, for round holes

### Fir tree parts FT6

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T50SOSFT6D10E		5.8 - 6.2	0.8 - 5.5	4.6	32.0	200	PA46	GY	1-2;4-5;25	157-00028
		5.8 - 6.2	0.8 - 5.5	4.6	32.0	225	PA66HS	BK	1-2;4-5;25	157-00045
T50SOSFT6E2		6.3 - 7.0	0.6 - 4.2	4.6	35.0	180	PA66HS	BK	1-2;4-7;25	157-00085
T50SOSFT6LGE		6.3 - 7.0	0.7 - 7.0	4.6	35.0	180	PA66HS	BK	1-2;4-7;25	157-00228

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



### 1-piece fixing ties with fir tree, with disc, for round holes

#### Fir tree parts FT6

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T30SOS-AS-FT6-E		6.3 - 6.7	0.6 - 4.0	3.5	25.0	200	PA66HS	BK	1-2;4-5;25	157-00243
T50SOSFT6E3		6.1 - 6.9	0.7 - 3.5	4.7	35.0	150	PA66HIRHS	BK	1-2;4-7;25	157-00241
T50SOSFT6E1		6.3 - 7.0	0.7 - 3.0	4.7	35.0	150	PA66HIRHS	BK	1-2;4-5;25	157-00033
		6.3 - 7.0	0.7 - 3.0	4.7	35.0	225	PA46	GY	1-2;4-5;25	157-00059
T50SOSFT6LG-E2		6.1 - 6.9 6.1 - 6.6 (hexagonal)	0.6 - 8.25	4.6	35.0	180	PA66HIRHS	BK	1-2;4-7;25	157-00242
T50SOSFT6LG-E4		6.3 - 7.0	0.8 - 7.0	4.9	31.0	200	PA66HS	BK	1;3;6-7;9-10;25	157-00237

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)

### 1-piece fixing ties with fir tree, with disc, for round holes

#### Fir tree parts FT7

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
FT220DP7		6.8 - 7.2	0.8 - 5.0	4.7	232.0	40.0	225	PA66	BK	1-2;4-5;25	150-01700

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)

### 1-piece fixing ties with fir tree, with disc, for round holes

#### Fir tree parts FT8

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T50SOSFT8E		8.0 - 8.5	0.6 - 6.0	4.6	163.0	35.0	225	PA46	GY	1-2;4-7;25	157-00115
		8.0 - 8.5	0.6 - 6.0	4.6	163.0	35.0	225	PA66HS	BK	1-2;4-7;25	157-00072

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



## 1-piece fixing ties with fir tree, with disc

### for oval holes

Primarily designed for fixing cable harnesses in the automotive industry their simplicity, and ease of use, has seen these parts used in everything from aircraft, to switch-gear, to washing machines.

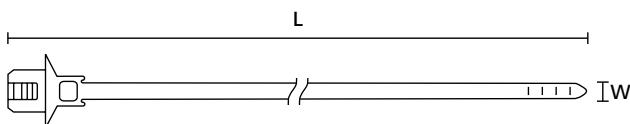
#### Features and benefits

- Cable tie head always situated in defined position
- Easy to assemble without the need for a tool
- Disc adjusts tie for pressure from various directions and minimises access of dust and dirt
- Fir tree foot part can be used for a variety of panel thicknesses
- Suitable for use within threaded holes
- Versions for oval holes feature anti-twist protection



This 1-piece fixing tie with fir tree design for oval holes features anti-twist protection.

**Material specifications: See Article-No. on our website.**

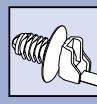


1-piece fixing tie with fir tree, with disc, for oval holes

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T50SOS-AS-DFTOVAL-E		6.5 x 12.5	0.6 - 6.75	4.6	166.4	35.0	180	PA66HIRHS	BK	1-2;4-5;25	157-00414

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



### 1-piece fixing ties with fir tree, with disc

#### for round holes, releasable

This fir tree design is ideal for use in thick panels and threaded, blind holes. The additional disc avoids the intrusion of dust and dirt.

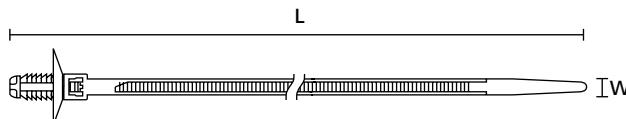
#### Features and benefits

- Cable tie head always situated in defined position
- Easy to assemble without the need for a tool
- Disc adjusts tie for pressure from various directions and minimises access of dust and dirt
- Suitable for use within threaded holes
- Reusable - Less waste and less pollution of the environment



REL30SDP6.

**Material specifications: See Article-No. on our website.**



Reference for dimensions only.

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
REL30SDP6		6.3 - 7.1	3.0 - 7.0	5.0	170.0	31.0	135	PA66	BK	1;3;6-7;9-10;25	150-55500

Recommended Tools: 1=MK10-SB, 3=MK21, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



### 1-piece fixing ties with fir tree, with disc, with stand-off, for round holes

With offset 12.5 and 25.0 mm

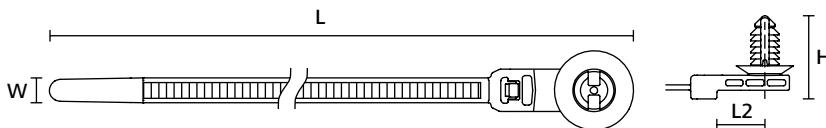
#### Features and benefits

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



Designed for optimal spacing: the integrated stand-off in this 1-piece fixing tie ensures secure cable routing while preventing contact with surfaces, ideal for high-performance applications.

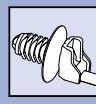
**Material specifications: See Article-No. on our website.**



TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Article-No.
T50ROSFT825SO		7.6 - 8.4	0.6 - 6.0	5.1	245.1	50.0	225	PA66HIRHSUV	BK	157-00196
T50ROSFT6SO12.5A		6.1 - 7.0 6.35	0.6 - 6.65	5.1	215.9	50.0	225	PA66HIRHS	GY	157-00130
		6.1 - 7.0 6.35	0.6 - 6.65	5.1	215.9	50.0	225	PA66HIRHSUV	BK	157-00145
T50ROSFT6SO25A		6.1 - 7.0 6.35	0.6 - 6.65	5.1	230.0	50.0	225	PA66HIRHS	GY	157-00119
T50ROSFT8SO25A		7.6 - 8.4	0.6 - 6.65	5.1	230.0	50.0	225	PA66HIRHS	GY	157-00120
T50ROSFT6SO25B		6.1 - 7.0 6.35	0.6 - 6.65	4.7	230.0	50.0	225	PA66HIRHSUV	BK	157-00169
T50ROSFTM6SO25B		M6	0.6 - 5.5	4.6	230.0	50.0	222	PA66HIRHSUV	BK	157-00172
T50ROSFTM6SO12.5B		M6	0.6 - 6.65	4.6	215.9	50.0	222	PA66HIRHSUV	BK	157-00131
T50ROSFT6SO25R		6.1 - 7.0 6.35	0.6 - 8.25	5.1	237.7	50.0	225	PA66HIRHSUV	BK	157-00164

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



## 2-piece fixing ties with fir tree, with disc, for round holes

### Fir tree parts FT3

Primarily designed for fixing cable harnesses in the automotive industry their simplicity, and ease of use, has seen these parts used in everything from aircraft, to switch-gear, to washing machines.

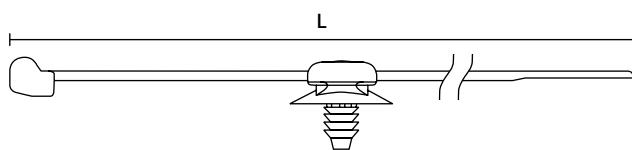
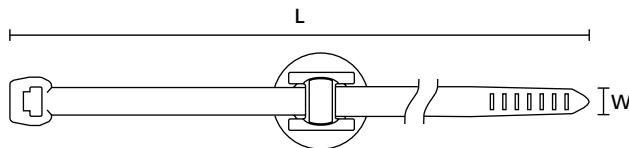
#### Features and benefits

- Pre-assembled 2-piece fixing tie with fir tree foot part
- Cable tie head can be moved after bundling
- Easy to assemble without the need for a tool
- Disc adjusts tie for pressure from various directions and minimises access of dust and dirt
- Fir tree foot part can be used for a variety of panel thicknesses
- Suitable for use within threaded holes



These fir tree fixings can also be used in threaded, blind holes.

**Material specifications: See Article-No. on our website.**



TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T18RFT3		M3	1.5 - 3.0	2.5	20.0	80	PA66HSUV	BK	1-2;4-5;25	156-00338

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



## 2-piece fixing ties with fir tree, with disc, for round holes

### Fir tree parts FT5

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T18RFT5		4.5 - 5.0	0.7 - 3.0	2.5	100.0	22.0	80	PA66HS PA66HIRHS	BK	1-2;4-5;25	156-01225
T30RFT5		4.5 - 5.0	0.7 - 3.0	3.5	150.0	34.0	135	PA46	GY	1-2;4-5;25	156-01316
T50SOSFT5		4.5 - 5.0	0.7 - 3.0	3.5	150.0	35.0	135	PA66HS PA66HIRHS	BK	1-2;4-5;25	150-55850
T50RFT5		4.5 - 5.0	0.7 - 3.0	4.6	150.0	35.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	156-06200
T50SOSFT5SD		4.5 - 5.0	0.7 - 3.0	4.6	200.0	45.0	222	PA66HS PA66HIRHS	BK	1-2;4-7;25	156-00025
		4.5 - 5.0	0.7 - 3.0	4.6	150.0	35.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	156-00432

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)

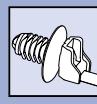
## 2-piece fixing ties with fir tree, with disc, for round holes

### Fir tree parts FT6

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	Material	Colour	Tools	Article-No.
PT2AFT6LG		6.4 - 7.1	0.75 - 6.0	3.4	145.0	35.0	PEEK PA46	BGE, GY	1-2;4-5;25	156-01336
T30RFT6LG		6.5 - 7.0	0.75 - 6.0	3.5	150.0	30.0	PA66HS PA66HIRHS	BK	1-2;4-5;25	150-31090
T50ROSFT6LG		6.5 - 7.0	0.75 - 6.0	4.6	200.0	45.0	PA66HS PA66HIRHS	BK	1-2;4-7;25	150-31099
T50RFT6LG		6.5 - 7.0	0.75 - 6.0	4.6	202.0	45.0	PA66HS PA66HIRHS	BK	1-2;4-7;25	150-31091
T80IFT6LG		6.5 - 7.0	0.75 - 6.0	4.7	305.0	75.0	PA66HS PA66HIRHS	BK	1-2;4-7;25	150-31096
T30RFT6SD		6.4 - 7.1	0.75 - 3.0	3.5	150.0	35.0	PA66HS PA66HIRHS	BK	1-2;4-5;25	150-52690
T50ROSFT6SD		6.4 - 7.1	0.75 - 3.0	4.6	200.0	45.0	PA46	GY	1-2;4-7;25	156-00085
		6.4 - 7.1	0.75 - 3.0	4.6	200.0	46.0	PA66HS PA66HIRHS	BK	1-2;4-7;25	156-05902

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 8=EVO9SG, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes.



**2-piece fixing ties with fir tree, with disc, for round holes**

**Fir tree parts FT6**

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	Material	Colour	Tools	Article-No.
<b>T50RFT6LGSD-HEX</b>		6.25 - 6.75 6.1 - 6.6 (hexagonal)	0.7 - 5.0	4.6	202.0	45.0	PA66HS PA66HIRHS	BK	1-2;4-7;25	156-01705
<b>T50SFT6LG1SD</b>		6.5 - 7.0	0.6 - 6.0	4.6	160.0	30.0	PA66HS PA66HIRHS	BK	1-2;4-7;25	156-00154
<b>T30RFT6</b>		6.4 - 7.1	0.75 - 3.0	3.5	150.0	30.0	PA66HS PA66HIRHS	BK	1-2;4-5;25	150-77950
<b>T50ROSFT6</b>		6.4 - 7.1	0.75 - 3.0	4.6	200.0	45.0	PA66HS PA66HIRHS	BK	1-2;4-7;25	156-00076
<b>T50RFT6</b>		6.4 - 7.1	0.75 - 3.0	4.6	202.0	45.0	PA46	GY	1-2;4-7;25	156-01693
<b>SGT100SFT6.7</b>		6.3 - 7.0	0.6 - 4.2	12.7	140.0	25.4	PA66HS TPE PA66HIRHS	BK	1-2;4-7;25	150-77941
									8	156-03268

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 8=EVO9SG, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes.



## 2-piece fixing ties with fir tree, with disc, for round holes

### Fir tree parts FT7

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	Material	Colour	Tools	Article-No.
T30RFT7		6.5 - 7.0	0.8 - 7.0	3.5	150.0	35.0	PA66HS	BK	1-2;4-5;25	156-00057
T50RFT7		6.5 - 7.0	0.8 - 7.0	4.6	202.0	45.0	PA66HS	BK	1-2;4-7;25	111-85871
T50IFT7		6.5 - 7.0	0.8 - 7.0	4.6	300.0	85.0	PA66HS	BK	1-2;4-7;25	150-00700
T50RFT7HD		6.2 - 7.2	0.8 - 7.0	4.6	202.0	50.0	PA46	BN	1-2;4-7;25	156-00457

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes.

## 2-piece fixing ties with fir tree, with disc, for round holes

### Fir tree parts FT8

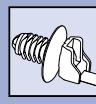
TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
S50ROSFT8GSD		M10 8.0 - 8.5	1.5 - 4.0	4.9	200.0	45.0	185	PP PA66HIRHS	BK	5	156-03587
S50ROSFT8		7.7 - 8.0	0.8 - 6.0	4.9	200.0	45.0	185	PP PA66HS	BK	5	156-03581
T50RFT8		7.7 - 8.0	0.8 - 6.0	4.6	202.0	45.0	225	PA66HS	BK	1-2;4-7;25	111-85880
T50RFT8GSD		8.0 - 8.5	1.5 - 4.0	4.6	202.0	45.0	225	PA46	GY	1-2;4-7;25	156-00235
		8.0 - 8.5	1.5 - 4.0	4.6	202.0	45.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	133-00034

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## 2-piece fixing ties with fir tree, with disc, for round holes

### Fir tree parts FT9

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T120IFT9		9.0 - 10.6	5.0 - 11.0	7.6	300.0	80.0	535	PA66HIR(S)	BK	1;3;6-7;9-10;25	156-00200
T120RFT9A		8.7 - 9.2	1.0 - 6.5	7.6	380.0	105.0	535	PA66HIRHSUV	BK	1;3;6-7;9-10;25	156-00067
WSSFT9A		8.7 - 9.2	1.0 - 6.5	12.7	228.0	57.0	535	PA66HIRHSUV	BK	3;5-7;9-10	156-00068
T120RFT9B		8.7 - 9.2	1.0 - 15.8	7.6	380.0	105.0	535	PA66HS PA66HIRHSUV	BK	1;3;6-7;9-10;25	156-00071

Recommended Tools: 1=MK10-SB, 3=MK21, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)

## 2-piece fixing ties with fir tree, with disc, for round holes

### Fir tree parts FT10

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	Material	Colour	Tools	Article-No.
S50ROSFT10		9.7 - 10.0	0.8 - 5.0	4.9	200.0	45.0	PP PA66HS	BK	5	156-03585
T50RFT10		9.7 - 10.0	0.8 - 5.0	4.6	200.0	45.0	PA66HS	BK	1-2;4-7;25	111-85810
T50ROSFT10		9.7 - 10.0	0.8 - 5.0	4.6	200.0	45.0	PA66HS	BK	1-2;4-7;25	156-00120

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes.



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## 2-Pieces Fixing Ties with Fir Tree, with cover

### 2-Pieces Fixing Ties with Fir Tree, with cover, for round holes

Primarily designed for fixing cable harnesses in the automotive industry their simplicity, and ease of use, has seen these parts used in everything from aircraft, to switch-gear, to washing machines.

#### Features and benefits

- Pre-assembled 2-piece fixing tie with fir tree foot part
- Cable tie head can be moved after bundling
- Easy to assemble without the need for a tool
- Disc adjusts tie for pressure from various directions and minimises access of dust, dirt and water
- Fir tree foot part can be used for a variety of panel thicknesses
- Suitable for use within threaded holes

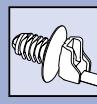


Two piece fixing tie with fir tree for round holes and with side offset.

**Material specifications: See Article-No. on our website.**

TYPE	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Article-No.
<b>T50RSOC13.9FT6.5</b>	6.1 - 6.9 M8 x 1.25 Threaded 6.1 - 6.6 (hexagonal)	0.7 - 3.0	4.6	202.0	45.0	225	PA66HIRHS	BK	156-03276

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



## 2-piece fixing ties for strong hold on smooth bundles

### Fir tree parts FT6

Soft Grip mounts are especially designed for use with Soft Grip ties. The versatile combinations provide a variety of flexible fastening options for fluid management / cooling systems in vehicles. The Soft Grip Series is a unique semi-customised part solution and designed to save time, money and development effort. The foot parts of the mounts can be adjusted to individual customer requirements.

In the event of maintenance, the cable tie can be easily removed using a screwdriver. Only the cable tie then needs to be replaced, not the whole fixing element.

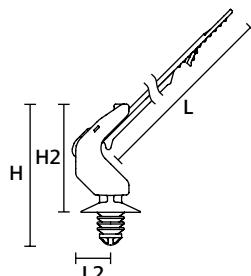
#### Features and benefits

- Suitable for a variety of fastening requirements thanks to different foot parts (for holes, for studs, for screw fixings)
- Soft Grip cable ties assure high protection of sensitive harnesses and fluid system tubes
- Soft TPE inner layer inhibits lateral movements of the bundle, especially on smooth tubing
- Pre-locking feature holds the cable tie in place before it is tensioned
- Soft Grip cable ties can be removed with a screwdriver for maintenance
- EVO9SG application tool with adjusted nose piece available



Soft Grip Cable Tie assembled with Soft Grip Mount for holes (arrowhead) and hoses for fluid management.

#### Material specifications: See Article-No. on our website.



SGT100SFT6.7

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	Material	Colour	Tools	Article-No.
SGT100SFT6.7		6.3 - 7.0	0.6 - 4.2	12.7	140.0	25.4	PA66HS TPE PA66HIRHS	BK	8	156-03268

Recommended Tools: 8=EVO9SG. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes.



## 2-piece fixing ties with fir tree, with disc, for oval holes

### S50ROS series with fixing element

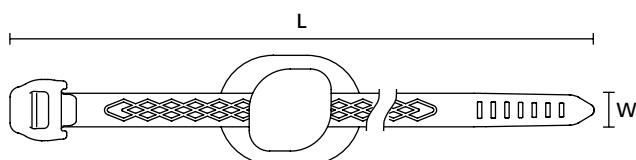
S-Series cable ties made from Polypropylene (PP) are non hydroscopic, offer a higher chemical resistance and reduced CO<sub>2</sub> footprint compared to a standard cable tie material. These cable ties are used to bundle and secure cables, pipes and/or hoses.

#### Features and benefits

- Pre-assembled 2-piece fixing tie with fir tree foot part
- Cable tie head can be moved after bundling
- Easy to assemble without the need for a tool
- Disc adjusts tie for pressure from various directions and minimises access of dust and dirt
- Fir tree foot part can be used for a variety of panel thicknesses
- Suitable for use within threaded holes
- DOP versions for oval holes feature anti-twist protection



**Material specifications: See Article-No. on our website.**



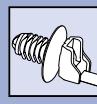
TYPE	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
<b>S50ROS1DOP62x122</b>	6.2 x 12.2	0.6 - 6.0	4.9	200.0	45.0	185	PP PA66HIRHS	BK	5	156-03586

**Recommended Tools:** 5=EVO7i. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



### 1-piece fixing ties with deep hole anchor, with disc, for round holes

#### Deep hole anchor T30SOSASDHA6x11E

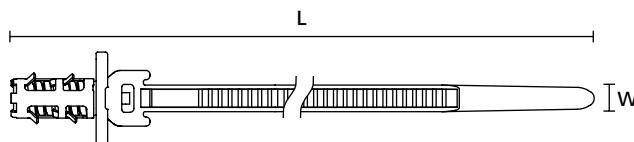
##### Features and benefits

- 1-piece fixing tie with deep hole anchor for secure installation in blind holes, with or without thread
- High pull-off forces enabled by integrated metal clamp
- Tool-free assembly simplifies installation and saves time
- Integrated disc compensates for pressure from various directions
- Disc design minimizes ingress of dust and dirt for enhanced durability



One piece fixing tie for round blind holes.

**Material specifications: See Article-No. on our website.**



T30SOSASDHA6x11E

TYPE	Hole Ø (FH)	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Article-No.
<b>T30SOSASDHA6x11E</b>	5.9 - 6.1	3.5	128.6	25.0	200	PA66HS	BK	126-00429

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



## 2-piece fixing ties with deep hole anchor, with disc, for round holes

### Deep hole anchor DHA5.5 - DHA8.4

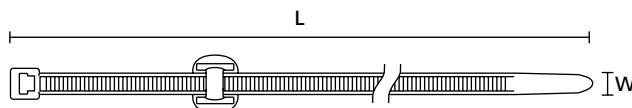
#### Features and benefits

- Pre-assembled 2-piece fixing tie with deep hole anchor
- The high 'pull off' forces are due to the integrated metal clamp
- Cable tie head can be moved after bundling
- Easy to assemble without the need for a tool
- Disc adjusts tie for pressure from various directions and minimises ingress of dust and dirt
- Suitable for use within blind holes with or without thread

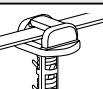


T50RDHA8.4x20-PA46 for blind hole applications and with higher temperature requirements, include transportation cap to protect the harness during transportaion.

#### Material specifications: See Article-No. on our website.

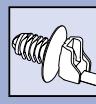


Fixing tie with deep hole anchor

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T50RDHA5.5x15		5.4 - 5.6	15.0	4.6	202.0	45.0	225	PA46	GY	1-2;4-5;25	156-01203
T50RDHA8.4x20		8.3 - 8.5	20.0	4.6	202.0	45.0	225	PA46	GY	1-2;4-5;25	156-01155

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)

**Arrowhead cradle****SF/TM-Series**

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

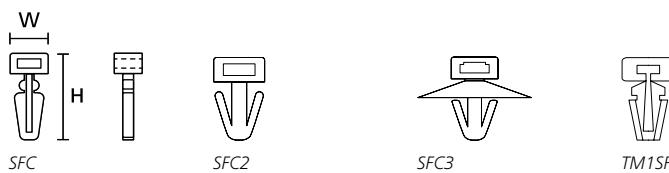
**Features and benefits**

- Arrowhead fixing for use in pre-drilled or punched holes
- Ideal for applications with limited space and restricted access
- Parts with disc protect against dirt and dust



TM1SF for secure fixing of cables into pre-drilled or pre-punched holes.

**Material specifications: See Article-No. on our website.**



TYPE	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Height (H)	Strap Width max. (G)	Material	Colour	Article-No.
<b>SFC2</b>	6.0	0.80 - 1.00	6.0	-	14.5	5.3	PA66	Natural (NA)	151-02000
<b>SFC</b>	6.0	3.00 - 3.20	11.0	18.0	18.0	5.3	PA66	Natural (NA)	151-01600
<b>SFC3</b>	6.3	0.80 - 1.80	22.0	15.5	15.5	8.6	PA66	Black (BK)	151-01907
	6.3	0.80 - 1.80	22.0	15.5	15.5	8.6	PA66	Natural (NA)	151-01909
<b>TM1SF</b>	6.3	3.40 - 3.40	10.2	15.8	15.6	5.0	PA66	White (WH)	151-40119

Recommended Tools: 1=MK10-SB, 3=MK21, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes.



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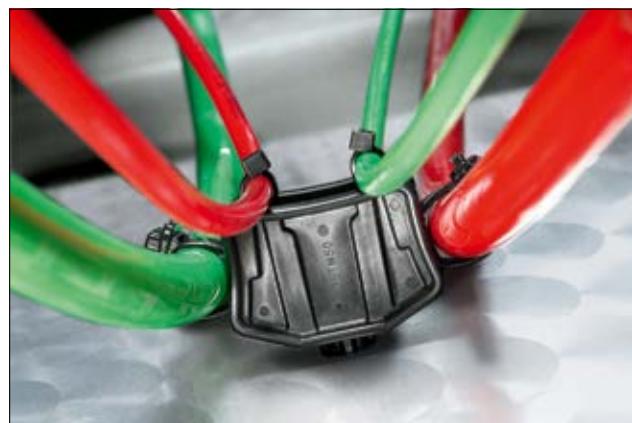
## Fixing elements with fir tree, for distance routing

### Saddle mount

These heavy duty fixing offers excellent performance for ship building and the truck and construction vehicle industries.

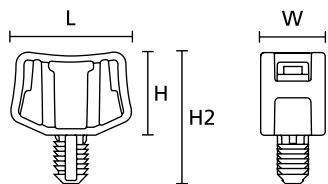
#### Features and benefits

- For parallel routing of four bundles
- Secure alignment to the bundle due to H-design
- For cable ties up to 13.0 mm wide
- Pre-fixing of tie with integrated nose



*The mount can secure up to four separate bundles, providing parallel spacing between the frame rail and adjacent bundles.*

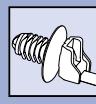
**Material specifications: See Article-No. on our website.**



Fir Tree Saddle Mounts

TYPE	Hole Ø (FH)	Panel Thickness	Strap Width max. (G)	Bundle Ø max.	Width (W)	Length (L)	Height (H)	Height (H2)	Material	Colour	Pack Cont.	Article-No.
<b>S3STM50</b>	12.7 - 13.7	1.9 - 13.0	13.0	127.0	22.0	50.0	35.0	55.0	PA66HIRHS	Black (BK)	100 pcs.	151-29500

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



## Automatic bundling

### Fir tree clips for automatic cable tying systems

#### Features and benefits

- Clips to fix cables and harnesses in the automotive and white goods industries
- Optimized for use automatic cable tying systems
- Easy to apply
- The fixing elements can be tied automatically with Autotool System



Fixing elements for automatic bundling.

**Can be used with Automatic Cable Tying Systems on page 596.**

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Material	Colour	Article-No.
<b>ATS62x122-2DOP90</b>		6.2 x 12.2	0.6 - 6.0	PA66HIRHS	Black (BK)	102-67040
<b>ATS62x122-2DOP</b>		6.2 x 12.2	0.6 - 6.0	PA66HIRHS	Black (BK)	102-67042
<b>ATSFT5LG</b>		4.5 - 5.0	0.7 - 8.0	PA66HIRHS	Black (BK)	102-67050
<b>ATSFT6</b>		6.3 - 7.0	0.75 - 3.0	PA66HIRHS	Black (BK)	102-67067
<b>ATSFT6LG</b>		6.5 - 7.1	0.6 - 6.0	PA66HIRHS	Black (BK)	102-67062
<b>ATSFT8GSD</b>		8.0 - 8.5	1.5 - 4.0	PA66HIRHS	Black (BK)	102-67081

All dimensions in mm. Subject to technical changes.



## Fixing elements for T-slotted aluminium frames

### ACFM-Series

The Aluminium Clip Frame Mounts (ACFM-Series) are specifically designed for use with aluminium construction profiles. Installation and handling is seamless - simply twist the mounts 90 degrees to secure them firmly into position at the desired positions along the profile. These mounts can also be loosened and repositioned easily for quick adjustment and the ongoing maintenance of cables. The range of aluminium frame mounts are suitable for use with various aluminium construction profiles from a range of manufacturers.

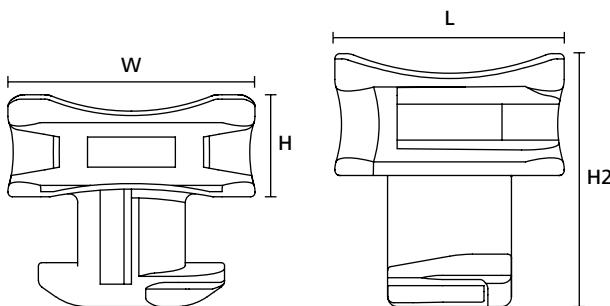
#### Features and benefits

- Quick and easy to install (quarter-turn fixing)
- 2-way cable tie entry, allowing cables to be fixed lengthways or sideways to the profile
- Curved design ensures that cables are supported centrally to the mount
- Secure fixing once installed
- Suitable for cable ties up to 8 mm wide



The Aluminium Clip Frame Mounts (ACFM) are special designed for Aluminium Construction Profiles.

**Material specifications: See Article-No. on our website.**

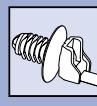


TYPE	Panel Thickness	Groove Width	Width (W)	Length (L)	Height (H)	Height (H2)	Product Family	Material	Colour	Pack Cont.	Article-No.
<b>ACFM4W8PT2.2</b>	2.2	8.0	22.5	17.5	9.3	15.0	For Bosch Rexroth Strut profiles slot 8	PA66/6HIRHS	Black (BK)	500 pcs.	151-03176
<b>ACFM8W6.2PT2.75</b>	2.8	6.2	22.5	17.5	9.3	15.3	For ITEM 6 frame	PA66/6HIRHS	Black (BK)	500 pcs.	151-03248
<b>ACFM1W13PT3.5</b>	3.5	13.0	22.5	17.5	13.3	20.8	For Ziegler profile 13	PA66/6HIRHS	Black (BK)	500 pcs.	151-02942
<b>ACFM5W8PT4,5</b>	4.5	8.0	22.5	17.5	9.3	17.3	For ITEM 8 frame	PA66/6HIRHS	Black (BK)	500 pcs.	151-03192
<b>ACFM7W10PT5.3</b>	5.3	10.0	22.5	17.5	9.3	18.6	For ITEM10 frame	PA66/6HIRHS	Black (BK)	500 pcs.	151-03193
<b>ACFM2W10PT6</b>	6.0	10.0	22.5	17.5	9.3	19.3	For Bosch Rexroth Strut profiles slot 10	PA66/6HIRHS	Black (BK)	500 pcs.	151-02858

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## Wire push in clips

### WPC-Series

With the increased complexity of electronic and electrical installations the use of WPC Clips enables cables to be installed using a minimum amount of space. A perfect solution for the frame/rails of control cabinets or the white goods industry.

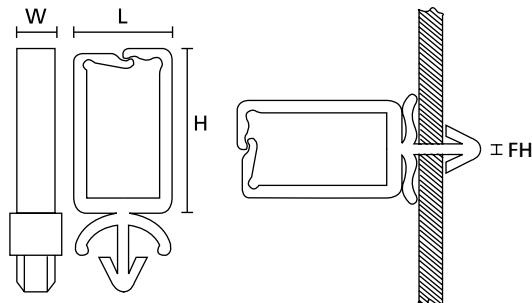
#### Features and benefits

- Accept single or multiple wires
- Simply push wires into place
- Arrowhead design for simple and secure installation
- Access to panel only needed from one side



WPC – Wire Push In Clip.

**Material specifications: See Article-No. on our website.**



WPC Wire Push In Clip (side view, front view, in application)

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Height (H)	Material	Colour	Article-No.
WPC5		4.7	0.80 - 4.00	5.3	15.0	12.7	PA66	Natural (NA)	151-75059
WPC10		4.7	0.80 - 4.00	5.3	15.0	17.7	PA66	Natural (NA)	151-75109
WPC15		4.7	0.80 - 4.00	5.3	15.0	22.7	PA66	Natural (NA)	151-75159
WPC20		4.7	0.80 - 4.00	5.3	15.0	27.7	PA66	Natural (NA)	151-75209

All dimensions in mm. Subject to technical changes.



## Fixing elements with arrowhead for round holes

### Harness push in clips, HC-Series

This fixing element is pressed into a hole manually and locks into place with an audible click. Cable bundles can be applied afterwards.

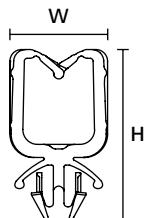
#### Features and benefits

- Accept single or multiple wires
- Simply push wires into place
- Arrowhead design for simple and secure installation
- Access to panel only needed from one side
- Harness clip made of polypropylene (PP) offers a lower CO<sub>2</sub> footprint compared to PA66 making it a more sustainable choice without compromising on performance



Harness clip made of polypropylene with arrow head for round holes 6.3 mm.

**Material specifications: See Article-No. on our website.**



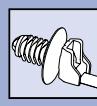
HC10.5WPM6.3

TYPE	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Height (H)	Material	Colour	Article-No.
<b>HC10.5WPM6.3</b>	6.1 - 6.6	1.0 - 3.0	9.5	16.7	19.8	PP	Black (BK)	151-03957

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



### Fixing elements for tubes and harnesses

#### KSFT6.5OC with low arrowhead

This fixing elements can be used ideally everywhere where space saving work is necessary. In case of maintenance, the tubes and harnesses can be exchanged.

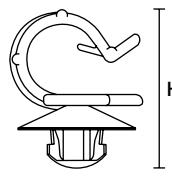
#### Features and benefits

- Fixing part with rounded arrowhead to minimise assembly height
- Ideal for applications where space is limited
- Simply clip on a wire or hose
- Bundle diameter is defined
- Suitable for post-installation of bundles



The very low arrowhead is specially designed for narrow installation spaces.

**Material specifications: See Article-No. on our website.**



KSFT6.5 OC 7-9

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Attach to Ø	Height (H)	Material	Colour	Article-No.
KSFT6.5OC1-3		6.3 - 6.7	2.30 - 2.70	1.0 - 3.0	14.4	PA66HIRHS	Black (BK)	151-01843
KSFT6.5OC7-9		6.3 - 6.7	2.30 - 2.70	7.0 - 9.0	21.6	PA66HIRHS	Black (BK)	151-01844

All dimensions in mm. Subject to technical changes.

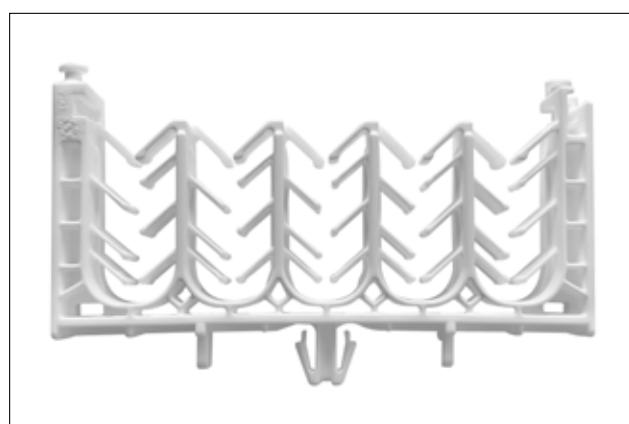


## LadderClamp

for installation on cable ladders

### Features and benefits

- Time saving
- Quick installation
- Ergonomic installation saves the installers shoulders
- No waste
- Fix the cables in place
- Reusable
- No tool needed
- Fits to cable ladders of brand MP-bolagen and Wibe
- Ladder clamp made of polypropylene (PP) offers a lower CO<sub>2</sub> footprint compared to PA66 making it a more sustainable choice without compromising on performance



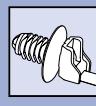
**Material specifications: See Article-No. on our website.**

TYPE	Width (W)	Length (L)	Height (H)	Material	Colour	Article-No.
<b>LC5-8-10SFT8.5</b>	15.0	95.0	85.0	PP	White (WH)	151-04121

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



### Fixing elements for tubes and harnesses with automatic locking feature

#### with arrowhead, for round holes

Offering a simple and secure method of attaching cables to panels. Originally designed for the automotive industry, these products are used in a wide range of applications with sheet metal panels across various industries.

#### Features and benefits

- Push and click closure for fixing of wires
- Clip is clicked into a specific hole
- AHC()SS und AHC()SB can be pushed onto a 5.0 mm stud

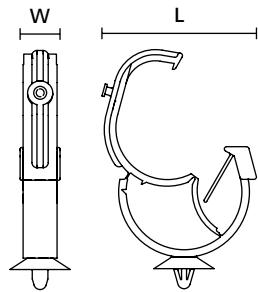


Automatic Harness Clip closed.



Automatic Harness Clip open.

**Material specifications: See Article-No. on our website.**



AHC-Series

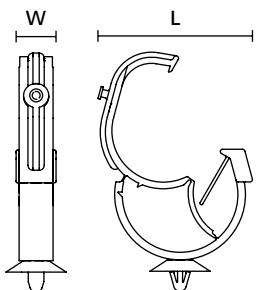
TYPE	Drawing	Panel Thickness	Bundle Ø max.	Disc Ø	Width (W)	Length (L)	Material	Colour	Article-No.
IAHC4AH		0.5 - 2.5	36.0	24.0	13.5	53.0	PA66HIRHS	Black (BK)	151-00382
AHC1AH		0.7 - 2.2	13.0	20.0	10.0	26.2	PA66HIRHS	Black (BK)	151-02874
AHC2AH		0.7 - 2.2	20.0	20.0	10.0	32.5	PA66HIRHS	Black (BK)	151-02881

All dimensions in mm. Subject to technical changes.



**Fixing elements for tubes and harnesses with automatic locking feature**

with arrowhead, for oval holes



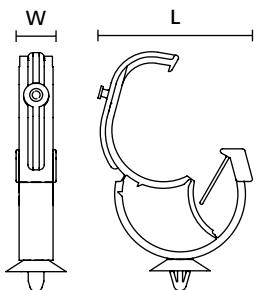
AHC-Series

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Bundle Ø max.	Disc Ø	Width (W)	Length (L)	Material	Colour	Article-No.
<b>AHC2BH</b>		6.2 x 12.2	0.7 - 2.2	20.0	20.0	10.0	32.5	PA66HIRHS	Black (BK)	151-02882
<b>AHC3BHR</b>		6.2 x 12.2	0.7 - 3.0	28.0	24.0	14.0	47.4	PA66HIRHS	Black (BK)	151-00370
<b>AHC45BHG2</b>		6.2 x 12.2	1.0 - 3.0	37.5	22.0	14.0	50.0	PA46	Grey (GY)	151-01377

All dimensions in mm. Subject to technical changes.

**Fixing elements for tubes and harnesses with automatic locking feature**

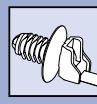
with fir tree for round holes



AHC-Series

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Bundle Ø max.	Disc Ø	Width (W)	Length (L)	Material	Colour	Article-No.
<b>AHC25FT6LG</b>		6.4 - 7.0	0.7 - 4.0	22.0	20.0	10.0	34.5	PA66HIRHS	Black (BK)	151-01198
<b>AHC223FT6LG</b>		6.4 - 7.0	0.7 - 4.0	23.0	20.0	10.0	35.0	PA66HIRHS	Black (BK)	151-01078

All dimensions in mm. Subject to technical changes.



### Fixing elements for tubes and harnesses with automatic locking feature, connectable

#### IAHC-Series, connectable

Offering a simple and secure method of attaching cables to panels. Originally designed for the automotive industry, these products are used in a wide range of applications with sheet metal panels across various industries.

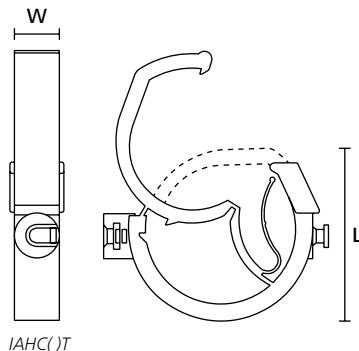
#### Features and benefits

- Push and click closure
- Coupling elements of the IAHC variants allow parts to connect
- IAHC( )T can only be connected with another IAHC element
- Vibration resistant, rattlefree and secure hold of bundle
- In case of maintenance easy replacement of bundle possible
- 360 degree rotatable for guiding bundles in different directions



IAHC( )AH in combination with an IAHC( )T.

**Material specifications: See Article-No. on our website.**



IAHC( )T

TYPE	Drawing	Bundle Ø max.	Width (W)	Length (L)	Material	Colour	Article-No.
IAHC1T		13.0	10.0	23.0	PA66HIRHS	Black (BK)	151-02883
IAHC3T		28.0	10.0	40.0	PA66HIRHS	Black (BK)	151-02884
IAHC4T		36.0	13.5	47.0	PA66HIRHS	Black (BK)	151-00207
IAHC5T			45.0	13.5	57.0	PA66HIRHS	Black (BK)

All dimensions in mm. Subject to technical changes.



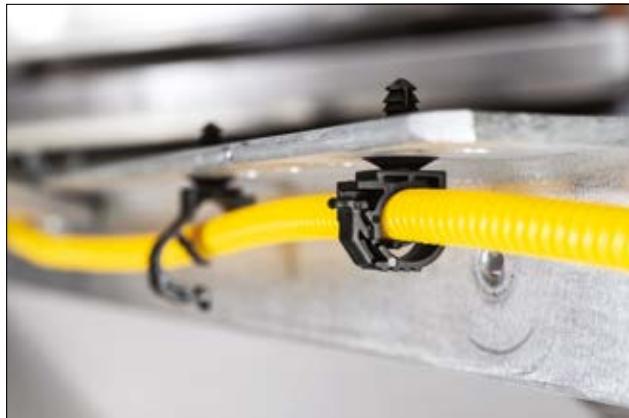
## Fixing elements for tubes and pipes

### with fir tree for round holes and cover, LOC-Series

These clips offer fast and easy bundling of convoluted tubes and pipes, especially for the automotive industry.

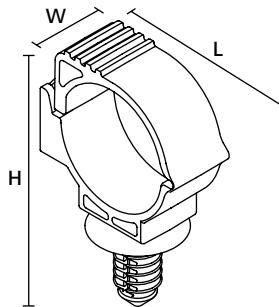
#### Features and benefits

- For fixing and bundling convoluted tubes and pipes
- Vibration resistant, rattle-free and secure hold of bundle
- In case of maintenance easy replacement of bundle possible



The locking clamps of the LOC-Series offer fast and easy bundling of convoluted tubes and pipes.

**Material specifications: See Article-No. on our website.**



Reference drawing for dimensions only

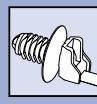
TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Bundle Ø max.	Width (W)	Length (L)	Height (H)	Material	Colour	Article-No.
LOC10-14FT6LG		6.1 - 6.6 (hexagonal) 6.1 - 7.0	0.6 - 8.25	14.0	12.0	34.9	57.8	PA66HIRHSUV	Black (BK)	151-01166
LOC15-19FT6LG		6.1 - 6.6 (hexagonal) 6.1 - 7.0	0.6 - 8.25	19.0	12.0	31.6	47.5	PA66HIRHSUV	Black (BK)	151-01022

All dimensions in mm. Subject to technical changes.

### with fir tree for oval holes and cover, LOC-Series

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Bundle Ø max.	Width (W)	Length (L)	Height (H)	Material	Colour	Article-No.
LOC15-19FToval		6.2 x 12.2 6.5 x 12.5 6.5 x 13.0 7.0 x 12.0	0.6 - 6.75	19.0	12.0	31.6	49.5	PA66HIRHSUV	Black (BK)	151-01049
LOC5-9FToval		6.2 x 12.2 6.5 x 12.5 6.5 x 13.0 7.0 x 12.0	0.6 - 6.75	9.0	12.0	25.5	34.2	PA66HIRHSUV	Black (BK)	151-01306

All dimensions in mm. Subject to technical changes.



### Fixing elements for tubes and harnesses

#### with fir tree

This Fixing Element is pressed into a hole by hand and locked into place with a hearable click. Cable bundles can be applied afterwards.

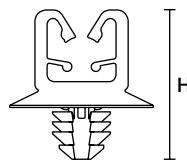
#### Features and benefits

- Easy to install without the need for a tool
- Types with disc cover the hole and protect against dirt and dust ingress
- Rattlefree and secure hold of bundles due to retaining collar
- Suitable for post-installation of bundles
- Easy replacement of bundles in case of maintenance



The HC48FT6 is designed for Bundle diameter 4.3 - 5.2 mm.

**Material specifications: See Article-No. on our website.**



HC48FT6

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Attach to Ø	Height (H)	Material	Colour	Article-No.
HC48FT5		4.5 - 5.0	0.7 - 3.0	4.3 - 5.2	21.0	PA66HIRHS	Black (BK)	151-01405
HC48FT6		6.5 - 7.0	0.7 - 2.8	4.3 - 5.2	20.8	PA66HIRHS	Black (BK)	151-00680
CTCFT6		6.3 - 6.7	0.7 - 4.5	15.0	18.5	PA66HIRHS	Black (BK)	151-00783

All dimensions in mm. Subject to technical changes.



## Fixing elements for corrugated tubing, with arrowhead

### for round and oval holes

These clamps are used in the automotive industry, in the production of cable harnesses and in the electrical industry. Their quick and easy mounting is the reason for their universal success wherever corrugated tubing and pipes have to be fixed quickly and securely.

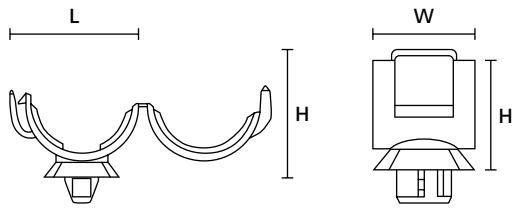
#### Features and benefits

- Clamps for corrugated tubing for a variety of nominal diameters
- Arrowhead simply locks into place
- Tube is guided accurately by clicking
- Axial slipping is prevented by the inside profile of the clamp



Simple and secure installation of pipes or hoses to panels.

**Material specifications: See Article-No. on our website.**

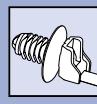


RCC D21, D24, D28

RCC D21, D24, D28

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Nominal Ø	Width (W)	Length (L)	Height (H)	Material	Colour	Article-No.
<b>RCC D21</b>		6.2 x 12.2	0.7 - 2.5	21.0	22.0	31.0	30.0	PA66HIRHS	Black (BK)	150-92300
<b>RCC D24</b>		6.2 x 12.2	0.7 - 2.5	24.0	22.0	33.0	33.0	PA66HIRHS	Black (BK)	151-02266

All dimensions in mm. Subject to technical changes.



### Fixing elements for corrugated tubing, with fir tree

#### CTC-Series

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

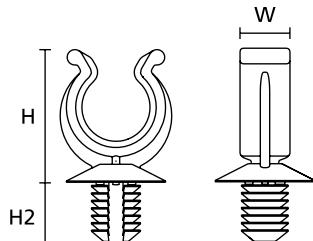
#### Features and benefits

- CTC clamps for a variety of nominal diameters
- Fir tree foot part can be used for a variety of panel thicknesses
- Suitable for use within threaded holes
- Tube is guided accurately by clicking
- Axial slipping is prevented by the inside profile of the clamp



*The tubing is clicked into the CTC clamp and is held firmly.*

**Material specifications: See Article-No. on our website.**



CTC-Series

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Nominal Ø	Disc Ø	Width (W)	Height (H)	Height (H2)	Material	Colour	Article-No.
<b>CTC10FT6LG</b>		6.5 - 7.0	0.75 - 6.0	10.0	16.0	8.0	21.4	11.1	PA66HIRHS	Black (BK)	151-00018
<b>CTC13FT6LG</b>		6.5 - 7.0	0.75 - 6.0	13.0	16.0	8.0	25.2	11.1	PA66HIRHS	Black (BK)	151-00019
<b>CTC4.5FT6LG</b>		6.5 - 7.0	0.75 - 6.0	4.5	16.0	8.0	16.1	11.1	PA66HIRHS	Black (BK)	151-14314
<b>CTC7.5FT6LG</b>		6.5 - 7.0	0.75 - 6.0	7.5	16.0	8.0	18.6	11.1	PA66HIRHS	Black (BK)	151-14313
<b>CTC10FT6</b>		6.5 - 7.0	0.75 - 3.0	10.0	16.0	8.0	21.4	7.5	PA66HIRHS	Black (BK)	151-14311
<b>CTC13FT6</b>		6.5 - 7.0	0.75 - 3.0	13.0	16.0	8.0	25.2	7.5	PA66HIRHS	Black (BK)	151-14312
<b>CTC7.5FT9</b>		8.7 - 9.0	3.0 - 5.0	7.5	23.0	8.0	19.9	12.2	PA66HIRHS	Black (BK)	155-31602
<b>CTC10FT9</b>		8.7 - 9.0	3.0 - 5.0	10.0	23.0	8.0	22.7	12.2	PA66HIRHS	Black (BK)	155-17801
<b>CTC22FT9</b>		8.7 - 9.0	3.0 - 5.0	22.0	23.0	8.0	37.7	12.2	PA66HIRHS	Black (BK)	155-25201

All dimensions in mm. Subject to technical changes.



## Fixing elements for corrugated tubing, with fir tree

### for round and oval holes

These clamps are used for example in the automotive industry, harness making, electrical industry and wherever corrugated tubing has been quickly and firmly fixed.

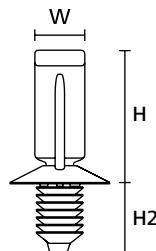
#### Features and benefits

- Clamps for a variety of nominal diameters
- Fir tree foot part can be used for a variety of panel thicknesses
- Suitable for use within threaded holes
- Tube is guided accurately by clicking
- Axial slipping is prevented by the inside profile of the clamp



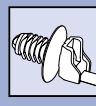
CNCTC8FT6.5LG Clamps.

**Material specifications: See Article-No. on our website.**



TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Nominal Ø	Width (W)	Height (H)	Height (H2)	Material	Colour	Article-No.
CNCTC8FT6.5LG		6.5 - 6.7	1.0 - 6.0	7.0	10.0	32.5	11.4	PA66HIRHS	Black (BK)	151-01038
LC9FToval		6.2 x 12.2 6.5 x 12.5 6.5 x 13.0 7.0 x 12.0	0.6 - 6.75	14.4	10.0	37.7	13.2	PA66HIRHS	Black (BK)	151-01880

All dimensions in mm. Subject to technical changes.



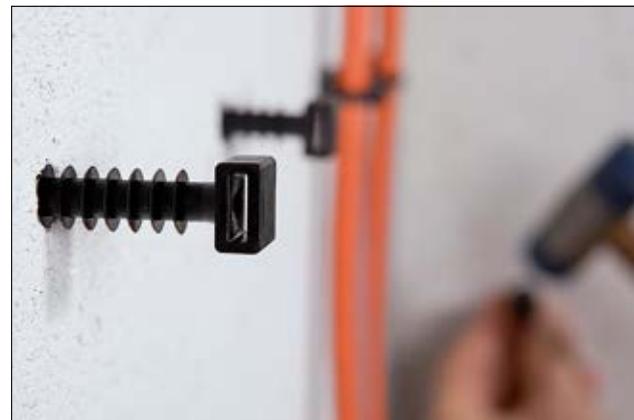
## Fixing base

### LOK-Series

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

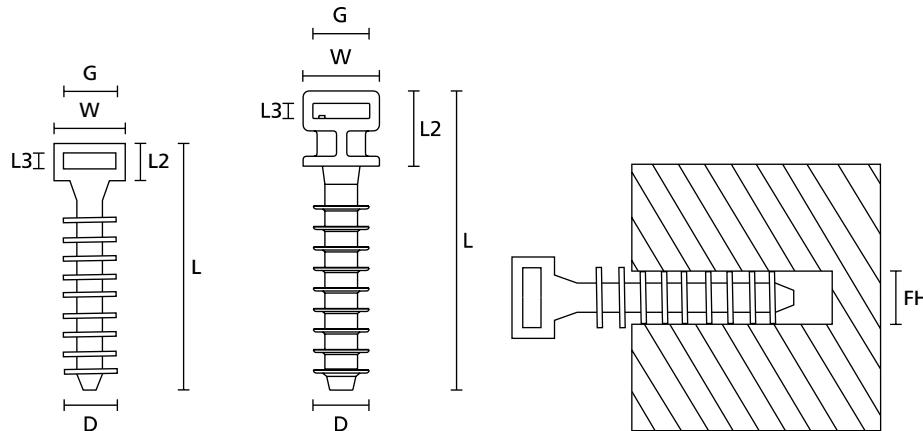
#### Features and benefits

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



LOK01 fixing bases for indoor and outdoor use.

**Material specifications: See Article-No. on our website.**



LOK01 fixing base (front view)

LOK05 fixing base (front view)

LOK01 pushed into a wall bore hole

TYPE	Width (W)	Length (L)	Length (L2)	Length (L3)	Ø (D)	Strap Width max. (G)	Hole Ø (FH)	Material	Colour	Article-No.
LOK01B	12.0	30.0	6.5	2.5	7.2	9.0	6.0	PA6HIR	Black (BK)	151-80500
LOK01	12.0	44.0	6.5	2.5	9.2	9.0	7.0 - 8.0	PA66W	Black (BK)	151-80110
LOK05	12.0	49.0	12.5	2.5	9.2	9.0	7.0 - 8.0	PA6HIR	Black (BK)	151-80700

Recommended Tools: 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## Rivet mount

### TY5-Series

The TY Fixings are ideal for use where a high pull out force is required (eg. in the aircraft industry). The two piece 'wedge' ensures that once installed the mounts will not come away from the panel. Particularly designed for areas with restricted access.

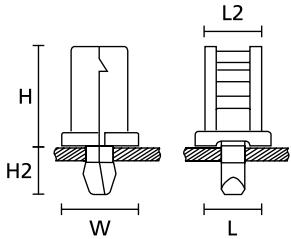
#### Features and benefits

- Quick installation
- Two-piece wedge
- Easy insertion
- Firmly fixes wide variety of cable ties



Rivet Mount TY5 is usable with a wide variety of our cable ties.

**Material specifications: See Article-No. on our website.**

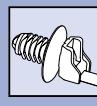


TY5K1 Rivet Mount

TYPE	Drawing	Width (W)	Length (L)	Length (L2)	Height (H)	Height (H2)	Strap Width max. (G)	Hole Ø (FH)	Panel Thickness	Material	Colour	Article-No.
TY5K1		14.8	15.0	11.0	18.3	9.5	5.4	5.0 - 5.3	1.00 - 3.00	PA66HS	Natural (NA)	152-51059
TY5K2		12.0	14.0	10.0	7.8	9.5	5.5	4.9 - 5.3	1.00 - 5.00	PA66HS	Natural (NA)	152-11209
TY5K3/5		22.0	18.0	14.0	10.0	9.5	9.3	4.9 - 5.3	1.00 - 5.00	PA66HS	Natural (NA)	152-11359
TY5K3		22.0	18.0	14.0	10.0	12.5	9.3	5.9 - 6.4	2.0 - 8.0	PA66HS	Natural (NA)	152-11309
TY5K4		22.0	14.0	10.0	175.0	12.5	4.7	5.9 - 6.4	2.0 - 8.0	PA66HS	Natural (NA)	152-11409
TY5K5		17.8	18.0	11.0	38.3	9.5	5.8	5.0 - 5.3	1.00 - 3.00	PA66HS	Natural (NA)	152-55059

Recommended Tools: 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes.



## Plastic rivets

### TY-Series

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

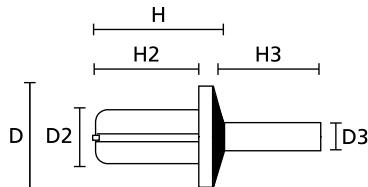
#### Features and benefits

- One Piece
- Simply push pin into body of rivet
- TY3P1 and TY8P1 pins inserted using rivet placement tool



Plastic Rivet TY8P1 in application.

**Material specifications: See Article-No. on our website.**



Plastic Rivet TY3P1 / 8P1

TYPE	Height (H)	Height (H2)	Height (H3)	Ø (D)	Ø (D2)	Ø (D3)	Material	Colour	Article-No.
<b>TY3P1</b>	7.5	6.0	5.3	6.0	3.0	1.7	PA66	Natural (NA)	241-11319
<b>TY8P1</b>	10.0	8.0	7.5	8.0	4.0	2.6	PA66	Black (BK)	241-11810
	10.0	8.0	7.5	8.0	4.0	2.6	PA66	Natural (NA)	241-11819

All dimensions in mm. Subject to technical changes.



## Blind plugs

### for round holes

Our Plugs were developed especially for the automotive industry. Application in trunks, doors, wheel housing and dash panels. Whenever needed to secure a hole against dirt or dust. Sometimes even used for optical reasons.

#### Features and benefits

- Easy assembly without the need of a tool
- Disc covers the hole and minimises ingress of dust, dirt and water
- Type "TRIM PLUG 5" with additional retainer to fix panel or cover



*Blindplugs are available in different dimensions and materials.*

**Material specifications: See Article-No. on our website.**

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Material	Colour	Article-No.
TRIM PLUG 5		5.0	4.0 - 4.5	PA66HIR	Natural (NA)	151-00333
PLUG5.5		5.0 - 5.5	2.5 - 26.0	PA6HIR	Grey (GY)	151-00401
PLUGFT6XL		6.5 - 7.0	0.7 - 18.0	PA66HIR	Black (BK)	241-00002
		6.5 - 7.0	0.7 - 18.0	PA66HIR	Grey (GY)	241-00001

All dimensions in mm. Subject to technical changes.

**Bundling clips, with arrowhead****for round holes**

Originally designed for the automotive industry, these clips offer simple and easy methods of securing cables, hoses or pipes.

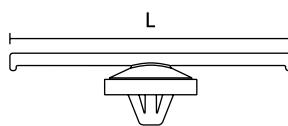
**Features and benefits**

- Easy to install without the need for a tool
- Cable tie head always situated in defined position
- Arrowhead simply locks into place
- Disc adjusts tie for pressure from various directions and minimises access of dust and dirt
- ATS fixing elements can be applied with Autotools ATS Flex or CPK Hybrid

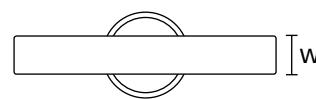


L to R: BundlingClip with OmegaClip, BundlingClip with seal, BundlingClip LR1.

**Material specifications: See Article-No. on our website.**



BCSFT6.5 16-3MD



BCSFT6.5 16-3MD

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Length (L)	Material	Colour	Article-No.
<b>ATSBCSFT6.5</b>		6.3 - 6.7	2.3 - 3.3	39.0	PA66HIRHS	Black (BK)	102-69066
<b>ATSBCKSFT6.5</b>		6.3 - 6.7	0.7 - 1.3	39.0	PA66HIRHS	Black (BK)	102-69067
<b>ATSBC2KSFT6.5</b>		6.3 - 6.7	1.7 - 2.3	39.0	PA66HIRHS	Black (BK)	102-69068
<b>ATSBCOWSFT6.5</b>		6.3 - 6.7	2.3 - 3.3	39.0	PA46	Grey (GY)	102-69080
<b>ATSBCSFT6.5PT2.3-3.3</b>		6.3 - 6.7	2.3 - 3.3	39.0	PA46	Grey (GY)	102-69089

All dimensions in mm. Subject to technical changes.

**Bundling clips with arrowhead for round holes, sealed**

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Length (L)	Material	Colour	Article-No.
<b>BCSFT6.5 16-3MD</b>		6.3 - 6.7	1.5 - 3.0	55.0	PA66HIRHS	Black (BK)	155-11601
<b>ATSBCSFT6.5-MD</b>		6.3 - 6.7	2.0 - 3.0	39.0	PA66HIRHS	Black (BK)	102-69065

All dimensions in mm. Subject to technical changes.



## Bundling clips with arrowhead for round holes

### for distance routing

Originally designed for the automotive industry, these clips offer simple and easy methods of securing cables, hoses or pipes. These parts are used in the automotive industry for assembly of cable harnesses.

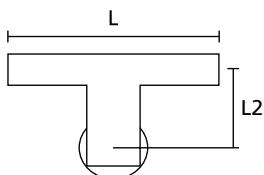
#### Features and benefits

- Easy to install without the need for a tool
- Arrowhead simply locks into place
- Disc adjusts tie for pressure from various directions and minimises access of dust and dirt
- Versions for oval holes feature anti-twist protection

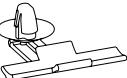


StandOff Clips allow cable looms to be routed at a set distance from the punched holes.

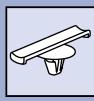
**Material specifications: See Article-No. on our website.**



Stand Off Clip SOC

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Length (L)	Length (L2)	Material	Colour	Article-No.
STAND-OFF-CLIP-2		6.5 - 6.8	0.4 - 1.6	40.0	25.0	PA66HIRHS	Black (BK)	155-01600

All dimensions in mm. Subject to technical changes.



### Bundling clips with fir tree

#### for round holes

Widespread used in cable harness production; a quick and easy means of fixing cables and wires securely in various parts of cars.

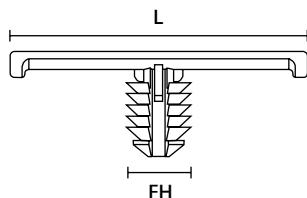
#### Features and benefits

- Easy to install without the need for a tool
- One fir tree foot part can be used for a variety of panel thicknesses
- Suitable for use within threaded holes
- Holding tabs prevent the tie slipping sideways
- ATS fixing elements can be tied automatically with the ATS3080 tool



Bundling Clips with fir tree for a variety of applications with a wide range of panel thicknesses and drilled holes.

**Material specifications: See Article-No. on our website.**



TC4FT6LG

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Length (L)	Material	Colour	Article-No.
TC4FT6LG		6.3 - 7.0	0.6 - 5.1	37.0	PA66HIRHS	Black (BK)	151-00215
ATSBCT6LG		6.3 - 7.0	0.6 - 5.1	39.0	PA66HIRHS	Black (BK)	102-67066

All dimensions in mm. Subject to technical changes.

#### for oval holes

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Length (L)	Material	Colour	Article-No.
WICKELCLIP-VDS		6.3 x 9.0 6.3 x 10.0	0.6 - 2.5	40.0	PA66HIRHS	Black (BK)	155-16301

All dimensions in mm. Subject to technical changes.



## Bundling clips with fir tree

### for oval holes

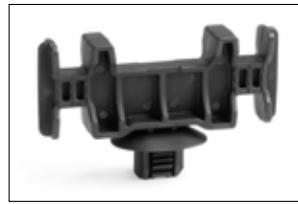
The ATSDBCFT62x122 in combination with our ATS Flex is a perfect match for the automatisation of a HV harnesses.

#### Features and benefits

- Effortless, tool-free installation – can be mounted easily by hand without the need for tools
- Flexible attachment options – compatible with both cable ties and adhesive tape
- Oval base geometry – ensures defined cable routing and provides reliable anti-twist protection for secure positioning



Our ATSDBCFT62x122 is specially made for the automatisation of HV harnesses.

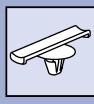


ATSDBCFT62x122.

**Material specifications: See Article-No. on our website.**

TYPE	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Height (H)	Material	Colour	Article-No.
<b>ATSDBCFT62X122</b>	6.2 x 12.2	0.7 - 4.5	11.0	56.0	25.0	PA66HIRHS	Black (BK)	151-04379

All dimensions in mm. Subject to technical changes.



### Bundling clips with fir tree for oval holes

#### for distance routing

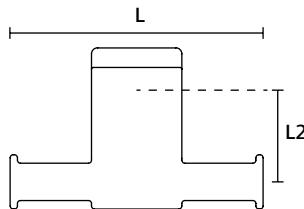
Originally designed for the automotive industry, these clips offer simple and easy methods of securing cables, hoses or pipes.

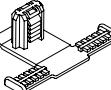
#### Features and benefits

- Easy to install without the need for a tool
- One fir tree foot part can be used for a variety of panel thicknesses
- Suitable for use within threaded holes
- Disc covers the hole to prevent dust and dirt gaining access
- Bundle runs in a set distance to the hole



**Material specifications: See Article-No. on our website.**



TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Length (L2)	Material	Colour	Article-No.
<b>ATSBCSOC6.2x12.2</b>		6.0 x 12.2	0.6 - 6.0	15.0	PA66HIRHS	Black (BK)	151-01882

All dimensions in mm. Subject to technical changes.



## Bundling Clips for Weld Studs, lateral adjustment

### Bundling Clips for Weld Studs, lateral adjustment

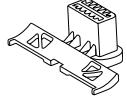
Originally designed for the automotive industry, these clips offer simple and easy methods of securing cables, hoses or pipes. These parts are used in the automotive industry for assembly of cable harnesses.

#### Features and benefits

- Easily mounted onto the bundling bar using cable ties or adhesive tape
- Enables lateral adjustment for flexible positioning on the mounting surface
- Low-profile version for tight spaces, and elevated version for enhanced grip and secure positioning on weld studs



*The slim line BC series is particularly compact and flexible.*

TYPE	Drawing	Stud Ø	Length (L)	Material	Colour	Article-No.
<b>BC30</b>		5.0	55.0	PA66HIRHS	Black (BK)	151-00016
<b>BCUWS5-D5-25</b>		5.0	50.0	PA66HIRHS	Natural (NA)	151-00851

All dimensions in mm. Subject to technical changes.

## Bundling clips for weld studs

### for distance routing

#### Features and benefits

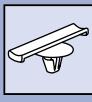
- Compatible with cable ties or adhesive tape – for flexible bundling options
- Suitable for automation – can be processed with the ATS (Autotool System) for efficient assembly
- Tool-free installation – can also be easily mounted by hand
- Defined spacing to the bundle – allows for slight distance between clip and harness to avoid pressure or abrasion



*Bundling clip, for stud 5 mm. The article is designed for our ATS flex but it could be used also with cable ties or tapes.*

TYPE	Stud Ø	Width (W)	Length (L)	Height (H)	Material	Colour	Article-No.
<b>ATSBC60SOC20SB55</b>	T5	31.0	60.0	16.2	PA66HIRHS	Black (BK)	102-68368

All dimensions in mm. Subject to technical changes.



## Bundling clips

### for edges

EdgeClips are used in the automotive industries and electrical industries and when it is impossible to drill holes or no other fixing points are available.

#### Features and benefits

- Easy assembly, just shuffle manually
- Designed for edges of 1 - 3 and 1.5 - 4 mm
- Integrated metal clamp holds clip firmly in place
- Clamp consists of double tempered steel spring
- ATS fixing elements can be tied automatically with tools ATS3080, AT2000 or AT2000CPK



*Cables and leads can be fastened with a cable tie or adhesive tape to the bars of the mounting element.*

**Material specifications: See Article-No. on our website.**

TYPE	Drawing	Panel Thickness	Width (W)	Length (L)	Height (H)	Material	Colour	Article-No.
EC14		1.0 - 3.0	10.0	40.0	12.4	PA66HIRHS	Black (BK)	151-03404
ATSBCEC35		1.5 - 4.0	9.0	39.0	13.2	PA66HIRHS	Black (BK)	102-68355
ATSBCEC36		1.5 - 4.0	9.0	39.0	16.0	PA66HIRHS	Black (BK)	102-68365
		1.5 - 4.0	15.0	39.0	13.2	PA46	Grey (GY)	102-68366
ATSBCEC37		1.5 - 4.0	9.0	39.0	14.2	PA66HIRHS	Black (BK)	102-68375
ATSBCEC38		1.5 - 4.0	13.2	39.0	14.2	PA66HSW	Black (BK)	102-68385

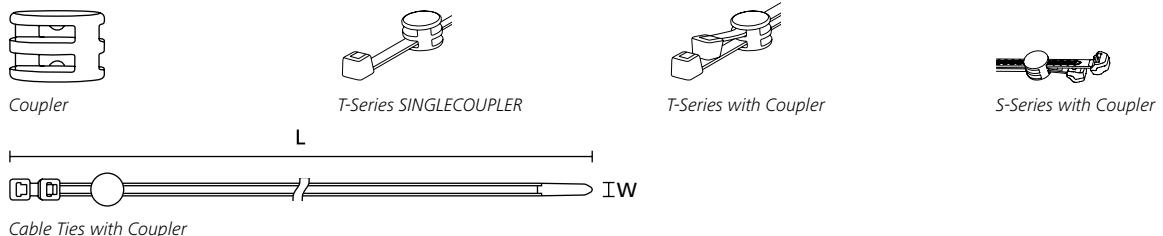
All dimensions in mm. Subject to technical changes.

**2-piece fixing ties for parallel separation****twistable up to 90°****Features and benefits**

- Pre-assembled 2-piece fixing tie with coupler
- Cable tie head can be moved after bundling
- Easy addition of cables after assembly
- For parallel routing of bundles that can be twisted 90° even after installation



T50RCOUPлер for parallel routing.

**Material specifications: See Article-No. on our website.**

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
<b>T50RCOUPLER</b>	4.6	202.0	47.0	225	PA46	GY	1-2;4-7;25	156-00382
<b>T50RSINGLECOUPLER</b>	4.6	202.0	47.0	225	PA66HIRHS	BK	1-2;4-5;25	156-01134
<b>T50RCOUPLER</b>	4.6	202.0	47.0	225	PA66HIRHS PA66HIR(S)	BK	1-2;4-7;25	156-00276
<b>S50ROSCoupler</b>	4.9	200.0	45.0	185	PP PA66HIRHS	BK	5	156-03594
<b>T120RCOUPLER</b>	7.6	390.0	105.0	535	PA46	GY	1;3;6-7;9-10;25	156-02416

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## 2-piece fixing ties for parallel separation

twistable up to 360°

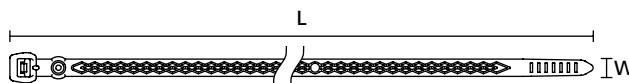
### Features and benefits

- Pre-assembled, 2-piece fixing tie for quick and efficient installation
- Integrated anti-slip serration prevents cables and cable harnesses from slipping sideways
- Enables cables to be added easily even after initial installation
- Enables parallel routing with 360° rotation to compensate for movement - ideal for use in dynamic or vibration-prone environments



Our T50SOSASVCD-S017 is a 360° twistable fixing tie with an anti-slip serration on the inside, designed to prevent undesired lateral movement of cables and harnesses.

**Material specifications: See Article-No. on our website.**



TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
<b>T50SOSASVCD-S017</b>		4.6	155.0	35.0	200	PA66HIRHS	BK	1-2;4-5;25	156-03119

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



## Cable tie mount for parallel routing, twistable 360°

### DSWS-Series

These fixing element for parallel routing can be used where bundles need separation from each other combined with the necessary functionality to support moving harnesses.

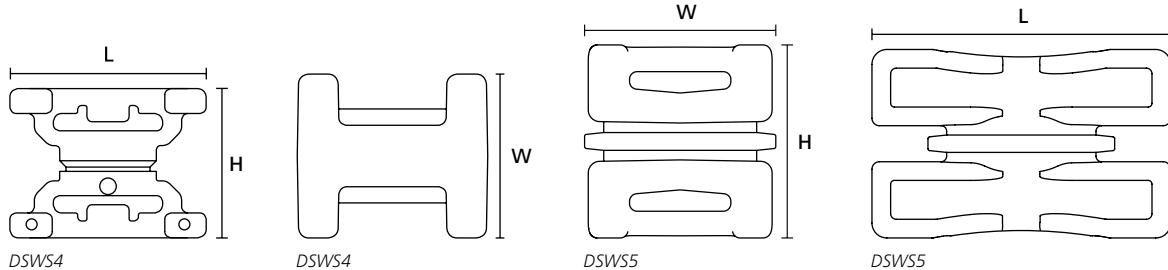
#### Features and benefits

- For parallel routing of bundles that can be twisted 360° even after setting
- Secure alignment to the bundle due to H-design
- Cable tie head can be moved after bundling
- For cable ties up to 12.7 mm wide
- For post-installation of bundles



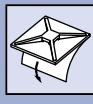
*The spacers can be easily rotated by hand, allowing the bundles to be crossed and rotated at any angle.*

**Material specifications: See Article-No. on our website.**



TYPE	Drawing	Bundle Ø min.	Bundle Ø max.	Strap Width max. (G)	Width (W)	Length (L)	Height (H)	Material	Colour	Pack Cont.	Article-No.
DSWS4		6.0	76.0	12.7	20.3	23.6	18.0	PA66HS POM	Black (BK)	50 pcs.	151-00644
		6.0	76.0	12.7	20.3	23.6	18.0	PA66HS POM	Black (BK)	2200 pcs.	151-06500
DSWS5		16.0	152.0	12.7	25.4	40.6	23.6	PA66HS PA46	Black (BK)	50 pcs.	151-06502

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



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

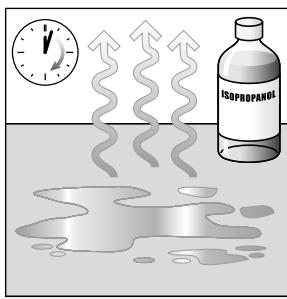
HellermannTyton uses different types of adhesives for self-adhesive bases: acrylate and synthetic rubber. These differ in the operating temperature range and the 'pull off' force of the adhesive. Synthetic rubber has an excellent initial grip, allowing for almost immediate use.

Acrylate adhesive has less initial grip, so there might be a need to wait for a few hours before use (depending on the surface), but has a higher, "pull off" force than synthetic rubber. This enables a permanent fixing lasting months or even years.

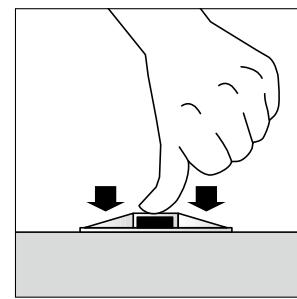
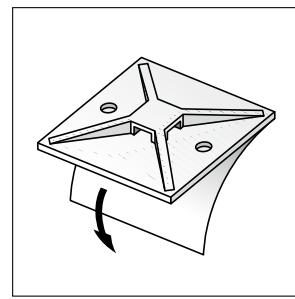
### Instructions for use



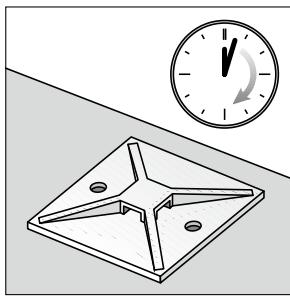
1. The surface must be dry, free from dust, oil, oxides, parting agents and other impurities. The surface to be glued should be cleaned using a clean cloth and isopropanol/water (50/50). When using other appropriate cleaning agents, ensure that they do not attack the surface nor leave any residues. After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



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



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



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

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



## Fixing elements for use with paste adhesive

### In-Line Ratchet P-Clamp

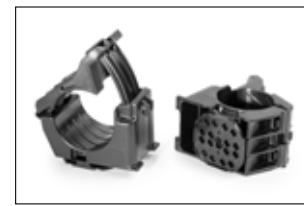
The In-line Ratchet P-Clamp family offers versatility when managing wires, cables and hoses. The robust design and durable materials make it ideal for heavy duty applications, both indoors and out. The adjustable clamp can be closed by hand to the desired diameter. The release feature allows easy and nondestructive removal of cables simply by using a flat-head screwdriver. In this way, the clamp can be reused or serviced without removing it from the mounting surface.

#### Features and benefits

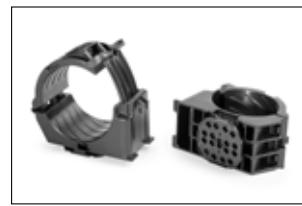
- One-piece ratchet closure allows for easy installation during pre- or final assembly
- Easy release feature simplifies quick adjustments and maintenance
- Impact modified, heat and UV stabilized PA66 provides long-term durability, indoors and out
- Can even be installed onto uneven surfaces
- Use with paste adhesive on the base to ensure a strong bond with the mounting surface



In-Line Ratchet P-Clamp for use with paste adhesive (IRCAPMB6CC).



In-Line Ratchet P-Clamp for use with paste adhesive (IRCCPMB6CC).



In-Line Ratchet P-Clamp for use with paste adhesive (IRCDPMB6CC).

### Material specifications: See Article-No. on our website.

<b>MATERIAL</b>	Polyamide 6.6, high impact modified, heat and UV-stabilised (PA66HIRHSUV), Polyamide 6.6/6, high impact modified, heat stabilised (PA66/6HIRHS)
<b>Operating Temperature</b>	-40 °C to +105 °C
<b>Flammability</b>	UL 94 HB

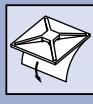


TYPE	Bundle Ø min.	Bundle Ø max.	Width (W)	Length (L)	Height (H)	Material	Colour	Pack Cont.	Article-No.
IRCAPMB6CC	6.2	13.7	44.8	34.8	42.8	PA66HIRHSUV PA66/6HIRHS	Black (BK)	100 pcs.	151-04326
IRCBPMB6CC	12.7	19.5	44.2	34.8	42.7	PA66HIRHSUV PA66/6HIRHS	Black (BK)	100 pcs.	151-04328
IRCCPMB6CC	19.4	36.0	44.2	34.8	42.7	PA66HIRHSUV PA66/6HIRHS	Black (BK)	100 pcs.	151-04330
IRCDPMB6CC	19.4	36.0	62.3	34.8	74.8	PA66HIRHSUV PA66/6HIRHS	Black (BK)	100 pcs.	151-04332

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



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## Paste adhesive mount

### PMB mount for uneven surfaces

PMB-Series offers a fixing solution wherever screw fixing is not allowed. Due to the design the mounts can even be installed onto uneven surfaces. PMB paste mounts are used in the railway industry as well as in the renewable energy industry. Further applications are in the electrical industry and the production of switching cabinets. PMB-Series is suitable for fixings with paste/liquid adhesive.

### Features and benefits

- PMB-Series for fixings with paste / liquid adhesive
- Mount geometry offers a good form closure with cured adhesive
- Can even be installed onto uneven surfaces
- PMB6 can also be applied in combination with hot-melt adhesive, as mount is made of heat resistant PA66
- PMB3 is made of flame-retardant material PA666V0

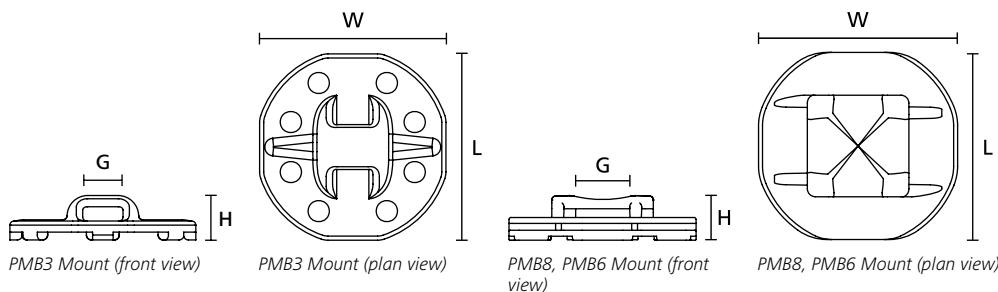


Our PMB mount (paste mount adhesive) as an adhesive fastening for a strong hold, even overhead.



Our PMB-series size comparison – suitable for tighter spaces and areas where a strong, vibration-resistant hold is required.

### Material specifications: See Article-No. on our website.



TYPE	Width (W)	Length (L)	Height (H)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
<b>PMB3</b>	22.6	22.6	5.4	4.7	PA666V0	Black (BK)	100 pcs.	151-02575
<b>PMB6</b>	33.0	31.0	9.0	8.5	PA66/6HIRHS	Black (BK)	100 pcs.	151-04322
<b>PMB8</b>	47.0	50.0	11.2	13.0	PA66/6HIRHS	Black (BK)	100 Bag	151-03196

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

**EN 45545-2**

Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**Cable tie mounts with high performance adhesive****FlexTack-Series FMB for round and angled surfaces**

FlexTack cable tie mounts can be successfully applied to a variety of high- and low-energy surfaces such as glass, metals (including painted, varnished or powder-coated surfaces) as well as plastics. FlexTack provides a reliable fixing solution where it is impractical to use screws or bolts. The unique design in combination with the special acrylate adhesive makes professional cable management easy.

**Features and benefits**

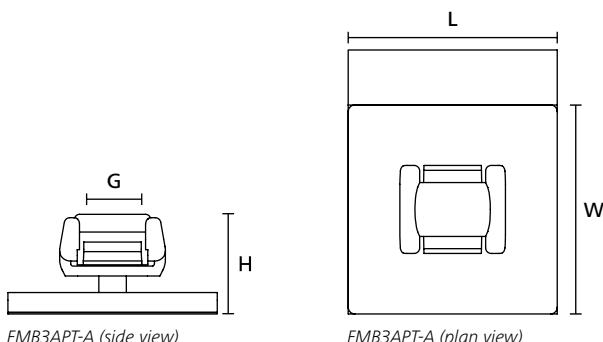
- Flexible mount for round and angled surfaces
- FMB mounts with homogeneous system of acrylic adhesive
- Allows greater design freedom and offers uniform stress distribution along with weight reduction
- Innovative fixing solution for high and low energy surfaces
- Protection foil with finger lift for easy peel off
- FlexTack cable tie mounts are also suitable for high energy surfaces like metal or glass.



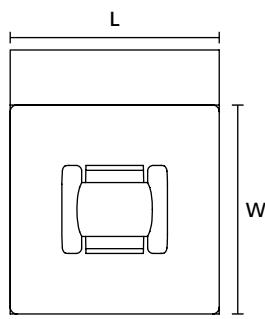
Flexible cable tie mount, FlexTack in use on a concaved surface.

<b>MATERIAL</b>	Polyamide 6.6, high impact modified, heat and UV-stabilised (PA66HIRHSUV)	Polyamide 6.6, heat stabilised (PA66HS)
<b>Adhesive</b>	Acrylate with base of acrylic foam	
<b>Operating Temperature</b>	-40 °C to +90 °C	
<b>Flammability</b>	UL 94 HB (excluding adhesive)	UL 94 V2 (excluding adhesive)

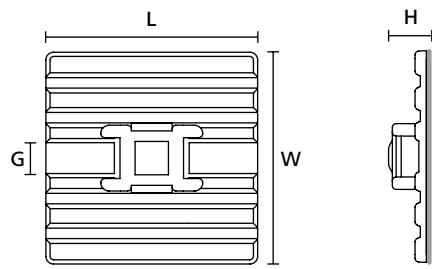
**For more information on the types of adhesive please see page 152.**



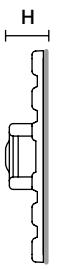
FMB3APT-A (side view)



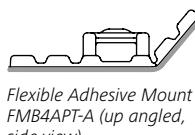
FMB3APT-A (plan view)



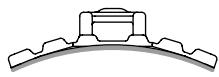
Flexible Adhesive Mount FMB4APT-A (plan view)



Flexible Adhesive Mount FMB4APT-A (side view)



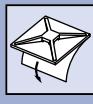
Flexible Adhesive Mount FMB4APT-A (up angled, side view)



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

TYPE	Width (W)	Length (L)	Height (H)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
<b>FMB3APT-A</b>	19.0	19.0	8.9	5.0	PA66HIRHSUV	Black (BK)	100 pcs.	151-04426
<b>FMB4APT-A</b>	28.0	28.0	6.3	5.4	PA66HS	Black (BK)	100 pcs.	151-02219

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



## Flexible mounts with cable clip, self-adhesive

### FlexTack-Series FMB for round and angled surfaces

FlexTack cable tie mounts can be successfully applied to a variety of high- and low-energy surfaces such as glass, metals (including painted, varnished or powder-coated surfaces) as well as plastics. FlexTack provides a reliable fixing solution where it is impractical to use screws or bolts. The unique design in combination with the special acrylate adhesive makes professional cable management easy.

#### Features and benefits

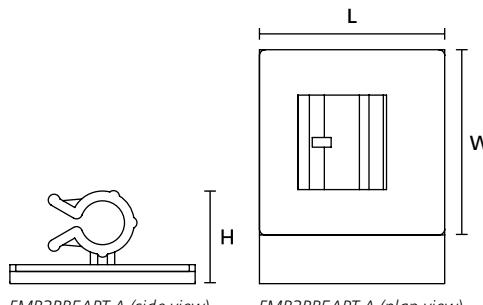
- Flexible mount for round and angled surfaces
- One-piece self adhesive mount for quick and easy installation
- Can be used without cable ties offering process optimization
- Designed to hold wires, cables or hoses
- FMB mounts with homogeneous system of acrylic adhesive
- Innovative fixing solution for high and low energy surfaces
- Protection foil with finger lift for easy peel off

**For more information on the types of adhesive please see page 152.**



*Self adhesive one piece fixing clips FMB3RB5APT-A*

<b>MATERIAL</b>	Polyamide 6.6, high impact modified, heat stabilised (PA66HIRHS)
<b>Adhesive</b>	Acrylate with base of acrylic foam
<b>Operating Temperature</b>	-40 °C to +90 °C
<b>Flammability</b>	UL 94 V2 (excluding adhesive)



*FMB3RB5APT-A (side view)*

*FMB3RB5APT-A (plan view)*

TYPE	Width (W)	Length (L)	Height (H)	Bundle Ø max.	Material	Colour	Pack Cont.	Article-No.
<b>FMB3RB5APT-A</b>	19.0	19.0	8.3	5.3	PA66HIRHS	Black (BK)	500 pcs.	151-03878

All dimensions in mm. Subject to technical changes.

**1-Piece Fixing Tie with Self Adhesive Socket****FlexTack-Series FMB for round and angled surfaces**

FlexTack One-Piece Fixing tie can be applied to a variety of high- and low-energy surfaces such as glass, metals (including painted, varnished or powder-coated surfaces) as well as plastics. FlexTack provides a reliable fixing solution where it is impractical to use screws or bolts. The unique design in combination with the special acrylate adhesive makes professional cable management easy.

**Features and benefits**

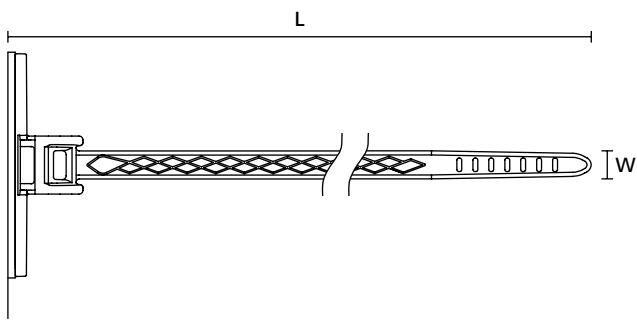
- Flexible Mount for round and angled surfaces
- FMB mounts with homogeneous system of acrylic adhesive
- Allows greater design freedom and offers uniform stress distribution along with weight reduction
- Innovative fixing solution for high and low energy surfaces
- Protection foil with finger lift for easy peel off
- FlexTack Cable tie mounts are also suitable for high energy surfaces like metal or glass.

**For more information on the types of adhesive please see page 152.**

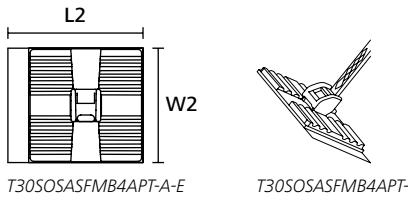


1-Piece FlexTack adhesive mount for round and angled surfaces

<b>MATERIAL</b>	Polyamide 6.6, high impact modified, heat stabilised (PA66HIRHS)
<b>Adhesive</b>	Acrylate with base of acrylic foam
<b>Operating Temperature</b>	-40 °C to +90 °C
<b>Flammability</b>	UL 94 V2 (excluding adhesive)



T30SOSASFMB4APT-A-E



T30SOSASFMB4APT-A-E

T30SOSASFMB4APT-A-E

TYPE	Width (W)	Length (L)	Width (W2)	Length (L2)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
T30SOSASFMB4APT-A-E	3.5	120.0	28.0	28.0	25.0	180	PA66HIRHS	BK	500 pcs.	126-00450

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



## Cable tie mounts with high performance adhesive

### SolidTack-Series QM

Q-mounts are ideally suited for holding cable ties in place. They would perfectly fit to all applications where a reliable and durable fixation is required. With its SolidTack adhesive Q-mounts offer an innovative fixing solution especially for low energy surfaces or if drilling a hole is not possible. Suitable for a wide range of applications on varnished or plastic or metal surfaces in many areas like electrical cabinet, railway, aerospace, automotive and agriculture machinery.

#### Features and benefits

- Q-mounts with homogeneous system of acrylic adhesive
- Perfect for combination with T-Series cable tie
- Very good initial adhesion, increases with time
- Innovative fixing solution for high and low energy surfaces
- Q-Mount base locks the cable tie in vertical position, means the hands are free to apply cables

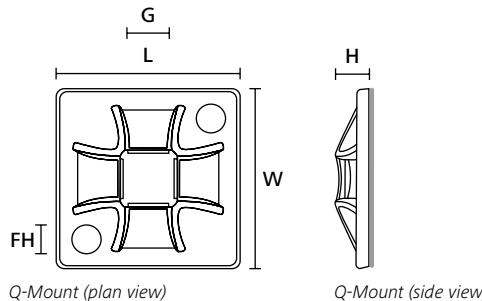
For more information on the types of adhesive  
please see page 152.



*SolidTack-Series QM - Cable Tie Mounts with high performance adhesive; screwable or self adhesive versions. Perfect for combination with T-series cable ties.*

<b>MATERIAL</b>	Polyamide 6.6 (PA66)	Polyamide 4.6 (PA46)
<b>Adhesive</b>	Acrylate with base of acrylic foam	Acrylic foam with high-temperature performance
<b>Operating Temperature</b>	-40 °C to +85 °C	-40 °C to +130 °C
<b>Flammability</b>	UL 94 V2 (excluding adhesive)	

HF ✓ RoHS ✓



TYPE	Width (W)	Length (L)	Height (H)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
QM20APT-HT	20.0	20.0	3.7	5.5	PA46	Grey (GY)	100 pcs.	151-03847
QM30APT-A	30.0	30.0	4.5	5.1	PA66	Black (BK)	100 pcs.	151-02974
	30.0	30.0	4.5	5.1	PA66	White (WH)	100 pcs.	151-02973

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 mounts Q-Series****Q-Mount Series QMA, self-adhesive**

Q-mounts are ideally suited for holding cable ties in place. They would perfectly fit to all applications where a reliable and durable fixation is required. Self adhesive versions of our Q-Mounts are suitable for applications where using screws, nuts, bolts or drilling holes to fix cables is problematic, or not the first choice.

**Features and benefits**

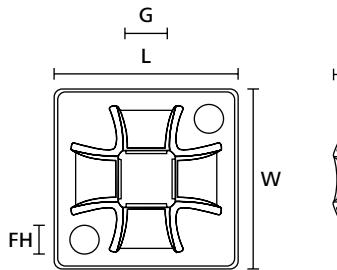
- Screwable or self adhesive versions
- Perfect for combination with T-Series cable ties
- 4-way entry for cable ties
- Adhesive with high pull-off force
- Locks cable tie in vertical position, means the hands are free to apply cables



*SolidTack-Series QM - Cable Tie Mounts with high performance adhesive; screwable or self adhesive versions. Perfect for combination with T-series cable ties.*

**For more information on the types of adhesive please see page 152.**

<b>MATERIAL</b>	Polyamide 6.6 (PA66)
<b>Adhesive</b>	Synthetic rubber with base of polyethylene foam
<b>Operating Temperature</b>	-40 °C to +60 °C
<b>Flammability</b>	UL 94 V2 (excluding adhesive)

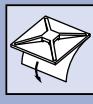


Q-Mount (plan view)

Q-Mount (side view)

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

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



## Cable tie mounts with high performance adhesive

### SolidTack-Series MB

SolidTack MB Series mounts have a square design and are fairly common in areas like electrical cabinet, railway, aerospace, automotive and agriculture machinery. The premium self-adhesive bonds well on high and low-energy surfaces like plastics, metal, varnish or paint and is suitable for a wide range of applications.

#### Features and benefits

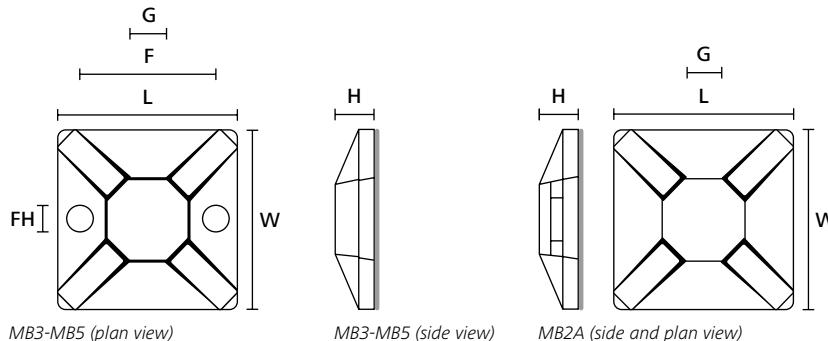
- MB mounts with homogeneous system of acrylic adhesive
- Very good initial adhesion, increases with time
- Innovative fixing solution for high and low energy surfaces
- Protection foil with finger lift for easy peel off



*SolidTack MB Series mounts with square design - screwable, self-adhesive - suitable for a wide range of applications like fastening of cables in the automotive machinery.*

**For more information on the types of adhesive please see page 152.**

<b>MATERIAL</b>	Polyamide 6.6 (PA66)
<b>Adhesive</b>	Acrylate with base of acrylic foam
<b>Operating Temperature</b>	-40 °C to +85 °C
<b>Flammability</b>	UL 94 V2 (excluding adhesive)



TYPE	Width (W)	Length (L)	Height (H)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
<b>MB2APT-A</b>	13.0	13.0	4.1	2.7	PA66	Black (BK)	100 pcs.	151-02243
<b>MB3APT-A</b>	19.0	19.0	3.8	4.4	PA66	Black (BK)	100 pcs.	151-02244
	19.0	19.0	3.8	4.4	PA66	White (WH)	100 pcs.	151-02978
<b>MB4APT-A</b>	28.0	28.0	4.7	5.6	PA66	Black (BK)	100 pcs.	151-02245
	28.0	28.0	4.7	5.6	PA66	White (WH)	100 pcs.	151-02246
<b>MB5APT-A</b>	38.0	38.0	6.4	10.0	PA66	Black (BK)	100 pcs.	151-02247

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 mounts

### MB-Series square design, self-adhesive

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

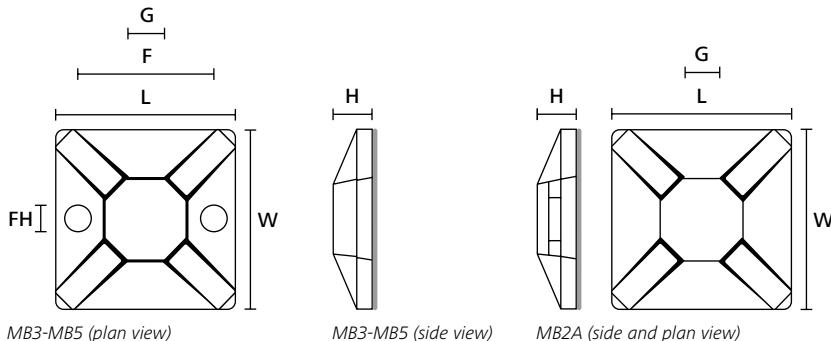
- Simple to install
- Excellent security, particularly in areas of high vibration
- Maximum surface area with adhesive to achieve high pull-off force
- 4-way entry for cable tie for quicker and more flexible installation



MB-Series Mounts with square design.

**For more information on the types of adhesive please see page 152.**

<b>MATERIAL</b>	Polyamide 6.6 (PA66)
<b>Adhesive</b>	Synthetic rubber with base of polyethylene foam
<b>Flammability</b>	UL 94 V2 (excluding adhesive)



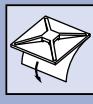
MB3-MB5 (plan view)

MB3-MB5 (side view)

MB2A (side and plan view)

TYPE	Width (W)	Length (L)	Height (H)	Strap Width max. (G)	Material	Colour	Operating Temperature	Pack Cont.	Article-No.
MB2A	13.0	13.0	4.1	2.7	PA66	BK	-40 °C to +60 °C	50 pcs.	151-01800
	13.0	13.0	4.1	2.7	PA66	WH	-40 °C to +60 °C	100 pcs.	151-01802
MB3A	19.0	19.0	3.8	4.1	PA66	BK	-40 °C to +60 °C	100 pcs.	151-28320
	19.0	19.0	3.8	4.1	PA66	WH	-40 °C to +60 °C	100 pcs.	151-28349
MB4A	28.0	28.0	4.7	5.4	PA66	BK	-40 °C to +60 °C	100 pcs.	151-28412
	28.0	28.0	4.7	5.4	PA66	WH	-40 °C to +60 °C	100 pcs.	151-28469
MB5A	37.7	37.7	7.1	8.9	PA66	BK	-18 °C to +66 °C	100 pcs.	151-28602
	37.7	37.7	7.1	8.9	PA66	WH	-18 °C to +66 °C	100 pcs.	151-28529

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. N = Minimum Loop Tensile Strength for Cable Ties (newton) \* Plastic box



## Cable tie mounts with high performance adhesive

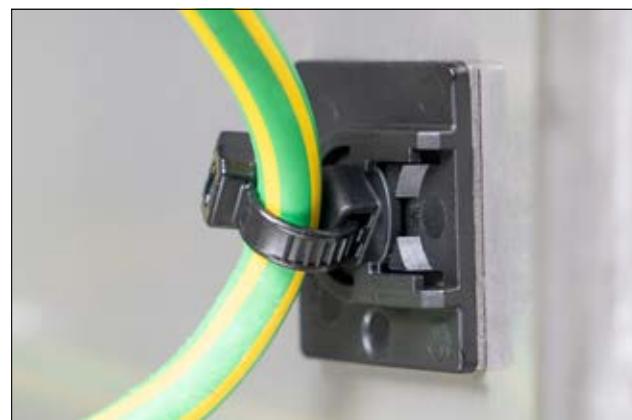
### SMB-Series, 360° rotation

Engineered for dynamic applications with moving parts, this innovative mount provides a reliable cable management solution where cables and bundles need to flex. Its 360° rotatable head ensures full adjustability, while the self-aligning feature allows for precise placement, making it ideal for environments that demand flexibility.

#### Features and benefits

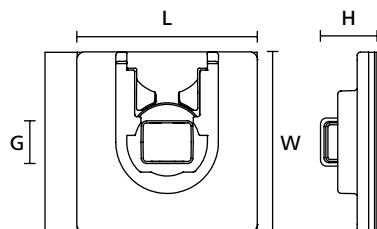
- Cable tie mount with 360° rotation
- Self-aligning function for easy installation of cables
- Ideal for moving parts & where cables need to flex in application
- Suitable for use within electrical cabinets & enclosures
- Compatible with cable ties up to a 4.8mm wide strap
- High strength synthetic rubber adhesive suitable for both high and low energy surfaces

**For more information on the types of adhesive please see page 152.**



Self-adhesive cable tie mount with 360° rotatable design.

<b>MATERIAL</b>	Polyamide 6.6, heat stabilised (PA66HS), Acryl (A)
<b>Adhesive</b>	Acrylate with base of acrylic foam
<b>Operating Temperature</b>	-40 °C to +90 °C
<b>Flammability</b>	UL 94 V2 (excluding adhesive)



SMB4APT-A (plan & side view)

TYPE	Drawing	Width (W)	Length (L)	Height (H)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
SMB4APT-A		28.0	28.0	8.4	4.8	PA66HS A	Black (BK)	50 pcs.	151-03334

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 mounts with high performance adhesive****SolidTack-Series MB with S-Series Cable Tie**

S-Series cable ties made from Polypropylene (PP) are non hydroscopic, offer a higher chemical resistance and reduced CO<sub>2</sub> footprint compared to a standard cable tie material. These cable ties are used to bundle and secure cables, pipes and/or hoses.

**Features and benefits**

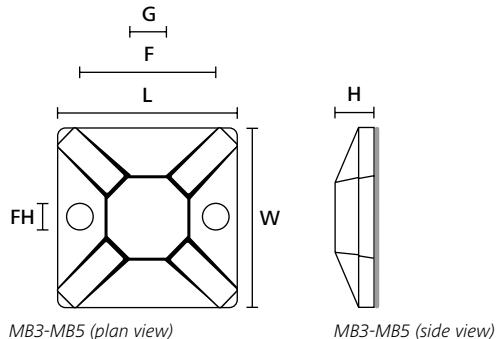
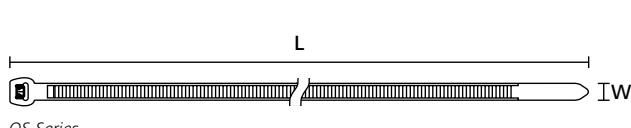
- The S50ROS features a significantly lower CO<sub>2</sub> footprint compared to cable ties made of standard material, in line with sustainability goals in various industries
- The outside serration design ensures gentle handling of sensitive cables and bundles, reducing the risk of damage during installation and maintenance
- With an anti-slip feature on the inside, the S50ROS prevents undesired lateral movement of cables and bundles, maintaining tidy and organized cable management within vehicles
- MB mounts with homogeneous system of acrylic adhesive
- Very good initial adhesion, increases with time
- Innovative fixing solution for high and low energy surfaces



<b>MATERIAL</b>	Polypropylene (PP), Polyamide 6.6 (PA66)
<b>Adhesive</b>	Acrylate with base of acrylic foam
<b>Operating Temperature</b>	-40 °C to +85 °C



**For more information on the types of adhesive please see page 152.**



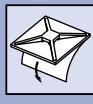
TYPE	Width (W)	Length (L)	N	Material	Colour	Pack Cont.	Tools	Article-No.
S50ROSMB4APT-A-SET	4.9	200.0	185	PP PA66	Black (BK)	500 pcs.	5	156-03592

Recommended Tools: 5-EVO7i. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## Cable tie mounts

### MAGMB-Series square design, magnetic

Magnetic Mounts and Clips are innovative solutions designed to meet the demands of modern cable management and mounting needs. Combining ease of use with versatility, they offer a practical and efficient alternative to traditional mounting methods. Whether in dynamic work environments or temporary setups, these mounts and clips provide advantages that set them apart from other options.

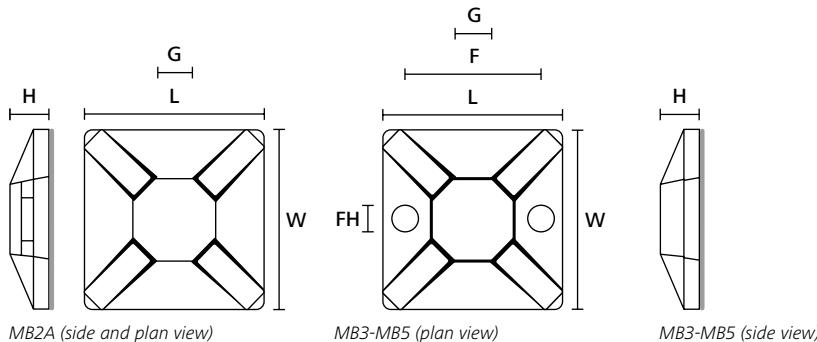
#### Features and benefits

- Quick to install and easy to adjust once fitted (reusable)
- Flexible neodymium magnet with adhesive backing
- 4-way entry for cable tie for quicker and more flexible installation
- Ideal for use on steel surfaces where it is not possible to drill holes
- Suitable for challenging surfaces like slightly dirty areas where adhesives fail



MAGMB-Series magnetic mounts enable easy, drill-free cable organization.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Neodymium alloy R5 (NDFEBR5)
<b>Operating Temperature</b>	-40 °C to +85 °C
<b>Flammability</b>	UL 94 V2 (excluding adhesive)



MB2A (side and plan view)

MB3-MB5 (plan view)

MB3-MB5 (side view)

TYPE	Width (W)	Length (L)	Height (H)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
<b>MAGMB2</b>	13.0	13.0	4.1	2.7	PA66 NDFEBR5	Black (BK)	50 pcs.	151-04461
<b>MAGMB3</b>	19.0	19.0	4.3	4.1	PA66 NDFEBR5	Black (BK)	25 pcs.	151-04462

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**Flat ribbon and round cable mounts****FKH-Series, self-adhesive**

FKH mounts are designed to retain flat ribbon and round cables commonly used in information technology applications, in entertainment electronics or for connecting sensors. As each installation scenario is individual, FKH mounts are available in different dimensions and can be supplied as self adhesive and/or screwable versions.

**Features and benefits**

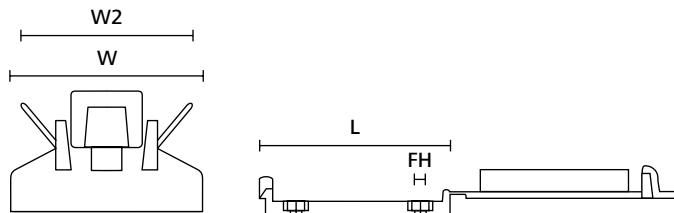
- One-piece fixing mount for flat ribbon and round cables
- Increased mounting area ensures proper bonding
- Quick and easy installation
- Can be released and re-used easily
- Cable is gently fastened due to soft wings

**For more information on the types of adhesive please see page 152.**



Perfect solution to route cables along the office desk.

<b>MATERIAL</b>	Polyamide 6.6, high impact modified (PA66HIR)
<b>Adhesive</b>	Acrylate with base of polyurethane foam
<b>Operating Temperature</b>	-40 °C to +80 °C
<b>Flammability</b>	UL 94 HB (excluding adhesive)

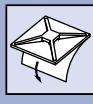


Flat Ribbon Cable Mount (front view)

Flat Ribbon Cable Mount (side view)

TYPE	Width (W2)	Hole Ø (FH)	Width (W)	Length (L)	Material	Colour	Pack Cont.	Article-No.
<b>FKH25A</b>	22.0	3.1	25.0	31.0	PA66HIR	Black (BK)	100 pcs.	151-15250
<b>FKH30A</b>	22.0	3.1	25.0	35.0	PA66HIR	Black (BK)	100 pcs.	151-15300
<b>FKH50A</b>	22.0	3.1	25.0	56.5	PA66HIR	Black (BK)	100 pcs.	151-15500
<b>FKH80A</b>	22.0	3.1	25.0	86.0	PA66HIR	Black (BK)	100 pcs.	151-15800

All dimensions in mm. Subject to technical changes.



## Cable tie mounts

### TY-Series rectangle design, self-adhesive

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

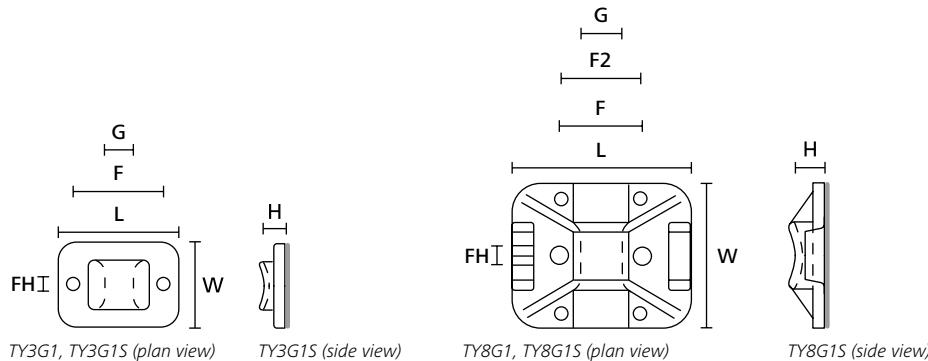
- 2-way mounting base for safe guiding of cables and conduits
- Suitable for applications with minimal space
- Mounted before cable installation

**For more information on the types of adhesive please see page 152.**



TY-Series selfadhesive mounts with rectangle design.

<b>MATERIAL</b>	Polyamide 6.6 (PA66)	Polyamide 6.6, UV-resistant (PA66W)
<b>Adhesive</b>	Acrylate with base of polyurethane foam	
<b>Operating Temperature</b>	-40 °C to +85 °C	
<b>Flammability</b>	UL 94 V2 (excluding adhesive)	



TYPE	Drawing	Width (W)	Length (L)	Height (H)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
TY8G1S		25.0	32.0	5.5	8.0	PA66	Natural (NA)	100 pcs.	151-11819
		25.0	32.0	5.5	8.0	PA66W	Black (BK)	100 pcs.	151-11810
TY3G1S		14.0	20.0	3.7	4.0	PA66	Natural (NA)	100 pcs.	151-11319
		14.0	20.0	3.7	4.0	PA66W	Black (BK)	100 pcs.	151-11310

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

**Mounts with cable clip, self-adhesive****RA-Series**

These mounts are ideal for use in applications which are difficult to access or for areas where self adhesive is the only possible fixing method and fixing holes would be unacceptable. The self adhesive mounts can be used without cable ties. Offering process optimization in industries like automotive, bus and truck, construction vehicles or industrial building.

**Features and benefits**

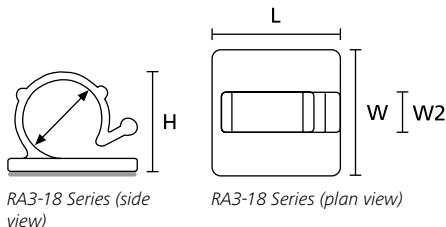
- One-piece self adhesive mount for quick and easy installation
- Can be used without cable ties offering process optimization
- Designed to hold wires, cables or hoses
- Different sizes for various bundle diameters available
- Two types of adhesive can be offered

**For more information on the types of adhesive please see page 152.**



Self adhesive one piece fixing mounts RA6 (l) and RB5 (r).

<b>MATERIAL</b>	Polyamide 6.6 (PA66)	
<b>Adhesive</b>	Acrylate with base of acrylic foam	Synthetic rubber with base of polyethylene foam
<b>Operating Temperature</b>	-40 °C to +85 °C	-40 °C to +60 °C
<b>Flammability</b>	UL 94 V2	UL 94 V2 (excluding adhesive)



RA3-18 Series (side view)

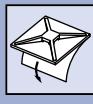
RA3-18 Series (plan view)

TYPE	Width (W)	Width (W2)	Length (L)	Height (H)	Bundle Ø max.	Operating Temperature	Material	Colour	Pack Cont.	Article-No.
RA3	13.0	5.0	13.0	5.0	3.0	-40 °C to +60 °C	PA66	Natural (NA)	100 pcs.	151-13018
RA6	19.0	5.0	19.0	9.0	6.0	-40 °C to +60 °C	PA66	Natural (NA)	100 pcs.	151-13019
RA6APT-A	19.0	5.0	19.0	9.0	6.0	-40 °C to +85 °C	PA66	Black (BK)	100 pcs.	151-03393
	19.0	5.0	19.0	9.0	6.0	-40 °C to +85 °C	PA66	Natural (NA)	100 pcs.	151-13405
RA9	19.0	7.5	19.0	12.5	9.0	-40 °C to +60 °C	PA66	Natural (NA)	100 pcs.	151-13020
RA9APT-A	19.0	7.5	19.0	12.5	9.0	-40 °C to +85 °C	PA66	Black (BK)	100 pcs.	151-03396
RA13	25.0	10.0	25.0	16.5	13.0	-40 °C to +60 °C	PA66	Natural (NA)	100 pcs.	151-13021
RA13APT-A	25.0	10.0	25.0	16.5	13.0	-40 °C to +85 °C	PA66	Natural (NA)	100 pcs.	151-13201
RA18	28.5	10.0	28.5	23.0	18.0	-40 °C to +60 °C	PA66	Natural (NA)	100 pcs.	151-13119
RA18APT-A	28.5	10.0	28.5	23.0	18.0	-40 °C to +85 °C	PA66	Black (BK)	100 pcs.	151-03607

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## Mounts with cable clip, magnetic

### MAGRA-Series

Magnetic mounts and clips are innovative solutions designed to meet the demands of modern cable management and mounting needs. They combine ease of use with versatility, offering a practical and efficient alternative to traditional mounting methods. Whether in dynamic work environments or temporary setups, these mounts and clips provide advantages that set them apart from other options on the market.

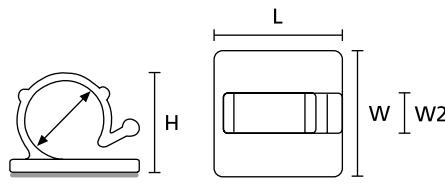
#### Features and benefits

- Quick to install and easy to adjust once fitted (reusable)
- Flexible neodymium magnet with adhesive backing
- Can be used without cable ties offering process optimization
- Different sizes for various bundle diameters available
- Designed to hold wires, cables or hoses
- Ideal for use on steel surfaces where it is not possible to drill holes
- Suitable for challenging surfaces like slightly dirty areas where adhesives fail



MAGRA-Series magnetic mounts with clips – reusable, removable, and no drilling required.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Neodymium alloy R5 (NDFEBR5)
<b>Operating Temperature</b>	-40 °C to +85 °C
<b>Flammability</b>	UL 94 V2 (excluding adhesive)



RA3-18 Series (side view)

RA3-18 Series (plan view)

TYPE	Width (W)	Length (L)	Height (H)	Bundle Ø max.	Material	Colour	Pack Cont.	Article-No.
<b>MAGRA3</b>	13.0	13.0	5.0	3.0	PA66 NDFEBR5	Black (BK)	50 pcs.	151-04466
<b>MAGRA6</b>	19.0	19.0	9.0	6.0	PA66 NDFEBR5	Black (BK)	25 pcs.	151-04468
<b>MAGRA9</b>	19.0	19.0	12.5	9.0	PA66 NDFEBR5	Black (BK)	25 pcs.	151-04467
<b>MAGRA13</b>	25.0	25.0	16.5	13.0	PA66 NDFEBR5	Black (BK)	15 pcs.	151-04465

All dimensions in mm. Subject to technical changes.



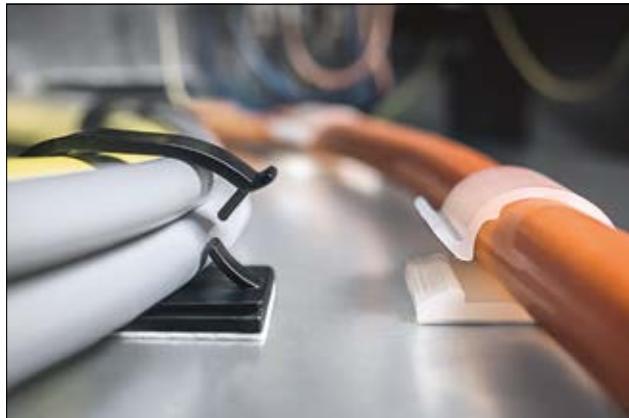
Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**Mounts with cable clip, self-adhesive****RB-Series**

RB-Series self adhesive mounts offer greater routing freedom and also reduce the risk of corrosion compared to screw fixing mounts. They are ideally suited for tool-free installation and can be re-opened and reused easily when cables need to be replaced. These mounts can be used without the need for additional cable ties. Offering process optimization in a variety of applications.

**Features and benefits**

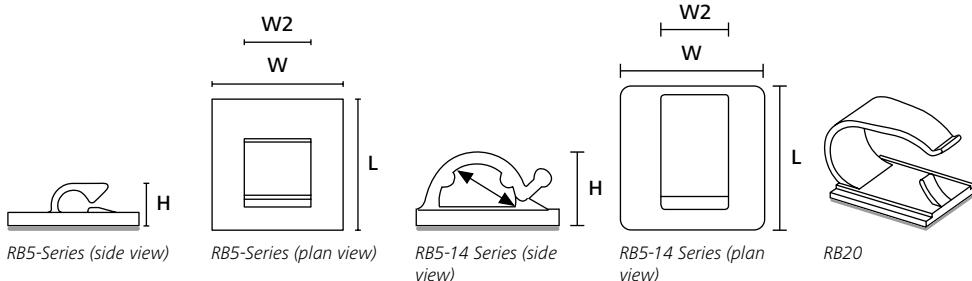
- Flat design to use in applications with limited space
- One-piece self adhesive mount for quick and easy installation
- Can be used without cable ties offering process optimization
- Different sizes for various bundle diameters available
- Cost effective with easy application on smooth, clean surfaces



Self adhesive one piece fixing mounts RB20 (l) and RB14 (r).

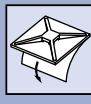
**For more information on the types of adhesive please see page 152.**

<b>MATERIAL</b>	Polyamide 6.6 (PA66)		Polyamide 6.6, high impact modified, heat stabilised (PA66HIRHS)
<b>Adhesive</b>	Acrylate with base of acrylic foam		Synthetic rubber with base of polyethylene foam
<b>Flammability</b>	UL 94 V2 (excluding adhesive)		UL 94 HB



<b>TYPE</b>	<b>Width (W)</b>	<b>Width (W2)</b>	<b>Length (L)</b>	<b>Height (H)</b>	<b>Bundle Ø max.</b>	<b>Operating Temperature</b>	<b>Material</b>	<b>Colour</b>	<b>Pack Cont.</b>	<b>Article-No.</b>
<b>RB5</b>	19.0	9.7	19.0	6.0	5.0	-40 °C to +60 °C	PA66	Natural (NA)	100 pcs.	151-14059
<b>RB5APT-A</b>	19.0	9.7	19.0	6.0	5.0	-40 °C to +85 °C	PA66	Black (BK)	50 pcs.	151-14006
<b>RB8</b>	25.0	12.7	25.0	11.5	8.0	-40 °C to +60 °C	PA66	Black (BK)	100 pcs.	151-13601
	25.0	12.7	25.0	11.5	8.0	-40 °C to +60 °C	PA66	Natural (NA)	100 pcs.	151-13606
<b>RB20</b>	27.0	18.0	33.0	25.0	20.0	-40 °C to +60 °C	PA66HIRHS	Black (BK)	100 pcs.	151-00831
<b>RB14</b>	27.4	23.0	33.2	16.0	14.0	-40 °C to +60 °C	PA66	Black (BK)	200 pcs.	151-00502
	27.4	23.0	33.2	16.0	14.0	-40 °C to +60 °C	PA66	Natural (NA)	100 pcs.	151-00505
<b>RB14APT-A</b>	33.2	23.0	27.4	16.0	14.0	-40 °C to +85 °C	PA66	Black (BK)	200 pcs.	151-03606

All dimensions in mm. Subject to technical changes.



### Mounts with cable clip, magnetic

#### MAGR-B-Series

Magnetic mounts and clips are innovative solutions designed to meet the demands of modern cable management and mounting needs. They combine ease of use with versatility, offering a practical and efficient alternative to traditional mounting methods. Whether in dynamic work environments or temporary setups, these mounts and clips provide advantages that set them apart from other options on the market.

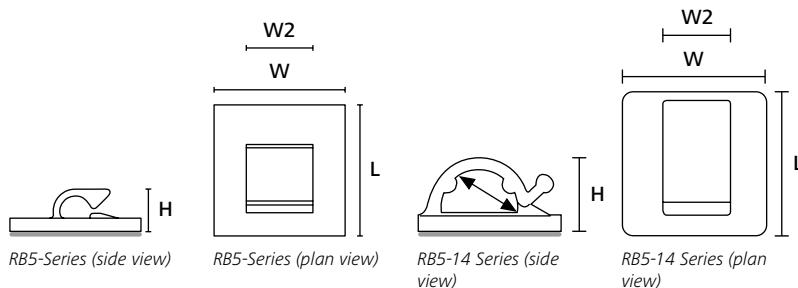
#### Features and benefits

- Flat design to use in applications with limited space
- Quick to install and easy to adjust once fitted (reusable)
- Flexible neodymium magnet with adhesive backing
- Can be used without cable ties offering process optimization
- Different sizes for various bundle diameters available
- Designed to hold wires, cables or hoses
- Ideal for use on steel surfaces where it is not possible to drill holes
- Suitable for challenging surfaces like slightly dirty areas where adhesives fail



MAGR-B-Series magnetic mounts with clips offer flexible cable management solutions.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Neodymium alloy R5 (NDFEBR5)
<b>Operating Temperature</b>	-40 °C to +85 °C
<b>Flammability</b>	UL 94 V2 (excluding adhesive)



TYPE	Width (W)	Length (L)	Height (H)	Bundle Ø max.	Material	Colour	Pack Cont.	Article-No.
<b>MAGR-B5</b>	19.0	19.0	6.0	5.0	PA66 NDFEBR5	Black (BK)	25 pcs.	151-04463
<b>MAGR-B8</b>	25.0	25.0	11.5	8.0	PA66 NDFEBR5	Black (BK)	15 pcs.	151-04464

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**Self Adhesive Clips****TY8H1(S) with flat design**

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

**Features and benefits**

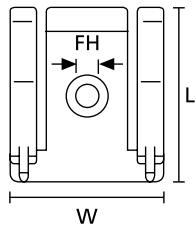
- Designed to hold cables, tubes or conduits without cable tie
- Simply screwed or stuck (TY8H1S) onto panel
- Side gripping fingers exert firm hold but allow for easy cable removal



Self adhesive mount for flat cables, TY8H1.

**For more information on the types of adhesive please see page 152.**

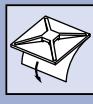
<b>MATERIAL</b>	Polyamide 6.6 (PA66)
<b>Operating Temperature</b>	-40 °C to +85 °C
<b>Flammability</b>	UL 94 V2 (excluding adhesive)
<b>Adhesive</b>	Acrylate with base of polyurethane foam



TY8H1S

TYPE	Drawing	Height (H)	Width (W)	Hole Ø (FH)	Length (L)	Bundle Ø max.	Material	Colour	Pack Cont.	Article-No.
<b>TY8H1S</b>		6.5	23.0	3.2	26.0	3.0	PA66	Natural (NA)	100 pcs.	151-12819

All dimensions in mm. Subject to technical changes.



## Mounts with flexible cable clip, self-adhesive

### SAC-Series

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

#### Features and benefits

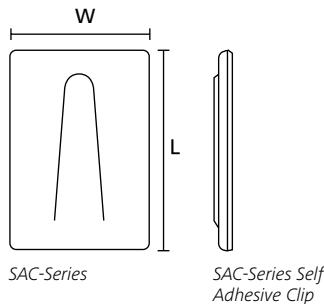
- Bendable metal tongue for any shape or configuration of wires or cables
- Cost effective with easy application on smooth, clean surfaces

**For more information on the types of adhesive please see page 152.**



*Bendable tongue allows for a variety of sizes per clip.*

<b>MATERIAL</b>	Steel (ST)
<b>Adhesive</b>	Acrylate with base of polyethylene foam
<b>Operating Temperature</b>	-40 °C to +60 °C



SAC-Series Self Adhesive Clip

TYPE	Width (W)	Length (L)	Bundle Ø max.	Material	Colour	Pack Cont.	Article-No.
<b>SAC1</b>	20.0	30.0	4.0	ST	White (WH)	100 pcs.	151-00100
<b>SAC2</b>	25.0	35.0	8.0	ST	White (WH)	100 pcs.	151-00200
<b>SAC3</b>	31.0	43.0	12.0	ST	White (WH)	100 pcs.	151-00300

All dimensions in mm. Subject to technical changes.



## 2-piece fixing tie with connector clip

### Connector clip family

These two piece fixing ties with connector clips have been designed for electronic cables and cable sets used in the automotive industry. The connector are pushed onto the connector clip and hold firmly in place.

#### Features and benefits

- Easy, tool-free assembly for efficient installation
- Pre-assembled cable tie with connector clip for quick handling
- Connector can be removed without damage – ideal for maintenance or repositioning
- Rattle-free mounting ensures secure and noise-free fixation, even under vibration
- Made from PP/PA66HIRHS: combines sustainability benefits of PP (lightweight, chemically resistant) with the robustness and heat stability of PA66HIRHS



**Material specifications: See Article-No. on our website.**

TYPE	Width (W)	Length (L)	Bundle Ø max.	Width (W2)	N	Type of connection	Material	Colour	Article-No.
<b>S50ROSCC11B</b>	4.9	200.0	45.0	10.9	185	USCAR11	PP PA66HIRHS	BK	156-03261
<b>S50ROSCC11A</b>	4.9	200.0	45.0	24.9	185	USCAR11	PP PA66HIRHS	BK	156-03259

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



## Connector clips for round holes

### with fir tree

The connector clips used here have been designed for electronic cables and cable sets used in the automotive industry. These parts are related to a connector and then secured to a surface depending on the requirement.

#### Features and benefits

- Connector easily installed by simply pushing into place
- Connection can be released non-destructive
- One fir tree foot part can be used for a variety of panel thicknesses
- Disc covers the hole to prevent dust and dirt gaining access
- For twist protection: Variants with additional stick



Connector Clips are available for many different connector types and fixing varieties.

**Material specifications: See Article-No. on our website.**

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Height (H)	Material	Colour	Type of connection	EWCAP standard	Article-No.
CC11FT6.5E3		6.1 - 6.9 6.1 - 6.6	0.6 - 5.0	10.9	25.8	19.6	PA66HIRHS	BK	USCAR11	EWCAP-005-11	151-04254
CC11FT6.5FT5-2		6.1 - 6.9 4.8 - 5.2	0.6 - 5.5	18.0	30.5	19.4	PA66HIRHS	BK	USCAR11	EWCAP-005-11	151-03961
CC11FT6.5FT5		6.1 - 6.9 4.8 - 5.2	0.6 - 5.5	18.0	30.5	19.4	PA66HIRHS	BK	USCAR11	EWCAP-005-11	151-03963
CC7FT6.5E3		6.1 - 6.9 6.1 - 6.6	0.6 - 5.0	7.5	25.4	21.1	PA66HIRHS	BK	USCAR7	EWCAP-005-7	151-04285
CC7FT6.5LGE3		6.1 - 6.9 6.1 - 6.6	0.6 - 10.0	16.5	25.4	26.3	PA66HIRHS	BK	USCAR7	EWCAP-005-7	151-04283

All dimensions in mm. Subject to technical changes.



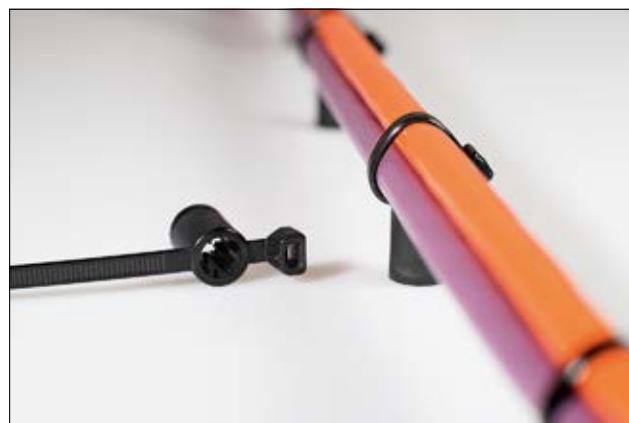
## 1-piece fixing ties for weld studs

### For cable routing above the stud

Primarily designed for use in the automotive industry, these parts can be used in a wide variety of applications where weld studs or ISO bolts are used and cables need to be bundled and secured.

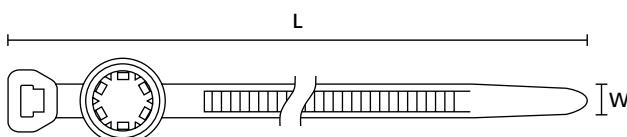
#### Features and benefits

- Cable tie head always situated in defined position
- Easy to assemble without the need for a tool
- Bundle runs directly above weld stud with defined stand-off from the panel



The T50SSBS5OT-E / T50SSBS6OT-E allows very precise routing of cable bundles.

**Material specifications: See Article-No. on our website.**

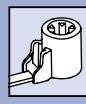


T50SSBS6OT-E

TYPE	Drawing	Stud Ø	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T50SSBS5OT-E		5.0	4.6	160.0	35.0	200	PA66HS	BK	1-2;4-7;25	155-30602
T50SSBS6OT-E		6.0	4.6	160.0	35.0	200	PA66HS	BK	1-2;4-7;25	157-00083

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. Since the bundled cables lie directly above or on the weld stud, care must be taken to ensure that the length of the weld stud does not exceed the height of the sheath. To avoid damage, we recommend a maximum weld stud length of 16.5 mm. N = Minimum Loop Tensile Strength for Cable Ties (newton)

**1-piece fixing ties for weld studs****For cable routing alongside the stud**

Primarily designed for use in the automotive industry, these parts can be used in a wide variety of applications where weld studs or ISO bolts are used and cables need to be bundled and secured.

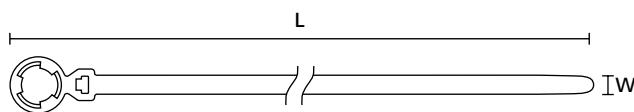
**Features and benefits**

- Cable tie head always situated in defined position
- Easy to install without the need for a tool
- Bundles are routed very close to stud



T50SOSSBD-M8/10.

**Material specifications: See Article-No. on our website.**



T50SOSSBD-M8/M10

TYPE	Drawing	Stud Ø	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Tools	Article-No.
T50SOSSBU-M6		M6	5.7	175.0	30.0	150	PA66HSUV	GY	1;3;6-7;9-10;25	157-00065
T50SOSSBD-M8		M8	5.7	175.0	30.0	150	PA66HSW	BK	1;3;6-7;9-10;25	157-00039
T50SOSSBD-M10		M10	5.7	175.0	30.0	150	PA66HSW	BK	1;3;6-7;9-10;25	157-00040
T50SOSSBU-M8		M8	5.7	175.0	30.0	150	PA66HSW	GY	1;3;6-7;9-10;25	157-00066
T50SOSSBU-M10		M10	5.7	175.0	30.0	150	PA66HSW	GY	1;3;6-7;9-10;25	157-00067

Recommended Tools: 1=MK10-SB, 3=MK21, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



## 1-piece fixing ties for weld studs, lateral adjustment

### T50SOSWSP5E-2 for 5 mm studs, retainer height 3.5 mm

Primarily designed for use in the automotive industry, these parts can be used in a wide variety of applications where weld studs or ISO bolts are used and cables need to be bundled and secured.

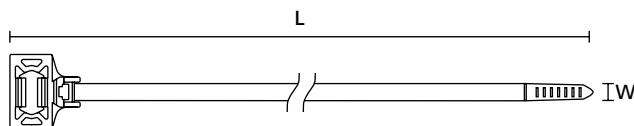
#### Features and benefits

- Cable tie head always situated in defined position
- Easy to install without the need for a tool
- Provides 5 – 6 mm lateral adjustment
- Very low profile, stackable design
- For parallel routing of several bundles



T50SOSWSP5E-2, parallel installation using two fixing ties.

**Material specifications: See Article-No. on our website.**



T50SOSWSP5E-2

TYPE	Drawing	Stud Ø	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T50SOSWSP5E-2		5.0, 6.0	4.6	162.6	35.0	225	PA66HS	BK	1-2;4-5;25	133-01553

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)

**1-piece fixing ties for weld studs****with stand-off, on the stud****Features and benefits**

- Offset bolt design with flat geometry enables the retrofitting of an additional, higher fastening bracket for bolts - ideal for flexible integration into complex assemblies
- Anti-slip serration on the inside prevents lateral cable movement and ensures a secure and vibration-resistant hold
- Developed for demanding and space-constrained environments

*T50SOSAS-Series offset stud mount cable ties are ideally suited for parallel routing (e. g. in combination with SB5-6 mounts).***Material specifications: See Article-No. on our website.**

TYPE	Drawing	Stud Ø	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Article-No.
<b>T50SOSASSO20AP5E</b>		M5, M6, T5, T6	4.6	179.2	35.0	225	PA66HS	BK	157-04016
<b>T50SOSASSO12.5AP5E</b>		M5, M6, T5, T6	4.6	171.8	35.0	225	PA66HS	BK	157-04018
<b>T50SOSASSO25AP5E</b>		M5, M6, T5, T6	4.6	184.2	35.0	225	PA66HS	BK	157-04020

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



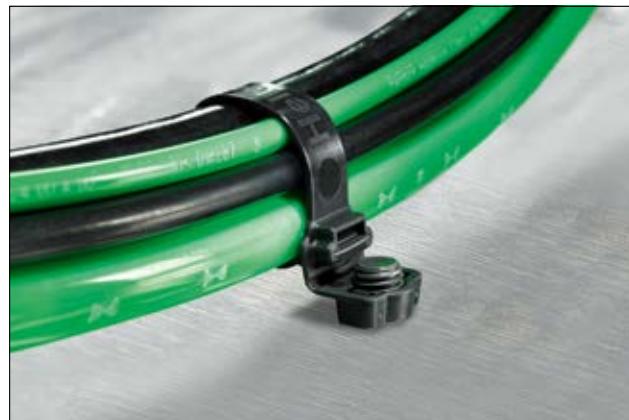
## 1-piece fixing ties for weld studs, for heavy duty applications

### WS-Series for threaded studs

Wide strap stud-mounted cable ties are primarily designed for use in the automotive or truck industry.

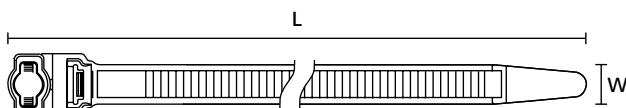
#### Features and benefits

- Very flexible strap provides minimum pinching of soft hoses and convoluted tubing
- Low profile head for compact bundling
- Clamping rails to increase grip on round bundles
- Flexible hinge



The wide strap stud mount cable tie minimises pinching on soft bundles.

**Material specifications: See Article-No. on our website.**



Wide strap heavy duty stud mount cable ties

TYPE	Drawing	Stud Ø	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
WSS8MM		8.0	12.7	246.4	57.1	535	PA66HIRHSW	BK	6-7;9-10	157-00034
WSI8MM		8.0	12.7	322.6	82.5	535	PA66HIRHSUV	BK	6-7;9-10	157-00035

Recommended Tools: 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)

**1-piece fixing ties for weld studs, for heavy duty applications****for parallel routing**

Primarily designed for use in the automotive industry, these parts can be used in a wide variety of applications where weld studs or ISO bolts are used and cables need to be bundled and secured.

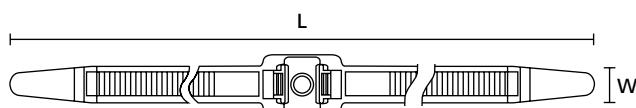
**Features and benefits**

- Parallel separation between hoses, wires, cables and tubing
- Abrasion protection
- Optional mounting hole for securing bundles along the Chassis of trucks, trailers and heavy duty equipment



*DCT products are made for parallel routing of harnesses with stud fixing.*

**Material specifications: See Article-No. on our website.**



*Dual Clamp Ties (DCT)*

TYPE	Stud Ø	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
DCT11	M6	12.7	487.7	58.0	667	PA66HIRHSUV	BK	6-7;9-10	115-31100
DCT9	M6	12.8	331.0	33.0	667	PA66HIRHSUV	BK	6-7;9-10	115-00034

**Recommended Tools:** 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



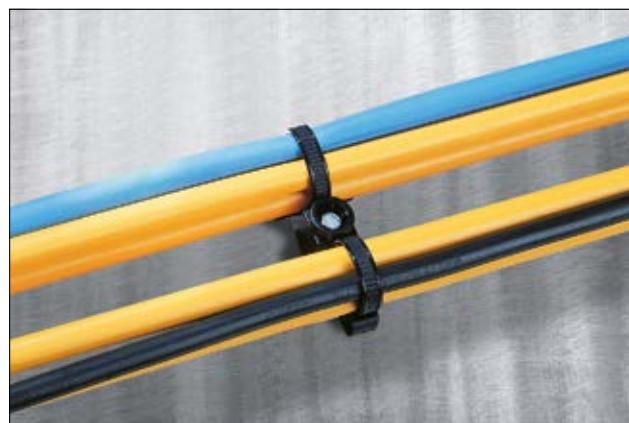
## 2-piece fixing ties for weld studs

### for parallel routing

Widely used for securing cables pipes and hoses in the automotive and truck building industries, the mounting base is simply pushed onto a 5 mm diameter stud or bolt.

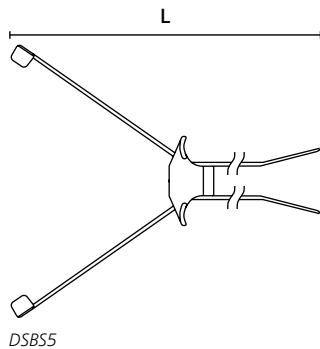
#### Features and benefits

- Pre-assembled 2-piece fixing tie with stud retainer
- For parallel routing of cables, hoses or harnesses
- Cable tie head can be moved after bundling
- Easy to install without the need for a tool
- For 5 mm studs or 5 mm ISO threaded studs
- Made from PP/PA66HIRHS: combines sustainability benefits of PP (lightweight, chemically resistant) with the robustness and heat stability of PA66HIRHS – perfect for demanding automotive environments



Parallel fixation of two cables and keeps the bundles close to the cables.

**Material specifications: See Article-No. on our website.**



TYPE	Drawing	Stud Ø	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T50SDSB55		5.0	4.6	150.0	35.0	225	PA66HS PA66HIRHS	BK	1-2;4-5;25	150-56193
T50ROSDSB55		5.0	4.6	200.0	45.0	222	PA66HS PA66HIRHS	BK	1-2;4-5;25	150-56199
S50ROSDSB55		5.0	4.9	200.0	45.0	185	PP PA66HIRHS	BK	5	156-03588
S50ROSDSB5-6H		T5, T6, M5, M6	4.9	200.0	45.0	185	PP PA66HIRHS	BK	5	156-03077
T50SDSB5-6H		T5, T6, M5, M6	4.6	160.0	35.0	225	PA66HS PA66HIRHS	BK	1-2;4-5;25	156-03295
T50SDSB5-6		T5, T6, M5, M6	4.6	160.0	35.0	225	PA66HS PA66HIRHS	BK	1-2;4-5;25	156-03293

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## 2-piece fixing ties for strong hold on smooth bundles

**for weld studs, for parallel routing**

Soft Grip mounts are especially designed for use with Soft Grip ties. The versatile combinations provide a variety of flexible fastening options for fluid management / cooling systems in vehicles. The Soft Grip Series is a unique semi-customised part solution and designed to save time, money and development effort. The foot parts of the mounts can be adjusted to individual customer requirements.

In the event of maintenance, the cable tie can be easily removed using a screwdriver. Only the cable tie then needs to be replaced, not the whole fixing element.

## Features and benefits

- Suitable for a variety of fastening requirements thanks to different foot parts (for holes, for studs, for screw fixings)
- Soft Grip cable ties assure high protection of sensitive harnesses and fluid system tubes
- Soft TPE inner layer inhibits lateral movements of the bundle, especially on smooth tubing
- Pre-locking feature holds the cable tie in place before it is tensioned
- Soft Grip cable ties can be removed with a screwdriver for maintenance
- EVO9SG application tool with adjusted nose piece available

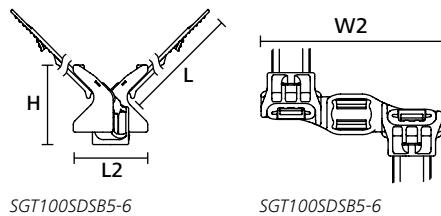


*The Soft Grip Tie in combination with the Soft Grip Mount for studs (weld studs) for parallel guidance of hoses in fluid management.*



Soft Grip Cable Tie assembled with Soft Grip Mount for studs (weld stud).

**Material specifications: See Article-No. on our website.**



TYPE	Stud Ø	Width (W2)	Length (L)	Length (L2)	Height (H)	Bundle Ø max.	Material	Colour	Tools	Article-No.
SGT100SDSB5-6	M5, M6, T5, T6	59.8	140.0	27.6	29.5	25.4	PA66HS TPE PA66HIRHS	BK, BU	8	156-04098

Recommended Tools: 8=EVO9SG. For more information on toolings please refer to the Application Tooling chapter on page 593.  
All dimensions in mm. Subject to technical changes.



## Fixing ties for weld studs

### multi parallel routing, outside serrated

With our new "WAVE FIXING" products, we meet the increasing demand of parallel cable routing for electric vehicles.

#### Features and benefits

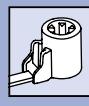
- Oval housing for welding studs enables tolerance compensation during assembly
- Supports a wider range of cable diameters for parallel bundling
- Cable tie head can be repositioned for ideal alignment with the cable bundle
- 'Soft-push' design enables effortless, tool-free manual assembly by hand
- Integrated retaining rib secures corrugated cables (e.g. protective conduits) and provides additional stability and protection in dynamic environments



**Material specifications: See Article-No. on our website.**

TYPE	Stud Ø	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Article-No.
<b>T50ROSCTMD26SB5-6</b>	M5, M6, T5, T6	30.0	78.0	26.0	225	PA66HS PA66HIRHS	BK	156-03240

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)

**Fixing ties for weld studs****multi parallel routing, outside serrated**

With our new "WAVE FIXING" products, we meet the increasing demand of parallel cable routing for electric vehicles.

**Features and benefits**

- For weld stud diameters, suitable for M5, M6, T5, T6
- Tolerances can be adjusted with an oval welding stud barrel
- A more varied selection of cable diameters can be bundled in parallel
- The cable tie head can be positioned in optimum bundle position
- "Soft-push" design for easy manual, tool free assembly



Fixing tie for cable bundles/for stud, outside serrated, 8.0-26.0mm



Multiple routing fixing tie for studs, outside serrated, for bundle diameters of 8.0-26.0mm.

**Material specifications: See Article-No. on our website.**

TYPE	Stud Ø	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Article-No.
<b>T50ROSCTM16D26SB5-6</b>	M5, M6, T5, T6	30.0	100.0	26.0	225	PA66HS PA66HIRHS	BK	156-03242

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



## 2-Piece Fixing Ties for Weld Studs

### on the stud

Primarily designed for use in the automotive industry, these parts can be used in a wide variety of applications where 5mm weld studs or 5mm ISO bolts are used and cables need to be bundled and secured

#### Features and benefits

- Pre-assembled with integrated cable tie and weld stud mounting foot for quick and solid installation
- Low insertion force (~30 N or less) supports ergonomic and worker-friendly installation - ideal for high-volume production lines
- Enables secure bundling of very small diameters, starting at a diameter of just 1.0 mm
- Designed for sustainable workflows by reducing operator strain and minimising rework



Pre-assembled two-piece fastening tie with weld stud foot — enables quick, secure mounting on 5 and 6 mm bolts with insertion forces below 30 N.

**Material specifications: See Article-No. on our website.**

TYPE	Stud Ø	Length (L)	Bundle Ø max.	N	Material	Colour	Article-No.
<b>T50RSBD5-6SD</b>	T5, T6, M5, M6	202.0	45.0	225	PA66HS PA66HIRHS	BK	156-03416

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)

**Fixing elements for weld studs****SB-Series**

Many industries (but specifically the automotive market) are using weld studs as the standard method of attaching components. Simply hammered onto the stud these parts provide ideal fixing bases for attaching cables, pipes or hose.

The use of weld studs avoids the problems with holes (ingress of moisture, corrosion etc).

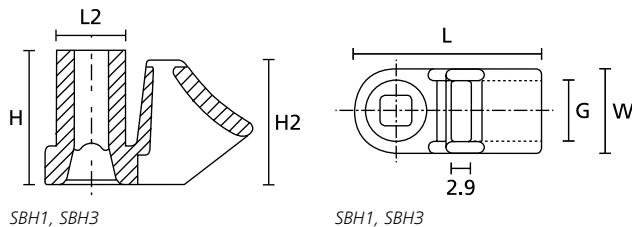
**Features and benefits**

- Simple and quick method of fixing
- SBH1 and SBH3 allow cables to run across the panel



SBH2 allow cables to run at 90° to the panel.

**Material specifications: See Article-No. on our website.**



TYPE	Drawing	Stud Ø	Width (W)	Length (L)	Length (L2)	Height (H)	Height (H2)	Strap Width max. (G)	Material	Colour	Article-No.
<b>SBH1</b>		5.0	12.5	26.8	9.0	13.9	15.9	8.5	PA66	Black (BK)	151-02260
		5.0	12.5	26.8	9.0	18.0	15.9	8.5	PA66	Black (BK)	151-02279
<b>SBH2</b>		5.0	12.5	26.8	9.0	14.0	12.5	8.5	PA66	Black (BK)	151-26250

Recommended Tools: 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes.



## Fixing elements for weld studs

### CT-Series

In areas with limited space these mounting bases allow the cable to be slightly offset from the fixing stud, and can be installed in the equipment prior to the cable installation. A major cost saving can be made using these products as they will allow the use of many different sizes of standard cable ties without the need to stock a wide range of specific fixing ties.

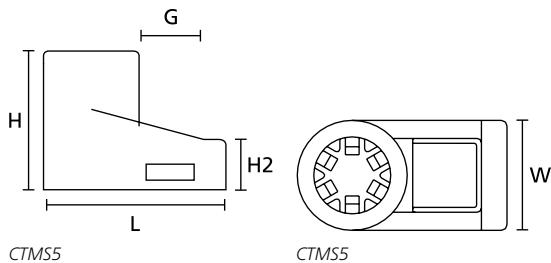
#### Features and benefits

- Ideal for cable ties up to 4.8 mm wide
- Simply pushed by hand onto an ISO or Fir Tree stud



Fixing Element CTMS5 allows bundles to be routed alongside the stud.

**Material specifications: See Article-No. on our website.**



CTMS5

CTMS5

TYPE	Width (W)	Length (L)	Height (H)	Height (H2)	Stud Ø	Strap Width max. (G)	Material	Colour	Article-No.
CTMS5	10.0	19.0	14.5	5.3	5.0	5.0	PA66	Black (BK)	151-03301

Recommended Tools: 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes.



### Fixing elements for tubes and harnesses with automatic locking feature

#### for weld studs

Offering a simple and secure method of attaching cables to panels. Originally designed for the automotive industry, these products are used in a wide range of applications with sheet metal panels across various industries.

#### Features and benefits

- Push and click closure for fixation of wires
- AHC( )SS und AHC( )SB can be pushed onto a 5.0 mm stud

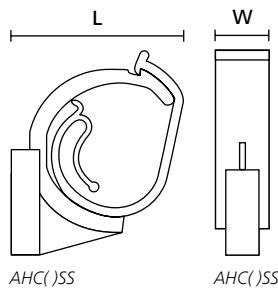


Automatic Harness Clip closed.



Automatic Harness Clip open.

**Material specifications: See Article-No. on our website.**



TYPE	Drawing	Stud Ø	Bundle Ø max.	Width (W)	Length (L)	Material	Colour	Article-No.
<b>AHC3SB</b>		5.0	28.0	10.0	43.0	PA66HIRHS	Black (BK)	151-00372

All dimensions in mm. Subject to technical changes.



## 1-piece fixing ties with mounting head for screws

### M-Series

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.

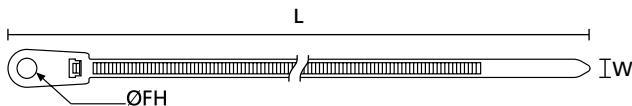
#### Features and benefits

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



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

**Material specifications: See Article-No. on our website.**



T18MR Series with Mounting Head for Screw fixing

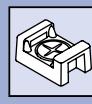
TYPE	Hole Ø (FH)	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T18MR	3.1	2.5	110.0	20.0	80	PA66	BK	1-2;4-5;25	113-01810
	3.1	2.5	110.0	20.0	80	PA66	NA	1-2;4-5;25	113-01819
T30MR	4.3	3.5	160.0	32.0	135	PA66	BK	1-2;4-5;25	113-03010
	4.3	3.5	160.0	32.0	135	PA66	NA	1-2;4-5;25	113-03019
T50MR	5.4	4.7	215.0	45.0	225	PA66	BK	1-2;4-7;25	113-05010
	5.4	4.7	215.0	45.0	225	PA66	NA	1-2;4-7;25	113-05019
	5.4	4.7	215.0	45.0	225	PA66W	BK	1-2;4-7;25	113-05060
T50ML	5.5	4.7	390.0	100.0	225	PA66	NA	1-2;4-7;25	113-05419
T120MR	6.5	7.6	395.0	102.0	535	PA66	BK	1;3;6-7;9-10;25	113-12020
	6.5	7.6	395.0	102.0	535	PA66	NA	1;3;6-7;9-10;25	113-12029
	6.5	7.6	395.0	102.0	535	PA66W	BK	1;3;6-7;9-10;25	113-12060

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## 2-piece fixing ties for heavy duty applications, for screws

### HDM-Series

Used in the automotive and truck industry for harness fixing in the engine body, these parts offer solutions in many other industrial applications with difficult environment.

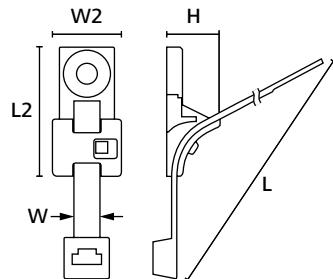
#### Features and benefits

- Pre-assembled 2-piece fixing tie
- Cable tie head can be moved after bundling
- Secure alignment to the bundle due to H-design
- A suitable alternative for metal clamps
- Withstands vibrations and displacement forces
- High tightening torque through metal bushing



These HDM (Heavy duty mount) are suitable for assembling on screws.

**Material specifications: See Article-No. on our website.**



HDM with cable tie (L = length of the tie "flat")

TYPE	Width (W)	Width (W2)	Length (L)	Length (L2)	Height (H)	Mounting Screw Type	Bundle Ø max.	Material	Colour	Tools	Article-No.
<b>T50RHDM6</b>	4.6	20.0	200.0	37.5	16.0	M6 Screw	50.0	PA66HIRHS	BK	1-2;4-7;25	156-00410
<b>T50RHDM8</b>	4.6	20.0	200.0	37.5	16.0	M8 Screw	50.0	PA66HIRHS	BK	1-2;4-7;25	156-00412
<b>T120SHDM8</b>	7.6	20.0	225.0	37.5	15.6	M8 Screw	55.0	PA46	GY	1;3;6-7;9-10;25	156-00429
<b>T120RHDM6</b>	7.6	20.0	390.0	37.5	16.0	M6 Screw	105.0	PA46	GY	1;3;6-7;9-10;25	156-00407
<b>T120RHDM6</b>	7.6	20.0	390.0	37.5	16.0	M6 Screw	105.0	PA66HIRHS	BK	1;3;6-7;9-10;25	156-00406
<b>T120RHDM8</b>	7.6	20.0	390.0	37.5	16.0	M8 Screw	105.0	PA46	GY	1;3;6-7;9-10;25	156-00409
<b>T120RHDM8</b>	7.6	20.0	390.0	37.5	16.0	M8 Screw	105.0	PA66HIRHS	BK	1;3;6-7;9-10;25	156-00408
<b>X120RHDM65x160</b>	7.7	32.0	369.0	40.2	15.5	M6 Screw	100.0	PA66HIRHS	BK	1;6-7;9-10;25	156-01466

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes.



## 2-piece fixing ties for heavy duty applications, for screws

### DHDM-Series for parallel routing

Used in the automotive and truck industry for harness fixing in the engine body, these parts offer solutions in many other industrial applications with difficult environment.

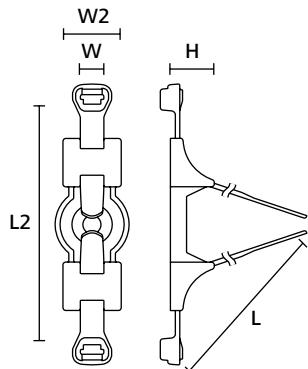
#### Features and benefits

- Pre-assembled 2-piece fixing tie
- Cable tie head can be moved after bundling
- Secure alignment to the bundle due to H-design
- A suitable alternative for metal clamps
- Withstands vibrations and displacement forces
- High tightening torque through metal bushing



DHDM (Double heavy duty mount) for parallel routing of bundles.

**Material specifications: See Article-No. on our website.**

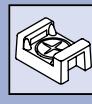


DHDM with cable tie (L = length of the tie "flat")

TYPE	Width (W)	Width (W2)	Length (L)	Length (L2)	Height (H)	Mounting Screw Type	Bundle Ø max.	Material	Colour	Tools	Article-No.
<b>T120ROSDHDM6</b>	7.6	25.4	385.0	59.4	15.5	M6 Screw	105.0	PA66HS PA66W	BK	1;3;6-7;9-10;25	156-01485
<b>X120RDHDM6</b>	7.7	25.4	369.0	59.4	15.5	M6 Screw	100.0	PA66HIRHS PA66W	BK	3;5-7;9-10	156-01096
<b>X120RDHDM8</b>	7.7	25.4	369.0	59.4	15.5	M8 Screw	100.0	PA66HIRHS	BK	3;5-7;9-10	156-01097

Recommended Tools: 1=MK10-SB, 3=MK21, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

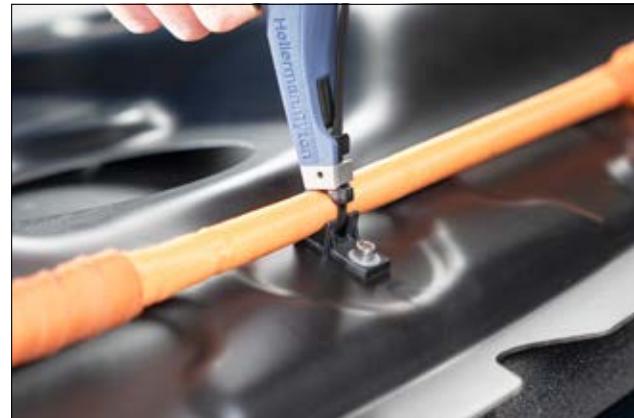
All dimensions in mm. Subject to technical changes.

**2-Piece Fixing tie for to screw****S50ROS series with CPC-fixing element**

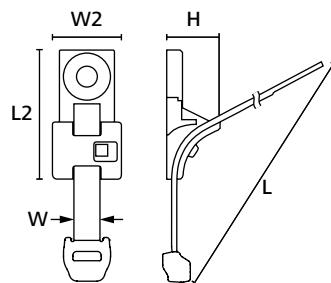
S-Series cable ties made from Polypropylene (PP) are non hydroscopic, offer a higher chemical resistance and reduced CO<sub>2</sub> footprint compared to a standard cable tie material. These cable ties are used to bundle and secure cables, pipes and/or hoses.

**Features and benefits**

- Pre-assembled 2-piece fixing tie with screw mount
- Cable tie head can be moved after bundling
- The S50ROS features a significantly lower CO<sub>2</sub> footprint compared to cable ties made of standard material, in line with sustainability goals in various industries
- The outside serration design ensures gentle handling of sensitive cables and bundles, reducing the risk of damage during installation and maintenance
- With an anti-slip feature on the inside, the S50ROS prevents undesired lateral movement of cables and bundles, maintaining tidy and organized cable management within vehicles
- For screw fixation M6
- Resists vibration and displacement forces and provides reliable performance in dynamic environments
- High torque due to integrated metal bushing for improved stability



**Material specifications: See Article-No. on our website.**



TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Mounting Screw Type	Material	Colour	Tools	Article-No.
S50ROSCPCM6		20.0	200.0	45.0	185	M6 Screw	PP PA66HIRHS	BK	5	156-03593

Recommended Tools: 5-EVO7i. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## Screwed Ratchet Clamp

### for multiple parallel cable routing

The Screwed Ratchet Clamp can be used wherever cables are to be laid in parallel. The clamp can be mounted both horizontally and vertically. In the second assembly step the cables can be inserted. The component can be used to fix various cables or cable combinations as it can be filled in a range from 25 to 150 mm.

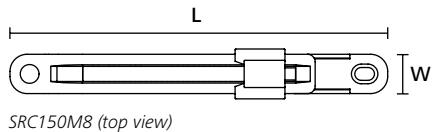
#### Features and benefits

- Cables and tubes can be bundled in parallel
- Can be opened and closed with one hand and without tools due to lever on the sliding element
- Re-openable, thus cables can be exchanged and added when required
- Can be screwed vertically or horizontally depending on the equipment
- After being screwed the locking cover/ lever is pushed onto the cable
- Allows a flexible accommodation of the cables with regards to the number of cables to be routed

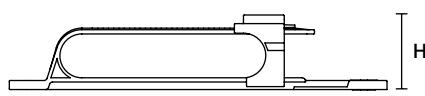


Screwed Ratchet Clamp SRC150M8 for parallel bundling of cables and tubes.

#### Material specifications: See Article-No. on our website.



SRC150M8 (top view)



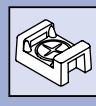
SRC150M8 (side view)

TYPE	Hole Ø (FH) max.	Width (W)	Length (L)	Height (H)	Bundle Ø max.	Material	Colour	Article-No.
<b>SRC150M8</b>	8.0	33.0	250.0	49.4	29.0	PA6GF30	Black (BK)	156-02742

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## 2-piece fixing ties for strong hold on smooth bundles

### for screws

Soft Grip mounts are especially designed for use with Soft Grip ties. The versatile combinations provide a variety of flexible fastening options for fluid management / cooling systems in vehicles. The Soft Grip Series is a unique semi-customised part solution and designed to save time, money and development effort. The foot parts of the mounts can be adjusted to individual customer requirements.

In the event of maintenance, the cable tie can be easily removed using a screwdriver. Only the cable tie then needs to be replaced, not the whole fixing element.

#### Features and benefits

- Suitable for a variety of fastening requirements thanks to different foot parts (for holes, for studs, for screw fixings)
- Soft Grip cable ties assure high protection of sensitive harnesses and fluid system tubes
- Soft TPE inner layer inhibits lateral movements of the bundle, especially on smooth tubing
- Pre-locking feature holds the cable tie in place before it is tensioned
- Soft Grip cable ties can be removed with a screwdriver for maintenance
- EVO9SG application tool with adjusted nose piece available

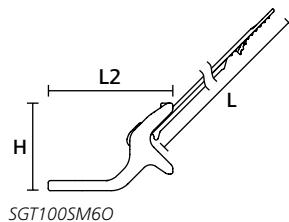


Soft Grip Cable Tie assembled with Soft Grip Mount for screw fixing e.g. for fluid management / air conditioning pipes.



Soft Grip Cable Tie assembled with Soft Grip Mount for screw fixing.

**Material specifications: See Article-No. on our website.**



SGT100SM60

TYPE	Mounting Screw Type	Height (H)	Length (L)	Length (L2)	Bundle Ø max.	Material	Colour	Tools	Article-No.
SGT100SM60	M6 Screw	29.7	140.0	42.0	25.4	PA66HS TPE PA6GF30	BK, BU	8	156-04096

Recommended Tools: 8=EVO9SG. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes.



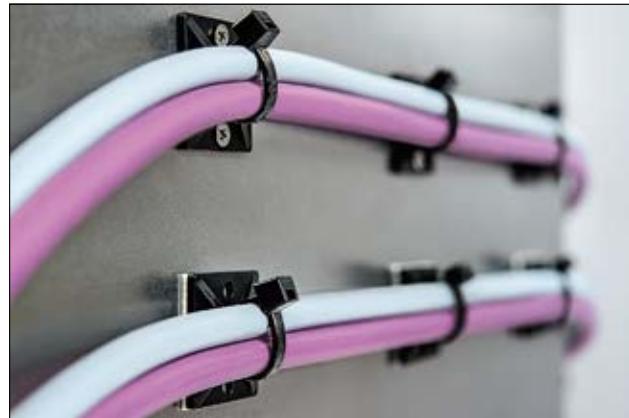
## Screw fixing cable tie mounts

### MB-Series square design, screwable

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 8mm wide.

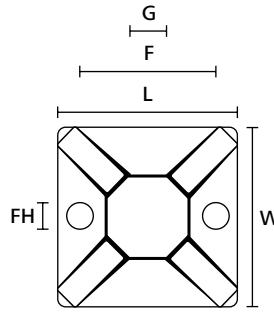
#### Features and benefits

- 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



MB-Series Mounts with square design.

**Material specifications: See Article-No. on our website.**



MB3-MB5 (plan view)



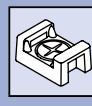
MB3-MB5 (side view)

TYPE	Width (W)	Length (L)	Hole Ø (FH)	Strap Width max. (G)	Fixing Hole Centres (F)	Material	Colour	Pack Cont.	Article-No.
<b>MB3</b>	19.0	19.0	3.1	4.1	13.2	PA66	White (WH)	100 pcs.	151-28359
<b>MB4</b>	28.0	28.0	4.0	5.4	20.0	PA66	White (WH)	100 pcs.	151-28479
<b>MB5</b>	37.7	37.7	4.8	8.9	25.3	PA66	White (WH)	100 pcs.	151-00324

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



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**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.

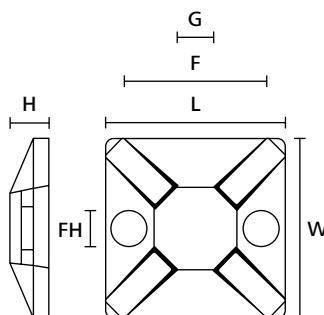
**Features and benefits**

- 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 detectable – perfect for use with food and pharmaceutical grade detection equipment
- Total metal dispersion provides consistent detectability, even for small cut-off pieces
- Greatly reduces 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.*

**Material specifications: See Article-No. on our website.**



MCMB Mount (side and plan view)

TYPE	Width (W)	Length (L)	Hole Ø (FH)	Strap Width max. (G)	Fixing Hole Centres (F)	Material	Colour	Pack Cont.	Article-No.
MCMB4	28.0	28.0	4.0	4.7	20.0	PA66MD	Blue (BU)	100 pcs.	151-01170

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



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



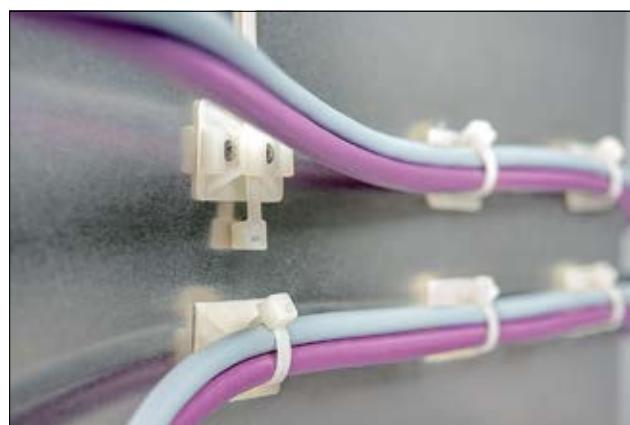
## Screw fixing cable tie mounts

### TY-Series rectangle design, screwable

These products are designed for simple yet robust installation in a wide variety of applications. TY-Series mounts with a rectangular design are commonly used in telecoms equipment, switchgear and control cabinets. With its small and compact design TY3G1 offers an easy and rapid assembly for many different applications.

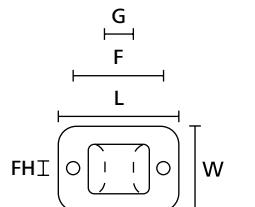
#### Features and benefits

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



TY-Series mounts with rectangle design.

**Material specifications: See Article-No. on our website.**



TY3G1, TY3G1S (plan view)

TY3G1 (side view)

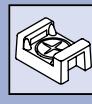


TYPE	Drawing	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Fixing Hole Centres (F)	Material	Colour	Pack Cont.	Article-No.
TY3G1		14.0	20.0	3.7	2.2	4.0	15.0	PA66	Natural (NA)	100 pcs.	151-21319

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



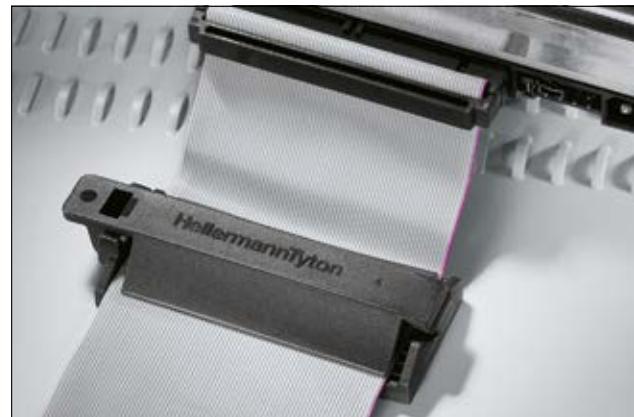
Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**Flat ribbon and round cable mounts****FKH-Series, screw fixing**

The FKH mounts are designed to retain flat ribbon cables. Ideal for use in computer equipment, gaming machines and domestic appliances. As each installation scenario is individual, FKH mounts are available in different dimensions and can be supplied as self adhesive and/or screwable versions.

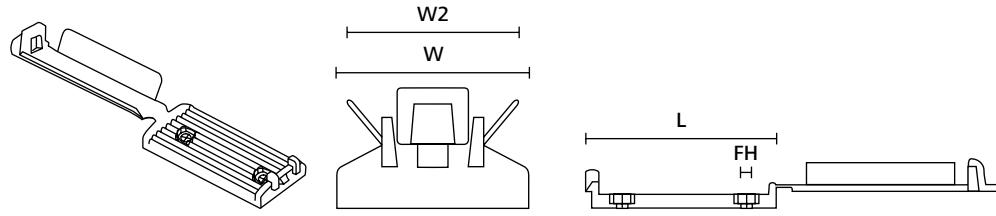
**Features and benefits**

- One-piece fixing mount for flat ribbon cables
- Increased mounting area offers high strength
- Quick and easy installation
- Can be released and re-used easily
- Flat cable is gently fastened due to soft wings



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

**Material specifications: See Article-No. on our website.**



Fixing can be realised with M3/  
M5 screws or acrylic adhesive backing

TYPE	Width (W)	Width (W2)	Length (L)	Hole Ø (FH)	Material	Colour	Pack Cont.	Article-No.
<b>FKH25</b>	25.0	22.0	31.0	3.1	PA66HIR	Black (BK)	100 pcs.	151-16250
<b>FKH30</b>	25.0	22.0	35.0	3.1	PA66HIR	Black (BK)	100 pcs.	151-16300
<b>FKH50</b>	25.0	22.0	56.5	3.1	PA66HIR	Black (BK)	100 pcs.	151-16500
<b>FKH80</b>	25.0	22.0	86.0	3.1	PA66HIR	Black (BK)	100 pcs.	151-16800

All dimensions in mm. Subject to technical changes.



## Screw fixing cable tie mounts CTQM for limited space

### CTQM-series

CTQM mounts are the ideal choice for applications that require reliable, permanent mounting - especially in confined or space-restricted environments.

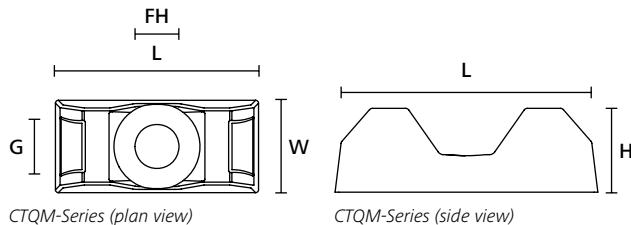
#### Features and benefits

- 2-way mounting base for safe guiding of cables and conduits
- For cable ties up to 5 mm width
- Uses screw with countersunk head (max. Ø of head: 8.0 mm)
- Pre-assembly feature in combination with cable tie
- Holds the cable tie in vertical mounting position



CTQM 2-way entry, screwable.

**Material specifications: See Article-No. on our website.**



CTQM-Series (plan view)

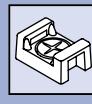
CTQM-Series (side view)

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

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



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## 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 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.

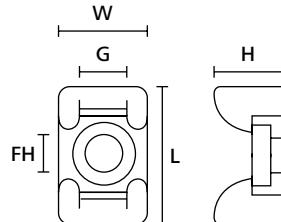
#### Features and benefits

- Curved design for additional cable support
- Simple to install with a screw or bolt
- Excellent security, particularly in areas of high vibration
- Mounts are available in various sizes and materials



Cable Tie Mounts KR6G5, KR8G5 and CTM.

**Material specifications: See Article-No. on our website.**



KR6G5, KR8G5 and CTM (plan view)  
KR6G5, KR8G5 and CTM (side view)

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
CTM0	9.4	14.7	6.9	3.8	5.0	PA66	Black (BK)	100 pcs.	151-30300
	9.4	14.7	6.9	3.8	5.0	PA66	White (WH)	100 pcs.	151-30303
CTM1	9.4	14.7	6.9	4.8	5.0	PA66	Black (BK)	100 pcs.	151-30400
	9.4	14.7	6.9	4.8	5.0	PA66	White (WH)	100 pcs.	151-30404
KR6G5	11.8	17.8	8.8	4.5	6.4	E/TFE	Blue (BU)	100 pcs.	151-00653
MCKR6G5	11.8	17.8	8.8	4.5	6.4	PA66MD	Blue (BU)	100 pcs.	151-00950
KR6G5	12.0	18.0	9.0	4.5	6.0	PA66	Natural (NA)	100 pcs.	151-24619
	12.0	18.0	9.0	4.5	6.0	PA66W	Black (BK)	100 pcs.	151-24660
	12.0	18.0	9.0	4.5	6.0	PP	Black (BK)	100 pcs.	151-03286
KR8G5	14.3	24.8	12.1	6.5	8.3	E/TFE	Blue (BU)	100 pcs.	151-00654
MCKR8G5-5	14.5	25.0	12.0	5.1	8.3	PA66MD	Blue (BU)	100 pcs.	151-01020
KR8G5	14.5	25.0	12.0	6.5	8.0	PA66	Natural (NA)	100 pcs.	151-24819
	14.5	25.0	12.0	6.5	8.0	PA66HS	Black (BK)	100 pcs.	151-24850
CTM2	15.5	21.8	9.4	4.6	7.9	PA66	Black (BK)	100 pcs.	151-30500
	15.5	21.8	9.4	4.6	7.9	PA66	White (WH)	100 pcs.	151-30504
CTM3	15.5	21.8	9.4	5.1	7.9	PA66	Black (BK)	100 pcs.	151-30600
	15.5	21.8	9.4	5.1	7.9	PA66	White (WH)	100 pcs.	151-30605
CTM4	15.8	21.8	9.4	6.4	7.9	PA66	Black (BK)	100 pcs.	151-30700
	15.8	21.8	9.4	6.4	7.9	PA66	White (WH)	100 pcs.	151-30703

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



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Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## Screw fixing mounts

### CTAM-Series for applications where space is limited

The CTAM series offers a range of mounting solutions that combine ease of installation with durability. Designed for a wide range of applications, these mounts are particularly valued in telecommunications equipment, switchgear and control cabinets. Thanks to their robust design, they are also a proven choice in the aerospace and railroad industries.

MCCTAM mounts (MC = Metal Content) are specially designed for use in hygiene-sensitive areas such as the food industry. Due to the integrated metal content, they can be detected by standard metal detection systems, which reduces the risk of contamination. They hold the MCT series cable ties securely in place, even in high vibration environments such as food processing machines and automated packaging lines.

All products in this range are screw-fastened, ensuring a stable and durable fastening even under dynamic loads.

### Features and benefits

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

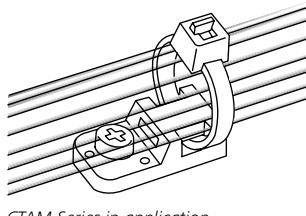


CTAM mounts for applications with limited space.

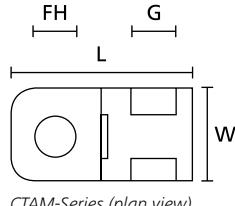


Detectable fixing solution containing of MCCTAM1 mount and MCTS cable tie.

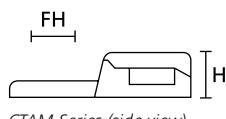
**Material specifications: See Article-No. on our website.**



CTAM-Series in application



CTAM-Series (plan view)



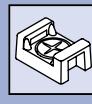
CTAM-Series (side view)

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
<b>CTAM1</b>	10.2	20.4	5.1	4.3	5.0	PA66	White (WH)	100 pcs.	151-31103
<b>CTAM2</b>	10.2	20.4	5.1	5.2	5.0	PA66	White (WH)	100 pcs.	151-31203
<b>CTAM1</b>	10.2	20.5	5.5	4.3	5.0	PEEK	Beige (BGE)	100 pcs.	151-00757
<b>CTAM2</b>	10.2	20.5	5.5	5.1	5.0	PEEK	Beige (BGE)	100 pcs.	151-00758
<b>MCCTAM1</b>	10.3	20.7	5.1	4.3	5.2	PA66MD	Blue (BU)	100 pcs.	151-00997

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



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**Stainless steel P-mount to screw****Stainless steel 316L mounts**

Suitable for the secure fixing of cables, tubing, conduits and pipes within the most arduous of environments. Providing a complete fastening and fixing solution when used in conjunction with stainless steel ties up to 10.0 mm width. SSPC metal cable tie mounts are ideal for use within shipbuilding, oil and gas (offshore), industrial machinery and vehicles, food and beverage, power, renewable energy or process industries.

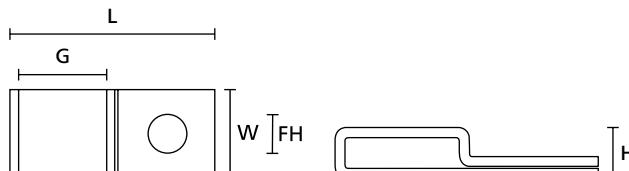
**Features and benefits**

- 2-way fixing for metal cable ties
- High performance stainless steel 316L material
- Heavy duty design
- Robust and durable solution
- Resistant to a range of chemicals in challenging environments
- Quick and easy to install
- Safe and secure solution for cables, tubing, conduits and pipes



Stainless Steel P-Mount SSPC for use in arduous environments.

**Material specifications: See Article-No. on our website.**



SSPC Series (plan view)

SSPC-Series (side view)

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
<b>SSPC4</b>	10.2	23.0	4.5	4.2	10.0	SS316L	Metal (ML)	100 pcs.	151-00837
<b>SSPC5</b>	10.2	23.0	4.5	5.3	10.0	SS316L	Metal (ML)	100 pcs.	151-00838
<b>SSPC6</b>	10.2	23.0	4.5	6.3	10.0	SS316L	Metal (ML)	100 pcs.	151-00839

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



## Screw fixing mounts

### LKC-, NY- and LOK-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.

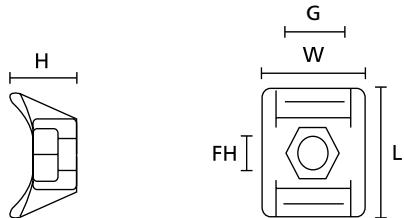
#### Features and benefits

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



LOK02 fixing base application.

**Material specifications: See Article-No. on our website.**



NY3256 (side view)

NY3256 (plan view)

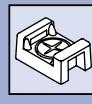
TYPE	Drawing	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
LKC		17.0	25.0	13.5	5.5	8.0	PA66	Black (BK)	100 pcs.	151-27010
		17.0	25.0	13.5	5.5	8.0	PA66	Natural (NA)	100 pcs.	151-27019
LKCSF1		19.0	40.0	16.8	6.0	13.0	PA66	Natural (NA)	100 pcs.	151-27219
		19.0	40.0	16.8	6.0	13.0	PA66	Black (BK)	100 pcs.	151-27202
NY3256		12.0	13.5	7.8	3.1	8.0	PA66	Natural (NA)	1000 pcs.	151-25219
LOK02		14.0	21.0	18.0	5.1	9.0	PA6HIR	Black (BK)	100 pcs.	151-80210

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



EN 45545-2

Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**Screw fixing mounts****MB-Series curved design, screwable**

These cable tie mounts are very small in their overall size. They are designed for simple yet robust installation particularly in areas with high vibrations and/or limited space. They are a common fixing method for telecoms equipment, switchgear and control cabinets.

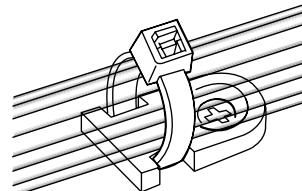
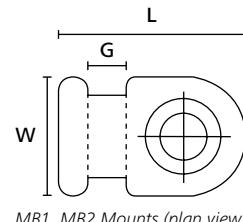
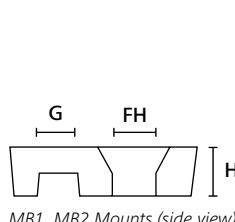
**Features and benefits**

- Small overall size for areas with limited mounting space
- Simple to install with a screw, bolt or rivet
- Excellent security, particularly in areas of high vibration
- Single hole fixing with two-way entry for cable tie



TY- (l) and MB-Series (r) with curved design, screwable.

**Material specifications: See Article-No. on our website.**



MB1, MB2 Mounts in application

TYPE	Width (W)	Length (L)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
<b>MB1</b>	8.0	12.5	2.9	2.6	PA66	Natural (NA)	100 pcs.	151-28119
<b>MB2</b>	12.5	20.5	5.0	5.0	PA66	Black (BK)	100 pcs.	151-28210
	12.5	20.5	5.0	5.0	PA66	White (WH)	100 pcs.	151-28219

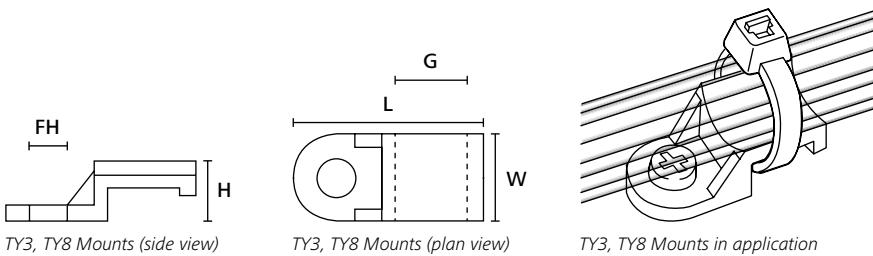
All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



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## TY-Series curved design, screwable

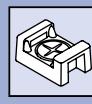


TYPE	Width (W)	Length (L)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
<b>TY8F1</b>	10.0	22.5	4.5	8.0	PA66	Natural (NA)	1000 pcs.	151-02157

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



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**Screw fixing mounts****LKM / CL / FH with curved design for sideways fixing**

In areas with limited space these mounting bases allow the cable to be offset from the fixing hole, and can be installed in the equipment prior to the cable installation. A major cost saving can be made using these products as they will allow the use of many different sizes of standard cable ties without the need to stock a wide range of specific fixing ties.

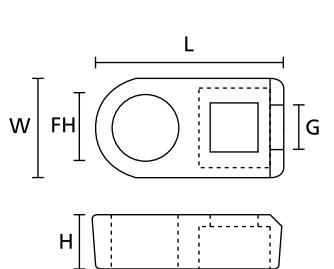
**Features and benefits**

- Small overall size for areas with limited mounting space
- Screwable mounts for fixing cable sideways
- Ideal for securing large, heavier bundles
- Suitable for cable ties up to 8 mm width

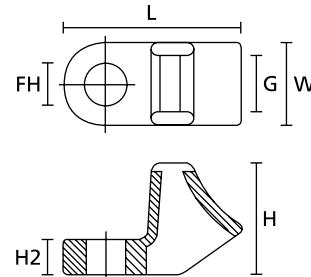


LKM, CL8 and FH cable tie mounts for applications with limited space.

**Material specifications: See Article-No. on our website.**



FH cable tie mounts (plan and side view)



LKM, CL8 cable tie mounts (plan and side view)

TYPE	Width (W)	Length (L)	Height (H)	Height (H2)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
<b>FH18</b>	7.1	13.3	4.0	-	3.7	2.5	PA66	Natural (NA)	500 pcs.	151-61119
<b>FH30</b>	9.5	17.9	4.7	-	5.5	3.5	PA66	Natural (NA)	500 pcs.	151-61319
<b>LKM</b>	12.0	27.0	16.0	5.0	6.0	7.6	PA66	Black (BK)	100 pcs.	151-26301
	12.0	27.0	16.0	5.0	6.0	7.6	PA66	Natural (NA)	100 pcs.	151-26304
<b>CL8</b>	12.5	27.3	16.0	5.0	6.5	8.0	PA66	Natural (NA)	100 pcs.	151-02258
	12.5	27.3	16.0	5.0	6.5	8.0	PA66W	Black (BK)	100 pcs.	151-02259

Recommended Tools: 1=MK10-SB, 3=MK21, 6=ProCut 9 no battery, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

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

**EN 45545-2**

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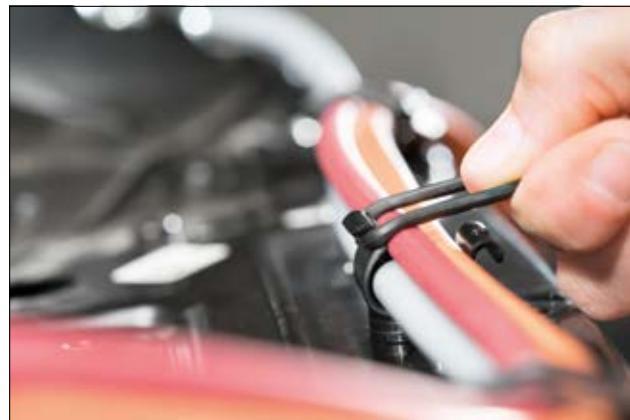
## Clamps with elastical loop

### Cradle clamp

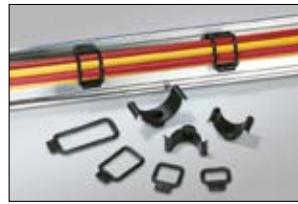
Simple and versatile method of bundling cables. These clamps consist of two parts. The clamping base for mounting onto a panel and the elastical loop.

#### Features and benefits

- 2-piece fixing system consisting of a clamping base (C-part) and a reusable retaining ring (R-part)
- Allows cables to be added or removed after installation without tools
- Elastic loop enables quick and secure cable fastening by simply stretching over the clamp
- Suitable for dynamic environments where rework or maintenance is required
- Reopenable and reusable design supports sustainable cable management solutions
- Space-saving and simple method for routing and bundling cables on control panels

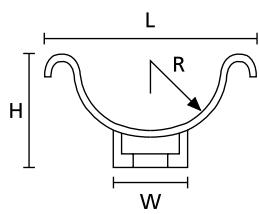


Cradle clamp - 2-piece fixing part consisting of clamp and retaining ring. The simple and versatile method of bundling cables.

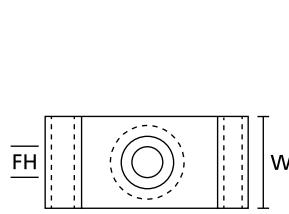


2-Piece fixing cradle clamp.

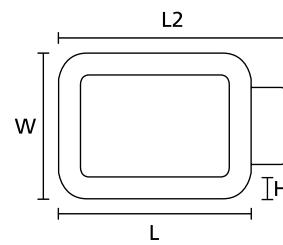
**Material specifications: See Article-No. on our website.**



Cradle clamp (front view)



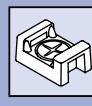
Cradle clamp (plan view)



Retaining ring R1-3

TYPE	Width (W)	Length (L)	Length (L2)	Height (H)	Radius (R)	Hole Ø (FH)	Material	Colour	Article-No.
<b>C1</b>	12.7	22.0	-	14.0	6.3	4.8	PA6HIR	Black (BK)	201-10010
<b>C2</b>	12.7	35.0	-	18.0	11.0	4.8	PA6HIR	Black (BK)	201-10020
<b>C3</b>	12.7	48.0	-	25.0	17.5	4.8	PA6HIR	Black (BK)	201-10030
<b>R1</b>	23.8	16.0	22.0	3.2	-	-	PVC	Black (BK)	201-20010
<b>R2</b>	23.8	22.0	29.0	3.2	-	-	PVC	Black (BK)	201-20020
<b>R3</b>	23.8	33.0	39.0	3.2	-	-	PVC	Black (BK)	201-20030

All dimensions in mm. Subject to technical changes.

**Strain relief clips****Klam-Klip (KK)**

Strain relief clips for gripping cables up to 8.5 mm bundle diameter. Strain relief clip is simply attached to mounting surface with an M4 fixing screw.

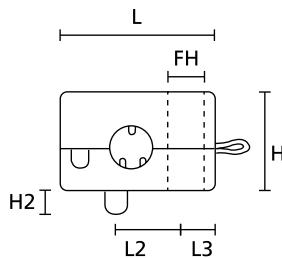
**Features and benefits**

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



Strain relief Klam-Klip in application.

**Material specifications: See Article-No. on our website.**



Klam-Klip (side view)



Klam-Klip (plan view)

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

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## Harness clip for heavy duty applications, for screws or threaded bolts

### Standard torque mounts

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.

**Material specifications: See Article-No. on our website.**

TYPE	Drawing	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
<b>HDM19</b>		19.3	36.3	16.7	4.7	12.7	PA66HIRHSUV	Black (BK)	100 pcs.	151-00134
<b>HDM25</b>		19.3	36.3	16.7	6.2	12.7	PA66HIRHSUV	Black (BK)	100 pcs.	151-00437
<b>HDM312</b>		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. Other packaging options may also be available.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

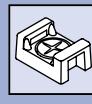
### Medium torque mounts

TYPE	Drawing	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
<b>HDM321</b>		24.0	46.0	20.7	8.31	12.7	PA66HIRHSUV	Black (BK)	500 pcs.	151-07100
<b>HDM401</b>		24.0	46.0	20.7	10.29	12.7	PA66HIRHSUV	Black (BK)	500 pcs.	151-07300
<b>HDM501</b>		24.0	46.0	20.7	12.7	12.7	PA66HIRHSUV	Black (BK)	500 pcs.	151-07500
<b>CTMM6B</b>		24.0	38.0	15.7	6.1	13.5	PA66HIRHS ST	Black (BK)	250 pcs.	151-03309
<b>CTMSBM8</b>		23.9	38.0	16.0	8.0	13.5	PA66HIRHS	Black (BK)	250 pcs.	151-03417
<b>CTMM8</b>		24.0	38.0	16.0	8.2	13.5	PA6GF30	Black (BK)	250 pcs.	151-03953
<b>CTMM8B</b>		24.0	38.0	15.7	8.1	13.5	PA66HIRHS ST	Black (BK)	250 pcs.	151-03333

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



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



**Harness clip for heavy duty applications, for screws or threaded bolts**

**High torque mounts**

TYPE	Drawing	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
<b>HDM320</b>		25.0	47.0	20.7	8.31	12.7	PA66HIRHSUV	Black (BK)	500 pcs.	151-02094
<b>HDM400</b>		25.0	47.0	20.7	10.29	12.7	PA66HIRHSUV	Black (BK)	500 pcs.	151-01224
<b>HDM500</b>		25.0	47.0	20.7	12.7	12.7	PA66HIRHSUV	Black (BK)	500 pcs.	151-02096
<b>HDM375BDM4W-R</b>		34.1	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.



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## Two way saddle mount for heavy duty applications, for parallel separation

### for screws or studs

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.

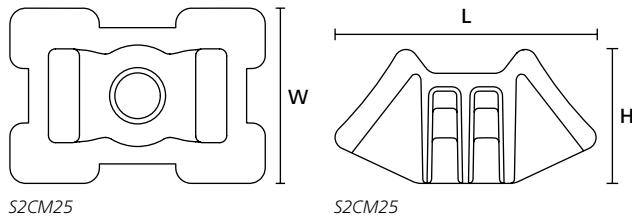
#### Features and benefits

- 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
- S2HM25 can be used with hex head screws 6.35



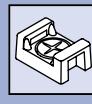
This saddle mount is installed between two bundles to separate them and prevent chafing and wear.

**Material specifications: See Article-No. on our website.**



TYPE	Drawing	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
S2CM25		30.0	45.0	23.0	6.0 6.35	13.5	PA66HIRHS	Grey (GY)	500 pcs.	151-29400
S2HM25		30.0	45.0	23.0	6.0 6.35	13.5	PA66HIRHSUV	Black (BK)	500 pcs.	151-29403
DCTMM8		23.9	52.0	15.5	8.3	13.5	PA6GF30	Black (BK)	150 pcs.	151-03955
DCTMM6B		23.9	52.0	15.5	M6	13.5	PA66HIRHS ST	Black (BK)	100 pcs.	151-04125
DCTMSBM8		23.9	52.0	15.5	8.3	13.5	PA66HIRHS	Black (BK)	150 pcs.	151-03954
DCTMM8B		23.9	52.0	15.5	M8	13.5	PA66HIRHS ST	Black (BK)	150 pcs.	151-04446

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

**Harness clip for heavy duty applications, for screws or threaded bolts for edges****SA-Series**

This axial oval mount stands off bundles from frame rails and cross members to prevent them from rubbing and chafing. They can be perfectly used in combination with heavy duty cable ties up to 12.7 mm width – ideal to securely fix cables and wires in the railway and shipbuilding industry as well as in truck and agricultural vehicle construction.

**Features and benefits**

- Guides bundles securely above sharp edges
- For threaded bolts or screws
- Can be used in combination with heavy duty cable ties
- For cable ties up to 12.7 mm width



Axial oval mounts stand off bundles from frame rails and cross members to prevent them from rubbing and chafing.

**Material specifications: See Article-No. on our website.**

TYPE	Drawing	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
SAM83		26.0	34.0	35.0	8.0	12.7	PA66HIRHS	Grey (GY)	500 pcs.	151-29600
SAOM82		26.0	34.0	35.0	8.0	12.7	PA66HIRHSUV	Black (BK)	500 pcs.	151-29701
SAM320B-R		25.0	29.9	44.9	8.31	12.7	PA66HIRHSUV	Black (BK)	500 pcs.	151-02099
SAM400B-R		25.0	29.9	44.9	10.29	12.7	PA66HIRHSUV	Black (BK)	500 pcs.	151-02102

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



## Heavy duty mounts for 3-way routing

### for screws or studs

These 3-way routing saddle mounts are designed to secure up to three bundles for multiple routing and reduce chaving or wear to those bundles. Applicable for various applications within the OEM, mass transit, defence or heavy truck and automotive markets.

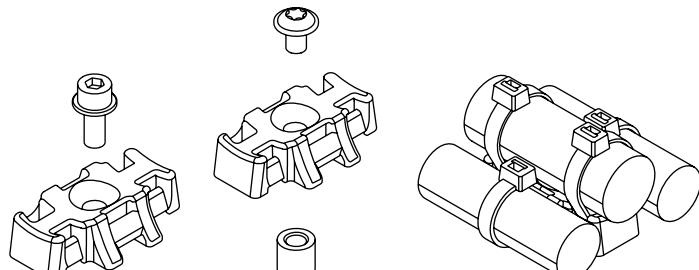
#### Features and benefits

- For parallel routing of bundles
- Secure alignment to the bundle due to H-design
- Easy maintenance of bundle by simply changing cable tie
- Cable tie head can be moved after bundling



S3SB15CBM8 and S3CBM8.

**Material specifications: See Article-No. on our website.**



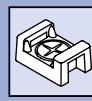
Suitable for external cylindrical hexagonal bolts M8

Suitable for welding studs (M8 internal bore & outer diameter 15 mm)

Example of a possible 3-way transfer

TYPE	Drawing	Width (W)	Length (L)	Height (H)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
<b>S3CBM8</b>		46.0	70.0	18.6	9.0	PA6GF30	Black (BK)	500 pcs.	151-01040
<b>S3SB15CBM8</b>		46.0	70.0	18.6	9.0	PA6GF30	Black (BK)	500 pcs.	151-01010
<b>S3SBM8</b>		46.0	70.0	18.0	9.0	PA66HIRHS	Black (BK)	500 pcs.	151-02092

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



## 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

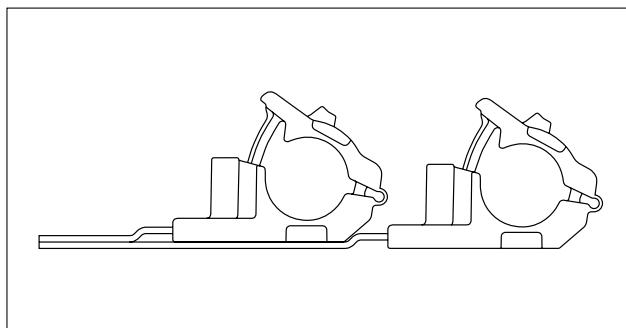


Ratchet P-Clamp - A more versatile way to mount and clamp cables.

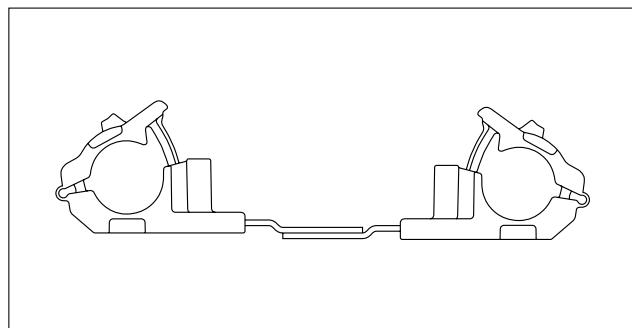
## Multiple configurations

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

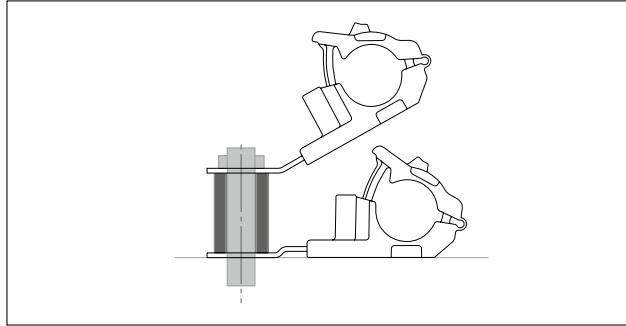
below just a few of the nearly endless number of configurations you can arrange by mixing Ratchet P-Clamps of varying sizes and different mounting plates.



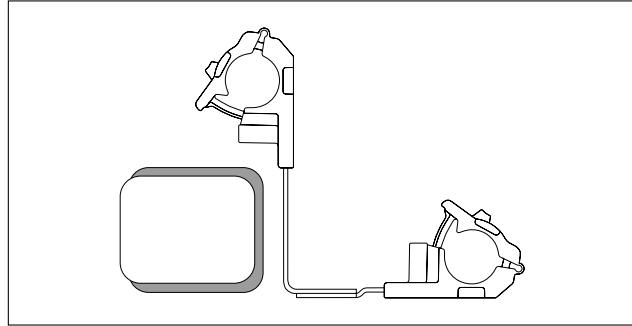
You can piggy-back Ratchet P-Clamps by using different length mounting plates to secure parallel cable configurations.



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.



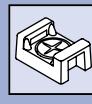
For bundle diameters from 6.2 mm to 13.7 mm, A-Series

TYPE	Drawing	Width (W)	Length (L2)	Bundle Ø min.	Bundle Ø max.	Hole Ø (FH)	Fixing Hole Centres (F)	Variant	Material	Colour	Article-No.
<b>RCA180LM6</b>		34.9	134.1	6.2	13.7	6.5	101.5	Long	PA66HIRHSUV ST ZN	Black (BK)	151-01639
<b>RCA180MM6</b>		34.9	105.1	6.2	13.7	6.5	72.5	Medium	PA66HIRHSUV ST ZN	Black (BK)	151-01638
<b>RCA180SM6</b>		34.9	83.1	6.2	13.7	6.5	50.5	Short	PA66HIRHSUV ST ZN	Black (BK)	151-01637
<b>RCA180SM8</b>		34.9	83.1	6.2	13.7	8.31	50.5	Short	PA66HIRHSUV ST ZN	Black (BK)	151-01416
<b>RCA90LM8</b>		34.9	96.8	6.2	13.7	8.31	24.9	Long	PA66HIRHSUV ST ZN	Black (BK)	151-01437
<b>RCA90SM6</b>		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.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



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.
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
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.



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## 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.



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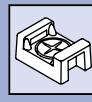
## For bundle diameters from 36.0 mm to 51.0 mm, D-Series

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.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## 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.

### 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



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

**Material specifications: See Article-No. on our website.**

TYPE	Width (W)	Bundle Ø min.	Bundle Ø max.	Description	Material	Colour	Article-No.
<b>RCINSERTA</b>	13.1	3.2	10.7	For A-Series	TPE	Black (BK)	151-01530
<b>RCINSERTB</b>	20.0	8.7	15.5	For B-Series	TPE	Black (BK)	151-01531
<b>RCINSERTC</b>	33.8	15.4	32.0	For C-Series	TPE	Black (BK)	151-01532
<b>RCD-CT-INSERT</b>	34.9	34.0	47.0	For convoluted tubes, D-Series	PA666V0	Black (BK)	151-02964
<b>RCINSERTD</b>	50.8	32.0	47.0	For D-Series	TPE	Black (BK)	151-01533

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

## 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.

TYPE	Material	Colour	Article-No.
<b>RCTT</b>	PA66HIRHSUV	Black (BK)	151-01529

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## Heavy duty cable clamps

### screwable, Inline Ratchet Clamps

The Inline Ratchet Clamp family is a perfect fit when facing space constraints or where offset mounting options are not ideal. Easily twists onto existing threaded rods, eliminating the need for additional hardware. 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 allows the clamp to be reused without removing or replacing any bolts or screws.

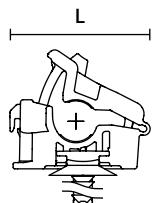
### Features and benefits

- Building on the Ratchet P-Clamp family, the Center Mount Ratchet Clamp (CMRC) family offers fast and versatile installation of lines, hoses and cables
- Designed for applications where space is limited or when a staggered mounting option is not ideal
- Depending on the variant, the CMRC can be screwed on with an M6/M8/M10 screw or attached to an M8 threaded bolt
- The variants for bolt attachment enable time-saving installation with a reliable hold



The Inline Ratchet Clamp family is a perfect fit when facing space constraints.

### Material specifications: See Article-No. on our website.



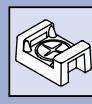
In-Line Ratchet P-Clamp

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Bundle Ø min.	Bundle Ø max.	Material	Colour	Article-No.
<b>CMRCBBL6</b>	35.1	86.1	30.4	6.3	12.7	19.6	PA66HIRHSUV	Black (BK)	151-03540
<b>CMRCCSMM6</b>	35.1	125.3	30.4	-	19.3	36.1	PA66HIRHSUV	Black (BK)	151-03555
<b>CMRCCSMM8</b>	35.1	125.3	30.4	-	19.3	36.1	PA66HIRHSUV	Black (BK)	151-03556
<b>CMRCCCLM6</b>	35.1	125.3	30.4	6.3	19.3	36.1	PA66HIRHSUV	Black (BK)	151-03550
<b>CMRCCHM6</b>	35.1	125.3	30.4	7.1	19.3	36.1	PA66HIRHSUV	Black (BK)	151-03547
<b>CMRCDHM10</b>	35.1	149.7	30.4	11.2	36.1	50.8	PA66HIRHSUV	Black (BK)	151-03560

All dimensions in mm. Subject to technical changes.



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## Aluminium P-Clamps

### Alu-P-Clamp with / without chloroprene insert

Manufactured from a high quality aluminium, these metal P-Clamps provide flexibility whilst providing a permanent fixing in the most arduous of environments. The addition of a chloroprene insert provides the cable or pipe bundle with a high degree of protection against vibration, reducing noise and also providing electrical isolation. They are commonly used in caravan construction, the defence and railway industry as well as in the renewable energy sector.

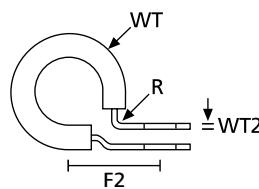
#### Features and benefits

- Simple and secure pipe or cable fixation
- Can be combined with chloroprene rubber for vibration resistance
- Ideal for use in high temperature applications
- Suitable for applications needing strength of metal components

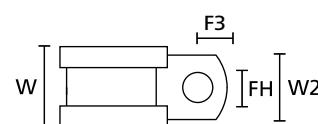


P-Clamps manufactured in polyamide, aluminium or aluminium with a chloroprene insert.

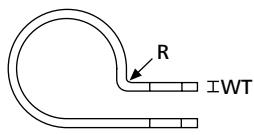
**Material specifications: See Article-No. on our website.**



ALU\_C P-Clamp with chloroprene insert (side view)



ALU\_C P-Clamp with chloroprene insert (plan view)



ALU P-Clamp (side view)



ALU P-Clamp (plan view)

TYPE	Drawing	Wall (WT2)	Hole Ø (FH)	Fixing Hole Centres (F2)	Fixing Hole Centres (F3)	Bundle Ø max.	Material	Colour	Article-No.
ALU4C		0.8	5.2	11.6	5.5	3.2	AL CR	Black (BK)	211-15040
ALU6C		0.8	5.2	13.4	5.5	6.4	AL CR	Black (BK)	211-15060
ALU8C		0.8	5.2	15.0	5.5	9.5	AL CR	Black (BK)	211-15080
ALU12C		1.3	5.2	19.9	5.5	15.9	AL CR	Black (BK)	211-15120
ALU16C		1.3	5.2	23.1	5.5	22.2	AL CR	Black (BK)	211-15160
ALU19C		1.3	5.2	25.5	5.5	27.0	AL CR	Black (BK)	211-15190
ALU23C		1.6	5.2	29.4	5.5	33.3	AL CR	Black (BK)	211-15230
ALU4		-	5.2	11.6	5.5	6.4	AL	Natural (NA)	211-10040
ALU6		-	5.2	13.4	5.5	9.5	AL	Natural (NA)	211-10060

All dimensions in mm. Subject to technical changes.



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## Plastic P-Clamps

### HP-Series

For permanent or semi-permanent cable fixings this range of plastic P-Clamps 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.

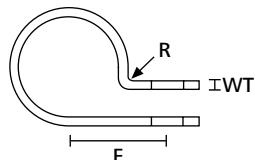
#### Features and benefits

- Manufactured from Polyamide
- Good temperature resistance and high strength
- Wide range of sizes for every application
- Can be used without cable ties



P-Clamps H1P - H18P in different dimensions.

**Material specifications: See Article-No. on our website.**



P-Clamp H1P - H18P (side view)



P-Clamp H1P - H18P (plan view)

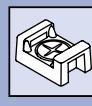
TYPE	Hole Ø (FH)	Fixing Hole Centres (F)	Bundle Ø max.	Material	Colour	Article-No.
<b>H1P</b>	4.2	8.5	3.2	PA66HS	Black (BK)	211-60000
<b>H2P</b>	4.2	9.5	5.0	PA66HS	Black (BK)	211-60001
<b>H3P</b>	4.2	10.0	6.5	PA66HS	Black (BK)	211-60002
<b>H4P</b>	4.2	10.0	8.0	PA66	Natural (NA)	211-60049
	4.2	10.0	8.0	PA66HS	Black (BK)	211-60003
<b>H5P</b>	4.2	11.0	9.5	PA66	Natural (NA)	211-60059
	4.2	11.0	9.5	PA66HS	Black (BK)	211-60004
<b>H6P</b>	4.2	13.0	11.0	PA66	Natural (NA)	211-60069
	4.2	13.0	11.0	PA66HS	Black (BK)	211-60005
<b>H7P</b>	4.2	14.0	12.5	PA66HS	Black (BK)	211-60006
<b>H8P</b>	4.2	15.0	14.0	PA66HS	Black (BK)	211-60007
<b>H9P</b>	4.2	16.0	16.0	PA66HS	Black (BK)	211-60008
<b>H10P</b>	4.2	17.0	17.5	PA66HS	Black (BK)	211-60009
<b>H11P</b>	4.2	18.0	19.0	PA66	Natural (NA)	211-60119
<b>H12P</b>	4.2	19.0	20.5	PA66	Natural (NA)	211-60129
<b>H13P</b>	5.2	20.5	22.0	PA66	Natural (NA)	211-60139
<b>H14P</b>	5.2	21.5	24.0	PA66	Natural (NA)	211-60149
<b>H15P</b>	5.2	23.0	25.5	PA66	Natural (NA)	211-60159
<b>H16P</b>	5.2	24.0	28.5	PA66	Natural (NA)	211-60169
<b>H18P</b>	5.2	27.5	35.0	PA66	Natural (NA)	211-60189

All dimensions in mm. Subject to technical changes.



**EN 5545-2**

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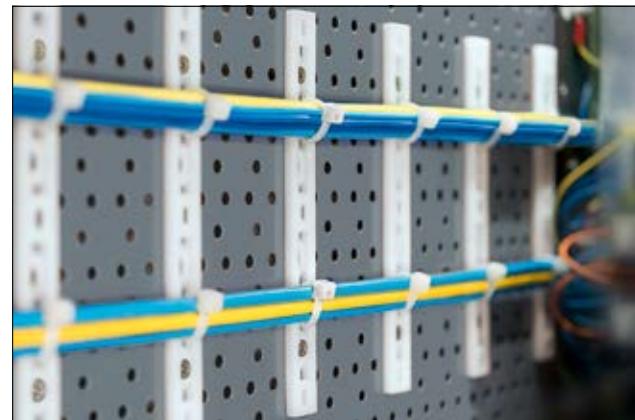
## Mounting plates for screw fixing

### MP-Series for parallel bundling

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

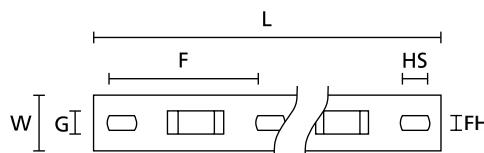
#### Features and benefits

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

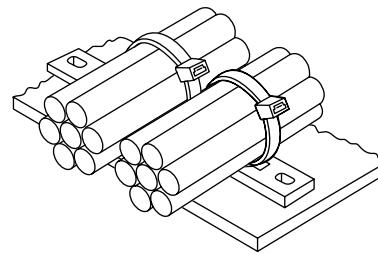


Screwable mounting plate MSMP.

**Material specifications: See Article-No. on our website.**



Mounting plates MP and MSMP (plan and side view)



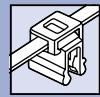
Mounting plates in application

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	No. of bundles	Material	Colour	Pack Cont.	Article-No.
<b>MP2M3</b>	12.7	76.2	3.2	3.7	5.2	2	PA66	Natural (NA)	100 pcs.	151-24219
<b>MP3M3</b>	12.7	108.0	3.2	3.7	5.2	3	PA66	Natural (NA)	100 pcs.	151-24319
<b>MP4M3</b>	12.7	139.8	3.2	3.7	5.2	4	PA66	Natural (NA)	100 pcs.	151-24419
<b>MSMP6/6</b>	15.7	243.0	5.3	3.8	7.6	6	PA66	Natural (NA)	100 pcs.	151-25619
<b>MSMP5/10</b>	15.8	204.5	5.3	5.1	7.6	5	PA66	Natural (NA)	100 pcs.	151-25519
<b>MSMP4</b>	15.9	167.0	5.2	5.1	8.2	4	PA66	Natural (NA)	500 pcs.	150-83499

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



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## 1-piece fixing ties for edges

### EdgeClip-Series

The S50SOSEC1.5-4.0 mm is a one-piece fastening tie for edges, designed for fast and secure cable bundling directly on panel edges. It is suitable for edge thicknesses from 1.5 to 4.0 mm and can be mounted both parallel and perpendicular to the edge - offering a high degree of flexibility during installation.

The integrated PFAS-free spring steel clamp ensures a firm hold on various edge geometries without the need for additional fasteners. The product can be installed easily by hand or automatically. Ergonomic and controlled installation to protect workers and increase efficiency meets USCAR installation force requirements.

Made from sustainable polypropylene (PP) and featuring an anti-slip engraving, the S50SOSEC supports secure cable routing even in the event of vibrations while contributing to a reduced environmental footprint.

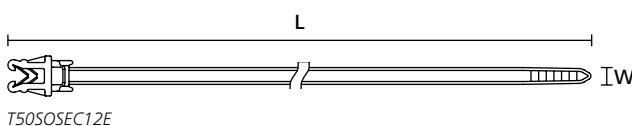
#### Features and benefits

- Can be installed straight or perpendicular to the edge
- PFAS-free spring steel clip
- Made from PP – lightweight, chemically resistant, and with a 55% lower carbon footprint compared to PA66
- Can be attached by hand and can also be automated with our tools
- Anti-slip engraving prevents the cable from moving during vibrations or transportation
- Ergonomic design with a 55% lower assembly force and  $\leq 30$  N compared to similar products – supports employee health, improves ease of use, and enhances assembly efficiency
- Meets USCAR mounting force requirements for safe and standardized installations



Ergonomically designed one-piece fastening tie with 100% PFAS-free EdgeClip and anti-slip engraving — allows  $\leq 30$  N insertion forces for efficient processing, can be rotated around the cable, yet stays securely fixed in position along the harness.

#### Material specifications: See Article-No. on our website.



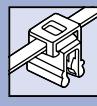
T50SOSEC12E

TYPE	Drawing	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Article-No.
S50SOSEC1.5-4TVE		1.5 - 4.0	5.5	160.0	30.0	200	PP C755	BK, SR	126-00465
S50SOSEC1.5-4.0SVE		4.0 - 1.5	5.5	157.0	30.0	200	PP C755	BK, SR	126-00471

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## 1-piece fixing ties for edges

### EdgeClip series

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.

The silver-grey clamp, the heart of our EdgeClips, consists of doubletempered spring steel in accordance with DIN EN 10132-4 C75S. The spring steel gives the clamp both the necessary rigidity to provide high pull-off forces and also sufficient flexibility for various possible applications.

The double coating is applied initially with a zinc plate system followed by inorganic surface sealing. Naturally, no chromium (VI) is used in this process. The clamp therefore complies with the current EU Directive 200/53/EC on end of life vehicles and the prohibition on heavy metals. The refined spring-steel clamp also fulfils the requirements for resistance to salt spray stipulated in DIN EN ISO 9227 NSS (min. 840 h without corrosion of base metal) and DIN EN ISO 6270-Z-CH (min. 720 h without corrosion of base material).

This solution has therefore been approved by many OEMs for exposed installation locations, e.g. in engine compartments and the running-gear area.

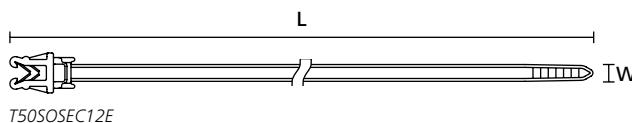


1-Piece Fixing Tie T50SOSEC12 can be pushed easily on edges.

**Material specifications: See Article-No. on our website.**

### Features and benefits

- Easy assembly, just clip on per hand
- For edges of 1 - 3 mm, 1.5 - 4 mm, 3 - 6 mm, 4 - 6 mm or 6 - 8 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



TYPE	Drawing	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T50SOSEC12E		1.0 - 3.0	4.6	160.0	35.0	150	PA46	GY	1-2;4-7;25	126-00253
		1.0 - 3.0	4.6	160.0	35.0	180	PA66HS	BK	1-2;4-7;25	148-00200
T50SOSEC13E		1.0 - 3.0	4.6	160.0	35.0	180	PA66HS	BK	1-2;4-7;25	126-00000
T40XEC5SP-E		1.0 - 3.0	4.0	85.0	15.0	178	PA66HS	BK	1-2;4-5;25	133-00059

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



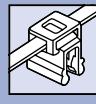
## 1-piece fixing ties for edges

### EdgeClip series

TYPE	Drawing	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
<b>T50SOSEC34E</b>		1.0 - 3.0	4.6	155.0	35.0	180	PA66HS	BK	1-2;4-7;25	126-00426
<b>T50SOSEC20-E</b>		3.0 - 6.0	4.6	150.0	35.0	180	PA66HS	BK	1-2;4-5;25	126-00235

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)

**2-piece fixing ties for edges****EdgeClip-Series, 0.5 - 2.5 mm, top fixing**

These cable ties and EdgeClip assemblies are ideal for use where holes are not acceptable or where adhesives will fail due to temperature problems. These assemblies are widely used for fixing and bundling cables, pipes and hoses within the automotive industry, harness making, panel building and electrical industry. These EdgeClips are specially designed for applications where space is limited such as in mirrors and headlights.

**Features and benefits**

- For flat edges
- For thin edges 0.5 - 2.5 mm
- Small housing for limited space
- Pre-assembled 2-piece fixing tie with EdgeClip
- Cable tie head can be moved after bundling



T30ROSECO,5-2,5SPV for application on thin edges.

**Material specifications: See Article-No. on our website.**

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
<b>T30ROSECO,5-2,5TP-SD</b>		3.4	145.0	30.0	133	PA66HS PA66HIRHS	BK	1-2;4-5;25	156-01543
<b>T30ROSECO,5-2,5TPVA</b>		3.4	145.0	30.0	133	PA66HS PA66HIRHS	BK	1-2;4-5;25	156-01542

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 25=EVOut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)

**EdgeClip-Series, 0.5 - 2.5 mm, side fixing**

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
<b>T30ROSECO,5-2,5SP-SVA</b>		3.4	145.0	30.0	133	PA66HS PA66HIRHS	BK	1-2;4-5;25	156-01797
<b>T30ROSECO,5-2,5SP-SVB</b>		3.4	145.0	30.0	133	PA66HS PA66HIRHS	BK	1-2;4-5;25	156-01546

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 25=EVOut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## 2-piece fixing ties for edges

### EdgeClip-Series, 1.0 - 3.0 mm, top fixing

These cable ties and EdgeClip assemblies are ideal for use where holes are not acceptable or where due to temperature problems adhesives will fail. These assemblies are widely used for fixing and bundling cables, pipes and hoses within the automotive industry, harness making, panel building and electrical industry.

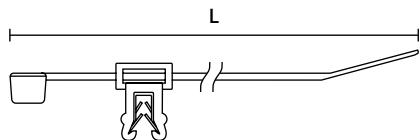
#### Features and benefits

- 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



Edge Clip 10 (EC10) fitted onto a plastic panel to hold a Ø 6 mm harness.

**Material specifications: See Article-No. on our website.**



Fixing Tie with Edge Clip

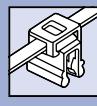
TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T30REC4A		3.6	148.0	33.0	135	PA66HS PA66HIRHS	BK	1-2;4-5;25	150-76090
T50SOSEC4A		4.6	150.0	35.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	150-76093
T50ROSEC4A		4.6	200.0	45.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	150-76099
T50REC4A		4.6	200.0	45.0	225	PA66W	BK	1-2;4-7;25	156-00570
S50ROSEC4A		4.6	202.0	45.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	150-76091
		4.9	200.0	45.0	185	PP PA66HIRHS	BK	5	156-03575
T30REC4B		3.6	148.0	35.0	135	PA66HS PA66HIRHS	BK	1-2;4-5;25	150-76080
T50SOSEC4B		4.6	150.0	35.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	156-00109
T50ROSEC4B		4.6	200.0	45.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	150-76079
S50ROSEC4B		4.9	200.0	45.0	185	PP PA66HIRHS	BK	5	156-03580
		4.9	200.0	45.0	185	PP PA66HIRHS	BK, BN	5	156-03589

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)

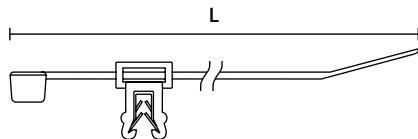


Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

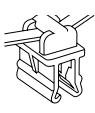


## 2-piece fixing ties for edges

EdgeClip-Series, 1.0 - 3.0 mm, top fixing



Fixing Tie with Edge Clip

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T18REC10SD		2.5	100.0	22.0	80	PA66HS PA66HIRHS	BK	1-2;4-5;25	155-38304
T50SOSEC10		4.6	150.0	31.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	156-00015
T50ROSEC10		4.6	200.0	45.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	156-05904
S50ROSEC10		4.9	200.0	45.0	185	PP PA66HIRHS	BK	5	156-03574
T18REC9SD		2.5	100.0	22.0	80	PA66HS PA66HIRHS	BK	1-2;4-5;25	155-37104
T50SOSEC9SD		4.6	150.0	31.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	156-00019
T50ROSEC9		4.6	200.0	45.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	156-05903
T50REC9		4.6	202.0	45.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	156-01280
S50ROSEC9		4.9	200.0	45.0	185	PP PA66HIRHS	BK	5	156-03579

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## 2-piece fixing ties for edges

### EdgeClip-Series, 1.0 - 3.0 mm, side fixing

These cable ties and EdgeClip assemblies are ideal for use where holes are not acceptable or where due to temperature problems adhesives will fail. These assemblies are widely used for fixing and bundling cables, pipes and hoses within the automotive industry, harness making, panel building and electrical industry.

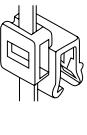
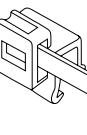
#### Features and benefits

- 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.

**Material specifications: See Article-No. on our website.**

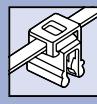
TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T30REC5A		3.6	148.0	33.0	135	PA66HS PA66HIRHS	BK	1-2;4-5;25	156-00003
T50SOSEC5A		4.6	150.0	31.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	150-40593
T50ROSEC5A		4.6	200.0	45.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	150-40591
S50ROSEC5A		4.9	200.0	45.0	185	PP PA66HIRHS	BK	5	156-03573
T50SOSEC5B		4.6	150.0	31.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	150-40583
T50REC5B		4.6	200.0	45.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	150-40582
T50ROSEC5B		4.6	200.0	45.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	150-40581
S50ROSEC5B		4.9	200.0	45.0	185	PP PA66HIRHS	BK	5	156-03583
T18REC21		2.5	100.0	18.0	80	PA66W PA66HIRHS	BK	1-2;4-5;25	156-01231
T50SOSEC21		4.6	150.0	35.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	156-00017
T50ROSEC21		4.6	200.0	45.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	156-00010
T80REC21		4.7	205.0	55.0	355	PA66HS PA66HIRHS	NA, BK	1-2;4-5;25	156-01728
S50ROSEC21		4.9	200.0	45.0	185	PP PA66HIRHS	BK	5	156-03572
T50ROSEC22		4.6	200.0	45.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	156-00011
S50ROSEC22		4.9	200.0	45.0	185	PP PA66HIRHS	BK	5	156-03582

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**2-piece fixing ties for edges****EdgeClip-Series, 3.0 - 6.0 mm, top fixing**

These cable ties and EdgeClip assemblies are ideal for use where holes are not acceptable or where due to temperature problems adhesives will fail. These assemblies are widely used for fixing and bundling cables, pipes and hoses within the automotive industry, harness making, panel building and electrical industry.

**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



Fixing Tie with EdgeClip for thick edges.

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

**Material specifications: See Article-No. on our website.**

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T18ROSEC19		2.5	100.0	20.0	80	PA66HS PA66HIRHS	BK	1-2;4-5;25	156-04600
T50SOSEC19		4.6	150.0	35.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	156-04601
T50ROSEC19		4.6	200.0	45.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	156-04602
S50ROSEC19		4.9	200.0	45.0	185	PP PA66HIRHS	BK	5	156-03578
T50SOSEC20		4.6	150.0	35.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	156-00016
T50ROSEC20		4.6	200.0	45.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	156-00020
S50ROSEC20		4.9	200.0	45.0	185	PP PA66HIRHS	BK	5	156-03577

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

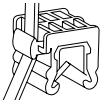
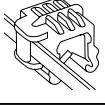
All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## EdgeClip series, 3.0 - 6.0 mm, side fixing

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T50ROSEC23		4.6	200.0	45.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	156-00006
S50ROSEC23		4.9	200.0	45.0	185	PP PA66HIRHS	BK	5	156-03576
T50ROSEC24		4.6	200.0	45.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	156-00007
S50ROSEC24		4.9	200.0	45.0	185	PP PA66HIRHS	BK	5	156-03584

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

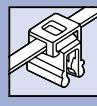
## 2-piece fixing ties for edges

## EdgeClip-Series, 6.0 - 8.0 mm, top fixing

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T50ROSEC6-8		4.6	200.0	45.0	225	PA66HS PA66HIRHS	BK	1-2;4-5;25	156-02700

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)

**2-piece fixing ties for edges****EdgeClip-Series, twistable**

These cable ties and EdgeClip assemblies are ideal for use where holes are not acceptable or where adhesives will fail due to temperature problems. These assemblies are widely used for fixing and bundling cables, pipes and hoses within the automotive industry, harness making, panel building and electrical industry.

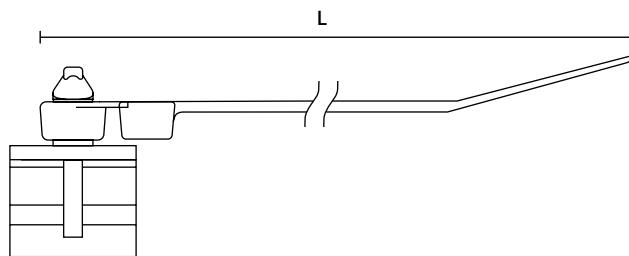
**Features and benefits**

- Pre-assembled 2-piece fixing tie with EdgeClip
- Easy to assemble by hand
- Cable tie head can be moved after bundling
- For edges of 1 – 2.5 mm or 1 – 3 mm
- Can be rotated to the desired position



EdgeClip CBTO50R, rotatable 90°.

**Material specifications: See Article-No. on our website.**



CBT30MR

TYPE	Drawing	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
CBT30MR		1.0 - 2.5	3.5	160.0	32.0	135	PA66HS POM	BK	1-2;4-5;25	156-00049
CBTO50R		1.0 - 3.0	4.6	202.0	47.0	225	PA66HS PA66HIRHS	BK	1-2;4-5;25	156-01601
CBTOS50RSTUD5		1.0 - 3.0	4.6	202.0	47.0	225	PA66HS PA66HIRHS	BK	1-2;4-5;25	156-00380

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 25=EVOCut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



### 3-piece fixing ties for edges

#### EdgeClip-Series, 1.5 – 4 mm

These cable ties and EdgeClip assemblies are ideal for parallel routing use where holes are not acceptable or where due to temperature problems adhesives will fail. These assemblies are widely used for fixing and bundling cables, pipes and hoses within the automotive industry, harness making, panel building and electrical industry.

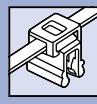
#### Features and benefits

- Pre-assembled 3-piece fixing tie with EdgeClip
- For parallel routing of two harnesses
- For minimum bundle diameters of 2 mm
- For edges of 1.5 – 4 mm



TYPE	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Article-No.
<b>T50ROSDEC1.5-4SP</b>	1.5 - 4.0	4.6	200.0	50.0	225	PA66HS PA66HIRHS	BK	156-03291

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



## 2-piece fixing ties for edges

### EdgeClip-Series, 1.0 - 3.0 mm

#### Features and benefits

- 2-piece fastening ties for edges for secure parallel routing of cable bundles
- Equipped with an integrated plastic side support for increased stability and surface contact
- Improved mechanical load distribution thanks to the additional molded support structure
- Designed for reliable hold during vibrations and movements
- Can be pushed onto the edge by hand
- Ideal for use in the automotive industry and in high-performance environments with demanding thermal and mechanical conditions thanks to the PA46



*Efficient edge mounting - the EdgeClip ensures reliable cable routing along the panel edges without drilling.*



TYPE	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Article-No.
<b>T50ROSDEC1-3SP</b>	1.0 - 3.0	4.6	200.0	12.4	225	PA46	GY	156-03960

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



## Fixing elements for edges

### for edges of 6.0 - 17 mm

Our Frame Clamp is useable for edges 6 - 17 mm. You can use this mount with cable ties or with the Fixing SFTP to route cables or harnesses. This article is perfectly made for heavy duty applications. With our EVO9 cable tie tool is the application very easy. The EVO9 tool ensures that the same tightening force is used each time the component is fitted, and the high-performance adhesive also supports the very good fit of the Frame Clamp.

#### Features and benefits

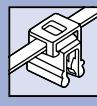
- For edges 6 - 17 mm
- for cables ties up to 8.3 mm width
- Recording suitable for Fixing SFTP
- For multible routing



TYPE	Panel Thickness	Width (W)	Height (H)	Material	Colour	Article-No.
<b>FrameClampBS-SET</b>	6.0 - 17.0	28.0	61.6	PA6GF15	Black (BK)	151-04249

Recommended Tools: 7=EVO9i. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes.



## Heavy duty harness clips

### Beam clamps / Wedge clips

Primarily designed for use in the automotive/truck industry, these parts can be used in a wide variety of industries and applications where bundles need mounting.

These heavy duty harness clips help to fix and secure cables, lines and hydraulic lines in truck, agriculture and railway vehicle construction, as well as in the ship building industry and industrial buildings.

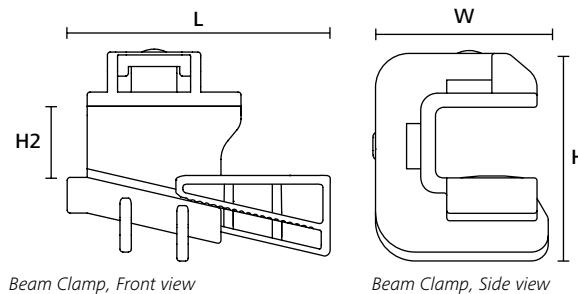
#### Features and benefits

- Easy to install
- No damage to surfaces
- Easy maintenance of bundle by simply changing cable tie
- Cable tie head can be moved after bundling
- Applicable to a wide range of panel thicknesses



Two-piece ratcheting wedge design allows for easy, positive-locking size adjustment.

**Material specifications: See Article-No. on our website.**



Beam Clamp, Front view

Beam Clamp, Side view

TYPE	Drawing	Panel Thickness	Width (W)	Length (L)	Height (H)	Height (H2)	Material	Colour	Article-No.
Beam Clamp D		5.5 - 7.0	28.6	46.2	36.7	12.5	PA6GF30	Black (BK)	151-00886
Beam Clamp B		7.0 - 8.5	28.6	46.2	36.7	12.5	PA6GF30	Black (BK)	151-00822
Beam Clamp C		8.5 - 10.5	28.6	46.2	36.7	12.5	PA6GF30	Black (BK)	151-00823
Beam Clamp D with foam		5.5 - 7.0	28.6	46.2	36.7	12.5	PA6GF30	Black (BK)	151-01188
Beam Clamp B with foam		7.0 - 8.5	28.6	46.2	36.7	12.5	PA6GF30	Black (BK)	151-01186
Beam Clamp C with foam		8.5 - 10.5	28.6	46.2	36.7	12.5	PA6GF30	Black (BK)	151-01187

All dimensions in mm. Subject to technical changes.



## Heavy Duty EdgeClip

### HDEC-Series for heavy duty applications

The new Heavy Duty EdgeClips are specifically designed for high-load applications in challenging environments such as truck manufacturing, wind energy systems, and industrial installations including steel construction and structural beams. Installation can be carried out using either a dead blow hammer or, for the HDEC-Pre versions, water pump or channel lock pliers, offering flexibility on-site. The design allows for parallel routing of up to three cables and lines, supporting organized and efficient cable management even under demanding conditions.

#### Features and benefits

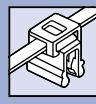
- PFAS-free metal clamp for environmentally conscious applications
- Supports up to three cable ties for secure multi-cable bundling
- Compatible with five panel thicknesses: 6–8 mm, 8–10 mm, 10–12 mm, 12–14 mm, and 14–16 mm
- Heavy-duty design ensures reliable performance in demanding environments



2-piece edge clip for heavy duty 14-16mm assembled

TYPE	Panel Thickness	Width (W)	Length (L)	Height (H)	Height (H2)	Material	Colour	Article-No.
<b>HDEC6-8</b>	6.0 - 8.0	30.0	40.0	36.0	23.0	PA6GF30 C75S	Black (BK)	156-03628
<b>HDEC6-8-PRE</b>	6.0 - 8.0	30.0	40.0	36.0	23.0	PA6GF30 C75S	Black (BK)	156-03631
<b>HDEC8-10</b>	8.0 - 10.0	31.0	40.0	36.0	23.0	PA6GF30 C75S	Black (BK)	156-03627
<b>HDEC8-10-PRE</b>	8.0 - 10.0	31.0	40.0	36.0	23.0	PA6GF30 C75S	Black (BK)	156-03632
<b>HDEC10-12</b>	10.0 - 12.0	33.0	40.0	36.0	23.0	PA6GF30 C75S	Black (BK)	156-03626
<b>HDEC10-12-PRE</b>	10.0 - 12.0	33.0	40.0	36.0	23.0	PA6GF30 C75S	Black (BK)	156-03633
<b>HDEC12-14</b>	12.0 - 14.0	35.0	40.0	36.0	23.0	PA6GF30 C75S	Black (BK)	156-03629
<b>HDEC12-14-PRE</b>	12.0 - 14.0	35.0	40.0	36.0	23.0	PA6GF30 C75S	Black (BK)	156-03634
<b>HDEC14-16</b>	14.0 - 16.0	37.0	40.0	36.0	23.0	PA6GF30 C75S	Black (BK)	156-03630
<b>HDEC14-16-PRE</b>	14.0 - 16.0	37.0	40.0	36.0	23.0	PA6GF30 C75S	Black (BK)	156-03635

All dimensions in mm. Subject to technical changes.

**Fixing elements for tubes and harnesses, for edges****EdgeClip-Series**

EdgeClips are used in the automotive industry and electrical industries and when it is impossible to drill holes or no other fixing points are available.

**Features and benefits**

- Releasable fixing elements with EdgeClip
- Low-vibration routing of bigger bundle diameters
- Clips to be pushed onto an edge
- To be closed single handed, a snap can be felt
- Bundles can be released at any time
- EC27: fixing element enables usage of smaller bundle diameter
- EC41: for parallel guidance of two bundles



EdgeClip cable and tube clips are suitable for the low-vibration routing of cables and tubes with larger bundle diameters.

**Material specifications: See Article-No. on our website.**

TYPE	Drawing	Panel Thickness	Attach to Ø	Material	Colour	Article-No.
EC27		1.0 - 3.0	15.0 - 22.0	PA66HIRHS	Black (BK)	151-00161
HCEC3.0SP-C		1.0 - 3.0	12.0 - 15.0	PA66HIRHS	Black (BK)	151-01863
EC1-3TL7OTP		1.0 - 3.0	6.5 - 8.5	PA66HIRHS	Black (BK)	151-02588
EC1-3SPDHC6-7		1.0 - 3.0	5.8 - 6.8	PA11 C75S	Black (BK)	151-04387
		1.0 - 3.0	5.8 - 6.8	PA66HSUV	Black (BK)	151-03846
		1.0 - 3.0	5.8 - 6.8	PA66HSUV	Black (BK)	151-04010
DLOC12EC3-6TP		3.0 - 6.0	11.8 - 12.4	PA66HIRHS	Black (BK)	151-04199
EC1-3SVDHC6-7		1.0 - 3.0	5.8 - 6.8	PA11 C75S	Black (BK)	151-04529
		1.0 - 3.0	5.8 - 6.8	PA66HSUV MET	Black (BK)	151-04209
		1.0 - 3.0	5.8 - 6.8	PA66HSUV MET	Black (BK)	151-04455

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



## Automatic bundling

### EdgeClip-Series for automatic cable tying systems

Clips to fix cables and harnesses in the automotive and white goods industry.

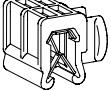
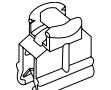
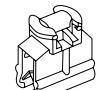
#### Features and benefits

- Optimized for use automatic cable tying systems
- Easy to apply
- The fixing elements can be tied automatically with Autotool System ATS



Automated clip application.

**Can be used with Automatic Cable Tying Systems on page 596.**

TYPE	Drawing	Panel Thickness	Width (W)	Length (L)	Height (H)	Material	Colour	Article-No.
ATSEC38		1.5 - 4.0	16.4	15.0	14.5	PA66HIRHS	Black (BK)	102-68380
ATSEC37		1.5 - 4.0	16.4	15.0	14.7	PA66HIRHS	Black (BK)	102-68370
ATSEC35		1.5 - 4.0	10.0	15.0	18.9	PA66HIRHS	Black (BK)	102-68350
ATSEC36		1.5 - 4.0	10.1	15.0	19.0	PA66HIRHS	Black (BK)	102-68360
ATSEC19		3.0 - 6.0	14.0	14.8	18.5	PA66HIRHS	Black (BK)	102-68390

All dimensions in mm. Subject to technical changes.

**2-Piece fixing ties with pipe clip, twistable 360°****for multiple routing****Features and benefits**

- Simply clip on a wire or hose
- Fixing clip offers full 360° rotation
- Routed cable can move in any direction in relation to the fixing point
- Inside serrated cable tie
- Made from PP/PA66HS: combines sustainability benefits of PP (lightweight, chemically resistant) with the robustness and heat stability of PA66HS

*T50SVC5 rotates in any direction.***Material specifications: See Article-No. on our website.**

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	Attach to Ø		Material	Colour	Tools	Article-No.
<b>T50SVC4S</b>		4.7	155.0	35.0	3.8 - 4.2	225	PA66HS PP	BK, NA	1-2;4-7;25	156-00318

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**2-Piece Fixing Ties with Pipe Clip, twistable 360°****for multiple routing**

These inside serrated fixing ties provide the opportunity to attach a wire or hose to an existing harness. Offering a full 360 degrees rotation, the wire/hose can be oriented in any direction in relation to the main harness.

**Features and benefits**

- Simply clip on a wire or hose
- Fixing clip offers full 360° rotation
- Routed cable can move in any direction in relation to the fixing point
- Inside serrated cable tie
- Made from PP/PA66HIRHS: combines sustainability benefits of PP (lightweight, chemically resistant) with the robustness and heat stability of PA66HIRHS



T50SVC5 rotates in any direction.

**Material specifications: See Article-No. on our website.**

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	Attach to Ø	N	Material	Colour	Tools	Article-No.
<b>T50SVC6.5</b>		4.7	155.0	35.0	6.5 - 8.0	222	PA66HS PA66HIRHS	BK	1-2;4-7;25	156-00155

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



## 2-piece fixing ties with pipe clip

### twistable 360°

These inside serrated fixing ties provide the opportunity to attach a wire or hose to an existing harness. Offering a full 360 degrees rotation, the wire/hose can be oriented in any direction in relation to the main harness.

#### Features and benefits

- simply clip onto a wire or hose
- Fixing clip offers full 360° rotation
- Routed cable can move in any direction in relation to the fixing point
- Inside serrated cable tie
- Ideally used in the Automotive Industry



*Cable tie combined with a 360° rotatable open clip that allows compensating movements and can be retrofitted to an already installed cable harness.*

### Material specifications: See Article-No. on our website.

TYPE	Drawing	Attach to Ø	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T50SVCOC10-14		10.0 - 14.0	4.7	155.0	35.0	222	PA46	GY	1-2;4-7;25	156-01045
T50SVCOC19-24.5		19.0 - 24.5	4.7	155.0	35.0	222	PA66HS PA66HIRHS	BK	1-2;4-7;25	156-00136

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



## 2-piece fixing ties with pipe clip

for multiple routing

### Features and benefits

- Ideal for adding cables to pre-assembled cable harnesses.
- The open clip design makes it easy to insert additional cables
- Flexible cable routing - parallel or reverse cable routing
- The integrated retaining tab holds the cables securely in the clip and helps to reduce rattling and vibration noises



**Material specifications: See Article-No. on our website.**

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	Attach to Ø	N	Material	Colour	Tools	Article-No.
<b>T50ROC1B</b>		4.6	202.0	45.0	4.0 - 10.0	225	PA66HS PA66HIRHS	BK	1-2;4-7;25	156-00306

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 6=ProCut 9 no battery, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



## 2-piece fixing ties with automatic harness clip

### IAHC-Series

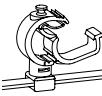
#### Features and benefits

- The cables activate the lock when they are pressed into the clamp, which enables quick, tool-free installation
- The free rotation between the clamp and the cable tie enables flexible positioning and optimised installation, even in difficult installation situations
- Supports different installation directions for maximum design flexibility
- IAHC = interconnectable automatic harness clip for multiple routing of cables and wires



T120R cable tie assembled with an IAHC.

**Material specifications: See Article-No. on our website.**

TYPE	Drawing	Attach to Ø	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
<b>T50RIAHC1TICR</b>		3.0 - 13.0	4.6	200.0	45.0	225	PA66HIRHS	BK	1-2:4-5;25	156-03377

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNP2, 5=EVO7i, 25=EVOCut. For more information on toolings please refer to the Application Tooling chapter on page 593.

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



## 2-piece fixing ties with fir tree

### for parallel routing

This Fixing Element is pressed into a hole by hand and locked into place with a hearable click. Cable bundles can be applied afterwards.

#### Features and benefits

- Pre-assembled 2-piece element with cable clip and cable tie for round holes
- For parallel routing of cables, hoses or harnesses
- Easy to install without the need for a tool
- Cable bundles can be applied afterwards
- For direct fixation
- Removable
- ERGO optimized footpart design, for reduced assembly forces



Two piece fixing tie with fir tree for round holes and with harness clip for cables 11.0 - 15.0mm.

**Material specifications: See Article-No. on our website.**

TYPE	Hole Ø (FH)	Attach to Ø	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Article-No.
<b>T50SHC11-15FT6.5</b>	6.1 - 7.0 6.35	1.0 - 30.0, 11.0 - 15.0	0.5 - 3.5	4.6	160.0	30.0	225	PA66HS PA66HIRHS	BK	156-03281

All dimensions in mm. Subject to technical changes. N = Minimum Loop Tensile Strength for Cable Ties (newton)



### Fixing elements for tubes and harnesses

#### for multiparallel routing

The clips are used to guide HV cables, harnesses and tubes. The products are designed to offer high stability within the application. The ratchet closure makes it possible to guide different cable diameters in parallel.

#### Features and benefits

- 2-way clip for bundling and securing cables, for oval holes
- For parallel / multiple routing
- can be used without cable ties due to clip function
- Ratchet function allows for different cable diameters
- Clip can be opened for maintenance purposes without damaging the clip



Fixing element for parallel routing of two harnesses or tubes (12.2 - 18.0mm).

**Material specifications: See Article-No. on our website.**

TYPE	Hole Ø (FH)	Panel Thickness	Bundle Ø min.	Bundle Ø max.	Width (W)	Length (L)	Height (H)	Material	Colour	Article-No.
<b>DHC12.2-18.2FTOVAL</b>	6.2 x 12.2 6.5 x 12.5 6.5 x 12.2	0.6 - 5.0	12.2	18.2	20.0	93.0	46.0	PA46	Grey (GY)	151-02966
	6.2 x 12.2 6.5 x 12.5 6.5 x 12.2	0.6 - 5.0	12.2	18.2	20.0	93.0	46.0	PA66HIRHS	Black (BK)	151-02965

All dimensions in mm. Subject to technical changes.



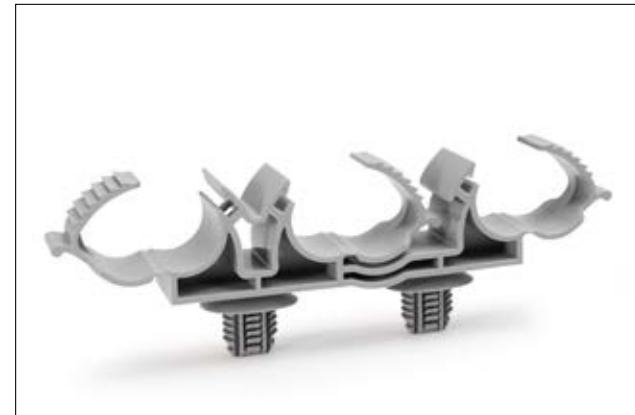
## Fixing elements for tubes and harnesses

### for multiparallel routing

The clips are used to guide HV cables, harnesses and tubes. The products are designed to offer high stability within the application. The ratchet closure makes it possible to guide different cable diameters in parallel.

#### Features and benefits

- 3-way clip for bundling and securing cables, for oval holes
- For parallel / multiple routing
- can be used without cable ties due to clip function
- Ratchet function allows for different cable diameters
- Clip can be opened for maintenance purposes without damaging the clip



Fixing element for parallel routing of three harnesses or tubes (12.2 - 18.2 mm).

**Material specifications: See Article-No. on our website.**

TYPE	Hole Ø (FH)	Panel Thickness	Bundle Ø min.	Bundle Ø max.	Width (W)	Length (L)	Height (H)	Material	Colour	Article-No.
<b>THC12.2-18.2FTOVAL</b>	6.2 x 12.2	0.6 - 5.0	12.2	18.2	20.0	139.0	46.0	PA46	Grey (GY)	151-02968
	6.5 x 12.5									
	6.5 x 12.2							PA66HIRHS	Black (BK)	151-02967
	6.2 x 12.2									
	6.5 x 12.5									
	6.5 x 12.2									

All dimensions in mm. Subject to technical changes.

**Fixing elements for multiple routing****with connecting element****Features and benefits**

- Quick and easy installation
- Secure cable management and strain relief
- Adaptable design for various cable sizes and types
- Competitive pricing and long-term cost savings
- Minimize cable damage and safety hazards, ensuring reliable and long-lasting solar installations
- Affordable upfront costs and reduced maintenance expenses over the products lifecycle
- Reduce installation time, while optimizing project efficiency and labor costs
- Made from bio-based PA11, derived from castor oil, this solution combines high performance with a significantly reduced environmental footprint

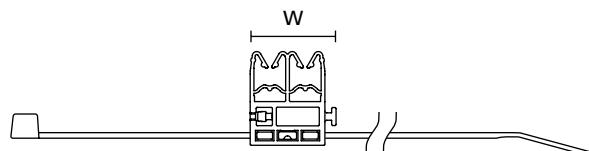


*QwicGrip, paired with a cable tie, offers dependable and efficient cable management for solar panels.*



*New innovative QwicGrip for fastening to e.g. solar rails with cable ties.*

**Material specifications: See Article-No. on our website.**



*This innovative new Qwicgrip can be easily combined with cable ties from our portfolio that are up to 8.8 mm wide.*

TYPE	Width (W)	Height (H)	Bundle Ø min.	Bundle Ø max.	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
<b>QGDHC5.2-8.0M</b>	23.0	25.1	5.2	8.0	8.8	PA11	Black (BK)	50 pcs.	151-04089
	23.0	25.1	5.2	8.0	8.8	PA66W	Black (BK)	50 pcs.	151-04088

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

**Snapper hose clips for tubes and harnesses****SNP-Series**

Our SNP range can be used as an alternative to 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.

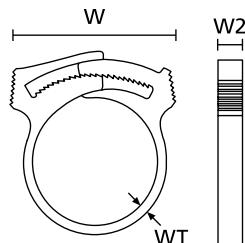
**Features and benefits**

- 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.

**Material specifications: See Article-No. on our website.**



SNP - Snapper Hose Clip (front view)

SNP Clip (side view)

TYPE	Bundle Ø min.	Bundle Ø max.	Width (W) min.	Width (W) max.	Width (W2)	Wall (WT)	Material	Colour	Article-No.
<b>SNP2(E)</b>	8.7	10.0	17.00	21.00	6.0	1.50	POM	Natural (NA)	191-10029
<b>SNP3(E)</b>	10.0	11.4	19.00	25.00	6.0	1.80	POM	Natural (NA)	191-10039
<b>SNP4(E)</b>	10.8	12.3	19.00	23.00	6.0	1.80	POM	Natural (NA)	191-10049
<b>SNP6(E)</b>	12.0	13.7	19.00	24.00	6.0	1.80	POM	Natural (NA)	191-10069
<b>SNP8(E)</b>	13.7	15.3	19.00	24.00	6.0	1.80	POM	Natural (NA)	191-10089
<b>SNP10(E)</b>	15.0	16.8	19.00	24.00	6.0	1.80	POM	Natural (NA)	191-10109
<b>SNP12(E)</b>	16.8	18.4	19.00	24.00	6.0	1.80	POM	Natural (NA)	191-10129
<b>SNP14(E)</b>	18.1	19.9	19.00	24.00	6.0	1.80	POM	Natural (NA)	191-10149
<b>SNP16</b>	19.3	21.5	19.00	24.00	6.0	1.90	POM	Natural (NA)	191-10169
<b>SNP20(E)</b>	22.7	24.7	20.00	26.00	6.0	1.80	POM	Natural (NA)	191-10209

All dimensions in mm. Subject to technical changes.