

1-Piece Fixing Ties for Edges

- EdgeClip-Family

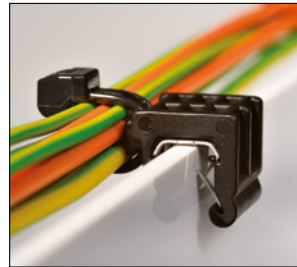
These cable ties and EdgeClip assemblies are ideal for use where holes are not acceptable or where, due to temperature problems, adhesives will fail. Once the cable tie is fastened around the cables the EdgeClip is presented ready for attaching to the panel. Widely used within the automotive and panel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

Features and Benefits

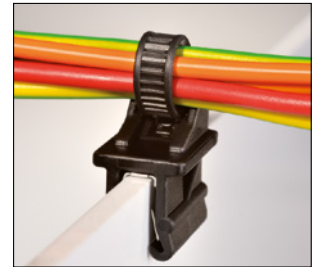
- Easy assembly by hand
- For edges of 1 – 3 mm or 3 – 6 mm
- Integrated metal clamp holds clip firmly in place
- Clamp consists of double tempered steel spring
- Ideal for applications where holes or adhesives are not suitable



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



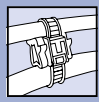
T50ROSEC23 - the cable bundle runs parallel with the edge.



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

The silver-grey clamp, the heart of our EdgeClips, consists of double-tempered 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.

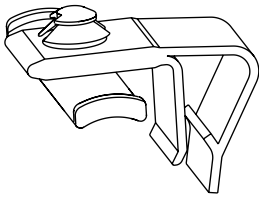


1-Piece Fixing Ties for Edges

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Features and Benefits

- Cable tie head always situated in defined position
- Suitable for minimum bundle diameters of 1 mm
- Outside serrated tie prevents bundle from being damaged
- For edges of 1 – 3 mm

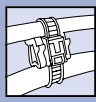


EdgeClips are also available on request for panelthickness from 4-7mm.

Material specification please see page 30.

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

All dimensions in mm. Subject to technical changes.



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

• EdgeClip-Family

Features and Benefits

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

Application tools
please see page 442.

Material specification
please see page 30.

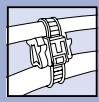
TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.		Material Cable Tie	Material Foot Part	Article-No.
T30REC4A		3.5	150.0	32.0	135	PA66HS	PA66HIRHS	150-76090
T50SOSEC4A		4.6	150.0	35.0	225	PA66HS	PA66HIRHS	150-76093
T50REC4A		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	150-76091
T50ROSEC4A		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	150-76099
T50ROSEC4A-W		4.6	200.0	45.0	225	PA66UV	PA66UV	156-00570
T30REC4B		3.5	150.0	32.0	135	PA66HS	PA66HIRHS	150-76080
T50SOSEC4B		4.6	150.0	35.0	225	PA66HS	PA66HIRHS	156-00109
T50ROSEC4B		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	150-76079
T18REC10SD		2.5	100.0	20.0	80	PA66HS	PA66HIRHS	155-38304
T50SOSEC10		4.6	150.0	31.0	225	PA66HS	PA66HIRHS	156-00015
T50ROSEC10		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	156-05904
T18REC9SD		2.5	100.0	20.0	80	PA66HS	PA66HIRHS	155-37104
T50SOSEC9SD		4.6	150.0	31.0	225	PA66HS	PA66HIRHS	156-00019
T50ROSEC9		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	156-05903

All dimensions in mm. Subject to technical changes.

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

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.		Material Cable Tie	Material Foot Part	Article-No.
T30REC5A		3.6	150.0	33.0	135	PA66HS	PA66HIRHS	156-00003
T50SOSEC5A		4.6	150.0	35.0	225	PA66HS	PA66HIRHS	150-40593
T50ROSEC5A		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	150-40591
T50SOSEC5B		4.6	150.0	31.0	225	PA66HS	PA66HIRHS	150-40583
T50REC5B		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	150-40582
T50ROSEC5B		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	150-40581
T50SOSEC21		4.6	150.0	35.0	225	PA66HS	PA66HIRHS	156-00017
T50ROSEC21		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	156-00010
T50ROSEC22		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	156-00011
		4.6	200.0	45.0	225	PA66UV	PA66HIRHS	156-00576

All dimensions in mm. Subject to technical changes.



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

- EdgeClip-Family

Features and Benefits

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

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

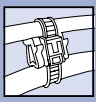
TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Material Cable Tie	Material Foot Part	Article-No.
T18ROSEC19		2.5	100.0	20.0	80	PA66HS	PA66HIRHS	156-04600
T50SOSEC19		4.6	150.0	31.0	225	PA66HS	PA66HIRHS	156-04601
T50ROSEC19		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	156-04602
T50SOSEC20		4.6	150.0	35.0	225	PA66HS	PA66HIRHS	156-00016
T50ROSEC20		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	156-00020

All dimensions in mm. Subject to technical changes.

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

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Material Cable Tie	Material Foot Part	Article-No.
T50ROSEC23		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	156-00006
T50ROSEC24		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	156-00007

All dimensions in mm. Subject to technical changes.

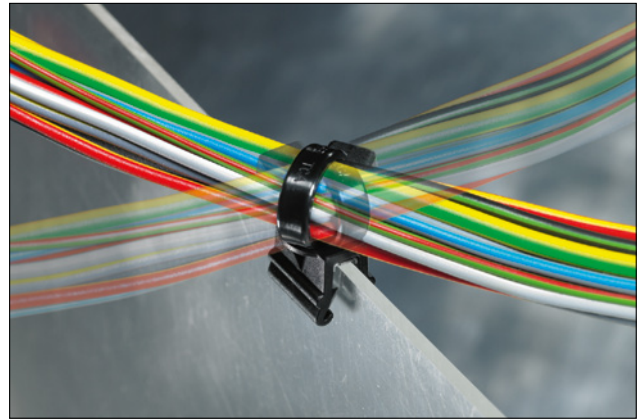


2-Piece Fixing Ties for Edges, twistable

- EdgeClip-Family


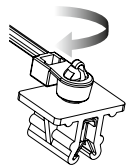
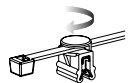
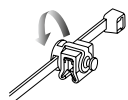
Features and Benefits

- 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 during mounting

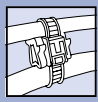


EdgeClip CBTO50R, rotatable 90°.

**Application tools
please see page 442.**

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.		Panel Thickness	Material Cable Tie	Material Foot Part	Article-No.
CBT30MR		3.5	160.0	32.0	135	2.5	PA66HS	POM	156-00049
CBTO50R		4.6	200.0	47.0	225	3.0	PA66HS	PA66HIRHS	156-01601
CBTO50RSTUD5		4.6	200.0	50.0	225	3.0	PA66HS	PA66HIRHS	156-00380

All dimensions in mm. Subject to technical changes.



2-Piece Fixing Ties for Edges, for Holes

- **EdgeClip-Family**

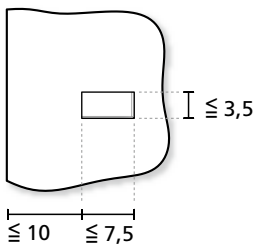
Due to the tie's reduced installation height it is ideal for use wherever space is at a premium.

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 1.0 - 3.0 mm
- Secure fixing of the EdgeClip into drill hole
- Ideal for use wherever space is at its premium



The holding tab increases the tensile strength additionally.



Position of the drill hole for the holding tab

**Material specification
please see page 30.**

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Material Cable Tie	Material Foot Part	Article-No.
T50REC2.5B		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	150-45292
T50ROS-EC2,5		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	150-45299

All dimensions in mm. Subject to technical changes.

Material Specification Overview

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

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

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

**More colours on request.

 = Minimum Tensile Strength

Material Specification Overview

Material	Shortcut	Operating Temperature	Colour**	Flammability	Material Properties*	
Polyamide 6.6 UV Resistant	PA66W	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK)	UL94 V2	<ul style="list-style-type: none"> High yield strength UV-resistant 	RoHS HF
Polyamide 6.6 V0	PA66V0	-40 °C to +85 °C	White (WH)	UL94 V0	<ul style="list-style-type: none"> High yield strength Low smoke emission 	RoHS HF LFH
Polyamide 6.6 V0 High Oxygen Index	PA66V0-HOI	-40 °C to +85 °C, (+105 °C, 500 h)	White (WH)	UL94 V0	<ul style="list-style-type: none"> High yield strength Low smoke emissions 	RoHS HF LFH
Polyamide 6.6 with metal particles	PA66MP	-40 °C to +85 °C, (+105 °C, 500 h)	Blue (BU)	UL94 HB	<ul style="list-style-type: none"> High yield strength 	RoHS HF
Polyamide 6 high impact modified	PA6HIR	-40 °C to +80 °C	Black (BK)	UL94 HB	<ul style="list-style-type: none"> Limited brittleness sensitivity Higher flexibility at low temperature 	RoHS
Polyester	SP	-50 °C to +150 °C	Black (BK)		<ul style="list-style-type: none"> UV-resistant Good chemical resistance to: most acids, alkalis and oils 	RoHS HF LFH
Polyetheretherketone	PEEK	-55 °C to +240 °C	Beige (BGE)	UL94 V0	<ul style="list-style-type: none"> Resistance to radioactivity Not moisture sensitive Good chemical resistance to: acids, bases, oxidizing agents 	RoHS HF LFH
Polyethylene	PE	-40 °C to +50 °C	Black (BK), Grey (GY)	UL94 HB	<ul style="list-style-type: none"> Low moisture absorption Good chemical resistance to: most acids, alcohol and oils 	RoHS HF
Polyolefin	PO	-40 °C to +90 °C	Black (BK)	UL94 V0	<ul style="list-style-type: none"> Low smoke emissions 	RoHS HF LFH
Polypropylene	PP	-40 °C to +115 °C	Black (BK), Natural (NA)	UL94 HB	<ul style="list-style-type: none"> Floats in water Moderate yield strength Good chemical resistance to: organic acids 	RoHS HF
Polypropylene, Ethylene-Propylene-Dien-Terpoly- mere-rubber free of Nitrosamine	PP, EPDM	-20 °C to +95 °C	Black (BK)	UL94 HB	<ul style="list-style-type: none"> Good resistance to high temperatures Good chemical and abrasion resistance 	RoHS HF
Polyvinylchloride	PVC	-10 °C to +70 °C	Black (BK), Natural (NA)	UL94 V0	<ul style="list-style-type: none"> Low moisture absorption Good chemical resistance to: acids, ethanol, oil 	RoHS
Stainless Steel	SS304, SS316	-80 °C to +538 °C	Natural (NA)		<ul style="list-style-type: none"> Corrosion resistant Antimagnetic 	RoHS HF LFH
Thermoplastic Polyurethane	TPU	-40 °C to +85 °C	Black (BK)	UL94 HB	<ul style="list-style-type: none"> High elastic Good chemical resistance to: acids, bases, oxidizing agents 	RoHS HF

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= Minimum Tensile Strength