



Fixing Ties for Edges

EdgeClip-Family

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

Features and benefits

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



One Step to the Web!



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



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.

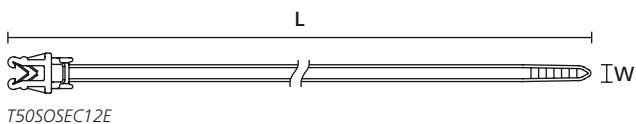


Fixing Ties for Edges

EdgeClip-Family



Material specification
please see page 26.



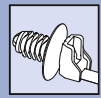
EdgeClips are also available on request
for panel thickness from 4 - 7 mm.

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Panel Thickness	Material	Colour	Tools	Article-No.
T50SOSEC12E		4.6	160.0	35.0	150	1.0 - 3.0	PA66HS	Black (BK)	2-10	148-00200
		4.6	160.0	35.0	150	1.0 - 3.0	PA46	Grey (GY)	2-10	126-00253
T50SOSEC13E		4.6	160.0	35.0	180	1.0 - 3.0	PA66HS	Black (BK)	2-10	126-00000
T40XEC5SP-E		4.0	85.0	15.0	178	1.0 - 3.0	PA66HS	Black (BK)	2;4-8	133-00059
T50SOSEC34E		4.6	155.0	35.0	180	1.0 - 3.0	PA66HS	Black (BK)	2-10	126-00036
T50SOSEC20-E		4.6	161.0	35.0	180	3.0 - 6.0	PA66HS	Black (BK)	2-10	126-00235

All dimensions in mm. Subject to technical changes.

Recommended Tools									
	2	3	4	5	6	7	8	9	10
	MK20	MK21	MK3SP	MK3PNSP2	EVO7	MK7HT	MK7P	MK6	EVO9
	551	551	552	552	554	555	556	557	554

For more information on toolings please refer to the Application Tooling chapter.

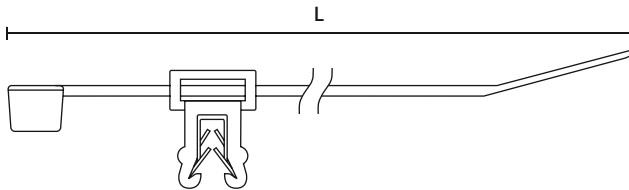


2-Piece Fixing Ties for Edges, 1.0 - 3.0 mm, Top Fixing

EdgeClip-Family

Features and benefits

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



Fixing Tie with EC4



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

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Material Cable Tie	Material Foot Part	Colour	Tools	Article-No.
T30REC4A		3.6	148.0	33.0	135	PA66HS	PA66HIRHS	Black (BK)	2;4-6	150-76090
T50SOSEC4A		4.6	150.0	35.0	225	PA66HS	PA66HIRHS	Black (BK)	2-10	150-76093
T50ROSEC4A		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	Black (BK)	2-10	150-76099
T50ROSEC4A-W		4.6	200.0	45.0	225	PA66W	PA66W	Black (BK)	2-10	156-00570
T50REC4A		4.6	202.0	45.0	225	PA66HS	PA66HIRHS	Black (BK)	2-10	150-76091
T50RDHEC4A		4.7	210.0	19.0	225	PA66	PA66HIRHS	Natural (NA), Black (BK)	2-10	156-01721
T30REC4B		3.6	148.0	35.0	135	PA66HS	PA66HIRHS	Black (BK)	2;4-6;8	150-76080
T50SOSEC4B		4.6	150.0	35.0	225	PA66HS	PA66HIRHS	Black (BK)	2-10	156-00109
T50ROSEC4B		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	Black (BK)	2-10	150-76079
T18REC10SD		2.5	100.0	22.0	80	PA66HS	PA66HIRHS	Black (BK)	2;4-6;8	155-38304
T50SOSEC10		4.6	150.0	31.0	225	PA66HS	PA66HIRHS	Black (BK)	2-10	156-00015
T50ROSEC10		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	Black (BK)	2-10	156-05904
T18REC9SD		2.5	100.0	22.0	80	PA66HS	PA66HIRHS	Black (BK)	2;4-6;8	155-37104
T50SOSEC9SD		4.6	150.0	31.0	225	PA66HS	PA66HIRHS	Black (BK)	2-10	156-00019
T50ROSEC9		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	Black (BK)	2-10	156-05903
T50REC9SD		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	Black (BK)	2-10	156-01280
Q50REC4A		4.7	210.0	45.0	220	PA66W	PA66W	Black (BK)	2-10	156-01085
Q50REC4B		4.7	210.0	45.0	220	PA66W	PA66W	Black (BK)	2-10	156-01086

All dimensions in mm. Subject to technical changes.



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

EdgeClip-Family

Features and benefits

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



Material specification
please see page 26.



T50ROSEC23 - the cable bundle runs parallel with the edge.

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Material Cable Tie	Material Foot Part	Colour	Tools	Article-No.
T30REC5A		3.6	148.0	33.0	135	PA66HS	PA66HIRHS	Black (BK)	2;4-6	156-00003
T50SOSEC5A		4.6	150.0	31.0	225	PA66HS	PA66HIRHS	Black (BK)	2-10	150-40593
T50ROSEC5A		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	Black (BK)	2-10	150-40591
T50SOSEC5B		4.6	150.0	31.0	225	PA66HS	PA66HIRHS	Black (BK)	2-10	150-40583
T50REC5B		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	Black (BK)	2-10	150-40582
T50ROSEC5B		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	Black (BK)	2-10	150-40581
T18REC21		2.5	100.0	18.0	80	PA66W	PA66HIRHS	Black (BK)	2;4-6	156-01231
T50SOSEC21		4.6	150.0	35.0	225	PA66HS	PA66HIRHS	Black (BK)	2-10	156-00017
T50ROSEC21		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	Black (BK)	2-10	156-00010
T80REC21		4.7	205.0	55.0	355	PA66HS	PA66HIRHS	Natural (NA), Black (BK)	2-10	156-01728
T50ROSEC22		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	Black (BK)	2-10	156-00011
T50REC22		4.6	200.0	45.0	225	PA66W	PA66HIRHS	Black (BK)	2-10	156-00576
Q50REC5A		4.7	210.0	45.0	220	PA66W	PA66W	Black (BK)	2-10	156-01087
Q50REC5B		4.7	210.0	45.0	220	PA66W	PA66W	Black (BK)	2-10	156-01088

All dimensions in mm. Subject to technical changes.

Recommended Tools

	2	3	4	5	6	7	8	9	10
	MK20	MK21	MK3SP	MK3PNSP2	EVO7	MK7HT	MK7P	MK6	EVO9
	551	551	552	552	554	555	556	557	554

For more information on toolings please refer to the Application Tooling chapter.



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

EdgeClip-Family

Features and benefits

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



Pre-assembled 2-piece fixing tie with EdgeClip.

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Material Cable Tie	Material Foot Part	Colour	Tools	Article-No.
T18ROSEC19		2.5	100.0	20.0	80	PA66HS	PA66HIRHS	Black (BK)	2;4-6	156-04600
T50SOSEC19		4.6	150.0	35.0	225	PA66HS	PA66HIRHS	Black (BK)	2-10	156-04601
T50ROSEC19		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	Black (BK)	2-10	156-04602
T50SOSEC20		4.6	150.0	35.0	225	PA66HS	PA66HIRHS	Black (BK)	2-10	156-00016
T50ROSEC20		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	Black (BK)	2-10	156-00020

All dimensions in mm. Subject to technical changes.



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

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

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Material Cable Tie	Material Foot Part	Colour	Tools	Article-No.
T50ROSEC23		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	Black (BK)	2-10	156-00006
T80REC23		4.7	205.0	55.0	355	PA66HS	PA66HIRHS	Natural (NA), Black (BK)	2-10	156-01729
T50ROSEC24		4.6	200.0	45.0	225	PA66HS	PA66HIRHS	Black (BK)	2-10	156-00007

All dimensions in mm. Subject to technical changes.

Recommended Tools

	2	3	4	5	6	7	8	9	10
	MK20	MK21	MK3SP	MK3PNSP2	EVO7	MK7HT	MK7P	MK6	EVO9
	551	551	552	552	554	555	556	557	554

For more information on toolings please refer to the Application Tooling chapter.



2-Piece Fixing Ties for Edges, 0.5 - 2.5 mm, Top Fixing

EdgeClip-Family for flat and thin edges

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. 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



T30ROSEC0,5-2,5SPV for application on thin edges.



The capabilities of our popular Edge Clip family have been enhanced with the introduction of new, smaller clips. These smaller clips allow bundles to run more safely on thin or flat edges.

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Panel Thickness	Material Cable Tie	Material Foot Part	Colour	Tools	Article-No.
T30ROSEC0.5-2.5TP-SD		3.4	145.0	35.0	135	0.5 - 2.5	PA66HS	PA66HIRHS	Black (BK)	2;4-6	156-01543
T30ROSEC0.5-2.5TV-SD		3.4	145.0	35.0	135	0.5 - 2.5	PA66HS	PA66HIRHS	Black (BK)	2;4-6	156-01545
T30ROSEC0.5-2.5TPVA		3.4	145.0	35.0	135	0.5 - 2.5	PA66HS	PA66HIRHS	Black (BK)	2;4-6	156-01542

All dimensions in mm. Subject to technical changes.

2-Piece Fixing Ties for Edges, 0.5 - 2.5 mm, Side Fixing

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Panel Thickness	Material Cable Tie	Material Foot Part	Colour	Tools	Article-No.
T30ROSEC0.5-2.5SP-SVB		3.4	145.0	35.0	135	0.5 - 2.5	PA66HS	PA66HIRHS	Black (BK)	2;4-6	156-01546
T30ROSEC0.5-2.5SPSVA		3.4	145.0	35.0	133	0.5 - 2.5	PA66HS	PA66HIRHS	Black (BK)	2;4-6	156-01797
T30ROSEC0.5-2.5SPVA		3.4	145.0	35.0	135	0.5 - 2.5	PA66HS	PA66HIRHS	Black (BK)	2;4-6	156-01544

All dimensions in mm. Subject to technical changes.

Recommended Tools				
	2	4	5	6
	MK20	MK3SP	MK3PNSP2	EVO7
	551	552	552	554

For more information on toolings please refer to the Application Tooling chapter.



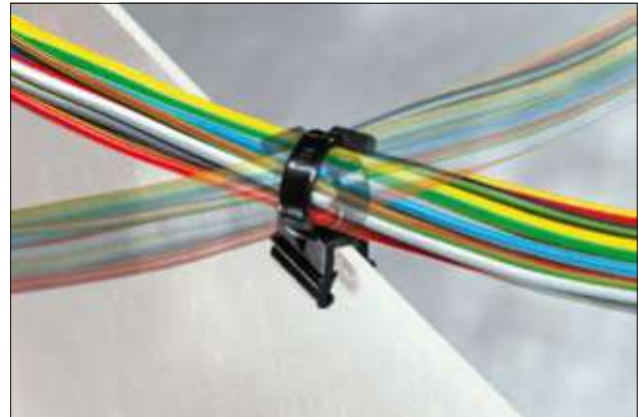
2-Piece Fixing Ties for Edges, twistable

EdgeClip-Family

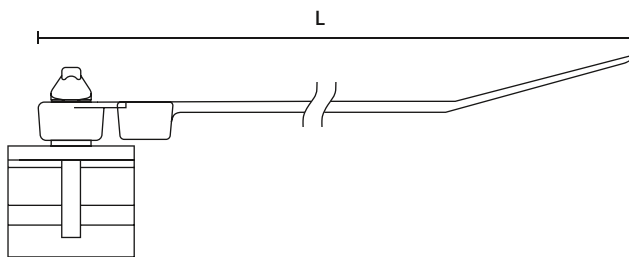
These cable ties and Edge Clip assemblies are ideal for use where holes are not acceptable or where due to temperature problems adhesives will fail. These assemblies are widely used for fixing and bundling cables, pipes and hoses within the automotive industry, harness making, panel building and electrical industry.

Features and benefits

- Pre-assembled 2-piece fixing tie with EdgeClip
- 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 CBT050R, rotatable 90°.



CBT30MR



**Material specification
please see page 26.**

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Panel Thickness	Material Cable Tie	Material Foot Part	Colour	Tools	Article-No.
CBT30MR		3.5	160.0	32.0	135	2.5	PA66HS	POM	Black (BK)	2;5-6	156-00049
CBT050R		4.6	202.0	47.0	225	3.0	PA66HS	PA66HIRHS	Black (BK)	2-10	156-01601
CBT050RSTUD5		4.6	200.0	47.0	225	3.0	PA66HS	PA66HIRHS	Black (BK)	2-10	156-00380

All dimensions in mm. Subject to technical changes.

Recommended Tools										
	2	3	4	5	6	7	8	9	10	
	MK20	MK21	MK3SP	MK3PNSP2	EVO7	MK7HT	MK7P	MK6	EVO9	
	551	551	552	552	554	555	556	557	554	

For more information on toolings please refer to the Application Tooling chapter.

Material Specification Overview

MATERIAL	Material Shortcut	Operating Temperature	Colour**	Flammability	Material Properties*	Material Specifications
Aluminium-alloy	AL	-40 °C to +180 °C	Natural (NA)		- Corrosion resistant - Antimagnetic	RoHS
Chloroprene	CR	-20 °C to +80 °C	Black (BK)		- Weather-resistant - High yield strength	RoHS
Ethylene Tetrafluoroethylene (Tefzel®)	E/TFE	-80 °C to +170 °C	Blue (BU)	UL 94 V0	- Resistance to radioactivity - UV- resistant, not moisture sensitive - Good chemical resistance to: acids, bases, oxidizing agents	RoHS
Polyacetal	POM	-40 °C to +90 °C, (+110 °C, 500 h)	Natural (NA)	UL 94 HB	- 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)	UL 94 HB	- Bio-plastic, derived from vegetable oil - Strong impact resistance at low temperature - Very low moisture absorption - Weather-resistant - Good chemical resistance	HF RoHS
Polyamide 12	PA12	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK)	UL 94 HB	- Good chemical resistance to: acids, bases, oxidizing agents - UV- resistant	HF RoHS
Polyamide 4.6	PA46	-40 °C to +150 °C (5000 h), +195 °C (500 h)	Natural (NA), Grey (GY)	UL 94 V2	- Resistance to high temperatures - Very moisture sensitive - Low smoke sensitiv	HF LFH RoHS
Polyamide 6	PA6	-40 °C to +80 °C	Black (BK)	UL 94 V2	High yield strength	RoHS
Polyamide 6, high impact modified	PA6HIR	-40 °C to +80 °C	Black (BK)	UL 94 HB	- Limited brittleness sensitivity - Higher flexibility at low temperature	RoHS
Polyamide 6.6	PA66	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK), Natural (NA)	UL 94 V2	High yield strength	HF RoHS
Polyamide 6.6, glass-fibre reinforced	PA66GF13, PA66GF15	-40 °C to +105 °C	Black (BK)	UL 94 HB	Good resistance to: lubricants, vehicle fuel, salt water and a lot of solvent	HF RoHS
Polyamide 6.6, heat and UV stabilised	PA66HSW	-40 °C to +105 °C	Black (BK)	UL 94 V2	- High yield strength - Modified elevated max. temperature - UV-resistant	HF RoHS
Polyamide 6.6, heat stabilised	PA66HS	-40 °C to +105 °C	Black (BK), Natural (NA)	UL 94 V2	- High yield strength - Modified elevated max. temperature	HF RoHS
Polyamide 6.6, high impact modified	PA66HIR	-40 °C to +80 °C, (+105 °C, 500 h)	Black (BK)	UL 94 HB	- Limited brittleness sensitivity - Higher flexibility at low temperature	RoHS
Polyamide 6.6, high impact modified, heat and UV stabilised	PA66HIRHSW	-40 °C to +110 °C	Black (BK)	UL 94 HB	- Limited brittleness sensitivity - Higher flexibility at low temperature - Modified elevated max. temperature - High yield strength, UV-resistant	RoHS
Polyamide 6.6, high impact modified, heat stabilised	PA66HIRHS	-40 °C to +105 °C	Black (BK)	UL 94 HB	- Limited brittleness sensitivity - Higher flexibility at low temperature - Modified elevated max. temperature	RoHS
Polyamide 6.6, high impact modified, ScanBlack	PA66HIR(S)	-40 °C to +80 °C, (+105 °C, 500 h)	Black (BK)	UL 94 HB	- Limited brittleness sensitivity - Higher flexibility at low temperature	RoHS
Polyamide 6.6, UV-resistant	PA66W	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK)	UL 94 V2	- High yield strength - UV-resistant	HF RoHS

MATERIAL	Material Shortcut	Operating Temperature	Colour**	Flammability	Material Properties*	Material Specifications
Polyamide 6.6 , with metal particles	PA66MP	-40 °C to +85 °C, (+105 °C, 500 h)	Blue (BU)	UL 94 HB	- High yield strength - Metal and X-Ray detectable	HF RoHS
Polyamide 6.6 , with metal particles	PA66MP+	-40 °C to +85 °C	Blue (BU)	not flame retardant	- High yield strength - Metal and x-ray detectable	HF RoHS
Polyamide 6.6 V0	PA66V0	-40 °C to +85 °C	White (WH)	UL 94 V0	- High yield strength - Low smoke emission	HF LFH RoHS
Polyester	SP	-50 °C to +150 °C	Black (BK)	halogen free	- UV-resistant - Good chemical resistance to: most acids, alkalis and oils	HF LFH RoHS
Polyetheretherketone	PEEK	-55 °C to +240 °C	Beige (BGE)	UL 94 V0	- Resistance to radioactivity - Not moisture sensitive - Good chemical resistance to: acids, bases, oxidizing agents	HF LFH RoHS
Polyethylene	PE	-40 °C to +50 °C	Black (BK), Grey (GY)	UL 94 HB	- Low moisture absorption - Good chemical resistance to: most acids, alcohol and oils	HF RoHS
Polyolefin	PO	-40 °C to +90 °C	Black (BK)	UL 94 V0	Low smoke emissions	HF LFH RoHS
Polypropylene	PP	-40 °C to +115 °C	Black (BK), Natural (NA)	UL 94 HB	- Floats in water - Moderate yield strength - Good chemical resistance to: organic acids	HF RoHS
Polypropylene, Ethylene-Propylene-Dien-Terpolymere-rubber free of Nitrosamine	PP, EPDM	-20 °C to +95 °C	Black (BK)	UL 94 HB	- Good resistance to high temperatures - Good chemical and abrasion resistance	HF RoHS
Polypropylene with metal particles	PPMP	-40 °C to +115 °C	Blue (BU)	UL 94 HB	- Metal and X-Ray detectable - Heat resistant - Moderate yield strength - Good chemical resistance	RoHS
Polypropylene with metal particles	PPMP+	-40 °C to +85 °C	Blue (BU)	not flame retardant	- High yield strength - Metal and x-ray detectable	HF RoHS
Polyvinylchloride	PVC	-10 °C to +70 °C	Black (BK), Natural (NA)	UL 94 V0	- Low moisture absorption - Good chemical resistance to: acids, ethanol and oil	RoHS
Stainless Steel	SS304, SS316	-80 °C to +538 °C	Natural (NA)	non-burning	- Corrosion resistant - Antimagnetic - Weather resistant - Outstanding chemical resistance	HF LFH RoHS
Thermoplastic Polyurethane	TPU	-40 °C to +85 °C	Black (BK)	UL 94 HB	- High elastic - Good chemical resistance to: acids, bases and oxidizing agents	HF RoHS

Tefzel® is a registered trademark of DuPont. General linguistic usage for cable ties made from raw material E/TFE is Tefzel®-Tie. In addition to Tefzel® from DuPont HellermannTyton is also using equivalent E/TFE raw material from other suppliers. *These details are only rough guide values. They should not 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 Loop Tensile Strength for Cable Ties (Newton)

HF = Halogenfree

LFH = Limited Fire Hazard

RoHS = Restriction of Hazardous Substances