



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

T-Series in PA66HS natural and black

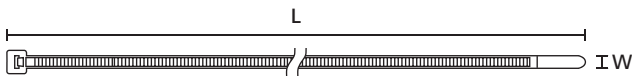
These inside serrated cable ties are made from heat stabilised Polyamide 6.6 (PA66HS). They can be applied in environments with continuous temperatures up to +105 °C. T-Series cable ties can be easily installed by hand or using an application tool to ensure consistency of installation.

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.



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.	2;4-6	111-01950
	2.5	100.0	22.0	80	PA66HS	Natural (NA)	100 pcs.	2;4-6	111-01959
T18I	2.5	145.0	35.0	80	PA66HS	Black (BK)	100 pcs.	2;4-6	111-02358
	2.5	145.0	35.0	80	PA66HS	Natural (NA)	1,000 pcs.	2;4-6	111-02359
T18L	2.5	205.0	55.0	80	PA66HS	Black (BK)	100 pcs.	2;4-6	111-02049
	2.5	205.0	55.0	80	PA66HS	Natural (NA)	100 pcs.	2;4-6	111-02159
T30R	3.5	150.0	35.0	135	PA66HS	Natural (NA)	100 pcs.	2;4-6	111-03259
	3.5	150.0	35.0	135	PA66HS	Black (BK)	100 pcs.	2;4-6	111-03050
T30L	3.5	198.0	50.0	135	PA66HS	Black (BK)	100 pcs.	2;4-6	111-03450
	3.5	198.0	50.0	135	PA66HS	Natural (NA)	100 pcs.	2;4-6	111-03459
T30LL	3.5	290.0	80.0	135	PA66HS	Black (BK)	1,000 pcs.	2;4-6	111-03660
	3.5	290.0	80.0	135	PA66HS	Natural (NA)	100 pcs.	2;4-6	111-03569
T40R	4.0	175.0	40.0	180	PA66HS	Black (BK)	100 pcs.	2;4-8	111-01623
	4.0	175.0	40.0	180	PA66HS	Natural (NA)	100 pcs.	2;4-8	111-01627
T50S	4.6	150.0	35.0	225	PA66HS	Natural (NA)	100 pcs.	2-10	111-05859
	4.6	150.0	35.0	225	PA66HS	Black (BK)	100 pcs.	2-10	111-05850
T50R	4.6	200.0	50.0	225	PA66HS	Black (BK)	100 pcs.	2-10	111-04950
T50I	4.6	300.0	85.0	225	PA66HS	Black (BK)	100 pcs.	2-10	111-05250
	4.6	300.0	85.0	225	PA66HS	Natural (NA)	100 pcs.	2-10	111-05259
T50L	4.6	390.0	110.0	225	PA66HS	Natural (NA)	100 pcs.	2-10	111-05436
	4.6	390.0	110.0	225	PA66HS	Black (BK)	100 pcs.	2-10	111-05450
T80R	4.7	210.0	55.0	355	PA66HS	Black (BK)	1,000 pcs.	2-12	117-08070
	4.7	210.0	55.0	355	PA66HS	Natural (NA)	100 pcs.	2-12	111-05059
T80I	4.7	300.0	85.0	355	PA66HS	Black (BK)	100 pcs.	2-12	111-08250
	4.7	300.0	85.0	355	PA66HS	Natural (NA)	100 pcs.	2-12	111-08259

All dimensions in mm. Subject to technical changes.

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



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



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T-Series in PA66HS natural and black



T-Series



Material specification
please see page 26.

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
T80L	4.7	390.0	110.0	355	PA66HS	Black (BK)	100 pcs.	2-12	111-00388
	4.7	390.0	110.0	355	PA66HS	Natural (NA)	100 pcs.	2-12	111-05459
T120S	7.6	225.0	55.0	535	PA66HS	Black (BK)	50 pcs.	3;9-12	111-12850
	7.6	225.0	55.0	535	PA66HS	Natural (NA)	50 pcs.	3;9-12	111-12824
T150R(H)	7.6	365.0	100.0	670	PA66HS	Black (BK)	100 pcs.	3;9-12	111-15050
	7.6	365.0	100.0	670	PA66HS	Natural (NA)	100 pcs.	3;9-12	111-15069
T120R(E)	7.6	387.0	100.0	535	PA66HS	Black (BK)	100 pcs.	3;9-12	111-12050
	7.6	387.0	100.0	535	PA66HS	Natural (NA)	100 pcs.	3;9-12	111-12059
T120M	7.6	460.0	125.0	535	PA66HS	Black (BK)	100 pcs.	3;9-12	111-00153
T120XM	7.6	600.0	175.0	535	PA66HS	Black (BK)	50 pcs.	3;9-12	111-12700
	7.6	600.0	175.0	535	PA66HS	Natural (NA)	50 pcs.	3;9-12	111-12719
T120L	7.6	760.0	225.0	535	PA66HS	Natural (NA)	50 pcs.	3;9-12	111-12449
	7.6	760.0	225.0	535	PA66HS	Black (BK)	50 pcs.	3;9-12	111-12440
T150M	8.9	530.0	150.0	780	PA66HS	Black (BK)	25 pcs.	9-12	111-15609
T150L	8.9	820.0	243.8	780	PA66HS	Black (BK)	25 pcs.	9-12	111-15410
T150XL	8.9	1,095.0	330.2	780	PA66HS	Black (BK)	25 pcs.	9-12	111-15510

All dimensions in mm. Subject to technical changes.

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

Recommended Tools											
	2	3	4	5	6	7	8	9	10	11	12
	MK20	MK21	MK3SP	MK3PNSP2	EVO7	MK7HT	MK7P	MK6	EVO9	EVO9HT	MK9P
	545	545	546	546	548	549	550	551	549	549	552

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



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

Material Specification Overview

MATERIAL	Material Shortcut	Operating Temperature	Colour**	Flammability	Material Properties*	Material Specifications
Aluminium alloy	AL	-40 °C to +180 °C	Natural (NA)		<ul style="list-style-type: none"> Corrosion resistant Antimagnetic 	RoHS
Chloroprene rubber	CR	-20 °C to +80 °C	Black (BK)		<ul style="list-style-type: none"> Weather resistant High yield strength 	RoHS
Ethylene Tetrafluoroethylene (Tefzel®)	E/TFE	-80 °C to +170 °C	Blue (BU)	UL 94 V0	<ul style="list-style-type: none"> Resistance to radioactivity UV resistant, not moisture sensitive Good chemical resistance to acids, bases, oxidizing agents 	RoHS
Polyacetal	POM	-40 °C to +90 °C, (+110 °C, 500 h)	Natural (NA)	UL 94 HB	<ul style="list-style-type: none"> Limited brittleness sensitivity Flexible at low temperature Not moisture sensitive Robust on impact 	RoHS
Polyamide 11	PA11	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK)	UL 94 HB	<ul style="list-style-type: none"> Bio-plastic, derived from vegetable oil Strong impact resistance at low temperature Very low moisture absorption Weather resistant Good chemical resistance 	HF RoHS
Polyamide 12	PA12	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK)	UL 94 HB	<ul style="list-style-type: none"> Good chemical resistance to acids, bases, oxidizing agents UV resistant 	HF RoHS
Polyamide 4.6	PA46	-40 °C to +130 °C, (+150 °C, 5000 h; +195 °C, 500 h)	Natural (NA), Grey (GY)	UL 94 V2	<ul style="list-style-type: none"> Resistance to high temperatures Very moisture sensitive Low smoke sensitivity 	HF LFH RoHS
Polyamide 6	PA6	-40 °C to +80 °C	Black (BK)	UL 94 V2	<ul style="list-style-type: none"> High yield strength 	RoHS
Polyamide 6 high impact modified	PA6HIR	-40 °C to +80 °C	Black (BK)	UL 94 HB	<ul style="list-style-type: none"> Limited brittleness sensitivity Higher flexibility at low temperature 	RoHS
Polyamide 6.6	PA66	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK), Natural (NA)	UL 94 V2	<ul style="list-style-type: none"> High yield strength 	HF RoHS
Polyamide 6.6 glass-fibre reinforced	PA66GF13, PA66GF15	-40 °C to +105 °C	Black (BK)	UL 94 HB	<ul style="list-style-type: none"> Good resistance to lubricants, fuels, salt water and solvents 	HF RoHS
Polyamide 6.6 heat and UV stabilised	PA66HSW	-40 °C to +105 °C	Black (BK)	UL 94 V2	<ul style="list-style-type: none"> High yield strength Modified elevated maximum temperature UV resistant 	HF RoHS
Polyamide 6.6 heat stabilised	PA66HS	-40 °C to +105 °C	Black (BK), Natural (NA)	UL 94 V2	<ul style="list-style-type: none"> High yield strength Modified elevated maximum temperature 	HF RoHS
Polyamide 6.6 high impact modified	PA66HIR	-40 °C to +80 °C, (+105 °C, 500 h)	Black (BK)	UL 94 HB	<ul style="list-style-type: none"> Limited brittleness sensitivity Higher flexibility at low temperature 	RoHS
Polyamide 6.6 high impact modified, heat and UV stabilised	PA66HIRHSW	-40 °C to +110 °C	Black (BK)	UL 94 HB	<ul style="list-style-type: none"> Limited brittleness sensitivity Higher flexibility at low temperature Modified elevated maximum temperature High yield strength, UV resistant 	RoHS
Polyamide 6.6 high impact modified, heat stabilised	PA66HIRHS	-40 °C to +105 °C	Black (BK)	UL 94 HB	<ul style="list-style-type: none"> Limited brittleness sensitivity Higher flexibility at low temperature Modified elevated maximum temperature 	RoHS
Polyamide 6.6 high impact modified, scan black	PA66HIR(S)	-40 °C to +80 °C, (+105 °C, 500 h)	Black (BK)	UL 94 HB	<ul style="list-style-type: none"> Limited brittleness sensitivity Higher flexibility at low temperature 	RoHS
Polyamide 6.6 UV resistant	PA66W	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK)	UL 94 V2	<ul style="list-style-type: none"> High yield strength UV resistant 	HF RoHS

MATERIAL	Material Shortcut	Operating Temperature	Colour**	Flammability	Material Properties*	Material Specifications
Polyamide 6.6 with metal particles	PA66MP	-40 °C to +85 °C, (+105 °C, 500 h)	Blue (BU)	UL 94 HB	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> High yield strength Low smoke emission 	HF LFH RoHS
Polyester	SP	-50 °C to +150 °C	Black (BK)		<ul style="list-style-type: none"> UV resistant Good chemical resistance to most acids, bases and oils 	HF LFH RoHS
Polyetheretherketone	PEEK	-55 °C to +240 °C	Beige (BGE)	UL 94 V0	<ul style="list-style-type: none"> Resistance to radioactivity Not moisture sensitive Good chemical resistance to acids, bases, oxidising agents 	HF LFH RoHS
Polyethylene	PE	-40 °C to +50 °C	Black (BK), Grey (GY)	UL 94 HB	<ul style="list-style-type: none"> Low moisture absorption Good chemical resistance to most acids, bases, alcohol, oils 	HF RoHS
Polyolefin	PO	-40 °C to +90 °C	Black (BK)	UL 94 V0	<ul style="list-style-type: none"> Low smoke emissions 	HF LFH RoHS
Polypropylene	PP	-40 °C to +115 °C	Black (BK), Natural (NA)	UL 94 HB	<ul style="list-style-type: none"> Floats in water Moderate yield strength Good chemical resistance to acids, bases and solvents 	HF RoHS
Polypropylene, Ethylene Propylene Diene Terpolymer rubber free of Nitrosamine	PP, EPDM	-20 °C to +95 °C	Black (BK)	UL 94 HB	<ul style="list-style-type: none"> Good resistance to high temperature Good chemical and abrasion resistance 	HF RoHS
Polypropylene with metal particles	PPMP	-40 °C to +115 °C	Blue (BU)	UL 94 HB	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> High yield strength Metal and X-Ray detectable 	HF RoHS
Polyvinylchloride	PVC	-10 °C to +70 °C	Black (BK), Natural (NA)	UL 94 V0	<ul style="list-style-type: none"> Low moisture absorption Good chemical resistance to acids, bases, salts, alcohol, oils 	RoHS
Stainless Steel, Stainless Steel	SS304, SS316	-80 °C to +538 °C	Natural (NA)	Non burning	<ul style="list-style-type: none"> Corrosion resistant Antimagnetic Weather resistant Chemical resistance SS316 also resistant against seawater, salt spray and anorganic acids 	HF LFH RoHS
Thermoplastic Polyurethane	TPU	-40 °C to +85 °C	Black (BK)	UL 94 HB	<ul style="list-style-type: none"> High elasticity Good chemical resistance to acids, bases and oxidising agents 	HF RoHS

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

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

**Further colours available on request.



Minimum Loop Tensile Strength for Cable Ties (Newton)

HF = Halogenfree

LFH = Limited Fire Hazard

RoHS = Restriction of Hazardous Substances