

Cable Ties for higher fire-protection

T-Series in PA66V0 white

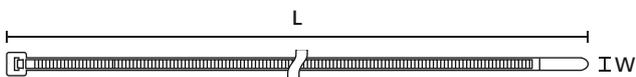
T-Series cable ties for bundling and securing cables, pipes and hoses. These cable ties can be used for almost any type of application especially where safety regulations are high and the reduction of smoke and dangerous gases is required. PA66V0 products are most critically used within public sector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



White T-Series cable ties for higher fire protection (PA66V0).



T-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Tools	Article-No.
T18R	2.5	100.0	22.0	80	PA66V0	White (WH)	100 pcs.	2;4-6	111-91819
T18L	2.5	205.0	55.0	80	PA66V0	White (WH)	1,000 pcs.	2;4-6	111-02043
T30R	3.5	150.0	35.0	135	PA66V0	White (WH)	100 pcs.	2;4-6	111-93019
T50R	4.6	200.0	50.0	225	PA66V0	White (WH)	100 pcs.	2-10	111-95019
T50I	4.6	300.0	85.0	225	PA66V0	White (WH)	100 pcs.	2-10	111-00317
T50L	4.7	390.0	110.0	225	PA66V0	White (WH)	100 pcs.	2-10	111-05438
T120R(E)	7.6	387.0	100.0	535	PA66V0	White (WH)	100 pcs.	3;9-12	111-91210

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
	551	551	552	552	554	555	556	557	554	554	558

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

EN 45545-2



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	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 impacts 	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 +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 sensitiv 	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, 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<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 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	<ul style="list-style-type: none"> 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	<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)	halogen free	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Low moisture absorption Good chemical oils resistance to: most acids, alcohol and 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: 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	<ul style="list-style-type: none"> 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	<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, ethanol and oil 	RoHS
Stainless Steel	SS304, SS316	-80 °C to +538 °C	Natural (NA)	non-burning	<ul style="list-style-type: none"> Corrosion resistant Antimagnetic Weather resistant Outstanding chemical resistance 	HF LFH RoHS
Thermoplastic Polyurethane	TPU	-40 °C to +85 °C	Black (BK)	UL 94 HB	<ul style="list-style-type: none"> 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