



Cable Ties and Fixings

Cable Ties Inside Serrated

Cable Ties for temperatures up to +195 °C (500 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
- Operating temperature (long-term) up to +130 °C



T-Series cable ties – higher temperature resistance up to +195 °C for 500 hours (PA46).



**Material specification
please see page 22.**



T-Series

PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø max.	N
T18R-PA46-NA	2.5	100.0	22.0	80
T30R-PA46-GY	3.5	150.0	35.0	135
T30R-PA46-NA	3.5	150.0	35.0	135
T50R-PA46-GY	4.6	200.0	50.0	225
T50R-PA46-NA	4.6	200.0	50.0	225
T50I-PA46-NA	4.6	300.0	85.0	225
T50L-PA46-NA	4.6	390.0	110.0	225
T120R-PA46-NA	7.6	387.0	100.0	535
T120R(E)-PA46-NA	7.6	387.0	100.0	535
T120R(E)-PA46-GY	7.6	387.0	100.0	535

All dimensions in mm. Subject to technical changes.



Material Specification Overview

MATERIAL	Material Shortcut	Operating Temperature	Colour*	Flammability
Aluminium alloy	AL	-40 °C to +180 °C	Natural (NA)	
Chloroprene Rubber	CR	-20 °C to +80 °C	Black (BK)	
Ethylene Tetrafluoroethylene (Tefzel®)	E/TFE	-80 °C to +170 °C	Blue (BU)	UL 94 V0
Polyacetal	POM	-40 °C to +90 °C, (+110 °C, 500 h)	Natural (NA)	UL 94 HB
Polyamide 11	PA11	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK)	UL 94 HB
Polyamide 11, UV-resistant	PA11W	-40 °C to +105 °C	Black (BK)	UL 94 HB
Polyamide 12	PA12	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK)	UL 94 HB
Polyamide 4.6	PA46	-40 °C to +130 °C, (+150 °C, 5000 h; +195 °C, 500 h)	Natural (NA), Grey (GY)	UL 94 V2
Polyamide 6	PA6	-40 °C to +80 °C	Black (BK)	UL 94 V2
Polyamide 6, glass-fibre reinforced	PA6GF30	-40 °C to +100 °C	Black (BK)	UL 94 HB
Polyamide 6, high impact modified	PA6HIR	-40 °C to +80 °C	Black (BK)	UL 94 HB
Polyamide 6, high impact modified, heat stabilised	PA6HIRHS	-80 °C to +110 °C	Black (BK)	UL 94 HB
Polyamide 6.6	PA66	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK), Natural (NA)	UL 94 V2
Polyamide 6.6, glass-fibre reinforced	PA66GF13	-40 °C to +105 °C	Black (BK)	UL 94 HB
Polyamide 6.6, glass-fibre reinforced	PA66GF15	-40 °C to +105 °C	Black (BK)	UL 94 HB
Polyamide 6.6, heat and UV stabilised	PA66HSUV	-40 °C to +105 °C	Black (BK), Natural (NA)	UL 94 V2
Polyamide 6.6, heat and UV stabilised	PA66HSW	-40 °C to +105 °C	Black (BK)	UL 94 V2
Polyamide 6.6, heat stabilised	PA66HS	-40 °C to +105 °C	Black (BK), Natural (NA)	UL 94 V2
Polyamide 6.6, high impact modified	PA66HIR	-40 °C to +80 °C, (+105 °C, 500 h)	Black (BK)	UL 94 HB
Polyamide 6.6, high impact modified, heat and UV stabilised	PA66HIRHSUV	-40 °C to +110 °C	Black (BK)	UL 94 HB
Polyamide 6.6, high impact modified, heat and UV stabilised (only for cable ties for Autotool System 3080)	PA66HIRHSUV	-40 °C to +95 °C, (+105 °C, 5000 h; +145 °C, 500 h)	Black (BK), Natural (NA)	UL 94 HB
Polyamide 6.6, high impact modified, heat and UV stabilised	PA66HIRHSW	-40 °C to +110 °C	Black (BK)	UL 94 HB
Polyamide 6.6, high impact modified, heat stabilised	PA66HIRHS	-40 °C to +105 °C	Black (BK)	UL 94 HB
Polyamide 6.6, high impact modified, scan black	PA66HIR(S)	-40 °C to +80 °C, (+105 °C, 500 h)	Black (BK)	UL 94 HB

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.

*Further colours available on request.



**Minimum Loop Tensile Strength
for Cable Ties (Newton)**

MATERIAL	Material Shortcut	Operating Temperature	Colour*	Flammability
Polyamide 6.6, UV resistant	PA66W	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK)	UL 94 V2
Polyamide 6.6, UV-stabilised	PA66UV	-40 °C to +85 °C	Black (BK), Natural (NA)	UL 94 V2
Polyamide 6.6, with metal particles	PA66MP	-40 °C to +85 °C, (+105 °C, 500 h)	Blue (BU)	UL 94 HB
Polyamide 6.6, with metal particles	PA66MP+	-40 °C to +85 °C	Blue (BU)	not flame retardant
Polyamide 6.6 V0	PA66V0	-40 °C to +85 °C	White (WH)	UL 94 V0
Polyaryletherketone	PAEK	-55 °C to +200 °C	Beige (BGE)	UL 94 V0
Polyester	SP	-50 °C to +150 °C	Black (BK)	
Polyetheretherketone	PEEK	-55 °C to +240 °C	Beige (BGE)	UL 94 V0
Polyethylene	PE	-40 °C to +50 °C	Black (BK), Grey (GY)	UL 94 HB
Polyolefin	PO	-40 °C to +90 °C	Black (BK)	UL 94 V0
Polyphenylene Sulfide	PPS	-40 °C to +150 °C	Black (BK), Grey (GY)	UL 94 V0
Polypropylene, Ethylene Propylene Diene Terpolymer rubber free of Nitrosamine	PP, EPDM	-20 °C to +95 °C	Black (BK)	UL 94 HB
Polypropylene 20% Talkum	PPT20	-40 °C to +65 °C	Black (BK)	UL 94 HB
Polypropylene with metal particles	PPMP	-40 °C to +115 °C	Blue (BU)	UL 94 HB
Polypropylene with metal particles	PPMP+	-40 °C to +85 °C	Blue (BU)	not flame retardant
Polyvinylidene Fluoride	PVDFX	-50 °C to +150 °C	Natural (NA)	UL 94 V0
Polyvinylchloride	PVC	-10 °C to +70 °C	Black (BK), Natural (NA)	UL 94 V0
Stainless Steel	SS304, SS316	-80 °C to +538 °C	Natural (NA)	non-burning
Thermoplastic Polyurethane	TPU	-40 °C to +85 °C	Black (BK)	UL 94 HB

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= Minimum Loop Tensile Strength
for Cable Ties (Newton)

Tip: Material shortcut is part of our Part Description name

Product series name (indicating tie type, clip and harness routing variant)

Material code

Colour code (details on page 326)

T50ROSEC5A-PA66HS/PA66HIRHS-BK