



Fixing Elements for Tubes and Harnesses

With Fir Tree

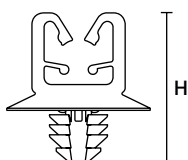
This Fixing Element is pressed into a hole by hand and locked into place with a hearable click. Cable bundles can be applicated afterwards.

Features and benefits

- Easy to install without the need for a tool
- Types with disc cover the hole and protect against dirt and dust ingress
- Rattlefree and secure hold of bundles due to retaining collar
- Suitable for post-installation of bundles
- Easy replacement of bundles in case of maintenance



The HC48FT6 is designed for Bundle diameter 4.3 - 5.2 mm.



HC48FT6

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Attach to Ø	Height (H)	Material	Colour	Article-No.
HC48FT5		4.5 - 5.0	0.7 - 3.0	4.3 - 5.2	21.0	PA66HIRHS	Black (BK)	151-01405
HC48FT6		6.5 - 7.0	0.7 - 2.8	4.3 - 5.2	20.8	PA66HIRHS	Black (BK)	151-00680
CTCFT6		6.3 - 6.7	0.7 - 4.5	15.0	18.5	PA66HIRHS	Black (BK)	151-00783

All dimensions in mm. Subject to technical changes.



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 rubber	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 impact	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 +130 °C, (+150 °C, 5000 h; +195 °C, 500 h)	Natural (NA), Grey (GY)	UL 94 V2	- 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	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	-40 °C to +105 °C, (+105 °C for 500 h)	Black (BK)	UL 94 HB	Good resistance to lubricants, fuels, salt water and solvents	HF RoHS
Polyamide 6.6, heat and UV-stabilised	PA66HSUV	-40 °C to +105 °C, (+105 °C for 500 h)	Black (BK)	UL 94 V2	- High yield strength - Modified elevated maximum temperature - UV resistant	HF RoHS
Polyamide 6.6, heat stabilised	PA66HS	-40 °C to +105 °C, (+105 °C for 500 h)	Black (BK), Natural (NA)	UL 94 V2	- 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	- Limited brittleness sensitivity - Higher flexibility at low temperature	RoHS
Polyamide 6.6, high impact modified, heat and UV-stabilised	PA66HIRHSUV	-40 °C to +110 °C	Black (BK)	UL 94 HB	- 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, (+105 °C for 500 h)	Black (BK)	UL 94 HB	- 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	- 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
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

MATERIAL	Material Shortcut	Operating Temperature	Colour**	Flammability	Material Properties*	Material Specifications
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)		- 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	- 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	- 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	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 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	- 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	- 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, bases, salts, alcohol, oils	RoHS
Stainless Steel	SS304, SS316	-80 °C to +538 °C	Natural (NA)	Non burning	- 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	- High elasticity - 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 also uses equivalent E/TFE raw material from other suppliers.

**Further colours available on request.

*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.

HF = Halogen Free

LFH = Limited Fire Hazard

RoHS = Restriction of Hazardous Substances

 = Minimum Loop Tensile Strength for Cable Ties (newton)