# **Connector Clips**

The connector clips used here have been designed for electronic cables and cable sets used in the automotive industry.

#### **Connector Clips for oval holes**

#### Features and benefits

- Connector easily installed by simply pushing into place
- Connection can be released non-destructive
- Easy assembly, just shuffle manually
- Oval connectors offer twist protection



For a secure fixation simply push the connector by hand on our Connector Clip YCCFT62x122.

#### **Connector Clips for Edges**

#### Features and benefits

- · Connectors are mounted simply by pushing them into retainer
- Connector can be removed without damage
- Fastened to an edge, the EdgeClip ensures snug fit almost all types of connector



EdgeClip EC6mod.

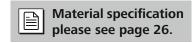
#### **Connector Clips for round holes**

#### **Features and benefits**

- · Connector easily installed by simply pushing into place
- Connection can be released (non-destructive)
- One fir tree foot part can be used for a variety of panel thicknesses
- Arrowhead simply locks into place
- Disc covers the hole to prevent dirt and water gaining access
- For twist protection: Variants with additional stick or for oval holes



Connector Clips are available for many different connector types and fixing varieties.



Fixing Elements

Other product variants are available in our Automotive catalogue.



## **Connector Clips for oval holes**

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Material	Colour	Article-No.
CCSFT7x12		7.0 x 12.0	0.8 - 2.0	PA66HIRHS	Grey (GY)	151-00222

All dimensions in mm. Subject to technical changes.

#### **Connector Clips for Edges**

ТҮРЕ	Drawing	Panel Thickness	Material	Colour	Article-No.
EC42		1.5 - 4.0	PA66HIRHS	Black (BK)	151-00429
EC6mod		1.0 - 3.0	PA66HIRHS	Black (BK)	151-00464

All dimensions in mm. Subject to technical changes.

### **Connector Clips for round holes**

ТҮРЕ	Drawing	Hole Ø (FH)	Stud Ø	Panel Thickness	Material	Colour	Article-No.
FT6LG-AMP		6.5 - 7.0	-	0.7 - 6.0	PA66HIRHS	Black (BK)	155-03800
CC-PAEKSFT6.5PT1.7-2.3		6.3 - 6.7	-	1.7 - 2.3	PA66HIRHS	Black (BK)	151-00840
CCSBS5		-	5.0	-	PA66HIRHS	Black (BK)	151-01196

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)		<ul><li>Corrosion resistant</li><li>Antimagnetic</li></ul>	RoHS
Chloroprene	CR	-20 °C to +80 °C	Black (BK)		Weather-resistant     High yield strength	RoHS
Ethylene Tetrafluoroethylene (Tefzel <sup>®</sup> )	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 resistanc	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
<b>Polyamide 6.6,</b> 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
<b>Polyamide 6.6,</b> heat and UV stabilised	PA66HSW	-40 °C to +105 °C	Black (BK)	UL 94 V2	<ul><li> High yield strength</li><li> Modified elevated max. temperature</li><li> UV-resistant</li></ul>	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
<b>Polyamide 6.6,</b> 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
<b>Polyamide 6.6,</b> 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
<b>Polyamide 6.6,</b> 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
<b>Polyamide 6.6,</b> 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
<b>Polyamide 6.6,</b> 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
<b>Polyamide 6.6,</b> 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, alkaliks 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 oilsresistance 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	<ul><li>Floats in water</li><li>Moderate yield strength</li><li>Good chemical resistance to: organic acids</li></ul>	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
<b>Polypropylene</b> 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
<b>Polypropylene</b> 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     **More colours on request	HF RoHS

Tefzel<sup>®</sup> is a registered trademark of DuPont. General linguistic usage for cable ties made from raw material E/TFE is Tefzel<sup>®</sup>-Tie. In addition to Tefzel<sup>®</sup> 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.

HF = Halogenfree LFH = Limited Fire Hazard RoHS = Restriction of Hazardous Substances \*\*More colours on request.

