

Fixing elements for tubes and harnesses

for multiparallel routing

These clips are designed for the installation of high voltage cables in the automotive sector or electric vehicles in general, but can be used for any application requiring parallel wiring.

The sturdy clip fixes and guides cables and corrugated conduits in a stable and optimal way, keeping the wiring parallel even in the presence of strong vibrations. The HV-Clips are available as CLP, CMP and CHP parts. The "L" stands for lower performance (EPDM), the "M" for medium performance (heat resistant + AEM) and the "H" for high performance (PA46 + AEM). The HV clips can also be produced with other material combinations or are already available.

Features and benefits

- Soft AEM inserts protect the wiring from crushing, abrasion and chemicals
- · Easy installation thanks to the special closure
- In PA6HS for temperatures up to 90°C and PA46 for temperature up to 150°C
- For fixing on 5.0 mm studs with anti-rotation pin
- For 2 cables or parallel routing
- The Twist-Lock closing system (20.0 24.0 mm) acts with the same force on both compartments and significantly increases the necessary reopening force by decreasing the closing force
- Rotatable fastener = 20.0 -24.0 mm bundle diameter
- Hinge lock = 14.0 -17.0 mm bundle diameter

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Double clip in PA46 with anti-rotation pin recommended for corrugated tubing.

Material information on page 22.

ТҮРЕ	Stud Ø	Bundle Ø min.	Bundle Ø max.	Width (W)	Length (L)	Height (H)	Material	Colour	Article-No.
CHP2W14-17	M5	14.0	17.0	20.0	75.1	31.7	PA46 AEM	Orange (OG)	151-03331
CMP2W14-17	M5	14.0	17.0	20.4	75.1	31.7	PA6HS AEM	Black (BK)	151-03463
CMP2W20-24	M5	20.0	24.0	22.0	89.7	41.2	PA6HS AEM	Black (BK)	151-03464

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 resistantHigh 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 sensitivityHigher 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	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	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	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 sensitivityHigher 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	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 sensitivityHigher flexibility at low temperature	HF RoHS
Polyamide 6.6, UV-resistant	PA66W	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK)	UL 94 V2	High yield strengthUV 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	 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 strengthLow 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 V2	 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	РР	-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, 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 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 additon 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.

HF = Halogen Free

LFH = Limited Fire Hazard

RoHS = Restriction of Hazardous Substances

**Further colours available on request.

 $\overset{\texttt{N}}{|\texttt{N}|} = \overset{\texttt{Minimum Loop Tensile Strength}}{\text{for Cable Ties (newton)}}$

For more material information please visit our website.