2-piece fixing ties with arrowhead, with disc, sealed

2-piece fixing ties with arrowhead, with disc, for round holes, sealed

The parts are mainly used in the automotive industry. This fastening solution is used to secure cable harnesses e.g. in car doors. We offer a variety of panel thicknesses and hole sizes to suit all kinds of application. The seal protects the interior and surrounding cables among other things from splash water.

Features and benefits

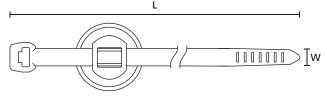
- Pre-assembled 2-piece fixing tie with arrowhead foot part
- · Cable tie head can be moved after bundling
- Easy to assemble without the need for a tool
- · Arrowhead simply locks into place
- Disc adjusts tie for pressure from various directions
- Seal protects against splash water
- Versions "SRAH" are coming with a seal made from thermoplastic elastomer (TPE)



The additional seal protects against the ingress of moisture.



Material specification please see page 26.



Drawing

T50ROSSFT6.5-16-2MOD-MD

TYPE

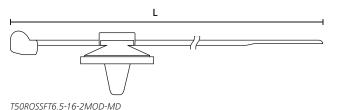
16-3MD T50ROSSFT6.5-

D16-2 MD

T50ROSSFT6.5

16-2MD-SHORT T50ROSSFT6.5-

T50RSRAH6.5SD



Width (W)	Length (L)	Material	Colour	Tools	Article-No.
4.6	200.0	PA66HS, PA66HIRHS	BK	2-3;5-6;8;10	150-37799
4.6	200.0	PA66HS, PA66HIRHS	ВК	2-3;5-6;8;10	155-42002
4.6	200.0	PA66HS, PA66HIRHS	ВК	2-3;5-6;8;10	150-93100

ВК

2-3;5-6;8

156-01711

PA66HIRHSUV, TPE

All dimensions in mm. Subject to technical changes.

Rec	Recommended Tools								
	2	3	5	6	8	10			
	MK20	MK21	MK3PNSP2	EVO7	MK7P	EVO9			
	549	549	550	552	554	553			

Hole Ø

(FH)

6.1 - 7.0

6.3 - 6.7

6.3 - 6.7

6 35

(hexagonal), 6.5

Panel

Thickness

2.5 - 3.0

0.7 - 1.2

0.7 - 1.8

0.6 - 1.1

4.6

200.0

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

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	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 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	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

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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 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 detectableHeat resistantModerate yield strengthGood 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

 $\label{eq:Tefel} \textit{Tefzel}^{\textcircled{\texttt{B}}} \ \text{is a registered trademark of DuPont. General linguistic usage for cable ties made from raw material \textit{E/TFE}} \ \text{is Tefzel}^{\textcircled{\texttt{B}}} \text{-Tie. In addition to Tefzel}^{\textcircled{\texttt{B}}} \ \text{from DuPont HellermannTyton also uses}$ equivalent E/TFE raw material from other suppliers.





LFH = Limited Fire Hazard

RoHS = Restriction of Hazardous Substances



^{**}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.