

#### Cable Tie locked by glass fibre pin

This cable tie is distinguished by its smooth strap and unique locking mechanism. The chamfered head of the KR-Series allows for a firm fit around the bundled element. Due to its special design KR-Series cable ties can be used as a safety method to bundle any cable and to also secure bellows on steering racks, water hoses or vacuum lines. The endless strap version is fairly flexible and can be cut to any length required. Separate heads are available to fix the strap.

#### Features and benefits

- Cable tie without serration to avoid any damage to cables
- Strap is locked into place with a glass-fibre reinforced pin
- · Very secure and vibration resistant fixing
- Available in various materials, colours and almost every length
- Cable ties from PA12 are highly resistant to chemicals, impact and UV light
- KR-ties up to 426 mm are made as one piece
- For assembly a special KR-tool is needed







The KR-Series has been repeatedly proven in high vibration applications.





The unlocked head of a KR-tie.

The cable tie (red) is locked into place with the pin.

#### **KR-Series**, 1-Piece



Cable tie KR-Series

ТҮРЕ	Width (W)	Length (L)	Bundle Ø max.	ر ۲	Material	Colour	Pack Cont.	Tools	Article-No.
	6.1	360.0	93.0	490	PA66	Natural (NA)	50 pcs.	13	121-63519
KR6/35	6.1	360.0	93.0	490	PA66HS	Natural (NA)	50 pcs.	13	121-63555
	6.1	360.0	93.0	490	PA66W	Black (BK)	50 pcs.	13	121-63560
	8.0	210.0	47.0	785	PA66HS	Natural (NA)	50 pcs.	13-14	121-82155
KR8/21	8.0	210.0	47.0	785	PA66	Natural (NA)	50 pcs.	13-14	121-82119
	8.0	210.0	47.0	785	PA66W	Black (BK)	50 pcs.	13-14	121-82160

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools								
	13	14						
	KR6/8	KR8PNSE						
	559	559						

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



For product specific approvals and specifications please refer to the Appendix.

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## Cable Tie locked by glass fibre pin

KR-Series, 1-Piece



Cable tie KR-Series

ТҮРЕ	Width (W)	Length (L)	Bundle Ø max.	S N	Material	Colour	Pack Cont.	Tools	Article-No.
KR8/33	8.0	337.0	86.0	390	PA12	Black (BK)	50 pcs.	13-14	121-83380
	8.0	337.0	86.0	785	PA66	Natural (NA)	50 pcs.	13-14	121-83319
	8.0	337.0	86.0	785	PA46	Grey (GY)	50 pcs.	13-14	121-83378
	8.0	337.0	86.0	785	PA66HS	Natural (NA)	50 pcs.	13-14	121-83355
	8.0	337.0	86.0	785	PA66W	Black (BK)	50 pcs.	13-14	121-83360
KR8/43	8.0	426.0	105.0	785	PA66HS	Black (BK)	50 pcs.	13-14	121-74360
	8.0	426.0	105.0	785	PA66HS	Natural (NA)	50 pcs.	13-14	121-74359

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

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For product specific approvals and specifications please refer to the Appendix.

#### KR-Series, ultrasonic welded



Other dimensions are available on request.

Cable tie KR-Series, ultrasonic welded

ТҮРЕ	Width (W)	Length (L)	Bundle Ø max.	S N	Material	Colour	Pack Cont.	Tools	Article-No.
KR8/50	8.0	500.0	152.0	785	PA66	Natural (NA)	50 pcs.	13-14	121-05019
KR8/60	8.0	600.0	184.0	785	PA66W	Black (BK)	50 pcs.	13-14	121-06060

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

#### **KR-Series**, endless







All dimensions in mm. Subject to technical changes

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

### **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)		<ul> <li>Weather-resistant</li> <li>High yield strength</li> </ul>	RoHS
Ethylene Tetrafluoroethylene (Tefzel <sup>®</sup> )	E/TFE	-80 °C to +170 °C	Blue (BU)	UL 94 V0	<ul> <li>Resistance to radioactivity</li> <li>UV- resistant, not moisture sensitive</li> <li>Good chemical resistance to: acids, bases, oxidizing agents</li> </ul>	RoHS
Polyacetal	POM	-40 °C to +90 °C, (+110 °C, 500 h)	Natural (NA)	UL 94 HB	<ul> <li>Limited brittleness sensitivity</li> <li>Flexible at low temperature</li> <li>Not moisture sensitive</li> <li>Robust on impacts</li> </ul>	RoHS
Polyamide 11	PA11	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK)	UL 94 HB	<ul> <li>Bio-plastic, derived from vegetable oil</li> <li>Strong impact resistance at low temperature</li> <li>Very low moisture absorption</li> <li>Weather-resistant</li> <li>Good chemical resistanc</li> </ul>	HF RoHS
Polyamide 12	PA12	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK)	UL 94 HB	<ul> <li>Good chemical resistance to: acids, bases, oxidizing agents</li> <li>UV- resistant</li> </ul>	HF RoHS
Polyamide 4.6	PA46	-40 °C to +150 °C (5000 h), +195 °C (500 h)	Natural (NA), Grey (GY)	UL 94 V2	<ul> <li>Resistance to high temperatures</li> <li>Very moisture sensitive</li> <li>Low smoke sensitiv</li> </ul>	HF LFH RoHS
Polyamide 6	PA6	-40 °C to +80 °C	Black (BK)	UL 94 V2	High yield strength	RoHS
<b>Polyamide 6,</b> high impact modified	PA6HIR	-40 °C to +80 °C	Black (BK)	UL 94 HB	<ul> <li>Limited brittleness sensitivity</li> <li>Higher flexibility at low temperature</li> </ul>	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, PA66GF15	-40 °C to +105 °C	Black (BK)	UL 94 HB	<ul> <li>Good resistance to: lubricants, vehicle fuel, salt water and a lot of solvent</li> </ul>	HF RoHS
Polyamide 6.6, 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	<ul> <li>High yield strength</li> <li>Modified elevated max. temperature</li> </ul>	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	<ul> <li>Limited brittleness sensitivity</li> <li>Higher flexibility at low temperature</li> </ul>	RoHS
Polyamide 6.6, high impact modified, heat and UV stabilised	PA66HIRHSW	-40 °C to +110 °C	Black (BK)	UL 94 HB	<ul> <li>Limited brittleness sensitivity</li> <li>Higher flexibility at low temperature</li> <li>Modified elevated max. temperature</li> <li>High yield strength, UV-resistant</li> </ul>	RoHS
Polyamide 6.6, high impact modified, heat stabilised	PA66HIRHS	-40 °C to +105 °C	Black (BK)	UL 94 HB	<ul> <li>Limited brittleness sensitivity</li> <li>Higher flexibility at low temperature</li> <li>Modified elevated max. temperature</li> </ul>	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	<ul> <li>Limited brittleness sensitivity</li> <li>Higher flexibility at low temperature</li> </ul>	RoHS
<b>Polyamide 6.6,</b> UV-resistant	PA66W	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK)	UL 94 V2	<ul> <li>High yield strength</li> <li>UV-resistant</li> </ul>	HF RoHS

# Cable Ties and Fixings Material Information

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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	<ul> <li>High yield strength</li> <li>Metal and X-Ray detectable</li> </ul>	HF RoHS
<b>Polyamide 6.6,</b> with metal particles	PA66MP+	-40 °C to +85 °C	Blue (BU)	not flame retardant	<ul> <li>High yield strength</li> <li>Metal and x-ray detectable</li> </ul>	HF RoHS
Polyamide 6.6 V0	PA66V0	-40 °C to +85 °C	White (WH)	UL 94 V0	<ul><li>High yield strength</li><li>Low smoke emission</li></ul>	HF LFH RoHS
Polyester	SP	-50 °C to +150 °C	Black (BK)	halogen free	<ul> <li>UV-resistant</li> <li>Good chemical resistance to: most acids, alkaliks and oils</li> </ul>	HF LFH RoHS
Polyetheretherketone	PEEK	-55 °C to +240 °C	Beige (BGE)	UL 94 V0	<ul> <li>Resistance to radioactivity</li> <li>Not moisture sensitive</li> <li>Good chemical resistance to: acids, bases, oxidizing agents</li> </ul>	HF LFH RoHS
Polyethylene	PE	-40 °C to +50 °C	Black (BK), Grey (GY)	UL 94 HB	<ul> <li>Low moisture absorption</li> <li>Good chemical oilsresistance to: most acids, alcohol and oils</li> </ul>	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	<ul> <li>Good resistance to high temperatures</li> <li>Good chemical and abrasion resistance</li> </ul>	HF RoHS
Polypropylene with metal particles	PPMP	-40 °C to +115 °C	Blue (BU)	UL 94 HB	<ul> <li>Metal and X-Ray detectable</li> <li>Heat resistant</li> <li>Moderate yield strength</li> <li>Good chemical resistance</li> </ul>	RoHS
Polypropylene with metal particles	PPMP+	-40 °C to +85 °C	Blue (BU)	not flame retardant	<ul> <li>High yield strength</li> <li>Metal and x-ray detectable</li> </ul>	HF RoHS
Polyvinylchloride	PVC	-10 °C to +70 °C	Black (BK), Natural (NA)	UL 94 V0	<ul> <li>Low moisture absorption</li> <li>Good chemical resistance to: acids, ethanol and oil</li> </ul>	RoHS
Stainless Steel	SS304, SS316	-80 °C to +538 °C	Natural (NA)	non-burning	<ul> <li>Corrosion resistant</li> <li>Antimagnetic</li> <li>Weather resistant</li> <li>Outstanding chemical resistance</li> </ul>	HF LFH RoHS
Thermoplastic Polyurethane	TPU	-40 °C to +85 °C	Black (BK)	UL 94 HB	<ul> <li>High elastic</li> <li>Good chemical resistance to: acids, bases and oxidizing agents</li> </ul>	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 additon 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.

\*\*More colours on request.

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= Minimum Loop Tensile Strength for Cable Ties (Newton)

HF = Halogenfree

LFH = Limited Fire Hazard RoHS = Restriction of Hazardous Substances

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