

## Endless cable ties with separate head and spacer **EL-TY-Series**

These robust cable ties are particularly suitable for use with larger diameter cables, pipes and hoses. Designed originally for securing overhead catenary and cables, they are now used in many industries from the building sector, through to the chemical industry, to the installation of signs for traffic management. Separate spacers allow for a defined distance when bundling in parallel.

## Features and benefits

- Made of very strong Polyacetal (POM)
- System consists of endless strap, spacers and heads
- Head includes stainless steel pawls for a proper fixation
- · Very secure fixing and good resistance to ageing and UV light
- Suits any bundle diameter and reduces inventory



EL-TY straps can be cut to suit any bundle with application tool EVO9.



please see page 26.







Head (Front View)

Head (Plain View)

G w

Head (Side View)

L



ТҮРЕ	Width (W)	Length (L)	Height (H)	ر ع	Strap Width max. (G)	Material	Colour	Tools	Article-No.
EL-TY (TELS1)	12.7	15.2 m	-	1,115	-	POM	Black (BK)	11	111-30000
EL-TY (TELSH)	20.3	15.8	12.4	1,115	12.7	POM	Black (BK)	-	111-31000
EL-TY (TELS-SPK2)	53.3	30.5	17.0	1,115	12.7	PP	Black (BK)	-	111-32000

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						
	11					
	evo9ht					
	553					

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)		<ul><li>Corrosion resistant</li><li>Antimagnetic</li></ul>	RoHS
Chloroprene Rubber	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 impact</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 resistance</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 +130 °C, (+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 sensitivity</li> </ul>	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	<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
<b>Polyamide 6.6,</b> 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	<ul> <li>High yield strength</li> <li>Modified elevated maximum 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 maximum temperature</li> </ul>	HF RoHS
Polyamide 6.6, 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
<b>Polyamide 6.6,</b> high impact modified, heat and UV-stabilised	PA66HIRHSUV	-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 maximum 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 maximum temperature</li> </ul>	RoHS
<b>Polyamide 6.6,</b> high impact modified, scan black)	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

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	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	<ul> <li>High yield strength</li> <li>Low smoke emission</li> </ul>	HF LFH RoHS
Polyester	SP	-50 °C to +150 °C	Black (BK)		<ul> <li>UV resistant</li> <li>Good chemical resistance to most acids, bases 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, oxidising 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 resistance to most acids, bases, alcohol, oils</li> </ul>	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	<ul> <li>Floats in water</li> <li>Moderate yield strength</li> <li>Good chemical resistance to acids, bases and solvents</li> </ul>	HF RoHS
Polypropylene, Ethylene Propylene Diene Terpolymer rubber free of Nitrosamine	PP, EPDM	-20 °C to +95 °C	Black (BK)	UL 94 HB	<ul> <li>Good resistance to high temperature</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
<b>Polypropylene</b> 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, bases, salts, alcohol, oils</li> </ul>	RoHS
Stainless Steel, 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>Chemical resistance</li> <li>SS316 also resistant against seawater, salt spray and anorganic acids</li> </ul>	HF LFH RoHS
Thermoplastic Polyurethane	TPU	-40 °C to +85 °C	Black (BK)	UL 94 HB	<ul> <li>High elasticity</li> <li>Good chemical resistance to acids, bases and oxidising 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 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 = Halogenfree

LFH = Limited Fire Hazard

RoHS = Restriction of Hazardous Substances

\*\*Further colours available on request.