Cable Ties and Fixings

Cable ties with low profile head

LPH-Series

LPH cable ties are made of Polyamide 6.6 materials. The design with its serration on the outside provides a smooth surface to the bundle. Any damage to the insulation can be avoided. The flat head is ideal in areas with restricted space. They are mainly used within the electrical industry but the tough design is perfectly suited to a variety of indoor and outdoor applications.

Features and benefits

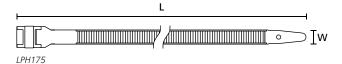
- High impact modifed cable ties are also available
- Good tensile strength with a single or a double bridged head
- Outside serration allows for a smooth surface to the bundle
- Design protects against damage to cable insulation
- Low profile head for optimised use especially in restricted spaces
- Strap is threaded parallel through the low profile head

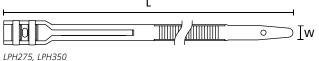


LPH-Series with a smooth surface to the bundle.



Material specification please see page 26.





| TYPE | Width (W) | Length (L) | Bundle Ø max. | ΚZ | Material | Colour | Pack Cont. | Tools | Article-No. |
|--------|--------------|---------------|------------------|-----|------------|------------|---------------|--------|-------------|
| LPH175 | 9.0 | 175.0 | 40.0 | 310 | PA66 | Black (BK) | 100 pcs. | 1;9-10 | 112-00203 |
| LPH275 | 9.0 | 265.0 | 62.0 | 480 | PA66HIR(S) | Black (BK) | 100 pcs. | 1;9-10 | 112-00303 |
| LPH350 | 9.0 | 355.0 | 92.0 | 480 | PA66HIR(S) | Black (BK) | 100 pcs. | 1;9-10 | 112-00403 |
| LPH500 | 9.0 | 505.0 | 140.0 | 540 | PA66HIR(S) | Black (BK) | 100 pcs. | 1;9-10 | 112-00033 |
| LPH750 | 9.0 | 752.0 | 220.0 | 540 | PA66HIR(S) | Black (BK) | 100 pcs. | 1;9-10 | 112-00034 |

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 | | | | | | | |
|-------------------|---------|--------|------|--|--|--|--|
| | 1 | 9 | 10 | | | | |
| | MK10-SB | EVO9HT | MK9P | | | | |
| | 550 | 554 | 556 | | | | |

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



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



Material Specification Overview

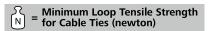
| MATERIAL | Material Shortcut | Operating Temperature | Colour** | Flammability | Material Properties* | Material Specifications |
|--|----------------------|--|--------------------------------|-------------------------|---|----------------------------|
| Aluminium alloy | AL | -40 °C to +180 °C | Natural (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 sensitivityFlexible at low temperatureNot moisture sensitiveRobust 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, (+105 °C for 500 h) | 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, (+105 °C for 500 h) | Black (BK) | UL 94 V2 | High yield strengthModified elevated maximum temperatureUV resistant | HF RoHS |
| Polyamide 6.6, heat stabilised | PA66HS | -40 °C to +105 °C, (+105 °C for 500 h) | 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, (+105 °C for 500 h) | 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 |
| 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 |
| | | | | | | |



| MATERIAL | Material Shortcut | Operating Temperature | Colour** | Flammability | Material Properties* | Material Specifications |
|--|----------------------|--------------------------|--------------------------------|-------------------------|--|----------------------------|
| 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 waterModerate yield strengthGood 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 | 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 oxidizing 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 addition to Tefzel® from DuPont HellermannTyton also uses equivalent E/TFE raw material from other suppliers.

HF = Halogen Free 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.