



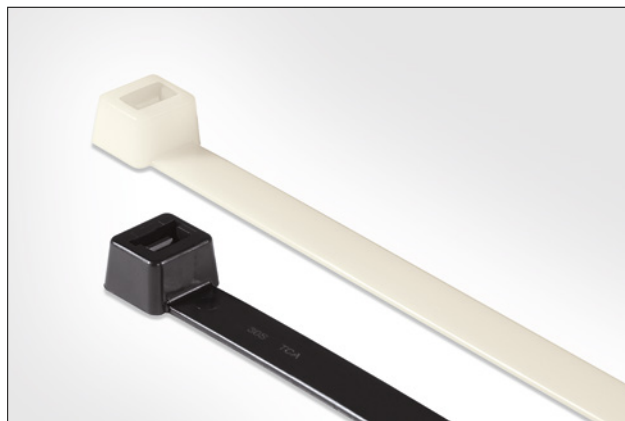
Cable Ties in-between size to T-Series

LK-Series natural and black

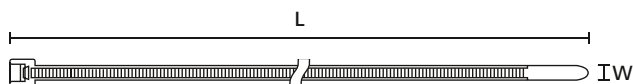
For bundling and securing cables, pipes and hoses. These cable ties can be used for almost any type of application.

Features and Benefits

- Available in a wide range of materials and sizes
- Inside serrated ties for a strong hold around bundles
- High tensile strength with very low insertion force
- Simple and quick to install
- Easy application either manually or with a processing tool



LK-Series.



LK-Series



Material specification please see page 24.

| TYPE | Width (W) | Length (L) | Bundle Ø max. | N | Material | Colour | Pack Cont. | Tools | Article-No. |
|------|-----------|------------|---------------|-------|------------|--------------|------------|-------|-------------|
| LK2A | 4.6 | 270.0 | 73.0 | 225 | PA66 | Black (BK) | 100 pcs. | 2-10 | 111-60110 |
| | 4.6 | 270.0 | 73.0 | 225 | PA66 | Natural (NA) | 100 pcs. | 2-10 | 111-60119 |
| | 4.6 | 270.0 | 73.0 | 225 | PA66HIR(S) | Black (BK) | 100 pcs. | 2-10 | 111-00127 |
| | 4.6 | 270.0 | 73.0 | 225 | PA66HS | Black (BK) | 100 pcs. | 2-10 | 111-60150 |
| | 4.6 | 270.0 | 73.0 | 225 | PA66HS | Natural (NA) | 100 pcs. | 2-10 | 111-60159 |
| | 4.6 | 270.0 | 73.0 | 225 | PA66W | Black (BK) | 100 pcs. | 2-10 | 111-60160 |
| LK2 | 4.8 | 120.0 | 28.0 | 135 | PA66 | Natural (NA) | 200 pcs. | 2;4-8 | 111-60219 |
| LK5 | 13.2 | 535.0 | 150.0 | 1,115 | PA66 | Black (BK) | 50 pcs. | 11-12 | 111-60510 |
| | 13.2 | 535.0 | 150.0 | 1,115 | PA66 | Natural (NA) | 50 pcs. | 11-12 | 111-60519 |
| | 13.2 | 535.0 | 150.0 | 1,115 | PA66HIR(S) | Black (BK) | 50 pcs. | 11-12 | 111-60501 |
| | 13.2 | 535.0 | 150.0 | 1,115 | PA66HS | Natural (NA) | 50 pcs. | 11-12 | 111-60559 |
| | 13.2 | 535.0 | 150.0 | 1,115 | PA66W | Black (BK) | 50 pcs. | 11-12 | 111-60560 |

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

| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|------|------|-------|----------|------|-------|------|-----|-----|-------|------|
| MK20 | MK21 | MK3SP | MK3PNSP2 | EVO7 | MK7HT | MK7P | MK6 | MK9 | MK9HT | MK9P |

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



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) | | <ul style="list-style-type: none"> Corrosion resistant Antimagnetic | RoHS |
| Chloroprene | CR | -20 °C to +80 °C | Black (BK) | | <ul style="list-style-type: none"> Weather-resistant High yield strength | RoHS |
| Ethylene Tetrafluoroethylene | E/TFE | -80 °C to +170 °C | Blue (BU) | UL94 V0 | <ul style="list-style-type: none"> 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) | UL94 HB | <ul style="list-style-type: none"> Limited brittleness sensitivity Flexible at low temperature Not moisture sensitive Robust on impacts | RoHS |
| Polyamide 11 | PA11 | -40 °C to +85 °C, (+105 °C, 500 h) | Black (BK) | UL94 HB | <ul style="list-style-type: none"> 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) | UL94 HB | <ul style="list-style-type: none"> Good chemical resistance to: acids, bases, oxidizing agents UV-resistant | HF RoHS |
| Polyamide 4.6 | PA46 | -40 °C to +150 °C (5000 h), +195 °C (500 h) | Natural (NA), Grey (GY) | UL94 V2 | <ul style="list-style-type: none"> Resistance to high temperatures Very moisture sensitive Low smoke sensitive | HF LFH RoHS |
| Polyamide 6 | PA6 | -40 °C to +80 °C | Black (BK) | UL94 V2 | <ul style="list-style-type: none"> High yield strength | RoHS |
| Polyamide 6, high impact modified | PA6HIR | -40 °C to +80 °C | Black (BK) | UL94 HB | <ul style="list-style-type: none"> 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) | UL94 V2 | <ul style="list-style-type: none"> High yield strength | HF RoHS |
| Polyamide 6.6, glass-fibre reinforced | PA66GF13, PA66GF15 | -40 °C to +105 °C | Black (BK) | UL94 HB | <ul style="list-style-type: none"> Good resistance to: lubricants, vehicle fuel, salt water and many solvents | HF RoHS |
| Polyamide 6.6, heat and UV stabilised | PA66HSW | -40 °C to +105 °C | Black (BK) | UL94 V2 | <ul style="list-style-type: none"> High yield strength Modified elevated max. temperature UV-resistant | HF RoHS |
| Polyamide 6.6, heat stabilised | PA66HS | -40 °C to +105 °C | Black (BK), Natural (NA) | UL94 V2 | <ul style="list-style-type: none"> High yield strength Modified elevated max. temperature | HF RoHS |
| Polyamide 6.6, high impact modified | PA66HIR | -40 °C to +80 °C, (+105 °C, 500 h) | Black (BK) | UL94 HB | <ul style="list-style-type: none"> Limited brittleness sensitivity Higher flexibility at low temperature | RoHS |
| Polyamide 6.6, high impact modified, heat and UV stabilised | PA66HIRHSW | -40 °C to +110 °C | Black (BK) | UL94 HB | <ul style="list-style-type: none"> Limited brittleness sensitivity Higher flexibility at low temperature Modified elevated max. temperature High yield strength, UV-resistant | HF RoHS |
| Polyamide 6.6, high impact modified, heat stabilised | PA66HIRHS | -40 °C to +105 °C | Black (BK) | UL94 HB | <ul style="list-style-type: none"> Limited brittleness sensitivity Higher flexibility at low temperature Modified elevated max. temperature | RoHS |
| Polyamide 6.6, high impact modified, scan black | PA66HIR(S) | -40 °C to +80 °C, (+105 °C, 500 h) | Black (BK) | UL94 HB | <ul style="list-style-type: none"> Limited brittleness sensitivity Higher flexibility at low temperature | HF RoHS |
| Polyamide 6.6, UV-resistant | PA66W | -40 °C to +85 °C, (+105 °C, 500 h) | Black (BK) | UL94 V2 | <ul style="list-style-type: none"> High yield strength UV-resistant | HF RoHS |

Tefzel® is a registered trademark of DuPont. General linguistic usage for cable ties made from raw material E/TFE is Tefzel®-Tie. **More colours on request.

In addition to Tefzel® 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.



N = Minimum Loop Tensile Strength for Cable Ties (Newton)

HF = Halogenfree
LFH = Limited Fire Hazard
RoHS = Restriction of Hazardous Substances

| 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) | UL94 HB | <ul style="list-style-type: none"> High yield strength Metal and X-Ray detectable | HF RoHS |
| Polyamide 6.6 V0 | PA66V0 | -40 °C to +85 °C | White (WH) | UL94 V0 | <ul style="list-style-type: none"> High yield strength Low smoke emission | HF LFH RoHS |
| Polyamide 6.6 V0 , High Oxygen Index | PA66V0-HOI | -40 °C to +85 °C, (+105 °C, 500 h) | White (WH) | UL94 V0 | <ul style="list-style-type: none"> High yield strength Low smoke emissions | HF LFH RoHS |
| Polyester | SP | -50 °C to +150 °C | Black (BK) | Halogen free | <ul style="list-style-type: none"> UV-resistant Good chemical resistance to: most acids, alkalis and oils | HF LFH RoHS |
| Polyetheretherketone | PEEK | -55 °C to +240 °C | Beige (BGE) | UL94 V0 | <ul style="list-style-type: none"> Resistance to radioactivity Not moisture sensitive Good chemical resistance to: acids, bases, oxidizing agents | HF LFH RoHS |
| Polyethylene | PE | -40 °C to +50 °C | Black (BK), Grey (GY) | UL94 HB | <ul style="list-style-type: none"> Low moisture absorption Good chemical resistance to: most acids, alcohol and oils | HF RoHS |
| Polyolefin | PO | -40 °C to +90 °C | Black (BK) | UL94 V0 | <ul style="list-style-type: none"> Low smoke emissions | HF LFH RoHS |
| Polypropylene | PP | -40 °C to +115 °C | Black (BK), Natural (NA) | UL94 HB | <ul style="list-style-type: none"> Floats in water Moderate yield strength Good chemical resistance to: organic acids | HF RoHS |
| Polypropylene, Ethylene- Propylene-Dien- Terpolymere-rubber free of Nitrosamine | PP, EPDM | -20 °C to +95 °C | Black (BK) | UL94 HB | <ul style="list-style-type: none"> Good resistance to high temperatures Good chemical and abrasion resistance | HF RoHS |
| Polypropylene with metal particles | PPMP | -40 °C to +115 °C | Blue (BU) | UL94 HB | <ul style="list-style-type: none"> Floats in certain liquids Metal and X-Ray detectable Heat resistant Moderate yield strength Good chemical resistance | RoHS |
| Polyvinylchloride | PVC | -10 °C to +70 °C | Black (BK), Natural (NA) | UL94 V0 | <ul style="list-style-type: none"> Low moisture absorption Good chemical resistance to: acids, ethanol and oil | RoHS |
| Stainless Steel, Stainless Steel | SS304, SS316 | -80 °C to +538 °C | Natural (NA) | Non burning | <ul style="list-style-type: none"> Corrosion resistant Antimagnetic Weather resistant Outstanding chemical resistance | HF LFH RoHS |
| Thermoplastic Polyurethane | TPU | -40 °C to +85 °C | Black (BK) | UL94 HB | <ul style="list-style-type: none"> High elasticity Good chemical resistance to: acids, bases and oxidizing agents | HF RoHS |

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