Protective channel for stainless steel ties

**LFPC-Series**

When used in conjunction with the MBT, MST, MLT and AMT range of stainless steel cable ties this channel gives the cable protection against chafing, vibration and shock. Ideal for use in arduous conditions such as those found on board ships, oil rigs or in nuclear power stations.

**Features and benefits**
- LFPC channel, manufactured from Polyolefin
- Works with MBT-, MST-, MLT- and AMT-Series
- Smooth surface protects bundle against chafing caused by vibrations and shocks
- Can be cut from roll to any length
- Halogenfree
- Flame retardant

**Material specification please see page 26.**

**Cable Tie MBTXH with LFPC Protective Channel.**

<table>
<thead>
<tr>
<th>TYPE</th>
<th>Width (W)</th>
<th>For Ties</th>
<th>Material</th>
<th>Pack Cont.</th>
<th>Article-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LFPC70</td>
<td>7.0</td>
<td>MBTS</td>
<td>PO</td>
<td>25 m</td>
<td>111-93000</td>
</tr>
<tr>
<td>LFPC83</td>
<td>8.3</td>
<td>MBTH</td>
<td>PO</td>
<td>25 m</td>
<td>111-00257</td>
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<tr>
<td>LFPC103</td>
<td>10.3</td>
<td>MBTH</td>
<td>PO</td>
<td>25 m</td>
<td>111-94000</td>
</tr>
<tr>
<td>LFPC129</td>
<td>12.9</td>
<td>MBTXH</td>
<td>PO</td>
<td>50 m</td>
<td>111-00253</td>
</tr>
<tr>
<td>LFPC132</td>
<td>13.2</td>
<td>MBTXH</td>
<td>PO</td>
<td>25 m</td>
<td>111-00254</td>
</tr>
<tr>
<td>LFPC150</td>
<td>15.0</td>
<td>MBTXH</td>
<td>PO</td>
<td>25 m</td>
<td>111-95000</td>
</tr>
<tr>
<td>LFPC163</td>
<td>16.3</td>
<td>AMT, MBTUH</td>
<td>PO</td>
<td>50 m</td>
<td>111-00255</td>
</tr>
</tbody>
</table>

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

**The fire protection properties of the material relate to the test performed on defined test samples. This is a test under laboratory conditions and not directly transferable to the product made from this material.**

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

Further information at www.HellermannTyton.co.uk/fixings
# Material Specification Overview

<table>
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<tr>
<th>MATERIAL</th>
<th>Material Shortcut</th>
<th>Operating Temperature</th>
<th>Colour**</th>
<th>Flammability</th>
<th>Material Properties*</th>
<th>Material Specifications</th>
</tr>
</thead>
</table>
| 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 |
| Polycarbonate | POM | -40 °C to +90 °C,  
(+110 °C, 500 h) | Natural (NA) | UL 94 HB  
• Bioplastics, derived from vegetable oil  
• Strong impact resistance at low temperature  
• Very low moisture absorption  
• Weather resistant  
• Good chemical resistance | | RoHS |
| Polyamide 11 | PA11 | -40 °C to +85 °C,  
(+105 °C, 500 h) | Black (BK) | UL 94 HB  
• Good chemical resistance to acids, bases, oxidizing agents  
• UV resistant | | RoHS |
| Polyamide 12 | PA12 | -40 °C to +85 °C,  
(+105 °C, 500 h) | Black (BK) | UL 94 HB  
• Resistance to high temperatures  
• Very moisture sensitive  
• Low smoke sensitivity | | RoHS |
| Polyamide 4.6 | PA46 | -40 °C to +130 °C,  
(+150 °C, 5000 h;  
+195 °C, 500 h)  
Natural (NA) | Natural (NA),  
Grey (GY) | UL 94 V2  
• Robust on impact | | 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 flexiblity 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 | | RoHS |
| Polyamide 6.6 glass-fibre reinforced | PA66GF13,  
PA66GF15 | -40 °C to +105 °C | Black (BK) | UL 94 HB  
• Good resistance to lubricants, fuels, salt water and solvents | | RoHS |
| Polyamide 6.6 heat and UV stabilised | PA66HSW | -40 °C to +105 °C | Black (BK) | UL 94 V2  
• High yield strength  
• Modified elevated maximum temperature  
• UV resistant | | RoHS |
| Polyamide 6.6 heat stabilised | PA66HS | -40 °C to +105 °C | Black (BK),  
Natural (NA) | UL 94 V2  
• Limited brittleness sensitivity  
• Higher flexiblity at low temperature | | 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 flexiblity at low temperature  
• Modified elevated maximum temperature  
• UV resistant | | RoHS |
| Polyamide 6.6 high impact modified, heat and UV stabilised | PA66HIRHSW | -40 °C to +110 °C | Black (BK) | UL 94 HB  
• Limited brittleness sensitivity  
• Higher flexiblity 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 flexiblity 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 flexiblity 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 | | RoHS |

**Colour**: Natural (NA), Grey (GY), Blue (BU), Black (BK), Scan black (S)
## Material Information

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</tr>
</thead>
<tbody>
<tr>
<td>Polyamide 6.6 with metal particles</td>
<td>PA66MP</td>
<td>-40 °C to +85 °C, (+105 °C, 500 h)</td>
<td>Blue (BU)</td>
<td>UL 94 HB</td>
<td>• High yield strength • Metal and X-Ray detectable</td>
<td>HF RoHS</td>
</tr>
<tr>
<td>Polyamide 6.6 with metal particles</td>
<td>PA66MP+</td>
<td>-40 °C to +85 °C</td>
<td>Blue (BU)</td>
<td>not flame retardant</td>
<td>• High yield strength • Metal and X-Ray detectable</td>
<td>HF RoHS</td>
</tr>
<tr>
<td>Polyamide 6.6 V0</td>
<td>PA66V0</td>
<td>-40 °C to +85 °C</td>
<td>White (WH)</td>
<td>UL 94 V0</td>
<td>• High yield strength • Low smoke emission</td>
<td>HF RoHS</td>
</tr>
<tr>
<td>Polyester</td>
<td>SP</td>
<td>-50 °C to +150 °C</td>
<td>Black (BK)</td>
<td></td>
<td>• UV resistant • Good chemical resistance to most acids, bases and oils</td>
<td>HF LFH RoHS</td>
</tr>
<tr>
<td>Polyetheretherketone</td>
<td>PEEK</td>
<td>-55 °C to +240 °C</td>
<td>Beige (BGE)</td>
<td>UL 94 V0</td>
<td>• Resistance to radioactivity • Not moisture sensitive • Good chemical resistance to acids, bases, oxidising agents</td>
<td>HF LFH RoHS</td>
</tr>
<tr>
<td>Polyethylene</td>
<td>PE</td>
<td>-40 °C to +50 °C</td>
<td>Black, (BK), Grey (GY)</td>
<td>UL 94 HB</td>
<td>• Low moisture absorption • Good chemical resistance to most acids, bases, alcohol, oils</td>
<td>HF RoHS</td>
</tr>
<tr>
<td>Polyolefin</td>
<td>PO</td>
<td>-40 °C to +90 °C</td>
<td>Black (BK)</td>
<td>UL 94 V0</td>
<td>• Low smoke emissions</td>
<td>HF LFH RoHS</td>
</tr>
<tr>
<td>Polypropylene</td>
<td>PP</td>
<td>-40 °C to +115 °C</td>
<td>Black (BK), Natural (NA)</td>
<td>UL 94 HB</td>
<td>• Floats in water • Moderate yield strength • Good chemical resistance to acids, bases and solvents</td>
<td>HF RoHS</td>
</tr>
<tr>
<td>Polypropylene, Ethylene Propylene Diene Terpolymer rubber free of Nitrosamine</td>
<td>PP, EPDM</td>
<td>-20 °C to +95 °C</td>
<td>Black (BK)</td>
<td>UL 94 HB</td>
<td>• Good resistance to high temperature • Good chemical and abrasion resistance</td>
<td>HF RoHS</td>
</tr>
<tr>
<td>Polypropylene with metal particles</td>
<td>PPMP</td>
<td>-40 °C to +115 °C</td>
<td>Blue (BU)</td>
<td>UL 94 HB</td>
<td>• Metal and X-Ray detectable • Heat resistant • Moderate yield strength • Good chemical resistance</td>
<td>RoHS</td>
</tr>
<tr>
<td>Polypropylene with metal particles</td>
<td>PPMP+</td>
<td>-40 °C to +85 °C</td>
<td>Blue (BU)</td>
<td>not flame retardant</td>
<td>• High yield strength • Metal and X-Ray detectable</td>
<td>HF RoHS</td>
</tr>
<tr>
<td>Polyvinylchloride</td>
<td>PVC</td>
<td>-10 °C to +70 °C</td>
<td>Black (BK), Natural (NA)</td>
<td>UL 94 V0</td>
<td>• Low moisture absorption • Good chemical resistance to acids, bases, salts, alcohol, oils</td>
<td>RoHS</td>
</tr>
<tr>
<td>Stainless Steel, Stainless Steel</td>
<td>SS304, SS316</td>
<td>-80 °C to +538 °C</td>
<td>Natural (NA)</td>
<td>Non burning</td>
<td>• Corrosion resistant • Antimagnetic • Weather resistant • Chemical resistance • SS316 also resistant against seawater, salt spray and anorganic acids</td>
<td>HF LFH RoHS</td>
</tr>
<tr>
<td>Thermoplastic Polyurethane</td>
<td>TPU</td>
<td>-40 °C to +85 °C</td>
<td>Black (BK)</td>
<td>UL 94 HB</td>
<td>• High elasticity • Good chemical resistance to acids, bases and oxidising agents</td>
<td>HF RoHS</td>
</tr>
</tbody>
</table>

*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.

**Further colours available on request.

*These details are only guide values. They should not be regarded as an exhaustive material specification and are no substitute for suitability tests. Please see our datasheets for further details.

**Further colours available on request.

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