## **Protective Channel for Stainless Steel Ties** LFPC

When used in conjunction with the MBT, MST 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- and AMT-Series
- Smooth surface protects bundle against chafing caused by vibrations and shocks
- Can be cut from roll (50 m) to any length
- Halogenfree
- Flame retardant



Cable tie MBTXH with LFPC Protective Channel.

The fire protection properties i 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.

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**Material specification** please see page 24.

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

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<br>Shortcut  | Operating<br>Temperature                          | Colour**                       | Flammability | Material<br>Properties*   | Material<br>Specifications |
|--|-----------------------|---|--------------------------------|--------------|---|----------------------------|
| Aluminium-alloy  | AL                    | -40 °C to +180 °C                                 | Natural<br>(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<br>Tetrafluoroethylene  | E/TFE                 | -80 °C to +170 °C                                 | Blue (BU)                      | UL94 V0      | <ul> <li>Resistance to radioactivity</li> <li>UV-resistant, not moisture sensitive</li> <li>Good chemical resistance to:<br/>acids, bases, oxidizing agents</li> </ul>  | RoHS                       |
| Polyacetal   | POM                   | -40 °C to +90 °C,<br>(+110 °C, 500 h)             | Natural<br>(NA)                | UL94 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,<br>(+105 °C, 500 h)             | Black (BK)                     | UL94 HB      | <ul> <li>Bio-plastic, derived from vegetable oil</li> <li>Strong impact resistance at low<br/>temperature</li> <li>Very low moisture absorption</li> <li>Weather-resistant</li> <li>Good chemical resistance</li> </ul> | HF<br>RoHS                 |
| Polyamide 12   | PA12                  | -40 °C to +85 °C,<br>(+105 °C, 500 h)             | Black (BK)                     | UL94 HB      | <ul> <li>Good chemical resistance to:<br/>acids, bases, oxidizing agents</li> <li>UV-resistant</li> </ul>   | HF<br>RoHS                 |
| Polyamide 4.6  | PA46                  | -40 °C to +150 °C<br>(5000 h), +195 °C<br>(500 h) | Natural<br>(NA),<br>Grey (GY)  | UL94 V2      | <ul> <li>Resistance to high temperatures</li> <li>Very moisture sensitive</li> <li>Low smoke sensitive</li> </ul>   | HF<br>LFH<br>RoHS          |
| Polyamide 6  | PA6                   | -40 °C to +80 °C                                  | Black (BK)                     | UL94 V2      | • High yield strength   | RoHS                       |
| Polyamide 6,<br>high impact modified                                     | PA6HIR                | -40 °C to +80 °C                                  | Black (BK)                     | UL94 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,<br>(+105 °C, 500 h)             | Black (BK),<br>Natural<br>(NA) | UL94 V2      | • High yield strength   | HF<br>RoHS                 |
| Polyamide 6.6,<br>glass-fibre reinforced                                 | PA66GF13,<br>PA66GF15 | -40 °C to +105 °C                                 | Black (BK)                     | UL94 HB      | Good resistance to: lubricants, vehicle<br>fuel, salt water and many solvents   | HF<br>RoHS                 |
| Polyamide 6.6,<br>heat and UV stabilised                                 | PA66HSW               | -40 °C to +105 °C                                 | Black (BK)                     | UL94 V2      | <ul> <li>High yield strength</li> <li>Modified elevated max. temperature</li> <li>UV-resistant</li> </ul>   | HF<br>RoHS                 |
| Polyamide 6.6, heat stabilised   | PA66HS                | -40 °C to +105 °C                                 | Black (BK),<br>Natural<br>(NA) | UL94 V2      | <ul> <li>High yield strength</li> <li>Modified elevated<br/>max. temperature</li> </ul>   | HF<br>RoHS                 |
| <b>Polyamide 6.6,</b><br>high impact modified                            | PA66HIR               | -40 °C to +80 °C,<br>(+105 °C, 500 h)             | Black (BK)                     | UL94 HB      | <ul> <li>Limited brittleness sensitivity</li> <li>Higher flexibility at low<br/>temperature</li> </ul>  | RoHS                       |
| <b>Polyamide 6.6,</b><br>high impact modified, heat<br>and UV stabilised | PA66HIRHSW            | -40 °C to +110 °C                                 | Black (BK)                     | UL94 HB      | Limited brittleness sensitivity     Higher flexibility at low temperature     Modified elevated max. temperature     High yield strength, UV-resistant  | HF<br>RoHS                 |
| <b>Polyamide 6.6,</b><br>high impact modified, heat<br>stabilised        | PA66HIRHS             | -40 °C to +105 °C                                 | Black (BK)                     | UL94 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><br>high impact modified, scan<br>black             | PA66HIR(S)            | -40 °C to +80 °C,<br>(+105 °C, 500 h)             | Black (BK)                     | UL94 HB      | <ul> <li>Limited brittleness sensitivity</li> <li>Higher flexibility at low temperature</li> </ul>  | HF<br>RoHS                 |
| <b>Polyamide 6.6,</b><br>UV-resistant                                    | PA66W                 | -40 °C to +85 °C,<br>(+105 °C, 500 h)             | Black (BK)                     | UL94 V2      | <ul><li>High yield strength</li><li>UV-resistant</li></ul>  | HF<br>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 additon 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.

HF = Halogenfree LFH = Limited Fire Hazard

RoHS = Restriction of Hazardous Substances

## Cable Ties and Fixings Material Information

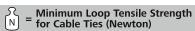
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| MATERIAL   | Material<br>Shortcut | Operating<br>Temperature              | Colour**                       | Flammability | Material<br>Properties*  | Material<br>Specifications |
|--|----------------------|---------------------------------------|--------------------------------|--------------|--|----------------------------|
| <b>Polyamide 6.6,</b> with metal particles   | PA66MP               | -40 °C to +85 °C,<br>(+105 °C, 500 h) | Blue (BU)                      | UL94 HB      | <ul> <li>High yield strength</li> <li>Metal and X-Ray detectable</li> </ul>  | HF<br>RoHS                 |
| Polyamide 6.6 V0   | PA66V0               | -40 °C to +85 °C                      | White (WH)                     | UL94 V0      | <ul><li>High yield strength</li><li>Low smoke emission</li></ul>   | HF<br>LFH<br>RoHS          |
| <b>Polyamide 6.6 V0</b> ,<br>High Oxygen Index   | PA66V0-HOI           | -40 °C to +85 °C,<br>(+105 °C, 500 h) | White (WH)                     | UL94 V0      | <ul><li>High yield strength</li><li>Low smoke emissions</li></ul>  | HF<br>LFH<br>RoHS          |
| Polyester  | SP                   | -50 °C to +150 °C                     | Black (BK)                     | Halogen free | <ul> <li>UV-resistant</li> <li>Good chemical resistance to:<br/>most acids, alkalis and oils</li> </ul>  | HF<br>LFH<br>RoHS          |
| Polyetheretherketone   | PEEK                 | -55 °C to +240 °C                     | Beige (BGE)                    | UL94 V0      | <ul> <li>Resistance to radioactivity</li> <li>Not moisture sensitive</li> <li>Good chemical resistance to:<br/>acids, bases, oxidizing agents</li> </ul>                     | HF<br>LFH<br>RoHS          |
| Polyethylene   | PE                   | -40 °C to +50 °C                      | Black (BK),<br>Grey (GY)       | UL94 HB      | <ul> <li>Low moisture absorption</li> <li>Good chemical resistance to: most acids, alcohol and oils</li> </ul>   | HF<br>RoHS                 |
| Polyolefin   | PO                   | -40 °C to +90 °C                      | Black (BK)                     | UL94 V0      | • Low smoke emissions  | HF<br>LFH<br>RoHS          |
| Polypropylene  | PP                   | -40 °C to +115 °C                     | Black (BK),<br>Natural<br>(NA) | UL94 HB      | <ul> <li>Floats in water</li> <li>Moderate yield strength</li> <li>Good chemical resistance to:<br/>organic acids</li> </ul>   | HF<br>RoHS                 |
| Polypropylene, Ethylene-<br>Propylene-Dien-<br>Terpolymere-rubber<br>free of Nitrosamine | PP, EPDM             | -20 °C to +95 °C                      | Black (BK)                     | UL94 HB      | <ul> <li>Good resistance to high temperatures</li> <li>Good chemical and abrasion<br/>resistance</li> </ul>  | HF<br>RoHS                 |
| Polypropylene<br>with metal particles  | PPMP                 | -40 °C to +115 °C                     | Blue (BU)                      | UL94 HB      | <ul> <li>Floats in certain liquids</li> <li>Metal and X-Ray detectable</li> <li>Heat resistant</li> <li>Moderate yield strength</li> <li>Good chemical resistance</li> </ul> | RoHS                       |
| Polyvinylchloride  | PVC                  | -10 °C to +70 °C                      | Black (BK),<br>Natural<br>(NA) | UL94 V0      | <ul> <li>Low moisture absorption</li> <li>Good chemical resistance to:<br/>acids, ethanol and oil</li> </ul>   | RoHS                       |
| Stainless Steel,<br>Stainless Steel  | SS304,<br>SS316      | -80 °C to +538 °C                     | Natural<br>(NA)                | Non burning  | <ul> <li>Corrosion resistant</li> <li>Antimagnetic</li> <li>Weather resistant</li> <li>Outstanding chemical resistance</li> </ul>  | HF<br>LFH<br>RoHS          |
| Thermoplastic<br>Polyurethane  | TPU                  | -40 °C to +85 °C                      | Black (BK)                     | UL94 HB      | High elasticity     Good chemical resistance to:     acids, bases and oxidizing agents     ""More colours on request   | HF<br>RoHS                 |

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