### 1-Piece Fixing Ties with Arrowhead, with Wings

**1-Piece Fixing Ties with Arrowhead, with Wings, for Round Holes**

<table>
<thead>
<tr>
<th>PART DESCRIPTION</th>
<th>Drawing</th>
<th>Hole Ø (FH)</th>
<th>Panel Thickness</th>
<th>Width (W)</th>
<th>Length (L)</th>
<th>Bundle Ø max.</th>
<th>Hole Ø (FH)</th>
<th>Panel Thickness</th>
<th>Width (W)</th>
<th>Length (L)</th>
<th>Bundle Ø max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>T50SAH-PA66HS-NA</td>
<td></td>
<td>6.0 - 6.6</td>
<td>0.7 - 3.0</td>
<td>4.6</td>
<td>160.0</td>
<td>25.0 225</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T18RWPM-PA66HS-BK</td>
<td></td>
<td>4.8 - 5.6</td>
<td>1.5 - 3.2</td>
<td>2.5</td>
<td>113.0</td>
<td>22.0 80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T50SL6-PA66HS-BK</td>
<td></td>
<td>6.3 - 7.5</td>
<td>0.5 - 2.5</td>
<td>4.6</td>
<td>165.0</td>
<td>34.0 225</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T8RWPM3.5-PA66V0-WH</td>
<td></td>
<td>3.4 - 3.6</td>
<td>0.4 - 1.6</td>
<td>1.7</td>
<td>81.0</td>
<td>15.0 36</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O5150WPM5-PA66-BK</td>
<td></td>
<td>4.7 - 5.0</td>
<td>0.7 - 2.5</td>
<td>4.7</td>
<td>150.5</td>
<td>35.0 200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O5150WPM7-PA66-BK</td>
<td></td>
<td>6.3 - 7.1</td>
<td>0.7 - 3.2</td>
<td>4.6</td>
<td>150.6</td>
<td>35.0 -</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T50XSF5-PA66HS-BK</td>
<td></td>
<td>6.35 (hexagonal), 6.0 - 6.6</td>
<td>0.7 - 3.0</td>
<td>4.6</td>
<td>143.0</td>
<td>27.0 225</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T50RWP7.0-PA66HS-BK</td>
<td></td>
<td>6.8 - 7.2</td>
<td>0.7 - 3.0</td>
<td>4.6</td>
<td>200.0</td>
<td>45.0 225</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T50SWPM7.0-PA66HS-BK</td>
<td></td>
<td>6.8 - 7.2</td>
<td>0.7 - 3.0</td>
<td>4.6</td>
<td>140.0</td>
<td>27.0 225</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T50SWPM4.7PT0.7-1.6-PA66HS-BK</td>
<td></td>
<td>4.6 - 4.8</td>
<td>0.7 - 1.6</td>
<td>4.8</td>
<td>155.0</td>
<td>35.0 225</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T50SWPM4.7-PA66-BK</td>
<td></td>
<td>4.6 - 4.8</td>
<td>3.2 - 4.0</td>
<td>4.8</td>
<td>155.0</td>
<td>35.0 225</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O5220-PM9-PA66HSHW-BK</td>
<td></td>
<td>9.0 - 9.2</td>
<td>2.0 - 5.5</td>
<td>5.0</td>
<td>220.0</td>
<td>45.0 250</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O5230-PM9-PA66HSHW-BK</td>
<td></td>
<td>9.0 - 9.2</td>
<td>7.0 - 14.0</td>
<td>5.0</td>
<td>229.0</td>
<td>45.0 250</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T50SL7-PA46-NA</td>
<td></td>
<td>6.9 - 7.1</td>
<td>0.8 - 2.5</td>
<td>4.6</td>
<td>163.0</td>
<td>34.0 225</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T50SL7-PA66HS-BK</td>
<td></td>
<td>6.9 - 7.1</td>
<td>0.8 - 2.5</td>
<td>4.6</td>
<td>165.0</td>
<td>34.0 225</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YQR10050-PA66-BN</td>
<td></td>
<td>6.9 - 7.1</td>
<td>1.6 - 4.0</td>
<td>4.6</td>
<td>165.0</td>
<td>34.0 225</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T50SL8-PA66-BK</td>
<td></td>
<td>8.0</td>
<td>0.8 - 1.5</td>
<td>4.6</td>
<td>165.0</td>
<td>35.0 225</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T50SL8-PA46-NA</td>
<td></td>
<td>8.0</td>
<td>0.8 - 1.5</td>
<td>4.6</td>
<td>165.0</td>
<td>35.0 -</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All dimensions in mm. Subject to technical changes.

### 2-Piece Fixing Ties with Arrowhead, with Wings

**2-Piece Fixing Ties with Arrowhead, with Wings and Pipe Clip, 90° rotatable**

Features and benefits
- Pre-assembled 2-piece fixing tie with fir tree foot part
- Easy to assemble without the need for a tool
- Fir tree foot part can be used for a variety of panel thicknesses
- For maintenance needs cables can be replaced easily

<table>
<thead>
<tr>
<th>PART DESCRIPTION</th>
<th>Drawing</th>
<th>Panel Thickness</th>
<th>Width (W)</th>
<th>Length (L)</th>
<th>Bundle Ø max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>T50SWPM7.00C15-18CBTO-SD-PA66HS/PA66HIRM-BK</td>
<td></td>
<td>0.7 - 3.0</td>
<td>4.6</td>
<td>140.0</td>
<td>27.0 225</td>
</tr>
</tbody>
</table>

All dimensions in mm. Subject to technical changes.
## Material Specification Overview

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>Material Shortcut</th>
<th>Operating Temperature</th>
<th>Colour*</th>
<th>Flammability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium alloy</td>
<td>AL</td>
<td>-40 °C to +180 °C</td>
<td>Natural (NA)</td>
<td></td>
</tr>
<tr>
<td>Chloroprene Rubber</td>
<td>CR</td>
<td>-20 °C to +80 °C</td>
<td>Black (BK)</td>
<td></td>
</tr>
<tr>
<td>Ethylene Tetrafluoroethylene (Tefzel®)</td>
<td>E/TFE</td>
<td>-80 °C to +170 °C</td>
<td>Blue (BU)</td>
<td>UL 94 V0</td>
</tr>
<tr>
<td>Polyacetal</td>
<td>POM</td>
<td>-40 °C to +90 °C, (+110 °C, 500 h)</td>
<td>Natural (NA)</td>
<td>UL 94 HB</td>
</tr>
<tr>
<td>Polyamide 11</td>
<td>PA11</td>
<td>-40 °C to +85 °C, (+105 °C, 500 h)</td>
<td>Black (BK)</td>
<td>UL 94 HB</td>
</tr>
<tr>
<td>Polyamide 11, UV-resistant</td>
<td>PA11W</td>
<td>-40 °C to +105 °C</td>
<td>Black (BK)</td>
<td>UL 94 HB</td>
</tr>
<tr>
<td>Polyamide 12</td>
<td>PA12</td>
<td>-40 °C to +85 °C, (+105 °C, 500 h)</td>
<td>Black (BK)</td>
<td>UL 94 HB</td>
</tr>
<tr>
<td>Polyamide 4.6</td>
<td>PA46</td>
<td>-40 °C to +130 °C, (+150 °C, 5000 h; +195 °C, 500 h)</td>
<td>Natural (NA), Grey (GY)</td>
<td>UL 94 V2</td>
</tr>
<tr>
<td>Polyamide 6</td>
<td>PA6</td>
<td>-40 °C to +80 °C</td>
<td>Black (BK)</td>
<td>UL 94 V2</td>
</tr>
<tr>
<td>Polyamide 6, glass-fibre reinforced</td>
<td>PA6GF30</td>
<td>-40 °C to +100 °C</td>
<td>Black (BK)</td>
<td>UL 94 HB</td>
</tr>
<tr>
<td>Polyamide 6, high impact modified</td>
<td>PA6HIR</td>
<td>-40 °C to +80 °C</td>
<td>Black (BK)</td>
<td>UL 94 HB</td>
</tr>
<tr>
<td>Polyamide 6, high impact modified, heat stabilised</td>
<td>PA6HIRHS</td>
<td>-80 °C to +110 °C</td>
<td>Black (BK)</td>
<td>UL 94 HB</td>
</tr>
<tr>
<td>Polyamide 6.6</td>
<td>PA66</td>
<td>-40 °C to +85 °C, (+105 °C, 500 h)</td>
<td>Black (BK), Natural (NA)</td>
<td>UL 94 V2</td>
</tr>
<tr>
<td>Polyamide 6.6, glass-fibre reinforced</td>
<td>PA66GF13</td>
<td>-40 °C to +105 °C</td>
<td>Black (BK)</td>
<td>UL 94 HB</td>
</tr>
<tr>
<td>Polyamide 6.6, glass-fibre reinforced</td>
<td>PA66GF15</td>
<td>-40 °C to +105 °C</td>
<td>Black (BK)</td>
<td>UL 94 HB</td>
</tr>
<tr>
<td>Polyamide 6.6, heat and UV stabilised</td>
<td>PA66HSU</td>
<td>-40 °C to +105 °C</td>
<td>Black (BK), Natural (NA)</td>
<td>UL 94 V2</td>
</tr>
<tr>
<td>Polyamide 6.6, heat and UV stabilised</td>
<td>PA66HSW</td>
<td>-40 °C to +105 °C</td>
<td>Black (BK)</td>
<td>UL 94 V2</td>
</tr>
<tr>
<td>Polyamide 6.6, heat stabilised</td>
<td>PA66HS</td>
<td>-40 °C to +105 °C</td>
<td>Black (BK), Natural (NA)</td>
<td>UL 94 V2</td>
</tr>
<tr>
<td>Polyamide 6.6, high impact modified</td>
<td>PA66HIR</td>
<td>-40 °C to +80 °C, (+105 °C, 500 h)</td>
<td>Black (BK)</td>
<td>UL 94 HB</td>
</tr>
<tr>
<td>Polyamide 6.6, high impact modified, heat and UV stabilised</td>
<td>PA66HIRHSU</td>
<td>-40 °C to +110 °C</td>
<td>Black (BK)</td>
<td>UL 94 HB</td>
</tr>
<tr>
<td>Polyamide 6.6, high impact modified, heat and UV stabilised (only for cable ties for Autotool System 3080)</td>
<td>PA66HIRHSU</td>
<td>-40 °C to +95 °C, (+105 °C, 5000 h; +145 °C, 500 h)</td>
<td>Black (BK), Natural (NA)</td>
<td>UL 94 HB</td>
</tr>
<tr>
<td>Polyamide 6.6, high impact modified, heat and UV stabilised</td>
<td>PA66HIRHSW</td>
<td>-40 °C to +110 °C</td>
<td>Black (BK)</td>
<td>UL 94 HB</td>
</tr>
<tr>
<td>Polyamide 6.6, high impact modified, heat stabilised</td>
<td>PA66HIRS</td>
<td>-40 °C to +105 °C</td>
<td>Black (BK)</td>
<td>UL 94 HB</td>
</tr>
<tr>
<td>Polyamide 6.6, high impact modified, scan black</td>
<td>PA66HIR(S)</td>
<td>-40 °C to +80 °C, (+105 °C, 500 h)</td>
<td>Black (BK)</td>
<td>UL 94 HB</td>
</tr>
</tbody>
</table>

* Further colours available on request.

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.
## Material Information

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>Material Shortcut</th>
<th>Operating Temperature</th>
<th>Colour*</th>
<th>Flammability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyamide 6.6, UV resistant</td>
<td>PA66W</td>
<td>-40 °C to +85 °C, (+105 °C, 500 h)</td>
<td>Black (BK)</td>
<td>UL 94 V2</td>
</tr>
<tr>
<td>Polyamide 6.6, UV-stabilised</td>
<td>PA66UV</td>
<td>-40 °C to +85 °C</td>
<td>Black (BK), Natural (NA)</td>
<td>UL 94 V2</td>
</tr>
<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>
</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>
</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>
</tr>
<tr>
<td>Polyyarlyetherketone</td>
<td>PAEK</td>
<td>-55 °C to +200 °C</td>
<td>Beige (BGE)</td>
<td>UL 94 V0</td>
</tr>
<tr>
<td>Polyester</td>
<td>SP</td>
<td>-50 °C to +150 °C</td>
<td>Black (BK)</td>
<td></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>
</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>
</tr>
<tr>
<td>Polyoxyefin</td>
<td>PO</td>
<td>-40 °C to +90 °C</td>
<td>Black (BK)</td>
<td>UL 94 V0</td>
</tr>
<tr>
<td>Polyphenylene Sulfide</td>
<td>PPS</td>
<td>-40 °C to +150 °C</td>
<td>Black (BK), Grey (GY)</td>
<td>UL 94 V0</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>
</tr>
<tr>
<td>Polypropylene 20% Talkum</td>
<td>PPT20</td>
<td>-40 °C to +65 °C</td>
<td>Black (BK)</td>
<td>UL 94 HB</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>
</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>
</tr>
<tr>
<td>Polyvinylidene Fluoride</td>
<td>PVDFX</td>
<td>-50 °C to +150 °C</td>
<td>Natural (NA)</td>
<td>UL 94 V0</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>
</tr>
<tr>
<td>Stainless Steel</td>
<td>SS304, SS316</td>
<td>-80 °C to +538 °C</td>
<td>Natural (NA)</td>
<td>non-burning</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>
</tr>
</tbody>
</table>

*Further colours available on request.

**Tip:** Material shortcut is part of our Part Description name

- **Product series name** (indicating tie type, clip and harness routing variant)
- **Material code**
- **Colour code** (details on page 326)

T50ROSEC5A-PA66HS/PA66HIRHS-BK