Plastic Rivets

TY-Series

These simple-to-use plastic rivets are ideal for improving productivity in the working environment, saving time and money over more conventional fixing methods - ideal for fixing panels or components to panels in a wide range of industries from automotive to panel building.

Features and benefits
- One Piece
- Simply push pin into body of rivet
- TY3P1 and TY8P1 pins inserted using rivet placement tool
- TY8P2 has 'mushroom' head so pin is simply hammered in
- TY8P2 consists of two unattached parts

Material specification
please see page 26.

<table>
<thead>
<tr>
<th>TYPE</th>
<th>Height (H)</th>
<th>Height (H2)</th>
<th>Height (H3)</th>
<th>Ø (D)</th>
<th>Ø (D2)</th>
<th>Ø (D3)</th>
<th>Ø (D4)</th>
<th>Material</th>
<th>Colour</th>
<th>Article-No.</th>
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<tbody>
<tr>
<td>TY3P1</td>
<td>7.5</td>
<td>6.0</td>
<td>5.3</td>
<td>6.0</td>
<td>3.0</td>
<td>1.7</td>
<td>-</td>
<td>PA66</td>
<td>Black (BK)</td>
<td>241-11310</td>
</tr>
<tr>
<td></td>
<td>7.5</td>
<td>6.0</td>
<td>5.3</td>
<td>6.0</td>
<td>3.0</td>
<td>1.7</td>
<td>-</td>
<td>PA66</td>
<td>Natural (NA)</td>
<td>241-11319</td>
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<td>TY8P1</td>
<td>10.0</td>
<td>8.0</td>
<td>7.5</td>
<td>8.0</td>
<td>4.0</td>
<td>2.6</td>
<td>-</td>
<td>PA66</td>
<td>Black (BK)</td>
<td>241-11810</td>
</tr>
<tr>
<td></td>
<td>10.0</td>
<td>8.0</td>
<td>7.5</td>
<td>8.0</td>
<td>4.0</td>
<td>2.6</td>
<td>-</td>
<td>PA66</td>
<td>Natural (NA)</td>
<td>241-11819</td>
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<td>TY8P2</td>
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<td>11.5</td>
<td>8.0</td>
<td>4.0</td>
<td>2.6</td>
<td>8.0</td>
<td>PA66</td>
<td>Black (BK)</td>
<td>241-11820</td>
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<tr>
<td></td>
<td>10.0</td>
<td>8.0</td>
<td>11.5</td>
<td>8.0</td>
<td>4.0</td>
<td>2.6</td>
<td>8.0</td>
<td>PA66</td>
<td>Natural (NA)</td>
<td>241-11829</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>
<th>Material Properties*</th>
<th>Material Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium-alloy</td>
<td>AL</td>
<td>-40 °C to +180 °C</td>
<td>Natural (NA)</td>
<td>• Corrosion resistant • Antimagnetic</td>
<td></td>
<td>RoHS</td>
</tr>
<tr>
<td>Chloroprene</td>
<td>CR</td>
<td>-20 °C to +80 °C</td>
<td>Black (BK)</td>
<td>• Weather-resistant • High yield strength</td>
<td></td>
<td>RoHS</td>
</tr>
<tr>
<td>Ethylene Tetrafluoroethylene (Tefzel®)</td>
<td>E/TFE</td>
<td>-80 °C to +170 °C</td>
<td>Blue (BU) UL 94 V0</td>
<td>• Resistance to radioactivity • UV- resistant, not moisture sensitive • Good chemical resistance to: acids, bases, oxidizing agents</td>
<td></td>
<td>RoHS</td>
</tr>
<tr>
<td>Polyacetal</td>
<td>POM</td>
<td>-40 °C to +90 °C, (+110 °C, 500 h)</td>
<td>Natural (NA) UL 94 HB</td>
<td>• Limited brittleness sensitivity • Flexible at low temperature • Not moisture sensitive • Robust on impacts</td>
<td></td>
<td>RoHS</td>
</tr>
<tr>
<td>Polyamide 11</td>
<td>PA11</td>
<td>-40 °C to +85 °C, (+105 °C, 500 h)</td>
<td>Black (BK) UL 94 HB</td>
<td>• Good chemical resistance to: acids, bases, oxidizing agents • UV- resistant</td>
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<td>RoHS</td>
</tr>
<tr>
<td>Polyamide 12</td>
<td>PA12</td>
<td>-40 °C to +85 °C, (+105 °C, 500 h)</td>
<td>Black (BK) UL 94 HB</td>
<td>• Good chemical resistance to: acids, bases, oxidizing agents • UV- resistant</td>
<td></td>
<td>HF RoHS</td>
</tr>
<tr>
<td>Polyamide 4.6</td>
<td>PA46</td>
<td>-40 °C to +150 °C (5000 h), +195 °C (500 h)</td>
<td>Natural (NA), Grey (GY) UL 94 V2</td>
<td>• Resistance to high temperatures • Very high moisture absorption • Weather-resistant • Good chemical resistance</td>
<td></td>
<td>HF LFH RoHS</td>
</tr>
<tr>
<td>Polyamide 6</td>
<td>PA6</td>
<td>-40 °C to +80 °C</td>
<td>Black (BK) UL 94 V2</td>
<td>• High yield strength</td>
<td></td>
<td>RoHS</td>
</tr>
<tr>
<td>Polyamide 6, high impact modified</td>
<td>PA6HIR</td>
<td>-40 °C to +80 °C</td>
<td>Black (BK) UL 94 HB</td>
<td>• Limited brittleness sensitivity • Higher flexibility at low temperature</td>
<td></td>
<td>RoHS</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) UL 94 V2</td>
<td>• High yield strength</td>
<td></td>
<td>HF RoHS</td>
</tr>
<tr>
<td>Polyamide 6.6, glass-fibre reinforced</td>
<td>PA66GF13, PA66GF15</td>
<td>-40 °C to +105 °C</td>
<td>Black (BK) UL 94 HB</td>
<td>• Good resistance to: lubricants, vehicle fuel, salt water and a lot of solvent</td>
<td></td>
<td>HF RoHS</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) UL 94 V2</td>
<td>• High yield strength • Modified elevated max. temperature • UV-resistant</td>
<td></td>
<td>HF RoHS</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) UL 94 V2</td>
<td>• High yield strength • Modified elevated max. temperature</td>
<td></td>
<td>HF RoHS</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) UL 94 HB</td>
<td>• Limited brittleness sensitivity • Higher flexibility at low temperature</td>
<td></td>
<td>RoHS</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) UL 94 HB</td>
<td>• Limited brittleness sensitivity • Higher flexibility at low temperature • Modified elevated max. temperature • High yield strength, UV-resistant</td>
<td></td>
<td>RoHS</td>
</tr>
<tr>
<td>Polyamide 6.6, high impact modified, heat stabilised</td>
<td>PA66HIRHS</td>
<td>-40 °C to +105 °C</td>
<td>Black (BK) UL 94 HB</td>
<td>• Limited brittleness sensitivity • Higher flexibility at low temperature • Modified elevated max. temperature</td>
<td></td>
<td>RoHS</td>
</tr>
<tr>
<td>Polyamide 6.6, high impact modified, ScanBlack</td>
<td>PA66HIR(S)</td>
<td>-40 °C to +80 °C, (+105 °C, 500 h)</td>
<td>Black (BK) UL 94 HB</td>
<td>• Limited brittleness sensitivity • Higher flexibility at low temperature</td>
<td></td>
<td>RoHS</td>
</tr>
<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) UL 94 V2</td>
<td>• High yield strength • UV-resistant</td>
<td></td>
<td>HF RoHS</td>
</tr>
<tr>
<td>MATERIAL</td>
<td>Material Shortcut</td>
<td>Operating Temperature</td>
<td>Colour**</td>
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<td>--------------</td>
<td>---------------------</td>
<td>------------------------</td>
</tr>
</tbody>
</table>
| 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 |
| 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) | halogen free | • UV-resistant  
• Good chemical resistance to: most acids, alkaliks 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, oxidizing agents | HF  
LFH  
RoHS |
| Polyethylene | PE | -40 °C to +50 °C | Black (BK), Grey (GY) | UL 94 HB | • Low moisture absorption  
• Good chemical oilresistance to: most acids, alcohol and 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 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), Natural (NA) | UL 94 HB | • Good resistance to high temperatures  
• 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 detectable  
• Heat resistant  
• Moderate yield strength  
• Good 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, ethanol and oil | RoHS |
| Stainless Steel | SS304, SS316 | -80 °C to +538 °C | Natural (NA) | non-burning | • Corrosion resistant  
• Antimagnetic  
• Weather resistant  
• Outstanding chemical resistance | HF  
LFH  
RoHS |
| Thermoplastic Polyurethane | TPU | -40 °C to +85 °C | Black (BK) | UL 94 HB | • High elastic  
• Good chemical resistance to: acids, bases and oxidizing agents | HF  
RoHS |

**More colours on request.**

*HF = Halogenfree

*LFH = Limited Fire Hazard

*RoHS = Restriction of Hazardous Substances

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 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.

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LFH = Limited Fire Hazard  
RoHS = Restriction of Hazardous Substances