

### Cable Ties for high temperature application up to +240°C

PEEK ties have been designed for the use in hazardous environments. Their suitability for high temperature applications makes them ideal for use in the drilling industry, railway, offshore or automotive industry. The excellent chemical and radiation resistance is predestined for applications in medical engineering, chemical industry and power stations. With regard to the aerospace industry, PEEK ties are suitable due to their good weight to tensile strength ratio. Because of this combination of different properties, PEEK ties can replace metal solutions.

#### Features and Benefits

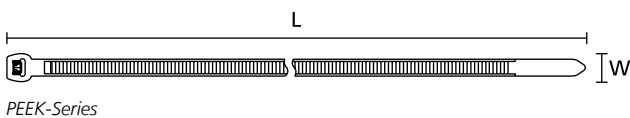
- For high temperature applications from -55° C up to +240° C
- Outside serrated cable tie with smooth surface to the bundle
- Close fit to the cable bundle due to the deepening head shape
- Easy insertion combined with high tensile strength
- Takes up less space due to the curved head
- Combines the performance of a metal tie with the ease of use of a polyamide cable tie
- Easy application either manually or with a processing tool



The contoured head takes up less space, gives a low insertion force and offers high strength.



Please find more PEEK products for your system solutions:  
**Foot Part P1SFT65, see page 90.**  
**Screw Mount CTAM, see page 124.**



Material specification please see page 30.



One Step to the Web!

#### • PEEK Ties, outside serrated

| TYPE | Width (W) | Length (L) | Bundle Ø min. | Bundle Ø max. |     | Colour      | Material | Pack Cont. | Article-No. |
|------|-----------|------------|---------------|---------------|-----|-------------|----------|------------|-------------|
| PT2A | 3.4       | 145.0      | 4.0           | 35.0          | 230 | Beige (BGE) | PEEK     | 100        | 118-00032   |

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

#### • PEEK Ties, inside serrated

| TYPE  | Width (W) | Length (L) | Bundle Ø min. | Bundle Ø max. |     | Material | Colour      | Pack Cont. | Article-No. |
|-------|-----------|------------|---------------|---------------|-----|----------|-------------|------------|-------------|
| PT220 | 4.7       | 220.0      | 8.0           | 56.0          | 380 | PEEK     | Beige (BGE) | 100        | 111-01235   |

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



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.

## Material Specification Overview

| Material   | Shortcut           | Operating Temperature                       | Colour**                 | Flammability | Material Properties*  |             |
|--|--------------------|---|--------------------------|--------------|---|-------------|
| Aluminium-alloy  | AL                 | -40 °C to +180 °C                           | Natural (NA)             |              | <ul style="list-style-type: none"> <li>Corrosion resistant</li> <li>Antimagnetic</li> </ul>   | RoHS        |
| Chloroprene  | CR                 | -20 °C to +80 °C                            | Black (BK)               |              | <ul style="list-style-type: none"> <li>Weather-resistant</li> <li>High yield strength</li> </ul>  | RoHS        |
| Ethylenterafluorineethylen                                 | E/TFE              | -80 °C to +170 °C                           | Blue (BU)                | UL94 V0      | <ul style="list-style-type: none"> <li>Resistance to radioactivity</li> <li>UV-resistant, not moisture sensitive</li> <li>Good chemical resistance to: acids, bases, oxidizing agents</li> </ul>  | RoHS        |
| Polyacetal   | POM                | -40 °C to +90 °C, (+110 °C, 500 h)          | Natural (NA)             | UL94 HB      | <ul style="list-style-type: none"> <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, (+105 °C, 500 h)          | Black (BK)               | UL94 HB      | <ul style="list-style-type: none"> <li>Bio-plastic, derived from vegetable oil</li> <li>Strong impact resistance at low temperature</li> <li>Very low moisture absorption</li> <li>Weather-resistant</li> <li>Good chemical resistance</li> </ul> | RoHS HF     |
| Polyamide 12   | PA12               | -40 °C to +85 °C, (+105 °C, 500 h)          | Black (BK)               | UL94 HB      | <ul style="list-style-type: none"> <li>Good chemical resistance to: acids, bases, oxidizing agents</li> <li>UV-resistant</li> </ul>   | RoHS HF     |
| 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"> <li>Resistance to high temperatures</li> <li>Very moisture sensitive</li> <li>Low smoke sensitive</li> </ul>   | RoHS HF LFH |
| Polyamide 6  | PA6                | -40 °C to +80 °C                            | Black (BK)               | UL94 V2      | <ul style="list-style-type: none"> <li>High yield strength</li> </ul>   | 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"> <li>High yield strength</li> </ul>   | RoHS HF     |
| Polyamide 6.6, Glassfibre reinforced                       | PA66GF13, PA66GF15 | -40 °C to +105 °C                           | Black (BK)               | UL94 HB      | <ul style="list-style-type: none"> <li>Good resistance to: lubricants, vehicle fuel, salt water and many solvents</li> </ul>  | RoHS HF     |
| Polyamide 6.6 heat and UV stabilised                       | PA66HSW            | -40 °C to +105 °C                           | Black (BK)               | UL94 V2      | <ul style="list-style-type: none"> <li>High yield strength</li> <li>Modified elevated max. temperature</li> <li>UV-resistant</li> </ul>   | RoHS HF     |
| Polyamide 6.6 Heat Stabilised                              | PA66HS             | -40 °C to +105 °C                           | Black (BK), Natural (NA) | UL94 V2      | <ul style="list-style-type: none"> <li>High yield strength</li> <li>Modified elevated max. temperature</li> </ul>   | RoHS HF     |
| Polyamide 6.6 High Imp. Mod., Heat Stab.                   | PA66HIRHS          | -40 °C to +105 °C                           | Black (BK)               | UL94 HB      | <ul style="list-style-type: none"> <li>Limited brittleness sensitivity</li> <li>Higher flexibility at low temperature</li> <li>Modified elevated max. temperature</li> </ul>  | RoHS        |
| Polyamide 6.6 High Imp. Mod. scan black                    | PA66HIR(S)         | -40 °C to +80 °C, (+105 °C, 500 h)          | Black (BK)               | UL94 HB      | <ul style="list-style-type: none"> <li>Limited brittleness sensitivity</li> <li>Higher flexibility at low temperature</li> </ul>  | RoHS HF     |
| 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"> <li>Limited brittleness sensitivity</li> <li>Higher flexibility at low temperature</li> </ul>  | RoHS        |
| Polyamide 6.6 high impact modified, heat and UV stabilised | PA66-HIRHSW        | -40 °C to +110 °C                           | Black (BK)               | UL94 HB      | <ul style="list-style-type: none"> <li>Limited brittleness sensitivity</li> <li>Higher flexibility at low temperature</li> <li>Modified elevated max. temperature</li> <li>High yield strength, UV-resistant</li> </ul>                           | RoHS HF     |

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 be regarded as a material specification and are no substitute for a suitability test. Please see our datasheets for further details.

\*\*More colours on request.

 = Minimum Tensile Strength

## Material Specification Overview

| Material   | Shortcut        | Operating Temperature                 | Colour**                          | Flammability | Material Properties*   |             |
|--|-----------------|---------------------------------------|-----------------------------------|--------------|--|-------------|
| <b>Polyamide 6.6</b><br>UV Resistant   | PA66W           | -40 °C to +85 °C,<br>(+105 °C, 500 h) | Black<br>(BK)                     | UL94 V2      | <ul style="list-style-type: none"> <li>High yield strength</li> <li>UV-resistant</li> </ul>  | RoHS HF     |
| <b>Polyamide 6.6 V0</b>  | PA66V0          | -40 °C to +85 °C                      | White<br>(WH)                     | UL94 V0      | <ul style="list-style-type: none"> <li>High yield strength</li> <li>Low smoke emission</li> </ul>  | RoHS HF LFH |
| <b>Polyamide 6.6 V0</b><br>High Oxygen Index   | PA66V0-HOI      | -40 °C to +85 °C,<br>(+105 °C, 500 h) | White<br>(WH)                     | UL94 V0      | <ul style="list-style-type: none"> <li>High yield strength</li> <li>Low smoke emissions</li> </ul>   | RoHS HF LFH |
| <b>Polyamide 6.6</b><br>with metal particles   | PA66MP          | -40 °C to +85 °C,<br>(+105 °C, 500 h) | Blue<br>(BU)                      | UL94 HB      | <ul style="list-style-type: none"> <li>High yield strength</li> </ul>  | RoHS HF     |
| <b>Polyamide 6</b><br>high impact modified   | PA6HIR          | -40 °C to +80 °C                      | Black<br>(BK)                     | UL94 HB      | <ul style="list-style-type: none"> <li>Limited brittleness sensitivity</li> <li>Higher flexibility at low temperature</li> </ul>   | RoHS        |
| <b>Polyester</b>   | SP              | -50 °C to +150 °C                     | Black<br>(BK)                     |              | <ul style="list-style-type: none"> <li>UV-resistant</li> <li>Good chemical resistance to: most acids, alkalis and oils</li> </ul>  | RoHS HF LFH |
| <b>Polyetheretherketone</b>  | PEEK            | -55 °C to +240 °C                     | Beige<br>(BGE)                    | UL94 V0      | <ul style="list-style-type: none"> <li>Resistance to radioactivity</li> <li>Not moisture sensitive</li> <li>Good chemical resistance to: acids, bases, oxidizing agents</li> </ul> | RoHS HF LFH |
| <b>Polyethylene</b>  | PE              | -40 °C to +50 °C                      | Black<br>(BK),<br>Grey<br>(GY)    | UL94 HB      | <ul style="list-style-type: none"> <li>Low moisture absorption</li> <li>Good chemical resistance to: most acids, alcohol and oils</li> </ul>                                       | RoHS HF     |
| <b>Polyolefin</b>  | PO              | -40 °C to +90 °C                      | Black<br>(BK)                     | UL94 V0      | <ul style="list-style-type: none"> <li>Low smoke emissions</li> </ul>  | RoHS HF LFH |
| <b>Polypropylene</b>   | PP              | -40 °C to +115 °C                     | Black<br>(BK),<br>Natural<br>(NA) | UL94 HB      | <ul style="list-style-type: none"> <li>Floats in water</li> <li>Moderate yield strength</li> <li>Good chemical resistance to: organic acids</li> </ul>                             | RoHS HF     |
| <b>Polypropylene,<br/>Ethylene-Propylene-Dien-Terpoly-<br/>mere-rubber free<br/>of Nitrosamine</b> | PP, EPDM        | -20 °C to +95 °C                      | Black<br>(BK)                     | UL94 HB      | <ul style="list-style-type: none"> <li>Good resistance to high temperatures</li> <li>Good chemical and abrasion resistance</li> </ul>  | RoHS HF     |
| <b>Polyvinylchloride</b>   | PVC             | -10 °C to +70 °C                      | Black<br>(BK),<br>Natural<br>(NA) | UL94 V0      | <ul style="list-style-type: none"> <li>Low moisture absorption</li> <li>Good chemical resistance to: acids, ethanol, oil</li> </ul>  | RoHS        |
| <b>Stainless Steel</b>   | SS304,<br>SS316 | -80 °C to +538 °C                     | Natural<br>(NA)                   |              | <ul style="list-style-type: none"> <li>Corrosion resistant</li> <li>Antimagnetic</li> </ul>  | RoHS HF LFH |
| <b>Thermoplastic<br/>Polyurethane</b>  | TPU             | -40 °C to +85 °C                      | Black<br>(BK)                     | UL94 HB      | <ul style="list-style-type: none"> <li>High elastic</li> <li>Good chemical resistance to:<br/>acids, bases, oxidizing agents</li> </ul>  | RoHS HF     |

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