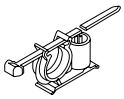
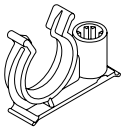
## Fixing Elements for Corrugated Tubing, for Weld Studs

- **CTC-Series for Weld Studs**

**Features and Benefits**

- Fixing elements for corrugated tubing for nominal diameters from 4.5 - 17.0 mm
- For M6 weld studs
- Soft-Push mechanic for simple assembly without the need for a tool
- Tube is guided accurately, clipping into place
- Movement is prevented by the inside profile of the clamp
- Clamp can be unscrewed and removed from the weld stud

*The tubing clips into the CTC clamp and is held firmly.*

| TYPE | Drawing | Width (W) | Length (L) | Height (H) | Nominal Ø | Material | Colour | Article-No. |
|---|---|---|---|---|---|---|---|---|
| **CTC17SBS6** |  | 11.0 | 44.6 | 33.2 | 17.0 | PA66HIRHS | Black (BK) | 151-00010 |
| **CTC4.5SBS6** |  | 11.0 | 28.6 | 18.7 | 4.5 | PA66HIRHS | Black (BK) | 151-00700 |
| **CTC7.5SBS6** | | 11.0 | 31.8 | 19.4 | 7.5 | PA66HIRHS | Black (BK) | 151-00701 |
| **CTC10SBS6** | | 11.0 | 35.3 | 22.2 | 10.0 | PA66HIRHS | Black (BK) | 151-00702 |
| **CTC13SBS6** | | 11.0 | 37.0 | 26.5 | 13.0 | PA66HIRHS | Black (BK) | 151-00703 |

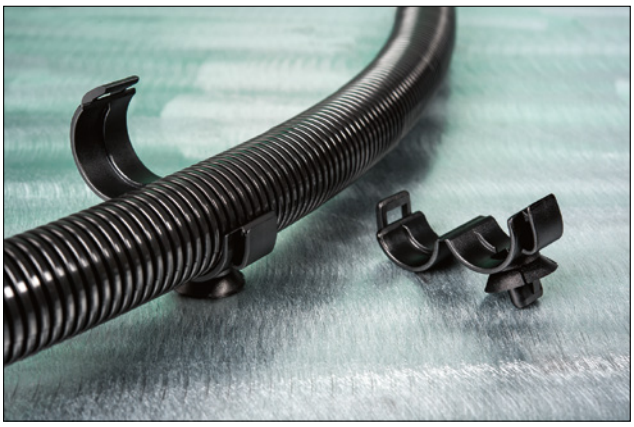
All dimensions in mm. Subject to technical changes.

## Fixing Elements for Corrugated Tubing, with Arrowhead

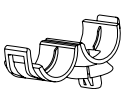
**Features and Benefits**

- Clamps for corrugated tubing for a variety of nominal diameters
- Arrowhead simply locks into place
- Tube is guided accurately, clipping into place
- Movement is prevented by the inside profile of the clamp
- CTCLPROFILE clamp can also fastened to a metal edge

**Material specification please see page 30.**



*Simple and secure installation of pipes or hoses to panels.*

| TYPE | Drawing | Width (W) | Length (L) | Height (H) | Hole Ø (FH) | Panel Thickness | Material | Colour | Article-No. |
|---|---|---|---|---|---|---|---|---|---|
| **RCC D21** |  | 22.0 | 31.0 | 30.0 | 6.2 x 12.2 | 0.7 - 2.5 | PA66HIRHS | Black (BK) | 150-92300 |
| **RCC D24** | | 22.0 | 33.0 | 33.0 | 6.2 x 12.2 | 0.7 - 2.5 | PA66HIRHS | Black (BK) | 155-04000 |
| **RCC D28** | | 22.0 | 37.0 | 37.0 | 6.75 x 13.25 | 0.7 - 3.0 | PA66HIRHS | Black (BK) | 151-00598 |
| **CTCLPROFILE** |  | 12.0 | 49.7 | 47.0 | 7.8 - 8.2 | 2.3 - 2.7 | PA66HIRHS | Black (BK) | 151-00026 |

All dimensions in mm. Subject to technical changes.

## Material Specification Overview

| Material | Shortcut | Operating Temperature | Colour** | Flammability | Material Properties* | |
|---|---|---|---|---|---|---|
| **Aluminium-alloy** | AL | -40 °C to +180 °C | Natural (NA) | | • Corrosion resistant<br>• Antimagnetic | RoHS |
| **Chloroprene** | CR | -20 °C to +80 °C | Black (BK) | | • Weather-resistant<br>• High yield strength | RoHS |
| **Ethylenterafluori-neethylen** | E/TFE | -80 °C to +170 °C | Blue (BU) | UL94 V0 | • Resistance to radioactivity<br>• UV- resistant, not moisture sentitive<br>• Good chemical resistance to:<br>• acids, bases, oxidizing agents | RoHS |
| **Polyacetal** | POM | -40 °C to +90 °C, (+110 °C, 500 h) | Natural (NA) | UL94 HB | • Limited brittleness sensitivity<br>• Flexible at low temperature<br>• Not moisture sensitive<br>• Robust on impacts | RoHS |
| **Polyamide 11** | PA11 | -40 °C to +85 °C, (+105 °C, 500 h) | Black (BK) | UL94 HB | • Bio-plastic, derived from vegetable oil<br>• Strong impact resistance at low temperature<br>• Very low moisture absorption<br>• Weather-resistant<br>• Good chemical resistance | RoHS HF |
| **Polyamide 12** | PA12 | -40 °C to +85 °C, (+105 °C, 500 h) | Black (BK) | UL94 HB | • Good chemical resistance to:<br>• acids, bases, oxidizing agents<br>• UV- resistant | RoHS HF |
| **Polyamide 4.6** | PA46 | -40 °C to +150 °C (5000 h), +195 °C (500 h) | Natural (NA), Grey (GY) | UL94 V2 | • Resistance to high temperatures<br>• Very moisture sensitive<br>• Low smoke sensitive | RoHS HF LFH |
| **Polyamide 6** | PA6 | -40 °C to +80 °C | Black (BK) | UL94 V2 | • High yield strength | RoHS |
| **Polyamide 6.6** | PA66 | -40 °C to +85 °C, (+105 °C, 500 h) | Black (BK), Natural (NA) | UL94 V2 | • High yield strength | RoHS HF |
| **Polyamide 6.6,** Glassfibre reinforced | PA66GF13, PA66GF15 | -40 °C to +105 °C | Black (BK) | UL94 HB | • Good resistance to: lubricants, vehicle fuel, salt water and many solvents | RoHS HF |
| **Polyamide 6.6** heat and UV sta-bilised | PA66HSW | -40 °C to +105 °C | Black (BK) | UL94 V2 | • High yield strength<br>• Modified elevated max. temperature<br>• UV-resistant | RoHS HF |
| **Polyamide 6.6** Heat Stabilised | PA66HS | -40 °C to +105 °C | Black (BK), Natural (NA) | UL94 V2 | • High yield strength<br>• Modified elevated max. temperature | RoHS HF |
| **Polyamide 6.6** High Imp. Mod., Heat Stab. | PA66HIRHS | -40 °C to +105 °C | Black (BK) | UL94 HB | • Limited brittleness sensitivity<br>• Higher flexibility at low temperature<br>• Modified elevated max. temperature | RoHS |
| **Polyamide 6.6** High Imp. Mod. scan black | PA66HIR(S) | -40 °C to +80 °C, (+105 °C, 500 h) | Black (BK) | UL94 HB | • Limited brittleness sensitivity<br>• Higher flexibility at low temperature | RoHS HF |
| **Polyamide 6.6** High Impact Mo-dified | PA66HIR | -40 °C to +80 °C, (+105 °C, 500 h) | Black (BK) | UL94 HB | • Limited brittleness sensitivity<br>• Higher flexibility at low temperature | RoHS |
| **Polyamide 6.6** high impact modified, heat and UV stabilised | PA66-HIRHSW | -40 °C to +110 °C | Black (BK) | UL94 HB | • Limited brittleness sensitivity<br>• Higher flexibility at low temperature<br>• Modified elevated max. temperature<br>• High yield strength, UV-resistant | 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 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 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.

N = Minimum Tensile Strength



Date of issue: January 2014

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| Material | Shortcut | Operating Temperature | Colour** | Flammability | Material Properties* | |
|---|---|---|---|---|---|---|
| **Polyamide 6.6** UV Resistant | PA66W | -40 °C to +85 °C, (+105 °C, 500 h) | Black (BK) | UL94 V2 | • High yield strength<br>• UV-resistant | RoHS HF |
| **Polyamide 6.6 V0** | PA66V0 | -40 °C to +85 °C | White (WH) | UL94 V0 | • High yield strength<br>• Low smoke emission | RoHS HF LFH |
| **Polyamide 6.6 V0** High Oxygen Index | PA66V0-HOI | -40 °C to +85 °C, (+105 °C, 500 h) | White (WH) | UL94 V0 | • High yield strength<br>• Low smoke emissions | RoHS HF LFH |
| **Polyamide 6.6** with metal particles | PA66MP | -40 °C to +85 °C, (+105 °C, 500 h) | Blue (BU) | UL94 HB | • High yield strength | RoHS HF |
| **Polyamide 6** high impact modified | PA6HIR | -40 °C to +80 °C | Black (BK) | UL94 HB | • Limited brittleness sensitivity<br>• Higher flexibility at low temperature | RoHS |
| **Polyester** | SP | -50 °C to +150 °C | Black (BK) | | • UV-resistant<br>• Good chemical resistance to: most acids, alkalis and oils | RoHS HF LFH |
| **Polyetheretherketone** | PEEK | -55 °C to +240 °C | Beige (BGE) | UL94 V0 | • Resistance to radioactivity<br>• Not moisture sensitive<br>• Good chemical resistance to: acids, bases, oxidizing agents | RoHS HF LFH |
| **Polyethylene** | PE | -40 °C to +50 °C | Black (BK), Grey (GY) | UL94 HB | • Low moisture absorption<br>• Good chemical resistance to: most acids, alcohol and oils | RoHS HF |
| **Polyolefin** | PO | -40 °C to +90 °C | Black (BK) | UL94 V0 | • Low smoke emissions | RoHS HF LFH |
| **Polypropylene** | PP | -40 °C to +115 °C | Black (BK), Natural (NA) | UL94 HB | • Floats in water<br>• Moderate yield strength<br>• Good chemical resistance to: organic acids | RoHS HF |
| **Polypropylene, Ethylene-Propylene-Dien-Terpolymere-rubber free of Nitrosamine** | PP, EPDM | -20 °C to +95 °C | Black (BK) | UL94 HB | • Good resistance to high temperatures<br>• Good chemical and abrasion resistance | RoHS HF |
| **Polyvinylchloride** | PVC | -10 °C to +70 °C | Black (BK), Natural (NA) | UL94 V0 | • Low moisture absorption<br>• Good chemical resistance to: acids, ethanol, oil | RoHS |
| **Stainless Steel** | SS304, SS316 | -80 °C to +538 °C | Natural (NA) | | • Corrosion resistant<br>• Antimagnetic | RoHS HF LFH |
| **Thermoplastic Polyurethane** | TPU | -40 °C to +85 °C | Black (BK) | UL94 HB | • High elastic<br>• Good chemical resistance to:<br>• acids, bases, oxidizing agents | RoHS HF |

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