



FR333W HFFR TPE Cable Compound for Insulation and Jacket

◆ Application

FR333W is designed for wind power cable, power cord, phone wire, USB connector cable, wiring for computer and peripheral equipment. It is characterized by flexibility at lower temperature, excellent physical performances and easy to process.

◆ Property Parameter

| Item | Unit | Typical Value | Test Method |
|----------------------------|-------------------|--------------------------|-------------|
| Density | g/cm ³ | 1.05 | ISO 1183 |
| Hardness | Shore A | 75 | ISO 2039-2 |
| Tensile Strength | MPa | 13 | IEC 60811 |
| Elongation | % | 460 | IEC 60811 |
| Heat Aging Method | °C × h | 120 °C × 168h | IEC 60811 |
| Change of Tensile Strength | % | 12 | IEC 60811 |
| Change of Elongation | % | -11 | IEC 60811 |
| Heat Deformation (120°C) | % | 10 | IEC 60811 |
| HCL generation | % | ND | IEC 60754-1 |
| Conductivity | μS/mm | 2.8 | IEC 60754-2 |
| 20°C Volume Resistivity | Ω .m | 1.0 × 10 ¹⁵ | IEC 60093 |
| pH Value | | 5.2 | IEC 60754-2 |
| Flame Retardancy | | VW-1, Pass (NO Dripping) | UL1581 |
| Cold Brittleness (-60°C) | | Pass | IEC 60811 |

◆ Processing Guide

1) Processing Temperature

The recommended temperature range is 140°C-190°C.

| Barrel 1 | Barrel 2 | Barrel 3 | Barrel 4 | Barrel 5 | Die |
|----------|----------|----------|----------|----------|-------|
| 140°C | 165°C | 175°C | 185°C | 190°C | 190°C |

2) Extrusion Equipment

It can be processed in ordinary PVC processing machine, standard extruders with gradually changing screw having L/D ≥ 25.

◆ Storage & Packaging

Store in dry place at ambient temperature. Avoid direct exposure to sunlight, moisture and weathering. If water content > 0.2%, pre-dry under 90°C for 2-4 hours. Use as soon as possible after open. Recommend storage period not more than 6 months. Standard packing of 25kg net in vacuum pack. Customized package is also available.