



JLS- FR001R/W LSNH Cable Compound for Flexible Cord

◆ Application

JLS-FR001R/W is halogen-free, low-smoke, flame retardant Thermoplastic Polyurethane (TPU), applicable in insulation and jacketing for flexible wire. Characterized by low-causticity and low toxicity and NO dripping, it is mainly used for producing power cord, phone wire, USB connector cable, and wiring for computer and peripheral equipment. It can be directly colored or by mixing with color masterbatch. It maintains excellent flame retardancy, mechanical property and extrudability. The durometer of hardness is between Shore A 80 to 90. Both gloss and matt surfacing are available upon request.

◆ Property Parameter

| Item | Unit | Typical Value | Method |
|----------------------------|-------------------|---------------|-------------|
| Density | g/cm ³ | 1.27 | ISO1183 |
| HCL generation | % | 0 | IEC 60754-1 |
| Toxicity Index | | 4.3 | NES 713 |
| LOI | % | 32 | ISO4589 |
| Conductivity | μS/mm | 5.6 | IEC 60754-2 |
| pH Value | | 6.1 | IEC 60754-1 |
| Hardness (Shore A) | Shore A | 87±2 | ISO 2039-2 |
| Original Tensile Strength | MPa | 20 | IEC60811 |
| Original Elongation | % | 590 | IEC60811 |
| Heat Aging Method | °C x hr | 110 °C x168hr | IEC60811 |
| Change of Tensile Strength | % | 11 | IEC60811 |
| Change of Elongation | % | 13 | IEC60811 |
| Cold Brittleness (-25°C) | | Pass | IEC60811 |
| Withstand Voltage | | AC2500V 1 min | UL1581 |
| Flame Retardancy | | VW-1 FT1 | UL1581 |

*The data above is based on AWG22, with insulation thickness of 0.6mm.



◆ Processing Guide

1) Pre-Dry

Pre-dry is required. It is recommended to place it under 90°C for 2 to 4 hours to ensure the best performance.

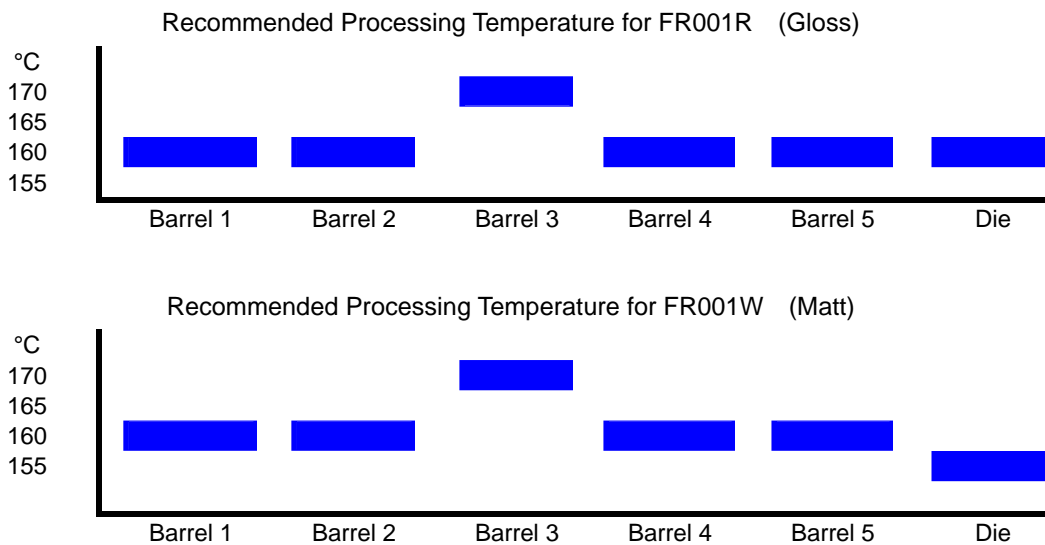
2) Extrusion Equipment

It can be processed in ordinary PVC processing machine. NO special screw is required. All kinds of screw combination and tooling are applicable. Using TPU extrusion machine could offer better result.

3) Processing Temperature

Please refer to the following graph for setting the temperature of each barrel.

The recommended temperature range is 155°C-170°C.



◆ Storage & Packaging

Store in dry place at ambient temperature. Avoid direct exposure to sunlight, moisture and weathering. Use as soon as possible after open. Standard packing of 25kg net in multi-layer bags (with PE bag inside). Customized package is also available.