# HellermannTyton

## 309-65192



Article Number: 309-65192

Heat Shrink Tubing, Bulk Reel, 2:1, 1.5", 38.1/19.1 dia., Polyolefin, Black, 100 ft/reel

### **Base Data**

Local Order Number 309-65192

Type TFN21-38.1/19.1 BK

Color Black (BK)

- Features and Benefits Thin, 2 to 1 shrink ratio tubing provides insulation and abrasion protection for wires and cables.
  - Flammability rating of UL224 VW-1 for use in applications requiring the highest degree of flame protection (excludes clear tubing).
  - Flexible-yet-durable material resists most common oils, chemicals and fluids.
  - Available in a variety of diameters and colors for identifying and marking wires and cables.
  - Available in mini reels, bulk reels, and sticks for small to large volume applications.

Product Description TFN21 is a highly flexible thin wall heat shrink tubing with a 2 to 1 shrink ratio and excellent flame retardant properties. In addition to providing insulation and abrasion protection for wires and cables, the polyolefin material also offers resistance to oils, solvents and chemicals. Available in mini reels, bulk reels and sticks, for small to large volume applications.

Printable (Yes/No) Yes

Shrink Ratio 2:1

Variant Thin-Wall

Short Description Heat Shrink Tubing, Bulk Reel, 2:1, 1.5", 38.1/19.1 dia., Polyolefin, Black, 100 ft/reel

With inner glue (Yes/No) ETIM No

#### **Product Dimensions**

Length L (imperial) 1000.0 ft

Length L (metric) 304.8 m

Wall Thickness WT (imperial) 0.039 "

Wall Thickness WT (metric) 1.0 mm

Recovered Diameter D (metric) 19.1 mm

Recovered Diameter D (imperial) 0.752 "

Supplied Diameter D (imperial) 1.5 "

Supplied Diameter D (metric) 38.1 mm

# **Logistics and Packaging**

Quantity per reel

Package Quantity (imperial) 100 ft

Reel Length (metric) 30 m

# **Material and Specifications**

Material Polyolefin, cross-linked (PO-X)

Material Shortcut PO-X

Dielectric Strength (metric) 20 kV/mm

Elongation at break 600%

Flammability UL224 VW-1

Halogenfree No

Shrink Temperature +212 °F (+100 °C)

**Operating Temperature**  $-67 \, ^{\circ}\text{F to} +275 \, ^{\circ}\text{F} \, (-55 \, ^{\circ}\text{C to} +135 \, ^{\circ}\text{C})$ 

ROHS Conformity Yes

 $\textbf{Certification / Specification} \quad \textbf{UL224 125 °C 600V VW-1}$ 

CSA

Tensile Strength (MPa) 14 MPa

UL Recognized (US) Yes

Volume Resistance (Ohm cm)  $10^{1}$ I  $\Omega$  cm