# HellermannTyton

## 309-65163



Article Number: 309-65163

Heat Shrink Tubing, Bulk Reel, 2:1, 1/2", 12.7/6.4 dia., Polyolefin, Black, 300 ft/reel

#### RoHS

Download spec sheet

#### Base Data

Local Order Number	309-65163
Туре	TFN21-12.7/6.4 BK
Color	Black (BK)
Features and Benefits	<ul> <li>Thin, 2 to 1 shrink ratio tubing provides insulation and abrasion protection for wires and cables.</li> <li>Flammability rating of UL224 VW-1 for use in applications requiring the highest degree of flame protection (excludes clear tubing).</li> <li>Flexible-yet-durable material resists most common oils, chemicals and fluids.</li> <li>Available in a variety of diameters and colors for identifying and marking wires and cables.</li> <li>Available in mini reels, bulk reels, and sticks for small to large volume applications.</li> </ul>
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.
Short Description	Heat Shrink Tubing, Bulk Reel, 2:1, 1/2", 12.7/6.4 dia., Polyolefin, Black, 300 ft/reel

#### **Product Dimensions**

Length L (Imperial)	300.0 ft
Length L (Metric)	91.4 m
Printable (Yes/No)	Yes
Shrink Ratio	2.1
Tensile Strength (MPa)	14 MPa
Trade Size	1/2 "
Variant	Thin-Wall
Volume Resistance (Ohm cm)	10 <sup>•</sup> I Ω cm
Nominal Diameter (Imperial)	1/2 "
Nominal Diameter (Metric)	12.7 mm
Wall Thickness WT (Imperial)	0.024 "
Wall Thickness WT (Metric)	.62 mm
Recovered Diameter d (metric)	6.4 mm
Recovered Diameter d (imperial)	0.25 "
Supplied Diameter D (metric)	12.7 mm
Supplied Diameter D (imperial)	0.5 "

### Logistics and Packaging

## 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°F to +275°F (-55°C to +135°C)
<b>ROHS</b> Compliant	Yes
Certification/Specification	CSA UL224 125 °C 600V VW-1
UL Recognized (US)	Yes

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