

## Specification Sheet

Part Number: 309-60302

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.



Article Number 309-60302

Type TFN21 9.5/4.8

Color Black (BK)

Quantity Per reel

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, Mini Reel, 2:1 Shrink Ratio, 3/8", 9.5/4.8 Dia, PO, Black, 50 ft/reel
Global Part Name	TFN21 9.5/4.8-PO-X-BK
Variant	Thin-Wall
Nominal Diameter (Imperial)	0.38
Nominal Diameter (Metric)	9.5
Wall Thickness WT (Imperial)	.024
Wall Thickness WT (Metric)	0.62
Material	Polyolefin, cross-linked (PO-X)
Material Shortcut	PO-X
Flammability	UL 224 VW-1 (except clear)
Halogen Free	No
UV Resistant (Yes/No)	No
Operating Temperature	-67°F to +275°F (-55°C to +135°C)
Reach Compliant (Article 33)	Yes

ROHS Compliant	Yes
Certification/Specification	UL   ANSI/UL 224 CSA
UL Recognized (US)	Yes
UL Recognized (US and Canada)	Yes
Package Quantity (Imperial)	50
Package Quantity (Metric)	15.24
Customs Number	3926909988

## About HellermannTyton

HellermannTyton is a global manufacturer of cable management and identification solutions for automotive, solar, electrical, construction, industrial automation, broadband and other OEM markets. The company's integrated approach to product design, sustainability, production, quality assurance and delivery is optimized to benefit local and global customers. HellermannTyton operates in 39 countries, with North American headquarters in Milwaukee, Wisconsin. ([www.hellermann.tyton.com](http://www.hellermann.tyton.com)).

© 2023 HellermannTyton. All Rights Reserved.

[Contact Us](#)   [RoHS/WEEE Compliance](#)   [Disclaimer](#)   [Terms and Conditions](#)