



Product: [NH50105FUA](#)

DataTuff™ Industrial Ethernet CAT5e 4x2x22AWG/1 F/UTP SWA Fire Resistant

Product Description

DataTuff™ Industrial Ethernet CAT5e 4x2x22AWG/1 F/UTP SWA Fire Resistant

Technical Specifications

Product Overview

Suitable Applications:	This Category 5e Cable is a cable standard for Gigabit Ethernet, capable to continue transmitting data even when being directly attacked by fire.
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Construction Details

Conductor

Size	Stranding	Stranding Class	Material	No. of Pairs	No. of Elements
22 AWG	Solid	Class 1	BC - Bare Copper	4	8

Insulation

Material	Nom. Insulation Diameter	Color Code	Notes
PE - Polyethylene	1.23 mm (0.0484 in)	Blue & White with Blue Strips, Orange & White with Orange Strips, Green & White with Green Strips, Brown & White with Brown Strips	Fire Protection Barrier: Mica glass Tape(MGT)

Inner Shield

Element	Shield Type	Material	Drainwire Type	Notes
Overall	Tape	Polyester + Bi-Laminate (Alum+Poly)	26 AWG (Solid) TC	A Fire Protection Barrier: Mica Glass Tape wrapped over shielding

Inner Jacket

Material	Nom. Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant)	11.2 mm (0.441 in)

Armor

Armor Type & Material
SWA - Steel Wire Armor

Outer Jacket

Material	
LSZH - Low Smoke Zero Halogen (Flame Retardant)	
Overall Cable Diameter (Nominal):	14.80 mm (0.5827 in)

Electrical Characteristics

Electricals

Max. Conductor DCR	Nom. Characteristic Impedance
54.3 Ohm/km @ 20 Deg. C	100 Ohm

Delay

Max. Delay Skew
45 ns/100m
536 ns/100m

Voltage

Voltage Rating
60 V

Mechanical Characteristics

Temperature

Operating
-40°C to + 60°C

Standards and Compliance

Environmental Suitability:	UV Resistance, Oil Resistance
Flammability / Reaction to Fire:	IEC 60332-1-2, IEC 60332-3-22, IEC 60331-23
Data Category:	Category 5e
ISO/IEC Compliance:	IEC 61034-2 - Smoke Density Min Transmittance = 60%
European Halogen Free Standards:	IEC 60754-1 - Halogen Amount = 0.5 %, IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity = 10 µS/mm, IEC 60754-2 - Halogen Acid Gas Amount - Min. pH = 4.3

Product Notes

Notes:	• TIA 568 D .2 Cat.5E and ISO/IEC 11801 class D and IEEE 802.3 100Base TX,1000Base T, Circuit integrity performance during a fire of the relevant requirements of IEC 60331 23. • Cable will meet CAT 5e channel requirements up to 80m length or up to 70m permanent length.
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History

Update and Revision:	Revision Number: 0.22 Revision Date: 06-15-2025
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