



Product: [129463](#)

Blue Hose®, 1 Pr #20 Str TC, PE Ins Blu,Clr, Foil+TC Braid Shld, PVC Jkt, AIA Armor, PVC Jkt, CM

[Request Sample](#)

Product Description

Blue Hose® for Data Highway Plus, 1 Pair 20AWG (7x28) Tinned Copper, PE Insulation Blue & Clear, Overall Beldfoil®+Tinned Copper Braid(55%) Shield, PVC Inner Jacket, Aluminum Interlock Armor, Blue PVC Outer Jacket, CM

Technical Specifications

Product Overview

Suitable Applications:	exposure to rodent, crush, or cut through force, harsh environment, Allen Bradley Data Highway communication interface between PLC processors, I/O devices, operator interfaces, computers and other intelligent devices, PLC processor interlocking, peer-to-peer messaging, remote programming, troubleshooting, I/O updates, etc.
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Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material
Pair(s)	1	20 AWG	7x28	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code	Notes
Pair(s)	PE - Polyethylene	0.019 in (0.48 mm)	0.076 in (1.9 mm)	Clear & Blue	Twinax with rod fillers

Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	20 AWG (7x28) TC
Braid	Tinned Copper (TC)	60%	

Inner Jacket

Material	Nom. Thickness	Nom. Diameter
PVC - Polyvinyl Chloride	0.037 in (0.94 mm)	0.238 in (6.05 mm)

Armor

Armor Type & Material	Armor Thickness	Armor Material Diameter
AIA - Aluminum Interlock Armor	0.025 in (0.64 mm)	0.450 in (11.4 mm)

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
PVC - Polyvinyl Chloride	0.050 in (1.3 mm)	0.550 in (14.0 mm)

Overall Cable Diameter (Nominal):	0.550 in (14.0 mm)
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Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Shield	Nom. Capacitance Cond-to-Other (Conds + Shield)	Nom. Characteristic Impedence	Nom. Velocity of Prop.
Pair(s)	11.3 Ohm/1000ft	19.7 pF/ft (64.6 pF/m)	37 pF/ft	36 pF/ft	78 Ohm	66%
Nom. Outer Shield DCR:		4.1 Ohm/1000ft (13 Ohm/km)				

High Frequency (Nominal/Typical)

Element	Frequency [MHz]	Nom. Insertion Loss (Attenuation)
Pair(s)	1	0.6 dB/100ft
	10	2.1 dB/100ft
	50	5 dB/100ft
	100	7.5 dB/100ft
	200	11 dB/100ft
	400	16 dB/100ft

Voltage

UL Voltage Rating
300 V

Mechanical Characteristics

Temperature

UL Temperature	Operating
60°C	-40°C to +60°C

Bend Radius

Stationary Min.	Installation Min.
6.5 in (170 mm)	6.5 in (170 mm)

Max. Pull Tension:	200 lbs (91 kg)
Bulk Cable Weight:	133 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance
Flammability / Reaction to Fire:	UL 1685 UL Loading
NEC / UL Compliance:	Article 725, Article 800, CM, PLTC
CEC / C(UL) Compliance:	CM, CMG, HLBCD
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
Other Standard Compliance(s):	Allen Bradley Part No. 1770-CD

History

Update and Revision:	Revision Number: 0.553 Revision Date: 04-30-2024
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Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC
129463 J221000	Blue, Strong	Reel	1,000 ft	612825110934

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