



**Product:** [9463](#)

Blue Hose®, 1 Pr #20 Str TC, PE Ins Blu, Clr, Foil+TC Brd, 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, Blue PVC Outer Jacket, CM

## Technical Specifications

### Product Overview

Suitable Applications:	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	Number of Element	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)	0.0755 in (1.92 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%	

#### Outer Jacket

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

Table Notes:	Jacket OD +/- 0.003
Overall Cable Diameter (Nominal):	0.238 in

### Electrical Characteristics

#### Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Shield	Nom. Capacitance Cond-to-Other (Conds + Shield)	Characteristic Impedance	Nom. Velocity of Prop.
Pair(s)	9.5 Ohm/1000ft	19.7 pF/ft	37 pF/ft	36 pF/ft	78 Ohm	66%

Nom. Outer Shield DCR:	4.1 Ohm/1000ft
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#### High Frequency (Nominal/Typical)

Element	Frequency [MHz]	Nom. Insertion Loss
Pair(s)	1 MHz	0.6 dB/100ft
	10 MHz	2.1 dB/100ft
	50 MHz	5.0 dB/100ft
	100 MHz	7.5 dB/100ft
	200 MHz	11.0 dB/100ft
	400 MHz	16.0 dB/100ft

## Voltage

UL Voltage Rating
300 V (CM, CL2), 300 V (UL AWM 2464)

## Mechanical Characteristics

### Temperature

UL Temperature	Operating	Installation	Storage
80°C (UL AWM 2464)	-40°C to +80°C	-40°C To +80°C	-40°C to +80°C

### Bend Radius

Stationary Min.	Installation Min.
2.4 in (61 mm)	2.4 in

## Standards and Compliance

Environmental Suitability:	Indoor, Sunlight Resistance
Flammability / Reaction to Fire:	UL1685 UL Loading, IEC 60332-1-2
NEC / UL Compliance:	Article 725, Article 800, CM, CL2
AWM Compliance:	AWM 2464
CEC / C(UL) Compliance:	CM
CPR Euroclass:	Eca
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):	P-7K-SC-182141-MSHA, Allen Bradley Part No. 1770-CD
Plenum Number:	89463

## History

Update and Revision:	Revision Number: 0.491 Revision Date: 02-08-2022
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