



**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.
------------------------	---

### 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 (6.05 mm)

### 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 Impedance	Nom. Velocity of Prop.
Pair(s)	9.5 Ohm/1000ft (31 Ohm/km)	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	5.0 dB/100ft
	100	7.5 dB/100ft
	200	11.0 dB/100ft

400

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

Max. Pull Tension: 48 lbs (22 kg)

Bulk Cable Weight: 36 lbs/1000ft

**Standards and Compliance**

Environmental Suitability:	Indoor, Sunlight Resistance
Flammability / Reaction to Fire:	UL1685 UL Loading, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	Article 725, Article 800, CM, CL2
AWM Compliance:	AWM 2464
CEC / C(UL) Compliance:	CM
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

**Part Numbers****Variants**

Item #	Color	Putup Type	Length	UPC/EAN
9463.0030	Blue	Reel	30 m	8719605020550
9463.00U152	Blue	UnReel	152 m	8719605020574
9463.01152	Blue	Reel	152 m	8719605020598
9463.00305	Blue	Reel	305 m	8719605020567
9463.00U305	Blue	UnReel	305 m	8719605020581
9463.001000	Blue	Reel	1,000 m	8719605020536
9463.001829	Blue	Reel	1,829 m	8719605020543
9463 J22100	Blue, Strong	Reel	100 ft	612825253549
9463 J22500	Blue, Strong	Reel	500 ft	612825253570
9463 J22U500	Blue, Strong	UnReel	500 ft	612825253532
9463 J221000	Blue, Strong	Reel	1,000 ft	612825253556
9463 J22U1000	Blue, Strong	UnReel	1,000 ft	612825253525
9463 J2212000	Blue, Strong	Reel	2,000 ft	612825253563
9463 J226000	Blue, Strong	Reel	6,000 ft	612825253587
9463.02305	Brown	Reel	305 m	8719605020604
9463 0011000	Brown	Reel	1,000 ft	612825253594
9463 00112000	Brown	Reel	2,000 ft	612825253617
9463.023050	Brown	Reel	3,050 m	8719605020611
9463 0016000	Brown	Reel	6,000 ft	612825253624
9463 00110000	Brown	Reel	10,000 ft	612825253600
9463.03305	Orange	Reel	305 m	8719605020635
9463 0031000	Orange	Reel	1,000 ft	612825253631
9463.031829	Orange	Reel	1,829 m	8719605020628
9463 00312000	Orange	Reel	2,000 ft	612825253655

9463 0036000	Orange	Reel	6,000 ft	612825253662
9463 00310000	Orange	Reel	10,000 ft	612825253648
9463.04305	Violet	Reel	305 m	8719605020659
9463 0071000	Violet	Reel	1,000 ft	612825253679
9463.041829	Violet	Reel	1,829 m	8719605020642
9463 0076000	Violet	Reel	6,000 ft	612825253686

© 2022 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.