



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

Blue Hose®, 1 Pr #20 Str TC, PO Ins Blu,Wht, OS+TC Brd, PVC Jkt, CM

[Request Sample](#)

## Product Description

Blue Hose® for Data Highway Plus, 1 Pair 20AWG (7x28) Tinned Copper, PO Insulation Blu,Wht Color Code, 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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### Physical Characteristics (Overall)

#### Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Pairs
20	7x28	TC - Tinned Copper	0.038 in	1

Conductor Count:	2
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#### Insulation

Material	Nominal Diameter
PE - Polyethylene	0.078 in

#### Color Chart

Number	Color
1	Clear & Blue

#### Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	1	Alum / Poly	Beldfoil®	100 %	TC - Tinned Copper	20	7x28H
Braid	2	TC - Tinned Copper		55 %			

#### Outer Jacket Material

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.238 in

### Construction and Dimensions

#### Stranding

Twists	Diameter
2.75 twist/ft	0.154 mm

### Electrical Characteristics

#### Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
9.5 Ohm/1000ft	4.1 Ohm/1000ft

#### Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
19.7 pF/ft	36 pF/ft

#### Inductance

Nominal Inductance
0.12 $\mu$ H/ft

#### Impedance

Nominal Characteristic Impedance
78 Ohm

#### High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.6 dB/100m
10 MHz	2.1 dB/100m
50 MHz	5 dB/100m
100 MHz	7.5 dB/100m
200 MHz	11 dB/100m
400 MHz	16 dB/100m

#### Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.54 ns/ft	66 %

#### Voltage

UL Voltage Rating
300 V RMS (UL AWM Style 2464)
300 (NEC Type CM) V RMS
300 V RMS (NEC Type CL2)

Electrical Characteristics Notes:	DC Resistance Unbalanced: .77 Ohms/1000 ft Max
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#### Temperature Range

Installation Temp Range:	-40°C To +80°C
UL Temp Rating:	80°C (UL AWM Style 2464)
Storage Temp Range:	-40°C To +80°C
Operating Temp Range:	-40°C To +80°C

#### Mechanical Characteristics

Bulk Cable Weight:	36 lbs/1000ft
Max Recommended Pulling Tension:	48 lbs
Min Bend Radius/Minor Axis:	2.4 in

#### Standards

Customer Part Number Reference Spec:	Allen Bradley P/N 1770-CD
NEC/(UL) Specification:	CL2, CM
CEC/C(UL) Specification:	CM
UL AWM Style:	UL Style 2464 (300 V 80°C)
CPR Euroclass:	Eca
PMSHA Specification:	P-7K-SC-182141

#### Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)

EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2005-01-01
MII Order #39 (China RoHS):	Yes

### Suitability

Suitability - Sunlight Resistance:	Yes
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### Flammability, LSOH, Toxicity Testing

UL Flammability:	UL1685 UL Loading
ISO/IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V RMS (UL AWM Style 2464)

### Plenum/Non-Plenum

Plenum Number:	89463
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### Part Number

#### 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

Footnote:	C - CRATE REEL PUT-UP.
Footnote:	Z - FINAL PUT-UP MAY VARY (= OR -) 10% FOR SPOOLS OR REELS AND (+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.
Footnote:	Y - FINAL PUT-UP LENGTH MAY VAR -10% TO +20% FROM LENGTH SHOWN. MAY CONTAIN 2 PIECES. MINIMUM LENGTH OF ANY ONE PIECE IS 1500'.

### History

Update and Revision:	Revision Number: 0.348 Revision Date: 04-28-2020
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