



Part Number: 9463

Blue Hose®, (1 pr) 20 AWG (7x28) TC, PE/PVC, Foil+TC Braid Shld, CM

Product Description

One 20 AWG pair stranded (7x28) tinned copper conductors, polyethylene insulation, overall Beldfoil® (100% coverage) plus tinned copper braid shield (55% coverage), oil- and UV-resistant PVC jacket.

Technical Specifications

Physical Characteristics (Overall)

Conductor AWG Stranding Material Nominal Diameter No. of Pairs 20 7x28 TC - Tinned Copper 0.038 in 1 Conductor Count: 2 AWG Size: 20

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	Aluminum Foil-Polyester Tape	Beldfoil®	100 %	TC - Tinned Copper	20	7x28H mm
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 µH/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 300V RMS (UL AWM Style 2464) 300 (NEC Type CM) V RMS 300V RMS (NEC Type CL2)

Electrical Characteristics Notes:

DC Resistance Unbalanced: .77 Ohms/1000 ft Max

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
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Suitability

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Flammability, LS0H, Toxicity Testing

UL Flammability:

UL1685 UL Loading

Part Number

Plenum Number:

89463

Variants

Variants				
Item #	Color	Footnote		
9463.001829	BLUE			
9463.00305	BLUE			
9463.00U152	BLUE			
9463.00U305	BLUE			
9463.01152	BLUE			
9463 J22100	BLUE, STRONG			
9463 J221000	BLUE, STRONG	С		
9463 J2212000	BLUE, STRONG	CY		
9463 J22500	BLUE, STRONG			
9463 J226000	BLUE, STRONG	CZ		
9463 J22U1000	BLUE, STRONG			
9463 J22U500	BLUE, STRONG			
9463.02305	BROWN			
9463 0011000	BROWN			
9463 00110000	BROWN	CZ		
9463 00112000	BROWN	CY		
9463 0016000	BROWN	CZ		
9463.031829	ORANGE			
9463.03305	ORANGE			
9463 0031000	ORANGE	С		
9463 00310000	ORANGE	CZ		
9463 00312000	ORANGE	CY		
9463 0036000	ORANGE	CZ		
9463.041829	VIOLET			
9463.04305	VIOLET			
9463 0071000	VIOLET	С		
9463 0076000	VIOLET	CZ		

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'.

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