# **Detailed Specifications & Technical Data**

METRIC MEASUREMENT VERSION



#### 9463 Twinax - Blue Hose® Cable

For more Information please call

1-800-Belden1



## **General Description:**

20 AWG stranded (7x28) .038" tinned copper conductors, polyethylene insulation, Beldfoil® (100% coverage) plus a tinned copper braid shield (55% coverage), sunlight-resistant PVC jacket.

## **Physical Characteristics (Overall)**

#### Conductor

#### AWG:

# Pairs	AWG	Stranding	<b>Conductor Material</b>	Dia. (mm)
1	20	7x28	TC - Tinned Copper	0.965

Total Number of Conductors: 2

#### Insulation

#### **Insulation Material:**

<b>Insulation Material</b>	Dia. (mm)
PE - Polyethylene	1.981

#### **Outer Shield**

#### **Outer Shield Material:**

Layer # Outer Shield Trade Name		Type	Outer Shield Material	Coverage (%)
1	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100
2		Braid	TC - Tinned Copper	55

## **Outer Shield Drain Wire AWG:**

AWG	Stranding	Drain Wire Conductor Material
20	7x28H	TC - Tinned Copper

#### **Outer Jacket**

## **Outer Jacket Material:**

Outer Jacket Material
PVC - Polyvinyl Chloride

#### **Overall Cable**

Overall Nominal Diameter: 6.045 mm

#### Pair

#### Pair Color Code Chart:



## Pair Lay Length & Direction:

Twists (twist/m) 9.023

## **Mechanical Characteristics (Overall)**

Operating Temperature Range:	-40°C To +80°C	
UL Temperature Rating:	80°C (UL AWM Style 2464)	
Bulk Cable Weight:	53.575 Kg/Km	
Max. Recommended Pulling Tension:	213.514 N	
Min. Bend Radius/Minor Axis:	60.960 mm	

Page 1 of 3 11-08-2019

# **Detailed Specifications & Technical Data**





## 9463 Twinax - Blue Hose® Cable

Applicable Specifications and Agency Compliance (Overall)				
Applicable Standards & Environmental Programs				
NEC/(UL) Specification:	CL2, CM			
CEC/C(UL) Specification:	СМ			
AWM Specification:	UL Style 2464 (300 V 80°C)			
EU Directive 2011/65/EU (ROHS II):	Yes			
EU CE Mark:	Yes			
EU Directive 2000/53/EC (ELV):	Yes			
EU Directive 2002/95/EC (RoHS):	Yes			
EU RoHS Compliance Date (mm/dd/	/yyyy): 01/01/2005			
EU Directive 2002/96/EC (WEEE):	Yes			
EU Directive 2003/11/EC (BFR):	Yes			
CA Prop 65 (CJ for Wire & Cable):	Yes			
MII Order #39 (China RoHS):	Yes			
PMSHA Specification:	P-7K-SC-182141			
Customer Part Number Reference S	Specification: Allen Bradley P/N 1770-CD			
Flame Test				
UL Flame Test:	UL1685 UL Loading			
Suitability				
Sunlight Resistance:	Yes			
Plenum/Non-Plenum				
Plenum Number:	89463			

## **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:

Impedance (Ohm) 78

Nom. Inductance:

Inductance (µH/m) 0.39372

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m) 64.6357

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m) 118.116

Nominal Velocity of Propagation:

**VP (%)**66

Nominal Delay:

**Delay (ns/m)** 5.05274

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 31.1695

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)

Page 2 of 3 11-08-2019

## **Detailed Specifications & Technical Data**

#### METRIC MEASUREMENT VERSION



9463 Twinax - Blue Hose® Cable

13.4521

#### Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
1	1.9686
10	6.8901
50	16.405
100	24.6075
200	36.091
400	52.496

#### Max. Operating Voltage - UL:

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

Other Electrical Characteristic 1:

DC Resistance Unbalanced: .77 Ohms/1000 ft Max

## **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9463 J22U1000	1,000 FT	38.000 LB	BLUE, STRONG		78 OHM TWINAX
9463 J22U500	500 FT	19.500 LB	BLUE, STRONG		78 OHM TWINAX
9463 J22100	100 FT	4.400 LB	BLUE, STRONG		78 OHM TWINAX
9463 J221000	1,000 FT	39.000 LB	BLUE, STRONG	С	78 OHM TWINAX
9463 J2212000	12,000 FT	492.000 LB	BLUE, STRONG	CY	78 OHM TWINAX
9463 J22500	500 FT	19.500 LB	BLUE, STRONG		78 OHM TWINAX
9463 J226000	6,000 FT	234.000 LB	BLUE, STRONG	CZ	78 OHM TWINAX
9463 0011000	1,000 FT	39.000 LB	BROWN		78 OHM TWINAX
9463 00110000	10,000 FT	380.000 LB	BROWN	CZ	78 OHM TWINAX
9463 00112000	12,000 FT	492.000 LB	BROWN	CY	78 OHM TWINAX
9463 0016000	6,000 FT	234.000 LB	BROWN	CZ	78 OHM TWINAX
9463 0031000	1,000 FT	39.000 LB	ORANGE	С	78 OHM TWINAX
9463 00310000	10,000 FT	380.000 LB	ORANGE	CZ	78 OHM TWINAX
9463 00312000	12,000 FT	492.000 LB	ORANGE	CY	78 OHM TWINAX
9463 0036000	6,000 FT	234.000 LB	ORANGE	CZ	78 OHM TWINAX
9463 0071000	1,000 FT	39.000 LB	VIOLET	С	78 OHM TWINAX
9463 0076000	6,000 FT	234.000 LB	VIOLET	CZ	78 OHM TWINAX

#### Notes:

C = CRATE REEL PUT-UP.

Y = FINAL PUT-UP LENGTH MAY VARY -10% TO +20% FROM LENGTH SHOWN.MAY CONTAIN 2 PIECES. MINIMUM LENGTH OF ANY ONE PIECE IS 1500'.

Z = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 10% FOR SPOOLS OR REELS AND(+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

Revision Number: 3 Revision Date: 08-08-2017

© 2019 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 herein 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 "AS IS" 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 EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure 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. This 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. Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 2014/35/EU).

Page 3 of 3 11-08-2019