



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
Condu	Conductor Count: 2			

Insulation

Material	Nominal Diameter
PE - Polyethylene	0.078 in

Color Chart

Number	Color
1	Clear & Blue

Outer Shield Material

Туре	Layer	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Таре	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

TwistsDiameter2.75 twist/ft0.154 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

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)

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	
Suitability - Sunlight Resistance:	Yes

Flammability, LS0H, Toxicity Testing

UL Flammability: UL1685 UL Loading

89463

Part Number

Plenum Number:

Variants

ltem #	Color
9463.001000	BLUE
9463.001829	BLUE
9463.0030	BLUE
9463.00305	BLUE
9463.00U152	BLUE
9463.00U305	BLUE
9463.01152	BLUE
9463 J22100	BLUE, STRONG
9463 J221000	BLUE, STRONG
9463 J2212000	BLUE, STRONG
9463 J22500	BLUE, STRONG
9463 J226000	BLUE, STRONG
9463 J22U1000	BLUE, STRONG
9463 J22U500	BLUE, STRONG
9463.02305	BROWN
9463.023050	BROWN
9463 0011000	BROWN
9463 00110000	BROWN
9463 00112000	BROWN
9463 0016000	BROWN
9463.031829	ORANGE
9463.03305	ORANGE
9463 0031000	ORANGE
9463 00310000	ORANGE
9463 00312000	ORANGE
9463 0036000	ORANGE
9463.041829	VIOLET
9463.04305	VIOLET
9463 0071000	VIOLET
9463 0076000	VIOLET

Product Notes

Footnote:	CRATE REEL PUT-UP.
Footnote:	FINAL PUT-UP MAY VARY (= OR -) 10% FOR SPOOLS OR REELS AND (+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.
Footnote:	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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Belden declares this product to be incompliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.