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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	Conductor Material	Dia. (in.)
1	20	7x28	TC - Tinned Copper	0.038

Total Number of Conductors: 2

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
PE - Polyethylene	0.078

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: 0.238 in.

Pair

Pair Color Code Chart:

Number	Color
1	Clear & Blue

Pair Lay Length & Direction:

Twists (twist/ft)
2.750

Mechanical Characteristics (Overall)

Operating Temperature Range:	-40°C To +80°C
UL Temperature Rating:	80°C (UL AWM Style 2464)
Bulk Cable Weight:	36 lbs/1000 ft.
Max. Recommended Pulling Tension:	48 lbs.
Min. Bend Radius/Minor Axis:	2.400 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CL2, CM
CEC/C(UL) Specification:	CM
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 Specification:	Allen Bradley P/N 1770-CD

Flame Test

UL Flame Test:	UL1685 UL Loading
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Suitability

Sunlight Resistance:	Yes
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Plenum/Non-Plenum

Plenum Number:	89463
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Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
78

Nom. Inductance:

Inductance (µH/ft)
0.12

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
19.7

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)
36

Nominal Velocity of Propagation:

VP (%)
66

Nominal Delay:

Delay (ns/ft)
1.54

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
9.5

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
4.1

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1	0.6
10	2.1
50	5.0
100	7.5
200	11.0
400	16.0

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
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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	C	78 OHM TWINAX
9463 J2212000	12,000 FT	492.000 LB	BLUE, STRONG	C Y	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	C Z	78 OHM TWINAX
9463 0011000	1,000 FT	39.000 LB	BROWN		78 OHM TWINAX
9463 00110000	10,000 FT	380.000 LB	BROWN	C Z	78 OHM TWINAX
9463 00112000	12,000 FT	492.000 LB	BROWN	C Y	78 OHM TWINAX
9463 0016000	6,000 FT	234.000 LB	BROWN	C Z	78 OHM TWINAX
9463 0031000	1,000 FT	39.000 LB	ORANGE	C	78 OHM TWINAX
9463 00310000	10,000 FT	380.000 LB	ORANGE	C Z	78 OHM TWINAX
9463 00312000	12,000 FT	492.000 LB	ORANGE	C Y	78 OHM TWINAX
9463 0036000	6,000 FT	234.000 LB	ORANGE	C Z	78 OHM TWINAX
9463 0071000	1,000 FT	39.000 LB	VIOLET	C	00 OHM TWINAX
9463 0076000	6,000 FT	234.000 LB	VIOLET	C Z	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.

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