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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. (mm)
1	20	7x28	TC - Tinned Copper	0.965

Total Number of Conductors: 2

Insulation

Insulation Material:

Insulation Material	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:

Number	Color
1	Clear & Blue

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

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/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)

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	305 MT	17.237 KG	BLUE, STRONG		78 OHM TWINAX
9463 J22U500	152 MT	8.845 KG	BLUE, STRONG		78 OHM TWINAX
9463 J22100	30 MT	1.996 KG	BLUE, STRONG		78 OHM TWINAX
9463 J221000	305 MT	17.690 KG	BLUE, STRONG	C	78 OHM TWINAX
9463 J2212000	3,658 MT	223.168 KG	BLUE, STRONG	C Y	78 OHM TWINAX
9463 J22500	152 MT	8.845 KG	BLUE, STRONG		78 OHM TWINAX
9463 J226000	1,829 MT	106.141 KG	BLUE, STRONG	C Z	78 OHM TWINAX
9463 0011000	305 MT	17.690 KG	BROWN		78 OHM TWINAX
9463 00110000	3,048 MT	172.366 KG	BROWN	C Z	78 OHM TWINAX
9463 00112000	3,658 MT	223.168 KG	BROWN	C Y	78 OHM TWINAX
9463 0016000	1,829 MT	106.141 KG	BROWN	C Z	78 OHM TWINAX
9463 0031000	305 MT	17.690 KG	ORANGE	C	78 OHM TWINAX
9463 00310000	3,048 MT	172.366 KG	ORANGE	C Z	78 OHM TWINAX
9463 00312000	3,658 MT	223.168 KG	ORANGE	C Y	78 OHM TWINAX
9463 0036000	1,829 MT	106.141 KG	ORANGE	C Z	78 OHM TWINAX
9463 0071000	305 MT	17.690 KG	VIOLET	C	00 OHM TWINAX
9463 0076000	1,829 MT	106.141 KG	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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