Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

3106T Multi-Conductor - EIA Industrial RS-485 PLTC/CMG

For more Information
please call

1-800-Belden1

General Description:

22 AWG stranded (7x30) tinned copper conductors, Datalene® insulation, twisted pairs, overall Beldfoil® shield (100% coverage) plus a tinned copper braid (65% coverage), drain wire, UV resistant LSZH jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Conductors	# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
1	1	22	7x30	TC - Tinned Copper	.030

Total Number of Conductors:	3

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material
Datalene®	FHDPE - Foam High Density Polyethylene

Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100.000
2		Braid	TC - Tinned Copper	65.000

Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire Conductor Material
22	7x30	TC - Tinned Copper

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
LSZH- Low Smoke Zero Halogen

Overall Cable

Overall Cabling Color Code Chart:

Number	Color
1	White/Orange Stripe
2	Orange/White Stripe
3	Blue/White Stripe

Overall Nominal Diameter:	0.300 in.

Pair

Pair Lay Length & Direction:

Lay Length (in.)
3.000

Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +60°C
Non-UL Temperature Rating:	60°C
Bulk Cable Weight:	53 lbs/1000 ft.
Max. Recommended Pulling Tension:	65 lbs.
Min. Bend Radius/Minor Axis:	3 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMG, PLTC
CEC/C(UL) Specification:	CMG
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 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

Flame Test

UL Flame Test:	UL1685 UL Loading
CSA Flame Test:	FT1

Suitability

Sunlight Resistance:	Yes

Plenum/Non-Plenum

Plenum (Y/N):	No

Surface Printing (Overall)

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Description
120

Nom. Inductance:

Inductance (µH/ft)
.203

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
11.0

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)
20.9

Nominal Velocity of Propagation:

VP (%)
78

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
14.7

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
2.8

Nom. Attenuation:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Attenuation (dB/100 ft.)
	1			.5

Max. Operating Voltage - UL:

Voltage
300 V RMS (NEC Type PLTC)
300 V RMS (NEC Type CM)

Max. Recommended Current:

Current
2.7 Amps per conductor @ 25°C

Other Electrical Characteristic 1:	Input Impedance/Unfitted Impedance .5 - 10 MHZ, 120 +-12 Ohms

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