





3109A Paired - EIA Industrial RS-485 PLTC/CM

 	<p>Metric Version For more information please call 1-800-Belden1</p> <p><u>See Put-ups and Colors</u></p>
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Description:

22 AWG stranded (7x30) tinned copper conductors, Datalene® insulation, twisted pairs, overall Beldfoil® shield (100% coverage) plus a tinned copper braid (90% coverage), drain wire, UV resistant PVC jacket.

PHYSICAL CHARACTERISTICS:

CONDUCTOR:

Number of Pairs	4
Total Number of Conductors	8
AWG	22
Stranding	7x30
Conductor Diameter	0.762 mm
Conductor Material	TC - Tinned Copper

INSULATION:

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

OVERALL CABLING:

Overall Cabling Color Code Chart :

Number	Color
1	White/Blue Stripe & Blue/White Stripe
2	White/Orange Stripe & Orange/White Stripe
3	White/Green Stripe & Green/White Stripe
4	White/Brown Stripe & Brown/White Stripe

OUTER SHIELD:

Outer Shield Material Trade Name	Beldfoil®
Outer Shield Type	Tape/Braid

Outer Shield Material :

Layer Number	Material Trade Name	Type	Material	% Coverage (%)
1	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100
2		Braid	TC - Tinned Copper	90

Outer Shield % Coverage 100 %



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OUTER SHIELD DRAIN WIRE :

Outer Shield Drain Wire AWG	22
Outer Shield Drain Wire Stranding	7x30
Outer Shield Drain Wire Diameter	0.762 mm
Outer Shield Drain Wire Conductor Material	TC - Tinned Copper

OUTER JACKET:

Outer Jacket Material	PVC - Polyvinyl Chloride
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OVERALL NOMINAL DIAMETER:

Overall Nominal Diameter	10.668 mm
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MECHANICAL CHARACTERISTICS:

Operating Temperature Range	-20°C To +60°C
Non-UL Temperature Rating	60°C
Bulk Cable Weight	143.462 Kg/Km
Max. Recommended Pulling Tension	444.82 N
Min. Bend Radius (Install)	114.3 mm

APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

APPLICABLE STANDARDS:

NEC/(UL) Specification	CM, PLTC OIL RES II
CEC/C(UL) Specification	CM
EU RoHS Compliant (Y/N)	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	10/01/2005

FLAME TEST:

UL Flame Test	UL1685 UL Loading
CSA Flame Test	FT1

SUITABILITY:

Sunlight Resistance	Passes UL 1581, 720 Hours
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PLENUM/NON-PLENUM:

Plenum (Y/N)	N
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ELECTRICAL CHARACTERISTICS:

Input/Unfitted Impedance :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Input/Unfitted Impedance (Ohms)
	1			120

Nom. Capacitance Conductor to Conductor @ 1 KHz	36.091 pF/m
Nom. Cap. Cond. to Other Cond. & Shield @ 1 KHz	68.573 pF/m



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Nominal Velocity of Propagation	78 %
Nom. Conductor DC Resistance @ 20 Deg. C	48.231 Ohms/km
Nominal Outer Shield DC Resistance @ 20 Deg. C	4.593 Ohms/km

Nom. Attenuation (dB/100 ft) :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Nom. Attenuation (dB/100m)
	1			1.64

Max. Operating Voltage - UL	300 V RMS
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Max. Recommended Current	2.7 Amps per conductor @ 25°C
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NOTES:

Notes	Oil Resistance: Passes Oil Res II Per UL1277, Table 10.17. For CPE jacketed version order Part No. YR44768.
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PUT-UPS AND COLORS:

Item	Description	Put-Up (M)	Ship Weight (kgs.)	Jacket Color	Notes
3109A 0101000	4 PR #22 FHDPE SH PVC	304.8	48.578	BLACK	C
3109A 0102000	4 PR #22 FHDPE SH PVC	609.6	98.972	BLACK	C

C = CRATE REEL PUT-UP.

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