



**Part Number: 3109DB**

RS-485UL DIR BUR, 4 Pr, 22AWG, Str, TC, PO Ins, OS+TC Brd, CPE Jkt, CM, PLTC, Outdoor, Sun Res, Oil Res

**Product Description**

RS-485 UL direct burial foil and braid shielded 120 Ohm low voltage low capacitance computer cable, 4 pair 22AWG stranded tinned copper Datalene® insulated conductors with CPE jacket, CM, PLTC, outdoor sun-resistant and oil-resistant

**Technical Specifications**

**Physical Characteristics (Overall)**

**Conductor**

AWG	Stranding	Material	Nominal Diameter	No. of Pairs
22	7x30	TC - Tinned Copper	0.03 in	4

Conductor Count:	8
Total Number of Pairs:	4

**Insulation**

Material	Material Trade Name	Nominal Diameter	Nominal Wall Thickness
FHDPE - Foamed High Density Polyethylene	Datalene®	0.075 in	0.023 in

**Color 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 Material**

Type	Layer	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG
Tape	1	Aluminum/Polyester	Beldfoil®	100.0 %	TC - Tinned Copper	22
Braid	2	TC - Tinned Copper		65.0 %		

**Outer Jacket Material**

Material	Nominal Diameter	Nominal Wall Thickness	Separator Material
CPE - Chlorinated Polyethylene	0.484 in	0.053 in	Water resistant tape (over braid, under jacket)

**Electrical Characteristics**

**Conductor DCR**

Nominal Conductor DCR	Nominal Outer Shield DCR
14.7 Ohm/1000ft	2.95 Ohm/1000ft

**Capacitance**

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
11 pF/ft	20.9 pF/ft

**Impedance**

Nominal Characteristic Impedance
120 Ohm

## High Frequency (Nominal/Typical)

### Nom. Insertion Loss

0.5 dB/100ft

## Delay

### Nominal Velocity of Propagation (VP) [%]

78.0 %

## Current

### Max. Recommended Current [A]

2.7 Amps per conductor @ 25°C

## Voltage

### UL Voltage Rating

300 V RMS (NEC Type PLTC)

300 V RMS (NEC Type CM)

Electrical Characteristics Notes: Nom. Attenuation: 0.5 dB/100ft. @ 1MHz

## Temperature Range

Non-UL Temp Rating:	60°C
UL Temp Rating:	60°C
Operating Temp Range:	-20°C To +60°C

## Mechanical Characteristics

Oil Resistance:	Yes
UV Resistance:	Sunlight Res
Bulk Cable Weight:	58 lbs/1000ft
Max Recommended Pulling Tension:	80 lbs
Min Bend Radius/Minor Axis:	4.8 in

## Standards

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

## Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	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):	2005-10-01
CA Prop 65 (CJ for Wire & Cable):	Yes

## Suitability

Suitability - Burial:	Yes - UL
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	Yes

## Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1685 UL Loading
CSA Flammability:	FT1
ISO/IEC Flammability:	IEC 60332-1-2

## Product Notes

Notes: Oil Resistance: Passes Oil Res II Per UL1277, Table 10.17.

## History

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