



**Product:** [3106DB](#)

RS-485, 1 Pr, 22AWG, Str TC, PE Ins, with OS, 1 c #22AWG Str, PVC Ins, OA TC Brd, CPE Jkt, CM, PLTC, Sun Res, Dir Bur, Oil Resistant

**Product Description**

RS-485, 120 Ohm, 1 pair 22AWG (7x30) tinned copper Datalene® insulation and a Foil Tape Shield, and 1 conductor 22AWG (7x30) Tinned Copper, PVC Insulated conductor, Overall 65% Tinned Copper Braid, CPE jacket, CM, PLTC, SUN RES DIR BUR and oil-resistant

**Technical Specifications**

Suitable Applications:	direct burial, serial communication (RS-485 standard) comprising of PLCs, VFDs, HMI, motors, RTU, SCADA, etc. within noisy environments over long distance, outdoor such as solar, lighting, etc.
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**Conductor**

Element	Number of Element	AWG	Stranding	Material
Pair(s)	1	22	7x30	TC - Tinned Copper
Conductor(s)	1	22	7x30	TC - Tinned Copper

**Insulation**

Element	Material	Thickness [in.]	Nom. Insulation Diameter	Color Code	Notes
Pair(s)	PE - Polyethylene (Foam)	0.033	0.075	White/Orange Stripe & Orange/White Stripe	HDPE
Conductor(s)	PVC - Polyvinyl Chloride	0.017	0.062	Blue/White Stripe	

**Inner Shield Material**

Element	Shield Type	Material	Coverage	Notes
Pair(s)	Tape	Bi-Laminate (Alum+Poly)	100%	Single conductor is not under tape
				Single conductor is not under tape

**Outer Shield Material**

Shield Type	Material	Coverage	Drainwire Type
Tape + Braid	Bi-Laminate (Alum+Poly) + Tinned Copper (TC)	100% + 65%	22 AWG (7x30) TC

Waterblocking:	Waterblock Tape
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**Outer Jacket Material**

Material	Thickness	Nom. Diameter
CPE - Chlorinated Polyethylene	0.055 in	0.359 in

Cable Diameter (Nominal):	0.359 in
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**Electricals**

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Characteristic Impedance	Nom. Velocity of Prop.	Max. Current
Pair(s)	14.7 Ohm/1000ft	11 pF/ft	20.9 pF/ft	120 Ohm	78%	2.7 Amps per Conductor at 25°C
Conductor(s)	14.7 Ohm/1000ft					

Nom Outer Shield DCR:	2.8 Ohm/1000ft
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**High Frequency (Nominal/Typical)**

Element	Frequency [MHz]	Nom. Insertion Loss
Pair(s)	1 MHz	0.5 dB/100ft

**Voltage**

UL Voltage Rating
300 V (CM, PLTC)

**Temperature**

UL Rating	Operating
60°C	-20°C to +60°C

**Bend Radius**

Stationary Min.	Installation Min.
3,6 in	3,6 in

Max. Pull Tension:	65 lbs
Bulk Cable Weight:	48 lbs/1000ft
Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance
Flammability / Fire Resistance:	UL1685 UL Loading, FT1, IEC 60332-1-2
NEC / UL Compliance:	Article 725, Article 800, CM, PLTC
CEC / C(UL) Compliance:	CM
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU, EU Directive 2011/65/EU (ROHS II), EU Directive 2012/19/EU (WEEE)
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Notes:	Oil Resistance: Passes Oil Res I & II Per UL1277, Table 10.17
Update and Revision:	Revision Number: 0.86 Revision Date: 09-30-2020

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