



Product: [3105DB](#)

RS-485, 1 Pr, 22AWG, Str TC, PE Ins, OS+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® insulaton, Overall Foil + 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, HMIs, 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

Insulation

Element	Material	Thickness [in.]	Nom. Insulation Diameter	Color Code	Notes
Pair(s)	PE - Polyethylene (Foam)	0.029	0.087	White/Blue Stripe & Blue/White Stripe	HDPE

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	0.053 in	0.339 in

Cable Diameter (Nominal):	0.339 in
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Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Characteristic Impedence	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

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.
3.4 in	3.4 in

Max. Pull Tension:	200 lbs
Bulk Cable Weight:	49 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: 0.84 Revision Date: 09-30-2020

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