



Product: [3109DB](#)

RS-485, 4 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, 4 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.
------------------------	--

Conductor

Element	Number of Element	AWG	Stranding	Material
Pair(s)	4	22	7x30	TC - Tinned Copper

Insulation

Element	Material	Thickness [in.]	Nom. Insulation Diameter	Color Code	Notes
Pair(s)	PE - Polyethylene (Foam)	0.023	0.075	White/Blue Stripe & Blue/White Stripe, White/Orange Stripe & Orange/White Stripe, White/Green Stripe & Green/White Stripe, White/Brown Stripe & Brown/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
----------------	-----------------

Outer Jacket Material

Material	Thickness	Nom. Diameter
CPE - Chlorinated Polyethylene	0.053 in	0.481 in

Cable Diameter (Nominal):	0.481 in
---------------------------	----------

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

Nom Outer Shield DCR:	2.95 Ohm/1000ft
-----------------------	-----------------

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.
------------------------	--------------------------

4.8 in	4.8 in
--------	--------

Max. Pull Tension:	80 lbs
Bulk Cable Weight:	58 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: 0.76 Revision Date: 09-30-2020

© 2020 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.