



Part Number: 3109A

RS-485, (4 pr) 22 AWG (7x30) TC, FHDPE,PVC, Foil+TC
Braid Shld, CM, PLTC

Product Description

Four 22 AWG pairs stranded (7x30) tinned copper conductors, Datalene® (FHDPE) insulation, twisted pairs, overall Beldfoil® shield (100% coverage) plus a tinned copper braid (65% coverage), PVC jacket.

Product Specifications

Technical Specifications

Construction and Dimensions

Conductor:

AWG	Stranding	Material	Nominal Diameter	No. of Pairs
22	7x30	TC - Tinned Copper	0.03 in	4
Total Number of Conductors:			8	

Insulation:

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

Color Chart 1:

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

Outershield 1:

Type	Layer	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire Diameter	Drainwire AWG	Drainwire Construction n x D
Tape	1	Aluminum Foil-Polyester Tape	Beldfoil®	100 %	TC - Tinned Copper	0.03 mm	22	7x30 mm
Braid	2	TC - Tinned Copper		65 %				

Outerjacket 1:

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.448 in
Print Legend:	BELDEN 3109A E34972 4PR22 SHIELDED (UL) CM OR PLTC SUN RES OR C(UL) CM --- FT1

Electrical Characteristics

Conductor DCR:

Nominal Conductor DCR	Nominal Outer Shield DCR
14.7 Ohm/1000ft	1.4 Ohm/1000ft

Capacitance:

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

High Frequency (Nominal/Typical):

Nom. Insertion Loss
0.5 db/100ft

Delay:

Nominal Velocity of Propagation (VP) [%]
78 %

High Freq:

Frequency [MHz]	Max./Min. Input Impedance (unFitted)
	120 Ohm
1 MHz	
1 MHz	

Current:

Max. Recommended Current [A]
2.7 Amps per conductor @ 25°C

Inductance:

Element	Nominal Inductance
Pair	0.225 µH/ft

Voltage:

UL Voltage Rating
300 V RMS

Use

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Max Recommended Pulling Tension:	100 lbs

Safety

CSA Flammability:	FT1
UL Flammability:	UL1685 UL Loading

Temperature Range

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

Mechanical Characteristics

Min Bend Radius/Minor Axis:	5.5 in
-----------------------------	--------

Part Number

Plenum (Y/N):	No
---------------	----

Standards

CA Prop 65 (CJ for Wire & Cable):	CA Prop 65 (CJ for Wire & Cable)
CEC/C(UL) Specification:	CEC/C(UL) Specification
MII Order #39 (China RoHS):	MII Order #39 (China RoHS)
NEC Articles:	NEC Articles
NEC/(UL) Specification:	NEC/(UL) Specification
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)

History

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

Product Variants

Part Number	Color	Put-Up Type	Length
3109A 0101000	BLACK	Reel	1000 ft
3109A 0102000	BLACK	Reel	2000 ft
3109A 0105000	BLACK	Reel	5000 ft

© 2016 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 herein 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 "AS IS" 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 EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure 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. This 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.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.