



**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
<b>Total Number of Conductors:</b>				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
<b>Print Legend:</b>	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 $\mu$ H/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
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## Part Number

Plenum (Y/N):	No
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## 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.
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## 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

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