

# **BELDEN**Cable<sup>\*\*</sup>

# 3107A Paired - EIA Industrial RS-485 PLTC/CM





Metric Version
For more information please call
1-800-Belden1

See Put-ups and Colors

## **Description:**

22 AWG stranded (7x30) tinned copper conductors, Datalene® insulation, twisted pairs, overall Beldfoil® shield (100% coverage) plus a tinned copper braid (90% coverage), drain wire, UV resistant PVC jacket.

#### PHYSICAL CHARACTERISTICS:

#### **CONDUCTOR:**

Number of Pairs	2	
Total Number of Conductors	4	
AWG	22	
Stranding	7x30	
Conductor Diameter	0.762 mm	
Conductor Material	TC - Tinned Copper	

### **INSULATION:**

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

#### **OVERALL CABLING:**

Overall Cabling Color Code Chart:

Number	Color
1	White/Blue Stripe & Blue/White Stripe
2	White/Orange Stripe & Orange/White Stripe

#### **OUTER SHIELD:**

Outer Shield Material Trade Name	Beldfoil®
Outer Shield Type	Tape/Braid

### Outer Shield Material:

Layer Number	Material Trade Name	Туре	Material	% Coverage (%)
1	Beldfoil®	Таре	Aluminum Foil-Polyester Tape	100
2		Braid	TC - Tinned Copper	90

Outer Shield %Coverage 100 %

#### **OUTER SHIELD DRAIN WIRE:**

Outer Shield Drain Wire AWG



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Outer Shield Drain Wire Stranding	7x30
Outer Shield Drain Wire Diameter	0.762 mm
Outer Shield Drain Wire Conductor Material	TC - Tinned Copper

#### **OUTER JACKET:**

Outer Jacket Material PVC - Polyvinyl Chloride

#### **OVERALL NOMINAL DIAMETER:**

Overall Nominal Diameter 9.042 mm

#### **MECHANICAL CHARACTERISTICS:**

Operating Temperature Range	-20°C To +60°C
Non-UL Temperature Rating	60°C
Bulk Cable Weight	108.639 Kg/Km
Max. Recommended Pulling Tension	355.856 N
Min. Bend Radius (Install)	91.44 mm

## APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

#### APPLICABLE STANDARDS:

NEC/(UL) Specification	CM, PLTC OIL RES II
CEC/C(UL) Specification	CM
EU CE Mark (Y/N)	Yes
EU RoHS Compliant (Y/N)	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	10/01/2005

#### FLAME TEST:

UL Flame Test	UL1685 UL Loading
CSA Flame Test	FT1

#### **SUITABILITY:**

Sunlight Resistance Passes UL 1581, 720 Hours

### PLENUM/NON-PLENUM:

Plenum (Y/N) N

#### **ELECTRICAL CHARACTERISTICS:**

Input/Unfitted Impedance:

mput chritica impedance:				
Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Input/Unfitted Impedance (Ohms)
	1			
Nom. Characteristic Impedance		120 Ohms		
Nom. Capacitance Conductor to Conductor @ 1 KHz		36.091 pF/m		
Nom. Cap. Cond. to Other Cond. & Shield @ 1 KHz		68.573 pF/m		

## Detailed Specifications & Technical Data



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Nominal Velocity of Propagation 78 %

Nom. Conductor DC Resistance @ 20 Deg. C 48.231 Ohms/km

Nominal Outer Shield DC Resistance @ 20 Deg. C 5.906 Ohms/km

Nom. Attenuation (dB/100 ft):

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Nom. Attenuation (dB/100m)
	1			1.64

Max. Operating Voltage - UL 300 V RMS

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

NOTES:

Notes Oil Resistance: Passes Oil Res II Per UL1277, Table 10.17. For CPE jacketed version order YR46792.

#### **PUT-UPS AND COLORS:**

Item	Description	Put-Up (M)	Ship Weight (kgs.)	Jacket Color	Notes
3107A 0101000	2 PR #22 FHDPE SH PVC	304.8	31.326	BLACK	С
3107A 0104000	2 PR #22 FHDPE SH PVC	1219.2	136.2	BLACK	С
3107A 0105000	2 PR #22 FHDPE SH PVC	1524	174.79	BLACK	C N

C = CRATE REEL PUT-UP.

N = FINAL PUT-UP LENGTH MAY VARY -0% TO +10% FROM LENGTH SHOWN.

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