

**3106A Multi-Conductor - EIA Industrial RS-485 PLTC/CM**



For more Information  
please call  
1-800-Belden1



**Description**

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

**Physical Characteristics (Overall):**

**Conductor:**  
AWG

# Conductors	# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
1	1.000	22	7x30	TC - Tinned Copper	0.030

**Insulation:**

Insulation Material

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

**Outer Shield:**

Outer Shield Material

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100.000
2		Braid	TC - Tinned Copper	65.000

Outer Shield Drain Wire AWG

AWG	Stranding	Drain Wire Conductor Material
22	7x30	TC - Tinned Copper

Outer Shield Drain Wire Diameter .030

**Outer Jacket:**

Outer Jacket Material

Outer Jacket Material
PVC - Polyvinyl Chloride

**Overall Cabling:**

Overall Cabling Color Code Chart

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

Overall Nominal Diameter: 0.3 in.

**Pair:**

Pair Lay Length & Direction

Lay Length (in.)
3.000

**Mechanical Characteristics (Overall):**

Operating Temperature Range -20°C To +60°C

Non-UL Temperature Rating 60°C

Bulk Cable Weight: 48 lbs/1000 ft.

Max. Recommended Pulling Tension: 65 lbs.

**3106A Multi-Conductor - EIA Industrial RS-485 PLTC/CM**

Min. Bend Radius (Install)/Minor Axis: 3 in.

**Applicable Specifications and Agency Compliance (Overall):**

**Applicable Standards:**

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

**Plenum/Non-Plenum:**

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

**Electrical Characteristics (Overall):**

Nom. Inductance

<b>Inductance (µH/ft)</b>
0.203

Nom. Capacitance Conductor to Conductor

<b>Capacitance (pF/ft)</b>
11.000

Nom. Capacitance Cond. to Other Conductor & Shield

<b>Capacitance (pF/ft)</b>
20.900

Nominal Velocity of Propagation

<b>VP (%)</b>
78

Nom. Conductor DC Resistance

<b>DCR @ 20°C (Ohm/1000 ft)</b>
14.700

Nominal Outer Shield DC Resistance

<b>DCR @ 20°C (Ohm/1000 ft)</b>
2.800

Nom. Attenuation

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Attenuation (dB/100 ft.)
	1.000			0.500

Max. Operating Voltage - UL

<b>Voltage</b>
300 V RMS

Max. Recommended Current

<b>Current</b>
2.7 Amps per conductor @ 25°C

Input/Unfitted Impedance

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Impedance (Ohm)
	1.000			120

**Notes (Overall):**

Notes Oil Resistance: Passes Oil Res II Per UL1277, Table 10.17. For CPE jacketed version order YR46721.

**PUT UPS AND COLORS:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
--------	-------	-------------	-------	-------	-----------

3106A Multi-Conductor - EIA Industrial RS-485 PLTC/CM

3106A 0101000	1,000 FT	47.000 LB	BLACK	C	#22 FS PR,1#22PVCBRDPVC BLK
3106A 010500	500 FT	25.000 LB	BLACK	C	#22FSPR,1#22PVCBRDPVC BLK
3106A 0105000	5,000 FT	240.000 LB	BLACK	C N	#22 FS PR,1#22PVCBRDPVC BLK

**Notes:**

C = CRATE REEL PUT-UP.

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

Revision Number: 1    Revision Date: 05-28-2008

© 2008 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 the following environmental regulations: California Proposition 65 Consent Judgment For Wire & Cable Mfgs. (San Francisco Superior Court Nos. 312962 And 320342); EU RoHS (Directive 2002/95/EC, 27-Jan-2003); Material manufactured prior to the compliance date may still be in stock at Belden facilities and in our Distributor's inventory; and China Ministry of Information Industry order#39 (China RoHS). EU ELV (Directive 2000/53/EC, 18-Sept-2000); EU WEEE (Directive 2002/96/EC, 27-Jan-2003); EU BFR (Directive 2003/11/EC, 6-Feb-2003). 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 the 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.