# **Detailed Specifications & Technical Data**



### ENGLISH MEASUREMENT VERSION

## 3105A 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: # Pairs AWG Stranding Conductor Material Dia. (in.) 22 7x30 TC - Tinned Copper .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 (%) Beldfoil® Tape Aluminum Foil-Polyester Tape 100.000 Braid TC - Tinned Copper 65.000 2 **Outer Shield Drain Wire AWG:** AWG Stranding Drain Wire Conductor Material 22 7x30 TC - Tinned Copper .030 **Outer Shield Drain Wire Diameter: Outer Jacket Outer Jacket Material: Outer Jacket Material** PVC - Polyvinyl Chloride **Overall Cabling Overall Nominal Diameter:** 0.284 in. Pair Pair Color Code Chart: Number Color 1 White/Blue Stripe and Blue/White Stripe Pair Lay Length & Direction: Lay Length (in.)

2.500

chanical Characteristics (Overall)		
Operating Temperature Range:	-20°C To +60°C	
Non-UL Temperature Rating:	60°C	
Bulk Cable Weight:	44 lbs/1000 ft.	
Max. Recommended Pulling Tension:	60 lbs.	
Min. Bend Radius (Install)/Minor Axis:	2.800 in.	

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Applicable Specifications and Agency Co	• • •		
Applicable Standards & Environmental Progr	ams		
CEC/C(UL) Specification:	СМ		
EU CE Mark:	Yes		
EU Directive 2000/53/EC (ELV):	Yes		
EU Directive 2002/95/EC (RoHS):	Yes		
EU RoHS Compliance Date (mm/dd/yyyy):	10/01/2005		
EU Directive 2002/96/EC (WEEE):	Yes		
EU Directive 2003/11/EC (BFR):	Yes		
CA Prop 65 (CJ for Wire & Cable):	Yes		
MII Order #39 (China RoHS):	Yes		
Flame Test			
UL Flame Test:	UL1685 UL Loading		
CSA Flame Test:	FT1		
Plenum/Non-Plenum			
Plenum (Y/N):	No		
Electrical Characteristics (Overall)			
Nom. Characteristic Impedance:			
Impedance (Ohm) 120			
Nom. Capacitance Conductor to Conductor:			
Capacitance (pF/ft) 11.0			
Nom. Capacitance Cond. to Other Conductor & Shi	ield:		
Capacitance (pF/ft)			
20.9			
Nominal Velocity of Propagation: VP (%) 78			
Nom. Conductor DC Resistance:			
DCR @ 20°C (Ohm/1000 ft) 14.7			
Nominal Outer Shield DC Resistance:			
DCR @ 20°C (Ohm/1000 ft) 2.8			
Nom. Attenuation:			
Description Freq. (MHz) Start Freq. (MHz) Stop Freq. (	(MHz) Attenuation (dB/100 ft.)		
Max. Operating Voltage - UL:			
Voltage 300 V RMS			
Max. Recommended Current:			
Current			
Current 2.7 Amps per conductor @ 25°C			
2.7 Amps per conductor @ 25°C Input/Unfitted Impedance:			
2.7 Amps per conductor @ 25°C	MHz) Impedance (Ohm)		



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### **Notes (Overall)**

Notes: Oil Resistance: Passes Oil Res II Per UL1277, Table 10.17. For CPE jacketed version order Part No. YR44345.

### **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
3105A 0101000	1,000 FT	46.000 LB	BLACK	С	1 PR #22 FHDPE SH PVC
3105A 010500	500 FT	21.500 LB	BLACK	С	1 PR #22 FHDPE SH PVC
3105A 0105000	5,000 FT	235.000 LB	BLACK	CN	1 PR #22 FHDPE SH PVC

Notes:

C = CRATE REEL PUT-UP

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

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