

3105A Multi-Conductor - EIA Industrial RS-485 PLTC/CM



For more Information
please call

1-800-Belden1

**General 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.)
1	22	7x30	TC - Tinned Copper	.030

Total Number of Conductors: 2

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 Jacket**Outer Jacket Material:**

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter: 0.281 in.

Pair**Pair Color Code Chart:**

Number	Color
1	White/Blue Stripe and Blue/White Stripe

Pair Lay Length & Direction:

Lay Length (in.)
3.750

Mechanical 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/Minor Axis: 2.800 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification: CM, PLTC

CEC/C(UL) Specification: CM

EU Directive 2011/65/EU (ROHS II): Yes

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

Suitability

Sunlight Resistance: Yes

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 & Shield:

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.)
	1			.5

Max. Operating Voltage - UL:

Voltage

300 V RMS (NEC Type PLTC)

300 V RMS (NEC Type CM)

Max. Recommended Current:

3105A Multi-Conductor - EIA Industrial RS-485 PLTC/CM**Current**

2.7 Amps per conductor @ 25°C

Other Electrical Characteristic 1:

Input Impedance/Unfitted Impedance .5 - 10 MHZ, 120 +/-12 Ohms

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	C	1 PR #22 FHDPE SH PVC
3105A 010500	500 FT	23.000 LB	BLACK	C	1 PR #22 FHDPE SH PVC
3105A 0105000	5,000 FT	230.000 LB	BLACK	C N	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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