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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. (mm)
1	22	7x30	TC - Tinned Copper	0.762

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: 7.137 mm

### Pair

Pair Color Code Chart:

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

Pair Lay Length & Direction:

Lay Length (mm)
95.250

## Mechanical Characteristics (Overall)

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

Non-UL Temperature Rating: 80C

Bulk Cable Weight: 65.481 Kg/Km

Max. Recommended Pulling Tension: 266.892 N

Min. Bend Radius/Minor Axis: 71.120 mm

## 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

## METRIC MEASUREMENT VERSION

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

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
MIL Order #39 (China RoHS):	Yes

### Flame Test

UL Flame Test:	UL1685 UL Loading
CSA Flame Test:	FT1

### Suitability

Sunlight Resistance:	Yes
Oil Resistance:	Yes - Oil Res II

### Plenum/Non-Plenum

Plenum (Y/N):	No
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## Electrical Characteristics (Overall)

### Nom. Characteristic Impedance:

#### Impedance (Ohm)

120

### Nom. Capacitance Conductor to Conductor:

#### Capacitance (pF/m)

36.091

### Nom. Capacitance Cond. to Other Conductor & Shield:

#### Capacitance (pF/m)

68.5729

### Nominal Velocity of Propagation:

#### VP (%)

78

### Nom. Conductor DC Resistance:

#### DCR @ 20°C (Ohm/km)

48.2307

### Nominal Outer Shield DC Resistance:

#### DCR @ 20°C (Ohm/km)

12.337

### Nom. Attenuation:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Attenuation (dB/100m)
	1			1.6405

### Max. Operating Voltage - UL:

#### Voltage

300 V RMS (NEC Type PLTC)

300 V RMS (NEC Type CM)

### Max. Recommended Current:

#### 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:

No put ups and colors are available for this product

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

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Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 2014/35/EU).