## Detailed Specifications & Technical Data



## 3106A Paired - RS-485

For more information please call
1-800-Belden1

See Put-ups and Colors

#### **Description:**

22 awg stranded (7X30) tinned copper, Datalene@ insulation, twisted pairs, overall 100% Beldfoil@ shield + 90% tinned copper braid, 22 awg stranded TC drain wire, UV resistant PVC jacket.

#### PHYSICAL CHARACTERISTICS:

#### **CONDUCTOR:**

Number of Pairs	1
Number of Conductors	1
Total Number of Conductors	3
AWG	22
Stranding	7x30
Conductor Diameter	.030 in.
Conductor Material	TC - Tinned Copper

### INSULATION:

Insulation Material Trade Name	Datalene®
Insulation Material	FHDPE - Foam High Density Polyethylene
Lay Length	3.0 in.

#### **OVERALL CABLING:**

Overall Cabling Color Code Chart:

Number	Color
1	White & Orange
2	Orange & White
3	Blue & White

#### **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®	Tape	Aluminum Foil-Polyester Tape	100
2		Braid	TC - Tinned Copper	90

Outer Shield %Coverage 100 %

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OUTER SHIELD DRAIN WIRE:	
Outer Shield Drain Wire AWG	22
Outer Shield Drain Wire Stranding	7x30
Outer Shield Drain Wire Diameter	.030 in.
Outer Shield Drain Wire Conductor Material	TC - Tinned Copper

**OUTER JACKET:** 

Outer Jacket Material PVC - Polyvinyl Chloride

**OVERALL NOMINAL DIAMETER:** 

Overall Nominal Diameter .300 in.

#### **MECHANICAL CHARACTERISTICS:**

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.
Min. Bend Radius (Install)	3 in.

## APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

#### **APPLICABLE STANDARDS:**

NEC/(UL) Specification	CM, PLTC OIL RES II
CEC/C(UL) Specification	CM

## FLAME TEST:

UL Flame Test	UL1581 Vertical Tray
CSA Flame Test	FT1

#### **SUITABILITY:**

Sunlight Resistance Passes UL 1581, 720 Hours

## PLENUM/NON-PLENUM:

Plenum (Y/N) N

## **ELECTRICAL CHARACTERISTICS:**

Input/Unfitted Impedance:

<b>Description</b>	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Input/Unfitted Impedance (Ohms)
1	1			120
Nom. Capacitance Conductor	to Conductor @ 1 KHz	11.0 pF/ft		
Nom. Cap. Cond. to Other Co	ond. & Shield @ 1 KHz	20.9 pF/ft		
Nominal Velocity of Propagation		78 %		
Nom. Conductor DC Resistan	nce of Pair @ 20 Deg. C	14.7 Ohms/1000 ft		
Nominal Outer Shield DC Resistance @ 20 Deg. C		2.8 Ohms/1000 ft		
Nom. Attenuation (dB/100 ft):				

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## 3106A Paired - RS-485

Description	Frequency (MHz)	Start Frequency (MHz)	Start Frequency (MHz) Stop Frequency (MHz)		
	1			.5	
Max. Operating Voltage - UL 300 V RMS					
Max. Recommended Curr	rent	2.7 Amps per conductor @ 25°C			
NOTES:					
Notes		Oil Resistance: Passes Oil Res II Per UL1277, Table 10.17			
Notes (Cont'd.)		CPE Jacket Optional	CPE Jacket Optional		

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

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
3106A 0101000	#22 FS PR,1#22PVCBRDPV C	1000	51	BLACK	CN
3106A 010500	#22FSPR,1#22PVCB RDPVC	500	27	BLACK	CN
3106A 0105000	#22 FS PR,1#22PVCBRDPV C	5000	260	BLACK	CN

C = CRATE REEL PUT-UP.

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

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