Detailed Specifications & Technical Data



3107A 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	2
Total Number of Conductors	4
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

OVERALL CABLING:

Overall Cabling Color Code Chart:

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

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 %

OUTER SHIFT D DRAIN WIRE

OUTER SHIELD DRAIN WIRE:		
Outer Shield Drain Wire AWG	22	
Outer Shield Drain Wire Stranding	7x30	
Outer Shield Drain Wire Diameter	.030 in.	

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Outer Shield Drain Wire Conductor Material TC - Tinned Copper

OUTER JACKET:

Outer Jacket Material PVC - Polyvinyl Chloride

OVERALL NOMINAL DIAMETER:

Overall Nominal Diameter .356 in.

MECHANICAL CHARACTERISTICS:

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

Non-UL Temperature Rating 60°C

Bulk Cable Weight 73 lbs/1000 ft.

Max. Recommended Pulling Tension 80 lbs.

Min. Bend Radius (Install) 3.6 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)

ELECTRICAL CHARACTERISTICS:

Input/Unfitted Impedance:

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Input/Unfitted Impedance (Ohms)
	1			120

Nom. Capacitance Conductor to Conductor @ 1 KHz

Nom. Cap. Cond. to Other Cond. & Shield @ 1 KHz

20.9 pF/ft

Nominal Velocity of Propagation 78 9

Nom. Conductor DC Resistance of Pair @ 20 Deg. C

14.7 Ohms/1000 ft

Nominal Outer Shield DC Resistance @ 20 Deg. C

18. Ohms/1000 ft

Nom. Attenuation (dB/100 ft):

Description	Frequency (MHz)	Start Frequency (MHz)	 Nom. Attenuation (dB/100 ft.)
	1		.5

Max. Operating Voltage - UL 300 V RMS

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Max. Recommended Current	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

PUT-UPS AND COLORS:

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
3107A 0101000	2 PR #22 FHDPE SH PVC	1000	73	BLACK	CD
3107A 0104000	2 PR #22 FHDPE SH PVC	4000	300	BLACK	C D
3107A 0105000	2 PR #22 FHDPE SH PVC	5000	385	BLACK	C D

C = CRATE REEL PUT-UP.

D = FINAL PUT-UP LENGTH MAY VARY -0% TO +20% FROM LENGTH SHOWN.

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