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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 Haloarrest XLink2 jacket.

### Physical Characteristics (Overall)

#### Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
3	22	7x30	TC - Tinned Copper	.030

Total Number of Conductors: 6

#### 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 Shield Drain Wire Diameter: .030

#### Outer Jacket

Outer Jacket Material:

Outer Jacket Material
Haloarrest Xlink2

#### Overall Cable

Overall Cabling Color Code Chart:

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

Overall Nominal Diameter: 0.470 in.

### Mechanical Characteristics (Overall)

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

Bulk Cable Weight: 132 lbs/1000 ft.

Max. Recommended Pulling Tension: 90 lbs.

Min. Bend Radius/Minor Axis: 5 in.

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMG, CMG-LS, CMH, CMP, CMR, CMX, CMX-Outdoor, Electrical Circuit Protective Systems (FHIT) #30), FAS90, FAS105, FHC 25/50, FPL, FPLP, FPLR, FPLR-CI, HL, HPN, ITC, MC, MP, MPG, MPP, NPLF, OF, OFC, OFCP, OFCR, OFN, OFNP, OFNR, Open Wiring, PLTC

CEC/C(UL) Specification: CMG

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

IEEE Specification: 45

EU Directive 2000/53/EC (ELV): Yes

## 3108Z Multi-Conductor - EIA Industrial RS-485 PLTC/CMG

EU Directive 2002/95/EC (RoHS):	Yes
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 FT4 Loading
C(UL) Flame Test:	FT4
IEC Flame Test:	60332-3-22 (Category A)

### Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes

### Plenum/Non-Plenum

Plenum (Y/N):	No
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### Surface Printing (Overall)

Surface Printing:	BELDEN 3108A E34972 3PR22 SHIELDED (UL) CM OR PLTC SUN RES OR C(UL) CM --- FT1
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### Electrical Characteristics (Overall)

#### Nom. Characteristic Impedance:

Impedance (Ohm)
120

#### Nom. Inductance:

Description	Inductance (µH/ft)
Pair	0.225

#### 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)
1.5

#### 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

#### 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

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
3108Z 0105000	5,000 FT	660.000 LB	BLACK		3 PR #22 FHDPE SH TSNH

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