



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 Haloarrest XLink2 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
Haloarrest Xlink2

Overall Cable

Overall Nominal Diameter: 0.400 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

Bulk Cable Weight: 109 lbs/1000 ft.

Max. Recommended Pulling Tension: 60 lbs.

Min. Bend Radius/Minor Axis: 4 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMG, PLTC

CEC/(UL) Specification: CMG

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

IEEE Specification: 45

EU CE Mark: Yes

3105Z Multi-Conductor - EIA Industrial RS-485 PLTC/CMG

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

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:

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
3105Z 0105000	5,000 FT	545.000 LB	BLACK	C N	1 PR #22 FHDPE SH TSNH

Notes:

C = CRATE REEL PUT-UP.

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

Revision Number: 0 Revision Date: 10-31-2014

© 2017 Belden, Inc
All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability. Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether

3105Z Multi-Conductor - EIA Industrial RS-485 PLTC/CMG

in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein. All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

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