



Product: [977896Z](#)

DeviceBus®, 2 Pr #16+18 Str TC, XLPO+PP Ins, IS+OA TC Brd, LSZH-TS Jkt, Brnz Brd Armor, LSZH-TS Jkt, 600V TC-ER-LS

Product Description

DeviceBus® for ODVA DeviceNet™, 2 Pair 16+18AWG (19x29+19x30) Tinned Copper, XLPO+Polypropylene Insulation, Individual Beldfoil® & OA Tinned Copper Braid(65%) Shield, LSZH Thermoset Inner Jacket, Bronze Braid Armor, LSZH Thermoset Outer Jacket, 600V TC-ER-ST1

Technical Specifications

Product Overview

Suitable Applications:	shipboard, harsh environment, ODVA device-level communication, used with CIP (common Industrial Protocol) for control, configuration, and data collection between devices, such as sensors and actuators, and higher level devices such as PLC, and PC in industrial automation, bus topology, etc.
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Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material
Power Pair(s)	1	16 AWG	19x29	TC - Tinned Copper
Data Pair(s)	1	18 AWG	19x30	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Color Code	Notes
Power Pair(s)	XLPE - Cross-Linked Polyethylene (Thermoset)	0.031 in (0.79 mm)	Red & Black	
Data Pair(s)	PP - Polypropylene	0.068 in (1.7 mm)	Blue & White	Flame Retardant

Inner Shield

Element	Shield Type	Material	Coverage
Power Pair(s)	Tape	Bi-Laminate (Alum+Poly)	100%
Data Pair(s)	Tape	Bi-Laminate (Alum+Poly)	100%

Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Braid	Tinned Copper (TC)	65%	16 AWG (19x29) TC

Inner Jacket

Material	Nom. Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant, Thermoset)	0.646 in (16.4 mm)

Armor

Armor Type & Material
BBA - Bronze Braid Armor

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant, Thermoset)	0.050 in (1.3 mm)	0.801 in (20.3 mm)

Overall Cable Diameter (Nominal):	0.801 in (20.3 mm)
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Electrical Characteristics

Electricals

Element	Nom. Characteristic Impedance	Nom. Velocity of Prop.
Power Pair(s)		
Data Pair(s)	120 Ohm	75%

High Frequency

Element
Data Pair(s)

Voltage

UL Voltage Rating
600 V (TC-ER-ST1)

Mechanical Characteristics

Temperature

UL Temperature
75°C Dry

Standards and Compliance

Environmental Suitability:	Outdoor, Sunlight Resistance, Burial
NEC / UL Compliance:	Article 336, TC-ER-ST1
AWM Compliance:	AWM I/II A/B

History

Update and Revision:	Revision Number: 0.127 Revision Date: 02-03-2025
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Part Numbers

Variants

Item #	Color	UPC
977896Z 0105000	Black	612825258643

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