



**Product:** [777896T](#)

DeviceBus®, 2 Pr #16+18 Str TC, XLPE+PP Ins, IS+OA TC Brd, LSZH Jkt, BBA, LSZH Jkt, 600V TC-ER-ST1

## Product Description

DeviceBus® for ODVA DeviceNet™, 2 Pair 16+18AWG (19x29+19x30) Tinned Copper, XLPE+ PP Insulation, Individual Beldfoil® & OA Tinned Copper Braid(65%) Shield, LSZH Inner Jacket, Bronze Braid Armor, LSZH 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	Number of Element	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)	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)	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:	Sunlight Resistance, Burial
NEC / UL Compliance:	Article 336, TC-ER-ST1

## History

Update and Revision:	Revision Number: 0.129 Revision Date: 04-08-2022
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## Part Numbers

#### Variants

Item #	Color	UPC
777896T 0105000	Black	612825189121

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