Product: 127897A

DeviceBus®, 2 Pr #15+18 Str TC, PVC-NYL + FEP Ins, IS+OA TC Brd, PVC Jkt, AIA, PVC Jkt, 600V

Product Description

DeviceBus® for ODVA DeviceNet™, 2 Pair 15+18AWG (19x27+19x30) Tinned Copper, PVC-NYL + FEP Insulation, Individual Beldfoil® & OA Tinned Copper Braid(65%) Shield, PVC Inner Jacket, Aluminum Interlock Armor, PVC Outer Jacket, 600V

Technical Specifications

Product Overview

Suitable Applications:	exposure to rodent, crush, or cut through force, 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.

Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material
Power Pair(s)	1	15 AWG	19x27	TC - Tinned Copper
Data Pair(s)	1	18 AWG	19x30	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Color Code
Power Pair(s)	PVC/Nylon - Polyvinyl Chloride + Nylon	0.026 in (0.66 mm)	Red & Black
Data Pair(s)	FEP - Fluorinated Ethylene Propylene (Foam)	0.050 in (1.3 mm)	Blue & White

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%	18 AWG (19x30) TC

Inner Jacket

Material	Nom. Diameter
PVC - Polyvinyl Chloride	0.460 in (11.7 mm)

Armor

Armor Type & Material
AIA - Aluminum Interlock Armor

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
PVC - Polyvinyl Chloride	0.050 in (1.3 mm)	0.763 in (19.4 mm)

Overall Cable Diameter (Nominal):	0.763 in (19.4 mm)

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Characteristic Impedence	Nom. Velocity of Prop.	Max. Current
Power Pair(s)	3.6 Ohm/1000ft (12 Ohm/km)				8 Amps per Conductor at 25ºC
Data Pair(s)	6.9 Ohm/1000ft (23 Ohm/km)	12 pF/ft (39 pF/m)	120 Ohm	75%	

Nom. Outer Shield DCR:	1.8 Ohm/1000ft (5.9 Ohm/km)

High Frequency

Element	Frequency [MHz]	Max. Insertion Loss (Attenuation)	Max./Min. Input Impedance (unFitted) [Ohm]
Data Pair(s)	0.125	0.13 dB/100ft	120
	0.5	0.25 dB/100ft	
	1	0.40 dB/100ft	

Voltage

Voltage Rating
600 V

Mechanical Characteristics

Temperature

UL Temperature	Operating
75°C Dry	-20°C to +75°C

Bend Radius

Stationary Min.	Installation Min.
7.6 in (190 mm)	7.6 in (190 mm)

Max. Pull Tension:	190 lbs (86 kg)

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance
Other Standard Compliance(s):	ODVA Class 1 Thick

History

Update and Revision:	Revision Number: 0.60 Revision Date: 05-31-2024