



Part Number: 7896A

DeviceNet™, (1 pr) 16 AWG (19x29) TC, (1 pr) 18 AWG (19x30) TC, PVC-NYL/FRPP/PVC, Foil+Braid Shld, TC-ER

Product Description

One 16 AWG pair stranded (19x29) tinned copper conductor, one 18 AWG pair stranded (19x30) tinned copper conductors, PVC/Nylon insulation (power), F-R Polypropylene insulation (data), individual foil shield (100% coverage) plus an overall tinned copper braid shield (65% coverage), PVC jacket.

Product Specifications

Technical Specifications

Construction and Dimensions

Conductor:

AWG	Stranding	Material	No. of Pairs
16	19x29	TC - Tinned Copper	1
18	19x30	TC - Tinned Copper	1
Total Number of Conductors:			4

Insulation:

Element	Material
16	PVC/Nylon - Polyvinyl Chloride/Nylon
18	FRPP - Flame Retardant Polypropylene

Color Chart 1:

Number	Color
1 (16 AWG)	Red & Black
2 (18 AWG)	Blue & White

Stranding:

Lay Length
1 MHz

Innershield:

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	16 AWG Pair	Aluminum Foil-Polyester Tape	Beldfoil®	100 %
Tape	18 AWG Pair	Aluminum Foil-Polyester Tape	Beldfoil®	100 %

Outershield 1:

Type	Material	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Braid	TC - Tinned Copper	65 %	TC - Tinned Copper	16	19x29 mm

Outerjacket 1:

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.525 in	0.06 in

Electrical Characteristics**Conductor DCR:**

Element	Nominal Conductor DCR	Nominal Outer Shield DCR
16 AWG	4.9 Ohm/1000ft	1.8 Ohm/1000ft
18 AWG	6.9 Ohm/1000ft	

Capacitance:

Element	Nom. Capacitance Conductor to Conductor
18 AWG Pair Only	14.7 pF/ft

Delay:

Max. Delay	Max. Delay Description	Nominal Velocity of Propagation (VP) [%]	Nominal Velocity of Propagation (VP) Description
1.6 ns/ft	18 AWG Pair Only	64 %	18 AWG Pair Only

High Freq:

Element	Frequency [MHz]	Max./Min. Input Impedance (unFitted)
18 AWG Pair Only		120 Ohm
18 AWG Pair Only		
	0.5 MHz	
	0.125 MHz	
	0.5 MHz	
	1 MHz	

Current:

Element	Max. Recommended Current [A]
15 AWG	8.0 Amps per conductor at 25°C

Voltage:

UL Voltage Rating
600 V RMS

Use

Suitability - Oil Resistance:	Yes
Suitability - Sunlight Resistance:	Yes
Max Recommended Pulling Tension:	190 lbs

Safety

CSA Flammability:	FT1
UL Flammability:	UL1685 UL Loading

Temperature Range

Installation Temp Range:	-25°C To +75°C
Non-UL Temp Rating:	75°C
Operating Temp Range:	-40°C To +75°C

Mechanical Characteristics

Min Bend Radius/Minor Axis:	5 in
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Part Number

Plenum (Y/N):	No
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Standards

CA Prop 65 (CJ for Wire & Cable):	CA Prop 65 (CJ for Wire & Cable)
CSA AWM Specification:	CSA Specification
MII Order #39 (China RoHS):	MII Order #39 (China RoHS)
NEC/(UL) Specification:	NEC/(UL) Specification
Other Specification:	Other Specification
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	EU CE Mark

History

Notes:	Meter marks on jacket to aid users in installation. ODVA DeviceNet is an Open DeviceNet Vendor Association, Inc. trademark.
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Product Variants

Part Number	Color	Put-Up Type	Length
7896A T5U1000	GRAY T5U	Reel	1000 ft
7896A T5U2000	GRAY T5U	Reel	2000 ft
7896A T5U500	GRAY T5U	Reel	500 ft

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