



Product: [3082F](#)

DeviceBus®, 2 Pr #15+18 Str TC, PVC&PO Ins, IS+OA TC Brd, PVC Jkt, High Flex CMG

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Product Description

DeviceBus® for ODVA DeviceNet™, 2 Pair 15+18AWG (65x33+65x36) Tinned Copper, PVC&PO Insulation, Individual Beldfoil® & OA Tinned Copper Braid(65%) Shield, PVC Outer Jacket, High Flex CMG

Technical Specifications

Product Overview

Suitable Applications:	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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Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
15	65x33	TC - Tinned Copper	1
18	65x36	TC - Tinned Copper	1

Conductor Count:	4
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Insulation

Element	Material	Nominal Wall Thickness
15	PVC - Polyvinyl Chloride	0.021 in
18	PE - Polyethylene (Foam)	0.053 in

Color Chart

Number	Color
1 (15 AWG)	Red & Black
2 (18 AWG)	Blue & White

Inner Shield Material

Type	Material	Coverage [%]	Drainwire Material	Drainwire AWG
Tape	Alum / Poly	100%	TC - Tinned Copper	18

Outer Shield Material

Type	Material	Coverage [%]	Drainwire Construction n x D
Braid	Tinned Copper (TC)	65%	65x36

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.48 in	0.06 in

Electrical Characteristics

Conductor DCR

Element	Nominal Conductor DCR	Nominal Outer Shield DCR
15 AWG	3.6 Ohm/1000ft	1.8 Ohm/1000ft
18 AWG	6.9 Ohm/1000ft	

Capacitance

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

Inductance

Element	Nominal Inductance
15 AWG Pair Only	0.174 µH/ft

Impedance

Nominal Characteristic Impedance
100 Ohm
120 Ohm

Delay

Max. Delay	Max. Delay Description	Nominal Delay	Nominal Velocity of Propagation (VP) [%]	Nominal Velocity of Propagation (VP) Description
1.36 ns/ft	18 AWG Pair Only			18 AWG Pair Only
		1.36 ns/ft	75%	

High Freq

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

Current

Element	Max. Recommended Current [A]
15 AWG	8 Amps per Conductor
18 AWG	5 Amps per Conductor

Voltage

UL Description	UL Voltage Rating
C(UL) AWM	300 V RMS

Temperature Range

UL Temp Rating:	75°C
Operating Temp Range:	-20°C To +75°C

Mechanical Characteristics

Oil Resistance:	Yes
Bulk Cable Weight:	108 lbs/1000ft
Max. Pull Tension:	205 lbs
Min Bend Radius/Minor Axis:	4.6 in

Standards

NEC/(UL) Compliance:	CMG, PLTC-ER
CEC/C(UL) Compliance:	CMG
UL AWM Style Compliance:	20201
CSA AWM Compliance:	AWM I/II A
Other Compliance:	ODVA Class 2 Thick

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes

EU RoHS Compliance Date (yyyy-mm-dd):	2005-04-01
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Oil Resistance:	Yes
Suitability - Sunlight Resistance:	Yes

Flammability, LSOH, Toxicity Testing

UL Flammability:	UL1685 FT4 Loading
CSA Flammability:	FT4
UL voltage rating:	300 V RMS

Part Number

Variants

Item #	Color	Putup Type	Length	UPC
3082F T5U500	Gray T5U	Reel	500 ft	612825140818
3082F T5U1000	Gray T5U	Reel	1,000 ft	612825140795
3082F T5U2000	Gray T5U	Reel	2,000 ft	612825140801

Footnote:	C - CRATE REEL PUT-UP.
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Product Notes

Notes:	High-Flex. Thick. Meter marks on jacket to aid users in installation. ODVA DeviceNet is an Open DeviceNet Vendor Association, Inc. trademark. Jacket printed ""1PR16"" instead of ""1PR15"" due to UL requirements for CMG Listing.
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History

Update and Revision:	Revision Number: 0.340 Revision Date: 06-08-2020
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