



**Product:** [3082F](#)

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

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### Product Description

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

### 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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#### Construction Details

##### Conductor

Element	Number of Element	Size	Stranding	Material
Power Pair(s)	1	15 AWG	65x33	TC - Tinned Copper
Data Pair(s)	1	18 AWG	65x36	TC - Tinned Copper

##### Insulation

Element	Material	Nom. Thickness	Color Code	Notes
Power Pair(s)	PVC - Polyvinyl Chloride	0.021 in (0.53 mm)	Red & Black	
Data Pair(s)	PE - Polyethylene (Foam)	0.053 in (1.3 mm)	Blue & White	HDPE

##### 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 (65x36) TC

##### Outer Jacket

Material	Nom. Thickness	Nom. Diameter
PVC - Polyvinyl Chloride	0.060 in (1.5 mm)	0.480 in (12.2 mm)

Overall Cable Diameter (Nominal):	0.480 in (12.2 mm)
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#### Electrical Characteristics

##### Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Characteristic Impedance	Nom. Velocity of Prop.	Max. Current
Power Pair(s)	3.6 Ohm/1000ft (12 Ohm/km)				8 Amps per Conductor
Data Pair(s)	6.9 Ohm/1000ft (23 Ohm/km)	12.0 pF/ft (39.4 pF/m)	120 Ohm	75%	5 Amps per Conductor

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

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

	0.5	0.25 dB/100ft	
	1	0.36 dB/100ft	

#### Voltage

UL Voltage Rating
300 V (CMG, PLTC), 600 V (UL AWM 20201)

## Mechanical Characteristics

#### Temperature

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

#### Bend Radius

Stationary Min.	Installation Min.
4.6 in (120 mm)	4.6 in

Max. Pull Tension:	205 lbs (93.0 kg)
Bulk Cable Weight:	108 lbs/1000ft (161 kg/km)

## Standards and Compliance

Environmental Suitability:	Indoor, Sunlight Resistance, Oil Resistance
Flammability / Reaction to Fire:	UL1685 FT4 Loading, 1202
NEC / UL Compliance:	Article 725, Article 800, CMG, PLTC
AWM Compliance:	AWM 20201, I/II A
CEC / C(UL) Compliance:	CMG
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Other Standard Compliance(s):	ODVA Class 2 Thick

## 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: 0.408 Revision Date: 05-05-2023
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## Part Numbers

#### 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

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