Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



3082F Multi-Conductor - DeviceBus® for ODVA DeviceNet™



For more Information please call

1-800-Belden1



General Description:

15 and 18 AWG stranded tinned copper conductors, PVC insulation (power), FPE insulation (data), individually foil shielded (100% coverage) plus an overall tinned copper braid (65% coverage), sunlight/oil-resistant PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
1	15	65x33	TC - Tinned Copper
1	18	65x36	TC - Tinned Copper

Total Number of Conductors:

4

Insulation

Insulation Material:

Insulation Material	AWG
PVC - Polyvinyl Chloride	15
FPE - Foam Polyethylene	18

Inner Shield

Inner Shield Material:

Layer#	Type	Inner Shield Material	Coverage (%)
15 AWG Pair Tape Aluminum Foil-Polyester Tape		100	
18 AWG Pair	Tape	Aluminum Foil-Polyester Tape	100

Outer Shield

Outer Shield Material:

ı	Type	Outer Shield Material	Coverage (%)
	Braid	TC - Tinned Copper	65

Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire Conductor Material
18	65x36	TC - Tinned Copper

Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (mm)
PVC - Polyvinyl Chloride	1.524

Overall Cable

Overall Nominal Diameter: 12.192 mm

Pair

Pair Color Code Chart:

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

Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +75°C
UL Temperature Rating:	75°C (UL AWM Style 20201)
Bulk Cable Weight:	160.726 Kg/Km
Max. Recommended Pulling Tension:	911.881 N
Min. Bend Radius/Minor Axis:	116.840 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMG, PLTC-ER

Page 1 of 3 09-11-2017

Detailed Specifications & Technical Data

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3082F Multi-Conductor - DeviceBus® for ODVA DeviceNet™

CEC/C(UL) Specification:		CMG		
	AWM Specification:	UL Style 20201 (600 V 75°C)		
	CSA Specification:	III A		
	EU Directive 2011/65/EU (ROHS II):	Yes		
	EU CE Mark:	Yes		
	EU Directive 2000/53/EC (ELV):	Yes		
	EU Directive 2002/95/EC (RoHS):	Yes		
	EU RoHS Compliance Date (mm/dd/yyyy):	04/01/2005		
	EU Directive 2002/96/EC (WEEE):	Yes		
	EU Directive 2003/11/EC (BFR):	Yes		
	CA Prop 65 (CJ for Wire & Cable):	Yes		
	MII Order #39 (China RoHS):	Yes		
	Other Specification:	ODVA Class 2 Thick		
Fla	me Test			
	UL Flame Test:	UL1685 FT4 Loading		
	CSA Flame Test:	FT4		
Sui	itability			
	Sunlight Resistance:	Yes		
	Oil Resistance:	Yes		
Sur	face Printing (Overall)			
	Surface Printing:	BELDEN 3082F DEVICEBUS(R) HIGH FLEX THICK CABLE 1PR16 1PR18 SHIELDED (UL) E34972 CMG 75C OR PLTC SUN RES OR AWM 20201 600V C(UL) CMG OR AWM I/II A 80C 300VFT4 OIL RES (1 METER MARKING, "METER")		

Electrical Characteristics (Overall)

Unaveraged Impedance:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Impedance (Ohm)
18 AWG Pair Only				120

Nom. Inductance:

Description	Inductance (µH/m)	
15 AWG Pair Only	0.570894	

Nom. Capacitance Conductor to Conductor:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Capacitance (pF/m)
18 AWG Pair Only	1			39.372

Nominal Velocity of Propagation:

Description	VP (%)
18 AWG Pair Only	75

Maximum Delay:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Delay (ns/m)
18 AWG Pair Only				4.46216

Nom. Conductor DC Resistance:

Description	DCR @ 20°C (Ohm/km)
15 AWG	11.8116
18 AWG	22.6389

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)
5.9058

Max. Attenuation:

0	Description	Freq. (MHz)
0.42653	18 AWG Pair Only	.125
0.85306		.500
1.3124		1.00

Max. Operating Voltage - UL:

x. Operaning	, voltage of	•••
Voltage	Description	
300 V RMS	C(UL) AWM	

Max. Recommended Current:

Description Current

Page 2 of 3 09-11-2017

Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



3082F Multi-Conductor - DeviceBus® for ODVA DeviceNet™

15 AWG	8.0 Amps
18 AWG	5.0 Amps

Notes (Overall)

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.

Put Ups and Colors:

No put ups and colors are available for this product

Revision Number: 2 Revision Date: 04-06-2010

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Page 3 of 3