Detailed Specifications & Technical Data



METRIC MEASUREMENT VERSION

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



For more Information please call

1-800-Belden1



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.

sunigrivoi-resistant PVC jacket.
Physical Characteristics (Overall)
Conductor
AWG:
Pairs AWG Stranding Conductor Material
1 15 19x28 TC - Tinned Copper
1 18 19x30 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:
TypeOuter Shield MaterialCoverage (%)BraidTC - Tinned Copper65
Outer Shield Drain Wire AWG:
AWG Stranding Drain Wire Conductor Material
18 19x30 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

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UL Temperature Rating:	75°C
Bulk Cable Weight:	160.726 Kg/Km
Max. Recommended Pulling Tension:	845.158 N
Min. Bend Radius/Minor Axis:	121.920 mm
Applicable Specifications and Agency C	compliance (Overall)
Applicable Standards & Environmental Prog	
CEC/C(UL) Specification:	CMG
AWM Specification:	UL Style 20201 (600 V 75°C)
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
Flame Test	
UL Flame Test:	UL1685 FT4 Loading
CSA Flame Test:	FT4
Suitability	
Sunlight Resistance:	Yes
Oil Resistance:	Yes
Plenum/Non-Plenum	
Plenum (Y/N):	No
Electrical Characteristics (Overall)	
Unaveraged Impedance:	
Description Freq. (MHz) Start Freq. (MHz) Stop 18 AWG Pair Only <	p Freq. (MHz) Impedance (Ohm) 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 18 AWG Pair Only 1	p Freq. (MHz) Capacitance (pF/m) 39.372
Nominal Velocity of Propagation:	I
DescriptionVP (%)18 AWG Pair Only75	
Maximum Delay:	
Description Freq. (MHz) Start Freq. (MHz) Stop	o 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:



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DCR @ 20°C (Ohm/km)

5.9058

Max. Attenuation:

0	Description	Freq. (MHz)	Attenuation (dB/100m)
0.42653	18 AWG Pair Only	0.125	0.427
0.82025		0.500	0.820
1.3124		1.000	1.181

Max. Operating Voltage - UL:

Voltage Description 300 V RMS C(UL) AWM

Max. Recommended Current:

Description	Current
15 AWG	8.0 Amps
18 AWG	5.0 Amps

Notes (Overall)

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

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
3082A T5U1000	305 MT	66.678 KG	GRAY T5U	С	2 #15, 2 #18 SHLD PVC
3082A T5U2000	610 MT	122.471 KG	GRAY T5U	С	2 #15, 2 #18 SHLD PVC
3082A T5U3000	914 MT	193.231 KG	GRAY T5U		2 #15, 2 #18 SHLD PVC
3082A T5U500	152 MT	31.071 KG	GRAY T5U	С	2 #15, 2 #18 SH PVC
3082A 0021000	305 MT	66.678 KG	RED	С	2 #15, 2 #18 SHLD FRPVC

Notes:

C = CRATE REEL PUT-UP.

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