



3082A Paired - DeviceBus® for ODVA DeviceNet™

		<p><b>Metric Version</b> For more information please call <b>1-800-Belden1</b></p> <p><u>See Put-ups and Colors</u></p>
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**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:**

**CONDUCTOR:**

Number of Pairs 2

Total Number of Conductors 4

AWG :

Number of Pairs	AWG	Stranding	Conductor Material	Conductor Diameter (mm)
1	15	19x28	TC - Tinned Copper	
1	18	19x30	TC - Tinned Copper	

Stranding 19x28, 19x30

Conductor Material TC - Tinned Copper

**INSULATION:**

Insulation Material PVC - Polyvinyl Chloride, FPE - Foam Polyethylene

Insulation Material (Multi-AWG) :

AWG	Layer Number	Material Trade Name	Material	Wall Thickness (mm)	Diameter (mm)
15			PVC - Polyvinyl Chloride		
18			FPE - Foam Polyethylene		

Pair Color Code Chart :

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

**INNER SHIELD:**

Inner Shield Type Tape/Tape

Inner Shield Material :

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Layer Number/Description	Material Trade Name	Type	Material	% Coverage (%)	Stranding	Diameter (mm)	Conductor Material
15 AWG Pair		Tape	Aluminum Foil-Polyester Tape	100			
18 AWG Pair		Tape	Aluminum Foil-Polyester Tape	100			

Inner Shield % Coverage 100 %

**OUTER SHIELD:**

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

**OUTER SHIELD DRAIN WIRE :**

Outer Shield Drain Wire AWG 18  
 Outer Shield Drain Wire Stranding 19x30  
 Outer Shield Drain Wire Conductor Material TC - Tinned Copper

**OUTER JACKET:**

Outer Jacket Material PVC - Polyvinyl Chloride  
 Outer Jacket Nominal Wall Thickness 1.524 mm

**OVERALL NOMINAL DIAMETER:**

Overall Nominal Diameter 12.192 mm

**MECHANICAL CHARACTERISTICS:**

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 845.158 N  
 Min. Bend Radius (Install) 116.84 mm

**APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:**

**APPLICABLE STANDARDS:**

NEC/(UL) Specification CMG, PLTC OPEN WIRING  
 CEC/C(UL) Specification CMG  
 AWM Specification UL Style 20201 (600 V 75°C)  
 CSA Specification I/II A  
 EU CE Mark (Y/N) Yes  
 EU RoHS Compliant (Y/N) Yes  
 EU RoHS Compliance Date (mm/dd/yyyy): 04/01/2005  
 Other Specification ODVA Class 2 Thick

**FLAME TEST:**



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UL Flame Test	UL1685 FT4 Loading
CSA Flame Test	FT4

**SUITABILITY:**

Sunlight Resistance	Yes
Oil Resistance	Yes

**PLENUM/NON-PLENUM:**

Plenum (Y/N)	N
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**ELECTRICAL CHARACTERISTICS:**

Unaveraged Impedance :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Unaveraged Impedance (Ohms)
18 AWG Pair Only				120

Nom. Inductance :

Description	Nom. Inductance (µH/m)
15 AWG Pair Only	0.571

Nom. Capacitance Conductor to Conductor :

Description	Frequency (kHz)	Start Frequency (kHz)	Stop Frequency (kHz)	Nom. Capacitance Conductor to Conductor (pF/m)
18 AWG Pair Only	1			39.372

Nominal Velocity of Propagation :

Description	Nominal Velocity of Propagation (%)
18 AWG Pair Only	75

Maximum Delay :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Maximum Delay (ns/m)
18 AWG Pair Only				4.462

Nom. Conductor DC Resistance @ 20 Deg. C :

Description	Nom. Conductor DC Resistance @ 20 Deg. C (Ohms/km)
15 AWG	11.812
18 AWG	22.639

Nominal Outer Shield DC Resistance @ 20 Deg. C 5.906 Ohms/km

Max. Attenuation (dB/100 ft.) :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Max. Attenuation (dB/100m)
18 AWG Pair Only	0.125			0.427
	0.5			0.82
	1			1.312

Max. Operating Voltage - UL :

UL Voltage	UL
300 V RMS	C(UL) AWM



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Max. Recommended Current :

Description	Max. Recommended Current
15 AWG	8.0 Amps
18 AWG	5.0 Amps

**NOTES:**

Notes Thick. Meter marks on jacket to aid users in installation. ODVA DeviceNet is an Open DeviceNet Vendor Associatio, Inc. Trademark.

**PUT-UPS AND COLORS:**

Item	Description	Put-Up (M)	Ship Weight (kgs.)	Jacket Color	Notes
3082A T5U1000	2 #15, 2 #18 SHLD PVC	304.8	62.652	GRAY T5U	C
3082A T5U2000	2 #15, 2 #18 SHLD PVC	609.6	127.12	GRAY T5U	C
3082A T5U500	2 #15, 2 #18 SH PVC	152.4	32.234	GRAY T5U	C

C = CRATE REEL PUT-UP.

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