# Detailed Specifications & Technical Data



## 3082A Paired - DeviceBus® for DeviceNet

For more information please call
1-800-Belden1

See Put-ups and Colors

## **Description:**

300V Class 2 Thick, 15 and 18 AWG stranded tinned copper, PVC insulation (power), FPE insulation (data), 100% individually foil shielded + overall 65% tinned copper braid, drain wire, 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 (in.)
1	15	19x28	TC	
1	18	19x30	TC	

### **INSULATION:**

Insulation Material (Multi-AWG):

AWG	Layer Number	Material Trade Name	Material	Wall Thickness (in.)	Diameter (in.)
15			PVC		
18			FPE		

#### **PAIR:**

#### Pair Shield Material:

Description	Material Trade Name	Туре	Material	% Coverage (%)	Stranding	Diameter (in.)	Conductor Material
15 AWG Pair		. I .	Aluminum Foil- Polyester	100			
18 AWG Pair		Tape	Aluminum Foil- Polyester	100			

#### Pair Color Code Chart:

Number	Color	Number	Color
15 AWG Pair	Red & Black	18 AWG Pair	Blue & White

## **OUTER SHIELD:**

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



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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

**OVERALL NOMINAL DIAMETER:** 

Overall Nominal Diameter .460 in.

**MECHANICAL CHARACTERISTICS:** 

Operating Temperature Range -20°C To +75°C

Temperature Rating 75°C

Bulk Cable Weight 108 lbs/1000 ft.

Max. Recommended Pulling Tension 190 lbs.

Min. Bend Radius (Install) 4.6 in.

APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

**APPLICABLE STANDARDS:** 

NEC/(UL) Specification CMG PLTC
CEC/C(UL) Specification CMG FT4
AWM Specification 20201 I/II A

FLAME TEST:

UL Flame Test 1581 Vertical Tray

CSA Flame Test FT4

### **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/ft)
15 AWG Pair Only	.174

Nom. Capacitance Conductor to Conductor:

Description	Frequency (kHz)	Start Frequency (kHz)	 Nom. Capacitance Conductor to Conductor (pF/ft)
18 AWG Pair Only	1		12.0

Nominal Velocity of Propagation:

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

Maximum Delay:

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Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Maximum Delay (ns/ft)
18 AWG Pair Only				1.36

Nom. Conductor DC Resistance @ 20 Deg. C:

Description	Nom. Conductor DC Resistance @ 20 Deg. C (Ohms/1000 ft)
15 AWG	3.6
18 AWG	6.9

Nominal Outer Shield DC Resistance @ 20 Deg. C 1.8 Ohms/1000 ft

Nom. Attenuation (dB/100 ft):

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Nom. Attenuation (dB/100 ft.)
18 AWG Pair Only	.125			.13
	.500			.25
	1.0			.36

Max. Operating Voltage - UL:

UL Voltage	UL
300 V RMS	PLTC, CMG
300 V RMS	C(UL) AWM
600 V RMS	AWM

# Max. Recommended Current :

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

#### NOTES:

Notes Meter marks on jacket to aid users in installation.

# PUT-UPS AND COLORS:

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
3082A T5U1000	2 #15, 2 #18 SHLD PVC	1000	128	GRAY T5U	CZ
3082A T5U2000	2 #15, 2 #18 SHLD PVC	2000	260	GRAY T5U	ВС
3082A T5U500	2 #15, 2 #18 SH PVC	500	64	GRAY T5U	CZ

B = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 20% FROM LENGTH SHOWN.

C = CRATE REEL PUT-UP.

 $Z = FINAL\ PUT-UP\ LENGTH\ MAY\ VARY\ (+\ OR\ -)\ 10\%\ FOR\ SPOOLS\ OR\ REELS\ AND\ (+\ OR\ -)\ 5\%\ FOR\ UNREEL\ CARTONS\ FROM\ LENGTH\ SHOWN.$ 

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