

# 3082F Paired - DeviceBus® for ODVA DeviceNet<sup>TM</sup>





For more information please call 1-800-Belden1

See Put-ups and Colors

#### **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 (in.)
1	15	65x33	TC - Tinned Copper	
1	18	65x36	TC - Tinned Copper	

Stranding 65x33, 65x36
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 (in.)	Diameter (in.)
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:

Layer Number/Descri ption	Material Trade Name	Туре	Material	% Coverage (%)	Stranding	Conductor Material
15 AWG Pair		Tape	Aluminum Foil- Polyester Tape	100		
18 AWG Pair		1	Aluminum Foil- Polyester Tape	100		



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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	65x36	
Outer Shield Drain Wire Conductor Material	TC - Tinned Copper	
OUTER JACKET:		
Outer Jacket Material	PVC - Polyvinyl Chloride	
Outer Jacket Nominal Wall Thickness	.060 in.	
OVERALL NOMINAL DIAMETER:		
Overall Nominal Diameter	.480 in.	
MECHANICAL CHARACTERISTICS:		
Operating Temperature Range	-20°C To +75°C	
UL Temperature Rating	75°C (UL AWM Style 20201)	
Bulk Cable Weight	108 lbs/1000 ft.	
Max. Recommended Pulling Tension	205 lbs.	
Min. Bend Radius (Install)	4.6 in.	
APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:		

#### APPLICABLE STANDARDS:

NEC/(UL) Specification	CMG, PLTC-ER
CEC/C(UL) Specification	CMG
AWM Specification	UL Style 20201 (600 V 75°C)
CSA Specification	III 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:

UL Flame Test	UL1685 FT4 Loading
CSA Flame Test	FT4

# **SUITABILITY:**

Sunlight Resistance	Yes	
Oil Resistance	Yes	



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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/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:

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

#### Max. Attenuation (dB/100 ft.):

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Max. Attenuation (dB/100 ft.)
18 AWG Pair Only	.125			.13
	.500			.26
	1.00			.40

## Max. Operating Voltage - UL:

UL Voltage	Description
300 V RMS	C(UL) AWM

# Max. Recommended Current:

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

# NOTES:

Notes	High-Flex. Thick. Meter marks on jacket to aid users in installation. ODVA

#### **PUT-UPS AND COLORS:**

# Detailed Specifications & Technical Data



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Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
3082F 0021000	2 #15, 2 #18 SHLD FRPVC	1000	140	RED	С
3082F T5U1000	2 #15, 2 #18 SH PVC	1000	140	GRAY T5U	С
3082F T5U2000	2 #15, 2 #18 SH PVC	2000	284	GRAY T5U	С
3082F T5U500	2 #15, 2 #18 SH PVC	500	72.5	GRAY T5U	С

#### C = CRATE REEL PUT-UP.

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