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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), CPE 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:

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

##### Outer Shield Drain Wire AWG:

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

#### Outer Jacket

##### Outer Jacket Material:

Outer Jacket Material
CPE - Chlorinated Polyethylene

#### Overall Cable

Overall Nominal Diameter: 12.065 mm

#### Pair

##### Pair Color Code Chart:

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

### Mechanical Characteristics (Overall)

Operating Temperature Range: -30°C To +75°C

Non-UL Temperature Rating: 75°C

## 3083A Multi-Conductor - DeviceBus® for ODVA DeviceNet™

Bulk Cable Weight: 177.096 Kg/Km

Max. Recommended Pulling Tension: 845.158 N

Min. Bend Radius/Minor Axis: 121.920 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMG, PLTC

CEC/C(UL) Specification: CMG

EU Directive 2000/53/EC (ELV): Yes

EU Directive 2002/95/EC (RoHS): Yes

EU RoHS Compliance Date (mm/dd/yyyy): 10/13/2005

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

### Electrical Characteristics (Overall)

#### Unaveraged Impedance:

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

#### 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:

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

#### Max. Operating Voltage - UL:

Voltage
300 V RMS (PLTC)

## 3083A Multi-Conductor - DeviceBus® for ODVA DeviceNet™

CMG)

**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 Association, 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
3083A 5601000	305 MT	60.782 KG	YELLOW, BRIGHT	C	2 #15, 2 #18 SH CPE
3083A 5602000	610 MT	126.099 KG	YELLOW, BRIGHT	C	2 #15, 2 #18 SH CPE

**Notes:**

C = CRATE REEL PUT-UP.

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