Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION

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

For more Information
please call

1-800-Belden1

General 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
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 2011/65/EU (ROHS II):	Yes
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 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:

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No put ups and colors are available for this product

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