



Part Number: 2133A

FOUNDATION Fieldbus or Profibus, (20 pr) 16 AWG (7x24) TC, XLPO/TPE, IS/OS, TC-ER

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Product Description

Twenty 16 AWG pairs stranded (7x24) tinned copper, cross-linked polyolefin insulation, Individual and overall Beldfoil® shield (100% coverage), oil- and UV-resistant TPE jacket.

Technical Specifications

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
16	7x24	TC - Tinned Copper	20
Conductor Count:			40
Total Number of Pairs:			20
Conductor Size:			16 AWG

Insulation

Material	Nominal Wall Thickness
XLP - Cross Linked Polyolefin	0.038 in

Color Chart

Number	Color
1	Blue and Orange Numbered 1
2	Blue and Orange Numbered 2
3	Blue and Orange Numbered 3
4	Blue and Orange Numbered 4
5	Blue and Orange Numbered 5
6	Blue and Orange Numbered 6
7	Blue and Orange Numbered 7
8	Blue and Orange Numbered 8
9	Blue and Orange Numbered 9
10	Blue and Orange Numbered 10
11	Blue and Orange Numbered 11
12	Blue and Orange Numbered 12
13	Blue and Orange Numbered 13
14	Blue and Orange Numbered 14
15	Blue and Orange Numbered 15
16	Blue and Orange Numbered 16
17	Blue and Orange Numbered 17
18	Blue and Orange Numbered 18
19	Blue and Orange Numbered 19
20	Blue and Orange Numbered 20

Inner Shield Material

Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG
Tape	Aluminum Foil-Polyester Tape	Beldfoil®	100 %	TC - Tinned Copper	18

Outer Shield Material

Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG
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Tape	Aluminum/Polyester	Beldfoil®	100 %	TC - Tinned Copper	16
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Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
TPE - Thermoplastic Elastomer	1.469 in	0.085 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
4.2 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Conductor
22 pF/ft

Inductance

Nominal Inductance
0.22 µH/ft

Impedance

Nominal Characteristic Impedance
100 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
0.039 MHz	0.065 dB/100ft

Delay

Nominal Velocity of Propagation (VP) [%]
64 %

Current

Max. Recommended Current [A]
7.2 Amps per Conductor

Voltage

UL Voltage Rating
600 V RMS

Electrical Characteristics Notes:	Max Propagation Delay Change From 7.812 kHz to 39.06 kHz: 518 pS/ft
Other Electrical Characteristic 2:	31.25 KBits/sec

Temperature Range

UL Temp Rating:	90°C
Operating Temp Range:	-40°C To 90°C

Mechanical Characteristics

Oil Resistance:	Yes
Bulk Cable Weight:	1037 lbs/1000ft
Max Recommended Pulling Tension:	1911 lbs
Min Bend Radius/Minor Axis:	14.75 in

Standards

NEC/(UL) Specification:	TC-ER
CSA AWM Specification:	AWM I A/B II A/B

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes

EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes

Suitability

Suitability - Burial:	Yes
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	Yes

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1581 Vertical Tray
CSA Flammability:	FT4
ISO/IEC Flammability:	60332-3-24 (Category C)
UL voltage rating:	600 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
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Part Number

Variants

Item #	Color
2133A 0061000	Blue, Light
2133A 0031000	Orange

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