



Part Number: 2117a

FOUNDATION Fieldbus, (36 pr) 16 AWG (7x24) TC, XLP/FR-PVC, Foil Shld, CMG, PLTC-ER

# **Product Description**

Thirty-six 16 AWG pair stranded (7x24) tinned copper conductors, cross-linked polyolefin, overall Beldfoil® shield (100% coverage), flame retardant PVC jacket.

# **Product Specifications**

# **Technical Specifications**

## **Construction and Dimensions**

#### Conductor:

AWG	Stranding	Material		No. of Pairs
16	7×24	TC - Tinned Coppe	r	36
Total Number of Conductors:			72	

### Insulation:

Material			
XLP - Cross-linked Po	lyolefin		

#### Color Chart 1:

Number	Color
1	Blue & Orange Numbered 1
2	Blue & Orange Numbered 2
3	Blue & Orange Numbered 3
4	Blue & Orange Numbered 4
5	Blue & Orange Numbered 5
6	Blue & Orange Numbered 6
7	Blue & Orange Numbered 7
8	Blue & Orange Numbered 8
9	Blue & Orange Numbered 9
10	Blue & Orange Numbered 10
11	Blue & Orange Numbered 11
12	Blue & Orange Numbered 12
13	Blue & Orange Numbered 13
14	Blue & Orange Numbered 14
15	Blue & Orange Numbered 15
16	Blue & Orange Numbered 16
17	Blue & Orange Numbered 17
18	Blue & Orange Numbered 18
19	Blue & Orange Numbered 19
20	Blue & Orange Numbered 20
21	Blue & Orange Numbered 21
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24	Blue & Orange Numbered 24
25	Blue & Orange Numbered 25
26	Blue & Orange Numbered 26
27	Blue & Orange Numbered 27
28	Blue & Orange Numbered 28
29	Blue & Orange Numbered 29
30	Blue & Orange Numbered 30
31	Blue & Orange Numbered 31
32	Blue & Orange Numbered 32
33	Blue & Orange Numbered 33
34	Blue & Orange Numbered 34
35	Blue & Orange Numbered 35
36	Blue & Orange Numbered 36

# Stranding:

Lay Length			
0.091 mm			

#### Innershield:

Туре	Material	Material Trade Name	Coverage [%]	Drainwire AWG	Drainwire Construction n x D
Tape	Aluminum Foil-Polyester Tape	Beldfoil®	100 %	18	7x26 mm
	TC - Tinned Copper				

#### Outershield 1:

Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	Aluminum Foil-Polyester Tape	Beldfoil®	100 %	TC - Tinned Copper	16	7x24 mm

## Outerjacket 1:

Material	Nominal Diameter	Ripcord
FR PVC - Flame Retardant Polyvinyl Chloride	1.952 in	Yes

## **Electrical Characteristics**

### **Conductor DCR:**

Nominal Conductor DCR	
4.2 Ohm/1000ft	

### Capacitance:

Max. Capacitance Unbalance	Nom. Cap	pacitance Conductor to Shield
1.2 pF/ft	22 pF/ft	
Other Electrical Characteristic 1:		Max Propagation Delay Change From 7.812 kHz to 39.06 kHz: 518 pS/ft
Other Electrical Characteristic 2:		31.25 KBits/sec

## High Frequency (Nominal/Typical):

Nom. Insertion Loss			
0.065 db/100ft			

### Delay:

No	minal Velocity of Propagation (VP) [%]
0.64	4 %

### High Freq:

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Max./Min. Input Impedance (unFitted)
	0.091 db/100ft	100 Ohm
0.03125 MHz		
0.039 MHz		
0.039 MHz		

#### **Current:**

Element	Max. Recommended Current [A]
Per Conductor	7.2 Amps

#### Inductance:

### Nominal Inductance

0.22 µH/ft

### Voltage:

Description	UL Voltage Rating	Voltage Rating [V]
CSA CIC type TC	300 V RMS	300 V RMS

## Use

Suitability - Oil Resistance:	Yes
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	Yes
Max Recommended Pulling Tension:	3412 lbs

## Safety

CSA Flammability:	FT4
ISO/IEC Flammability:	60332-3-24 (Category C)
UL Flammability:	UL1685 FT4 Loading

# **Temperature Range**

Installation Temp Rating:	-25°C
Operating Temp Range:	-25°C Cold Impact -40°C To +90°C -55°C Cold Bend
UL Temp Rating:	go°C Wet/Dry

# **Mechanical Characteristics**

Min Bend Radius/Minor Axis:	19.75 in
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## **Part Number**

Plenum (Y/N):	No
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## **Standards**

CA Prop 65 (CJ for Wire & Cable):	CA Prop 65 (CJ for Wire & Cable)
	5,11.6p cg (65.6. Will a caste)

CSA AWM Specification:	CSA Specification
MII Order #39 (China RoHS):	MII Order #39 (China RoHS)
NEC/(UL) Specification:	NEC/(UL) Specification
Other Specification:	Other Specification
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	EU CE Mark

### **History**

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