



**Product:** <u>1328A</u> ☑

Fieldbus, 5 Pr #18 Str TC, PO Ins, IS/OS, PVC Jkt, CMG

Request Sample

# **Product Description**

Fieldbus, 5 Pair 18AWG (7x26) Tinned Copper, PO Insulation, Individual & Overall Beldfoil® Shield, Orange PVC Outer Jacket, CMG

# **Technical Specifications**

#### **Product Overview**

Suitable Applications: harsh environment digital and serial two-way communication, oil and gas extraction and refining sites, petrochemical, Profibus process automation or Foundation FieldBus process automation, extreme temperature environments, exposure to humidity/moisture, dust, and oil, remote locations long distance applications, etc.

# **Physical Characteristics (Overall)**

#### Conductor

Element	AWG	Stranding	Material	Nominal Diameter	No. of Pairs
Pair(s)	18	7x26	TC - Tinned Copper	0.048 in	5
Conducto	r Count	:	10		

### Insulation



#### **Color Chart**

Number	Color
1	Blue, Orange and Numbered
2	
3	
4	
5	

#### Inner Shield

Type	Material	Material Trade Name	Coverage [%]	Drainwire AWG	Drainwire Construction n x D
Tape	Bi-Laminate (Alum+Poly)	Beldfoil®	100%	20	7x28
	Tinned Copper (TC)				

## Outer Shield

Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	Bi-Laminate (Alum+Poly)	Beldfoil®	100%	TC - Tinned Copper	18	7x26

#### **Outer Jacket**

Material	Nominal Diameter	Ripcord
PVC - Polyvinyl Chloride	0.55 in	Yes

### **Construction and Dimensions**

## Stranding



## **Electrical Characteristics**

## Conductor DCR

Individual Pair Nominal Shield DCR	Nominal Conductor DCR	Nominal Outer Shield DCR
7.5 Ohm/1000ft	5.86 Ohm/1000ft	4.9 Ohm/1000ft

#### Capacitance

Ma	ax. Capacitance Unbalance	Nom. Capacitance Conductor to Shield	Nom.Mutual Capacitance
1.2	2 pF/ft	45 pF/ft	24 pF/ft

#### Inductance

Nominal Inductance 0.19 µH/ft

# Impedance

Nominal Characteristic Impedance
100 Ohm

# High Frequency (Nominal/Typical)

Nom. Insertion Loss
0.08 dB/100ft

## Delay

Nominal Velocity of Propagation (VP) [%] 66%

## High Frequency

Max. Insertion Loss (Attenuation)	Max./Min. Input Impedance (unFitted)
0.091 dB/100ft	100 Ohm

#### Current

Element	Max. Recommended Current [A]
Per Conductor	5.2 Amps per Conductor

# Voltage

# UL Voltage Rating 300 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:	105°C
Operating Temperature Range:	-40°C to +105°C

# **Mechanical Characteristics**

Oil Resistance:	Yes
UV Resistance:	Yes
Max. Pull Tension:	309 lbs
Min. Bend Radius/Minor Axis:	5.5 in

# **Standards**

NEC Articles:	Article 725, Article 727, Article 800 nce: CMG, CMX-Outdoor, ITC, PLTC-ER			
NEC/(UL) Compliance:				
CEC/C(UL) Compliance:	CMG			
CPR Euroclass:	Eca			

# **Applicable Environmental and Other Programs**

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes

EU Directive 2015/863/EU (RoHS 2 amendment):	Yes			
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)			
EU CE Mark:	Yes			
MII Order #39 (China RoHS):	Yes			

# Suitability

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

## Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1685 FT4 Loading			
IEC Flammability:	IEC 60332-3-24			
IEEE Flammability:	1202			
UL voltage rating:	300 V RMS			

#### Plenum/Non-Plenum

Plenum (Y/N):	No		

#### **Related Part Numbers**

#### Variants

iteiii#	COIOI	Put-op Type	Lengui	UPC
1328A 0061000	Blue, Light	Reel	1,000 ft	612825112051
1328A 0031000	Orange	Reel	1,000 ft	612825112044
Footnote:		C - CRAT	E REEL I	PUT-UP.

#### **History**

Update and Revision:	Revision Number: 0.523 Revision Date: 05-05-2023

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