# **Detailed Specifications & Technical Data**

#### **ENGLISH MEASUREMENT VERSION**



## 3079E Multi-Conductor - DataBus® ISA/SP-50 PROFIBUS Cable



For more Information please call

1-800-Belden1



## **Description:**

22 AWG stranded (7x30) bare copper conductors, FRFPE insulation, Beldfoil® shield (100% coverage) plus a tinned copper braid shield (65% coverage), PVC jacket.

## **Physical Characteristics (Overall)**

#### Conductor

#### AWG:

# Pairs	AWG	Stranding	<b>Conductor Material</b>
1	22	7x30	BC - Bare Copper

#### Insulation

#### Insulation Material:

Insulation Material	
FRFF	PE - Flame Retardant Foam Polyethylene

#### **Outer Shield**

#### **Outer Shield Material:**

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100
2		Braid	TC - Tinned Copper	65

### **Outer Jacket**

### **Outer Jacket Material:**

Outer Jacket Material
PVC - Polyvinyl Chloride

#### **Overall Cable**

Overall Nominal Diameter: 0.315 in.

### **Pair**

#### **Pair Color Code Chart:**

Number	Color
1	Red & Green

## Pair Lay Length & Direction:

-	_
Lay Length	(in.)
2.750	

## **Mechanical Characteristics (Overall)**

Operating Temperature Range:	-30°C To +75°C
UL Temperature Rating:	60°C
Bulk Cable Weight:	39 lbs/1000 ft.
Max. Recommended Pulling Tension:	50 lbs.
Min. Bend Radius (Install)/Minor Axis:	3.200 in.

## **Applicable Specifications and Agency Compliance (Overall)**

#### **Applicable Standards & Environmental Programs**

NEC/(UL) Specification:	PLTC
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## 3079E Multi-Conductor - DataBus® ISA/SP-50 PROFIBUS Cable

CEC/C(UL) Specification:	CMG
AWM Specification:	UL Style 20201 (600 V 75°C)
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004
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:	ISA/SP-50
Flame Test	
UL Flame Test:	UL1685 FT4 Loading
CSA Flame Test:	FT4
Plenum/Non-Plenum	
Plenum (Y/N):	No

## **Electrical Characteristics (Overall)**

#### Fitted Impedance:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Impedance (Ohm)
		3	20	150

#### Nom. Inductance:

Inductance (µH/ft)
.267

## Nom. Mutual Capacitance:

Capacitance (pF/ft) 8.5

## **Nominal Velocity of Propagation:**

**VP (%)**78

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 16.0

Ind. Pair Nominal Shield DC Resistance @ 20 3.900 Ohm/1000 ft Deg. C:

#### Max. Attenuation:

Freq. (MHz)	Attenuation (dB/100 m)
0.100	0.510
1.000	1.570
10.000	4.800

## Max. Operating Voltage - UL:

Voltage	Description
300 V RMS	CMG

## Max. Recommended Current:

Description	Current
Per Conductor	2.3 Amps

Other Electrical Characteristic 1: Capacitance Unbalance @ 1 kHz: Less than 1000 pF/km

## **Related Documents:**

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### 3079E Multi-Conductor - DataBus® ISA/SP-50 PROFIBUS Cable

No related documents are available for this product

#### **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
3079E B021000	1,000 FT	44.000 LB	PURPLE	С	2 #22 FRFPE/FRPE SH PVC
3079E B021640	1,640 FT	73.800 LB	PURPLE	С	2 #22 FRFPE/FRPE SH PVC
3079E B023280	3,280 FT	144.320 LB	PURPLE	С	2 #22 FRFPE/FRPE SH PVC

#### Notes:

C = CRATE REEL PUT-UP.

Revision Number: 1 Revision Date: 10-05-2011

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