

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

For more Information please call

1-800-Belden1



### **General 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         Conductor         Material           1         22         7x30         BC - Bare Copper			
Total Number of Conductors:	2		
Insulation			
Insulation Material:			
Insulation Material FRFPE - Flame Retardant Foam Polyethylene			
Outer Shield Outer Shield Material:			
Layer # Outer Shield Trade Name Type Outer Shield Ma	aterial Coverage (%)		
1 Beldfoil® Tape Aluminum Foil-F			
2 Braid TC - Tinned Cop	oper 65		
Outer Jacket Outer Jacket Material:			
Outer Jacket Material PVC - Polyvinyl Chloride			
Overall Cable			
Overall Nominal Diameter:	8.001 mm		
Pair Pair Color Code Chart: Number Color 1 Red & Green			
Pair Lay Length & Direction: Lay Length (mm) 69.85			
Mechanical Characteristics (Overall)			
Operating Temperature Range:	-30°C To +75°C		
UL Temperature Rating:	60°C		
Bulk Cable Weight:	58.040 Kg/Km		
Max. Recommended Pulling Tension:	Max. Recommended Pulling Tension:     222.410 N		
Min. Bend Radius/Minor Axis:	81.280 mm		
Applicable Specifications and Agency Complia Applicable Standards & Environmental Programs	nce (Overall)		
NEC/(UL) Specification:	PLTC		
CEC/C(UL) Specification:	CMG		
AWM Specification:	UL Style 20201 (600 V 75°C)		
EU Directive 2011/65/EU (ROHS II):	Yes		
EU CE Mark:	Yes		
EU Directive 2000/53/EC (ELV):	Yes		
EU Directive 2002/95/EC (RoHS):	Yes		

# **Detailed Specifications & Technical Data**



## METRIC MEASUREMENT VERSION

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

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	107/07 - 30			
UL Flame Test:	UL1685 FT4 Loading			
CSA Flame Test:	FT4			
Suitability				
Sunlight Resistance:	Yes			
Plenum/Non-Plenum				
Plenum (Y/N):	No			
Electrical Characteristics (Overall)				
Fitted Impedance:				
Description Freq. (MHz) Start Freq. (MHz) Stop Freq. (MHz) In				
3 20 15	50			
Nom. Inductance: Inductance (µH/m) 0.876027				
Nom. Mutual Capacitance: Capacitance (pF/m) 27.8885				
Nominal Velocity of Propagation:				
Nom. Conductor DC Resistance: DCR @ 20°C (Ohm/km) 52.496				
Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C:	12.796 Ohm/km			
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			
Put Lins and Colors:				

### 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
3079E B025000	5,000 FT	220.000 LB	PURPLE	CZ	2 #22 FRFPE/FRPE SH PVC

#### Notes:

Z = CRATE REEL PUT-UP. Z = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 10% FOR SPOOLS OR REELS AND(+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

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