# **Detailed Specifications & Technical Data**

METRIC MEASUREMENT VERSION



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



For more Information please call

1-800-Belden1



# **General Description:**

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

# **Physical Characteristics (Overall)**

#### Conductor

#### AWG:

# Pairs	AWG	Stranding	<b>Conductor Material</b>	Dia. (mm)
1	22	Solid	BC - Bare Copper	0.6604

Total Number of Conductors: 2

#### Insulation

#### **Insulation Material:**

ĺ	Insulation Material
	FRFPE - 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: 8.001 mm

## **Pair**

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

Number	Color
1	Red & Green

#### Pair Lay Length & Direction:



# **Mechanical Characteristics (Overall)**

Operating Temperature Range:	-30°C To +75°C
UL Temperature Rating:	60°C
Bulk Cable Weight:	77.386 Kg/Km
Max. Recommended Pulling Tension:	222.410 N
Min. Bend Radius/Minor Axis:	81.280 mm

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

**Applicable Standards & Environmental Programs** 

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# **Detailed Specifications & Technical Data**





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

NEC/(UL) Specification:	CMG, 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
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
Flame Test	
UL Flame Test:	UL1685 FT4 Loading
CSA Flame Test:	FT4
IEEE Flame Test:	1202
Suitability	
Sunlight Resistance:	Yes
Plenum/Non-Plenum	
Plenum (Y/N):	No

# **Electrical Characteristics (Overall)**

Nom. Inductance:

Inductance (µH/m) 0.925242

Nom. Mutual Capacitance:

Capacitance (pF/m) 27.8885

Nominal Velocity of Propagation:

**VP (%)** 78

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 52.496

Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C:

12.796 Ohm/km

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
0.200	0.886
4.000	2.198
16.000	4.495

## Max. Attenuation:

Freq. (MHz)	Attenuation (dB/100 m)
0.200	1.100
4.000	2.650
16.000	5.400

# Max. Operating Voltage - UL:

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Voltage				
300 V RMS	(NEC	Type (	CMG)	

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# **Detailed Specifications & Technical Data**

#### METRIC MEASUREMENT VERSION



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

600 V RMS (UL AWM Style 20201) 300V RMS (NEC Type PLTC)

#### Max. Recommended Current:

Description	Current
Per Conductor	2.3 Amps

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

Other Electrical Characteristic 2: Input Impedance/Unfitted Impedance 3 - 20 MHZ, 150 +-15 Ohms

**Notes (Overall)** 

Notes: Siemens Sinec L2 Cable. For CPE jacketed version order Part No. YR45047. For LS0H (FRNC) jacketed version, order Part No. YR44731.

## **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
3079A 0071000	1,000 FT	56.000 LB	VIOLET	С	1 PR #22 FRFPE FRPE SH PVC
3079A 0072000	2,000 FT	112.000 LB	VIOLET	С	1 PR #22 FRFPE FRPE SH PVC
3079A 0073600	3,600 FT	201.600 LB	VIOLET	С	1 PR #22 FRFPE FRPE SH PVC
3079A 0075000	5,000 FT	285.000 LB	VIOLET		1 PR #22 FRFPE FRPE SH PVC
3079A 0601000	1,000 FT	56.000 LB	CHROME	С	1 PR #22 FRFPE FRPE SH PVC
3079A 0602000	2,000 FT	112.000 LB	CHROME	С	1 PR #22 FRFPE FRPE SH PVC
3079A 0603600	3,600 FT	201.600 LB	CHROME	С	1 PR #22 FRFPE FRPE SH PVC

#### Notes:

C = CRATE REEL PUT-UP.

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