

## 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, FHDPE insulation, Beldfoil® (100% coverage) plus a tinned copper braid shield (65% coverage), sunlight resistant PVC jacket.

**Physical Characteristics (Overall)****Conductor**

AWG:

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

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 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:

Lay Length (mm)
69.85

**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**

## 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 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

## Plenum/Non-Plenum

Plenum (Y/N):	No
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## Electrical Characteristics (Overall)

## Fitted Impedance:

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

## 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:

Voltage	Description
300 V RMS	CMG
600 V RMS	AWM

## Max. Recommended Current:

## METRIC MEASUREMENT VERSION

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Description	Current
Per Conductor	2.3 Amps

Other Electrical Characteristic 1:

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

## 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	305 MT	25.401 KG	VIOLET	C	1 PR #22 FRFPE FRPE SH PVC
3079A 0072000	610 MT	50.803 KG	VIOLET	C	1 PR #22 FRFPE FRPE SH PVC
3079A 0073600	1,097 MT	91.445 KG	VIOLET	C	1 PR #22 FRFPE FRPE SH PVC
3079A 0075000	1,524 MT	129.274 KG	VIOLET		1 PR #22 FRFPE FRPE SH PVC
3079A 0601000	305 MT	25.401 KG	CHROME	C	1 PR #22 FRFPE FRPE SH PVC
3079A 0602000	610 MT	50.803 KG	CHROME	C	1 PR #22 FRFPE FRPE SH PVC
3079A 0603600	1,097 MT	91.445 KG	CHROME	C	1 PR #22 FRFPE FRPE SH PVC

**Notes:**

C = CRATE REEL PUT-UP.

## Test Reports

**a) UL**

- i) UL Test Reports are available on-line through the UL Client Document Access web portal.
- ii) UL Inspection Reports are also available through the UL Client Document Access web portal.

**b) CSA**

- i) CSA "Descriptive Report and Test Results" documents are available on the CSA Gateway Portal.
- ii) CSA Inspection Reports are maintained on the CSA issued 'flash drive' at each manufacturing location.

\* other test data may be available if requested at time of order.

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