## **Detailed Specifications & Technical Data**



ENGLISH 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   Conductor Material   Dia. (in.)     1   22   Solid   BC - Bare Copper   .026					
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					
1   Beldfoil®   Tape   Aluminum Foil-Polyest     2   Braid   TC - Tinned Copper	er Tape 100 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:	52 lbs/1000 ft.				
Max. Recommended Pulling Tension:	50 lbs.				
Min. Bend Radius/Minor Axis:	3.200 in.				
Applicable Specifications and Agency Compliance Applicable Standards & Environmental Programs	(Overall)				
NEC/(UL) Specification:	CMG, PLTC				
CEC/C(UL) Specification:	СМС				
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				
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EU Directive 2002/98/EC (WEEE):   Yes     EU Directive 2002/11/EC (BFR):   Yes     CA Pops 62 (China RoH8):   Yes     UL Filmen Test   UL filmen Test:     UL Filmen Test:   UL filmen Test:     EE Filmen Test:   UL filmen Test:     Boold Provide Council (PR):   Yes     Status Test:   PT4     IEEE Filmen Test:   UL filmen Test:     Perture (YR):   No     Versum/Non-Pienum   Perture (YR):     Perture (YR):   No     Control (PR):   No     Contro (PR):   No	EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004
C A Prop 45 (CJ for Wir & Cable):   Yes     Mill Order #39 (China RoH5):   Yes     L Flame Test:   UL 1680 FT4 Loading     C A Prop 45 (CJ for Wire & Cable):   FT4     IEEE Flame Test:   UL 1680 FT4 Loading     C A Prop 45 (CJ for Wire & Cable):   FT4     IEEE Flame Test:   1022     Utblifty   Sunlight Resistance:   Yes     Penum (YN):   No     Cectrical Characteristics (Overall)   No     Cectrical Characteristics (Overall)   Multi Capacitance:     Multi Capacitance:   Multi Capacitance:     Dispacitance (pF70)   Solo Ohm/1000 fl     Solo Ohm/1000 fl   Solo Ohm/1000 fl     mit Attenuation (dBr/100 fl)   Solo Ohm/1000 fl     Cable Cable Official Characteristics   Solo Ohm/1000 fl     Freq. (Mith Attenuation (dBr/100 fl)   Solo Ohm/1000 fl     Cable Official Characteristics   Solo Ohm/1000 fl     Freq. (Mith Attenuation (dBr/100 fl)   Solo Ohm/1000 fl     Cable Official Characteristics   Solo Ohm/1000 fl     Freq. (Mith Attenuation (dBr/100 fl)   Solo Ohm/1000 fl     Cable Official Characteristics	EU Directive 2002/96/EC (WEEE):	Yes
Mill Order #39 (China RoH5)::   Ycs     UL Flame Test:   UL (6085 FT4 Loading     GSA Flame Test:   1202     Littability   Sourdight Resistance:   Ycs     Barling Hestistance:   Ycs     Barling Attenuation (dP100	EU Directive 2003/11/EC (BFR):	Yes
Barbar Test:   UL1685 FT4 Loading     CSA Flame Test:   FT4     EEEE Flame Test:   1202     utability   Sunight Resistance:   Yes     enum/Non-Plenum   No     Penum (YN):   No     control Capacitance:   Indicatance (utif)     282   No     control Capacitance:   Indicatance (utif)     282   No     mind Velocity of Propagation:   Ves     VP (S)   282     mind Velocity of Propagation:   Ves     VP (S)   282     mind Velocity of Resistance:   DCR 282 (unif 080 ft)     10   Samo Conductor DC Resistance:   DCR 282 (unif 080 ft)     110   Samo Conductor DC Resistance:   280 Ohm/1000 ft     110   Samo Conductor DC Resistance:   290 (Unif 090 ft)     110   Samo Conductor DC Resistance:   290 (Unif 090 ft)     110   Samo Conductor DC Resistance:   290 (Unif 090 ft)     110   Samo Conductor DC Resistance:   Samo Conductor DC Resistance:     110   Samo Conductor CR Resistance:   Samo Conductor CR Res	CA Prop 65 (CJ for Wire & Cable):	Yes
UL Flame Test:   UL föls T4 Loading     SAlma Test:   F74     IEEE Flame Test:   202     Salight Resistance:   Yes     Salight Resistance:   No     Penum (YIN):   No     Certrical Characteristics (Overall):   No     Salight Resistance:   No     Certrical Characteristics (Overall):   No     Salight Resistance:   No     Certrical Characteristics (Overall):   No     Salight Resistance:   Salight Resistance:     Capacitance (PIM)   Salight Resistance:     Salight Resistance:   Salight Resistance:     Capacitance (PIM)   Salight Resistance:     Salight Resistance:	MII Order #39 (China RoHS):	Yes
CSA Flame Test:   FT4     IEEE Flame Test:   1202     suitight Resistance:   Yes     Benum (Y/N):   No     Penum (Y/N):   No     cectrical Characteristics (Overall)	ame Test	
IEEE Flame Test:   1202     utability   Sunght Resistance:   Yes     Benum (Non-Plenum   No     Penum (Nit):   No     Control Characteristics (Overall)   No     minutal Capacitance:   Compacitance (Phil)     Sas   Sas     minut Capacitance:   Compacitance (Phil)     Sas   Sas     Total Antimution Train (Phil)   Sas     Sas   Sas     Sas   Sas     Sas   Sas     Sas   Sas     Sas   Sas	UL Flame Test:	UL1685 FT4 Loading
Autiability   Yes     sonight Resistance:   Yes     Peinum (Y/N):   No     certrical Characteristics (Overall)	CSA Flame Test:	FT4
Sunging Resistance:   Yes     Infunction-Plenum   No     Plenum (YN):   No     control Characteristics (Overall)	IEEE Flame Test:	1202
Pinum (Y/N):   No     cctrical Characteristics (Overall)	uitability	
Penum (Yi):   No     cettrad Characteristics (Overall)	Sunlight Resistance:	Yes
contributions   Control Characteristics (Overall)     cm. Inductance:   Inductance:     fail   Capacitance (pf/f)     3.5   Control Characteristics (Overall)     0.6   Control Characteristics (Overall)     0.7   Control Characteristics (Overall Characteristicst)		
m. Inductance: inductance: 282 m. Mutual Capacitance: Capacitance (pFrH) 8.5 minal Velocity of Propagation: VP (%) m. Conductor DC Resistance: DCR @ 20°C (Ohm/1000 ft) 16.0 m. Conductor DC Resistance: DCR @ 20°C (Ohm/1000 ft) 16.0 m. Attenuation: Frag. (MH2) Attenuation (dB/100 ft) 0.200 0.270 10.00 0.270 10.0	Plenum (Y/N):	No
Inductance (µHft)     282     mi. Mutual Capacitance:     Capacitance (pFft)     8-     minal Velocity of Propagation:     VP 660     7a     om. Adultation of the selectance:     DCR @ 20°C (Ohm/1000 ft)     16.0     modulation of the selectance of	ectrical Characteristics (Overall)	
Freq. (HHz) Attenuation (dB/100 ft.)   0.200 0.270   4.000 0.670   16.000 1.370   ax. Attenuation: Freq. (HHz)   Freq. (HHz) Attenuation (dB/100 m)   0.200 1.100   4.000 2.650   16.000 5.400   ax. Operating Voltage - UL: Voltage   Voltage 300 V RMS (NEC Type CMG)   600 V RMS (UL AWM Style 20201) 300V RMS (NEC Type PLTC)   ax. Recommended Current: Per Conductor	Om. Mutual Capacitance:   Capacitance (pF/ft)   8.5   ominal Velocity of Propagation:   VP (%)   78   om. Conductor DC Resistance:   DCR @ 20°C (Ohm/1000 ft)   16.0   Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C:	3.900 Ohm/1000 ft
0.200 0.270   4.000 0.670   16.000 1.370   ax. Attenuation   Freq. (MHz) Attenuation (dB/100 m)   0.200 1.100   4.000 2.650   16.000 5.400   ax. Operating Voltage - UL:   Voltage   300 V RMS (NEC Type CMG)   600 V RMS (UL AWM Style 20201)   300V RMS (NEC Type PLTC)   ax. Recommended Current:   Description Current   Per Conductor 2.3 Amps		
ax. Attenuation:   Freq. (MHz) Attenuation (dB/100 m)   0.200 1.100   4.000 2.650   16.000 5.400   ax. Operating Voltage - UL:   Voltage   300 V RMS (NEC Type CMG)   600 V RMS (UL AWM Style 20201)   300V RMS (NEC Type PLTC)   ax. Recommended Current:   Per Conductor   2.3 Amps	0.200   0.270     4.000   0.670	
Freq. (MHz) Attenuation (dB/100 m)   0.200 1.100   4.000 2.650   16.000 5.400   ax. Operating Voltage - UL:   Voltage   300 V RMS (NEC Type CMG)   600 V RMS (UL AWM Style 20201)   300V RMS (NEC Type PLTC)   ax. Recommended Current:   Description Current   Per Conductor 2.3 Amps		
Voltage   300 V RMS (NEC Type CMG)   600 V RMS (UL AWM Style 20201)   300V RMS (NEC Type PLTC)   ax. Recommended Current:   Description Current   Per Conductor 2.3 Amps	Freq. (MHz)   Attenuation (dB/100 m)     0.200   1.100     4.000   2.650	
300 V RMS (NEC Type CMG)   600 V RMS (UL AWM Style 20201)   300V RMS (NEC Type PLTC)   ax. Recommended Current:   Description Current   Per Conductor 2.3 Amps	ax. Operating Voltage - UL:	
Description   Current     Per Conductor   2.3 Amps	300 V RMS (NEC Type CMG)600 V RMS (UL AWM Style 20201)300V RMS (NEC Type PLTC)	
	Description Current	
Other Electrical Characteristic 2: Input Impedance/Unfitted Impedance 3 - 20 MHZ, 150 +-15 Ohms	Other Electrical Characteristic 1:	Capacitance Unbalance @ 1 kHz; Less than 1000 pF/km

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

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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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