

## 183079A Multi-Conductor - Continuous Armor DataBus® ISA/SP-50 PROFIBUS Cable

For more Information  
please call

1-800-Belden1



### Description:

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

### Physical Characteristics (Overall)

#### Conductor

##### AWG:

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

#### 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

Outer Jacket over Armor (y/n): Y

#### Outer Jacket over Armor

Outer Jacket Wall Thickness Over Armor: .055

#### Armor

Armor Type: Continuously Corrugated

Armor Material: Aluminum

Armor Thickness: .021

Diameter over Armor: .477

#### Overall Cabling

Overall Nominal Diameter: 14.910 mm

#### Pair

##### Pair Color Code Chart:

Number	Color
1	Red & Green

##### Pair Lay Length & Direction:

Lay Length (mm)
69.849725

### Mechanical Characteristics (Overall)

Operating Temperature Range: -30°C To +60°C

## 183079A Multi-Conductor - Continuous Armor DataBus® ISA/SP-50 PROFIBUS Cable

UL Temperature Rating:	60°C
Bulk Cable Weight:	252.994 Kg/Km
Max. Recommended Pulling Tension:	222.410 N
Min. Bend Radius (Install)/Minor Axis:	177.800 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

CEC/C(UL) Specification:	CMG
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):	04/18/2006
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
---------------	----

### 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)
.2	0.88587
4.0	2.19827
16.0	4.49497

#### Max. Attenuation:

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

METRIC MEASUREMENT VERSION

## 183079A Multi-Conductor - Continuous Armor DataBus® ISA/SP-50 PROFIBUS Cable

16.000	5.400
--------	-------

### Max. Operating Voltage - UL:

Voltage Description	
300V	CMG
600V	AWM

### Max. Recommended Current:

Description	Current
Per Conductor	2.3 Amps

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

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
183079A 0071640	500 MT	101.914 KG	VIOLET		ARMR 1PR#22FRFPEFRPESH PVC-SPCL
183079A 0072000	610 MT	127.914 KG	VIOLET	C Z	ARMORED 1PR #22 FRFPEFRPESH PVC

#### Notes:

C = 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.

Revision Number: 1    Revision Date: 05-30-2008

© 2011 Belden, Inc  
All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.