

# Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION

**BELDEN**  
SENDING ALL THE RIGHT SIGNALS

## 3119A Multi-Conductor - DeviceBus® for Phoenix Contact InterBus-S®



For more Information  
please call

1-800-Belden1



### General Description:

18 and 24 AWG stranded tinned copper conductors, PVC insulation (power), PE insulation (data), overall Beldfoil® shield (100% coverage) plus a tinned copper braid (90% coverage), polyurethane jacket.

### Physical Characteristics (Overall)

#### Conductor

AWG:

# Conductors	# Pairs	AWG	Stranding	Conductor Material	Dia. (mm)
	3	24	7x32	TC - Tinned Copper	0.610
3		18	7x26	TC - Tinned Copper	1.524

Total Number of Conductors:

9

#### Insulation

Insulation Material:

Insulation Material	AWG
PE - Polyethylene	24
PVC - Polyvinyl Chloride	18

#### 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	90

Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire Conductor Material
24	7x32	TC - Tinned Copper

Outer Shield Drain Wire Diameter:

.024

#### Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PUR - Polyurethane

#### Overall Cable

Overall Cabling Color Code Chart:

Number	Color	AWG
1	White & Brown	24
2	Red	18
3	Pink & Gray	24
4	Blue	18
5	Yellow & Green	24
6	Green/Yellow Stripe	18

Overall Nominal Diameter:

8.458 mm

### Mechanical Characteristics (Overall)

Operating Temperature Range:

-40°C To +80°C

UL Temperature Rating:

80°C (UL AWM Style 20233)

# Detailed Specifications & Technical Data



METRIC MEASUREMENT VERSION

## 3119A Multi-Conductor - DeviceBus® for Phoenix Contact InterBus-S®

Bulk Cable Weight:	92.268 Kg/Km
Max. Recommended Pulling Tension:	444.820 N
Min. Bend Radius/Minor Axis:	76.200 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

AWM Specification:	UL Style 20233 (300 V 80°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):	10/01/2005
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

#### Suitability

Sunlight Resistance:	High
----------------------	------

#### Plenum/Non-Plenum

Plenum (Y/N):	No
---------------	----

### Electrical Characteristics (Overall)

#### Nom. Characteristic Impedance:

Impedance (Ohm)
100

#### Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)
50.5274

#### Nominal Velocity of Propagation:

Description	VP (%)
24 AWG	66

#### Nom. Conductor DC Resistance:

Description	DCR @ 20°C (Ohm/km)
24	76.7754
18	21.6546

#### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)
8.8587

#### Max. Operating Voltage - UL:

Voltage
300 V RMS (UL AWM Style 20233)

#### Max. Recommended Current:

Description	Current
24 AWG	2.1
18 AWG	4.8

### Notes (Overall)

Notes: Oil Resistance: High

### Put Ups and Colors:

# Detailed Specifications & Technical Data



METRIC MEASUREMENT VERSION

## 3119A Multi-Conductor - DeviceBus® for Phoenix Contact InterBus-S®

Item #	Putup	Ship Weight	Color	Notes	Item Desc
3119A Y5P1000	1,000 FT	71.000 LB	GREEN Y5P	C	3PR #24 PE 3 #18 PVC SH PU
3119A Y5P500	500 FT	35.500 LB	GREEN Y5P	C	3 PR#24 PE 3#18 PVC SH PU

**Notes:**

C = CRATE REEL PUT-UP.

Revision Number: 1    Revision Date: 04-11-2008

© 2020 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 2014/35/EU).