# **Detailed Specifications & Technical Data**

### **ENGLISH MEASUREMENT VERSION**



# 8105 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422



For more Information please call

1-800-Belden1



### **General Description:**

24 AWG stranded (7x32) TC conductors, Datalene® insulation, twisted pairs, overall Beldfoil® (100% coverage) + TC braid shield (65% coverage), 24 AWG stranded TC drain wire, PVC jacket.

# **Physical Characteristics (Overall)**

## Conductor

AWG:



Total Number of Conductors:

10

#### Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Wall Thickness (in.)	
Datalene®	FPE - Foam Polyethylene	0.013	

#### **Outer Shield**

Outer Shield Material:

ı	Layer#	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
ı	1	Beldfoil®	Таре	Aluminum Foil-Polyester Tape w/Shorting Fold	100
ı	2		Braid	TC - Tinned Copper	65

## Outer Shield Drain Wire AWG:

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

### **Outer Jacket**

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (in.)
PVC - Polyvinyl Chloride	0.035

## **Overall Cable**

**Overall Nominal Diameter:** 

0.303 in.

#### Pair

#### Pair Color Code Chart:

Number	Color
1	White/Blue & Blue/White
2	White/Orange & Orange/White
3	White/Green & Green/White
4	White/Brown & Brown/White
5	White/Gray & Gray/White

## **Mechanical Characteristics (Overall)**

Operating Temperature Range:	-30°C To +80°C	
UL Temperature Rating:	80°C (UL AWM Style 2919)	
Bulk Cable Weight:	43 lbs/1000 ft.	
Max. Recommended Pulling Tension:	60.500 lbs.	
Min. Bend Radius/Minor Axis:	3.250 in.	

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

## Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CM
CEC/C(UL) Specification:	CM
AWM Specification:	UL Style 2919 (30 V 80°C)
EU Directive 2011/65/EU (ROHS II):	Yes

Page 1 of 3 01-05-2017

# **Detailed Specifications & Technical Data**





# 8105 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422

	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
Fla	me Test	
	UL Flame Test:	UL1685 UL Loading
Ple	num/Non-Plenum	
	Plenum (Y/N):	No
	Plenum Number:	88105

## **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:

Impedance (Ohm) 100

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)

Nominal Velocity of Propagation:

VP (%) 78

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 24

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

Max. Operating Voltage - UL:

Voltage Description 30 V RMS UL AWM Style 2919 300 V RMS

Max. Recommended Current:

Current 1.5 Amps per conductor @ 25°C

## Notes (Overall)

Notes: Datalene® insulation features include low dielectric constant and a dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight.

## **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8105 060100	100 FT	5.200 LB	CHROME		5 PR #24 FHDPE SH PVC
8105 0601000	1,000 FT	47.000 LB	CHROME	С	5 PR #24 FHDPE SH PVC
8105 060500	500 FT	25.000 LB	CHROME	С	5 PR #24 FHDPE SH PVC
8105 0605000	5,000 FT	240.000 LB	CHROME	CZ	5 PR #24 FHDPE SH PVC

#### Notes:

TOUGH.

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.

Page 2 of 3

# **Detailed Specifications & Technical Data**

### **ENGLISH MEASUREMENT VERSION**



# 8105 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422

Revision Number: 3 Revision Date: 08-15-2012

© 2017 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, 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 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

product. ´ Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 2014/35/EU).

Page 3 of 3