

## 9841 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-485 Applications

For more Information  
please call

1-800-Belden1



### General Description:

24 AWG stranded (7x32) TC conductors, polyethylene insulation, twisted pairs, overall Beldfoil® (100% coverage) + TC braid shield (90% coverage), 24 AWG stranded TC drain wire, PVC jacket.

### Usage (Overall)

**Suitable Applications:** RS-485, DMX-512

### Physical Characteristics (Overall)

#### Conductor

##### AWG:

# Pairs	AWG	Stranding	Conductor Material
1	24	7x32	TC - Tinned Copper

**Total Number of Conductors:** 2

#### Insulation

##### Insulation Material:

Insulation Material	Wall Thickness (mm)
PE - Polyethylene	0.584

#### Outer Shield

##### Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Beldfoil® (w/ shorting fold)	Tape	Aluminum Foil-Polyester Tape	100.000
2		Braid	TC - Tinned Copper	90.000

##### Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire Conductor Material
24	7x#32	TC - Tinned Copper

#### Outer Jacket

##### Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (mm)
PVC - Polyvinyl Chloride	0.889

#### Overall Cable

**Overall Cabling Fillers:** Fibrous Polypropylene

##### Overall Cabling Lay Length & Direction:

Length (mm)	Direction	Twists (twist/m)
63.500	Left Hand	15.749

**Overall Nominal Diameter:** 5.893 mm

#### Pair

##### Pair Color Code Chart:

Color
White/Blue and Blue/White

### Mechanical Characteristics (Overall)

**Operating Temperature Range:** -30°C To +80°C

**Bulk Cable Weight:** 53.575 Kg/Km

## 9841 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-485 Applications

Max. Recommended Pulling Tension:	321.605 N
Min. Bend Radius/Minor Axis:	63.500 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CM
NEC Articles:	800
CEC/C(UL) Specification:	CM
AWM Specification:	UL Style 2919 (30 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):	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 UL Loading
CSA Flame Test:	FT1

#### Suitability

Suitability - Indoor:	Yes
-----------------------	-----

#### Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	82841, 89841

### Electrical Characteristics (Overall)

#### Nom. Characteristic Impedance:

Impedance (Ohm)  
120

#### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)  
41.9968

#### Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m)  
75.463

#### Nominal Velocity of Propagation:

VP (%)  
66

#### Nominal Delay:

Delay (ns/m)  
5.2496

#### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)  
78.744

#### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)

## METRIC MEASUREMENT VERSION

### 9841 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-485 Applications

11.1554

#### Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
1.000	1.969

#### Max. Operating Voltage - UL:

Voltage	Description
300 V RMS	Type CM
30 V RMS	AWM2919

#### Max. Recommended Current:

Description	Current
10C temperature rise	2.1 Amps per conductor @ 25°C ambient

#### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9841 060100	100 FT	4.300 LB	CHROME		1 PR #24 PE SH PVC
9841 0601000	1,000 FT	40.000 LB	CHROME	C	1 PR #24 PE SH PVC
9841 06010000	10,000 FT	380.000 LB	CHROME	C	1 PR #24 PE SH PVC
9841 060500	500 FT	20.000 LB	CHROME	C	1 PR #24 PE SH PVC
9841 0605000	5,000 FT	200.000 LB	CHROME		1 PR #24 PE SH PVC

#### Notes:

C = CRATE REEL PUT-UP.

Revision Number: 2    Revision Date: 04-25-2017

© 2019 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).