Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION

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.

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
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

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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)
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:

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C = CRATE REEL PUT-UP.

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