

## 9681 Multi-Conductor - Low Capacitance Cable for EIA RS-232/422 Applications



For more Information  
please call

1-800-Belden1



### General Description:

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

### Physical Characteristics (Overall)

#### Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
4	24	7x32	TC - Tinned Copper

Total Number of Conductors: 8

#### Insulation

Insulation Material:

Insulation Material	Wall Thickness (in.)
PE - Polyethylene	0.016

#### Outer Shield

Outer Shield Material:

Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100

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: 0.307 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

### Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +80°C
Non-UL Temperature Rating:	80°C (UL AWM Style 2919)
Bulk Cable Weight:	39 lbs/1000 ft.
Max. Recommended Pulling Tension:	44 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
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes

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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
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### Plenum/Non-Plenum

Plenum (Y/N):	No
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## Electrical Characteristics (Overall)

### Nom. Characteristic Impedance:

Impedance (Ohm)
100

### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
15.5

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

Capacitance (pF/ft)
27.5

### Nominal Velocity of Propagation:

VP (%)
66

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
24

### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
14.4

### Max. Operating Voltage - UL:

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

### Max. Recommended Current:

Current
2.1 Amps per conductor @ 25°C

## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9681 0601000	1,000 FT	43.000 LB	CHROME	C	4 PR #24 PER FS PVC
9681 060500	500 FT	23.000 LB	CHROME	C	4 PR #24 PER FS PVC
9681 0605000	5,000 FT	220.000 LB	CHROME		4 PR #24 PER FS PVC

### Notes:

C = CRATE REEL PUT-UP.

Revision Number: 2    Revision Date: 09-10-2012

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