# **Detailed Specifications & Technical Data**

### **METRIC MEASUREMENT VERSION**



# 8125 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:

# Pairs	AWG	Stranding	<b>Conductor Material</b>
25	24	7x32	TC - Tinned Copper

Total Number of Conductors:

50

### Insulation

### **Insulation Material:**

Insulation Trade Name	Insulation Material	Wall Thickness (mm)
Datalene®	FPE - Foam Polyethylene	0.381

### **Outer Shield**

### **Outer Shield Material:**

Layer #	Outer Shield Trade Name	Туре	Outer Shield Material	Coverage (%)
1	Beldfoil®	Tape	Aluminum Foil-Polyester Tape w/Shorting Fold	100
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 (mm)
PVC - Polyvinyl Chloride	1.270

### **Overall Cable**

Overall Nominal Diameter: 16.053 mm

#### 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
6	Red/Blue & Blue/Red
7	Red/Orange & Orange/Red
8	Red/Green & Green/Red
9	Red/Brown & Brown/Red
10	Red/Gray & Gray/Red
11	Black/Blue & Blue/Black
12	Black/Orange & Orange/Black
13	Black/Green & Green/Black
14	Black/Brown & Brown/Black

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15	Black/Gray & Gray/Black
16	Yellow/Blue & Blue/Yellow
17	Yellow/Orange & Orange/Yellow
18	Yellow/Green & Green/Yellow
19	Yellow/Brown & Brown/Yellow
20	Yellow/Gray & Gray/Yellow
21	Purple/Blue & Blue/Purple
22	Purple/Orange & Orange/Purple
23	Purple/Green & Green/Purple
24	Purple/Brown & Brown/Purple
25	Purple/Gray & Gray/Purple

Mechanical	Characteristics	(Overall)
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Operating Temperature Range:	-30°C To +80°C
UL Temperature Rating:	80°C (UL AWM Style 2919)
Bulk Cable Weight:	260.435 Kg/Km
Max. Recommended Pulling Tension:	1247.720 N
Min. Bend Radius/Minor Axis:	165.100 mm

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

# **Applicable Standards & Environmental Programs**

CM
CM
UL Style 2919 (30 V 80°C)
Yes
Yes
Yes
Yes
01/01/2004
Yes
Yes
Yes
Yes
UL1685 UL Loading
No
88125

# **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:

Impedance (Ohm) 100

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m) 41.0125

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m) 72.182

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### Nominal Velocity of Propagation:

#### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 78.744

#### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 6.562

## Max. Operating Voltage - UL:

Voltage	Description
	UL AWM Style 2919
300 V RMS	CM

#### Max. Recommended Current:

Current
1 Amp 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
8125 060100	30 MT	9.389 KG	CHROME	С	25 PR #24 FHDPE SH PVC
8125 0601000	305 MT	86.637 KG	CHROME	С	25 PR #24 FHDPE SH PVC
8125 060500	152 MT	43.091 KG	CHROME	С	25 PR #24 FHDPE SH PVC

#### Notes:

C = CRATE REEL PUT-UP.

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