

## 8164 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422 &amp; Digital



For more Information  
please call

1-800-Belden1

**General Description:**

24 AWG stranded (7x32) TC conductors, Datalene® insulation, twisted pairs individually Beldfoil® shielded + overall 100% Beldfoil + TC braid shield (65% coverage), 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 Trade Name	Insulation Material	Wall Thickness (mm)
Datalene®	FPE - Foam Polyethylene	0.483

**Inner Shield****Inner Shield Material:**

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

**Inner Shield Drain Wire AWG:**

AWG
24

Inner Shield Drain Wire Stranding: 7x32

Inner Shield Drain Wire Conductor Material: TC - Tinned Copper

**Outer Shield****Outer Shield Material:**

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

**Outer Jacket****Outer Jacket Material:**

Outer Jacket Material	Nom. Wall Thickness (mm)
PVC - Polyvinyl Chloride	1.219

**Overall Cable**

Overall Nominal Diameter: 9.855 mm

**Pair****Pair Color Code Chart:**

Number	Color
1	Black & Red
2	Black & White
3	Black & Green
4	Black & Blue

**Mechanical Characteristics (Overall)**

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Operating Temperature Range:	-40°C To +60°C
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UL Temperature Rating:	60°C
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Bulk Cable Weight:	107.150 Kg/Km
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Max. Recommended Pulling Tension:	493.750 N
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Min. Bend Radius/Minor Axis:	101.600 mm
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## Applicable Specifications and Agency Compliance (Overall)

## Applicable Standards &amp; Environmental Programs

NEC/(UL) Specification:	CM
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CEC/C(UL) Specification:	CM
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AWM Specification:	UL Style 2493 (300 V 60°C)
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EU CE Mark:	Yes
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EU Directive 2000/53/EC (ELV):	Yes
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EU Directive 2002/95/EC (RoHS):	Yes
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EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004
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EU Directive 2002/96/EC (WEEE):	Yes
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EU Directive 2003/11/EC (BFR):	Yes
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CA Prop 65 (CJ for Wire & Cable):	Yes
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MII Order #39 (China RoHS):	Yes
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## Plenum/Non-Plenum

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

## Nom. Characteristic Impedance:

Impedance (Ohm)
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100
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## Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)
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41.0125
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## Nom. Capacitance Cond. to Other Conductor &amp; Shield:

Capacitance (pF/m)
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72.182
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## Nominal Velocity of Propagation:

VP (%)
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78
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## Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
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78.744
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## Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)
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10.4992
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Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C:	59.058 Ohm/km
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## Max. Operating Voltage - UL:

Voltage
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300 V RMS
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## Max. Recommended Current:

Current
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2.5 Amps per conductor @ 25°C
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**8164 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422 & Digital****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
8164 060100	30 MT	3.719 KG	CHROME		4 FS PR #24 FHDPE SH PVC
8164 0601000	305 MT	35.834 KG	CHROME	C	4 FS PR #24 FHDPE SH PVC
8164 060500	152 MT	17.917 KG	CHROME	C	4 FS PR #24 FHDPE SH PVC

**Notes:**

C = CRATE REEL PUT-UP.

**Test Reports****a) UL**

- i) UL Test Reports are available on-line through the UL Client Document Access web portal.
- ii) UL Inspection Reports are also available through the UL Client Document Access web portal.

**b) CSA**

- i) CSA "Descriptive Report and Test Results" documents are available on the CSA Gateway Portal.
- ii) CSA Inspection Reports are maintained on the CSA issued 'flash drive' at each manufacturing location.

\* other test data may be available if requested at time of order.

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