



Product: [8164](#)

RS232/422 Low Cap, #24-4pr, FPO, Indiv.& O/A Foils+Braid, PVC Jkt, CM, 100Ω

Product Description

Computer EIA RS-232/422, Digital Audio Cable, 24 AWG stranded (7x32) tinned copper conductors, Datalene® insulation, 4 twisted pairs individually Beldfoil® shielded + overall 100% Beldfoil® + tinned copper braid shield (65% coverage), drain wire, PVC jacket.

Technical Specifications

Product Overview

Suitable Applications:	RS-232 Extended Distance & RS-422 Applications; Computer Communications; Low Voltage Analog signals (4-20ma, 0-10v, ...); Low Voltage Digital Control (24v, ...); Digital Audio; Panel Wiring
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Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	No. of Pairs
Pair(s)	24	7x32	TC - Tinned Copper	4

Conductor Count:	8
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Insulation

Element	Material	Material Trade Name	Nominal Wall Thickness
Pair(s)	PE - Polyethylene (Foam)	Datalene®	0.0185 in

Color Chart

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

Inner Shield Material

Element	Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Pair(s)	Tape	Alum / Poly	Beldfoil® (Z-Fold®)	100 %	TC - Tinned Copper	24	7x32

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Alum / Poly	Beldfoil®	100 %
Braid	2	TC - Tinned Copper		65 %

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.388 in	0.048 in

Electrical Characteristics

Conductor DCR

Individual Pair Nominal Shield DCR	Nominal Conductor DCR	Nominal Outer Shield DCR
18 Ohm/1000ft	24 Ohm/1000ft	3.2 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
12.5 pF/ft	22 pF/ft

Impedance

Nominal Characteristic Impedance
100 Ohm

Delay

Max. Delay Skew	Nominal Velocity of Propagation (VP) [%]
78 ns/100m	78 %

Current

Max. Recommended Current [A]
2.5 Amps per conductor @ 25°C A

Voltage

UL Description	UL Voltage Rating
CM	300 V
UL AWM 2493	300 V

Temperature Range

UL Temp Rating:	60°C (UL AWM 2493)
Operating Temp Range:	-40°C to +60°C

Mechanical Characteristics

Bulk Cable Weight:	72 lbs/1000ft
Max Recommended Pulling Tension:	111 lbs
Min Bend Radius/Minor Axis:	4 in

Standards

NEC/(UL) Specification:	CM
CEC/C(UL) Specification:	CM
UL AWM Style:	2493
CPR Euroclass:	Eca

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
MII Order #39 (China RoHS):	Yes

Flammability, LS0H, Toxicity Testing

ISO/IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V

Plenum/Non-Plenum

Plenum (Y/N):	No
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Part Number

Variants

Item #	Color	Putup Type	Length	UPC/EAN
8164.0030	Chrome	Reel	30 m	8719605017970
8164 060100	Chrome	Reel	100 ft	612825195634
8164.00152	Chrome	Reel	152 m	8719605017963

8164.00305	Chrome	Reel	305 m	8719605017987
8164 060500	Chrome	Reel	500 ft	612825195658
8164 0601000	Chrome	Reel	1,000 ft	612825195641

Footnote: C - CRATE REEL PUT-UP.

Product Notes

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.

History

Update and Revision: Revision Number: 0.257 Revision Date: 05-19-2020

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