



Product: [8102](#) 

RS232/422 Low Cap, #24-2pr, FPO, O/A Foil+Braid, PVC Jkt, CM, 100Ω

Product Description

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

Technical Specifications

Product Overview

Suitable Applications:	rs-232 extended distance applications; rs-422 applications; computer communications; low voltage analog signals (4-20ma, 0-10v, ...); low voltage digital control (24v, ...); line level 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	2

Conductor Count:	4
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Insulation

Element	Material	Material Trade Name	Nominal Wall Thickness
Pair(s)	PE - Polyethylene (Foam)	Datalene®	0.0125 in

Color Chart

Number	Color
1	White/Blue Stripe & Blue/White Stripe
2	White/Orange Stripe & Orange/White Stripe

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	1	Alum / Poly	Beldfoil®	100 %	TC - Tinned Copper	24	7x32
Braid	2	TC - Tinned Copper		65 %			

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.270 in	0.035 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
24 Ohm/1000ft	4.6 Ohm/1000ft

Capacitance

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

Inductance

Nominal Inductance

0.201 μH/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]
1.8 Amps per conductor @ 25°C A

Voltage

UL Description	UL Voltage Rating
CM	300 V
UL AWM 2919	30 V

Temperature Range

UL Temp Rating:	80°C (UL AWM 2919)
Operating Temp Range:	-30°C to +80°C

Mechanical Characteristics

Bulk Cable Weight:	34 lbs/1000ft
Max Recommended Pulling Tension:	27.5 lbs
Min Bend Radius/Minor Axis:	2.75 in

Standards

NEC Articles:	800
NEC/(UL) Specification:	CM
CEC/C(UL) Specification:	CM
UL AWM Style:	2919
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

Suitability

Suitability - Indoor:	Yes
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Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1685 UL Loading
ISO/IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V (CM), 30 V (UL AWM 2919)

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	88102

Part Number

Variants

Item #	Color	Putup Type	Length	UPC/EAN
8102.0030	Chrome	Reel	30 m	8719605017680
8102 060100	Chrome	Reel	100 ft	612825194743
8102.01152	Chrome	Reel	152 m	8719605017703
8102.00305	Chrome	Reel	305 m	8719605017697
8102 060500	Chrome	Reel	500 ft	612825194774
8102 0601000	Chrome	Reel	1,000 ft	612825194750
8102.001000	Chrome	Reel	1,000 m	8719605017673
8102 0605000	Chrome	Reel	5,000 ft	612825194781
8102 06010000	Chrome	Reel	10,000 ft	612825194767

Footnote:	C - CRATE REEL PUT-UP.
Footnote:	Y - FINAL PUT-UP LENGTH MAY VAR -10% TO +20% FROM LENGTH SHOWN. MAY CONTAIN 2 PIECES. MINIMUM LENGTH OF ANY ONE PIECE IS 1500'.

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.
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History

Update and Revision:	Revision Number: 0.269 Revision Date: 05-19-2020
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