

Product: 8178

RS232/422 Low Cap, #24-18pr, 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, twisted pairs individually Beldfoil® shielded + overall 100% Beldfoil® + tinned copper braid shield (65% coverage), drain wire, PVC jacket.

Technical Specifications

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
24	7x32	TC - Tinned Copper	18

Conductor Count:	36

Insulation

Material	Material Trade Name	Nominal Wall Thickness
FPE - Foamed Polyethylene	Datalene®	0.019 in

Color Chart

Number	Color
1	Black & Red
2	Black & White
3	Black & Green
4	Black & Blue
5	Black & Yellow
6	Black & Brown
7	Black & Orange
8	Red & White
9	Red & Green
10	Red & Blue
11	Red & Yellow
12	Red & Brown
13	Red & Orange
14	Green & White
15	Green & Blue
16	Green & Yellow
17	Green & Brown
18	Green & Orange

Inner Shield Material

Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	Aluminum Foil-Polyester Tape	Beldfoil®	100 %	TC - Tinned Copper	24	Stranded

Outer Shield Material

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

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.696 in	0.065 in

Electrical Characteristics

Conductor DCR

Individual Pair Nominal Shield DCR	Nominal Conductor DCR	Nominal Outer Shield DCR
18 Ohm/1000ft	24 Ohm/1000ft	2.6 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]
1 Amp per conductor @ 25°C A

Voltage

UL Voltage Rating
300 V RMS

Temperature Range

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

Mechanical Characteristics

Bulk Cable Weight:	214 lbs/1000ft
Max Recommended Pulling Tension:	364 lbs
Min Bend Radius/Minor Axis:	7 in

Dimensions (WxHxD)

Width	Height
8.5	8.465

Standards

NEC/(UL) Specification:	CM
CEC/C(UL) Specification:	CM

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
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1581 Vertical Tray
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No

Part Number

Variants

Item #	Color	UPC	Length	Footnote
8178 060100	Chrome	612825195856	100 ft	C
8178 0601000	Chrome	612825195863	1,000 ft	C

Footnote:	C - CRATE REEL PUT-UP.

History

Update and Revision:	Revision Number: 0.246 Revision Date: 08-22-2019

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