Belden

Product: 9831 ⧉

RS232/422 Low Cap, #24-4pr, PE, O/A Foil+Braid, PVC Jkt, CM, 100Ω

Product Description

Computer EIA RS-232/422 Cable, 4-Pair, 24 AWG stranded (7x32) tinned copper conductors, polyethylene insulation, 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

Construction Details

Conductor

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

Insulation

Element	Material	Nom. Thickness	Color Code
Pair(s)	PE - Polyethylene	0.0155 in (0.394 mm)	White/Blue Stripe & Blue/White Stripe, White/Orange Stripe & Orange/White Stripe, White/Green Stripe & Green/White Stripe, White/Brown Stripe & Brown/White Stripe

Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	24 AWG (7x32) TC
Braid	Tinned Copper (TC)	65%	

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
PVC - Polyvinyl Chloride	0.035 in (0.89 mm)	0.330 in (8.38 mm)

Overall Cable Diameter (Nominal):	0.330 in (8.38 mm)

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Nom. Characteristic Impedence	Nom. Delay	Nom. Velocity of Prop.	Max. Current
Pair(s)	24 Ohm/1000ft (79 Ohm/km)	15.5 pF/ft (50.9 pF/m)	27.5 pF/ft (90.2 pF/m)	100 Ohm	1.6 ns/ft	66%	1.68 Amps per Conductor at 25ºC

Nom Outer Shield DCR:	3.9 Ohm/1000ft (13 Ohm/km)

Voltage

UL Voltage Rating
300 V (CM), 30 V (UL AWM 2919)

Mechanical Characteristics

Temperature

UL Temperature	Operating

80°C (UL AWM 2919)	-30°C to +80°C

Bulk Cable Weight:	53 lbs/1000ft (79 kg/km)

Standards and Compliance

Environmental Suitability:	Indoor
Flammability / Reaction to Fire:	UL1685 UL Loading, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	Article 800, CM
AWM Compliance:	AWM 2919
CEC / C(UL) Compliance:	CM
European Directive Compliance:	EU CE Mark, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)

History

Update and Revision:	Revision Number: 0.327 Revision Date: 09-07-2025

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
9831 060100	Chrome	Reel	100 ft	612825259268	
9831 060500	Chrome	Reel	500 ft	612825259282	
9831 0601000	Chrome	Reel	1,000 ft	612825259275	C

Footnote:	C - CRATE REEL PUT-UP.