Belden



Product: 89732

RS232/422 Low Cap, #24-9pr, FFEP, Indiv. Foil, PVDF Jkt, CMP, 100Ω

Product Description

Computer EIA RS-232/422, Digital Audio Cable, 9-Pair, 24 AWG stranded (7x32) tinned copper conductor, foam FEP insulation, individually shielded pairs with Beldfoil® (100% coverage), 24 AWG stranded tinned copper drain wire, overall fluorocopolymer jacket, plenum rated

Technical Specifications

Product Overview

Suitable Applications:	extreme high temperature environments; RS-232 extended distance applications; RS-422 applications; computer communication; 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)	9	24 AWG	7x32	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Pair(s)	FEP - Fluorinated Ethylene Propylene (Foam)	0.019 in (0.48 mm)	0.062 in (1.6 mm)	Western Electric Standard
				Red, Green, Blue

Inner Shield

Element	Shield Type	Material	Coverage	Drainwire Type	Notes
Pair(s)	Tape	Bi-Laminate (Alum+Poly)	100%	24 AWG (7x32) TC	each pair

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
PVDF - Polyvinylidene Fluoride	0.016 in (0.41 mm)	0.433 in (11.0 mm)

Overall Cable Diameter (Nominal):	0.433 in (11.0 mm)

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Inner Shield DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Nom. Characteristic Impedence	Nom. Delay	Nom. Inductance	Nom. Velocity of Prop.	Max. Current
Pair(s)	28.8 Ohm/1000ft	16.19 Ohm/1000ft (53.12 Ohm/km)	13.5 pF/ft (44.3 pF/m)	22.5 pF/ft (73.8 pF/m)	100 Ohm	1.3 ns/ft	0.24 µH/ft (0.79 µH/m)	76%	1.96 Amps per Conductor at 25°C

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss (Attenuation)
0.384	0.74 dB/100ft
0.7056	0.87 dB/100ft
0.768	0.89 dB/100ft
1.024	0.95 dB/100ft
1.4112	1.03 dB/100ft
1.536	1.06 dB/100ft
2.048	1.17 dB/100ft

2.8224	1.37 dB/100ft
3.072	1.44 dB/100ft
4.096	1.67 dB/100ft
5.6448	1.89 dB/100ft
6.144	1.96 dB/100ft
8.192	2.26 dB/100ft
11.2896	2.59 dB/100ft
12.288	2.71 dB/100ft
24.576	3.73 dB/100ft

Voltage

UL Voltage Rating
300 V (CMP)

Mechanical Characteristics

Temperature

UL Temperature	Operating
150°C	-15°C to +150°C

Bend Radius

Stationary Min.	Installation Min.
4.3 in (110 mm)	4.3 in (110 mm)

Max. Pull Tension:	104.5 lbs (47.40 kg)
Bulk Cable Weight:	92 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor
Flammability / Reaction to Fire:	NFPA 262 (UL910), FT6
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	Article 800, CMP
CEC / C(UL) Compliance:	CMP
European Directive Compliance:	EU CE Mark, REACH, 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)
Non-Plenum Number:	9732

History

Update and Revision:	Revision Number: 0.492 Revision Date: 09-07-2025

Part Numbers

Variants

Item #	Color	UPC	Footnote
89732 0081000	Gray	612825221197	C

Footnote:	C - CRATE REEL PUT-UP.

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