Product: 8167NH

Life Cycle Status: Capability

RS232/422 Low Cap, #24-7pr, 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, 7 twisted pairs individually Beldfoil® shielded + overall 100% Beldfoil® + tinned copper braid shield (65% coverage), drain wire, LSZH 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

Construction Details

Conductor

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

Insulation

Element	Material	Nom. Thickness	Color Code
Pair(s)	PE - Polyethylene (Foam)	0.019 in (0.48 mm)	Black & Red, Black & White, Black & Green, Black & Blue, Black & Yellow, Black & Brown, Black & Orange

Inner Shield

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

Outer Shield

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

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant)	0.048 in (1.2 mm)	0.446 in (11.3 mm)

Overall Cable Diameter (Nominal):	0.446 in (11.3 mm)

Electrical Characteristics

Electricals

Element	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Nom. Characteristic Impedence	Nom. Velocity of Prop.	Max. Current
Pair(s)	12.5 pF/ft (41.0 pF/m)	22 pF/ft (72 pF/m)	100 Ohm	78%	1.6 Amps per Conductor at 25ºC

Voltage

Voltage Rating
300 V

Mechanical Characteristics

Temperature

Operating	Installation
-40°C to +80°C	-15°C To +80°C

Bend Radius

Stationary Min.	Installation Min.
4.5 in (110 mm)	4.5 in (110 mm)

Max. Pull Tension:	160 lbs (73 kg)

Standards and Compliance

Environmental Suitability:	Indoor
Flammability / Reaction to Fire:	IEC 60332-3-24, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca
ISO/IEC Compliance:	IEC 61034-2 - Smoke Density Min Transmittance = 60%
CENELEC Compliance:	EN 50290-2-20
European Halogen Free Standards:	IEC 62821-1 Halogen Free Compliance = Yes, IEC 60754-1 - Halogen Amount = Zero, IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity = 2.5 µS/mm, IEC 60754-2 - Halogen Acid Gas Amount - Min. pH = 4.3
European Directive Compliance:	EU CE Mark, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
UK Regulation Compliance:	UKCA Mark

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. This is a preliminary Technical Design Specification (TDS). The minimum business quantity to offer is 3km for the first order. This product will have Chrome as standard color and 305mt as standard put-ups. Additional options for colors and put-ups are available on special request. The estimated production lead time for the first order will be similar to the production lead time of 8167. Please liaise with your Belden representative for confirmation.

History

Update and Revision:	Revision Number: 0.1 Revision Date: 08-22-2025