



Product: [4306FES](#) 

Life Cycle Status: Capability

Security & Sound, 8 Conductor 18 AWG BC, LSZH, Shielded, SWA, Eca

Product Description

Security & Commercial Audio Cable, 8-18 AWG stranded bare copper conductors with polypropylene insulation, Beldfoil® shield, LSZH innrt jacket, Steel Wire Armour, LSZH outer jacket, CPR Eca

Technical Specifications

Product Overview

Suitable Applications:	Security System, Intercom/PA, Audio/Speaker, Power-Limited Controls
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Product Life Cycle

Life Cycle:	Capability - the product is not yet standardly available for orders but can be manufactured
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Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material
Conductor(s)	2	18 AWG	7x26	BC - Bare Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Conductor(s)	PP - Polypropylene	0.2 mm (0.0079 in)	1.5 mm (0.059 in)	Black, Red, White, Green, Brown, Blue, Orange, Yellow

Inner Shield

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

Outer Shield

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

Inner Jacket

Material	Nom. Thickness	Nom. Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant)	0.8 mm (0.031 in)	7.1 mm (0.28 in)

Armor

Armor Type & Material	Armor Thickness	Coverage
SWA - Steel Wire Armor	0.9 mm	95%

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant)	1.3 mm (0.051 in)	11.5 mm (0.453 in)

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Max. Current
Conductor(s)	21.3 Ohm/km (6.49 Ohm/1000ft)	110 pF/m (34 pF/ft)	200 pF/m (61 pF/ft)	5 Amps per Conductor

Nom Outer Shield DCR:	23.6 Ohm/km (7.19 Ohm/1000ft)
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Voltage

Voltage Rating
300 V

Mechanical Characteristics

Temperature

Operating	Installation	Storage
-20°C To +70°C	-20°C To +70°C	-30°C To +70°C

Bend Radius

Stationary Min.	Installation Min.
20.75 mm (0.8169 in)	41.5 mm (1.63 in)

Standards and Compliance

Environmental Suitability:	Indoor/Outdoor - Euroclass Eca, Indoor, Outdoor, Non-Halogenated, Sunlight Resistance - UL 1581 sec 1200 Black Only
Flammability / Reaction to Fire:	IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca
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)
UK Regulation Compliance:	UKCA Mark

Product Notes

Notes:	This is a preliminary Technical Design Specification (TDS). The minimum business quantity to offer is 3km for the first order. Please liaise with your Belden representative for confirmation.
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History

Update and Revision:	Revision Number: 0.5 Revision Date: 05-20-2026
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