



# Product: <u>4301FE</u> ☑

Security & Sound, 3 Conductor 18 AWG BC, LSZH, Shielded, Eca

# **Product Description**

Security & Commercial Audio Cable, 3-18 AWG stranded bare copper conductors with polypropylene insulation, Beldfoil® shield, LSZH jacket with ripcord, CPR Eca

# **Technical Specifications**

# **Product Overview**

WG       Stranding       Material       Nominal Diameter       No. of Conductors         8       7x26       BC - Bare Copper       1.22 mm       3         Sourductor Count:         Subtrom         Type       Material       Nominal Diameter       Diameter +/- Tolerance       Nominal Wall Thickness         Subtrom         Type       Material       Nominal Diameter       Diameter +/- Tolerance       Nominal Wall Thickness         Subtrom         Object Color         Vire 1       Black         Vire 2       Red         Vire 3       White         Type       Material       Material Trade Name       Coverage [%]       Thickness of Foil       Drainwire Material       Drainwire AWG         Stel - Low Smoke Zero Halogen       Katerial       Nominal Diameter       Nominal Wall Thickness       Ripcord         Stel - Low Smoke Zero Halogen       Katerial       Nominal Diameter       Nominal Wall Thickness       Ripcord         Stel - Low Smoke Zero Halogen       Katerial       Nominal Diameter       Nominal Wall Thickness       Ripcord	Mile       Stranding       Material       Nominal Diameter       No. of Conductors         8       7x26       BC - Bare Copper       1.22 mm       3         Sonductor Count:       3       3         sulation         Type       Material       Nominal Diameter       Diameter +/- Tolerance       Nominal Wall Thickness         sulation         PP - Polypropylene       1.5 mm       0.05 mm       0.2 mm         ober Chart         water Shied         Vint 1       Black         Vint 1       Black         ype       Material Trade Name       Coverage [%]       Thickness of Foil       Drainwire AWG         Just colspan="2">Subid         Vint 1       Black         Withit         Subid       100%       9 µm       To - Timed Copper       AWG24/7         Material Trade Name       Coverage [%]       Thickness       Flipcord         Subid       100%       9 µm       To - Timed Copper       AWG24/7         Subid       100%       9 µm       Yes         Subid       Subid<		pplications	s:			Security S	ystem, Intercom/PA	, Audio/Sp	eaker, Powe	er-Limited Controls,	Noisy Enviro
binductor WKG Stranding Material Nominal Diameter No. of Conductors 8 7x26 BC - Bare Copper 1.22 mm 3 Conductor Count: 3 Sulation Type Material Nominal Diameter Diameter +/- Tolerance Nominal Wall Thickness sulation PP - Polypropylene 1.5 mm 0.05 mm 0.2 mm Olof material Nominal Diameter 0.02 mm Olof material Nominal Diameter V Tolerance Nominal Wall Thickness bloc Chart Wre 1 Black Wre 2 Red Wre 3 White Uter Shield  Ype Material Material Trade Name Coverage [%] Thickness of Foll Drainwire Material Drainwire AWG app Bi-Laminate (Alum+Poly) Beldfoll® 100% 9 μm TC - Tinned Copper AWG24/7  Uter Jacket  Xet Field Xet Fi	Amountability       Naterial       Nominal Diameter       No. of Conductors         8       7x26       BC - Bare Copper       1.22 mm       3         Sonductor Count:       3       3         sulation         Type       Material       Nominal Diameter +/- Tolerance       Nominal Wall Thickness         sulation         PP - Polypropylene       1.5 mm       0.05 mm       0.2 mm         object Chart         tumber       Color         Vire 1       Black         Vire 3       Vine 1         Vire 4       Black         Vire 4       Black         Vire 5       Diameter Nominal Diameter       Nominal Colspan= 4WG24/7         Vire 4       Nominal Diameter       Nominal Vire 4WG         State rial       Nominal Diameter       Nominal Vire 4WG24/7         State rial Trade Name       Coverage [%]       Thickness of Foil       Drainwire Material       Drainwire AWG <th></th> <th></th> <th></th> <th>(<b>a</b>)</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>				( <b>a</b> )							
Name Naterial Material Naterial Nate	NVG       Stranding       Material       Nominal Diameter       No. of Conductors         8       7x26       BC - Bare Copper       1.22 mm       3         Sonductor Count:       3       3         sulation         PP - Polypropylene       1.5 mm       0.05 mm       0.2 mm         olspan="4">olspan="4">olspan=ter +/- Tolerance       Nominal Wall Thickness         nsulation       PP - Polypropylene       1.5 mm       0.2 mm         olspan="4">olspan=ter +/- Tolerance       Nominal Wall Thickness         Nominal Diameter // Tolerance         Nominal Diameter +/- Tolerance         Nominal Vall Thickness         Nominal Mail Thickness         Nominal Diameter +/- Tolerance         Nominal Mail Thickness         Nominal Mail Thickness of Foll       Drainwire AWG         Nominal Diameter         Nominal Diameter       Nominal Mail Thickness       Ripcord         Nominal Diameter       Nominal Wall Thickness       Ripcord         Nominal Diameter       Nominal Wall Thickness       Ripcord         State         State       Nominal Diamet	hysica	l Chara	cteristic	s (Overall)							
Name       Color       Nominal Diameter       Diameter +/- Tolerance       Nominal Wall Thickness         Insulation       PP - Polypopylene       1.5 m       0.0 m       0.2 mm         Olor Chart         Number       Color         Wire 1       Black       Nortical       Naterial       Naterial       Naterial       Nortical       Nortical       Nortical         Number       Color         Wire 2       Red       Nortical       Norti	18         7x26         BC - Bare Copper         1.22 mm         3           Solution           Solution           Type         Material         Nominal Diameter +/- Tolerance         Nominal Vall Thickness           Solution         PP - Pulypropytene         1.5 mm         0.25 mm         0.2 mm           Olor That           Number Color           Vire 1         Black         Material         Material Trade Name         Coverage [%]         Thickness of Foil         Drainwire Material         Drainwire AWG           Solution           Vire 2         Red           Vire 3         White         100%         9 µm         TC - Tinned Copper         AWG24/7           Vore Solution         Material         Nominal Diameter         Nominal Wall Thickness         Ripcord           Solution         Quere Solution           Solution         Quere Solution	onductor										
Conductor Count:       3         rsulation       Type       Material       Nominal Diameter       Diameter +/- Tolerance       Nominal Wall Thickness         Insulation       PP - Polypropylene       1.5 mm       0.05 mm       0.2 mm         Solor Chart         Number       Color         Wire 1       Black         Wire 2       Red         Wire 3       White         Puter Shield       Type         Material       Material Trade Name       Coverage [%]       Thickness of Foil       Drainwire Material       Drainwire AWG         Type       Material       Material Trade Name       Coverage [%]       Thickness of Foil       Drainwire Material       Drainwire AWG         Type       Material (Alum +Poly)       Beldfoil®       100%       9 µm       TC - Tinned Copper       AWG24/7         Water Jacket       Image: State S	20nductor Count:       3         sulation         Type       Material       Nominal Diameter       Diameter +/- Tolerance       Nominal Wall Thickness         nsulation       PP - Polypropylene       1.5 mm       0.05 mm       0.2 mm         olor Chart         Wine 1       Black Wire 2       Red         Wire 1       Black Wire 3       White         uter Shield       Ver Shield         Nominal Diameter       Nominal Diameter       Nominal Mail Thickness of Foil       Drainwire Material       Drainwire AWG         Spe       Material       Material Trade Name       Coverage [%]       Thickness of Foil       Drainwire Material       Drainwire AWG         Spe       Bi-Laminate (Alum+Poly)       Beldfoil®       100%       9 µm       TC - Tinned Copper       AWG24/7         uter Jacket       Szth - Low Smoke Zero Halogen (Flame Retardant)       4.35 mm       0.4 mm       Yes         Table Notes:       Ripcord       Nominal Diameter       Nominal Wall Thickness       Ripcord         construction and Dimensions       Ripcord provided under sheath       Start       Low Smoke Zero Halogen (Flame Retardant)       4.35 mm       0.4 mm       Yes	AWG St	randing	Materia	I Nominal Di	ameter	No. of Cond	luctors				
Insulation         Type       Material       Nominal Diameter       Diameter +/- Tolerance       Nominal Wall Thickness         Insulation       PP - Polypropylene       1.5 mm       0.05 mm       0.2 mm         Solor Chart         Number       Color         Wire 2       Red         Wire 3       White         Polypropylene 1.5 mm         Voor Sheld         Type       Material       Material Trade Name       Coverage [%]       Thickness of Foil       Drainwire Material       Drainwire AWG         Type       Material       Material Trade Name       Coverage [%]       Thickness of Foil       Drainwire Material       Drainwire AWG         Tape       Bi-Laminate (Alum+Poly)       Beldfoil®       100%       9 µm       TC - Tinned Copper       AWG24/7         Noter Jacket         Material       Nominal Diameter       Nominal Wall Thickness       Ripcord         LSZH - Low Smoke Zero Halogen (Flame Retardant)       4.35 mm       0.4 mm       Yes	sulation          Type       Material       Nominal Diameter       Diameter +/- Tolerance       Nominal Wall Thickness         insulation       PP - Polypropylene       1.5 mm       0.05 mm       0.2 mm         olor Chart         Wine 1       Black         Wire 2       Red         Wire 3       White         uter Shidd         Ypp       Material       Material Trade Name       Coverage [%]       Thickness of Foil       Drainwire Material       Drainwire AWG         Tape       Bi-Laminate (Alum+Poly)       Beldfoil@       100%       9 µm       TC - Tinned Copper       AWG24/7         uter Jackt       Material       Nominal Diameter       Nominal Wall Thickness       Ripcord         SZH - Low Smoke Zero Halogen (Flame Retardant)       4.35 mm       0.4 mm       Yes         Table Notes:       Ripcord       Ripcord under sheath       Yes         Construction and Dimensions       Ripcord sheath       Start sheath       Yes	18 7x	26	BC - Bare C	opper 1.22 mm		3					
Insulation PP - Polypropylene 1.5 mm 0.05 mm 0.2 mm  Color Chart  Number Color Wire 1 Black Wire 2 Red Wire 3 White  Coverage [%] Thickness of Foil Drainwire Material Drainwire AWG Tape Bi-Laminate (Alum+Poly) Beldfoil® 100% 9 µm TC - Tinned Copper AWG24/7  Doter Jack  Katerial Nominal Diameter Nominal Wall Thickness Ripcord LSZH - Low Smoke Zero Halogen (Flame Retardant) 4.35 mm 0.4 mm Yes	Type       Material       Nominal Diameter       Diameter +/- Tolerance       Nominal Wall Thickness         Insulation       PP - Polypropylene       1.5 mm       0.05 mm       0.2 mm         olor Chart         Number       Color         Vire 1       Black         Vire 2       Red         Vire 3       White         uter Shield       Material       Material Trade Name       Coverage [%]       Thickness of Foil       Drainwire Material       Drainwire AWG         Tape       Bi-Laminate (Alum+Poly)       Beldfoil®       100%       9 µm       TC - Tinned Copper       AWG24/7         uter Jacket	Conductor	r Count:				3					
Insulation PP - Polypropylene 1.5 mm 0.05 mm 0.2 mm Color Chart  Number Color Wire 1 Black Wire 2 Red Wire 3 White  Deter Shiel  Type Material Material Trade Name Coverage [%] Thickness of Foil Drainwire Material Drainwire AWG Tape Bi-Laminate (Alum+Poly) Beldfoil® 100% 9 µm TC - Tinned Copper AWG24/7  Deter Shiel  Number Coverage [%] Nominal Diameter Nominal Wall Thickness Ripcord LSZH - Low Smoke Zero Halogen (Flame Retardant) 4.35 mm 0.4 mm Yes	nsulation PP - Polypropylene 1.5 mm 0.05 mm 0.2 mm olor Chart Wire 1 Black Wire 2 Red Wire 3 White uter Shield Type Material Material Trade Name Coverage [%] Thickness of Foil Drainwire Material Drainwire AWG Tape Bi-Laminate (Alum+Poly) Beldfoil® 100% 9 µm TC - Tinned Copper AWG24/7 uter Jacket SZH - Low Smoke Zero Halogen (Flame Retardant) 4.35 mm 0.4 mm Yes Fable Notes: Ripcord Fable Notes: Ripcord provided under sheath Fable Notes: Ripcord Dimensions	sulation										
Number       Color         Wire 1       Black         Wire 2       Red         Wire 3       White         Outer Shield       Tape       Material       Material Trade Name       Coverage [%]       Thickness of Foil       Drainwire Material       Drainwire AWG         Type       Material       Material Trade Name       Coverage [%]       Thickness of Foil       Drainwire Material       Drainwire AWG         Tape       Bi-Laminate (Alum+Poly)       Beldfoil®       100%       9 µm       TC - Tinned Copper       AWG24/7         Outer Jacket       Material       Nominal Diameter       Nominal Wall Thickness       Ripcord         Material       Nominal Diameter       Nominal Wall Thickness       Ripcord         Low Smoke Zero Halogen (Flame Retardant)       4.35 mm       0.4 mm       Yes	olor Chart Number Color Nire 1 Black Nire 2 Red Nire 3 White uter Shield Type Material Material Trade Name Coverage [%] Thickness of Foil Drainwire Material Drainwire AWG rape Bi-Laminate (Alum+Poly) Beldfoil® 100% 9 µm TC - Tinned Copper AWG24/7 uter Jacket SZH - Low Smoke Zero Halogen (Flame Retardant) 4.35 mm 0.4 mm Yes Fable Notes: Ripcord provided under sheath Fable Notes: Ripcord provided under sheath	Туре	Ma	terial	Nominal Diameter	Diam	eter +/- Tolera	ance Nominal Wal	ll Thickne	ss		
Number       Color         Wire 1       Black         Wire 2       Red         Wire 3       White    Substrate A State A	Number       Color         Vire 1       Black         Vire 2       Red         Vire 3       White         uter Shield       Naterial         Type       Material       Material Trade Name       Coverage [%]       Thickness of Foil       Drainwire Material       Drainwire AWG         Tape       Bi-Laminate (Alum+Poly)       Beldfoil@       100%       9 µm       TC - Tinned Copper       AWG24/7         uter Jacket	Insulation	PP - Pol	propylene	1.5 mm	0.05 r	mm	0.2 mm				
Material     Nominal Diameter     Nominal Wall Thickness     Ripcord       LSZH - Low Smoke Zero Halogen (Flame Retardant)     4.35 mm     0.4 mm     Yes	Material     Nominal Diameter     Nominal Wall Thickness     Ripcord       .SZH - Low Smoke Zero Halogen (Flame Retardant)     4.35 mm     0.4 mm     Yes       Table Notes:     Ripcord provided under sheath	uter Shie	ld									
MaterialNominal DiameterNominal Wall ThicknessRipcordLSZH - Low Smoke Zero Halogen (Flame Retardant)4.35 mm0.4 mmYes	Material     Nominal Diameter     Nominal Wall Thickness     Ripcord       SZH - Low Smoke Zero Halogen (Flame Retardant)     4.35 mm     0.4 mm     Yes       Table Notes:     Ripcord provided under sheath	Туре	Mate	rial	Material Trade N	ame (	Coverage [%]	Thickness of Foil	Drainwir	e Material	Drainwire AWG	
MaterialNominal DiameterNominal Wall ThicknessRipcordLSZH - Low Smoke Zero Halogen (Flame Retardant)4.35 mm0.4 mmYes	Material     Nominal Diameter     Nominal Wall Thickness     Ripcord       SZH - Low Smoke Zero Halogen (Flame Retardant)     4.35 mm     0.4 mm     Yes       Table Notes:     Ripcord provided under sheath											
LSZH - Low Smoke Zero Halogen (Flame Retardant) 4.35 mm 0.4 mm Yes	SZH - Low Smoke Zero Halogen (Flame Retardant)     4.35 mm     0.4 mm     Yes       Fable Notes:     Ripcord provided under sheath	Tape Bi-l	Laminate									
Table Notes:     Ripcord provided under sheath	abling	Tape Bi-l	Laminate	Alum+Poly)		1	100%	9 µm	TC - Tinr	ned Copper		
	abling	Tape Bi-l	Laminate ( <b>ket</b>	Alum+Poly) Material	Beldfoil®	1 Nom	100% hinal Diameter	9 μm · Nominal Wall Th	TC - Tinr ickness	ned Copper		
	abling	Tape Bi-I Duter Jack	Laminate ( <b>ket</b> w Smoke	Alum+Poly) Material	Beldfoil®	1 Nom	inal Diameter mm	9 µm Nominal Wall Thi 0.4 mm	TC - Tinr	ned Copper		
	Description	Tape Bi-I Outer Jack LSZH - Lo Table Note	Laminate ( <b>ket</b> ow Smoke es:	Alum+Poly) Material Zero Haloge	Beldfoil®	1 Nom	inal Diameter mm	9 µm Nominal Wall Thi 0.4 mm	TC - Tinr	ned Copper		
Cabling		Duter Jack LSZH - Lo Table Note	Laminate ( <b>ket</b> ow Smoke es:	Alum+Poly) Material Zero Haloge	Beldfoil®	1 Nom	inal Diameter mm	9 µm Nominal Wall Thi 0.4 mm	TC - Tinr	ned Copper		
Cabling Description	wires twisted	Tape Bi-I Duter Jack LSZH - Lo Table Note Constru	Laminate ( ket w Smoke es: uction a	Alum+Poly) Material Zero Haloge	Beldfoil®	1 Nom	inal Diameter mm	9 µm Nominal Wall Thi 0.4 mm	TC - Tinr	ned Copper		
Cabling Description 3 wires twisted	lectrical Characteristics	Tape Bi- Duter Jack LSZH - Lo Table Note Constru Sabling Descript	Laminate ( ket w Smoke es: loction a	Alum+Poly) Material Zero Haloge	Beldfoil®	1 Nom	inal Diameter mm	9 µm Nominal Wall Thi 0.4 mm	TC - Tinr	ned Copper		

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
21.3 Ohm/km	23.6 Ohm/km

#### Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
125 pF/m	224 pF/m

#### Current

Max. Recommended Current [A]
3.5 Amps per Conductor

#### Voltage

Voltage Rating [V]
300 V

## **Temperature Range**

Installation Temperature Range:	-20°C To +70°C
Storage Temperature Range:	-30°C To +70°C
Operating Temperature Range:	-20°C To +70°C

## **Mechanical Characteristics**

Min. Bend Radius During Installation: 43.5 mm	
Min Setting Radius: 21.75 mm	

## Standards

	Fee
CPR Euroclass:	Eca

## **Applicable Environmental and Other Programs**

Environmental Space: Indoor - Euroclass Eca
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# Flammability, LS0H, Toxicity Testing

IEC Flammability:	IEC 60332-1-2
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
IEC 61034-2 - Smoke Density Min. Transmittance:	60%

## **Related Part Numbers**

#### Variants

Item #	Color	Put-Up Type	Length	EAN
4301FE.01500	Blue	Reel	500 m	8719605006578
4301FE.00100	Gray	Reel	100 m	8719605006554
4301FE.00500	Gray, RAL 7032	Reel	500 m	8719605006561

### History

	Update and Revision:	Revision Number: 0.284 Revision Date: 06-28-2024
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