



CW1600 Voice Cable 2-100 Pair Internal LSZH



Key Features

- Solid Copper Conductor
- LSZH Black Sheath (Also known as HFFR - Halogen Free Flame Retardant)
- Manufactured to British Telecom CW1600 standards
- Polyethylene/Aluminium Laminate moisture barrier

Voice Cable

Part No: See Below

General Description:

Designed for use internally where there is a risk of fire. This cable is compliant with BS6701:2016+A1:2017: Telecommunications equipment and telecommunications cabling. Specification for installation, operation and maintenance, with a minimum CPR classification of Cca (s1b, d2, a2).

The cable is designed to handle low frequency signals for short-range applications and is intended to be terminated in Insulation Displacement Connectors (IDC), but may be soldered or wrapped.

The cable is intended to take the place of Polyvinyl Chloride (PVC) sheathed cables and will withstand similar environments with a similar working life.

Part Numbers

TRI-000342	CW1600 10 Pair Black LSZH Internal Voice Cable
TRI-001000	CW1600 20 Pair Black LSZH Internal Voice Cable
TRI-000486	CW1600 50 Pair Black LSZH Internal Voice Cable
TRI-000552	CW1600 100 Pair Black LSZH Internal Voice Cable

Cable Construction:

Conductor	Material:	Solid Copper Wire
	Nom. O.D. (mm):	0.5 ± 0.010
Insulation	Material:	Polyethylene
	Diameter:	0.95 (± 0.10)
Jacket	External O.D.(mm):	4.5 (± 0.20) (2 Pair)
	Surface:	Clean / Smooth
	Outer Material:	LSZH (complies RoHS)

Electrical Characteristics at 20°C

Parameter – 0.5mm Conductor	Unit	Value
Resistance, Max Average @ 20°C	Ohms/km	97.8
Insulation Resistance, Min Value @ 20°C (500 volts/1 min)	Megaohms	50
Mutual Capacitance, Max Average @ 20°C	nF/km	80
Capacitance Unbalance, Max Average @20°C	pF/500m	500

Fire Performance

Test	Test Method	Value	Comment
Fume Emission	XR-F	No halogen, nitrogen, phosphorous or sulphur containing compounds (trace elements ≤ 0.5% w/w)	Compliant
Single Cable Vertical Burn Test	BS EN 50265-2-1 IEC 60332-1: 2004	Onset of char (from top support): > 50mm Extent of char (from top support): < 540mm	Compliant
Bunched Cable Vertical Burn Test	BS EN 50266-2-4 BS EN 50266-2-5	Category C (1.5 NMV) Category D (< 12mm diameter)	Compliant
Acid Gas Emission	BS EN 50267-2-1: 1999	Less than 5mg/g	Compliant
Smoke Emission	BS EN 61034-2: 2005	Minimum light transmittance 60%	Compliant
CPR Euro Classification	BS EN 50575-2014 AI-2016	B2ca, Cca, Dca, Eca (Contact office for possible additional classification)	Compliant

Physical Characteristics

Cabling Element	A-Wire	B-Wire	Cabling Element	A-Wire	B-Wire
No.1	WHITE-Blue	BLUE	No.16	YELLOW-Blue	BLUE
No.2	WHITE-Orange	ORANGE	No.17	YELLOW-Orange	ORANGE
No.3	WHITE-Green	GREEN	No.18	YELLOW-Green	GREEN
No.4	WHITE-Brown	BROWN	No.19	YELLOW-Brown	BROWN
No.5	WHITE-Grey	GREY	No.20	YELLOW-Grey	GREY
No.6	RED-Blue	BLUE	No.21	VIOLET-Blue	BLUE
No.7	RED-Orange	ORANGE	No.22	VIOLET-Orange	ORANGE
No.8	RED-Green	GREEN	No.23	VIOLET-Green	GREEN
No.9	RED-Brown	BROWN	No.24	VIOLET-Brown	BROWN
No.10	RED-Grey	GREY	No.25	VIOLET-Grey	GREY
No.11	BLACK-Blue	BLUE			
No.12	BLACK-Orange	ORANGE			
No.13	BLACK-Green	GREEN			
No.14	BLACK-Brown	BROWN			
No.15	BLACK-Grey	GREY			

Note 1: Uppercase letters indicate the base, solid colour of insulation, and the lower case indicates ink bands applied onto the base colour.

Make-up & unit identification colours – 20 pair unit

Pair Size	10 Pair	20 Pair	40 Pair	50 Pair	80 Pair	100 Pair
Make-Up	Number of Units					
Centre	½	1	2	5 * ½	1	1
1 st Layer	-	-	-	-	3	4
2 nd Layer	-	-	-	-	-	****
Unit No.	Colour of Unit Lappings					
1	Orange	Orange	Orange	Orange	Blue	Blue
2	-	-	Green	Natural	Orange	Orange
3	-	-	-	Green*	Green	Green
4	-	-	-	-	Brown	Brown
5	-	-	-	-	-	Grey
6	-	-	-	-	-	-
7	-	-	-	-	-	-
8	-	-	-	-	-	-
9-15	-	-	-	-	-	-
16	-	-	-	-	-	-

Note 1: ½ refers to sub-units of 10 Pairs.

Note 2: These cables include the single 1.38mm diameter insulated conductor.

* The Green colour lapping shall be applied to the last ½ unit.

**** At the manufacturer's discretion the first layer may be 4 x 1.

Alternatively, the centre layer may be 5 x 1 in which case the Unit lappings shall be coloured Orange, 3 x Natural, Green.