



## Application

For installation where fire, smoke emission and toxic fumes create a potential threat to life and equipment. Examples of use include supplying mobile power units, UPS installations, stage lighting and audio visual equipment. This cable will withstand medium mechanical stresses and is suitable for both installation indoors and outdoors.

## Characteristics

Voltage Rating (Uo/U)	: 450/750V
Temperature Rating	: Fixed: -20°C to +90°C Flexed: -5°C to +50°C
Minimum Bending Radius	: Fixed: 4 × overall diameter Flexed: 6 × overall diameter
Core Identification	: 3 core: Green/Yellow, Blue, Brown 4 core: Green/Yellow, Brown, Black, Grey
Sheath Colour	: Black

## Cable Standards

BS EN 50525-3-21, CENELEC HD22-13, CEI 20-19 Part 13, BS EN/IEC 60332-3

## Construction

### Conductor

Class 5 flexible copper conductor according to BS EN 60228 (previously BS 6360)

### Insulation

LSZH (Low Smoke Zero Halogen) cross-linked compound Type EI8 according to EN 50363

### Sheath

LSZH (Low Smoke Zero Halogen) cross-linked compound Type EM8 according to EN 50363

This product range is available on reels of 50m or per metre.

## Dimensions

Part Number	No. of Cores	Nominal Cross Sectional Area mm <sup>2</sup>	Nominal Overall Diameter mm	Nominal Weight kg/km	A2 Gland Brass	A2PL Gland Plastic
PP002448	3	2.5	12.45	250	25	25
PP002450	3	4	14.45	330	25	-
PP002449	4	2.5	13.8	275	25	25
PP002451	4	4	15.95	388	25	25

## Conductors

Class 5 Flexible Copper Conductors for Single Core and Multi-Core Cables

Nominal Cross Sectional Area mm <sup>2</sup>	Maximum Diameter of Wires in Conductor mm	Maximum Resistance of Conductor at 20°C
		Plain Wires Ω/km
2.5	0.26	7.98
4	0.31	4.95

The above table is in accordance with BS EN 60228 (previously BS 6360)

## Electrical Characteristics (2.5mm<sup>2</sup>)

Current Carrying Capacity and Mass Supportable

Nominal Cross Sectional Area mm <sup>2</sup>	Current Carrying Capacity		Maximum Mass Supportable by Twin Flexible Cable (See Regulations 522.7.2 and 559.6.1.5 of the 17th Edition of IEE Wiring Regulations) kg
	Single-Phase AC	Three-Phase AC	
2.5	25	20	5

The above table is in accordance with Table 4F3A of the 17th Edition of IEE Wiring Regulations.

## Voltage Drop

Nominal Cross Sectional Area mm <sup>2</sup>	DC or Single-Phase AC mV/A/m	Three-Phase AC mV/A/m
2.5	19	16

The above table is in accordance with Table 4F3B of the 17th Edition of IEE Wiring Regulations.

Conductor operating temperature: 60°C\*

### Note

\*The tabulated values above are for 60°C thermoplastic or thermosetting insulated flexible cables and for other types of flexible cable they are to be multiplied by the following factors:

For 90°C thermoplastic or thermosetting insulated	1.09
150°C	1.31
185°C glass fibre	1.43

## Electrical Characteristics (4mm<sup>2</sup>)

Current Carrying Capacity

Nominal Cross Sectional Area mm <sup>2</sup>	DC or Single-Phase AC (1 Two Core Cable with or without Protective Conductor) Amps	Three-Phase AC (1 Three Core, Four Core or Five Core Cable) Amps
4	42	37

The above table is in accordance with Table 4F2A of the 17th Edition of IEE Wiring Regulations.

Ambient temperature: 30°C

Conductor operating temperature: 90°C

## Voltage Drop

Nominal Cross Sectional Area mm <sup>2</sup>	1 Two Core or 2 Single Core Cables DC mV/A/m	Two Core Cable Single-Phase AC mV/A/m	1 Three Core, Four Core or Five Core Cable
			Three-Phase AC mV/A/m
4	13.2	13.2	11.1

The above table is in accordance with Table 4F2B of the 17th Edition of IEE Wiring Regulations.

## De-Rating Factors

90°C Thermosetting (Rubber) Insulated Cables

Ambient Temperature	35°C	40°C	45°C	50°C	55°C	60°C	65°C	70°C	75°C	80°C	85°C
De-Rating Factor	0.95	0.91	0.86	0.82	0.76	0.7	0.64	0.57	0.5	0.4	0.28

## Part Number Table

Description	Cable Length	Part Number
H07ZZ-F LSZH Rubber Flexible Cable, 3 Core, 2.5mm <sup>2</sup> , Black	50m or per metre	PP002448
H07ZZ-F LSZH Rubber Flexible Cable, 4 Core, 2.5mm <sup>2</sup> , Black		PP002449
H07ZZ-F LSZH Rubber Flexible Cable, 3 Core, 4mm <sup>2</sup> , Black		PP002450
H07ZZ-F LSZH Rubber Flexible Cable, 4 Core, 4mm <sup>2</sup> , Black		PP002451

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