SOLAR PV DC TWIN CABLE · H1Z2Z2-K · 1500 V DC

INDOCABLES SOLAR H1Z2Z2-K TWIN

PHOTOVOLTAIC POWER CABLE, HALOGEN FREE, FLAME RETARDANT — BS EN 50618

INDO CABLES ITEM CODE

IC-SO-02-«SIZE»-TC-E2X-H1Z2Z2K-1500-EN50618-UV

Size field = sq.mm × 100
Per-size item IDs in the ordering table

REGISTER STATUS — DRAFT

All five item codes on this sheet exist in the Product Code Master as DRAFT (IC1006352–IC1006356). They may not be quoted or sold until the code steward moves them to ACTIVE.

APPLICATION

INDOCABLES low smoke, halogen free, flexible single core cable with electron beam cross linked insulation and sheath is designed to use for Photovoltaic installation at the Direct current side. These cables are suitable for permanent outdoor use under variable climatic condition.

Figure 2 — Core identification: (+ve) red, (–ve) black.

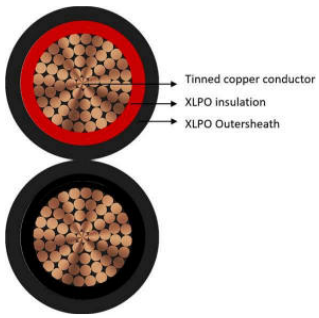

Figure 1 — Cross section: tinned copper conductor, XLPO insulation, XLPO outer sheath.

Images not to scale. Follow table for dimensions

CHARACTERISTICS

CONSTRUCTION

INDO CABLES
EVERY CONNECTION MATTERS

PRODUCT DATASHEET
H1Z2Z2-K · BS EN 50618

RC-05
SHEET NO.

SOLAR PV DC TWIN CABLE · H1Z2Z2-K · 1500 V DC

VOLTAGE RATING
Nominal Voltage: 1500 V DC between conductors as well as conductor and earth. Max permitted voltage: 1800 V

OPERATION TEMPERATURE
Fixed: -40 °C to +120 °C
Maximum conductor temperature: +120 °C

BENDING RADIUS
For fixed installation > 6 D. For occasional moved > 8 D

CONDUCTOR
Tinned copper conductor as per IEC 60228, class 5.

INSULATION
E-Beam cross linked halogen free and flame-retardant compound (XLPO)

SHEATH
E-Beam cross linked halogen free and flame-retardant compound (XLPO), Colour: Black

CORE IDENTIFICATION
(+ve) Red, (–ve) Black

OUTSTANDING FEATURES

Halogen free

Electron beam cross-linked

Flame retardant

High life

Flexibility

UV, ozone resistant

Hydrolysis resistant

High temperature resistant

STANDARD FOLLOWS

IEC 60228 · EN 50618 · IEC 60332-1-2 · UL 4703 · IEC 62930

COMPLIANCE

Fire Performance	EN 60332-1
Smoke Emission	IEC 61034 / EN 50268-2
Halogen free material	EN 50267-2-1 / IEC 60754-2
Toxicity	EN 50305
Resistance to ozone	EN 50396
Weathering / UV	HD 605/A1 or DIN 53667
Life Expectancy	IEC 60216

WEIGHT, DIMENSION & ELECTRICAL DATA

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CROSS SECTIONAL AREA n × mm²	NOMINAL INSULATION THICKNESS mm	NOMINAL SHEATH THICKNESS mm	NOMINAL OVERALL DIAMETER mm	WEIGHT (APPROX.) Kg/Km	MAX. DC RESISTANCE AT 20 °C Ω/km	CURRENT RATING CAPACITY Amp.		
						Single cable free in air	Single loaded cable on a surface	Two cables touching on a surface
2 × 2.5	0.7	0.8	5.2 × 10.4	99	8.21	41	39	33
2 × 4.0	0.7	0.8	5.8 × 11.6	128	5.09	55	52	44
2 × 6.0	0.7	0.8	6.4 × 12.8	170	3.39	70	67	57
2 × 10	0.7	0.8	7.3 × 14.6	252	1.95	98	93	79
2 × 16	0.7	0.8	8.6 × 17.2	380	1.24	132	125	107

DE-RATING FACTOR

Current Ratings are based on EN 50618 at Max. Conductor Temperature 120 °C and Ambient Air temperature 60 °C. Current rating de-rating factors other than 60 °C ambient temperature.

AMBIENT AIR TEMPERATURE °C	up to 60	70	80	90
DE-RATING FACTOR	1.00	0.92	0.84	0.75

ORDERING — INDO CABLES PRODUCT CODES

Two core, tinned copper, XLPO insulated and sheathed, 1.5 kV DC, to EN 50618, UV resistant. Register description: "2 Core n sq.mm Tinned Copper XLPO Insulated Double Insulated 1.5 kV DC Solar DC Cable to EN 50618, UV Resistant".

SIZE MM²	ITEM ID	ITEM CODE
2 × 2.5	IC1006352	IC-SO-02-00250-TC-E2X-H1Z2Z2K-1500-EN50618-UV
2 × 4.0	IC1006353	IC-SO-02-00400-TC-E2X-H1Z2Z2K-1500-EN50618-UV
2 × 6.0	IC1006354	IC-SO-02-00600-TC-E2X-H1Z2Z2K-1500-EN50618-UV
2 × 10	IC1006355	IC-SO-02-01000-TC-E2X-H1Z2Z2K-1500-EN50618-UV
2 × 16	IC1006356	IC-SO-02-01600-TC-E2X-H1Z2Z2K-1500-EN50618-UV

The register also holds 2-core sizes 1.5 mm² (IC1006351) and 25–240 mm² (IC1006357–IC1006365) on this line. They are not listed above because the source datasheet carries no dimensional or electrical data for them. EN 50618 is not an IS standard, so no BIS CM/L number applies to these items.

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CERTIFICATIONS & COMPLIANCE

ISO 9001
Cert. 99 100 22646 (TÜV SÜD)

ISI
Bureau of Indian Standards

RoHS
Compliant

REACH
Compliant

Make in India
Manufactured in India