

IGNIS 240

FIRE SURVIVAL SINGLE CORE CABLE

450/750 V AC

CROSS-LINKED HALOGEN FREE

1 CORE · 1.5-300 SQMM

MICA GLASS FIRE BARRIER

IEC 60331-3



Images not to scale. Follow table for dimensions

APPLICATION

INDOCABLES FS Single core cable is suitable to use in various Indoor and outdoor applications such as Tunnels, High rise Buildings, Schools, Hospitals, Hotels, Malls, Subways for emergency lighting during the event of fire.

CONSTRUCTION

- Annealed plain stranded copper conductor as per IEC 60228, Class-2.
- Mica Glass flame barrier tape.
- Extruded Cross-linked Halogen Free Flame Retardant Insulation

CORE COLOUR Green/Yellow or any mono colour

CONDUCTOR Plain annealed stranded copper, Class 2

CHARACTERISTICS

Voltage Rating	450/750 V AC Can be extended to 1000 V
Operation Temperature	-20°C to +90°C
Short Circuit Temperature	250°C
Bending Radius	Min. 8 x Overall Diameter

OUTSTANDING FEATURES

HIGH RESISTANT TO FIRE
HALOGEN FREE
REDUCED FLAME PROPAGATION
CIRCUIT INTEGRITY WHEN EXPOSED TO FIRE
LOW TOXICITY
FIRE BARRIER

STANDARD FOLLOWS

EN 60228:2005

BS 8592:2016

COMPLIANCE

Fire Resistant IEC 60331-3

Flame Propagation EN 60332-1-2

 **RoHS** Compliant
  **REACH** Compliant
  **MAKIN** 60331-3 (Cat.C)
  Manufactured in India

Halogen free material

EN 60754-1


ISO 9001
 Cert. 99 100 22646 (TÜV SÜD)

ISI
 Bureau of Indian Standards · CM/L 6200266003

RoHS Compliant

REACH Compliant

MAKIN 60331-3 (Cat.C)


Manufactured in India

FIRE SURVIVAL · SINGLE CORE UNSHEATHED · 450/750 V AC

IC/DS/FC-06 · REV 00 · PAGE 2 OF 4

PRODUCT CODES

CONSTRUCTION	INDO CABLES ITEM CODE	ITEM ID
1 Core 1.5 sq.mm	IC-FS-01-00150-CU-2XL-FS2XH-0450-IS17505P1-ZHFR	IC1006482
1 Core 2.5 sq.mm	IC-FS-01-00250-CU-2XL-FS2XH-0450-IS17505P1-ZHFR	IC1006483
1 Core 4 sq.mm	IC-FS-01-00400-CU-2XL-FS2XH-0450-IS17505P1-ZHFR	IC1006484
1 Core 6 sq.mm	IC-FS-01-00600-CU-2XL-FS2XH-0450-IS17505P1-ZHFR	IC1006485
1 Core 10 sq.mm	IC-FS-01-01000-CU-2XL-FS2XH-0450-IS17505P1-ZHFR	IC1006486
1 Core 16 sq.mm	IC-FS-01-01600-CU-2XL-FS2XH-0450-IS17505P1-ZHFR	IC1006487
1 Core 25 sq.mm	IC-FS-01-02500-CU-2XL-FS2XH-0450-IS17505P1-ZHFR	IC1006488
1 Core 35 sq.mm	IC-FS-01-03500-CU-2XL-FS2XH-0450-IS17505P1-ZHFR	IC1006489
1 Core 50 sq.mm	IC-FS-01-05000-CU-2XL-FS2XH-0450-IS17505P1-ZHFR	IC1006490
1 Core 70 sq.mm	IC-FS-01-07000-CU-2XL-FS2XH-0450-IS17505P1-ZHFR	IC1006491
1 Core 95 sq.mm	IC-FS-01-09500-CU-2XL-FS2XH-0450-IS17505P1-ZHFR	IC1006492
1 Core 120 sq.mm	IC-FS-01-12000-CU-2XL-FS2XH-0450-IS17505P1-ZHFR	IC1006493
1 Core 150 sq.mm	IC-FS-01-15000-CU-2XL-FS2XH-0450-IS17505P1-ZHFR	IC1006494
1 Core 185 sq.mm	IC-FS-01-18500-CU-2XL-FS2XH-0450-IS17505P1-ZHFR	IC1006495
1 Core 240 sq.mm	IC-FS-01-24000-CU-2XL-FS2XH-0450-IS17505P1-ZHFR	IC1006496
1 Core 300 sq.mm	IC-FS-01-30000-CU-2XL-FS2XH-0450-IS17505P1-ZHFR	IC1006497

All sixteen items are **DRAFT** and were **derived from the code structure** — none exists in the Item Master. Line FS, cores 01, sizes 00150–30000, conductor CU, insulation 2XL, designation FS2XH, voltage grade 0450, standard IS17505P1 and option ZHFR are all existing register values, but the register carries no FS row at 0450 and none against IS17505P1 — the FS line is currently BS7846 at 1100 only. Position 7 also has no token for an unsheathed single core: every FS designation in the register carries a sheath, so FS2XH (mica + XLPE, unarmoured, LSZH) is used as the nearest available value and the halogen-free insulation is carried by ZHFR. Each combination needs a row on tab 3 ITEM MASTER before approval. Next free item ID after this sheet is IC1006498.


ISO 9001
Cert. 99 100 22646 (TÜV SÜD)

ISI
Bureau of Indian Standards · CM/L 6200266003

ROHS
Compliant

REACH
Compliant

MAKE IN INDIA
Manufactured in India

FIRE SURVIVAL · SINGLE CORE UNSHEATHED · 450/750 V AC

IC/DS/FC-06 · REV 00 · PAGE 3 OF 4

DIMENSIONS AND WEIGHTS

NO. OF CORES	CROSS SECTIONAL AREA	APPROX CABLE OVERALL DIA.	MAX. CONDUCTOR RESISTANCE DC AT 20°C	MAX. CONDUCTOR RESISTANCE AC AT 90°C	CABLE WEIGHT APPROX.
—	mm ²	mm	Ohms/Km	Ohms/Km	kg / km
1	1.5	3.5	12.1	15.4	27
1	2.5	4.1	7.41	9.45	40
1	4	4.6	4.61	5.88	55
1	6	5.1	3.08	3.93	75
1	10	6.5	1.83	2.33	120
1	16	7.6	1.15	1.47	180
1	25	9.3	0.727	0.927	280
1	35	10.4	0.524	0.668	380
1	50	12.1	0.387	0.494	510
1	70	13.9	0.268	0.342	715
1	95	16	0.193	0.247	950
1	120	17.7	0.153	0.196	1225
1	150	19.8	0.124	0.16	1500
1	185	21.9	0.0991	0.129	1875
1	240	24.7	0.0754	0.0988	2415
1	300	27.5	0.0601	0.0804	3000

The above data is approximate & subject to manufacturing tolerance. The source table carries no minimum insulation thickness column; the cores column is shown from the product code list.

CORE IDENTIFICATION

Extruded cross-linked halogen free flame retardant insulation in Green/Yellow or any mono colour. Sheath print: INDOCABLES repeated along the length.



FIRE SURVIVAL · SINGLE CORE UNSHEATHED · 450/750 V AC

IC/DS/FC-06 · REV 00 · PAGE 4 OF 4

CURRENT CARRYING CAPACITY

Amperes · air ambient temperature 30 °C · conductor operating temperature 90 °C

COND. C.S.A. ^B mm ²	REF. METHOD A enclosed in conduit in thermally insulating wall etc.		REF. METHOD B enclosed in conduit on a wall or in trunking etc.		REF. METHOD C clipped direct		REF. METHOD F · TOUCHING ^A in free air or on a perforated cable tray etc, horizontal or vertical etc			REF. METHOD G ^A in free air, spaced by one cable diameter	
	2 cables, single- phase AC or DC	3 or 4 cables, three-phase AC	2 cables, single- phase AC or DC	3 or 4 cables, three-phase AC	2 cables, single- phase AC or DC flat and touching	3 or 4 cables, three-phase AC flat and touching or trefoil	2 cables, single- phase AC or DC flat	3 cables, three- phase AC flat	3 cables, three- phase AC trefoil	horizontal	vertical
1.5	19	17	23	20	25	23	—	—	—	—	—
4	35	31	42	37	46	41	—	—	—	—	—
6	45	40	54	48	59	54	—	—	—	—	—
10	61	54	75	66	81	74	—	—	—	—	—
16	81	73	100	88	109	99	—	—	—	—	—
25	106	95	133	117	143	130	161	141	135	182	161
35	131	117	164	144	176	161	200	176	169	226	201
50	158	141	198	175	228	209	242	216	207	275	246
70	200	179	253	222	293	268	310	279	268	353	318
95	241	216	306	269	355	326	377	342	328	430	389
120	278	249	354	312	413	379	437	400	383	500	454
150	318	285	393	342	476	436	504	464	444	577	527
185	362	324	449	384	545	500	575	533	510	661	605
240	424	380	528	450	644	590	679	634	607	781	719
300	486	435	603	514	743	681	783	736	703	902	833

Current rating de-rating factors for other than 30 °C ambient air temperature.^C Ratings are approximate & subject to installation conditions.

FLAGGED — SOURCE VALUES REPRODUCED AS WRITTEN, CONFIRMATION REQUIRED

a Methods F and G carry no values below 25 mm² in the source; shown as —.**c** The de-rating heading appears in the source with no factor table beneath it. No factors are published on this sheet.**b** 2.5 mm² has a product code and a dimensions row but no current-rating row — the source table steps 1.5 to 4.