INDO CABLES
EVERY CONNECTION MATTERS

PRODUCT DATASHEET
LV Power Cable · IS 7098 Part 1

LV-03
SHEET NO.

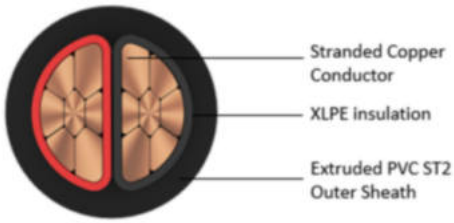
LOW VOLTAGE POWER CABLE · 2XFY

650/1100 V · 2-CORE COPPER

XLPE insulated · galvanised steel flat-strip armoured · PVC sheathed · manufactured to IS 7098 Part 1

650/1100 V	+90 °C	250 °C	1500 V DC
Rated voltage, AC systems	Max. operating temperature	Max. short-circuit temperature	Max. rated DC voltage to earth

CABLE / SIDE VIEW · INDOCABLES sheath print



CROSS-SECTION · construction callouts

Images not to scale. Follow table for dimensions.

APPLICATION

INDOCABLE LV CU IEC 60502-1 0.6/1 KV MC-2 UA, stranded compacted copper conductor, XLPE insulated, and PVC sheathed unarmoured cable confirming to IEC 60502-1 is suitable for fixed installation such as distribution network or industrial installation. These cable cables are designed for systems with rated AC voltage 1KV (Um=1.2 KV) & ≤1.5 KV (with a maximum 1.8 KV DC) between two live conductor.

CONSTRUCTION

Conductor	Stranded plain compacted sector-shaped copper conductor as per IS 8130, class 2
Insulation	Cross-linked polyethylene (XLPE) as per IS 7098 Part 1
Inner sheath	Extruded PVC, Type ST2 as per IS 5831
Armour	Galvanised flat steel strip as per IS 3975
Outer sheath	Extruded PVC, Type ST2 as per IS 5831
Core identification	Red and black
Bending radius	Fixed installation: 12 × overall diameter

OUTSTANDING FEATURES

High life

High insulation resistance

Flame retardant

Low halogen · low smoke

UV resistant

STANDARD FOLLOWS

- IS 8130:2013
- IS 5831:1984
- IS 3975:1979
- IS 7098-1:1988

COMPLIANCE

Conductor resistance	IS 8130
Insulation resistance	IS 7098-1:1988
Flammability test	IEC 60332-1

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WEIGHT & DIMENSION DATA

Product code	Nominal cross-sectional area n × mm²	Nominal thickness of insulation mm	Nominal dimension of armour flat wire mm	Minimum thickness of outer sheath mm	Overall diameter mm	Weight (approx.) kg/km
IC-PW-02-02500-CU-2XL-2XFY-1100-IS7098P1-FRLS	2 × 25	0.9	4 × 0.8	1.4	18.5	804.4
IC-PW-02-03500-CU-2XL-2XFY-1100-IS7098P1-FRLS	2 × 35	0.9	4 × 0.8	1.4	20	1019.7
IC-PW-02-05000-CU-2XL-2XFY-1100-IS7098P1-FRLS	2 × 50	1	4 × 0.8	1.4	22.5	1311
IC-PW-02-07000-CU-2XL-2XFY-1100-IS7098P1-FRLS	2 × 70	1.1	4 × 0.8	1.56	25.5	1757
IC-PW-02-09500-CU-2XL-2XFY-1100-IS7098P1-FRLS	2 × 95	1.1	4 × 0.8	1.56	28	2289
IC-PW-02-12000-CU-2XL-2XFY-1100-IS7098P1-FRLS	2 × 120	1.2	4 × 0.8	1.56	30.5	2755
IC-PW-02-15000-CU-2XL-2XFY-1100-IS7098P1-FRLS	2 × 150	1.4	4 × 0.8	1.72	31.8	3353
IC-PW-02-18500-CU-2XL-2XFY-1100-IS7098P1-FRLS	2 × 185	1.6	4 × 0.8	1.72	37	4094
IC-PW-02-24000-CU-2XL-2XFY-1100-IS7098P1-FRLS	2 × 240	1.7	4 × 0.8	1.88	38.7	5225
IC-PW-02-30000-CU-2XL-2XFY-1100-IS7098P1-FRLS	2 × 300	1.8	4 × 0.8	2.04	42.5	6412
IC-PW-02-40000-CU-2XL-2XFY-1100-IS7098P1-FRLS	2 × 400	2	4 × 0.8	2.36	48.2	8075

The above data is approximate & subject to manufacturing tolerance. Codes registered in the Indo Cables Item Master (status: DRAFT) except 2×400, derived from the code structure — see run report.

ELECTRICAL CHARACTERISTICS

Current rating and maximum DC conductor resistance.

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Nominal area of conductor mm²	Buried direct in the ground Amp.	In single-way ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
16	115	96	108	1.15
25	147	122	140	0.727
35	176	146	172	0.524
50	208	173	208	0.388
70	253	211	262	0.268
95	302	252	322	0.193
120	340	284	368	0.152
150	379	317	419	0.124
185	425	357	482	0.0990
240	486	409	566	0.0754
300	541	456	644	0.0602
400	602	508	734	0.0471

90°C
Conductor operating temperature

40°C
Air ambient temperature

30°C
Ground ambient temperature

IS 3961 (Part 6):2016
Rating table in accordance with

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DE-RATING FACTORS

Rating factor for variation in ambient air temperature, cable in free air. Maximum conductor temperature 90°C.

Ambient air temperature °C	25	30	35	40	45	50	55	60
De-rating factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Rating factor for variation in ground temperature, direct buried cables. Maximum conductor temperature 90°C.

Ground temperature °C	15	20	25	30	35	40	45	50
De-rating factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Rating factor for variation in ground temperature, cable in duct. Maximum conductor temperature 90°C.

Ground temperature °C	15	20	25	30	35	40	45	50
De-rating factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

OUR ACCREDITATIONS & APPROVAL

ISO 9001
Cert. 99 100 22646 (TÜV SÜD)

ISI
BIS CM/L 6200267409 (IS 7098 Pt-1)

RoHS
Compliant

REACH
Compliant

Make in India
Manufactured in India

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