INDO CABLES
EVERY CONNECTION MATTERS

PRODUCT DATASHEET
LV Power Cable · IS 7098-1

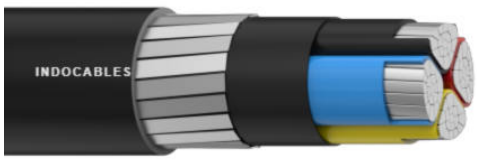
LV-08
SHEET NO.

LOW VOLTAGE POWER CABLE · 4-CORE · A2XFY

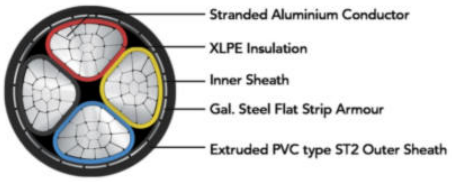
650/1100 V · 4-CORE ALUMINIUM

XLPE insulated · galvanised flat steel strip armoured (A2XFY) · PVC sheathed · manufactured to IS 7098 Part 1

650/1100 V	+90 °C	250 °C
Rated voltage	Max. operating temperature	Max. short-circuit temperature



CABLE / SIDE VIEW · INDOCABLES sheath print



CROSS-SECTION · construction callouts

Images not to scale. Follow table for dimensions.

APPLICATION

INDOCABLE LV AL IEC 60502-1 0.6/1 KV MC-4 SFA, stranded compacted aluminium conductor, XLPE insulated, and PVC sheathed armoured 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 compacted sector shaped aluminium conductor as per IS 8130, class 2
Insulation	Cross-linked polyethylene (XLPE) to IS 7098-1
Inner sheath	Extruded PVC Type ST2 / FRLS / FR / LSZH
Armouring	Galvanized flat steel strip to IS 3975
Outer sheath	Sheathed with extruded PVC Type ST2 / FRLS / FR / LSZH
Core identification	Red, Yellow, Blue 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 8130:2013
Insulation resistance	IS 7098-1:1988
Flammability test	IEC 60332-1:2015

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WEIGHT & DIMENSION DATA

Product code	Nominal cross-sectional area n × mm²	Nominal insulation thickness mm	Nominal dimension of armour flat wire mm	Min. outer sheath thickness mm	Overall diameter mm	Weight (approx.) kg/km
IC-PW-04-01600-AL-2XL-A2XFY-1100-IS7098P1-FRLS	4 × 16	0.7	4 × 0.8	1.4	20	608
IC-PW-04-02500-AL-2XL-A2XFY-1100-IS7098P1-FRLS	4 × 25	0.9	4 × 0.8	1.4	23	828.5
IC-PW-04-03500-AL-2XL-A2XFY-1100-IS7098P1-FRLS	4 × 35	0.9	4 × 0.8	1.4	25	997
IC-PW-04-05000-AL-2XL-A2XFY-1100-IS7098P1-FRLS	4 × 50	1	4 × 0.8	1.56	28	1235
IC-PW-04-07000-AL-2XL-A2XFY-1100-IS7098P1-FRLS	4 × 70	1.1	4 × 0.8	1.56	32	1615
IC-PW-04-09500-AL-2XL-A2XFY-1100-IS7098P1-FRLS	4 × 95	1.1	4 × 0.8	1.56	35	2014
IC-PW-04-12000-AL-2XL-A2XFY-1100-IS7098P1-FRLS	4 × 120	1.2	4 × 0.8	1.72	39	2403
IC-PW-04-15000-AL-2XL-A2XFY-1100-IS7098P1-FRLS	4 × 150	1.4	4 × 0.8	1.88	43	2888
IC-PW-04-18500-AL-2XL-A2XFY-1100-IS7098P1-FRLS	4 × 185	1.6	4 × 0.8	2.04	48	3505
IC-PW-04-24000-AL-2XL-A2XFY-1100-IS7098P1-FRLS	4 × 240	1.7	4 × 0.8	2.2	54	4389
IC-PW-04-30000-AL-2XL-A2XFY-1100-IS7098P1-FRLS	4 × 300	1.8	4 × 0.8	2.36	59.5	5291
IC-PW-04-40000-AL-2XL-A2XFY-1100-IS7098P1-FRLS †	4 × 400	2	4 × 0.8	2.68	66.5	6538

The above data is approximate & subject to manufacturing tolerance. All codes 16–300 mm² are registered in the Item Master (status DRAFT, OPT 1 = FRLS). † 4 × 400 mm² is not in the Item Master (the 4-core aluminium A2XFY range ends at 300 mm²); this code is derived from the code structure and awaits registration.

ELECTRICAL CHARACTERISTICS

Current carrying capacity and max. DC conductor resistance at 20°C.

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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	74	61	69	1.91
25	95	79	93	1.20
35	114	94	114	0.868
50	134	112	138	0.641
70	164	137	175	0.443
95	197	164	216	0.321
120	223	187	249	0.253
150	249	209	284	0.206
185	282	238	329	0.164
240	327	276	392	0.125
300	369	312	452	0.101
400	420	356	526	0.0778
500	478	412	612	0.0605

90°C
Conductor operating temperature

40°C
Air ambient temperature

30°C
Ground ambient temperature

IS 3961 (Part 6):2016
Basis of the above table

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DE-RATING FACTORS

Rating factor for variation in ambient air temperature for 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 for 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 for 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
Bureau of Indian Standards · CM/L 6200267409

RoHS
Compliant

REACH
Compliant

Make in India
Manufactured in India

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