LOW VOLTAGE POWER CABLE · 3-CORE · FSA ARMOURED

0.6/1 (1.2) KV · 3-CORE ALUMINIUM

XLPE insulated · galvanised steel flat strip armoured (FSA) · PVC sheathed · manufactured to IEC 60502-1

0.6/1 (1.2) kV	+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

- **Core build.** Features 3-core stranded compacted aluminium conductors paired with premium XLPE insulation for high thermal efficiency.
- **Armouring.** Reinforced with Steel Flat Armour (SFA) and a durable PVC outer sheath, providing excellent mechanical protection for fixed installations.
- **Voltage rating.** Engineered for AC systems at 1 kV (Um=1.2 kV) and DC networks up to 1.5 kV (max 1.8 kV) between live conductors.
- **Compliance & use.** Fully conforms to IEC 60502-1 standards, making it ideal for robust industrial distribution and utility power networks.

CONSTRUCTION

Conductor	Circular compacted or stranded aluminium conductor as per IEC 60228, class 2
Insulation	XLPE as per IEC 60502-1
Inner covering	Extruded or lapped PVC
Armouring	Galvanised flat strip armoured (FSA)
Outer sheath	Extruded polyvinylchloride (ST2) or polyethylene (ST7) or halogen free (ST8) as per IEC 60502-1
Core identification	Red, Yellow, and Black
Bending radius	Fixed installation: 12 × overall diameter
Test voltage	3.5 kV AC

OUTSTANDING FEATURES

High life

High insulation resistance

Flame retardant

Low halogen · low smoke

UV resistant

STANDARD FOLLOWS

`IEC 60228` `IEC 60502-1` `IEC 60332-1-2`

COMPLIANCE

Conductor resistance	`IEC 60228`
Insulation resistance	`IEC 60502-1`
Shrinkage test	`IEC 60811-503`
Flame retardant test	`IEC 60332-1-2`

Note. The above cable is also available with EPR/HEPR insulation type.

WEIGHT & DIMENSION DATA

Product code	Nominal cross-sectional area mm²	Nominal thickness · mm			Armouring dimension mm	Overall diameter (approx.) mm	Weight (approx.) kg/km
		Insulation	Inner covering	Sheath			
IC-PW-03-02500-AL-2XL-A2XFY-0660-IEC60502P1-FRLS*	25	0.90	1.00	1.60	4 × 0.2	19.8	600
IC-PW-03-03500-AL-2XL-A2XFY-0660-IEC60502P1-FRLS*	35	0.90	1.00	1.70	4 × 0.2	21.9	700
IC-PW-03-05000-AL-2XL-A2XFY-0660-IEC60502P1-FRLS*	50	1.00	1.00	1.80	4 × 0.2	25.0	900
IC-PW-03-07000-AL-2XL-A2XFY-0660-IEC60502P1-FRLS*	70	1.10	1.00	1.90	4 × 0.2	28.3	1150
IC-PW-03-09500-AL-2XL-A2XFY-0660-IEC60502P1-FRLS*	95	1.10	1.20	2.10	4 × 0.5	32.5	1700
IC-PW-03-12000-AL-2XL-A2XFY-0660-IEC60502P1-FRLS*	120	1.20	1.20	2.20	4 × 0.5	35.4	2025
IC-PW-03-15000-AL-2XL-A2XFY-0660-IEC60502P1-FRLS*	150	1.40	1.40	2.40	4 × 0.5	39.7	2500
IC-PW-03-18500-AL-2XL-A2XFY-0660-IEC60502P1-FRLS*	185	1.60	1.40	2.50	4 × 0.5	43.6	2975
IC-PW-03-24000-AL-2XL-A2XFY-0660-IEC60502P1-FRLS*	240	1.70	1.40	2.70	4 × 0.5	48.3	3650
IC-PW-03-30000-AL-2XL-A2XFY-0660-IEC60502P1-FRLS*	300	1.80	1.60	2.90	4 × 0.5	53.3	4450
IC-PW-03-40000-AL-2XL-A2XFY-0660-IEC60502P1-FRLS*	400	2.00	1.60	3.10	4 × 0.5	58.8	5375
IC-PW-03-50000-AL-2XL-A2XFY-0660-IEC60502P1-FRLS*	500	2.20	1.80	3.30	4 × 0.5	66.6	6900
IC-PW-03-63000-AL-2XL-A2XFY-0660-IEC60502P1-FRLS*	630	2.40	1.80	3.60	4 × 0.5	74.3	8900

The above data is approximate & subject to manufacturing tolerance. *All codes derived from the Indo Cables code structure — the IEC 60502-1 family is not yet in the Item Master. See run report.

ELECTRICAL CHARACTERISTICS

Current rating and max. DC conductor resistance at 20°C.

Nominal cross-sectional area mm²	Buried direct in the ground at 20°C Amp.	In single-way ducts at 30°C Amp.	In air at 30°C Amp.	Max. DC conductor resistance at 20°C Ω/km
25	103	95	102	1.2
35	123	113	125	0.868
50	145	134	152	0.641
70	177	164	193	0.443
95	213	196	238	0.32
120	241	222	274	0.253
150	269	248	312	0.206
185	305	281	362	0.164
240	353	324	431	0.125
300	399	364	497	0.1
400	454	412	579	0.0778
500	516	463	673	0.0605
630	585	518	783	0.0469

90°C Max. conductor temperature	**30°C** Ambient air temperature	**20°C** Ground temperature	**750 mm** Depth of laying	**1.5 Km/W** Thermal resistivity of soil

DE-RATING FACTORS

Current rating de-rating factors for other than 30°C ambient air temperature.

Air temperature °C	20	25	35	40	45	50	55	60
De-rating factor	1.08	1.04	0.96	0.91	0.87	0.82	0.76	0.71

Current rating de-rating factors for other than 20°C ground temperature.

Ground temperature °C	10	15	25	30	35	40	45	50
De-rating factor	1.07	1.04	0.96	0.93	0.89	0.85	0.8	0.76

Current rating de-rating factors for other than 30°C ground temperature for cables in ducts.

Ground temperature °C	15	25	35	40	45	50
De-rating factor	1.12	1.04	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