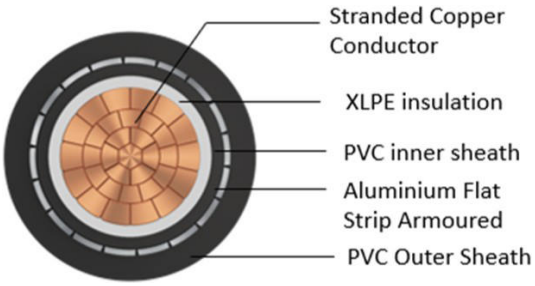
LOW VOLTAGE POWER CABLE · LV CU IEC 60502-1 · SINGLE CORE STRIP ARMOURED

0.6/1 (1.2) KV · SINGLE CORE COPPER

Stranded compacted copper conductor · XLPE insulated · aluminium flat strip armoured · PVC sheathed to IEC 60502-1

0.6/1 (1.2) kV	**+90** °C max.	**250** °C	**3.5** kV AC
Nominal voltage	Operating temperature	Short-circuit temperature	Test voltage

CABLE / SIDE VIEW · INDOCABLES sheath print



CROSS-SECTION · construction callouts

Images not to scale. Follow table for dimensions.

APPLICATION

INDOCABLES LV CU IEC 60502-1 0.6/1 KV SC SFA, stranded compacted copper 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 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	Circular Compacted or Stranded Copper conductor as per IEC 60228, class 2
Insulation	XLPE as per IEC 60502-1
Inner covering	Extruded or Lapped PVC
Armouring	Aluminium 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 / Blue / Black / Natural
Bending radius	Fixed Installation: 12 x Overall diameter

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

OUR ACCREDITATIONS & APPROVAL

ISI
Bureau of Indian Standards · CM/L 6200267409

ISO 9001
Cert. 99 100 22646 (TÜV SÜD)

RoHS
Compliant

REACH
Compliant

Make in India
Manufactured in India

WEIGHT & DIMENSION DATA

Product code	Nominal cross-sectional area mm²	Nominal thickness of insulation mm	Nominal thickness of inner covering mm	Nominal thickness of sheath mm	Armouring dimension n x mm	Overall diameter (approx.) mm	Weight (approx.) kg/km
IC-PW-01-09500-CU-2XL-2XFaY-1100-IEC60502P1-FRLS †	95	1.10	1.00	1.60	4 x 0.5	19.6	1175
IC-PW-01-12000-CU-2XL-2XFaY-1100-IEC60502P1-FRLS †	120	1.20	1.00	1.60	4 x 0.5	21.3	1425
IC-PW-01-15000-CU-2XL-2XFaY-1100-IEC60502P1-FRLS †	150	1.40	1.00	1.70	4 x 0.5	23.3	1750
IC-PW-01-18500-CU-2XL-2XFaY-1100-IEC60502P1-FRLS †	185	1.60	1.00	1.80	4 x 0.5	25.5	2150
IC-PW-01-24000-CU-2XL-2XFaY-1100-IEC60502P1-FRLS †	240	1.70	1.00	1.80	4 x 0.5	27.9	2700
IC-PW-01-30000-CU-2XL-2XFaY-1100-IEC60502P1-FRLS †	300	1.80	1.00	1.90	4 x 0.5	30.4	3325
IC-PW-01-40000-CU-2XL-2XFaY-1100-IEC60502P1-FRLS †	400	2.00	1.20	2.10	4 x 0.5	34.0	4150
IC-PW-01-50000-CU-2XL-2XFaY-1100-IEC60502P1-FRLS †	500	2.20	1.20	2.20	4 x 0.5	38.1	5425
IC-PW-01-63000-CU-2XL-2XFaY-1100-IEC60502P1-FRLS †	630	2.40	1.20	2.30	4 x 0.5	41.9	6725
IC-PW-01-80000-CU-2XL-2XFaY-1100-IEC60502P1-FRLS †	800	2.60	1.40	2.40	4 x 0.5	46.5	8450
IC-PW-01-100000-CU-2XL-2XFaY-1100-IEC60502P1-FRLS †	1000	2.80	1.40	2.60	4 x 0.5	51.2	10475

The above data is approximate & subject to manufacturing tolerance. Codes read 01 = single core · CU · 2XL XLPE · 2XFaY aluminium strip armour, PVC sheath · 1100 V grade · IEC 60502-1 · FRLS.

† All eleven codes are derived from the Indo Cables code structure — the Item Master carries no IEC 60502-1 rows, so none could be looked up. The 2XFaY designation is the register's own segment for copper, XLPE, aluminium strip armour. Flagged for the Item Master Steward.

ELECTRICAL CHARACTERISTICS

Current ratting and maximum DC conductor resistance.

Nominal cross-sectional area mm²	Buried direct in the ground at 20°C		In single way ducts at 30°C		In air at 30°C		Max. DC conductor resistance at 20°C Ω/km
	Flat touching Amp.	Trefoil Amp.	Flat touching Amp.	Trefoil Amp.	Flat touching Amp.	Trefoil Amp.	
95	337	281	256	233	374	333	0.193
120	383	319	291	264	436	389	0.153
150	428	355	324	294	495	443	0.124
185	483	401	365	330	571	515	0.0991
240	556	461	420	379	674	608	0.0754
300	622	515	469	422	770	697	0.0601
400	703	580	528	473	894	811	0.047
500	785	646	589	525	1023	928	0.0366
630	870	714	651	578	1162	1057	0.0283
800	947	779	707	626	1297	1185	0.0221
1000	1010	834	751	668	1417	1307	0.0176

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

Soil thermal resistivity is printed “1.5 Km/W” in the source — reproduced as written, flagged for check (the IEC unit is K·m/W).

DE-RATING FACTOR

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

Air temperature	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	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	15	25	35	40	45	50
De-rating factor	1.12	1.04	0.96	0.91	0.87	0.82

Source captions the duct table “other than 30°C ground temperature” while the buried-cable table above it reads 20°C, and the duct row carries six columns against the other tables’ eight — reproduced as written, flagged for check.