

LOW VOLTAGE POWER CABLE · SC AWA · ALUMINIUM WIRE ARMoured

0.6/1 (1.2) KV · SINGLE-CORE COPPER

Circular compacted or stranded copper conductor · XLPE insulated · PVC inner covering · aluminium wire armoured · PVC sheathed · conforming to IEC 60502-1

0.6/1 (1.2) kV
Nominal voltage

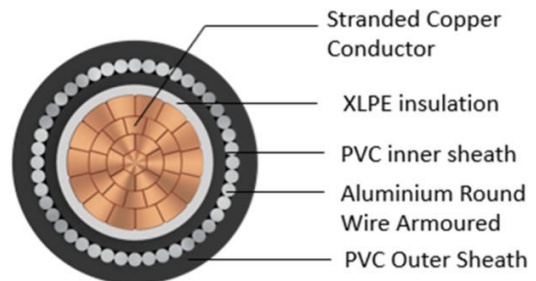
90 °C max.
Operating temperature

250 °C
Short-circuit temperature

3.5 kV AC
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 AWA, 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 cable cables are designed for systems with rated AC voltage 1KV ($U_m=1.2$ 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 wire armoured (AWA)
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

WEIGHT & DIMENSION DATA

Product code	Nominal cross-sectional area mm ²	Nominal thickness mm			Nominal diameter mm		Weight (approx.) kg/km
		Insulation	Inner covering	Sheath	Armouring wire	Overall	
IC-PW-01-00400-CU-2XL-2XWaY-1100-IEC60502 P1-FRLS†	4	0.70	1.00	1.40	0.80	10.4	160
IC-PW-01-00600-CU-2XL-2XWaY-1100-IEC60502 P1-FRLS†	6	0.70	1.00	1.40	0.80	10.9	190
IC-PW-01-01000-CU-2XL-2XWaY-1100-IEC60502 P1-FRLS†	10	0.70	1.00	1.40	0.80	11.9	250
IC-PW-01-01600-CU-2XL-2XWaY-1100-IEC60502 P1-FRLS†	16	0.70	1.00	1.40	0.80	12.4	305
IC-PW-01-02500-CU-2XL-2XWaY-1100-IEC60502 P1-FRLS†	25	0.90	1.00	1.40	0.80	14.0	425
IC-PW-01-03500-CU-2XL-2XWaY-1100-IEC60502 P1-FRLS†	35	0.90	1.00	1.50	1.25	16.1	575
IC-PW-01-05000-CU-2XL-2XWaY-1100-IEC60502 P1-FRLS†	50	1.00	1.00	1.50	1.25	17.7	750
IC-PW-01-07000-CU-2XL-2XWaY-1100-IEC60502 P1-FRLS†	70	1.10	1.00	1.60	1.25	19.6	980
IC-PW-01-09500-CU-2XL-2XWaY-1100-IEC60502 P1-FRLS†	95	1.10	1.00	1.60	1.60	21.8	1275
IC-PW-01-12000-CU-2XL-2XWaY-1100-IEC60502 P1-FRLS†	120	1.20	1.00	1.70	1.60	23.7	1575
IC-PW-01-15000-CU-2XL-2XWaY-1100-IEC60502 P1-FRLS†	150	1.40	1.00	1.80	1.60	25.7	1925
IC-PW-01-18500-CU-2XL-2XWaY-1100-IEC60502 P1-FRLS†	185	1.60	1.00	1.80	1.60	27.7	2300
IC-PW-01-24000-CU-2XL-2XWaY-1100-IEC60502 P1-FRLS†	240	1.70	1.00	1.90	1.60	30.3	2875
IC-PW-01-30000-CU-2XL-2XWaY-1100-IEC60502 P1-FRLS†	300	1.80	1.00	2.00	2.00	33.6	3600
IC-PW-01-40000-CU-2XL-2XWaY-1100-IEC60502 P1-FRLS†	400	2.00	1.20	2.20	2.00	37.2	4450
IC-PW-01-50000-CU-2XL-2XWaY-1100-IEC60502 P1-FRLS†	500	2.20	1.20	2.30	2.00	41.3	5775
IC-PW-01-63000-CU-2XL-2XWaY-1100-IEC60502 P1-FRLS†	630	2.40	1.20	2.40	2.50	46.1	7250
IC-PW-01-80000-CU-2XL-2XWaY-1100-IEC60502 P1-FRLS†	800	2.60	1.40	2.60	2.50	50.9	9075
IC-PW-01-100000-CU-2XL-2XWaY-1100-IEC6050 2P1-FRLS†	1000	2.80	1.40	2.70	2.50	55.4	11125

The above data is approximate & subject to manufacturing tolerance. †IEC 60502-1 items are not registered in the Indo Cables Item Master — all codes above are derived from the published code structure (01 single-core · CU · 2XL XLPE · 2XWaY aluminium-round-wire-armoured designation · 1100 · IEC60502P1 · FRLS sheath, mirroring the original codes) and are flagged for registration.

ELECTRICAL CHARACTERISTICS

Current rating and maximum DC conductor resistance.

Nominal cross-sectional area mm ²	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 .	
4	58	51	46	43	53	45	4.61
6	72	63	57	53	67	57	3.08
10	97	83	76	70	91	78	1.83
16	124	106	97	89	119	103	1.15
25	160	136	124	114	158	139	0.727
35	191	162	148	136	194	169	0.524
50	225	191	174	160	233	206	0.387
70	275	233	213	195	296	262	0.268
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 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 gives the duct table six reference temperatures (15–50°C) against eight for the other two tables, and heads it “other than 30°C ground temperature” while the stated ground condition is 20°C — reproduced as written, flagged for check.

OUR ACCREDITATIONS & APPROVAL



ISO 9001
Cert. 99 100 22646 (TÜV SÜD)



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Bureau of Indian Standards · CM/L 6200267409



RoHS
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