LOW VOLTAGE POWER CABLE · INDOCABLES LV CU MC-2 SWA · 2 CORE STEEL WIRE ARMOURED

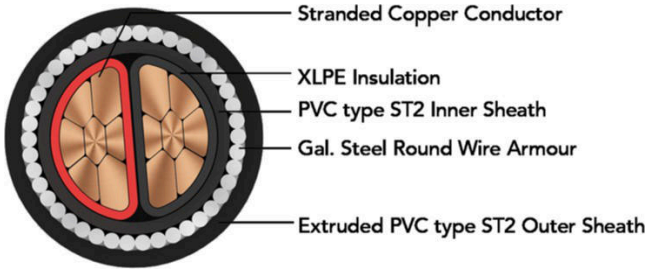
0.6/1 (1.2) KV AC · 2 CORE COPPER

Stranded compacted copper conductor · XLPE insulated · PVC inner covering · galvanized steel round wire armour (SWA) · PVC sheathed to IEC 60502-1

0.6/1 (1.2) kV	90 °C max.	250 °C	3.5 kV AC	4–630 mm²
Nominal voltage	Operating temperature	Short-circuit temperature	Test voltage	Size range, 2 core

CROSS SECTION · LAYER CALLOUTS

CABLE / SIDE VIEW · INDOCABLES sheath print



Images not to scale. Follow table for dimensions.

APPLICATION

INDOCABLES LV CU IEC 60502-1 0.6/1 KV MC-2 SWA, 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 (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	Galvanized steel wire armoured (SWA)
Outer sheath	Extruded Polyvinylchloride (ST2) or Polyethylene (ST7) or Halogen free (ST8) as per IEC 60502-1
Core identification	Red and Black
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

NOTES

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

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	Nominal diameter of armouring wire mm	Overall diameter mm	Weight (approx.) kg/km
IC-PW-02-00400-CU-2XL-2XWY-0660-IEC60502P1-FRLS*	4	0.70	1.00	1.40	0.80	14.5	370
IC-PW-02-00600-CU-2XL-2XWY-0660-IEC60502P1-FRLS*	6	0.70	1.00	1.50	1.25	16.5	500
IC-PW-02-01000-CU-2XL-2XWY-0660-IEC60502P1-FRLS*	10	0.70	1.00	1.50	1.25	18.5	690
IC-PW-02-01600-CU-2XL-2XWY-0660-IEC60502P1-FRLS*	16	0.70	1.00	1.60	1.25	18.0 †	770
IC-PW-02-02500-CU-2XL-2XWY-0660-IEC60502P1-FRLS*	25	0.90	1.00	1.70	1.60	21.3	1150
IC-PW-02-03500-CU-2XL-2XWY-0660-IEC60502P1-FRLS*	35	0.90	1.00	1.80	1.60	23.1	1430
IC-PW-02-05000-CU-2XL-2XWY-0660-IEC60502P1-FRLS*	50	1.00	1.00	1.90	1.60	25.9	1800
IC-PW-02-07000-CU-2XL-2XWY-0660-IEC60502P1-FRLS*	70	1.10	1.00	2.00	2.00	29.7	2500
IC-PW-02-09500-CU-2XL-2XWY-0660-IEC60502P1-FRLS*	95	1.10	1.20	2.10	2.00	32.7	3170
IC-PW-02-12000-CU-2XL-2XWY-0660-IEC60502P1-FRLS*	120	1.20	1.20	2.30	2.00	34.8	3770
IC-PW-02-15000-CU-2XL-2XWY-0660-IEC60502P1-FRLS*	150	1.40	1.20	2.40	2.50	39.0	4800
IC-PW-02-18500-CU-2XL-2XWY-0660-IEC60502P1-FRLS*	185	1.60	1.40	2.60	2.50	43.0	5790
IC-PW-02-24000-CU-2XL-2XWY-0660-IEC60502P1-FRLS*	240	1.70	1.40	2.70	2.50	46.8	7050
IC-PW-02-30000-CU-2XL-2XWY-0660-IEC60502P1-FRLS*	300	1.80	1.60	2.90	2.50	51.3	8540
IC-PW-02-40000-CU-2XL-2XWY-0660-IEC60502P1-FRLS*	400	2.00	1.60	3.10	2.50	56.0	10320
IC-PW-02-50000-CU-2XL-2XWY-0660-IEC60502P1-FRLS*	500	2.20	1.60	3.40	3.15	63.9	13810
IC-PW-02-63000-CU-2XL-2XWY-0660-IEC60502P1-FRLS*	630	2.40	1.80	3.70	3.15	70.5	16900

The above data is approximate & subject to manufacturing tolerance. Codes read 02 = 2 core · CU · 2XL XLPE · 2XWY round steel wire armoured, PVC sheathed · 600/1000 V grade · IEC 60502-1 · FRLS.

* The Item Master holds no IEC 60502-1 rows, so all seventeen codes are derived from the Indo Cables code structure and are not yet registered — the steward must add them and move them to ACTIVE before quoting. † The source gives 16 mm² an overall diameter of 18.0 mm, below the 18.5 mm shown for 10 mm² — reproduced as written, flagged for check.

ELECTRICAL CHARACTERISTICS

Current ratting and maximum DC conductor resistance.

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.	Maximum DC conductor resistance at 20°C Ω/km
1.5 ‡	33	27	30	12.1
2.5 ‡	44	35	40	7.41
4	58	45	53	4.61
6	72	56	67	3.08
10	96	75	91	1.83
16	124	96	119	1.15
25	159	122	154	0.727
35	190	146	189	0.524
50	225	173	229	0.387
70	273	211	288	0.268
95	326	252	354	0.193
120	367	284	405	0.153
150	409	317	461	0.124
185	459	357	530	0.0991
240	525	409	623	0.0754
300	584	456	708	0.0601
400	650	508	807	0.047
500	718	562	914	0.0366
630	786	616	1030	0.0283

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**

‡ The source carries current ratings for 1.5 mm² and 2.5 mm² but gives neither size a row in the weight & dimension table, so neither carries a product code — reproduced as written, flagged for check.

DE-RATING FACTOR

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

The air table omits the 30°C base column and the duct table omits 10°C, 20°C and 30°C — both reproduced with exactly the columns the source gives.