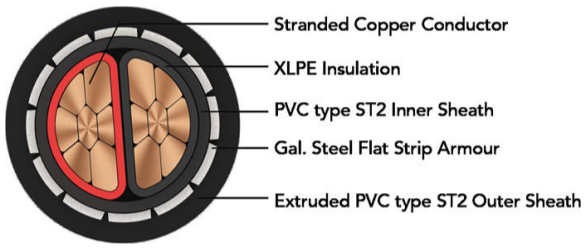
LOW VOLTAGE POWER CABLE · MC-2 SFA · TWO-CORE COPPER

0.6/1 (1.2) KV AC · STRIP ARMOURED

Circular compacted or stranded copper conductor · XLPE insulated · extruded or lapped PVC inner covering · galvanized flat strip armoured · PVC sheathed · conforming to IEC 60502-1

0.6/1 (1.2) kV	90 °C	250 °C	25–630 mm²
Nominal voltage	Max. operating temperature	Max. short circuit temperature	2 core range

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 MC-2 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 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.

CHARACTERISTICS

Voltage rating	Nominal Voltage: 0.6/1 (1.2) kV
Operation temperature	Max. operating temperature up to 90°C · Max. Short Circuit Temperature: 250°C
Core identification	Red and Black
Bending radius	Fixed Installation: 12 x Overall diameter
Test voltage	3.5kV AC †

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 Flat Strip armoured (FSA)
Outer sheath	Extruded Polyvinylchloride (ST2) or Polyethylene (ST7) or Halogen free (ST8) as per IEC 60502-1

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 mm²	Nominal insulation thickness mm	Nominal inner covering thickness mm	Nominal sheath thickness mm	Armouring dimension n × mm	Overall diameter mm	Weight (approx.) kg/km
IC-PW-02-02500-CU-2XL-2XFY-1100-IE C60502P1-FRLS†	25	0.90	1.00	1.8	4 × 0.2	18.3	800
IC-PW-02-03500-CU-2XL-2XFY-1100-IE C60502P1-FRLS†	35	0.90	1.00	1.8	4 × 0.2	20.1	1000
IC-PW-02-05000-CU-2XL-2XFY-1100-IE C60502P1-FRLS†	50	1.00	1.00	1.8	4 × 0.2	22.9	1400
IC-PW-02-07000-CU-2XL-2XFY-1100-IE C60502P1-FRLS†	70	1.10	1.00	1.9	4 × 0.2	25.9	1800
IC-PW-02-09500-CU-2XL-2XFY-1100-IE C60502P1-FRLS†	95	1.10	1.20	2.0	4 × 0.2	28.9	2400
IC-PW-02-12000-CU-2XL-2XFY-1100-IE C60502P1-FRLS†	120	1.20	1.20	2.2	4 × 0.5	31.6	3100
IC-PW-02-15000-CU-2XL-2XFY-1100-IE C60502P1-FRLS†	150	1.40	1.20	2.3	4 × 0.5	34.8	3800
IC-PW-02-18500-CU-2XL-2XFY-1100-IE C60502P1-FRLS†	185	1.60	1.40	2.4	4 × 0.5	38.6	4600
IC-PW-02-24000-CU-2XL-2XFY-1100-IE C60502P1-FRLS†	240	1.70	1.40	2.6	4 × 0.5	42.6	5800
IC-PW-02-30000-CU-2XL-2XFY-1100-IE C60502P1-FRLS†	300	1.80	1.60	2.8	4 × 0.5	47.1	7100
IC-PW-02-40000-CU-2XL-2XFY-1100-IE C60502P1-FRLS†	400	2.00	1.60	3.0	4 × 0.5	51.8	8700
IC-PW-02-50000-CU-2XL-2XFY-1100-IE C60502P1-FRLS†	500	2.20	1.60	3.2	4 × 0.5	58.2	11300
IC-PW-02-63000-CU-2XL-2XFY-1100-IE C60502P1-FRLS†	630	2.40	1.80	3.5	4 × 0.5	64.8	14100

The above data is approximate & subject to manufacturing tolerance. Also available with EPR/HEPR insulation type. †IEC 60502-1 armoured items are not yet registered in the Indo Cables Item Master — codes are derived from the published code structure (2-core · Cu · XLPE · 2XFY flat-strip-armoured designation · 1.1 kV · IEC60502P1 · ST2-FRLS sheath) and flagged for registration.

ELECTRICAL CHARACTERISTICS

Current rating 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
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

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
BIS standard mark

RoHS
Compliant

REACH
Compliant

Make in India
Manufactured in India