

LOW VOLTAGE POWER CABLE · INDOCABLES 2XWY MC-4 · 4 CORE ROUND WIRE ARMoured

650/1100 V AC · 4 CORE COPPER

Stranded compacted copper conductor · XLPE insulated · PVC inner sheath · Galvanized steel round wire armour · PVC sheathed to IS 7098-1

650/1100 V

Voltage rating

90 °C max.

Operation temperature

250 °C

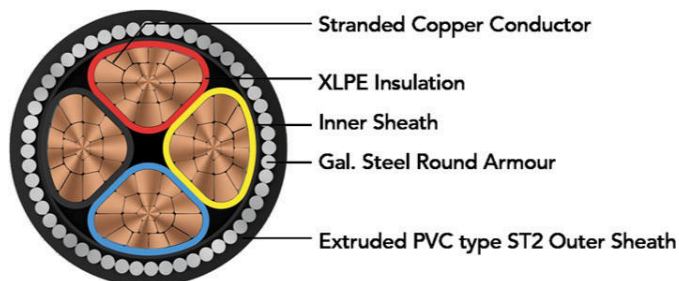
Short circuit temperature

1500 V DC

DC systems, to earth

4–300 mm²

Size range, 4 core



CROSS SECTION · LAYER CALLOUTS



CABLE / SIDE VIEW · INDOCABLES sheath print

Images not to scale. Follow table for dimensions

APPLICATION

INDOCABLES 2XWY MC-4, Stranded compacted copper conductor, XLPE insulated, PVC inner sheathed, Galvanized Steel round wire armour and PVC sheathed confirming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

CONSTRUCTION

Conductor	Stranded plain compacted sector shaped copper conductor as per IS 8130, class 1&2
Insulation	Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
Inner sheath	Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
Armour	Armoured with Galvanized Steel round wire to IS 3975
Outer sheath	Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH
Core identification	Red, Yellow, Blue and Black
Bending radius	Fixed installation 12 x Overall diameter

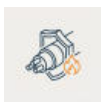
OUTSTANDING FEATURES



High life



High Insulation resistance



Flame retardant



Low Halogen · Low smoke



UV resistant

STANDARD FOLLOWS

IS 8130:2013

IS 5831:1984

IS 3975:1979

IS 7098-1:1988

COMPLIANCE

Conductor resistance

IS 8130:2013

Insulation resistance

IS 7098-1:1988

Flammability test

IEC 60332-1:2015

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 mm ²	Class of conductor	Nominal Thickness of Insulation mm	Nominal dimension of Armour round wire mm	Minimum thickness of outer sheath mm	Overall Diameter mm	Weight (Approx.) kg/km
IC-PW-04-00400-CU-2XL-2XWY-1100-IS70 98P1-FRLS§	4 x 4	Class 1	0.7	1.4	1.24	15.3	503
IC-PW-04-00400-CU-2XL-2XWY-1100-IS70 98P1-FRLS§	4 x 4	Class 2	0.7	1.4	1.24	16	533
IC-PW-04-00600-CU-2XL-2XWY-1100-IS70 98P1-FRLS§	4 x 6	Class 1	0.7	1.4	1.24	16.5	618
IC-PW-04-00600-CU-2XL-2XWY-1100-IS70 98P1-FRLS§	4 x 6	Class 2	0.7	1.4	1.24	17.3	646
IC-PW-04-01000-CU-2XL-2XWY-1100-IS70 98P1-FRLS	4 x 10	Class 2	0.7	1.4	1.4	19.8	870
IC-PW-04-01600-CU-2XL-2XWY-1100-IS70 98P1-FRLS	4 x 16	Class 2	0.7	1.6	1.4	21	1159
IC-PW-04-02500-CU-2XL-2XWY-1100-IS70 98P1-FRLS	4 x 25	Class 2	0.9	1.6	1.4	25	1615
IC-PW-04-03500-CU-2XL-2XWY-1100-IS70 98P1-FRLS	4 x 35	Class 2	0.9	1.6	1.4	26.5	2033
IC-PW-04-05000-CU-2XL-2XWY-1100-IS70 98P1-FRLS	4 x 50	Class 2	1	1.6	1.56	29.5	2593
IC-PW-04-07000-CU-2XL-2XWY-1100-IS70 98P1-FRLS	4 x 70	Class 2	1.1	2	1.56	34	3686
IC-PW-04-09500-CU-2XL-2XWY-1100-IS70 98P1-FRLS	4 x 95	Class 2	1.1	2	1.72	38	4769
IC-PW-04-12000-CU-2XL-2XWY-1100-IS70 98P1-FRLS	4 x 120	Class 2	1.2	2	1.88	42	5795
IC-PW-04-15000-CU-2XL-2XWY-1100-IS70 98P1-FRLS	4 x 150	Class 2	1.4	2.5	2.04	47	7324
IC-PW-04-18500-CU-2XL-2XWY-1100-IS70 98P1-FRLS	4 x 185	Class 2	1.6	2.5	2.2	52	8901
IC-PW-04-24000-CU-2XL-2XWY-1100-IS70 98P1-FRLS	4 x 240	Class 2	1.7	2.5	2.36	57.5	11210
IC-PW-04-30000-CU-2XL-2XWY-1100-IS70 98P1-FRLS	4 x 300	Class 2	1.8	3.15	2.52	64.5	14279

The above data is approximate & subject to manufacturing tolerance. Codes read 04 = four core · CU · 2XL XLPE · 2XWY galvanized steel round wire armour, PVC sheath · 1100 V grade · IS 7098 Part 1 · FRLS.

§ Every row was found in the Item Master. The register carries no conductor-class field, so the Class 1 and Class 2 rows at 4 mm² and 6 mm² each resolve to one item code — flagged for the Item Master Steward. ‡ The electrical table overleaf carries a 400 mm² row; the dimension table above and the register both stop at 300 mm² for four core — reproduced as written, flagged for check. ¶ The source cites the flammability standard as IEC 60332-1:2015; the current part designation is IEC 60332-1-2 — reproduced as written, flagged for check.

ELECTRICAL CHARACTERISTICS

Current carrying capacity and maximum DC conductor resistance.

Nominal area of conductor mm ²	Buried direct in the ground Amp .	In single way Ducts Amp .	In air Amp .	Max. DC conductor resistance at 20°C Ω/km
4	45	38	41	4.61
6	56	47	52	3.08
10	74	62	70	1.83
16	95	79	89	1.15
25	122	102	119	0.727
35	146	122	147	0.524
50	173	144	179	0.387
70	212	177	226	0.268
95	254	212	279	0.193
120	287	240	320	0.153
150	321	269	365	0.124
185	362	304	422	0.0991
240	418	352	500	0.0754
300	469	396	574	0.0601
400†	528	447	662	0.047

Air ambient temperature **40°C**

Ground ambient temperature **30°C**

Conductor operating temperature **90°C**

Per **IS 3961 (Part 6):2016**

DE-RATING FACTOR

Rating factor for variation in ambient air temperature for cable in free air.

Ambient air temperature	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C
De-rating factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90°C.

Rating factor for variation in ground temperature for direct buried cables.

Ground temperature	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C
De-rating factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90°C.

Rating factor for variation in ground temperature for cable in duct.

Ground temperature	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C
De-rating factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90°C. The duct and direct-buried factors are identical in the source — reproduced as written.