

LOW VOLTAGE POWER CABLE · A2XFY MC-2 · TWO CORE ARMoured

650/1100 V AC · TWO-CORE ALUMINIUM

Stranded compacted aluminium conductor · XLPE insulated · PVC inner sheathed · galvanized steel flat strip armoured · PVC sheathed · conforming to IS 7098-1

650/1100 V
Voltage rating

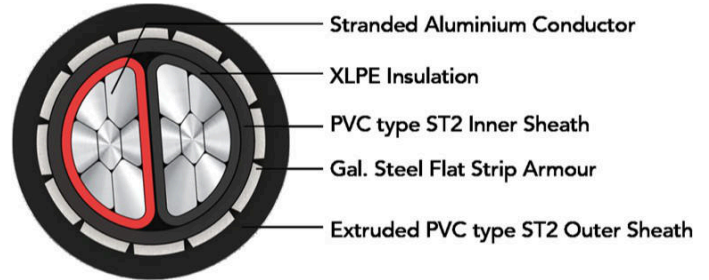
90 °C max.
Operation temperature

250 °C
Short-circuit temperature

1500 V DC
DC systems to earth



CABLE / SIDE VIEW · INDOCABLES sheath print



CROSS-SECTION · construction callouts

Images not to scale. Follow table for dimensions.

APPLICATION

INDOCABLES A2XFY MC-2, Stranded compacted aluminium conductor, XLPE insulated, PVC inner sheathed, Galvanized Steel Flat strip 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 compacted sector shaped Aluminium conductor as per IS 8130, class 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 Flat Steel Strip to IS 3975
Outer sheath	Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH
Core identification	Red and Black
Bending radius	Fixed installation 12 x Overall diameter

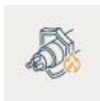
OUTSTANDING FEATURES



High life



High insulation resistance



Flame retardant



Low halogen · Low smoke



UV resistant

STANDARD FOLLOWS

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	Nominal thickness of insulation mm	Nominal dimension of armour flat wire mm	Minimum thickness of outer sheath mm	Overall diameter mm	Weight (approx.) kg/km
IC-PW-02-02500-AL-2XL-A2XFY-1100-IS7098P 1-FRLS	2 x25	0.9	4x0.8	1.4	18.5	509.13
IC-PW-02-03500-AL-2XL-A2XFY-1100-IS7098P 1-FRLS	2 x35	0.9	4x0.8	1.4	20	605.51
IC-PW-02-05000-AL-2XL-A2XFY-1100-IS7098P 1-FRLS	2 x50	1	4x0.8	1.4	22.5	753.28
IC-PW-02-07000-AL-2XL-A2XFY-1100-IS7098P 1-FRLS	2 x70	1.1	4x0.8	1.56	25.5	989
IC-PW-02-09500-AL-2XL-A2XFY-1100-IS7098P 1-FRLS	2 x95	1.1	4x0.8	1.56	28	1204.3
IC-PW-02-12000-AL-2XL-A2XFY-1100-IS7098P 1-FRLS	2 x120	1.2	4x0.8	1.56	30.5	1408.2
IC-PW-02-15000-AL-2XL-A2XFY-1100-IS7098P 1-FRLS	2 x150	1.4	4x0.8	1.72	31.79	1690.2
IC-PW-02-18500-AL-2XL-A2XFY-1100-IS7098P 1-FRLS	2 x185	1.6	4x0.8	1.72	37	2004
IC-PW-02-24000-AL-2XL-A2XFY-1100-IS7098P 1-FRLS	2 x240	1.7	4x0.8	1.88	38.69	2480
IC-PW-02-30000-AL-2XL-A2XFY-1100-IS7098P 1-FRLS	2 x300	1.8	4x0.8	2.04	42.53	2964
IC-PW-02-40000-AL-2XL-A2XFY-1100-IS7098P 1-FRLS†	2 x400	2	4x0.8	2.36	48.24	3676
IC-PW-02-50000-AL-2XL-A2XFY-1100-IS7098P 1-FRLS†	2 x500	2.2	4x0.8	2.52	56.5	4599
IC-PW-02-63000-AL-2XL-A2XFY-1100-IS7098P 1-FRLS†	2 x630	2.4	4x0.8	2.68	62.5	5662

The above data is approximate & subject to manufacturing tolerance. † 400, 500 and 630 mm² are not in the Indo Cables Item Master, which carries this line only to 300 mm²; these three codes are derived from the published code structure (PW · 02 two core · AL · 2XL XLPE · A2XFY strip-armoured PVC sheath · 1100 V · IS7098P1 · FRLS) and are flagged for registration.

ELECTRICAL CHARACTERISTICS

Current rating 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
16	89	74	83	1.91
25	114	95	109	1.2
35	136	113	133	0.868
50	161	134	162	0.641
70	197	164	204	0.443
95	235	196	251	0.320
120	266	222	287	0.253
150	296	248	328	0.206
185	335	281	379	0.164
240	385	324	448	0.125
300	432	364	513	0.100
400	487	412	593	0.0778
500	548	463	683	0.0605
630	612	518	784	0.0469

Air ambient temperature **40°C**

Ground ambient temperature **30°C**

Conductor operating temperature **90°C**

The above table is in accordance with IS 3961 (part 6):2016. Source splits these current ratings across two tables with identical column heads (16–300 mm² and 400–630 mm²); they are merged here with every value reproduced as written. The 16 mm² row has no matching entry in the weight & dimension table above, which starts at 25 mm² — flagged for check.

DE-RATING FACTOR

Rating factor for variation in ambient air temperature for cable in free air. Maximum conductor temperature 90°C.

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

Rating factor for variation in ground temperature for direct buried cables. Maximum conductor temperature 90°C.

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

Rating factor for variation in ground temperature for cable in duct. Maximum conductor temperature 90°C.

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

Source gives identical factors for direct-buried and in-duct laying — reproduced as written, flagged for check.