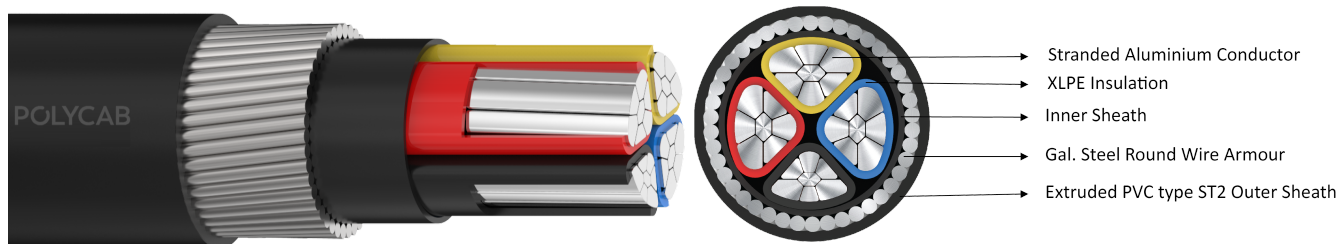


POLYCAB A2XWY MC-3.5 IS 7098-P1

POWER CABLE 650/1100 V AC



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB A2XWY MC-3.5, Stranded compacted aluminium conductor, XLPE insulated, PVC inner sheathed Galvanised Steel round wire armour and PVC sheathed conforming 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.

CHARACTERISTICS

Voltage Rating
650/1100 V

Operation Temperature
Max.: 90°C
Short circuit temperature 250°C

CONSTRUCTION

- Stranded compacted sector shaped Aluminium conductor as per IS 8130, class 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Armoured with Galvanised Steel round wire to IS 3975
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZ

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



NOTES

- Other color also available on request.
- Cable available with anti-rodent & termite

Weight & Dimension Data

Product code	Nominal cross-sectional area n x mm ²	Nominal Thickness of Insulation Main/Neutral mm	Nominal dimension of Armour round wire mm	Minimum thickness of outer sheath mm	Overall Diameter mm	Weight (Approx.) kg/km
LVIS09AXSWY23.5C025SA001S	3.5 x25	0.9/0.7	1.6	1.4	23.6	969
LVIS09AXSWY23.5C035SA001S	3.5 x35	0.9/0.7	1.6	1.4	25.8	1139
LVIS09AXSWY23.5C050SA001S	3.5 x50	1/0.9	1.6	1.56	29.5	1387
LVIS09AXSWY23.5C070SA001S	3.5 x70	1.1/0.9	2	1.56	34	1938
LVIS09AXSWY23.5C095SA001S	3.5 x95	1.1/1	2	1.56	37.2	2356
LVIS09AXSWY23.5C120SA001S	3.5 x120	1.2/1.1	2	1.72	41	2800
LVIS09AXSWY23.5C150SA001S	3.5 x150	1.4/1.1	2	1.88	45	3296
LVIS09AXSWY23.5C185SA001S	3.5 x185	1.6/1.1	2.5	2.04	50	4313
LVIS09AXSWY23.5C240SA001S	3.5 x240	1.7/1.2	2.5	2.2	56	5156
LVIS09AXSWY23.5C300SA001S	3.5 x300	1.8/1.4	2.5	2.36	61	6108
LVIS09AXSWY23.5C400SA001S	3.5 x400	2/1.6	3.15	2.68	70	8151
LVIS09AXSWY23.5C500SA001S	3.5 x500	2.2/1.7	3.15	2.84	77	9880

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

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	74	61	69	1.91
25	95	79	93	1.20
35	114	94	114	0.868
50	134	112	138	0.641
70	164	137	175	0.443
95	197	164	216	0.32
120	223	187	249	0.253
150	249	209	284	0.206
185	282	238	329	0.164

POLYCAB A2XWY MC-3.5 IS 7098-P1

POWER CABLE 650/1100 V AC

Nominal area of conductor	Buried direct in the ground	In single way Ducts	In air	Max. DC conductor resistance at 20°C
mm ²	Amp.	Amp.	Amp.	Ω/km
240	327	276	392	0.125
300	369	312	452	0.100
400	420	356	526	0.0778
500	478	412	612	0.0605

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

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