



Images not to scale. Follow table for dimensions

APPLICATION

POLY CAB A2XWY MC-4, Stranded compacted aluminium conductor, XLPE insulated, PVC inner sheathed, Galvanised Steel round wire armour and PVC sheathed confirming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthing) 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 1&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/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



POLYCAP A2XWY MC-4 IS 7098-P1 POWER CABLE 650/1100 V AC

POLYCAP
IDEAS. CONNECTED.

Weight & Dimension Data

Product code	Nominal cross-sectional area	Class of conductor	Nominal Thickness of Insulation	Nominal dimension of Armour round wire	Minimum thickness of outer sheath	Overall Diameter	Weight (Approx.)
							kg/km
	n x mm ²		mm	mm	mm	mm	
LVIS09AXSWY2004C004SA002S	4 x4	Class 1	0.7	1.4	1.24	15.3	413
LVIS09AXSWY2004C004SA003P	4 x4	Class 2	0.7	1.4	1.24	16	435
LVIS09AXSWY2004C006SA002P	4 x6	Class 1	0.7	1.4	1.24	16.5	473
LVIS09AXSWY2004C006SA001P	4 x6	Class 2	0.7	1.4	1.24	17.3	506
LVIS09AXSWY2004C010SA003P	4 x10	Class 1	0.7	1.4	1.4	18.6	592
LVIS09AXSWY2004C010SA001P	4 x10	Class 2	0.7	1.4	1.4	19.8	633
LVIS09AXSWY2004C016SA003S	4 x16	Class 2	0.7	1.6	1.4	21	795
LVIS09AXSWY2004C025SA001S	4 x25	Class 2	0.9	1.6	1.4	25	1045
LVIS09AXSWY2004C035SA001S	4 x35	Class 2	0.9	1.6	1.4	26.5	1244
LVIS09AXSWY2004C050SA001S	4 x50	Class 2	1	1.6	1.56	29.5	1520
LVIS09AXSWY2004C070SA001S	4 x70	Class 2	1.1	2	1.56	34	2137
LVIS09AXSWY2004C095SA001S	4 x95	Class 2	1.1	2	1.72	38	2622
LVIS09AXSWY2004C120SA001S	4 x120	Class 2	1.2	2	1.88	42	3087
LVIS09AXSWY2004C150SA001S	4 x150	Class 2	1.4	2.5	2.04	47	3980
LVIS09AXSWY2004C185SA001S	4 x185	Class 2	1.6	2.5	2.2	52	4721
LVIS09AXSWY2004C240SA001S	4 x240	Class 2	1.7	2.5	2.36	57.5	5709
LVIS09AXSWY2004C300SA001S	4 x300	Class 2	1.8	3.15	2.52	64.5	7372
LVIS09AXSWY2004C400SA001S	4 x400	Class 2	2	3.15	2.84	71.5	8985

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Nominal area of conductor mm ²	Buried direct in the ground		In single way Ducts		Max. DC conductor resistance at 20°C Ω/km
	Amp.	Amp.	Amp.	Amp.	
4	35	30	32		7.41
6	46	38	42		4.61
10	57	48	54		3.08
16	74	61	69		1.91
25	95	79	93		1.20
35	114	94	114		0.868

Nominal area of conductor mm ²	Buried direct in the ground		In single way Ducts	In air	Max. DC conductor resistance at 20°C
	Amp.	Amp.	Amp.	Amp.	Ω/km
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
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