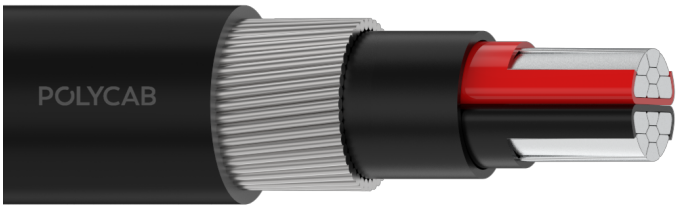
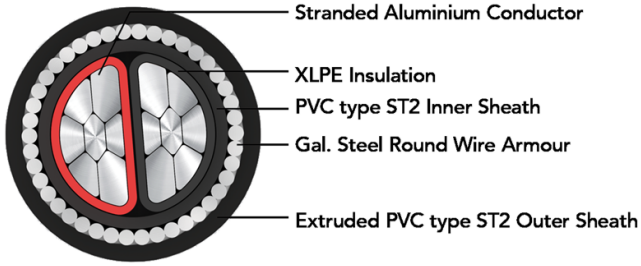
POLYCAB A2XWY MC-2 IS 7098-P1
POWER CABLE 650/1100 V AC





Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB A2XWY MC-2, 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 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 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 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

POLYCAB A2XWY MC-2 IS 7098-P1
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POLYCAB
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.)
	n x mm²		mm	mm	mm	mm	kg/km
LVIS09AXSWY2002C004SA002P	2 x4	Class 1	0.7	1.4	1.24	14.5	375
LVIS09AXSWY2002C004SA001S	2 x4	Class 2	0.7	1.4	1.24	15	403
LVIS09AXSWY2002C006SA002S	2 x6	Class 1	0.7	1.4	1.24	15.5	437
LVIS09AXSWY2002C006SA001S	2 x6	Class 2	0.7	1.4	1.24	16.5	465
LVIS09AXSWY2002C010SA001S	2 x10	Class 1	0.7	1.4	1.24	16	503
LVIS09AXSWY2002C010SA002S	2 x10	Class 2	0.7	1.4	1.24	18	551
LVIS09AXSWY2002C016SA001S	2 x16	Class 2	0.7	1.4	1.4	17	480.16
LVIS09AXSWY2002C025SA001S	2 x25	Class 2	0.9	1.6	1.4	20	671.84
LVIS09AXSWY2002C035SA001S	2 x35	Class 2	0.9	1.6	1.4	22	775.55
LVIS09AXSWY2002C050SA001S	2 x50	Class 2	1	1.6	1.4	24	937.97
LVIS09AXSWY2002C070SA001S	2 x70	Class 2	1.1	1.6	1.56	27	1186.85
LVIS09AXSWY2002C095SA001S	2 x95	Class 2	1.1	2	1.56	28.68	1572.78
LVIS09AXSWY2002C120SA001S	2 x120	Class 2	1.2	2	1.56	33	1849.49
LVIS09AXSWY2002C150SA001S	2 x150	Class 2	1.4	2	1.72	36	2182.96
LVIS09AXSWY2002C185SA001S	2 x185	Class 2	1.6	2	1.88	37.7	2597.6
LVIS09AXSWY2002C240SA001S	2 x240	Class 2	1.7	2.5	2.04	45	3418.52
LVIS09AXSWY2002C300SA001S	2 x300	Class 2	1.8	2.5	2.2	46.22	4019.07
LVIS09AXSWY2002C400SA001S	2 x400	Class 2	2	2.5	2.36	51.61	4854
LVIS09AXSFY2002C500SA001S	2 x500	Class 2	2.2	3.15	2.68	61.5	6517
LVIS09AXSFY2002C630SA001S	2 x630	Class 2	2.4	3.15	2.84	67.5	7790

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Nominal area of conductor	**Buried direct in the ground**	**In single way Ducts**	**In air**	**Max. DC conductor resistance at 20°C**
mm²	**Amp.**	**Amp.**	**Amp.**	**Ω/km**
4	42	36	38	7.41
6	55	46	50	4.61
10	68	57	64	3.08
16	89	74	83	1.91
25	114	95	109	1.20

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Nominal area of conductor	Buried direct in the ground	In single way Ducts	In air	Max. DC conductor resistance at 20°C
mm²	Amp.	Amp.	Amp.	Ω/km
35	136	113	133	0.868
50	161	134	162	0.641
70	197	164	204	0.443
95	235	196	251	0.32
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

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