



Images not to scale. Follow table for dimensions

## APPLICATION

POLY CAB A2XFY MC-2, Stranded compacted aluminium conductor, XLPE insulated, PVC inner sheathed, Galvanised 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.

## 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 Flat Steel Strip 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



# POLYCAT A2XFY MC-2 IS 7098-P1 POWER CABLE 650/1100 V AC

**POLYCAT**  
IDEAS. CONNECTED.

## Weight & Dimension Data

Product code	Nominal cross-sectional area	Nominal Thickness of Insulation	Nominal dimension of Armour flat wire	Minimum thickness of outer sheath	Overall Diameter	Weight (Approx.)
	n x mm <sup>2</sup>	mm	mm	mm	mm	kg/km
LVIS09AXSFY2002C025SA001S	2 x25	0.9	4x0.8	1.4	18.5	509.13
LVIS09AXSFY2002C035SA001S	2 x35	0.9	4x0.8	1.4	20	605.51
LVIS09AXSFY2002C050SA001S	2 x50	1	4x0.8	1.4	22.5	753.28
LVIS09AXSFY2002C070SA001S	2 x70	1.1	4x0.8	1.56	25.5	989
LVIS09AXSFY2002C095SA001S	2 x95	1.1	4x0.8	1.56	28	1204.3
LVIS09AXSFY2002C120SA001S	2 x120	1.2	4x0.8	1.56	30.5	1408.2
LVIS09AXSFY2002C150SA001S	2 x150	1.4	4x0.8	1.72	31.79	1690.2
LVIS09AXSFY2002C185SA001S	2 x185	1.6	4x0.8	1.72	37	2004
LVIS09AXSFY2002C240SA001S	2 x240	1.7	4x0.8	1.88	38.69	2480
LVIS09AXSFY2002C300SA001S	2 x300	1.8	4x0.8	2.04	42.53	2964
LVIS09AXSFY2002C400SA001S	2 x400	2	4x0.8	2.36	48.24	3676
LVIS09AXSFY2002C500SA001S	2 x500	2.2	4x0.8	2.52	56.5	4599
LVIS09AXSFY2002C630SA001S	2 x630	2.4	4x0.8	2.68	62.5	5662

The above data is approximate & subject to manufacturing tolerance.

## Electrical characteristics

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

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