



Images not to scale. Follow table for dimensions

APPLICATION

POLY CAB A2XFY MC-3, 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 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 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, Yellow, Blue

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



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 ²	mm	mm	mm	mm	kg/km
LVIS09AXSFY2003C016SA001S	3 x16	0.7	4x0.8	1.24	16.8	487.6
LVIS09AXSFY2003C025SA001S	3 x25	0.9	4x0.8	1.4	20.1	670.7
LVIS09AXSFY2003C035SA001S	3 x35	0.9	4x0.8	1.4	22	798
LVIS09AXSFY2003C050SA001S	3 x50	1	4x0.8	1.4	24.8	960
LVIS09AXSFY2003C070SA001S	3 x70	1.1	4x0.8	1.56	28.5	1282
LVIS09AXSFY2003C095SA001S	3 x95	1.1	4x0.8	1.56	31.3	1577
LVIS09AXSFY2003C120SA001S	3 x120	1.2	4x0.8	1.56	34.3	1871
LVIS09AXSFY2003C150SA001S	3 x150	1.4	4x0.8	1.72	38.3	2100
LVIS09AXSFY2003C185SA001S	3 x185	1.6	4x0.8	1.88	42.3	2500
LVIS09AXSFY2003C240SA001S	3 x240	1.7	4x0.8	2.04	47.2	3382
LVIS09AXSFY2003C300SA001S	3 x300	1.8	4x0.8	2.2	51.8	5101
LVIS09AXSFY2003C400SA001S	3 x400	2	4x0.8	2.52	58.5	5101
LVIS09AXSFY2003C500SA001S	3 x500	2.2	4x0.8	2.68	65	6365
LVIS09AXSFY2003C630SA001S	3 x630	2.4	4x0.8	2.84	73	7894

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	In air	Max. DC conductor resistance at 20°C Ω/km
	Amp.	Amp.	Amp.	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

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