



Images not to scale. Follow table for dimensions

APPLICATION

POLY CAB A2XWaY/A2XFaY SC, stranded compacted aluminium conductor, XLPE insulated, and PVC sheathed armoured cable 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 Aluminium conductor as per IS 8130, class 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Armoured with Aluminium Round wire/Flat strip armoured.
- Sheathed with PVC Type ST2/FRLS /FR/LSZH

Core Identification

Red/Black/Yellow/Blue/Natural

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 7098-1:1988

COMPLIANCE

Conductor resistance - IS 8130:2013

Insulation resistance - IS 7098-1:1988

Flammability test - IEC 60332-1-2:2015

OUR ACCREDITATIONS



APPROVAL



POLYCAT A2XWaY/A2XFaY SC IS 7098-P1 POWER CABLE 650/1100 V AC

POLYCAT
IDEAS. CONNECTED.

Weight & Dimension Data

A2XWaY						
Product code	Conductor size	Nominal Thickness of Insulation	Nominal dimension of Armour round wire	Minimum thickness of outer sheath	Overall Diameter	Weight (Approx.)
	n x mm ²	mm	mm	mm	mm	kg/km
LVIS09AXAWY2001C010SA001P	1 x 10	1	1.4	1.24	11.35	167
LVIS09AXAWY2001C016SA002S	1 x 16	1	1.4	1.24	12.5	190
LVIS09AXAWY2001C025SA002S	1 x 25	1.2	1.4	1.24	14	247
LVIS09AXAWY2001C035SA002S	1 x 35	1.2	1.4	1.24	15	290
LVIS09AXAWY2001C050SA002S	1 x 50	1.3	1.4	1.24	16.5	342
LVIS09AXAWY2001C070SA002S	1 x 70	1.4	1.4	1.24	18.5	428
LVIS09AXAWY2001C095SA002S	1 x 95	1.4	1.6	1.4	20.2	560
LVIS09AXAWY2001C120SA002S	1 x 120	1.5	1.6	1.4	22.5	665
LVIS09AXAWY2001C150SA002S	1 x 150	1.7	1.6	1.4	24	779
LVIS09AXAWY2001C185SA002S	1 x 185	1.9	1.6	1.4	26.5	921
LVIS09AXAWY2001C240SA002S	1 x 240	2	1.6	1.4	29	1121
LVIS09AXAWY2001C300SA002S	1 x 300	2.1	1.6	1.56	31.5	1349
LVIS09AXAWY2001C400SA002S	1 x 400	2.4	2	1.56	35.5	1739
LVIS09AXAWY2001C500SA002S	1 x 500	2.6	2	1.56	39.5	2128
LVIS09AXAWY2001C630SA002S	1 x 630	2.8	2	1.72	43	2660
LVIS09AXAWY2001C800SA002S	1 x 800	3.1	2	1.88	47.9	3296.5
LVIS09AXAWY2001C01KSA002S	1 x 1000	3.3	2.5	2.04	54.37	4142

A2XFaY						
Product code	Conductor size	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
LVIS09AXAFY2001C095SA002S	1 x 95	1.4	4x0.8	1.4	18.6	494
LVIS09AXAFY2001C120SA002S	1 x 120	1.5	4x0.8	1.4	20.4	589
LVIS09AXAFY2001C150SA002S	1 x 150	1.7	4x0.8	1.4	22.5	694
LVIS09AXAFY2001C185SA002S	1 x 185	1.9	4x0.8	1.4	24.5	827
LVIS09AXAFY2001C240SA002S	1 x 240	2	4x0.8	1.4	26.6	1026
LVIS09AXAFY2001C300SA002S	1 x 300	2.1	4x0.8	1.56	29.6	1235

A2XFaY						
Product code	Conductor size	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
LVIS09AXAFY2001C400SA002S	1 x 400	2.4	4x0.8	1.56	33	1548.5
LVIS09AXAFY2001C500SA002S	1 x 500	2.6	4x0.8	1.56	36.7	1909.5
LVIS09AXAFY2001C630SA002S	1 x 630	2.8	4x0.8	1.72	40.5	2413
LVIS09AXAFY2001C800SA002S	1 x 800	3.1	4x0.8	1.72	46	2992.5
LVIS09AXAFY2001C01KSA002S	1 x 1000	3.3	4x0.8	1.88	50	3667

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and Max. DC conductor resistance (Class 2)

Nominal cross sectional area mm ²	Buried direct in the ground		In single way Ducts			In air		Max. DC conductor resistance at 20°C Ω/km
	2 single core cables	3 single core cable	2 single core cables	3 single core cable	2 single core cables	3 single core cable	3 single core cable	
Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Ω/km
10	69	59	58	54	64	55	55	3.08
16	89	76	75	69	84	72	72	1.91
25	115	98	96	89	112	98	98	1.2
35	137	116	115	106	137	119	119	0.868
50	161	137	135	124	165	145	145	0.641
70	198	168	165	151	209	185	185	0.443
95	243	202	199	181	264	235	235	0.32
120	276	230	226	206	308	276	276	0.253
150	308	256	252	229	350	314	314	0.206
185	349	290	285	258	406	366	366	0.164
240	404	335	329	298	480	434	434	0.125
300	454	376	369	333	551	500	500	0.1
400	518	429	421	378	647	589	589	0.0778
500	588	485	476	426	751	685	685	0.0605
630	663	546	536	477	868	793	793	0.0469
800	740	608	596	528	992	907	907	0.0367

Nominal cross sectional area mm ²	Buried direct in the ground		In single way Ducts			In air		Max. DC conductor resistance at 20°C Ω/km
	2 single core cables	3 single core cable	2 single core cables	3 single core cable	2 single core cables	3 single core cable	3 single core cable	
1000	812	665	652	575	1117	1022	0.0291	

Air Ambient temperature: 40°C

Ground ambient temperature: 30°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

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

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