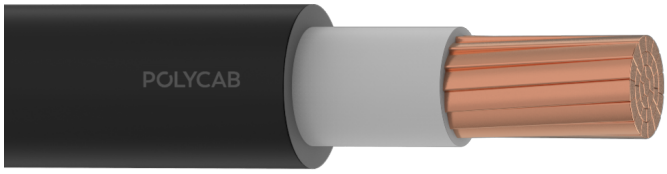
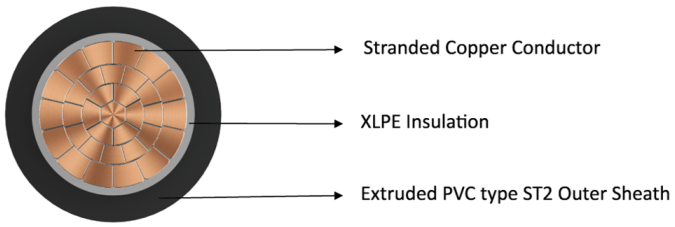
POLYCAB 2XY SC IS 7098-P1
POWER CABLE 650/1100 V AC





Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB 2XY SC, stranded compacted copper conductor, XLPE insulated 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/Solid plain compacted copper conductor as per IS 8130, class 1 or class 2
• Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
• Sheathed with PVC Type 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

POLYCAB 2XY SC IS 7098-P1
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IDEAS. CONNECTED.

Weight & Dimension Data

Product code	Nominal cross-sectional area	Class of conductor	Nominal Thickness of Insulation	Nominal thickness of outer sheath	Overall Diameter	Weight (Approx.)
	n x mm²		mm	mm	mm	kg/km
LVIS09CXUAY2001C004SA002P	1 x 4	Class 1	0.7	1.8	7.5	85.5
LVIS09CXUAY2001C006SA001P	1 x 6	Class 1	0.7	1.8	8	109
LVIS09CXUAY2001C004SA002P	1 x 4	Class 2	0.7	1.8	8	88
LVIS09CXUAY2001C006SA001P	1 x 6	Class 2	0.7	1.8	8.5	114
LVIS09CXUAY2001C010SA001P	1 x 10	Class 2	0.7	1.8	9.5	152
LVIS09CXUAY2001C016SA001S	1 x 16	Class 2	0.7	1.8	10	209
LVIS09CXUAY2001C025SA001S	1 x 25	Class 2	0.9	1.8	12	309
LVIS09CXUAY2001C035SA001S	1 x 35	Class 2	0.9	1.8	13	399
LVIS09CXUAY2001C050SA001S	1 x 50	Class 2	1	1.8	14	513
LVIS09CXUAY2001C070SA001S	1 x 70	Class 2	1.1	1.8	16	712
LVIS09CXUAY2001C095SA001S	1 x 95	Class 2	1.1	1.8	17.5	940
LVIS09CXUAY2001C120SA001S	1 x 120	Class 2	1.2	1.8	19	1168
LVIS09CXUAY2001C150SA001S	1 x 150	Class 2	1.4	2	21.5	1444
LVIS09CXUAY2001C185SA001S	1 x 185	Class 2	1.6	2	23.5	1786
LVIS09CXUAY2001C240SA001S	1 x 240	Class 2	1.7	2	26	2299
LVIS09CXUAY2001C300SA001S	1 x 300	Class 2	1.8	2	28.5	2840.5
LVIS09CXUAY2001C400SA001S	1 x 400	Class 2	2	2.2	33	3629
LVIS09CXUAY2001C500SA001S	1 x 500	Class 2	2.2	2.2	36	4598
LVIS09CXUAY2001C630SA001S	1 x 630	Class 2	2.4	2.2	40	5880
LVIS09CXUAY2001C800SA001S	1 x 800	Class 2	2.6	2.4	43.7	7486
LVIS09CXUAY2001C01KSA001S	1 x 1000	Class 2	2.8	2.6	49.2	9358

The above data is approximate & subject to manufacturing tolerance.

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Electrical characteristics

Current carrying capacity and Max. DC conductor resistance at 20°C

Nominal cross sectional area	Buried direct in the ground		In single way Ducts		In air		Max. DC conductor resistance at 20°C
	2 single core cables	3 single core cable	2 single core cables	3 single core cable	2 single core cables	3 single core cable	
mm²	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Ω/km
1.5	32	28	27	26	28	24	12.1
2.5	42	36	36	33	37	31	7.41
4	54	47	46	43	48	41	4.61
6	67	58	57	53	61	52	3.08
10	90	77	76	70	83	71	1.83
16	115	98	97	89	108	94	1.15
25	148	126	124	114	144	126	0.727
35	177	150	148	136	176	154	0.524
50	208	177	174	160	212	187	0.387
70	255	216	213	195	269	238	0.268
95	312	260	256	233	340	303	0.193
120	355	295	291	264	396	354	0.153
150	396	329	324	294	450	403	0.124
185	447	371	365	330	519	468	0.0991
240	515	427	420	379	613	553	0.0754
300	576	477	469	422	700	634	0.0601
400	651	537	528	473	813	737	0.047
500	727	598	589	525	930	844	0.0366
630	806	661	651	578	1056	961	0.0283
800	877	721	707	626	1179	1077	0.0221
1000	935	772	751	668	1288	1188	0.0176

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°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