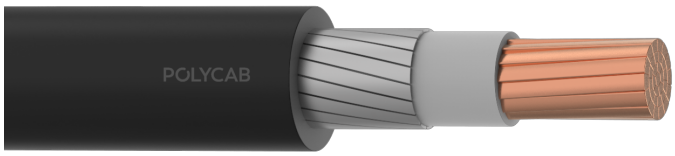
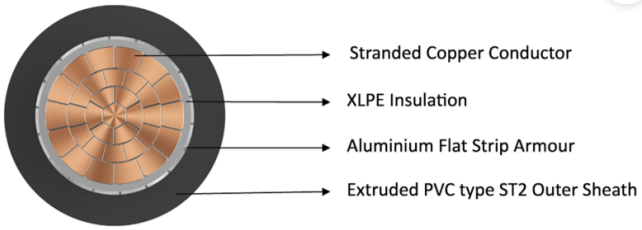
POLYCAB 2XWAY/2XFAY SC IS 7098-P1
POWER CABLE 650/1100 V AC





Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB 2XWaY/2XFaY SC, stranded compacted copper conductor, XLPE insulated and PVC sheathed armoured cable 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 plain compacted copper 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 resistan

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 2XWAY/2XFAY SC IS 7098-P1
POWER CABLE 650/1100 V AC

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Weight & Dimension Data

2XWaY

Product code	Nominal cross-sectional area	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
LVIS09CXAWY2001C010SA001P	1 x 10	1	1.4	1.24	12	219
LVIS09CXAWY2001C016SA002S	1 x 16	1	1.4	1.24	13	281
LVIS09CXAWY2001C025SA002S	1 x 25	1.2	1.4	1.24	14	390
LVIS09CXAWY2001C035SA002S	1 x 35	1.2	1.4	1.24	16	485
LVIS09CXAWY2001C050SA002S	1 x 50	1.3	1.4	1.24	17	608
LVIS09CXAWY2001C070SA002S	1 x 70	1.4	1.4	1.24	19	817
LVIS09CXAWYL001C095SA001S	1 x 95	1.4	1.6	1.4	22	1102
LVIS09CXAWY2001C120SA002S	1 x 120	1.5	1.6	1.4	23.5	1339
LVIS09CXAWY2001C150SA002S	1 x 150	1.7	1.6	1.4	24.5	1615
LVIS09CXAWY2001C185SA002S	1 x 185	1.9	1.6	1.4	26.5	1976
LVIS09CXAWY2001C240SA001S	1 x 240	2	1.6	1.4	29	2508
LVIS09CXAWY2001C300SA002S	1 x 300	2.1	1.6	1.56	31.5	3078
LVIS09CXAWY2001C400SA001S	1 x 400	2.4	2	1.56	36	3962
LVIS09CXAWY2001C500SA001S	1 x 500	2.6	2	1.56	39.5	4969
LVIS09CXAWY2001C630SA001S	1 x 630	2.8	2	1.72	43	6318
LVIS09CXAWY2001C800SA001S	1 x 800	3.1	2	1.88	48.5	7990
LVIS09CXAWY2001C01KSA002S	1 x 1000	3.3	2.5	2.04	54	10051

2XFaY

Product code	**Nominal cross-sectional area**	**Nominal Thickness of Insulation**	**Nominal dimension of Armour Flat wire**	**Minimum thickness of outersheath**	**Overall Diameter**	**Weight (Approx.)**
	n x mm²	**mm**	**mm**	**mm**	**mm**	**kg/km**
LVIS09CXAFY2001C095SA002S	1 x 95	1.4	4x0.8	1.4	18.6	1036
LVIS09CXAFY2001C120SA002S	1 x 120	1.5	4x0.8	1.4	20.4	1264
LVIS09CXAFY2001C150SA002S	1 x 150	1.7	4x0.8	1.4	22.2	1530
LVIS09CXAFY2001C185SA002S	1 x 185	1.9	4x0.8	1.4	24.4	1890

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IDEAS. CONNECTED.

2XFaY Product code	Nominal cross-sectional area	Nominal Thickness of Insulation	Nominal dimension of Armour Flat wire	Minimum thickness of outersheath	Overall Diameter	Weight (Approx.)
	n x mm²	mm	mm	mm	mm	kg/km
LVIS09CXAFY2001C240SA002S	1 x 240	2	4x0.8	1.4	26.6	2404
LVIS09CXAFY2001C300SA002S	1 x 300	2.1	4x0.8	1.56	29.6	2974
LVIS09CXAFY2001C400SA002S	1 x 400	2.4	4x0.8	1.56	33.2	3726
LVIS09CXAFY2001C500SA002S	1 x 500	2.6	4x0.8	1.56	36.7	4770
LVIS09CXAFY2001C630SA002S	1 x 630	2.8	4x0.8	1.72	41.2	6070
LVIS09CXAFY2001C800SA002S	1 x 800	3.1	4x0.8	1.88	45.1	7676
LVIS09CXAFY2001C01KSA002S	1 x 1000	3.3	4x0.8	2.04	50.6	9567

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

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
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

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
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

Current carrying capacity and Max. DC conductor resistance at 20°C (Class 2) 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