















Contents

- 01. Company Profile
- 02. Qualification Certificate
- 03. XLPE Cables Technical & Commercial Advantages
- 04. Selection of Cables
- 05. Polycab Armored/Unarmored Product Data Sheet as per IS 7098-1 of 650/1100 V AC
- 06. Tables





Company Profile

Polycab an ISO 9001:2008, ISO 14001:2004, OHSAS 18001:2007 company is India's no.1 cables & wires company with a glorious track record of over 4 decades. our manufacturing facilities at Halol (vadodara), Daman, Nashik and Roorkee in India, addresses to the specific needs with state-of-the-art machinery and technology.

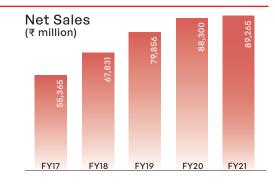
Polycab's turnover has crossed INR 8900 crore's in the fiscal year 2020-21. Polycab derives its strength from its custmers and those being in sectors like utilities, power generation, transmission & distribution, petroleum & oil refineries, oems, epc contractors, steel & metal, cement, chemical, atomic energy, nuclear plants, as well as government partners like BSNL, Railways and private telecom operators like Reliance, Vodafone, Airtel, Aircel, Tata, Idea and many more.

Things you didn't know about Polycab

- Between its facilities in Daman, Halol (vadodara), Nashik and Roorkee the company has 3.5 million square feet of manufacturing space.
- Polycab manufactures enough cable each year to circumnavigate the earth three and a half times and enough wire to go to the moon and come back four times.
- Polycab has increased its turnover 100 times in sixteen years.
- Over 300 authorised distributors service its india needs and its overseas interests.

Polycab offers a variety of services

- Commercially reasonable prices
- Reliable & consistent quality
- Product development as per market
- A target stocking policy
- Technical support for application









CERTIFICATE





Polycab India Limited

has implemented and maintains a Quality Management System.

Scope: The Design and Manufacture of PVC, XLPE, ZHFR and EBXL Compound and Celling Fans.

The Manufacture of Galvanized Steel Wires, Strips, Conductors, Wires & Cables, Switchgears Conduits & Fittings and Tapes.

The design development, procurement and supply of Lightings, Luminaires and lighting electronics for domestic, commercial, industrial, area lighting. Street Light, Landscape Light, specialized applications such as hazardous areas (flameproof, increased safety) & corrosive atmosphere for domestic and export markets.).

Trading of Fans and Switches

Engineering, Procurement & Construction (EPC) of EHV , HV & LT Electrical Work , Fire Alarm System and Public Address Systems.

Through an audit, documented in a report, it was verified that the management system fulfills the requirements of the following standard:

ISO 9001 : 2015

 Certificate registration no.
 50256041 QM15

 Date of original certification
 1999-04-27

 Date of certification
 2021-07-13

 Valid until
 2024-07-12





DQS Inc.

Brad McGuive

Brad McGuire Managing Director

Accredited Body. DQS Inc., 1500 McConnor Parkway, Suite 400, Schaumburg, IL 60173 USA Administrative Office: Deutsch Quality Systems (India) Pvt. Ltd., 5th Floor, Anjaneya Techno Park, 147, HAL Airport Road, Kothfall, Bangafore-560 017 - India



UL

CERTIFICATE



This is to certify that

Polycab India Limited

Unit - 4, Piot No.105, Halol Va Village Nurpura, Taluka Halol Panchamahal - 389350 Gujarat INDIA

with the organizational units/sites as listed in the annex

implemented and maintains an Environmental Management System

The Environmental activities and supporting processes associated with the Design and Manufacture of PVC and XLPE Compound.

The Environmental activities and supporting processes associated with the Manufacture of Conductors, Wires and Cables.

Through an audit, documented in a report, it was verified that the manage fulfills the requirements of the following standard:

ISO 14001: 2015

Certificate registration no. 50256041 UM15

Date of original certification 2010-06-22

Date of certification 2021-07-13

2024-07-12





Valid until DQS Inc.

Brad McGuive

Brad McGuire Managing Director

Accredited Body. DQS Inc., 1500 McConnor Parkway, Suite 400, Schaumburg, IL 60173 USA Administrative Office: Deutsch Quality Systems (India) Pvt. Ltd., 5th Floor, Anjaneya Techno Park, 147, HAL Airport Road, Kolshall, Bangsdree-560 017 - India



○Net -

CERTIFICATE





Polycab India Limited Unit - 4, Plot No. 105, Halol Vadodara Road Village Nurpura, Taluka Halol Panchamahal - 389350 Gujarat

with the organizational units/sites as listed in the annex

has implemented and maintains an Occupational Health and Safety Management System.

Scope:
The Occupational Health & Safety activities and supporting processes associated with the Design and Manufacture of PVC and XLPE Compound.

The Occupational Health & Safety activities and supporting processes associated with the Manufacture of Conductors, Wires and Cables.

Through an audit, documented in a report, it was verified that the management system fulfills the requirements of the following standard:

ISO 45001: 2018

Date of original certification 2010-06-22 (BS OHSAS 18001 : 2007)

2021-07-13 2024-07-12 Valid until





Brad McGune

Accredited Body: DQS Inc., 1500 McConnor Parkway, Suite 400, Schaumburg, IL 60173 USA Administrative Office: Deutsch Qualify Systems (India) Pvt. Ltd., 5th Floor, Anjaneya Techno Park, 147, HAL Airport Road, Koolhall, Bangadore-500 1017- India



Net −



National Accreditation Board for Testing and Calibration Laboratories

NABL

CERTIFICATE OF ACCREDITATION

POWER CABLE TEST LABORATORY, POLYCAB INDIA LIMITED

has been assessed and accredited in accordance with the standard

ISO/IEC 17025: 2017

"General Requirements for the Competence of Testing & Calibration Laboratories'

for its facilities at

67-72, 75-76, 102-106, 116/2, VILLAGE NURPURA, PANCH MAHAL, HALOL, GUJARAT, INDIA in the field of

TESTING

Issue Date:

Certificate Number: TC-5295

19/05/2021

Valid Until:

18/05/2023

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standards of the relevant requirements of National (To see the scope of accreditation of this bloodings, yourney above) NASI, whatele

Name of Legal I dentity: POLYCAB INDIA LIMITED

Signed for and on behalf of NABL



herlitism N. Venkateswaran Chief Executive Officer

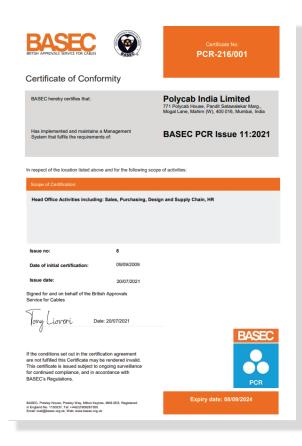


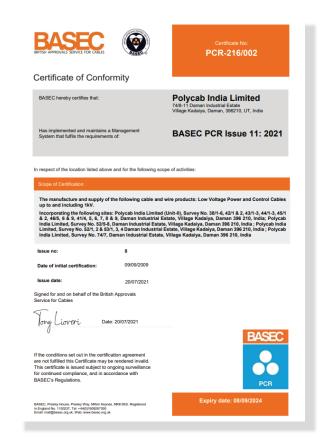
|○Net



BASEC PCR & FQC Certifications









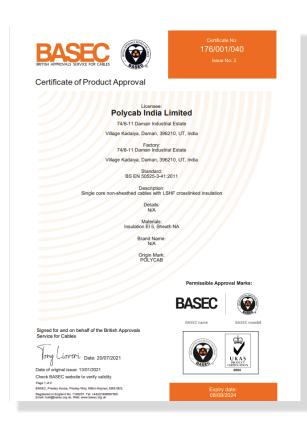


BASEC PCR & FQC Certifications













XLPE Cables



XLPE insulated heavy duty cables were introduced worldwide in mid-sixties. These cables have overcome the limitations of PVC insulated cables such as thermal degradation, poor moisture resistance and thermoplastic nature.

The advantages of XLPE insulated cables in comparison to PVC insulated cables are as under.

APPLICATION:

The cables are suitable for use on AC single phase or three phase (earthed or unearthed) systems for rated voltage up to and including 1100 Volts. These cables can be used on DC systems for rated voltage up to and including 1500 Volts to earth.

A. Technical Advantages:

- Higher current rating, higher short circuit rating approx. 1.2 times that of PVC.
- Thermosetting in nature
- Higher insulation resistance 1000 times more than PVC cables.
- Higher resistance to moisture
- Better resistance to surge currents.
- Low dielectric losses.
- Better resistance to chemicals.
- Longer service life.
- Comparatively higher cable temperature 90° C and short circuit temperature 250° C.

B. Commercial Advantages:

- Lower laying cost because of comparatively smaller diameter of cable and higher weight*.
- Lower installation charges as the diameter of cable is comparatively lesser with smaller bending radius, required less space requirement for laying cables.
- ** One size lower cable can be used as compared to PVC insulated cable.
 - * Density of XLPE is lower than PVC
 - ** For longer cable length voltage drop shall be considered

Polycab Cables of 0.6/1(1.2)KV 4C X 300 Sq.mm,1C X 800 Sq.mm has been successfully type tested at DEKRA-Netherland

Advantages of Polycab XLPE





HIGHER SHORT CIRCUIT RATING



BETTER ELECTRICAL, MECHANICAL & THERMAL PROPERTIES



EASY JOINTING & TERMINATION



Selection of Cables



Power cables are generally selected considering the application. However following factors are important for selection of suitable cable construction required to transport electrical energy from one end to the other.

- Maximum operating voltage.
- Fault level.
- Load to be carried.
- Possible overloading duration & magnitude.
- Route length and voltage drop.
- Mode of installation considering installation environment such as ambient & ground temperature as well as chemical & physical properties of soil, Grouping factors, arrangement of cables during installation.
- Flame retardant properties.

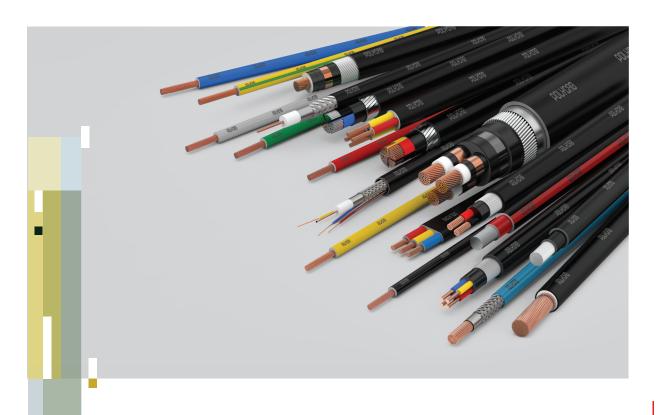
All size of POLYCAB XLPE cables are designed for standard operating conditions in India and abroad. The standard adopted are after duly considering the geographical /climactical conditions and general applications of power for utilities, distribution, and generation purpose.

The cables are manufactured conforming to Indian & International cables specification for XLPE insulated cables. Customer specific requirement can also be met.

Basic assumptions

The current rating given as per before mentioned following assumptions

- Maximum conductor temperature :90°C
- Thermal resistivity of soil :1.5K.m/w
- Ground temperature: 30°C
- Ambient air temperature :40 °C
- Dept of laying (measured to: 750 mm)



Comparative Current Rating and short circuits Rating for XLPE Cable Vis-à-vis PVC Cables



COMPARATIVE CURRENT RATING OF 650/1100 VOLTS MULTICORE HEAVY-DUTY PVC INSULATED CABLES & INSULATED CABLES. (3, 3.5 & 4 Core Unarmored /Armored PVC Sheathed cables with Aluminum conductor.)

Nominal size of cables		3, 3.5 & 4 Core PVC Insulated & Sheathed Cables as per IS-1554-P1			3, 3.5 & 4 Core XLPE Insulated & Sheathed Cables as per IS-7098-P1			
	In Ground	In Air	Approx. Voltage drop	In Ground	In Air	Approx. Voltage drop		
Sq.mm	Amp	Amp	mv/amp/mtr	Amp	Amp	mv/amp/mtr		
16	61	52	3.96	74	69	4.24		
25	78	70	2.49	95	93	2.67		
35	94	85	1.8	114	114	1.94		
50	111	104	1.34	134	138	1.43		
70	136	131	0.93	164	175	0.99		
95	163	162	0.68	197	216	0.72		
120	185	186	0.54	223	249	0.58		
150	206	212	0.45	249	284	0.48		
185	234	245	0.36	282	329	0.39		
240	271	291	0.29	327	392	0.31		
300	305	335	0.25	369	452	0.26		
400	348	390	0.21	420	526	0.21		

Comparision Of Short Circuit Rating For 1 Second Duration For *PVC & XLPE Insulated Cables ** with copper and Aluminium Conductors. (Current in kAmps)

Nominal size	PVC Insulated		XLPE Ir	nsulated	
Sq.mm	Copper	Aluminium	Copper	Aluminium	
1.5	0.173	-	0.21	-	
2.5	0.29	-	0.36	-	
4	0.46	0.3	0.57	0.38	
6	0.69	0.46	0.86	0.57	
10	1.15	0.76	1.43	0.95	
16	1.84	1.22	2.29	1.51	
25	2.88	1.9	3.58	2.36	
35	4.03	2.66	5.01	3.31	
50	5.75	3.8	7.16	4.73	
70	8.05	5.32	10.02	6.62	
95	10.93	7.22	13.59	8.98	
120	13.8	9.12	17.17	11.34	
150	17.25	11.4	21.47	14.18	
185	21.27	14.06	26.47	17.48	
240	27.6	18.24	34.34	22.68	
300	34.5	22.8	42.93	28.35	
400	46	30.4	57.24	37.8	
500	57.5	38	71.55	47.25	
630	72.45	47.88	90.15	59.54	
800	92	60.8	114.48	75.6	
1000	115	76	143.1	94.5	

^{*}PVC Type A Insulation as per IS 5831-84

1. Max.Conductor Temperature during

XLPE Operation PVC 70°C 90°C

2. Max. Condcutor temperature during short 250°C circuit 160°C

Formula relating short circuit rating with duration

A = Cross sectional area in Sq.mm

T = Duration in second

K = Constant

Ish = Short circuit current, kA

^{**}PVC Cables as per IS-1554-P1

^{**}XLPE cables as per IS 7098-P1

Approximate Capacitance (Microfarads/Km) 1.1 KV XLPE CABLES



Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

Nominal Area of Conductor	Single Core	Two Core	Three, Three & Half and Four Core
	Armoured	Armoured	Armoured
1.5	-	0.18	0.18
2.5	-	0.21	0.21
4	-	0.25	0.25
6	-	0.29	0.29
10	0.34	0.36	0.36
16	0.4	0.43	0.43
25	0.42	0.43	0.43
35	0.47	0.50	0.50
50	0.5	0.53	0.53
70	0.55	0.57	0.56
95	0.62	0.65	0.65
120	0.66	0.67	0.67
150	0.64	0.65	0.64
185	0.66	0.63	0.63
240	0.70	0.68	0.67
300	0.74	0.71	0.71
400	0.75	0.73	0.72
500	0.78	0.74	0.74
630	0.82	0.77	0.77
800	0.83	-	-
1000	0.87	-	-

Approximate Reactance At 50 Hz (Ohm/km) 1.1 Kv Xlpe Cables

Nominal Area of Conductor (Sq.mm)	Sing	le Core	Multi core
	Unarmoured	Armoured	
1.5	0.154	-	0.105
2.5	0.143	_	0.099
4	0.134	-	0.0933
6	0.125	-	0.0888
10	0.116	0.131	0.0842
16	0.110	0.124	0.0802
25	0.105	0.117	0.0808
35	0.101	0.112	0.0787
50	0.0937	0.108	0.0780
70	0.0910	0.100	0.0742
95	0.0879	0.099	0.0725
120	0.0850	0.0951	0.0713
150	0.0855	0.0936	0.0718
185	0.0839	0.0913	0.072
240	0.0820	0.0887	0.0713
300	0.0801	0.0868	0.0703
400	0.0792	0.0861	0.0702
500	0.0780	0.0843	0.0700
630	0.0767	0.0829	0.0697
800	0.0762	0.0819	-
1000	0.0757	0.0820	-

CONDCUTOR TECHNICAL INFORMATION FOR SINGLE CORE AND MULTICORE CABLES CONFORMING TO IS 8130/1984 (STRANDED -CLASS-2) COPPER & ALUMINIUM CONDUCTORS



Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

Nominal Area of Conductor		N	Ainimum no.of wires		Max.D.C R at 2		A.C Resistance at 90°C	
	Non con	npacted	Compacted/R	ound/Shaped	Plain copper	Aluminium	Plain copper	Aluminium
Sq.mm	Cu	Al	Cu	Al	Ohm/Km	Ohm/Km	Ohm/Km	Ohm/Km
1.5*	3	3	-	-	12.1	18.1	15.4	23.2
2.5*	3	3	-	-	7.41	12.1	9.45	15.5
4*	7	3	-	-	4.61	7.41	5.88	9.5
6*	7	3	-	-	3.08	4.61	3.93	5.91
10*	7	7	6	-	1.83	3.08	2.33	3.95
16	7	7	6	6	1.15	1.91	1.47	2.44
25	7	7	6	6	0.727	1.2	0.93	1.54
35	7	7	6	6	0.524	0.868	0.668	1.11
50	19	19	6	6	0.387	0.641	0.494	0.82
70	19	19	12	12	0.268	0.443	0.342	0.568
95	19	19	15	15	0.193	0.32	0.247	0.41
120	37	37	18	15	0.153	0.253	0.196	0.325
150	37	37	18	15	0.124	0.206	0.159	0.264
185	37	37	30	30	0.0991	0.164	0.128	0.211
240	61	37	34	30	0.0754	0.125	0.0985	0.161
300	61	61	34	30	0.0601	0.100	0.0796	0.129
400	61	61	53	53	0.0470	0.0778	0.0637	0.101
500	61	61	53	53	0.0366	0.0605	0.0515	0.0786
630	91	91	53	53	0.0283	0.0469	0.0421	0.0615
800	91	91	53	53	0.0221	0.0367	0.0354	0.0488
1000	91	91	53	53	0.0176	0.0291	0.0225	0.0372

 $^{{}^{\}star}\text{These sizes can be manufactured with solid conductor having single strand.}$

Polycab Preconditions For Current Rating

- 1. The values given in the table are valid for on circuit in three phase systems under conditions specified. For grouping cable ratings factor must be used.
- 2. The current rating carrying capacities mentioned in **POLYCAB** technical data are intended as a guide, to assist operating engineers in selecting cable for safety and reliability.
- 3. Basic assumption and condition of installation
- Ambient Ground temperature: 30 °C
- Ambient air temperature: 40 °C
- Dept of Cable Burial: 750 mm
- Thermal resistivity of soil: 1.5K.m/w
- 4. Single core cable are installed as indicated in the table spacing between cables in flat formation is as indicated
- 5.For 3 and 4 cables, it is usual to assume the same current carrying capacity for 4 core cable as for 3 core cable. Our calculated values are based actually on 3 core cable. These values are suitable with enough accuracy also for 4 cables in most cases. Only for large 4 core cables in air the values are too conservative due to the large cables surface and consequent high heat dissipation factor.
- 6.To obtain the maximum current carrying capacity of a cable operating at different condition from the standard, various rating factors are to be multiplied as follow.

la = KIs (in Amperes)

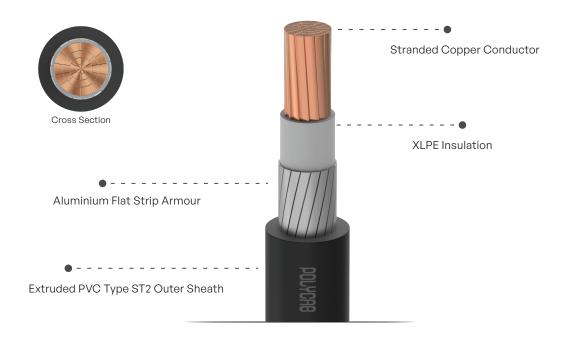
Where,

- la = Current rating at actual operating conditions (amperes)
- Is = Current rating at standard operating conditions (amperes)
- K = Rating factor as applicable



POLYCAB SC COPPER CONDUCTOR XLPE INSULATED ARMORED POWER CABLE 650/1100V AC - IS 7098-PART 1





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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red/Black/Yellow/Blue/Natural

STANDARD AND REFERENCES

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

BENDING RADIUS

Fixed installation | 12 x Overall diameter

- 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

















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 outer sheath	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
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

Current carrying capacity and Maximum DC conductor resistance.

Nominal	Buried direct	in the ground	In single v	vay Ducts	In	air	Max. DC
cross- sectional area	2 single core cables	3 single core cable	2 single core cables	3 single core cable	2 single core cables	3 single core cable	conductor resistance at 20°C
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
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 Conductor operating temperature: 90°C

The above table is in accordance with IS 3961(part 6):2016



POLYCAB SC COPPER CONDUCTOR XLPE INSULATED UNARMORED POWER CABLE 650/1100V AC - IS 7098-PART 1





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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red/Black/Yellow/Blue/Natural

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

STANDARD AND REFERENCES

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

BENDING RADIUS

Fixed installation | 12 x Overall diameter

















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.





Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

		in the ground	In single way Ducts		In a	Max. DC	
cross- sectional area	2 single core cables	3 single core cable	2 single core cables	3 single core cable	2 single core cables	3 single core cable	conductor resistance at 20°C
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

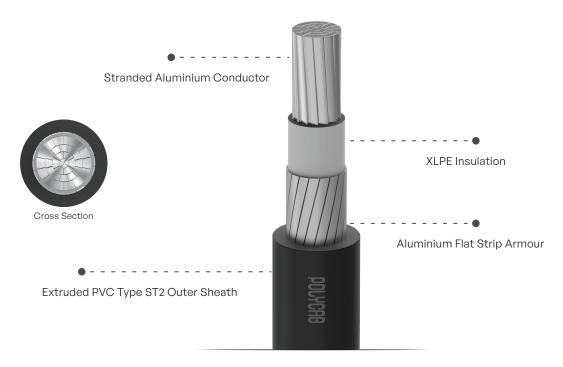
Air Ambient temperature: 40°C Ground ambient temperature: 30°C

The above table is in accordance with IS 3961(part 6):2016



POLYCAB SC ALUMINIUM CONDUCTOR XLPE INSULATED ARMORED POWER CABLE 650/1100V AC - IS 7098-PART 1





APPLICATION

POLYCAB 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 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red/Black/Yellow/Blue/Natural

STANDARD AND REFERENCES

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

BENDING RADIUS

Fixed installation | 12 x Overall diameter

- 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

















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 mm²	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 mm²	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
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 Maximum DC conductor resistance.

Nominal	Buried direct	in the ground	In single v	vay Ducts	ln :	air	Max. DC
cross- sectional area	2 single core cables	3 single core cable	2 single core cables	3 single core cable	2 single core cables	3 single core cable	conductor resistance at 20°C
mm²	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Ω/km
10	69	59	58	54	64	55	3.08
16	89	76	75	69	84	72	1.91
25	115	98	96	89	112	98	1.2
35	137	116	115	106	137	119	0.868
50	161	137	135	124	165	145	0.641
70	198	168	165	151	209	185	0.443
95	243	202	199	181	264	235	0.32
120	276	230	226	206	308	276	0.253
150	308	256	252	229	350	314	0.206
185	349	290	285	258	406	366	0.164
240	404	335	329	298	480	434	0.125
300	454	376	369	333	551	500	0.1
400	518	429	421	378	647	589	0.0778
500	588	485	476	426	751	685	0.0605
630	663	546	536	477	868	793	0.0469
800	740	608	596	528	992	907	0.0367
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



POLYCAB SC ALUMINIUM CONDUCTOR XLPE INSULATED UNARMORED POWER CABLE 650/1100V AC - IS 7098-PART 1





APPLICATION

POLYCAB A2XY SC, stranded compacted aluminium 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red/Black/Yellow/Blue/Natural

STANDARD AND REFERENCES

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

BENDING RADIUS

Fixed installation | 12 x Overall diameter

- Stranded/Solid compacted Aluminium conductor as per IS 8130, class 1 or class 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Sheathed with PVC Type ST2/FRLS/FR/LSZH

















Weight & Dimension Data

Product code	Conductor size	Class of conductor	Nominal Thickness of Insulation	Nominal thickness of outer sheath	Overall Diameter	Weight (Approx.)
	n x mm²		mm	mm	mm	kg/km
LVIS09AXUAY2001C004SA001P	1 x 4	Class1	0.7	1.8	7.5	60
LVIS09AXUAY2001C006SA001S	1 x 6	Class1	0.7	1.8	8	70
LVIS09AXUAY2001C010SA002S	1 x 10	Class1	0.7	1.8	9	80
LVIS09AXUAY2001C004SA001P	1 x 4	Class 2	0.7	1.8	8	65
LVIS09AXUAY2001C006SA001S	1 x 6	Class 2	0.7	1.8	8.5	75
LVIS09AXUAY2001C010SA001S	1 x 10	Class 2	0.7	1.8	9.5	90
LVIS09AXUAY2001C016SA001S	1 x 16	Class 2	0.7	1.8	10	115
LVIS09AXUAY2001C025SA001S	1 x 25	Class 2	0.9	1.8	12	155
LVIS09AXUAY2001C035SA001S	1 x 35	Class 2	0.9	1.8	13	180
LVIS09AXUAY2001C050SA001S	1 x 50	Class 2	1	1.8	14	240
LVIS09AXUAY2001C070SA001S	1 x 70	Class 2	1.1	1.8	15.5	310
LVIS09AXUAY2001C095SA001S	1 x 95	Class 2	1.1	1.8	17.5	385
LVIS09AXUAY2001C120SA001S	1 x 120	Class 2	1.2	1.8	19.5	470
LVIS09AXUAY2001C150SA001S	1 x 150	Class 2	1.4	2	21.5	600
LVIS09AXUAY2001C185SA001S	1 x 185	Class 2	1.6	2	23.5	710
LVIS09AXUAY2001C240SA001S	1 x 240	Class 2	1.7	2	26	900
LVIS09AXUAY2001C300SA001S	1 x 300	Class 2	1.8	2	28.5	1158
LVIS09AXUAY2001C400SA001S	1 x 400	Class 2	2	2.2	31.5	1385
LVIS09AXUAY2001C500SA001S	1 x 500	Class 2	2.2	2.2	35.5	1650
LVIS09AXUAY2001C630SA001S	1 x 630	Class 2	2.4	2.2	39.5	2100
LVIS09AXUAY2001C800SA001S	1 x 800	Class 2	2.6	2.4	44.5	2730
LVIS09AXUAY2001C01KSA001S	1 x 1000	Class 2	2.8	2.6	48.5	3350

The above data is approximate & subject to manufacturing tolerance.







Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

Nominal	Buried direct	in the ground	In single v	vay Ducts	In	air	Max. DC
cross- sectional area	2 single core cables	3 single core cable	2 single core cables	3 single core cable	2 single core cables	3 single core cable	conductor resistance at 20°C
mm²	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Ω/km
4	43	37	36	34	38	33	7.41
6	55	47	47	43	50	43	4.61
10	69	59	58	54	64	55	3.08
16	89	76	75	69	84	72	1.91
25	115	98	96	89	112	98	1.2
35	137	116	115	106	137	119	0.868
50	161	137	135	124	165	145	0.641
70	198	168	165	151	209	185	0.443
95	243	202	199	181	264	235	0.32
120	276	230	226	206	308	276	0.253
150	308	256	252	229	350	314	0.206
185	349	290	285	258	406	366	0.164
240	404	335	329	298	480	434	0.125
300	454	376	369	333	551	500	0.1
400	518	429	421	378	647	589	0.0778
500	588	485	476	426	751	685	0.0605
630	663	546	536	477	868	793	0.0469
800	740	608	596	528	992	907	0.0367
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



POLYCAB MC-2 COPPER CONDUCTOR XLPE INSULATED ARMORED POWER CABLE (2XFY) 650/1100V AC - IS 7098-PART 1





APPLICATION

POLYCAB 2XFY MC-2, stranded compacted copper conductor, XLPE insulated, PVC inner sheathed, Galvanised Steel Flat strip armoured, 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red and Black

STANDARD AND REFERENCES

IS 8130:2013

IS 5831:1984

IS 3975:1979

IS 7098-1:1988

COMPLIANCE

Conductor resistance - IS 8130

Insulation resistance - IS 7098-1:1988 Flammability test - IEC 60332-1

BENDING RADIUS

Fixed installation | 12 x Overall diameter

- Stranded plain compacted sector shaped Copper conductor as per IS 8130, class 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2 to IS 5831
- Armoured with Galvanised Flat Steel Strip to IS 3975
- Sheathed with Extruded PVC Type ST2 to IS 5831















POLYCAB MC-2 COPPER CONDUCTOR XLPE INSULATED ARMORED POWER CABLE (2XFY) 650/1100V AC - IS 7098-PART 1



Weight & Dimension Data

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
2 x25	0.9	4x0.8	1.4	18.5	804.4
2 x35	0.9	4x0.8	1.4	20	1019.7
2 x50	1	4x0.8	1.4	22.5	1311
2 x70	1.1	4x0.8	1.56	25.5	1757
2 x95	1.1	4x0.8	1.56	28	2289
2 x120	1.2	4x0.8	1.56	30.5	2755
2 x150	1.4	4x0.8	1.72	31.8	3353
2 x185	1.6	4x0.8	1.72	37	4094
2 x240	1.7	4x0.8	1.88	38.7	5225
2 x300	1.8	4x0.8	2.04	42.5	6412
2 x400	2	4x0.8	2.36	48.2	8075
	cross-sectional area n x mm² 2 x25 2 x35 2 x50 2 x70 2 x95 2 x120 2 x150 2 x185 2 x240 2 x300	cross-sectional area Thickness of Insulation n x mm² mm 2 x25 0.9 2 x35 0.9 2 x50 1 2 x70 1.1 2 x95 1.1 2 x120 1.2 2 x150 1.4 2 x185 1.6 2 x240 1.7 2 x300 1.8	Nominal cross- sectional area Nominal Thickness of Insulation dimension of Armour flat wire n x mm² mm mm 2 x25 0.9 4x0.8 2 x35 0.9 4x0.8 2 x50 1 4x0.8 2 x70 1.1 4x0.8 2 x95 1.1 4x0.8 2 x120 1.2 4x0.8 2 x150 1.4 4x0.8 2 x185 1.6 4x0.8 2 x240 1.7 4x0.8 2 x300 1.8 4x0.8	Nominal cross-sectional area Nominal Thickness of Insulation dimension of Armour flat wire Minimum thickness of outer sheath n x mm² mm mm mm 2 x25 0.9 4x0.8 1.4 2 x35 0.9 4x0.8 1.4 2 x50 1 4x0.8 1.4 2 x70 1.1 4x0.8 1.56 2 x95 1.1 4x0.8 1.56 2 x120 1.2 4x0.8 1.56 2 x150 1.4 4x0.8 1.72 2 x185 1.6 4x0.8 1.72 2 x240 1.7 4x0.8 1.88 2 x300 1.8 4x0.8 2.04	Nominal cross- sectional area Nominal Thickness of Insulation dimension of Armour flat wire Minimum thickness of outer sheath Overall Diameter n x mm² mm mm mm mm 2 x25 0.9 4x0.8 1.4 18.5 2 x35 0.9 4x0.8 1.4 20 2 x50 1 4x0.8 1.4 22.5 2 x70 1.1 4x0.8 1.56 25.5 2 x95 1.1 4x0.8 1.56 30.5 2 x120 1.2 4x0.8 1.56 30.5 2 x150 1.4 4x0.8 1.72 31.8 2 x185 1.6 4x0.8 1.72 37 2 x240 1.7 4x0.8 1.88 38.7 2 x300 1.8 4x0.8 2.04 42.5

Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

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
16	115	96	108	1.15
25	147	122	140	0.727
35	176	146	172	0.524
50	208	173	208	0.387
70	253	211	262	0.268
95	302	252	322	0.193
120	340	284	368	0.153
150	379	317	419	0.124
185	425	357	482	0.0991
240	486	409	566	0.0754
300	541	456	644	0.0601
400	602	508	734	0.047

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



POLYCAB MC-2 COPPER CONDUCTOR XLPE INSULATED ARMORED POWER CABLE (2XWY) 650/1100V AC - IS 7098-PART 1





APPLICATION

POLYCAB 2XWY MC-2, stranded compacted copper conductor XLPE insulated, PVC inner sheathed, Galvanised Steel round wire 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red and Black

STANDARD AND REFERENCES

IS 8130:2013

IS 5831:1984

IS 3975:1979

IS 7098-1:1988

COMPLIANCE

Conductor resistance - IS 8130

Insulation resistance - IS 7098-1:1988 - IEC 60332-1 Flammability test

BENDING RADIUS

Fixed installation | 12 x Overall diameter

- Stranded plain compacted sector shaped Copper conductor as per IS 8130, class 1&2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2 to IS 5831
- Armoured with Galvanised Steel round wire to IS 3975
- Sheathed with Extruded PVC Type ST2 to IS 5831

















Weight & Dimension Data

Product code	Nominal cross- sectional area	Class of conductor	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
LVIS09CXSWY2002C004SA002S	2 x4	Class 1	0.7	1.4	1.24	14	408
LVIS09CXSWY2002C004SA002P	2 x4	Class 2	0.7	1.4	1.24	14.5	427
LVIS09CXSWY2002C006SA002S	2 x6	Class 1	0.7	1.4	1.24	15	484
LVIS09CXSWY2002C006SA001S	2 x6	Class 2	0.7	1.4	1.24	16	522
LVIS09CXSWY2002C010SA001S	2 x10	Class 2	0.7	1.4	1.24	17.5	665
LVIS09CXSWY2002C016SA001S	2 x16	Class 2	0.7	1.4	1.4	17	696.5
LVIS09CXSWY2002C025SA001S	2 x25	Class 2	0.9	1.6	1.4	20	1001.7
LVIS09CXSWY2002C035SA001S	2 x35	Class 2	0.9	1.6	1.4	22	1224.2
LVIS09CXSWY2002C050SA001S	2 x50	Class 2	1	1.6	1.4	24	1520
LVIS09CXSWY2002C070SA001S	2 x70	Class 2	1.1	1.6	1.56	27	2004
LVIS09CXSWY2002C095SA001S	2 x95	Class 2	1.1	2	1.56	30.5	2736
LVIS09CXSWY2002C120SA001S	2 x120	Class 2	1.2	2	1.56	33	3230
LVIS09CXSWY2002C150SA001S	2 x150	Class 2	1.4	2	1.72	36	3876
LVIS09CXSWY2002C185SA001S	2 x185	Class 2	1.6	2	1.88	40	4731
LVIS09CXSWY2002C240SA001S	2 x240	Class 2	1.7	2.5	2.04	42.4	6203
LVIS09CXSWY2002C300SA001S	2 x300	Class 2	1.8	2.5	2.2	46.2	7514
LVIS09CXSWY2002C400SA001S	2 x400	Class 2	2	2.5	2.36	51.6	9262

Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

Nominal area of conductor	Buried direct in the ground	In single way Ducts	In air	Max. DC conductor resistance at 20°C
mm²	Amp.	Amp.	Amp.	Ω/km
4	54	45	48	4.61
6	67	56	61	3.08
10	89	75	83	1.83
16	115	96	108	1.15
25	147	122	140	0.727
35	176	146	172	0.524
50	208	173	208	0.387
70	253	211	262	0.268
95	302	252	322	0.193
120	340	284	368	0.153
150	379	317	419	0.124
185	425	357	482	0.0991
240	486	409	566	0.0754
300	541	456	644	0.0601
400	602	508	734	0.047

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



POLYCAB MC-2 ALUMINIUM CONDUCTOR XLPE INSULATED ARMORED POWER CABLE (A2XFY) 650/1100V AC - IS 7098-PART 1





APPLICATION

POLYCAB 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red and Black

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

STANDARD AND REFERENCES

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

BENDING RADIUS

Fixed installation | 12 x Overall diameter















POLYCAB MC-2 ALUMINIUM CONDUCTOR XLPE INSULATED ARMORED POWER CABLE (A2XFY) 650/1100V AC - IS 7098-PART 1



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 mm²	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

Current carrying capacity and Maximum DC conductor resistance.

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
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
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



POLYCAB MC-2 COPPER CONDUCTOR XLPE INSULATED UNARMORED POWER CABLE (2XY) 650/1100V AC - IS 7098-PART 1





APPLICATION

POLYCAB 2XY MC-2, 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red and Black

CONSTRUCTION ■ Stranded plain compacted (≤ 16 sqmm)/Non compacted

copper conductor as per IS 8130, class 1 & 2

- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

STANDARD AND REFERENCES

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 60332-1:2015

BENDING RADIUS

Fixed installation | 12 x Overall diameter















POLYCAB MC-2 COPPER CONDUCTOR XLPE INSULATED UNARMORED POWER CABLE (2XY) 650/1100V AC - IS 7098-PART 1



Weight & Dimension Data

Product code	Nominal cross- sectional area	Class of conductor	Nominal Thickness of Insulation	Minimum thickness of outer sheath	Overall Diameter	Weight (Approx.)
	n x mm²		mm	mm	mm	kg/km
LVIS09CXUAY2002C004SA001P	2 x 4	Class1	0.7	1.8	12.5	165
LVIS09CXUAY2002C006SA001S	2 x 6	Class1	0.7	1.8	13.5	210
LVIS09CXUAY2002C004SA002S	2 x 4	Class 2	0.7	1.8	13	175
LVIS09CXUAY2002C006SA001S	2 x 6	Class 2	0.7	1.8	14	225
LVIS09CXUAY2002C010SA001S	2 x 10	Class 2	0.7	1.8	16	300
LVIS09CXUAY2002C016SA001S	2 x 16	Class 2	0.7	1.8	14	422
LVIS09CXUAY2002C025SA001S	2 x 25	Class 2	0.9	2	17	636
LVIS09CXUAY2002C035SA001S	2 x 35	Class 2	0.9	2	19	817
LVIS09CXUAY2002C050SA001S	2 x 50	Class 2	1	2	21	1054
LVIS09CXUAY2002C070SA001S	2 x 70	Class 2	1.1	2	23	1453
LVIS09CXUAY2002C095SA001S	2 x 95	Class 2	1.1	2.2	26.5	1966
LVIS09CXUAY2002C120SA001S	2 x 120	Class 2	1.2	2.2	28.5	2413
LVIS09CXUAY2002C150SA001S	2 x 150	Class 2	1.4	2.2	32	2935
LVIS09CXUAY2002C185SA001S	2 x 185	Class 2	1.6	2.4	35.5	3676
LVIS09CXUAY2002C240SA001S	2 x 240	Class 2	1.7	2.6	39.5	4750
LVIS09CXUAY2002C300SA001S	2 x 300	Class 2	1.8	2.8	43.5	5918
LVIS09CXUAY2002C400SA001S	2 x 400	Class 2	2	3	49	7495

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

Nominal area of conductor	Buried direct in the ground	In single way Ducts	In air	Max. DC conductor resistance at 20°C
mm²	Amp.	Amp.	Amp.	Ω/km
4	54	45	48	4.61
6	67	56	61	3.08
10	89	75	83	1.83
16	115	96	108	1.15
25	147	122	140	0.727
35	176	146	172	0.524
50	208	173	208	0.387
70	253	211	262	0.268
95	302	252	322	0.193
120	340	284	368	0.153
150	379	317	419	0.124
185	425	357	482	0.0991
240	486	409	566	0.0754
300	541	456	644	0.0601
400	602	508	734	0.047
500	665	562	831	0.0366
630	728	616	936	0.0283

Air Ambient temperature: 40°C, Ground ambient temperature: 30°C, The above table is in accordance with IS 3961(part 6):2016



POLYCAB MC-2 ALUMINIUM CONDUCTOR XLPE INSULATED UNARMORED POWER CABLE (A2XY) 650/1100V AC - IS 7098-PART 1





APPLICATION

POLYCAB A2XY MC-2, Stranded compacted aluminium 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.

VOLTAGE RATING

650/1100 V

STANDARD AND REFERENCES

IS 8130:2013 IS 5831:1984 IS 7098-1:1988

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

COMPLIANCE

Conductor resistance - IS 8130:2013 Insulation resistance - IS 7098-1:1988 Flammability test - IEC 60332-1:2015

CORE IDENTIFICATION

Red and Black

BENDING RADIUS

Fixed installation | 12 x Overall diameter

- Stranded plain compacted (≤ 16 sqmm)/Non compacted aluminium conductor as per IS 8130, class 1 & 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH



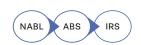












POLYCAB MC-2 ALUMINIUM CONDUCTOR XLPE INSULATED UNARMORED POWER CABLE (A2XY) 650/1100V AC - IS 7098-PART 1



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
LVIS09AXUAY2002C004SA001S	2 x 4	Class1	0.7	1.8	12.5	140
LVIS09AXUAY2002C006SA001S	2 x 6	Class1	0.7	1.8	13.5	170
LVIS09AXUAY2002C010SA001S	2 x 10	Class1	0.7	1.8	15	205
LVIS09AXUAY2002C004SA002S	2 x 4	Class 2	0.7	1.8	13	150
LVIS09AXUAY2002C006SA002S	2 x 6	Class 2	0.7	1.8	14	180
LVIS09AXUAY2002C010SA002S	2 x 10	Class 2	0.7	1.8	16	225
LVIS09AXUAY2002C016SA001S	2 x 16	Class 2	0.7	1.8	14	225
LVIS09AXUAY2002C025SA001S	2 x 25	Class 2	0.9	2	17	330
LVIS09AXUAY2002C035SA001S	2 x 35	Class 2	0.9	2	19	410
LVIS09AXUAY2002C050SA001S	2 x 50	Class 2	1	2	21	510
LVIS09AXUAY2002C070SA001S	2 x 70	Class 2	1.1	2	23	675
LVIS09AXUAY2002C095SA001S	2 x 95	Class 2	1.1	2.2	26.5	893
LVIS09AXUAY2002C120SA001S	2 x 120	Class 2	1.2	2.2	28.5	1050
LVIS09AXUAY2002C150SA001S	2 x 150	Class 2	1.4	2.2	32	1215
LVIS09AXUAY2002C185SA001S	2 x 185	Class 2	1.6	2.4	35.5	1510
LVIS09AXUAY2002C240SA001S	2 x 240	Class 2	1.7	2.6	39.5	1900
LVIS09AXUAY2002C300SA001S	2 x 300	Class 2	1.8	2.8	43.5	2360
LVIS09AXUAY2002C400SA001S	2 x 400	Class 2	2	3	49	3100
LVIS09AXUAY2002C500SA001S	2 x 500	Class 2	2.2	3.4	55.5	4000
LVIS09AXUAY2002C630SA001S	2 x 630	Class 2	2.4	3.6	61.5	4997

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

Nominal area of conductor	Buried direct in the ground	In single way Ducts	In air	Max. DC conductor resistance at 20°C
mm²	Amp.	Amp.	Amp.	Ω/km
4	42	36	38	7.41
6	55	46	50	4.61
10	68	57	64	3.08
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	0.32
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
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, The above table is in accordance with IS 3961(part 6):2016



POLYCAB MC-2 ALUMINIUM CONDUCTOR XLPE INSULATED ARMORED POWER CABLE (A2XWY) 650/1100V AC - IS 7098-PART 1





APPLICATION

POLYCAB A2XWY MC-2, Stranded compacted aluminium conductor, XLPE insulated, PVC inner sheathed, Galvanised Steel round wire 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red and Black

CONSTRUCTION

Stranded compacted sector shaped Aluminium conductor as per IS 8130, class 1&2

- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

STANDARD AND REFERENCES

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

BENDING RADIUS

Fixed installation | 12 x Overall diameter

















Weight & Dimension Data

Product code	Nominal cross- sectional area	Class of conductor	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
LVIS09AXSWY2002C004SA002P	2 x4	Class 1	0.7	1.4	1.24	14.5	375
LVIS09AXSWY2002C004SA001S	2 x4	Class 2	0.7	1.4	1.24	15	403
LVIS09AXSWY2002C006SA002S	2 x6	Class 1	0.7	1.4	1.24	15.5	437
LVIS09AXSWY2002C006SA001S	2 x6	Class 2	0.7	1.4	1.24	16.5	465
LVIS09AXSWY2002C010SA001S	2 x10	Class 1	0.7	1.4	1.24	16	503
LVIS09AXSWY2002C010SA002S	2 x10	Class 2	0.7	1.4	1.24	18	551
LVIS09AXSWY2002C016SA001S	2 x16	Class 2	0.7	1.4	1.4	17	480.16
LVIS09AXSWY2002C025SA001S	2 x25	Class 2	0.9	1.6	1.4	20	671.84
LVIS09AXSWY2002C035SA001S	2 x35	Class 2	0.9	1.6	1.4	22	775.55
LVIS09AXSWY2002C050SA001S	2 x50	Class 2	1	1.6	1.4	24	937.97
LVIS09AXSWY2002C070SA001S	2 x70	Class 2	1.1	1.6	1.56	27	1186.85
LVIS09AXSWY2002C095SA001S	2 x95	Class 2	1.1	2	1.56	28.68	1572.78
LVIS09AXSWY2002C120SA001S	2 x120	Class 2	1.2	2	1.56	33	1849.49
LVIS09AXSWY2002C150SA001S	2 x150	Class 2	1.4	2	1.72	36	2182.96
LVIS09AXSWY2002C185SA001S	2 x185	Class 2	1.6	2	1.88	37.7	2597.6
LVIS09AXSWY2002C240SA001S	2 x240	Class 2	1.7	2.5	2.04	45	3418.52
LVIS09AXSWY2002C300SA001S	2 x300	Class 2	1.8	2.5	2.2	46.22	4019.07
LVIS09AXSWY2002C400SA001S	2 x400	Class 2	2	2.5	2.36	51.61	4854
LVIS09AXSFY2002C500SA001S	2 x500	Class 2	2.2	3.15	2.68	61.5	6517
LVIS09AXSFY2002C630SA001S	2 x630	Class 2	2.4	3.15	2.84	67.5	7790

Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

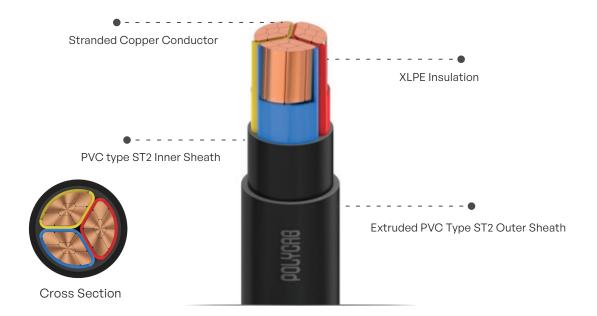
Nominal area of conductor	Buried direct in the ground	In single way Ducts	In air	Max. DC conductor resistance at 20°C
mm ²	Amp.	Amp.	Amp.	Ω/km
4	42	36	38	7.41
6	55	46	50	4.61
10	68	57	64	3.08
16	89	74	83	1.91
25	114	95	109	1.20
35	136	113	133	0.868
50	161	134	162	0.641
70	197	164	204	0.443
95	235	196	251	0.32
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
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



POLYCAB MC-3 COPPER CONDUCTOR XLPE INSULATED UNARMORED POWER CABLE (2XY) 650/1100V AC - IS 7098-PART 1





APPLICATION

POLYCAB 2XY MC-3, 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red, Yellow and Blue

STANDARD AND REFERENCES

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

BENDING RADIUS

Fixed installation | 12 x Overall diameter

- Stranded plain compacted (≤ 16 sqmm)/Non compacted copper conductor as per IS 8130, class 1 & 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH















POLYCAB MC-3 COPPER CONDUCTOR XLPE INSULATED UNARMORED POWER CABLE (2XY) 650/1100V AC - IS 7098-PART 1



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
LVIS09CXUAY2003C004SA002S	3x4	Class 1	0.7	1.8	13	210
LVIS09CXUAY2003C004SA001S	3x4	Class 2	0.7	1.8	13.5	232
LVIS09CXUAYL003C006SA002S	3x6	Class 1	0.7	1.8	14	280
LVIS09CXUAY2003C006SA002S	3x6	Class 2	0.7	1.8	15	299
LVIS09CXUAY2003C010SA001S	3x10	Class 2	0.7	1.8	16.5	415
LVIS09CXUAY2003C016SA001S	3x16	Class 2	0.7	1.8	16.2	425
LVIS09CXUAY2003C025SA001S	3x25	Class 2	0.9	2	19.5	874
LVIS09CXUAY2003C035SA001S	3x35	Class 2	0.9	2	21.5	1150
LVIS09CXUAY2003C050SA001S	3x50	Class 2	1	2	24.5	1501
LVIS09CXUAY2003C070SA001S	3x70	Class 2	1.1	2.2	28	2118
LVIS09CXUAY2003C095SA001S	3x95	Class 2	1.1	2.2	30.8	2821
LVIS09CXUAY2003C120SA001S	3x120	Class 2	1.2	2.2	33.8	3496
LVIS09CXUAY2003C150SA001S	3x150	Class 2	1.4	2.4	37.9	4322
LVIS09CXUAY2003C185SA001S	3x185	Class 2	1.6	2.6	42	5377
LVIS09CXUAY2003C240SA001S	3x240	Class 2	1.7	2.8	46.9	6992
LVIS09CXUAY2003C300SA001S	3x300	Class 2	1.8	3	51.5	8683
LVIS09CXUAY2003C400SA001S	3x400	Class 2	2	3.2	58.6	11029

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

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
4	45	38	41	4.61
6	56	47	52	3.08
10	74	62	70	1.83
16	95	79	89	1.15
25	122	102	119	0.727
35	146	122	147	0.524
50	173	144	179	0.387
70	212	177	226	0.268
95	254	212	279	0.193
120	287	240	320	0.153
150	321	269	365	0.124
185	362	304	422	0.0991
240	418	352	500	0.0754
300	469	396	574	0.0601
400	528	447	662	0.047

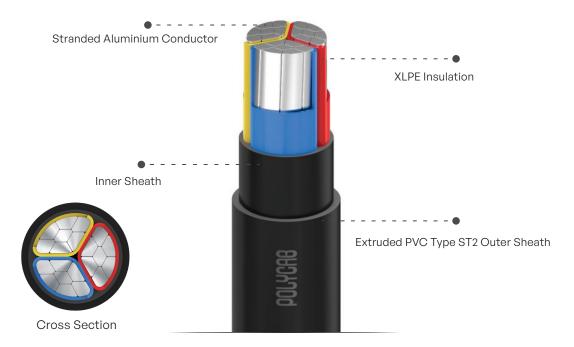
Air Ambient temperature: 40 $^{\circ}\text{C}\text{,}$

Ground ambient temperature: 30°C,



POLYCAB MC-3 ALUMINIUM CONDUCTOR XLPE INSULATED UNARMORED POWER CABLE (A2XY) 650/1100V AC - IS 7098-PART 1





APPLICATION

POLYCAB A2XY MC-3, Stranded compacted aluminium 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red, Yellow and Blue

CONSTRUCTION

■ Stranded compacted/Non compacted aluminium conductor as per IS 8130, class1&2

- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

STANDARD AND REFERENCES

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 60332-1:2015

BENDING RADIUS

Fixed installation | 12 x Overall diameter















POLYCAB MC-3 ALUMINIUM CONDUCTOR XLPE INSULATED UNARMORED POWER CABLE (A2XY) 650/1100V AC - IS 7098-PART 1



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
LVIS09AXUAY2003C004SA002S	3 x 4	Class 1	0.7	1.8	13	140
LVIS09AXUAY2003C006SA001S	3 x 6	Class 1	0.7	1.8	14.5	170
LVIS09AXUAY2003C010SA001S	3 x 10	Class 1	0.7	1.8	15.5	220
LVIS09AXUAY2003C004SA001S	3 x 4	Class 2	0.7	1.8	13.5	160
LVIS09AXUAY2003C006SA002S	3 x 6	Class 2	0.7	1.8	15	190
LVIS09AXUAY2003C010SA003S	3 x 10	Class 2	0.7	1.8	17	230
LVIS09AXUAY2003C016SA001S	3 x 16	Class 2	0.7	1.8	16.2	304
LVIS09AXUAY2003C025SA001S	3 x 25	Class 2	0.9	2	19.5	446
LVIS09AXUAY2003C035SA001S	3 x 35	Class 2	0.9	2	21.5	551
LVIS09AXUAY2003C050SA001S	3 x 50	Class 2	1	2	24.5	693
LVIS09AXUAY2003C070SA001S	3 x 70	Class 2	1.1	2.2	28	950
LVIS09AXUAY2003C095SA001S	3 x 95	Class 2	1.1	2.2	30.8	1206
LVIS09AXUAY2003C120SA001S	3 x 120	Class 2	1.2	2.2	33.8	1463
LVIS09AXUAY2003C150SA001S	3 x 150	Class 2	1.4	2.4	37.9	1814
LVIS09AXUAY2003C185SA001S	3 x 185	Class 2	1.6	2.6	42	2242
LVIS09AXUAY2003C240SA001S	3 x 240	Class 2	1.7	2.8	46.9	2869
LVIS09AXUAY2003C300SA001S	3 x 300	Class 2	1.8	3	51.5	3505
LVIS09AXUAY2003C400SA001S	3 x 400	Class 2	2	3.2	58.6	4427
LVIS09AXUAY2003C500SA001S	3 x 500	Class 2	2.2	3.6	66	5681
LVIS09AXUAY2003C630SA001S	3 x 630	Class 2	2.4	3.8	72	7125

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

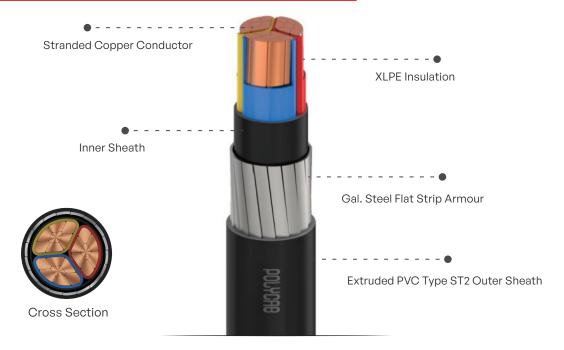
Nominal area of conductor	Buried direct in the ground	In single way Ducts	In air	Max. DC conductor resistance at 20°C
mm ²	Amp.	Amp.	Amp.	Ω/km
4	35	30	32	7.41
6	46	38	42	4.61
10	57	48	54	3.08
16	74	61	69	1.91
25	95	79	93	1.2
35	114	94	114	0.868
50	134	112	138	0.641
70	164	137	175	0.443
95	197	164	216	0.32
120	223	187	249	0.253
150	249	209	284	0.206
185	282	238	329	0.164
240	327	276	392	0.125
300	369	312	452	0.1
400	420	356	526	0.0778

Air Ambient temperature: 40°C, Ground ambient temperature: 30°C,



POLYCAB MC-3 COPPER CONDUCTOR XLPE INSULATED ARMORED POWER CABLE (2XFY) 650/1100V AC - IS 7098-PART 1





APPLICATION

POLYCAB 2XFY MC-3, Stranded compacted copper 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red, Yellow and Blue

STANDARD AND REFERENCES

IS 8130:2013 | IS 5831:1984 IS 3975:1979 | IS 7098-1:1988

COMPLIANCE

- IS 8130:2013 Conductor resistance - IS 7098-1:1988 Insulation resistance Flammability test - IEC 60332-1:2015

BENDING RADIUS

Fixed installation | 12 x Overall diameter

- Stranded plain compacted sector shaped copper 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

















Weight & Dimension Data

Product code	Nominal cross- sectional area	Nominal Thickness of Insulation Main/Neutral	Nominal dimension of Armour flat wire	Minimum thickness of outer sheath	Overall Diameter	Weight (Approx.)
	n x mm²	mm	mm	mm	mm	kg/km
LVIS09CXSFY2003C016SA001S	3x16	0.7	4x0.8	1.24	16.8	772.3
LVIS09CXSFY2003C025SA001S	3x25	0.9	4x0.8	1.4	20.1	1102
LVIS09CXSFY2003C035SA001S	3x35	0.9	4x0.8	1.4	22	1396
LVIS09CXSFY2003C050SA001S	3x50	1	4x0.8	1.4	24.8	1767
LVIS09CXSFY2003C070SA001S	3x70	1.1	4x0.8	1.56	28.5	2441
LVIS09CXSFY2003C095SA001S	3x95	1.1	4x0.8	1.56	31.3	3182
LVIS09CXSFY2003C120SA001S	3x120	1.2	4x0.8	1.56	34.3	3895
LVIS09CXSFY2003C150SA001S	3x150	1.4	4x0.8	1.72	38.3	4759
LVIS09CXSFY2003C185SA001S	3x185	1.6	4x0.8	1.88	42.3	5852
LVIS09CXSFY2003C240SA001S	3x240	1.7	4x0.8	2.04	47.3	7505
LVIS09CXSFY2003C300SA001S	3x300	1.8	4x0.8	2.2	51.8	9243
LVIS09CXSFY2003C400SA001S	3x400	2	4x0.8	2.52	58.5	11704

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

Nominal area of conductor	Buried direct in the ground	In single way Ducts	In air	Max. DC conductor resistance at 20°C
mm²	Amp.	Amp.	Amp.	Ω/km
16	95	79	89	1.15
25	122	102	119	0.727
35	146	122	147	0.524
50	173	144	179	0.387
70	212	177	226	0.268
95	254	212	279	0.193
120	287	240	320	0.153
150	321	269	365	0.124
185	362	304	422	0.0991
240	418	352	500	0.0754
300	469	396	574	0.0601
400	528	447	662	0.047

Air Ambient temperature: 40°C,

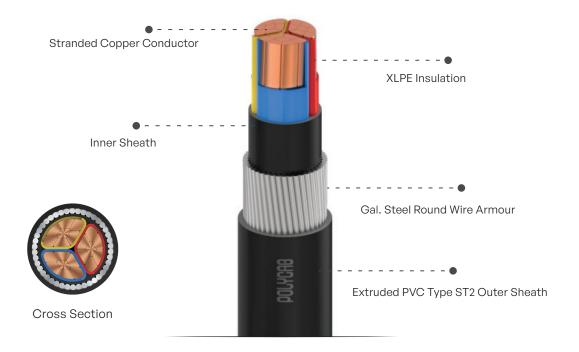
Ground ambient temperature: 30°C,

Conductor operating temperature: 90°C



POLYCAB MC-3 COPPER CONDUCTOR XLPE INSULATED ARMORED POWER CABLE (2XWY) 650/1100V AC - IS 7098-PART 1





APPLICATION

POLYCAB 2XWY MC-3, Stranded compacted copper conductor, XLPE insulated, PVC inner sheathed, Galvanised Steel round wire 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red, Yellow and Blue

STANDARD AND REFERENCES

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

BENDING RADIUS

Fixed installation | 12 x Overall diameter

- Stranded plain compacted sector shaped copper conductor as per IS 8130, class 1 & 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 Round Wire to IS 3975
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

















Weight & Dimension Data

Product code	Nominal cross-sectional area	Class of conductor	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
LVIS09CXSWY2003C004SA002S	3 x 4	Class 1	0.7	1.4	1.24	15	530
LVIS09CXSWY2003C004SA001S	3 x 4	Class 2	0.7	1.4	1.24	16	460
LVIS09CXSWY2003C006SA002S	3 x 6	Class 1	0.7	1.4	1.24	16	640
LVIS09CXSWY2003C006SA001S	3 x 6	Class 2	0.7	1.4	1.24	17	551
LVIS09CXSWY2003C010SA001S	3 x 10	Class 2	0.7	1.4	1.24	19	722
LVIS09CXSWY2003C016SA001S	3 x 16	Class 2	0.7	1.4	1.4	18.8	921
LVIS09CXSWY2003C025SA001S	3 x 25	Class 2	0.9	1.6	1.4	21.7	1282
LVIS09CXSWY2003C035SA001S	3 x 35	Class 2	0.9	1.6	1.4	23.6	1596
LVIS09CXSWY2003C050SA001S	3 x 50	Class 2	1	1.6	1.56	26.8	2042
LVIS09CXSWY2003C070SA001S	3 x 70	Class 2	1.1	1.6	1.56	30.9	2888
LVIS09CXSWY2003C095SA001S	3 x 95	Class 2	1.1	2	1.56	33.7	3686
LVIS09CXSWY2003C120SA001S	3 x 120	Class 2	1.2	2	1.72	37	4455
LVIS09CXSWY2003C150SA001S	3 x 150	Class 2	1.4	2	1.88	41.1	5396
LVIS09CXSWY2003C185SA001S	3 x 185	Class 2	1.6	2	2.04	46	6868
LVIS09CXSWY2003C240SA001S	3 x 240	Class 2	1.7	2.5	2.2	50.9	8654
LVIS09CXSWY2003C300SA001S	3 x 300	Class 2	1.8	2.5	2.36	55.5	10526
LVIS09CXSWY2003C400SA001S	3 x 400	Class 2	2	2.5	2.68	64	13718

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

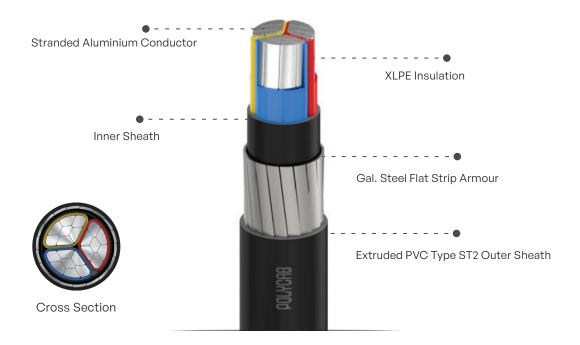
Nominal area of conductor	Buried direct in the ground	In single way Ducts	In air	Max. DC conductor resistance at 20°C
mm ²	Amp.	Amp.	Amp.	Ω/km
4	45	38	41	4.61
6	56	47	52	3.08
10	74	62	70	1.83
16	95	79	89	1.15
25	122	102	119	0.727
35	146	122	147	0.524
50	173	144	179	0.387
70	212	177	226	0268
95	254	212	279	0.193
120	287	240	320	0.153
150	321	269	365	0.124
185	362	304	422	0.0991
240	418	352	500	0.0754
300	469	396	574	0.0601
400	528	447	662	0.047

Air Ambient temperature: 40°C, Ground ambient temperature: 30°C, Conductor operating temperature: 90°C



POLYCAB MC-3 ALUMINIUM CONDUCTOR XLPE INSULATED ARMORED POWER CABLE (A2XFY) 650/1100V AC - IS 7098-PART 1





APPLICATION

POLYCAB 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 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red, Yellow and Blue

STANDARD AND REFERENCES

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

BENDING RADIUS

Fixed installation | 12 x Overall diameter

- 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

















Weight & Dimension Data

Product code	Nominal cross- sectional area	Nominal Thickness of Insulation Main/Neutral	Nominal dimension of Armour flat wire	Minimum thickness of outer sheath	Overall Diameter	Weight (Approx.)
	n x mm²	mm	mm	mm	mm	kg/km
LVIS09AXSFY2003C016SA001S	3x16	0.7	4x0.8	1.24	16.8	487.6
LVIS09AXSFY2003C025SA001S	3x25	0.9	4x0.8	1.4	20.1	670.7
LVIS09AXSFY2003C035SA001S	3x35	0.9	4x0.8	1.4	22	798
LVIS09AXSFY2003C050SA001S	3x50	1	4x0.8	1.4	24.8	960
LVIS09AXSFY2003C070SA001S	3x70	1.1	4x0.8	1.56	28.5	1282
LVIS09AXSFY2003C095SA001S	3x95	1.1	4x0.8	1.56	31.3	1577
LVIS09AXSFY2003C120SA001S	3x120	1.2	4x0.8	1.56	34.3	1871
LVIS09AXSFY2003C150SA001S	3x150	1.4	4x0.8	1.72	38.3	2100
LVIS09AXSFY2003C185SA001S	3x185	1.6	4x0.8	1.88	42.3	2500
LVIS09AXSFY2003C240SA001S	3x240	1.7	4x0.8	2.04	47.3	3382
LVIS09AXSFY2003C300SA001S	3x300	1.8	4x0.8	2.2	51.8	5101
LVIS09AXSFY2003C400SA001S	3x400	2	4x0.8	2.52	58.5	5101
LVIS09AXSFY2003C500SA001S	3x500	2.2	4x0.8	2.68	65	6365
LVIS09AXSFY2003C630SA001S	3x630	2.4	4x0.8	2.84	73	7894

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

Nominal area of conductor	Buried direct in the ground	In single way Ducts	In air	Max. DC conductor resistance at 20°C
mm²	Amp.	Amp.	Amp.	Ω/km
16 25	74 95	61 79	69 93	1.91 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
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,

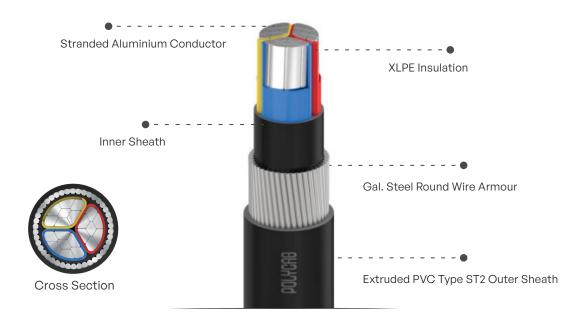
Ground ambient temperature: 30°C,

Conductor operating temperature: 90 $^{\circ}\text{C}$



POLYCAB MC-3 ALUMINIUM CONDUCTOR XLPE INSULATED ARMORED POWER CABLE (A2XWY) 650/1100V AC - IS 7098-PART 1





APPLICATION

POLYCAB A2XWY MC-3, Stranded compacted aluminium conductor, XLPE insulated, PVC inner sheathed, Galvanised Steel round wire 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red, Yellow, and Blue

CONSTRUCTION

Stranded compacted sector shaped Aluminium conductor as per IS 8130, class 1&2

- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Armoured with Galvanised Steel round wire to IS 3975
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

STANDARD AND REFERENCES

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

BENDING RADIUS

Fixed installation | 12 x Overall diameter















POLYCAB MC-3 ALUMINIUM CONDUCTOR XLPE INSULATED ARMORED POWER CABLE (A2XWY) 650/1100V AC - IS 7098-PART 1



Weight & Dimension Data

Product code	Nominal cross- sectional area	Class of conductor	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
LVIS09AXSWY2003C004SA002S	3 x 4	Class 1	0.7	1.4	1.24	15	460
LVIS09AXSWY2003C004SA001S	3 x 4	Class 2	0.7	1.4	1.24	16	399
LVIS09AXSWY2003C006SA002S	3 x 6	Class 1	0.7	1.4	1.24	16	530
LVIS09AXSWY2003C006SA001S	3 x 6	Class 2	0.7	1.4	1.24	17	470
LVIS09AXSWY2003C010SA002S	3 x 10	Class 1	0.7	1.4	1.24	18	640
LVIS09AXSWY2003C010SA001S	3 x 10	Class 2	0.7	1.4	1.24	18.5	551
LVIS09AXSWY2003C016SA001S	3 x 16	Class 2	0.7	1.6	1.4	19	648.4
LVIS09AXSWY2003C025SA001S	3 x 25	Class 2	0.9	1.6	1.4	21.7	855
LVIS09AXSWY2003C035SA001S	3 x 35	Class 2	0.9	1.6	1.4	23.6	997
LVIS09AXSWY2003C050SA001S	3 x 50	Class 2	1	1.6	1.56	26.8	1235
LVIS09AXSWY2003C070SA001S	3 x 70	Class 2	1.1	2	1.56	30.9	1729
LVIS09AXSWY2003C095SA001S	3 x 95	Class 2	1.1	2	1.56	33.7	2077
LVIS09AXSWY2003C120SA001S	3 x 120	Class 2	1.2	2	1.72	37	2422
LVIS09AXSWY2003C150SA001S	3 x 150	Class 2	1.4	2	1.88	41.1	2888
LVIS09AXSWY2003C185SA001S	3 x 185	Class 2	1.6	2.5	2.04	46	3733
LVIS09AXSWY2003C240SA001S	3 x 240	Class 2	1.7	2.5	2.2	50.9	4531
LVIS09AXSWY2003C300SA001S	3 x 300	Class 2	1.8	2.5	2.36	55.45	5339
LVIS09AXSWY2003C400SA001S	3 x 400	Class 2	2	3.15	2.68	64	7115
LVIS09AXSWY2003C500SA001S	3 x 500	Class 2	2.2	3.15	2.84	73	8597
LVIS09AXSWY2003C630SA001S	3 x 630	Class 2	2.4	4	3	78	11295

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

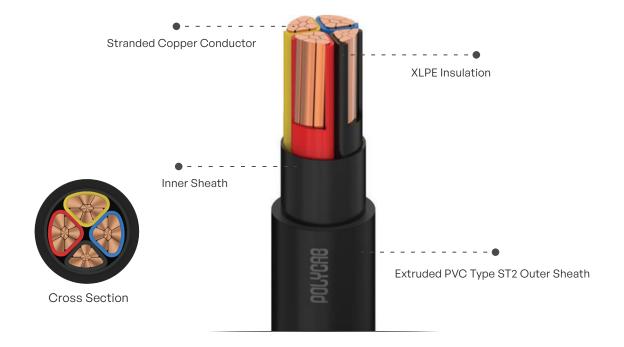
Nominal area of conductor	Buried direct in the ground	In single way Ducts	In air	Max. DC conductor resistance at 20°C
mm²	Amp.	Amp.	Amp.	Ω/km
4	35	30	32	7.41
6	46	38	42	4.61
10	57	48	54	3.08
16	74	61	69	1.91
25	95	79	93	1.2
35	114	94	114	0.868
50	134	112	138	0.641
70	164	137	175	0.443
95	197	164	216	0.32
120	223	187	249	0.253
150	249	209	284	0.206
185	282	238	329	0.164
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



POLYCAB MC-3.5 COPPER CONDUCTOR XLPE INSULATED UNARMORED POWER CABLE (2XY) 650/1100V AC - IS 7098-PART 1





APPLICATION

POLYCAB 2XY MC-3.5, 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red. Yellow, Blue & Black

STANDARD AND REFERENCES

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

BENDING RADIUS

Fixed installation | 12 x Overall diameter

- Stranded plain compacted copper 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
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH















POLYCAB MC-3.5 COPPER CONDUCTOR XLPE INSULATED UNARMORED POWER CABLE (2XY) 650/1100V AC - IS 7098-PART 1



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
LVIS09CXUAY23.5C025SA001S	3.5 x 25	Class 2	0.9/0.7	2	21.3	1035
LVIS09CXUAY23.5C035SA001S	3.5 x 35	Class 2	0.9/0.7	2	23.6	1311
LVIS09CXUAY23.5C050SA001S	3.5 x 50	Class 2	1/0.9	2	26.8	1748
LVIS09CXUAY23.5C070SA001S	3.5 x 70	Class 2	1.1/0.9	2.2	31	2460
LVIS09CXUAY23.5C095SA001S	3.5 x 95	Class 2	1.1/1	2.2	34.3	3287
LVIS09CXUAY23.5C120SA001S	3.5 x 120	Class 2	1.2/1.1	2.2	37.6	4142
LVIS09CXUAY23.5C150SA001S	3.5 x 150	Class 2	1.4/1.1	2.4	42.3	4987
LVIS09CXUAY23.5C185SA001S	3.5 x 185	Class 2	1.6/1.1	2.6	46.8	6279
LVIS09CXUAY23.5C240SA001S	3.5 x 240	Class 2	1.7/1.2	2.8	52.4	8122
LVIS09CXUAY23.5C300SA001S	3.5 x 300	Class 2	1.8/1.4	3	57	10079
LVIS09CXUAY23.5C400SA001S	3.5 x 400	Class 2	2/1.6	3.4	65	12834.5

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

Nominal area of conductor	Buried direct in the ground	In single way Ducts	In air	Max. DC conductor resistance at 20°C
mm²	Amp.	Amp.	Amp.	Ω/km
25	122	102	119	0.727
35	146	122	147	0.524
50	173	144	179	0.387
70	212	177	226	0.268
95	254	212	279	0.193
120	287	240	320	0.153
150	321	269	365	0.124
185	362	304	422	0.0991
240	418	352	500	0.0754
300	469	396	574	0.0601
400	528	447	662	0.047

Air Ambient temperature: 40°C, Ground ambient temperature: 30°C, The above table is in accordance with IS 3961(part 6):2016

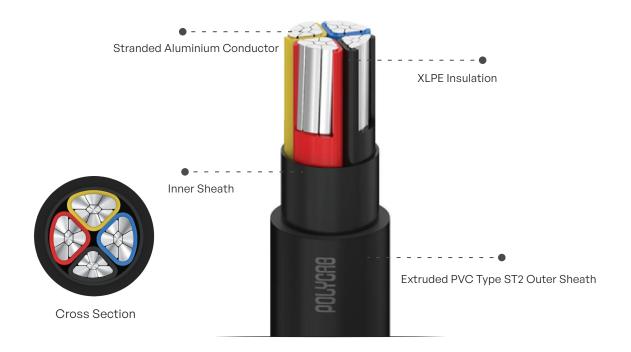






POLYCAB MC-3.5 ALUMINIUM CONDUCTOR XLPE INSULATED UNARMORED POWER CABLE (A2XY) 650/1100V AC - IS 7098-PART 1





APPLICATION

POLYCAB A2XY MC-3.5, Stranded compacted aluminium 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red, Yellow, Blue & Black

STANDARD AND REFERENCES

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 60332-1:2015

BENDING RADIUS

Fixed installation | 12 x Overall diameter

- Stranded compacted 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
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH















POLYCAB MC-3.5 ALUMINIUM CONDUCTOR XLPE INSULATED UNARMORED POWER CABLE (A2XY) 650/1100V AC - IS 7098-PART 1



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
LVIS09AXUAY23.5C025SA001S	3.5 x 25	Class 2	0.9/0.7	2	21.3	525
LVIS09AXUAY23.5C035SA001S	3.5 x 35	Class 2	0.9/0.7	2	23.6	625
LVIS09AXUAY23.5C050SA001S	3.5 x 50	Class 2	1/0.9	2	26.8	800
LVIS09AXUAY23.5C070SA001S	3.5 x 70	Class 2	1.1/0.9	2.2	31	1100
LVIS09AXUAY23.5C095SA001S	3.5 x 95	Class 2	1.1/1	2.2	34.3	1400
LVIS09AXUAY23.5C120SA001S	3.5 x 120	Class 2	1.2/1.1	2.2	37.5	1650
LVIS09AXUAY23.5C150SA001S	3.5 x 150	Class 2	1.4/1.1	2.4	41	2000
LVIS09AXUAY23.5C185SA001S	3.5 x 185	Class 2	1.6/1.1	2.6	46.5	2550
LVIS09AXUAY23.5C240SA001S	3.5 x 240	Class 2	1.7/1.2	2.8	52.5	3200
LVIS09AXUAY23.5C300SA001S	3.5 x 300	Class 2	1.8/1.4	3	56	4000
LVIS09AXUAY23.5C400SA001S	3.5 x 400	Class 2	2/1.6	3.4	64	5177
LVIS09AXUAY23.5C500SA001S	3.5 x 500	Class 2	2.2/1.70	3.6	72.5	6500

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

Nominal area of conductor	Buried direct in the ground	In single way Ducts	In air	Max. DC conductor resistance at 20°C
mm²	Amp.	Amp.	Amp.	Ω/km
16	74	61	69	1.91
25	95	79	93	1.2
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
240	327	276	392	0.125
300	369	312	452	0.1
400	420	356	526	0.0778
500	478	412	612	0.0605

Air Ambient temperature: 40°C, Ground ambient temperature: 30°C,



POLYCAB MC-3.5 COPPER CONDUCTOR XLPE INSULATED ARMORED POWER CABLE (2XFY) 650/1100V AC - IS 7098-PART 1





APPLICATION

POLYCAB 2XFY MC-3.5, Stranded compacted copper 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red, Yellow, Blue & Black

STANDARD AND REFERENCES

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 - IEC 60332-1:2015 Flammability test

BENDING RADIUS

Fixed installation | 12 x Overall diameter

- Stranded plain compacted sector shaped copper 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















POLYCAB MC-3.5 COPPER CONDUCTOR XLPE INSULATED ARMORED POWER CABLE (2XFY) 650/1100V AC - IS 7098-PART 1



Weight & Dimension Data

Nominal cross- sectional area	Nominal Thickness of Insulation Main/Neutral	Nominal dimension of Armour flat wire	Minimum thickness of outer sheath	Overall Diameter	Weight (Approx.)
n x mm²	mm	mm	mm	mm	kg/km
3.5 x25	0.9/0.7	4x0.8	1.4	21.9	1272
3.5 x35	0.9/0.7	4x0.8	1.4	24.2	1586
3.5 x50	1/0.9	4x0.8	1.4	27.4	2061
3.5 x70	1.1/0.9	4x0.8	1.56	31.5	2831
3.5 x95	1.1/1	4x0.8	1.56	34.8	3686
3.5 x120	1.2/1.1	4x0.8	1.72	38.5	4617
3.5 x150	1.4/1.1	4x0.8	1.72	42.7	5481
3.5 x185	1.6/1.1	4x0.8	1.88	47.2	6830
3.5 x240	1.7/1.2	4x0.8	2.04	52.7	8711
3.5 x300	1.8/1.4	4x0.8	2.2	57.9	10716
3.5 x400	2/1.6	4x0.8	2.52	65.5	13556
	n x mm ² 3.5 x25 3.5 x35 3.5 x50 3.5 x70 3.5 x95 3.5 x120 3.5 x150 3.5 x185 3.5 x240 3.5 x300	Thickness of Insulation Main/Neutral n x mm² mm 3.5 x25 0.9/0.7 3.5 x35 0.9/0.7 3.5 x50 1/0.9 3.5 x70 1.1/0.9 3.5 x95 1.1/1 3.5 x120 1.2/1.1 3.5 x150 1.4/1.1 3.5 x185 1.6/1.1 3.5 x240 1.7/1.2 3.5 x300 1.8/1.4	Nominal cross- sectional area Thickness of Insulation Main/Neutral dimension of Armour flat wire n x mm² mm mm 3.5 x25 0.9/0.7 4x0.8 3.5 x35 0.9/0.7 4x0.8 3.5 x50 1/0.9 4x0.8 3.5 x70 1.1/0.9 4x0.8 3.5 x95 1.1/1 4x0.8 3.5 x120 1.2/1.1 4x0.8 3.5 x150 1.4/1.1 4x0.8 3.5 x185 1.6/1.1 4x0.8 3.5 x240 1.7/1.2 4x0.8 3.5 x300 1.8/1.4 4x0.8	Nominal cross- sectional area Thickness of Insulation Main/Neutral dimension of Armour flat wire Minimum thickness of outer sheath n x mm² mm mm mm 3.5 x25 0.9/0.7 4x0.8 1.4 3.5 x35 0.9/0.7 4x0.8 1.4 3.5 x50 1/0.9 4x0.8 1.4 3.5 x70 1.1/0.9 4x0.8 1.56 3.5 x95 1.1/1 4x0.8 1.72 3.5 x120 1.2/1.1 4x0.8 1.72 3.5 x150 1.4/1.1 4x0.8 1.72 3.5 x185 1.6/1.1 4x0.8 1.88 3.5 x240 1.7/1.2 4x0.8 2.04 3.5 x300 1.8/1.4 4x0.8 2.2	Nominal area Thickness of Insulation Main/Neutral dimension of Armour flat wire Minimum thickness of outer sheath Overall Diameter n x mm² mm mm mm mm 3.5 x25 0.9/0.7 4x0.8 1.4 21.9 3.5 x35 0.9/0.7 4x0.8 1.4 24.2 3.5 x50 1/0.9 4x0.8 1.4 27.4 3.5 x70 1.1/0.9 4x0.8 1.56 31.5 3.5 x95 1.1/1 4x0.8 1.56 34.8 3.5 x120 1.2/1.1 4x0.8 1.72 38.5 3.5 x150 1.4/1.1 4x0.8 1.72 42.7 3.5 x185 1.6/1.1 4x0.8 1.88 47.2 3.5 x240 1.7/1.2 4x0.8 2.04 52.7 3.5 x300 1.8/1.4 4x0.8 2.2 57.9

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

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
16	95	79	89	1.15
25	122	102	119	0.727
35	146	122	147	0.524
50	173	144	179	0.387
70	212	177	226	0.268
95	254	212	279	0.193
120	287	240	320	0.153
150	321	269	365	0.124
185	362	304	422	0.0991
240	418	352	500	0.0754
300	469	396	574	0.0601
400	528	447	662	0.047

Air Ambient temperature: 40°C,

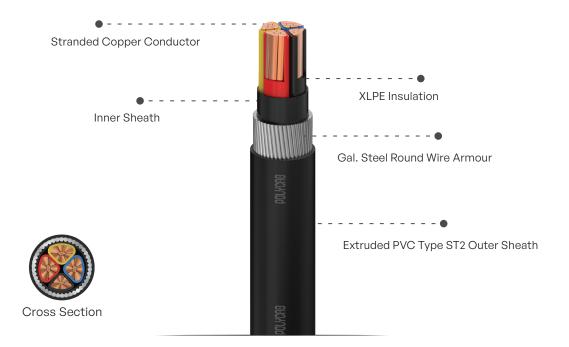
Ground ambient temperature: 30 $^{\circ}\text{C}\text{,}$

Conductor operating temperature: 90°C



POLYCAB MC-3.5 COPPER CONDUCTOR XLPE INSULATED ARMORED POWER CABLE (2XWY) 650/1100V AC - IS 7098-Part 1





APPLICATION

POLYCAB 2XWY MC-3.5, Stranded compacted copper conductor, XLPE insulated, PVC inner sheathed, Galvanised Steel round wire 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red, Yellow, Blue and Black

CONSTRUCTION

Stranded plain compacted sector shaped copper 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 Steel round wire to IS 3975
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

STANDARD AND REFERENCES

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

BENDING RADIUS

Fixed installation | 12 x Overall diameter















POLYCAB MC-3.5 COPPER CONDUCTOR XLPE INSULATED ARMORED POWER CABLE (2XWY) 650/1100V AC - IS 7098-Part 1



Weight & Dimension Data

Product code	Nominal cross- sectional area	Nominal Thickness of Insulation Main/Neutral	Nominal dimension of Armour round wire	Minimum thickness of outer sheath	Overall Diameter	Weight (Approx.)
	n x mm²	mm	mm	mm	mm	kg/km
LVIS09CXSWY23.5C025SA001S	3.5 x25	0.9/0.7	1.6	1.4	23.6	1491
LVIS09CXSWY23.5C035SA001S	3.5 x35	0.9/0.7	1.6	1.4	25.8	1824
LVIS09CXSWY23.5C050SA001S	3.5 x50	1/0.9	1.6	1.56	29	2337
LVIS09CXSWY23.5C070SA001S	3.5 x70	1.1/0.9	2	1.56	33.9	3296
LVIS09CXSWY23.5C095SA001S	3.5 x95	1.1/1	2	1.56	37.2	4237
LVIS09CXSWY23.5C120SA001S	3.5 x120	1.2/1.1	2	1.72	41	5225
LVIS09CXSWY23.5C150SA001S	3.5 x150	1.4/1.1	2	1.88	45	6194
LVIS09CXSWY23.5C185SA001S	3.5 x185	1.6/1.1	2.5	2.04	50	7989
LVIS09CXSWY23.5C240SA001S	3.5 x240	1.7/1.2	2.5	2.2	56	10003
LVIS09CXSWY23.5C300SA001S	3.5 x300	1.8/1.4	2.5	2.36	61	12131
LVIS09CXSWY23.5C400SA001S	3.5 x400	2/1.6	3.15	2.68	70	15817

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

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
16	95	79	89	1.15
25	122	102	119	0.727
35	146	122	147	0.524
50	173	144	179	0.387
70	212	177	226	0.268
95	254	212	279	0.193
120	287	240	320	0.153
150	321	269	365	0.124
185	362	304	422	0.0991
240	418	352	500	0.0754
300	469	396	574	0.0601
400	528	447	662	0.047

Air Ambient temperature: 40°C,

Ground ambient temperature: 30°C,

Conductor operating temperature: 90°C



POLYCAB MC-3.5 ALUMINIUM CONDUCTOR XLPE INSULATED ARMORED POWER CABLE (A2XFY) 650/1100V AC - IS 7098-Part 1





APPLICATION

POLYCAB A2XFY MC-3.5, 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red, Yellow, Blue and Black

CONSTRUCTION

■ Stranded plain 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

STANDARD AND REFERENCES

IS 8130:2013

IS 5831:1984

IS 3975:1979

IS 7098-1:1988

COMPLIANCE

Conductor resistance Insulation resistance

- IS 8130:2013

- IS 7098-1:1988

Flammability test - IEC 60332-1:2015

BENDING RADIUS

Fixed installation | 12 x Overall diameter















POLYCAB MC-3.5 ALUMINIUM CONDUCTOR XLPE INSULATED ARMORED POWER CABLE (A2XFY) 650/1100V AC - IS 7098-Part 1



Weight & Dimension Data

Product code	Nominal cross- sectional area	Nominal Thickness of Insulation Main/Neutral	Nominal dimension of Armour flat wire	Minimum thickness of outer sheath	Overall Diameter	Weight (Approx.)
	n x mm²	mm	mm	mm	mm	kg/km
LVIS09AXSFYL3.5C025SA001S	3.5 x25	0.9/0.7	4x0.8	1.4	21.9	733
LVIS09AXSFYL3.5C035SA001S	3.5 x35	0.9/0.7	4x0.8	1.4	24.2	886
LVIS09AXSFYL3.5C050SA001S	3.5 x50	1/0.9	4x0.8	1.4	27.4	1113
LVIS09AXSFYL3.5C070SA001S	3.5 x70	1.1/0.9	4x0.8	1.56	31.5	1451
LVIS09AXSFYL3.5C095SA001S	3.5 x95	1.1/1	4x0.8	1.56	34.8	1796
LVIS09AXSFYL3.5C120SA001S	3.5 x120	1.2/1.1	4x0.8	1.72	38.5	2199
LVIS09AXSFYL3.5C150SA001S	3.5 x150	1.4/1.1	4x0.8	1.72	42	2579
LVIS09AXSFYL3.5C185SA001S	3.5 x185	1.6/1.1	4x0.8	1.88	47.2	3156
LVIS09AXSFYL3.5C240SA001S	3.5 x240	1.7/1.2	4x0.8	2.04	52.7	3913
LVIS09AXSFYL3.5C300SA001S	3.5 x300	1.8/1.4	4x0.8	2.2	57	4693
LVIS09AXSFYL3.5C400SA001S	3.5 x400	2/1.6	4x0.8	2.52	65	5890
LVIS09AXSFYL003C500SA001S	3.5 x500	2.2/1.7	4x0.8	2.68	73.5	7400

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

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
16	95	79	89	1.15
25	122	102	119	0.727
35	146	122	147	0.524
50	173	144	179	0.387
70	212	177	226	0.268
95	254	212	279	0.193
120	287	240	320	0.153
150	321	269	365	0.124
185	362	304	422	0.0991
240	418	352	500	0.0754
300	469	396	574	0.0601
400	528	447	662	0.047
500	478	412	612	0.0605

Air Ambient temperature: 40 $^{\circ}\text{C}\text{,}$

Ground ambient temperature: 30 $^{\circ}\text{C}\text{,}$

Conductor operating temperature: 90°C



POLYCAB MC-3.5 ALUMINIUM CONDUCTOR XLPE INSULATED ARMORED POWER CABLE (A2XWY) 650/1100V AC - IS 7098-Part 1





APPLICATION

POLYCAB A2XWY MC-3.5, Stranded compacted aluminium conductor, XLPE insulated, PVC inner sheathed Galvanised Steel round wire 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red. Yellow, Blue and Black

STANDARD AND REFERENCES

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

BENDING RADIUS

Fixed installation | 12 x Overall diameter

- 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 Steel round wire to IS 3975
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH















POLYCAB MC-3.5 ALUMINIUM CONDUCTOR XLPE INSULATED ARMORED POWER CABLE (A2XWY) 650/1100V AC - IS 7098-Part 1



Weight & Dimension Data

Product code	Nominal cross- sectional area	Nominal Thickness of Insulation Main/Neutral	Nominal dimension of Armour round wire	Minimum thickness of outer sheath	Overall Diameter	Weight (Approx.)
	n x mm²	mm	mm	mm	mm	kg/km
LVIS09AXSWY23.5C025SA001S	3.5 x25	0.9/0.7	1.6	1.4	23.6	969
LVIS09AXSWY23.5C035SA001S	3.5 x35	0.9/0.7	1.6	1.4	25.8	1139
LVIS09AXSWY23.5C050SA001S	3.5 x50	1/0.9	1.6	1.56	29.5	1387
LVIS09AXSWY23.5C070SA001S	3.5 x70	1.1/0.9	2	1.56	34	1938
LVIS09AXSWY23.5C095SA001S	3.5 x95	1.1/1	2	1.56	37.2	2356
LVIS09AXSWY23.5C120SA001S	3.5 x120	1.2/1.1	2	1.72	41	2800
LVIS09AXSWY23.5C150SA001S	3.5 x150	1.4/1.1	2	1.88	45	3296
LVIS09AXSWY23.5C185SA001S	3.5 x185	1.6/1.1	2.5	2.04	50	4313
LVIS09AXSWY23.5C240SA001S	3.5 x240	1.7/1.2	2.5	2.2	56	5156
LVIS09AXSWY23.5C300SA001S	3.5 x300	1.8/1.4	2.5	2.36	61	6108
LVIS09AXSWY23.5C400SA001S	3.5 x400	2/1.6	3.15	2.68	70	8151
LVIS09AXSWY23.5C500SA001S	3.5 x500	2.2/1.7	3.15	2.84	77	9880

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

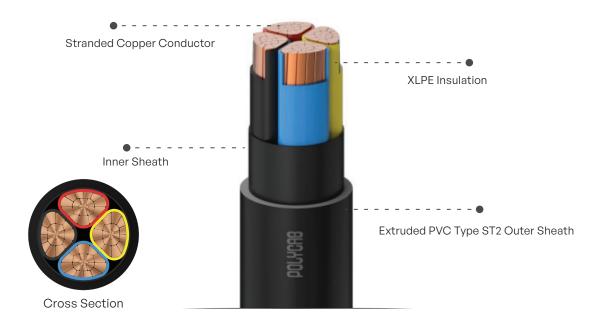
Nominal area of conductor	Buried direct in the ground	In single way Ducts	In air	Max. DC conductor resistance at 20°C
mm ²	Amp.	Amp.	Amp.	Ω/km
16	74	61	69	1.91
25	95	79	93	1.20
35	114	94	114	0.868
50	134	112	138	0.641
70	164	137	175	0.443
95	197	164	216	0.32
120	223	187	249	0.253
150	249	209	284	0.206
185	282	238	329	0.164
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



POLYCAB MC-4 COPPER CONDUCTOR XLPE INSULATED UNARMORED POWER CABLE (2XY) 650/1100V AC - IS 7098-Part 1





APPLICATION

POLYCAB 2XY MC-4, 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red, Yellow, Blue & Black

STANDARD AND REFERENCES

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

BENDING RADIUS

Fixed installation | 12 x Overall diameter

- Stranded plain compacted/Non-Compacted copper conductor as per IS 8130, class 1 & 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH















POLYCAB MC-4 COPPER CONDUCTOR XLPE INSULATED UNARMORED POWER CABLE (2XY) 650/1100V AC - IS 7098-Part 1



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
LVIS09CXUAY2004C004SA001S	4 x 4	Class 1	0.7	1.8	13.5	260
LVIS09CXUAY2004C006SA001S	4 x 6	Class 1	0.7	1.8	14.7	350
LVIS09CXUAY2004C004SA002S	4 × 4	Class 2	0.7	1.8	14.2	280
LVIS09CXUAY2004C006SA004S	4 x 6	Class 2	0.7	1.8	15.5	365
LVIS09CXUAY2004C010SA001S	4 x 10	Class 2	0.7	1.8	17.8	510
LVIS09CXUAY2004C016SA001S	4 x 16	Class 2	0.7	1.8	17.5	741
LVIS09CXUAY2004C025SA001S	4 x 25	Class 2	0.9	2	21	1140
LVIS09CXUAY2004C035SA001S	4 x 35	Class 2	0.9	2	23.5	1491
LVIS09CXUAY2004C050SA001S	4 x 50	Class 2	1	2	26	1957
LVIS09CXUAY2004C070SA001S	4 x 70	Class 2	1.1	2.2	30.5	2774
LVIS09CXUAY2004C095SA001S	4 x 95	Class 2	1.1	2.2	33.5	3714
LVIS09CXUAY2004C120SA001S	4 x 120	Class 2	1.2	2.4	37.5	4645
LVIS09CXUAY2004C150SA001S	4 x 150	Class 2	1.4	2.6	42	5719
LVIS09CXUAY2004C185SA001S	4 x 185	Class 2	1.6	2.8	46.5	7125
LVIS09CXUAY2004C240SA001S	4 x 240	Class 2	1.7	3	52.5	9253
LVIS09CXUAY2004C300SA001S	4 x 300	Class 2	1.8	3.2	58	11524

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

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
4	45	38	41	4.61
6	56	47	52	3.08
10	74	62	70	1.83
16	95	79	89	1.15
25	122	102	119	0.727
35	146	122	147	0.524
50	173	144	179	0.387
70	212	177	226	0.268
95	254	212	279	0.193
120	287	240	320	0.153
150	321	269	365	0.124
185	362	304	422	0.0991
240	418	352	500	0.0754
300	469	396	574	0.0601
400	528	447	662	0.047

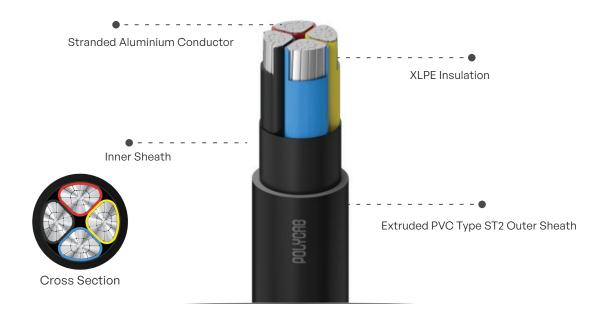
Air Ambient temperature: 40°C,

Ground ambient temperature: 30 $^{\circ}\text{C}\text{,}$



POLYCAB MC-4 ALUMINIUM CONDUCTOR XLPE INSULATED UNARMORED POWER CABLE (A2XY) 650/1100V AC - IS 7098-Part 1





APPLICATION

POLYCAB A2XY MC-4, Stranded compacted aluminium 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red, Yellow, Blue & Black

STANDARD AND REFERENCES

IS 8130:2013 IS 5831:1984 IS 7098-1:1988

COMPLIANCE

Conductor resistance - IS 8130:2013 - IS 7098-1:1988 Insulation resistance Flammability test - IEC 60332-1-2:2015

BENDING RADIUS

Fixed installation | 12 x Overall diameter

- Stranded compacted (≤ 16 sqmm)/Non compacted aluminium conductor as per IS 8130, class 1 & 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH















POLYCAB MC-4 ALUMINIUM CONDUCTOR XLPE INSULATED UNARMORED POWER CABLE (A2XY) 650/1100V AC - IS 7098-Part 1



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
LVIS09AXUAY2004C004SA001S	4x4	Class 1	0.7	1.8	13.5	160
LVIS09AXUAY2004C006SA003S	4x6	Class 1	0.7	1.8	14.7	200
LVIS09AXUAY2004C010SA001S	4x10	Class 1	0.7	1.8	16.6	250
LVIS09AXUAY2004C004SA002S	4x4	Class 2	0.7	1.8	14.2	180
LVIS09AXUAY2004C006SA002S	4x6	Class 2	0.7	1.8	15.5	215
LVIS09AXUAY2004C010SA002S	4x10	Class 2	0.7	1.8	17.5	260
LVIS09AXUAY2004C016SA001S	4x16	Class 2	0.7	1.8	17.8	350
LVIS09AXUAY2004C025SA001S	4x25	Class 2	0.9	2	21	550
LVIS09AXUAY2004C035SA001S	4x35	Class 2	0.9	2	23.5	680
LVIS09AXUAY2004C050SA001S	4x50	Class 2	1	2	26	875
LVIS09AXUAY2004C070SA001S	4x70	Class 2	1.1	2.2	30.5	1200
LVIS09AXUAY2004C095SA001S	4x95	Class 2	1.1	2.2	33.5	1530
LVIS09AXUAY2004C120SA001S	4x120	Class 2	1.2	2.4	37.5	1850
LVIS09AXUAY2004C150SA001S	4x150	Class 2	1.4	2.6	42	2280
LVIS09AXUAY2004C185SA001S	4x185	Class 2	1.6	2.8	46.5	2800
LVIS09AXUAY2004C240SA001S	4x240	Class 2	1.7	3	52.5	3700
LVIS09AXUAY2004C300SA001S	4x300	Class 2	1.8	3.2	58	4600
LVIS09AXUAY2004C400SA001S	4x400	Class 2	2	3.6	65.5	6000

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

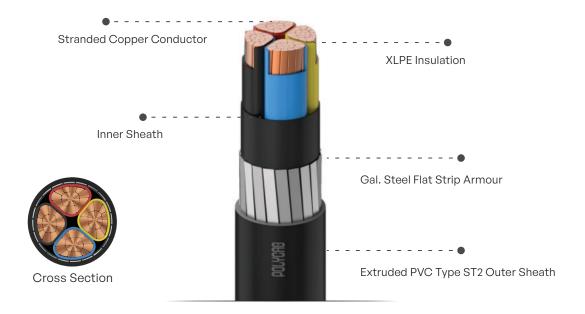
Nominal area of conductor	Buried direct in the ground	In single way Ducts	In air	Max. DC conductor resistance at 20°C
mm²	Amp.	Amp.	Amp.	Ω/km
4	35	30	32	7.41
6	46	38	42	4.61
10	57	48	54	3.08
16	74	61	69	1.91
25	95	79	93	1.2
35	114	94	114	0.868
50	134	112	138	0.641
70	164	137	175	0.443
95	197	164	216	0.32
120	223	187	249	0.253
150	249	209	284	0.206
185	282	238	329	0.164
240	327	276	392	0.125
300	369	312	452	0.1
400	420	356	526	0.0778
500	478	412	612	0.0605

Air Ambient temperature: 40°C, Ground ambient temperature: 30°C,



POLYCAB MC-4 COPPER CONDUCTOR XLPE INSULATED ARMORED POWER CABLE (2XFY) 650/1100V AC - IS 7098-Part 1





APPLICATION

POLYCAB 2XFY MC-4, Stranded compacted copper 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red, Yellow, Blue and Black

CONSTRUCTION

- Stranded plain compacted sector shaped Copper 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

STANDARD AND REFERENCES

IS 8130:2013 | IS 5831:1984 IS 3975:1979 | IS 7098-1:1988

COMPLIANCE

Conductor resistance - IS 8130:2013 - IS 7098-1:1988 Insulation resistance Flammability test - IEC 60332-1:2015

BENDING RADIUS

Fixed installation | 12 x Overall diameter















POLYCAB MC-4 COPPER CONDUCTOR XLPE INSULATED ARMORED POWER CABLE (2XFY) 650/1100V AC - IS 7098-Part 1



Weight & Dimension Data

Product code	Nominal cross- sectional area	Nominal Thickness of Insulation Main/Neutral	Nominal dimension of Armour flat wire	Minimum thickness of outer sheath	Overall Diameter	Weight (Approx.)
	n x mm²	mm	mm	mm	mm	kg/km
LVIS09CXSFY2004C016SA001S	4 x16	0.7	4x0.8	1.4	20	969
LVIS09CXSFY2004C025SA001S	4 x25	0.9	4x0.8	1.4	23	1406
LVIS09CXSFY2004C035SA001S	4 x35	0.9	4x0.8	1.4	25	1786
LVIS09CXSFY2004C050SA001S	4 x50	1	4x0.8	1.56	28	2308
LVIS09CXSFY2004C070SA001S	4 x70	1.1	4x0.8	1.56	32	3154
LVIS09CXSFY2004C095SA001S	4 x95	1.1	4x0.8	1.56	35	4161
LVIS09CXSFY2004C120SA001S	4 x120	1.2	4x0.8	1.72	39	5101
LVIS09CXSFY2004C150SA001S	4 x150	1.4	4x0.8	1.88	43.5	6232
LVIS09CXSFY2004C185SA001S	4 x185	1.6	4x0.8	2.04	48	7676
LVIS09CXSFY2004C240SA001S	4 x240	1.7	4x0.8	2.2	54	9880
LVIS09CXSFY2004C300SA001S	4 x300	1.8	4x0.8	2.36	59.5	12198

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

Nominal area of conductor	Buried direct in the ground	In single way Ducts	In air	Max. DC conductor resistance at 20°C
mm²	Amp.	Amp.	Amp.	Ω/km
16	95	79	89	1.91
25	122	102	119	1.2
35	146	122	147	0.868
50	173	144	179	0.641
70	212	177	226	0.443
95	254	212	279	0.32
120	287	240	320	0.253
150	321	269	365	0.206
185	362	304	422	0.164
240	418	352	500	0.125
300	469	396	574	0.100
400	528	447	662	0.0778

Air Ambient temperature: 40°C,

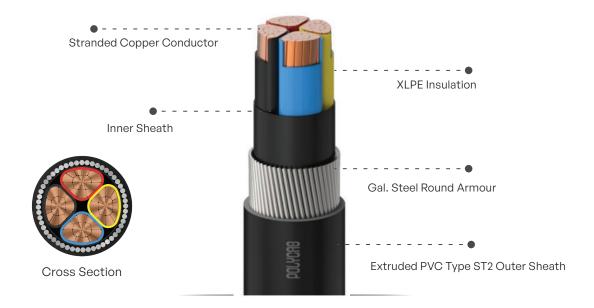
Ground ambient temperature: 30°C,

Conductor operating temperature: 90 $^{\circ}\text{C}$



POLYCAB MC-4 COPPER CONDUCTOR XLPE INSULATED ARMORED POWER CABLE (2XWY) 650/1100V AC - IS 7098-Part 1





APPLICATION

POLYCAB 2XWY MC-4, Stranded compacted copper conductor, XLPE insulated, PVC inner sheathed, Galvanised Steel round wire 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red, Yellow, Blue and Black

STANDARD AND REFERENCES

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

BENDING RADIUS

Fixed installation | 12 x Overall diameter

- Stranded plain compacted sector shaped Copper conductor as per IS 8130, class 1&2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Armoured with Galvanised Steel round wire to IS 3975
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH















POLYCAB MC-4 COPPER CONDUCTOR XLPE INSULATED ARMORED POWER CABLE (2XWY) 650/1100V AC - IS 7098-Part 1



Weight & Dimension Data

Product code	Nominal cross- sectional area	Class of conductor	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
LVIS09CXSWY2004C004SA002P	4x4	Class 1	0.7	1.4	1.24	15.3	503
LVIS09CXSWY2004C004SA001P	4x4	Class 2	0.7	1.4	1.24	16	533
LVIS09CXSWY2004C006SA002P	4x6	Class 1	0.7	1.4	1.24	16.5	618
LVIS09CXSWY2004C006SA001P	4x6	Class 2	0.7	1.4	1.24	17.3	646
LVIS09CXSWY2004C010SA001S	4x10	Class 2	0.7	1.4	1.4	19.8	870
LVIS09CXSWY2004C016SA001S	4x16	Class 2	0.7	1.6	1.4	21	1159
LVIS09CXSWY2004C025SA001S	4x25	Class 2	0.9	1.6	1.4	25	1615
LVIS09CXSWY2004C035SA001S	4x35	Class 2	0.9	1.6	1.4	26.5	2033
LVIS09CXSWY2004C050SA001S	4x50	Class 2	1	1.6	1.56	29.5	2593
LVIS09CXSWY2004C070SA001S	4x70	Class 2	1.1	2	1.56	34	3686
LVIS09CXSWY2004C095SA001S	4x95	Class 2	1.1	2	1.72	38	4769
LVIS09CXSWY2004C120SA001S	4x120	Class 2	1.2	2	1.88	42	5795
LVIS09CXSWY2004C150SA001S	4x150	Class 2	1.4	2.5	2.04	47	7324
LVIS09CXSWY2004C185SA001S	4x185	Class 2	1.6	2.5	2.2	52	8901
LVIS09CXSWY2004C240SA001S	4x240	Class 2	1.7	2.5	2.36	57.5	11210
LVIS09CXSWY2004C300SA001S	4x300	Class 2	1.8	3.15	2.52	64.5	14279

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

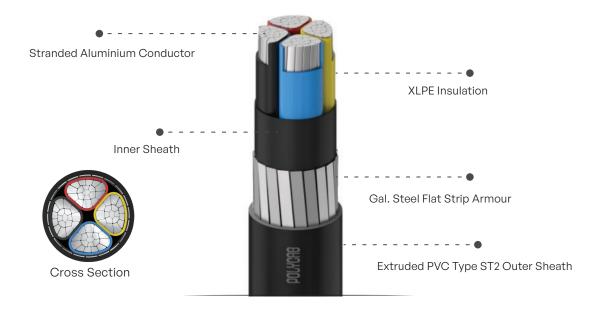
Nominal area of conductor	Buried direct in the ground	In single way Ducts	In air	Max. DC conductor resistance at 20°C
mm ²	Amp.	Amp.	Amp.	Ω/km
4	45	38	41	4.61
6	56	47	52	3.08
10	74	62	70	1.83
16	95	79	89	1.15
25	122	102	119	0.727
35	146	122	147	0.524
50	173	144	179	0.387
70	212	177	226	0.268
95	254	212	279	0.193
120	287	240	320	0.153
150	321	269	365	0.124
185	362	304	422	0.0991
240	418	352	500	0.0754
300	469	396	574	0.0601
400	528	447	662	0.047

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



POLYCAB MC-4 ALUMINIUM CONDUCTOR XLPE INSULATED ARMORED POWER CABLE (A2XFY) 650/1100V AC - IS 7098-Part 1





APPLICATION

POLYCAB A2XFY MC-4, 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red. Yellow, Blue and Black

STANDARD AND REFERENCES

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

BENDING RADIUS

Fixed installation | 12 x Overall diameter

- 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















POLYCAB MC-4 ALUMINIUM CONDUCTOR XLPE INSULATED ARMORED POWER CABLE (A2XFY) 650/1100V AC - IS 7098-Part 1



Weight & Dimension Data

Product code	Nominal cross- sectional area	Nominal Thickness of Insulation Main/Neutral	Nominal dimension of Armour flat wire	Minimum thickness of outer sheath	Overall Diameter	Weight (Approx.)
	n x mm²	mm	mm	mm	mm	kg/km
LVIS09AXSFY2004C016SA001S	4 x16	0.7	4x0.8	1.4	20	608
LVIS09AXSFY2004C025SA001S	4 x25	0.9	4x0.8	1.4	23	828.5
LVIS09AXSFY2004C035SA001S	4 x35	0.9	4x0.8	1.4	25	997
LVIS09AXSFY2004C050SA001S	4 x50	1	4x0.8	1.56	28	1235
LVIS09AXSFY2004C070SA001S	4 x70	1.1	4x0.8	1.56	32	1615
LVIS09AXSFY2004C095SA001S	4 x95	1.1	4x0.8	1.56	35	2014
LVIS09AXSFY2004C120SA001S	4 x120	1.2	4x0.8	1.72	39	2403
LVIS09AXSFY2004C150SA001S	4 x150	1.4	4x0.8	1.88	43	2888
LVIS09AXSFY2004C185SA001S	4 x185	1.6	4x0.8	2.04	48	3505
LVIS09AXSFY2004C240SA001S	4 x240	1.7	4x0.8	2.2	54	4389
LVIS09AXSFY2004C300SA001S	4 x300	1.8	4x0.8	2.36	59.5	5291
LVIS09AXSFY2004C400SA001S	4 x400	2	4x0.8	2.68	66.5	6538

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

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
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
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 $^{\circ}\text{C}\text{,}$

Conductor operating temperature: 90 °C



POLYCAB MC-4 ALUMINIUM CONDUCTOR XLPE INSULATED ARMORED POWER CABLE (A2XWY) 650/1100V AC - IS 7098-Part 1





APPLICATION

POLYCAB A2XWY MC-4, Stranded compacted aluminium conductor, XLPE insulated, PVC inner sheathed, Galvanised Steel round wire 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

Red, Yellow, Blue and Black

CORE IDENTIFICATION

CONSTRUCTION

Stranded compacted sector shaped Aluminium conductor as per IS 8130, class 1&2

- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Armoured with Galvanised Steel round wire to IS 3975
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

STANDARD AND REFERENCES

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

BENDING RADIUS

Fixed installation | 12 x Overall diameter















POLYCAB MC-4 ALUMINIUM CONDUCTOR XLPE INSULATED ARMORED POWER CABLE (A2XWY) 650/1100V AC - IS 7098-Part 1



Weight & Dimension Data

Product code	Nominal cross- sectional area	Class of conductor	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
LVIS09AXSWY2004C004SA002S	4 x4	Class 1	0.7	1.4	1.24	15.3	413
LVIS09AXSWY2004C004SA003P	4 x4	Class 2	0.7	1.4	1.24	16	435
LVIS09AXSWY2004C006SA002P	4 x6	Class 1	0.7	1.4	1.24	16.5	473
LVIS09AXSWY2004C006SA001P	4 x6	Class 2	0.7	1.4	1.24	17.3	506
LVIS09AXSWY2004C010SA003P	4 x10	Class 1	0.7	1.4	1.4	18.6	592
LVIS09AXSWY2004C010SA001P	4 x10	Class 2	0.7	1.4	1.4	19.8	633
LVIS09AXSWY2004C016SA003S	4 x16	Class 2	0.7	1.6	1.4	21	795
LVIS09AXSWY2004C025SA001S	4 x25	Class 2	0.9	1.6	1.4	25	1045
LVIS09AXSWY2004C035SA001S	4 x35	Class 2	0.9	1.6	1.4	26.5	1244
LVIS09AXSWY2004C050SA001S	4 x50	Class 2	1	1.6	1.56	29.5	1520
LVIS09AXSWY2004C070SA001S	4 x70	Class 2	1.1	2	1.56	34	2137
LVIS09AXSWY2004C095SA001S	4 x95	Class 2	1.1	2	1.72	38	2622
LVIS09AXSWY2004C120SA001S	4 x120	Class 2	1.2	2	1.88	42	3087
LVIS09AXSWY2004C150SA001S	4 x150	Class 2	1.4	2.5	2.04	47	3980
LVIS09AXSWY2004C185SA001S	4 x185	Class 2	1.6	2.5	2.2	52	4721
LVIS09AXSWY2004C240SA001S	4 x240	Class 2	1.7	2.5	2.36	57.5	5709
LVIS09AXSWY2004C300SA001S	4 x300	Class 2	1.8	3.15	2.52	64.5	7372
LVIS09AXSWY2004C400SA001S	4 x400	Class 2	2	3.15	2.84	71.5	8985

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

Nominal area of conductor	Buried direct in the ground	In single way Ducts	In air	Max. DC conductor resistance at 20°C
mm²	Amp.	Amp.	Amp.	Ω/km
4	35	30	32	7.41
6	46	38	42	4.61
10	57	48	54	3.08
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
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



POLYCAB MC 1.5 SQMM COPPER CONDUCTOR XLPE INSULATED ARMORED CONTROL CABLE (2XFY) 650/1100V AC - IS 7098-Part 1





APPLICATION

POLYCAB 1.5 2XFY MC, Stranded/solid copper conductor, XLPE insulated, PVC inner sheathed, Galvanised Steel 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

CONSTRUCTION

Grey with number printing

Stranded Copper conductor as per IS 8130, class 1&2

- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Armoured with Galvanised Steel strip to IS 3975
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

STANDARD AND REFERENCES

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

OUTER SHEATH COLOUR

Black

*Other colour also available on request.

BENDING RADIUS

Fixed installation | 12 x Overall diameter















POLYCAB MC 1.5 SQMM COPPER CONDUCTOR XLPE INSULATED ARMORED CONTROL CABLE (2XFY) 650/1100V AC - IS 7098-Part 1



Weight & Dimension Data

Product code	Cross sectional area	Number of cores	Nominal Thickness of Insulation	Nominal dimension of Armour flat wire	Minimum thickness of outer sheath	Nominal Overall Diameter	Weight (Approx.)
	Sqmm	No's	mm	mm	mm	mm	kg/km
LVIS09CXSFY2016C1.5SA001S	1.5	16	0.7	4x0.8	1.4	18.5	651
LVIS09CXSFY2019C1.5SA001S	1.5	19	0.7	4x0.8	1.4	19.3	736
LVIS09CXSFY2021C1.5SA001P	1.5	21	0.7	4x0.8	1.4	20.2	788
LVIS09CXSFY2024C1.5SA001S	1.5	24	0.7	4x0.8	1.4	22.1	874
LVIS09CXSFY2027C1.5SA001S	1.5	27	0.7	4x0.8	1.4	22.5	950
LVIS09CXSFY2030C1.5SA001S	1.5	30	0.7	4x0.8	1.4	23.2	1016
LVIS09CXSFY2033C1.5SA001S	1.5	33	0.7	4x0.8	1.4	24.1	1102
LVIS09CXSFY2037C1.5SA001S	1.5	37	0.7	4x0.8	1.4	24.9	1168
LVIS09CXSFY2044C1.5SA001S	1.5	44	0.7	4x0.8	1.4	27.7	1358
LVIS09CXSFY2052C1.5SA001S	1.5	52	0.7	4x0.8	1.56	29.2	1548
LVIS09CXSFY2061C1.5SA001S	1.5	61	0.7	4x0.8	1.56	31.1	1757

Solid & stranded conductor

The above data is approximate & subject to manufacturing tolerance.

Electrical parameter

Current carrying capacity and Maximum DC conductor resistance.

Cross sectional area	Number of cores	Max. DC conductor resistance at 20°C	Current	Rating
Sqmm	No's	Ω/km	In Ground (A)	In Air(A)
1.5	16	12.1	14	12
1.5	19	12.1	14	12
1.5	21	12.1	12	11
1.5	24	12.1	12	11
1.5	27	12.1	11	9
1.5	30	12.1	11	9
1.5	33	12.1	11	9
1.5	37	12.1	11	9
1.5	44	12.1	9	8
1.5	52	12.1	9	8
1.5	61	12.1	9	8

 $Air\,Ambient\,temperature: 40\,^{\circ}C,\,\,Ground\,ambient\,temperature: 30\,^{\circ}C,\,Conductor\,operating\,temperature: 90\,^{\circ}C$



POLYCAB MC 1.5 SQMM COPPER CONDUCTOR XLPE INSULATED ARMORED CONTROL CABLE (2XWY) 650/1100V AC - IS 7098-Part 1





APPLICATION

POLYCAB 1.5 2XWY MC, Stranded/solid copper conductor, XLPE insulated, PVC inner sheathed, Galvanised Steel round wire 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red, Yellow, Blue, Black & Grey upto 5Core & 6 Core & above Grey with number printing

CONSTRUCTION

- Stranded Copper conductor as per IS 8130, class 1&2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Armoured with Galvanised Steel round wire to IS 3975
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

STANDARD AND REFERENCES

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

BENDING RADIUS

Fixed installation | 12 x Overall diameter

OUTER SHEATH COLOUR

Black

*Other colour also available on request.















POLYCAB MC 1.5 SQMM COPPER CONDUCTOR XLPE INSULATED ARMORED CONTROL CABLE (2XWY) 650/1100V AC - IS 7098-Part 1



Weight & Dimension Data

Product code	Number of cores	Nominal Thickness of Insulation	Nominal dimension of Armour round wire	Minimum thickness of outer sheath	Overall Diameter	Weight (Approx.)
	No's	mm	mm	mm	mm	kg/km
LVIS09CXSWY2002C1.5SA002S	2	0.7	1.4	1.24	11.9	288
LVIS09CXSWY2003C1.5SA002S	3	0.7	1.4	1.24	12.4	302
LVIS09CXSWY2004C1.5SA002S	4	0.7	1.4	1.24	13.1	349
LVIS09CXSWY2005C1.5SA002S	5	0.7	1.4	1.24	13.9	385
LVIS09CXSWY2006C1.5SA001S	6	0.7	1.4	1.24	14.7	432
LVIS09CXSWY2007C1.5SA001S	7	0.7	1.4	1.24	14.7	450
LVIS09CXSWY2008C1.5SA001S	8	0.7	1.4	1.24	16.5	494
LVIS09CXSWY2009C1.5SA001S	9	0.7	1.4	1.24	17.5	542
LVIS09CXSWY2010C1.5SA001S	10	0.7	1.4	1.24	17.5	594
LVIS09CXSWY2012C1.5SA001S	12	0.7	1.4	1.24	18	646
LVIS09CXSWY2014C1.5SA001S	14	0.7	1.4	1.4	18.9	709
LVIS09CXSWY2016C1.5SA001S	16	0.7	1.6	1.4	20.1	807
LVIS09CXSWY2019C1.5SA001S	19	0.7	1.6	1.4	20.9	900
LVIS09CXSWY2021C1.5SA002S	21	0.7	1.6	1.4	21.8	960
LVIS09CXSWY2024C1.5SA001S	24	0.7	1.6	1.4	23.7	1094
LVIS09CXSWY2027C1.5SA002S	27	0.7	1.6	1.4	24.1	1152
LVIS09CXSWY2030C1.5SA001S	30	0.7	1.6	1.4	24.9	1229
LVIS09CXSWY2033C1.5SA001S	33	0.7	1.6	1.4	25.7	1322
VIS09CXSWY2037C1.5SA001S	37	0.7	1.6	1.4	26.5	1415
LVIS09CXSWY2044C1.5SA002S	44	0.7	1.6	1.56	29.7	1662
LVIS09CXSWY2052C1.5SA002S	52	0.7	1.6	1.56	30.9	1833
LVIS09CXSWY2061C1.5SA002S	61	0.7	2	1.56	33.5	2251
2.1337070111200101100710020	01	0.,	_	1.00	00.0	2201

Solid & stranded conductor

The above data is approximate & subject to manufacturing tolerance.



POLYCAB MC 1.5 SQMM COPPER CONDUCTOR XLPE INSULATED ARMORED CONTROL CABLE (2XWY) 650/1100V AC - IS 7098-Part 1



Electrical parameter

Current carrying capacity and Maximum DC conductor resistance.

Cross sectional area	Number of cores	Max. DC conductor resistance at 20°C	Current Rating	
Sqmm	No's	Ω/km	In Ground (A)	In Air(A)
1.5	2	12.1	31	27
1.5	3	12.1	26	23
1.5	4	12.1	26	23
1.5	5	12.1	26	23
1.5	6	12.1	23	20
1.5	7	12.1	20	18
1.5	8	12.1	17	15
1.5	9	12.1	17	15
1.5	10	12.1	17	15
1.5	12	12.1	16	14
1.5	14	12.1	16	14
1.5	16	12.1	14	12
1.5	19	12.1	14	12
1.5	21	12.1	12	11
1.5	24	12.1	12	11
1.5	27	12.1	11	9
1.5	30	12.1	11	9
1.5	33	12.1	11	9
1.5	37	12.1	11	9
1.5	44	12.1	9	8
1.5	52	12.1	9	8
1.5	61	12.1	9	8

Air Ambient temperature: 40°C, Ground ambient temperature: 30°C, Conductor operating temperature: 90°C





POLYCAB MC 1.5 SQMM COPPER CONDUCTOR XLPE INSULATED UNARMORED CONTROL CABLE (2XY) 650/1100V AC - IS 7098-Part 1





APPLICATION

POLYCAB 1.5 2XY MC, Stranded/solid copper conductor, XLPE insulated, PVC inner sheathed, 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red, Yellow, Blue, Black & Grey upto 5Core & 6 Core & above Grey with number printing

CONSTRUCTION

- Stranded Copper conductor as per IS 8130, class 1&2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

STANDARD AND REFERENCES

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 60332-1:2015

BENDING RADIUS

Fixed installation | 12 x Overall diameter















POLYCAB MC 1.5 SQMM COPPER CONDUCTOR XLPE INSULATED UNARMORED CONTROL CABLE (2XY) 650/1100V AC - IS 7098-Part 1



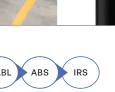
Weight & Dimension Data

Product code	Number of cores	Nominal Thickness of Insulation	Nominal thickness of outer sheath	Overall Diameter	Weight (Approx.)
	No's	mm	mm	mm	mm
LVIS09CXUAY2002C1.5SA001S	2	0.7	1.8	10	140
LVIS09CXUAY2003C1.5SA001S	3	0.7	1.8	10.5	160
LVIS09CXUAY2004C1.5SA001P	4	0.7	1.8	11.5	171
LVIS09CXUAY2005C1.5SA002S	5	0.7	1.8	12.1	195
LVIS09CXUAY2006C1.5SA002S	6	0.7	1.8	12.9	222
LVIS09CXUAY2007C1.5SA001S	7	0.7	1.8	12.9	239
LVIS09CXUAY2008C1.5SA001S	8	0.7	1.8	14	275
LVIS09CXUAY2009C1.5SA002S	9	0.7	1.8	15	308
LVIS09CXUAY2010C1.5SA001S	10	0.7	1.8	15.7	327
LVIS09CXUAY2012C1.5SA001S	12	0.7	1.8	16.1	365
LVIS09CXUAY2014C1.5SA002S	14	0.7	1.8	16.8	413
LVIS09CXUAY2016C1.5SA001S	16	0.7	1.8	17.7	460
LVIS09CXUAY2019C1.5SA001S	19	0.7	1.8	18.5	513
LVIS09CXUAY2021C1.5SA002S	21	0.7	2	19.8	560
LVIS09CXUAY2024C1.5SA001S	24	0.7	2	21.7	627
LVIS09CXUAY2027C1.5SA001S	27	0.7	2	22.1	684
LVIS09CXUAY2030C1.5SA001S	30	0.7	2	22.8	741
LVIS09CXUAY2033C1.5SA001S	33	0.7	2	23.7	807
LVIS09CXUAY2037C1.5SA001S	37	0.7	2	24.5	874
LVIS09CXUAY2044C1.5SA002S	44	0.7	2	27.3	1026
LVIS09CXUAY2052C1.5SA002S	52	0.7	2	28.4	1178
LVIS09CXUAY2061C1.5SA001S	61	0.7	2.2	30.7	1387

Solid & stranded conductor

The above data is approximate & subject to manufacturing tolerance.





POLYCAB MC 1.5 SQMM COPPER CONDUCTOR XLPE INSULATED UNARMORED CONTROL CABLE (2XY) 650/1100V AC - IS 7098-Part 1



Electrical parameter

Current carrying capacity and Maximum DC conductor resistance.

Cross sectional area	Number of cores	Max. DC conductor resistance at 20°C	Current Rating	
Sqmm	No's	Ω/km	In Ground (A)	In Air(A)
1.5	2	12.1	31	27
1.5	3	12.1	26	23
1.5	4	12.1	26	23
1.5	5	12.1	26	23
1.5	6	12.1	23	20
1.5	7	12.1	20	18
1.5	8	12.1	17	15
1.5	9	12.1	17	15
1.5	10	12.1	17	15
1.5	12	12.1	16	14
1.5	14	12.1	16	14
1.5	16	12.1	14	12
1.5	19	12.1	14	12
1.5	21	12.1	12	11
1.5	24	12.1	12	11
1.5	27	12.1	11	9
1.5	30	12.1	11	9
1.5	33	12.1	11	9
1.5	37	12.1	11	9
1.5	44	12.1	9	8
1.5	52	12.1	9	8
1.5	61	12.1	9	8

Air Ambient temperature: 40°C, Ground ambient temperature: 30°C, Conductor operating temperature: 90°C



POLYCAB MC 2.5 SQMM COPPER CONDUCTOR XLPE INSULATED ARMORED CONTROL CABLE (2XFY) 650/1100V AC - IS 7098-Part 1





APPLICATION

POLYCAB 2.5 2XFY MC, Stranded/solid copper conductor, XLPE insulated, Galvanised Steel 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Grey with number printing

CONSTRUCTION

- Stranded Copper conductor as per IS 8130, class 1&2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Armoured with Galvanised Steel strip to IS 3975
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

STANDARD AND REFERENCES

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

BENDING RADIUS

Fixed installation | 12 x Overall diameter

OUTER SHEATH COLOUR

Black

*Other colour also available on request.















POLYCAB MC 2.5 SQMM COPPER CONDUCTOR XLPE INSULATED ARMORED CONTROL CABLE (2XFY) 650/1100V AC - IS 7098-Part 1



Weight & Dimension Data

Product code	Number of cores	Nominal Thickness of Insulation	Nominal dimension of Armour flat wire	Minimum thickness of outer sheath	Overall Diameter	Weight (Approx.)
	No's	mm	mm	mm	mm	kg/km
LVIS09CXSFY2010C2.5SA001S	10	0.7	4x0.8	1.24	17.8	624
LVIS09CXSFY2012C2.5SA001S	12	0.7	4x0.8	1.4	18.5	694
LVIS09CXSFY2014C2.5SA001S	14	0.7	4x0.8	1.4	19.3	780
LVIS09CXSFY2016C2.5SA001S	16	0.7	4x0.8	1.4	20.2	867
LVIS09CXSFY2019C2.5SA001S	19	0.7	4x0.8	1.4	21.2	960
LVIS09CXSFY2021C2.5SA001S	21	0.7	4x0.8	1.4	22.2	1016
LVIS09CXSFY2024C2.5SA001S	24	0.7	4x0.8	1.4	24.4	1159
LVIS09CXSFY2027C2.5SA002S	27	0.7	4x0.8	1.4	24.9	1235
LVIS09CXSFY2030C2.5SA001S	30	0.7	4x0.8	1.4	25.7	1349
LVIS09CXSFY2033C2.5SA001S	33	0.7	4x0.8	1.4	26.6	1437
LVIS09CXSFY2037C2.5SA001S	37	0.7	4x0.8	1.4	27.6	1567
LVIS09CXSFY2044C2.5SA001S	44	0.7	4x0.8	1.56	31.3	1862
LVIS09CXSFY2052C1.5SA001S	52	0.7	4x0.8	1.56	32.6	2109
LVIS09CXSFY2061C2.5SA001S	61	0.7	4x0.8	1.56	34.5	2375

Solid & stranded conductor . The above data is approximate & subject to manufacturing tolerance.

Electrical parameter

Current carrying capacity and Maximum DC conductor resistance.

Cross sectional area	Number of cores	Max. DC conductor resistance at 20°C	Current	t Rating
Sqmm	No's	Ω/km	In Ground (A)	In Air(A)
2.5	10	7.41	23	20
2.5	12	7.41	20	18
2.5	14	7.41	20	18
2.5	16	7.41	18	16
2.5	19	7.41	18	16
2.5	21	7.41	16	14
2.5	24	7.41	16	14
2.5	27	7.41	14	13
2.5	30	7.41	14	13
2.5	33	7.41	14	13
2.5	37	7.41	14	13
2.5	44	7.41	12	11
2.5	52	7.41	12	11
2.5	61	7.41	12	11

Air Ambient temperature: 40°C, Ground ambient temperature: 30°C, Conductor operating temperature: 90°C



POLYCAB MC 2.5 SQMM COPPER CONDUCTOR XLPE INSULATED ARMORED CONTROL CABLE (2XWY) 650/1100V AC - IS 7098-Part 1





APPLICATION

POLYCAB 2.5 2XWY MC, Stranded/solid copper conductor, XLPE insulated, Galvanised Steel round wire 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red, Yellow, Blue, Black & Grey upto 5 Core & 6 Core & above Grey with number printing

CONSTRUCTION

- Stranded Copper conductor as per IS 8130, class 1&2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Armoured with Galvanised Steel round wire to IS 3975
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

STANDARD AND REFERENCES

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

BENDING RADIUS

Fixed installation | 12 x Overall diameter

OUTER SHEATH COLOUR

Black

*Other colour also available on request.















POLYCAB MC 2.5 SQMM COPPER CONDUCTOR XLPE INSULATED ARMORED CONTROL CABLE (2XWY) 650/1100V AC - IS 7098-Part 1



Weight & Dimension Data

Product code	Number of cores	Nominal Thickness of Insulation	Nominal dimension of Armour round wire	Minimum thickness of outer sheath	Overall Diameter	Weight (Approx.)
	No's	mm	mm	mm	mm	kg/km
LVIS09CXSWY2002C2.5SA002S	2	0.7	1.4	1.24	12.7	342
LVIS09CXSWY2003C2.5SA002S	3	0.7	1.4	1.24	13.2	360
LVIS09CXSWY2004C2.5SA002S	4	0.7	1.4	1.24	14	406
LVIS09CXSWY2005C2.5SA002S	5	0.7	1.4	1.24	14.9	464
LVIS09CXSWY2006C2.5SA001S	6	0.7	1.4	1.24	15.9	522
LVIS09CXSWY2007C2.5SA001S	7	0.7	1.4	1.24	15.9	549
LVIS09CXSWY2008C2.5SA001S	8	0.7	1.4	1.24	17	608
LVIS09CXSWY2009C2.5SA001S	9	0.7	1.4	1.4	18.5	684
LVIS09CXSWY2010C2.5SA001S	10	0.7	1.6	1.4	19.6	789
LVIS09CXSWY2012C2.5SA001S	12	0.7	1.6	1.4	20.1	865
LVIS09CXSWY2014C2.5SA001S	14	0.7	1.6	1.4	20.9	944
LVIS09CXSWY2016C2.5SA001S	16	0.7	1.6	1.4	21.9	1023
LVIS09CXSWY2019C2.5SA001S	19	0.7	1.6	1.4	22.8	1147
LVIS09CXSWY2021C2.5SA001S	21	0.7	1.6	1.4	23.9	1243
LVIS09CXSWY2024C2.5SA001S	24	0.7	1.6	1.4	26	1387
LVIS09CXSWY2027C2.5SA002S	27	0.7	1.6	1.4	26.5	1482
LVIS09CXSWY2030C2.5SA001S	30	0.7	1.6	1.4	27.3	1586
LVIS09CXSWY2033C2.5SA001S	33	0.7	1.6	1.56	28.6	1729
LVIS09CXSWY2037C2.5SA001S	37	0.7	1.6	1.56	29.6	1852
LVIS09CXSWY2044C2.5SA002S	44	0.7	2	1.56	33.7	2356
LVIS09CXSWY2052C2.5SA002S	52	0.7	2	1.56	35	2631
LVIS09CXSWY2061C2.5SA002S	61	0.7	2	1.56	36.9	2926

Solid & stranded conductor .The above data is approximate & subject to manufacturing tolerance.

Electrical parameter

 $\overset{\cdot}{\text{Current}}$ carrying capacity and Maximum DC conductor resistance.

Cross sectional area	Number of cores	Max. DC conductor resistance at 20°C	Current Rating	
Sqmm	No's	Ω/km	In Ground (A)	In Air(A)
2.5	2	7.41	41	36
2.5	3	7.41	34	30
2.5	4	7.41	34	30
2.5	5	7.41	34	30
2.5	6	7.41	31	27
2.5	7	7.41	27	23
2.5	8	7.41	23	20

Air Ambient temperature: 40°C, Ground ambient temperature: 30°C, Conductor operating temperature: 90°C



POLYCAB MC 2.5 SQMM COPPER CONDUCTOR XLPE INSULATED ARMORED CONTROL CABLE (2XWY) 650/1100V AC - IS 7098-Part 1



Electrical parameter

Current carrying capacity and Maximum DC conductor resistance.

Number of cores	Max. DC conductor resistance at 20°C	Current Rating	
No's	Ω/km	In Ground (A)	In Air(A)
12	7.41	20	18
14	7.41	20	18
16	7.41	18	16
19	7.41	18	16
21	7.41	16	14
24	7.41	16	14
27	7.41	14	13
30	7.41	14	13
33	7.41	14	13
37	7.41	14	13
44	7.41	12	11
52	7.41	12	11
61	7.41	12	11
	No's 12 14 16 19 21 24 27 30 33 37 444 52	No's Ω/km 12 7.41 14 7.41 16 7.41 19 7.41 21 7.41 24 7.41 27 7.41 30 7.41 33 7.41 37 7.41 44 7.41 52 7.41	No's Ω/km In Ground (A) 12 7.41 20 14 7.41 18 19 7.41 18 21 7.41 16 24 7.41 16 27 7.41 14 30 7.41 14 33 7.41 14 37 7.41 14 44 7.41 12 52 7.41 12

Air Ambient temperature: 40°C, Ground ambient temperature: 30°C, Conductor operating temperature: 90°C





POLYCAB MC 2.5 SQMM COPPER CONDUCTOR XLPE INSULATED UNARMORED CONTROL CABLE (2XY) 650/1100V AC - IS 7098-Part 1





APPLICATION

POLYCAB 2.5 2XY MC, Stranded/solid copper conductor, XLPE insulated, PVC inner sheathed, 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.

VOLTAGE RATING

650/1100 V

OPERATION TEMPERATURE

Max.: 90°C

Short circuit temperature 250°C

CORE IDENTIFICATION

Red, Yellow, Blue, Black & Grey upto 5 Core & 6 Core & above Grey with number printing

CONSTRUCTION

- Stranded Copper conductor as per IS 8130, class 1&2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

STANDARD AND REFERENCES

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 60332-1:2015

BENDING RADIUS

Fixed installation | 12 x Overall diameter















POLYCAB MC 2.5 SQMM COPPER CONDUCTOR XLPE INSULATED UNARMORED CONTROL CABLE (2XY) 650/1100V AC - IS 7098-Part 1



Weight & Dimension Data

Product code	Number of cores	Nominal Thickness of Insulation	Nominal thickness of outer sheath	Overall Diameter	Weight (Approx.)
	No's	mm	mm	mm	mm
LVIS09CXUAY2002C2.5SA003S	2	0.7	1.8	10.9	173
LVIS09CXUAY2003C2.5SA001S	3	0.7	1.8	11.4	202
LVIS09CXUAY2004C2.5SA002S	4	0.7	1.8	12.2	218
LVIS09CXUAY2005C2.5SA003S	5	0.7	1.8	13.1	254
LVIS09CXUAY2006C2.5SA001S	6	0.7	1.8	14	291
LVIS09CXUAY2007C2.5SA001S	7	0.7	1.8	14	313
LVIS09CXUAY2008C2.5SA001S	8	0.7	1.8	16	342
LVIS09CXUAY2009C2.5SA001S	9	0.7	1.8	16.5	385
LVIS09CXUAY2010C2.5SA001S	10	0.7	1.8	17.2	427
LVIS09CXUAY2012C2.5SA001S	12	0.7	1.8	17.7	484
LVIS09CXUAY2014C2.5SA002S	14	0.7	1.8	18.5	551
LVIS09CXUAY2016C2.5SA002S	16	0.7	2	19.8	636
LVIS09CXUAY2019C2.5SA001S	19	0.7	2 2	0.8	722
LVIS09CXUAY2021C2.5SA001S	21	0.7	2	21.8	769
LVIS09CXUAY2024C2.5SA002S	24	0.7	2	24	864
LVIS09CXUAY2027C2.5SA001S	27	0.7	2	24.5	950
LVIS09CXUAY2030C2.5SA001S	30	0.7	2 2	5.3	1035
LVIS09CXUAY2033C2.5SA001S	33	0.7	2 2	6.2	1130
LVIS09CXUAY2037C2.5SA001S	37	0.7	2	27.2	1235
LVIS09CXUAY2044C2.5SA001S	44	0.7	2.2	30.9	1501
LVIS09CXUAY2052C2.5SA002S	52	0.7	2.2	32.2	1719
LVIS09CXUAY2061C2.5SA001S	61	0.7	2.2	34.1	1976

Solid & stranded conductor. The above data is approximate & subject to manufacturing tolerance.

Electrical parameter

Current carrying capacity and Maximum DC conductor resistance.

Cross sectional area	Number of cores	Max. DC conductor resistance at 20°C	Current	: Rating
Sqmm	No's	Ω/km	In Ground (A)	In Air(A)
2.5	2	7.41	41	36
2.5	3	7.41	34	30
2.5	4	7.41	34	30
2.5	5	7.41	34	30
2.5	6	7.41	31	27
2.5	7	7.41	27	23
2.5	8	7.41	23	20
2.5	9	7.41	23	20
2.5	10	7.41	23	20
2.5	12	7.41	20	18
2.5	14	7.41	20	18
2.5	16	7.41	18	16
2.5	19	7.41	18	16
2.5	21	7.41	16	14
2.5	24	7.41	16	14
2.5	27	7.41	14	13
2.5	30	7.41	14	13
2.5	33	7.41	14	13
2.5	37	7.41	14	13
2.5	44	7.41	12	11
2.5	52	7.41	12	11
2.5	61	7.41	12	11

 $\text{Air Ambient temperature: } 40\,^{\circ}\text{C}, \text{ Ground ambient temperature: } 30\,^{\circ}\text{C}, \text{ Conductor operating temperature: } 90\,^{\circ}\text{C} \\$





Rating factor for variation in ambient air temperature for cable in free air

Å	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



^{*} For glands and lugs - Please consult with Polycab-Dowell Broucher



CORPORATE OFFICE:

POLYCAB INDIA LIMITED

(FORMERLY KNOWN AS 'POLYCAB WIRES LIMITED')

 $POLYCAB\ HOUSE, 771, MOGUL\ LANE, MAHIM\ (W),\ MUMBAI-400\ 016,\ MAHARASHTRA,\ INDIA.\ TEL:\ 91-22-2432\ 7070-4,\ 6735\ 1400$

WE ARE JUST A CALL AWAY TO ANSWER ALL YOUR QUERIES!

 $\textbf{CALL:}\ 1800-267-0008\ \textbf{TIMING:}\ 9:30\ \text{AM TO } 6:30\ \text{PM (MONDAY - SATURDAY)}\ \textbf{EMAIL:}\ \text{CUSTOMERCARE@POLYCAB.COM}$ $\textbf{WHATSAPP:}\ 73044\ 85540$

WWW.POLYCAB.COM | EMAIL: ENQUIRY@POLYCAB.COM | TOLL FREE NO.: 1800 267 0008

FOLLOW US ON: () (a) (b) (c)