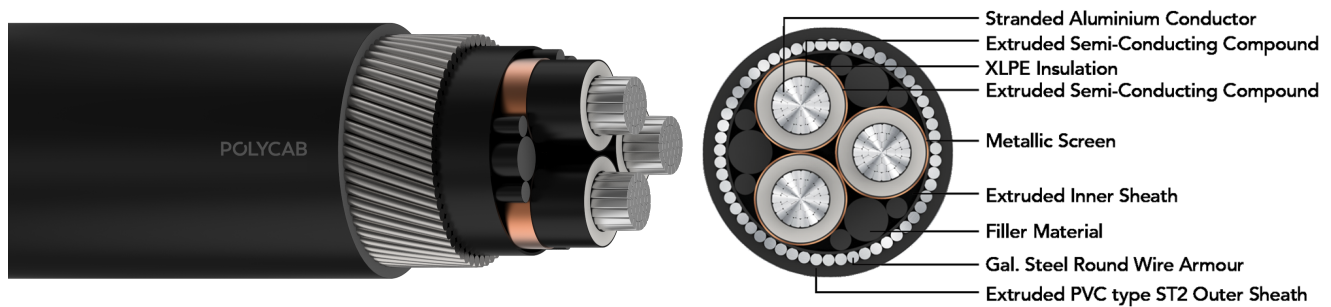


POLYCAB MV MC AL IS 7098-2, 11/11 KV(E) Medium Voltage Multi Core Aluminium Armoured Cable, 11/11 KV (UE) AC



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB MV 11/11 KV(UE) XLPE insulated with aluminium conductor multi core cable is suitable to use for power distribution for external and direct burial applications in power network system.

CHARACTERISTICS

Voltage Rating

Nominal Voltage: 11/11 KV (UE)

Operation Temperature

Max. operating temperature: +90°C

Max. Short Circuit Temperature: 250°C

Bending Radius:

Fixed Installation: 15D

D is overall diameter of cable

OUTSTANDING FEATURES

- Flame retardant
- High life
- UV resistant

STANDARD FOLLOWS

IS 8130:2013

IS 5831:1984

IS 3975:1979

IS 7098-2:2011

COMPLIANCE

- Conductor resistance IS 8130
- Insulation resistance IS 7098-2
- Flammability test IEC 60332-1-2
- Partial Discharge test IS 7098-2

CONSTRUCTION

- Conductor: Circular Compacted Aluminium conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Galvanised steel Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride

Colour: Black

Test Voltage

35kV AC 50 Hz

Impulse test Voltage

95 KV

OUR ACCREDITATIONS



APPROVAL



NOTES

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

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DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
A2XWY	No.	mm ²	mm	mm	mm	Kg/Km
MVIS11AXSWY2003C025SA001S	3C	25	41.5	46.5	50.6	3922
MVIS11AXSWY2003C035SA001S	3C	35	44.0	49.0	53.0	4259
MVIS11AXSWY2003C050SA001S	3C	50	47.5	52.5	56.9	4805
MVIS11AXSWY2003C070SA001S	3C	70	50.9	55.9	60.7	5411
MVIS11AXSWY2003C095SA001S	3C	95	54.8	59.8	64.5	6014
MVIS11AXSWY2003C120SA001S	3C	120	58.4	64.7	69.7	7473
MVIS11AXSWY2003C150SA001S	3C	150	62.1	68.4	73.8	8222
MVIS11AXSWY2003C185SA001S	3C	185	65.7	72.0	77.7	9051
MVIS11AXSWY2003C240SA001S	3C	240	71.0	79.0	85.0	11446
MVIS11AXSWY2003C300SA001S	3C	300	76.4	84.4	90.4	12867
MVIS11AXSWY2003C400SA001S	3C	400	83.3	91.3	97.3	14658
MVIS11AXSWY2003C500SA001S	3C	500	90.5	98.5	104.5	16710
MVIS11AXSWY2003C630SA001S	3C	630	97.7	105.7	111.7	18822
Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
A2XFY	No.	mm ²	mm	mm	mm	Kg/Km
MVIS11AXSFY2003C025SA001S	3C	25	41.5	43.1	46.8	2481
MVIS11AXSFY2003C035SA001S	3C	35	44.0	45.6	49.6	2777
MVIS11AXSFY2003C050SA001S	3C	50	47.5	49.1	53.2	3182
MVIS11AXSFY2003C070SA001S	3C	70	50.9	52.5	56.9	3647
MVIS11AXSFY2003C095SA001S	3C	95	54.8	56.4	61.1	4199
MVIS11AXSFY2003C120SA001S	3C	120	58.4	60.0	64.7	4688
MVIS11AXSFY2003C150SA001S	3C	150	62.1	63.7	68.7	5304
MVIS11AXSFY2003C185SA001S	3C	185	65.7	67.3	72.7	5939
MVIS11AXSFY2003C240SA001S	3C	240	71.0	72.6	78.3	6912
MVIS11AXSFY2003C300SA001S	3C	300	76.4	78.0	84.0	7995
MVIS11AXSFY2003C400SA001S	3C	400	83.3	84.9	90.9	9385

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Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
A2XFY	No.	mm ²	mm	mm	mm	Kg/Km
MVIS11AXSFY2003C500SA001S	3C	500	90.5	92.1	98.1	10957
MVIS11AXSFY2003C630SA001S	3C	630	97.7	99.3	105.3	12669

The above data is approximate & subject to manufacturing tolerance.

ELECTRICAL CHARACTERISTICS:

No. of Cores	Core Cross sectional Area	Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance		Approx. Reactance	
					mH/km		Ω/km	
No.	mm ²	Ω/km	Ω/km	μF/km	A2XFY	A2XWY	A2XFY	A2XWY
3	25	1.2	1.539	0.14	0.42	0.42	0.131	0.131
3	35	0.868	1.113	0.15	0.40	0.40	0.124	0.124
3	50	0.641	0.822	0.17	0.36	0.36	0.114	0.114
3	70	0.443	0.568	0.19	0.35	0.35	0.109	0.109
3	95	0.32	0.410	0.21	0.33	0.33	0.104	0.104
3	120	0.253	0.325	0.23	0.32	0.32	0.100	0.100
3	150	0.206	0.264	0.25	0.31	0.31	0.096	0.096
3	185	0.164	0.211	0.27	0.30	0.30	0.094	0.094
3	240	0.125	0.161	0.30	0.29	0.29	0.090	0.090
3	300	0.1	0.129	0.33	0.28	0.28	0.087	0.087
3	400	0.0778	0.101	0.37	0.27	0.27	0.084	0.084
3	500	0.0605	0.079	0.41	0.26	0.26	0.082	0.082
3	630	0.0469	0.061	0.45	0.25	0.25	0.080	0.080

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CURRENT CARRYING CAPACITY:

Nominal area of conductor Sqmm	Buried direct in ground A	In a buried duct A	In air A
25	94	81	103
35	112	97	124
50	131	114	148
70	161	139	184
95	190	165	222
120	216	188	256
150	242	209	288
185	273	240	330
240	315	278	387
300	354	312	441
400	404	356	512
500	457	403	590

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 7):2016

De-Rating Factor

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

Ambient air Temperature	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90°C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90°C

Rating factor for variation in ground temperature for cable in duct.

Ground Temperature	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90°C