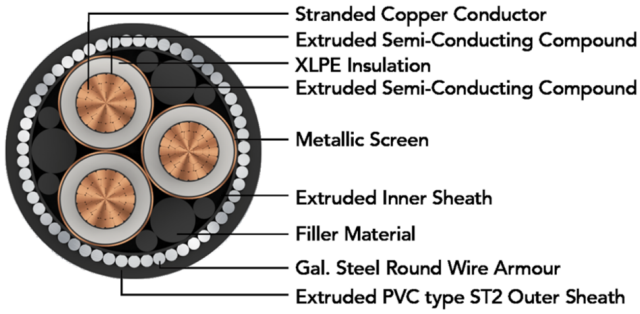
POLYCAB MV MC CU IS 7098-2, 6.35/11 KV(E)
Medium Voltage Multi Core Copper Armoured Cable, 6.35/11 KV (E) AC



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB MV 6.35/11 KV(E) XLPE insulated with copper 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: 6.35/11 KV (E)

Operation Temperature
Max. operating temperature: 90°C
Max. Short Circuit Temperature: 250°C

Bending Radius:
Fixed Installation: 15D
D is overall diameter of cable

CONSTRUCTION

- Conductor: Circular Compacted Copper 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
21kV AC 50 Hz

Impulse test Voltage
75 KV

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

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
			Under armour	Over armour	Overall	(Approx.)
2XWY	No.	mm^2	mm	mm	mm	Kg/Km
MVIS17CXSWY2003C025SA001S	3C	25	33.1	37.1	40.5	3024
MVIS17CXSWY2003C035SA001S	3C	35	35.6	39.6	43.0	3495
MVIS17CXSWY2003C050SA001S	3C	50	39.1	43.1	46.8	4273
MVIS17CXSWY2003C070SA001S	3C	70	42.5	47.5	51.6	5546
MVIS17CXSWY2003C095SA001S	3C	95	46.6	51.6	56.0	6681
MVIS17CXSWY2003C120SA001S	3C	120	49.9	54.9	59.3	7689
MVIS17CXSWY2003C150SA001S	3C	150	53.7	58.7	63.4	8981
MVIS17CXSWY2003C185SA001S	3C	185	57.5	63.8	68.8	11104
MVIS17CXSWY2003C240SA001S	3C	240	62.8	69.1	74.5	13298
MVIS17CXSWY2003C300SA001S	3C	300	68.2	74.5	80.2	15793
MVIS17CXSWY2003C400SA001S	3C	400	75.1	83.1	89.1	20539
MVIS17CXSWY2003C500SA001S	3C	500	82.2	90.2	96.2	24467
MVIS17CXSWY2003C630SA001S	3C	630	89.5	97.5	103.5	28952

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight
			Under armour	Over armour	Overall	(Approx.)
2XFY	No.	mm^2	mm	mm	mm	Kg/Km
MVIS17CXSFY2003C025SA001S	3C	25	33.1	34.7	37.8	2219
MVIS17CXSFY2003C035SA001S	3C	35	35.6	37.2	40.6	2660
MVIS17CXSFY2003C050SA001S	3C	50	39.1	40.7	44.4	3346
MVIS17CXSFY2003C070SA001S	3C	70	42.5	44.1	47.9	4085
MVIS17CXSFY2003C095SA001S	3C	95	46.6	48.2	52.3	5079
MVIS17CXSFY2003C120SA001S	3C	120	49.9	51.5	55.9	6031
MVIS17CXSFY2003C150SA001S	3C	150	53.7	55.3	60.0	7185
MVIS17CXSFY2003C185SA001S	3C	185	57.5	59.1	63.8	8382
MVIS17CXSFY2003C240SA001S	3C	240	62.8	64.4	69.5	10337

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Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight
			Under armour	Over armour	Overall	(Approx.)
2XFY	No.	mm^2	mm	mm	mm	Kg/Km
MVIS17CXSFY2003C300SA001S	3C	300	68.2	69.8	75.2	12532
MVIS17CXSFY2003C400SA001S	3C	400	75.1	76.7	82.7	15746
MVIS17CXSFY2003C500SA001S	3C	500	82.2	83.8	89.8	19275
MVIS17CXSFY2003C630SA001S	3C	630	89.5	91.1	97.1	23280

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	2XFY	2XWY	2XFY	2XWY
3	25	0.727	0.932	0.18	0.37	0.37	0.116	0.116
3	35	0.524	0.672	0.20	0.35	0.35	0.111	0.111
3	50	0.387	0.496	0.23	0.33	0.33	0.102	0.102
3	70	0.268	0.344	0.25	0.31	0.31	0.098	0.098
3	95	0.193	0.248	0.29	0.30	0.30	0.093	0.093
3	120	0.153	0.197	0.32	0.29	0.29	0.090	0.090
3	150	0.124	0.159	0.35	0.28	0.28	0.087	0.087
3	185	0.0991	0.128	0.38	0.27	0.27	0.085	0.085
3	240	0.0754	0.098	0.42	0.26	0.26	0.082	0.082
3	300	0.0601	0.078	0.47	0.25	0.25	0.080	0.080
3	400	0.047	0.062	0.52	0.25	0.25	0.078	0.078
3	500	0.0366	0.049	0.58	0.24	0.24	0.076	0.076
3	630	0.0283	0.038	0.64	0.24	0.24	0.074	0.074

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CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in ground	In a buried duct	In air
Sqmm	A	A	A
25	121	105	133
35	144	125	160
50	169	146	191
70	207	179	237
95	245	213	286
120	278	241	329
150	311	269	371
185	349	308	422
240	401	354	493
300	449	396	560
400	506	446	643
500	565	497	731

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