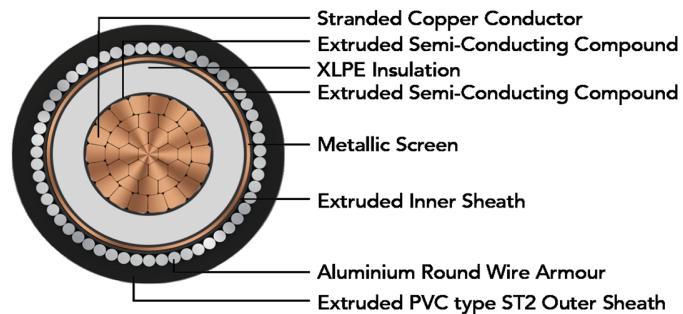


POLY CAB MV SC CU IS 7098-2, 6.6/6.6 KV(UE) Medium Voltage Single Core Copper Armoured Cable, 6.6/6.6 KV (UE) AC

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Images not to scale. Follow table for dimensions

APPLICATION

POLY CAB MV 6.6/6.6 KV(UE) XLPE insulated with copper conductor single core cable is suitable to use for power distribution for external and direct burial applications in power network system.

CHARACTERISTICS

Voltage Rating

Nominal Voltage: 6.6/6.6 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

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: Aluminium Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride,

Colour: Black

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

Test Voltage

21kV AC 50 Hz

Impulse test Voltage

75 KV

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DIMENSIONS AND WEIGHTS:

Product Code 2XWaY	No. of Cores No.	Core Cross sectional Area mm ²	Nominal Diameter			Weight (Approx.) Kg/Km
			Under armour mm	Over armour mm	Overall mm	
MVIS18CXAWY2001C025SA001S	1C	25	15.5	18.7	21.5	713
MVIS18CXAWY2001C035SA001S	1C	35	16.7	19.9	22.7	839
MVIS18CXAWY2001C050SA001S	1C	50	18.2	21.4	24.2	1032
MVIS18CXAWY2001C070SA001S	1C	70	19.8	23.0	25.8	1258
MVIS18CXAWY2001C095SA001S	1C	95	21.6	24.8	27.6	1549
MVIS18CXAWY2001C120SA001S	1C	120	23.2	26.4	29.5	1850
MVIS18CXAWY2001C150SA001S	1C	150	24.9	28.1	31.2	2191
MVIS18CXAWY2001C185SA001S	1C	185	26.8	30.8	33.9	2652
MVIS18CXAWY2001C240SA001S	1C	240	29.2	33.2	36.4	3244
MVIS18CXAWY2001C300SA001S	1C	300	31.7	35.7	39.2	3948
MVIS18CXAWY2001C400SA001S	1C	400	34.9	38.9	42.4	4915
MVIS18CXAWY2001C500SA001S	1C	500	38.4	42.4	46.2	6090
MVIS18CXAWY2001C630SA001S	1C	630	41.8	46.8	50.9	7539
MVIS18CXAWY2001C800SA001S	1C	800	45.9	50.9	55.3	9295
MVIS18CXAWY2001C01KSA001S	1C	1000	50.4	55.4	60.1	11379

Product Code 2XFaY	No. of Cores No.	Core Cross sectional Area mm ²	Nominal Diameter			Weight (Approx.) Kg/Km
			Under armour mm	Over armour mm	Overall mm	
MVIS18CXAFY2001C025SA001S	1C	25	15.5	17.1	19.9	626
MVIS18CXAFY2001C035SA001S	1C	35	16.7	18.3	21.1	748
MVIS18CXAFY2001C050SA001S	1C	50	18.2	19.8	22.6	931
MVIS18CXAFY2001C070SA001S	1C	70	19.8	21.4	24.2	1147
MVIS18CXAFY2001C095SA001S	1C	95	21.6	23.2	26.0	1423
MVIS18CXAFY2001C120SA001S	1C	120	23.2	24.8	27.6	1698
MVIS18CXAFY2001C150SA001S	1C	150	24.9	26.5	29.6	2052

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Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Overall	Weight (Approx.)
			Under armour	Over armour	mm		
2XFaY	No.	mm ²	mm	mm	mm	Kg/Km	
MVIS18CXAFY2001C185SA001S	1C	185	26.8	28.4	31.5	2423	
MVIS18CXAFY2001C240SA001S	1C	240	29.2	30.8	34.0	2995	
MVIS18CXAFY2001C300SA001S	1C	300	31.7	33.3	36.4	3648	
MVIS18CXAFY2001C400SA001S	1C	400	34.9	36.5	40.0	4621	
MVIS18CXAFY2001C500SA001S	1C	500	38.4	40.0	43.8	5763	
MVIS18CXAFY2001C630SA001S	1C	630	41.8	43.4	47.1	6993	
MVIS18CXAFY2001C800SA001S	1C	800	45.9	47.5	51.6	8703	
MVIS18CXAFY2001C01KSA001S	1C	1000	50.4	52.0	56.4	10720	

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	
					μF/km	mH/km	2XFaY	2XWaY
No.	mm ²	Ω/km	Ω/km	μF/km	2XFaY	2XWaY	2XFaY	2XWaY
1	25	0.727	0.932	0.18	0.43	0.44	0.13	0.14
1	35	0.524	0.672	0.20	0.41	0.42	0.13	0.13
1	50	0.387	0.496	0.23	0.38	0.39	0.12	0.12
1	70	0.268	0.344	0.25	0.36	0.37	0.11	0.12
1	95	0.193	0.248	0.29	0.34	0.35	0.11	0.11
1	120	0.153	0.197	0.32	0.33	0.34	0.10	0.11
1	150	0.124	0.159	0.35	0.32	0.33	0.10	0.10
1	185	0.0991	0.128	0.38	0.31	0.32	0.10	0.10
1	240	0.0754	0.098	0.42	0.30	0.31	0.09	0.10
1	300	0.0601	0.078	0.47	0.29	0.30	0.09	0.09
1	400	0.047	0.062	0.52	0.28	0.29	0.09	0.09
1	500	0.0366	0.049	0.58	0.27	0.28	0.09	0.09

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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					
					No.	mm ²	Ω/km	μF/km	mH/km	2XFaY	2XWaY	2XFaY
1	630	0.0283	0.038	0.64	0.27	0.28	0.08	0.09	0.27	0.28	0.08	0.09
1	800	0.0221	0.031	0.72	0.26	0.27	0.08	0.09	0.26	0.27	0.08	0.09
1	1000	0.0176	0.026	0.79	0.26	0.27	0.08	0.08	0.26	0.27	0.08	0.08

CURRENT CARRYING CAPACITY:

Nominal area of conductor Sqmm	Buried direct in the ground		In single -way Ducts		In air	
	Trefoil	Flat touching	Trefoil ducts	Flat touching ducts	Trefoil	Flat Touching
25	127	130	113	111	150	153
35	151	155	134	132	181	185
50	178	181	158	154	216	219
70	216	220	191	186	269	273
95	257	259	227	219	326	329
120	290	292	256	246	376	378
150	323	323	285	272	424	425
185	360	354	317	297	487	480
240	411	398	361	332	568	552
300	456	435	399	362	643	616
400	508	474	443	392	735	690
500	559	510	486	420	828	761
630	611	544	529	446	930	835
800	639	550	550	448	1003	873
1000	672	569	575	460	1083	927

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

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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