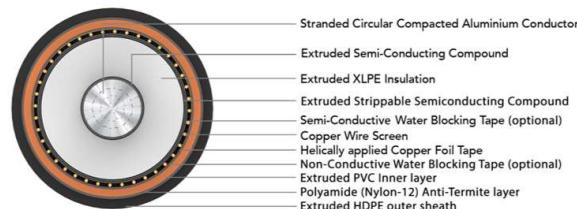


3.8/6.6 (7.2) KV

MV Cable with AL Conductor, XLPE Insulation, Cu Screen and UA



Images not to scale. Follow table for dimensions

APPLICATION

POLY CAB MV 3.8/6.6 KV XLPE insulated with Aluminium conductor single core cable is suitable to use for power supply to wide networks i.e. Commercial, Industrial and Urban / Residential.

CHARACTERISTICS

Voltage Rating

Nominal Voltage: 3.8/6.6 (7.2) kV

Operation Temperature

Min. installation temperature: 0°C

Operating temperature: -25°C to +90°C

Emergency operating temperature: 105°C

(max. operation of 36hrs, at 3 periods for 12 consecutive months use)

Max. Short Circuit Temperature: 250°C

Bending Radius:

Fixed Installation: 20D

During Installation: 30D

D is diameter over nylon

OUTSTANDING FEATURES

- Long life
- UV resistant
- Resistant to chemical exposure
- Resistant to weather exposure
- Resistant to water (AD7/AD8)
- Termite resistant

STANDARD FOLLOWS

AS/NZS 1429.1

AS/NZS 1125

AS/NZS 3808

COMPLIANCE

- | | |
|-------------------------|---------------|
| • Conductor resistance | AS/NZS 1125 |
| • Insulation resistance | AS/NZS 1429.1 |
| • Voltage test | AS/NZS 1429.1 |

OUR ACCREDITATIONS



APPROVAL



NOTES

High Voltage Test (kV AC)	Partial discharge test (kV AC)		Impulse test Voltage (kV peak)
	200% to rated voltage	150% to rated voltage	
12.5	7.6	5.7	60

CONSTRUCTION

- Conductor: Stranded Compacted Circular aluminium conductor as per AS/NZS 1125
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Insulation Screen: Extruded stripable Semi-conductive compound
- Longitudinal Water blocking : Water blocking tape above and below copper screen (Optional)
- Metallic Insulation Screen: Copper Wire Screen + helically applied copper tape (E/F current capacity – Based on requirement)

Composite sheath

- Inner layer : Extruded Polyvinyl Chloride, Colour: Orange
- Termite Protection: Polyamide (Nylon -12)
- Outer layer: HDPE (Black)

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DIMENSIONAL CHARACTERISTICS:

Product Code	No. of Cores No.	Core Cross sectional Area mm ²	Nominal Diameter		
			Under metallic screen mm	Over metallic screen mm	Overall mm
MVNZ15AXUAPH001C016SAXXXX	1	16	12.8	14.7	19.0
MVNZ15AXUAPH001C025SAXXXX	1	25	14.1	16.0	22.0
MVNZ15AXUAPH001C035SAXXXX	1	35	15.1	17.0	23.0
MVNZ15AXUAPH001C050SAXXXX	1	50	16.2	18.1	24.0
MVNZ15AXUAPH001C070SAXXXX	1	70	17.8	19.7	26.0
MVNZ15AXUAPH001C095SAXXXX	1	95	19.4	21.3	27.0
MVNZ15AXUAPH001C120SAXXXX	1	120	21	22.9	29.0
MVNZ15AXUAPH001C150SAXXXX	1	150	22.3	24.2	30.0
MVNZ15AXUAPH001C185SAXXXX	1	185	24	25.9	32.0
MVNZ15AXUAPH001C240SAXXXX	1	240	26.5	28.4	35.0
MVNZ15AXUAPH001C300SAXXXX	1	300	29.1	31.0	37.0
MVNZ15AXUAPH001C400SAXXXX	1	400	32.2	34.1	41.0
MVNZ15AXUAPH001C500SAXXXX	1	500	36	37.9	45.0
MVNZ15AXUAPH001C630SAXXXX	1	630	39.2	41.1	48.0
MVNZ15AXUAPH001C800SAXXXX	1	800	43.1	45.0	53.0
MVNZ15AXUAPH001C01KSAXXXX	1	1000	47.6	49.5	57.0

• Above mentioned parameters are based on 3kA/sec earth fault current capacity of copper screen

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	Continuous Current Rating					
							In ground at 20°C	In Ducts	In air at 30°C			
No.	mm ²	Ω/km	Ω/km	μF/km	mH/km	Ω/km	Flat	Trefoil	Flat	Trefoil	Flat	Trefoil
1	16	1.91	2.449	0.22	0.485	0.153	88	84	81	80	99	97
1	25	1.2	1.539	0.25	0.463	0.145	112	108	103	102	130	127
1	35	0.868	1.113	0.28	0.441	0.138	134	129	123	122	157	154
1	50	0.641	0.822	0.31	0.421	0.132	157	152	146	142	189	184
1	70	0.443	0.568	0.36	0.388	0.122	192	186	178	176	236	230
1	95	0.32	0.411	0.4	0.370	0.116	229	221	213	210	287	280
1	120	0.253	0.325	0.45	0.352	0.111	260	252	242	240	332	324
1	150	0.206	0.265	0.49	0.342	0.107	288	281	271	267	376	368
1	185	0.164	0.211	0.53	0.330	0.104	324	317	307	303	432	424
1	240	0.125	0.161	0.58	0.318	0.100	373	367	356	351	511	502

3.8/6.6 (7.2) KV

MV Cable with AL Conductor, XLPE Insulation, Cu Screen and

UA

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	Continuous Current Rating					
							In ground at 20°C		In Ducts		In air at 30°C	
No.	mm ²	Ω/km	Ω/km	μF/km	mH/km	Ω/km	Flat	Trefoil	Flat	Trefoil	Flat	Trefoil
1	300	0.1	0.130	0.6	0.308	0.097	419	414	402	397	586	577
1	400	0.0778	0.102	0.62	0.301	0.095	466	470	457	451	676	673
1	500	0.0605	0.080	0.66	0.294	0.092	525	530	510	505	760	750
1	630	0.0469	0.064	0.73	0.287	0.090	580	585	560	555	860	850
1	800	0.0367	0.052	0.82	0.279	0.088	650	655	620	615	960	950
1	1000	0.0291	0.043	0.91	0.271	0.085	715	705	670	665	1060	1050

*: Current Ratings are based on IEC 60502-2 & IEC 60287, Max. Conductor Temperature at 90°C, Ambient temperature at 30°C in Air / at 20°C in Ground, Thermal resistivity of Soil 1.5 k.m/W & for earthenware ducts 1.2k.m/W and Depth of Laying 0.8m.

Current rating de-rating factors for other than 30°C ambient air temperature.

20	25	35	40	45	50	55	60
1.08	1.04	0.96	0.91	0.87	0.82	0.76	0.71

Current rating de-rating factors for other than 20°C ground temperature.

10	15	25	30	35	40	45	50
1.07	1.04	0.96	0.93	0.89	0.85	0.80	0.76