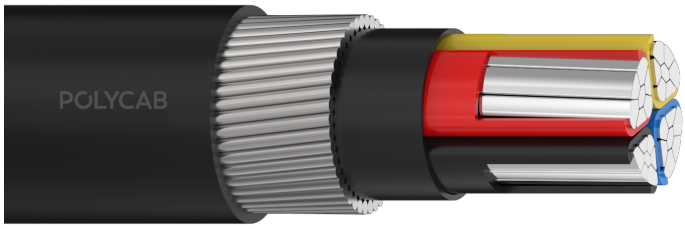
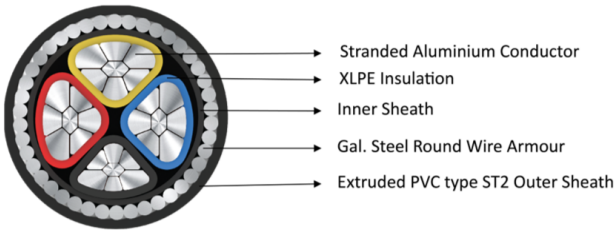
POLYCAB LV AL IEC 60502-1 0.6/1 KV MC-3.5 SWA
Power Cable, 0.6/1 (1.2) KV AC





Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB LV AL IEC 60502-1 0.6/1 KV MC-3.5 SWA, stranded compacted aluminium conductor, XLPE insulated, and PVC sheathed armoured cable confirming to IEC 60502-1 is suitable for fixed installation such as distribution network or industrial installation. These cable cables are designed for systems with rated AC voltage 1KV (Um=1.2 KV) & ≤1.5 KV (with a maximum 1.8 KV DC) between two live conductor.

CHARACTERISTICS

Voltage Rating
Nominal Voltage: 0.6/1 (1.2) kV

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

CONSTRUCTION

- Conductor: Circular Compacted or Stranded Aluminium conductor as per IEC 60228, class 2
- Insulation: XLPE as per IEC 60502-1
- Inner covering: Extruded or Lapped PVC
- Armouring: Galvanised steel wire armoured (SWA)
- Outer Sheath: Extruded Polyvinylchloride (ST2) or Polyethylene (ST7) or Halogen free (ST8) as per IEC 60502-1

Core Identification
Red, Yellow, Blue, and Black

Bending Radius:
Fixed Installation: 12 x Overall diameter

Test Voltage
3.5kV AC

OUTSTANDING FEATURES

- High life
- High Insulation resistance
- Flame retardant
- Low Halogen
- Low smoke
- UV resistant

STANDARD FOLLOWS

IEC 60228
IEC 60502-1
IEC 60332-1-2

COMPLIANCE

Conductor resistance IEC 60228
Insulation resistance IEC 60502-1
Shrinkage test IEC 60811-503
Flame Retardant test IEC 60332-1-2

OUR ACCREDITATIONS

APPROVAL

NOTES

The above cable is also available with EPR/HEPR insulation type.

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Weight & Dimension Data

Product Code	Nominal Cross-sectional Area	Nominal Thickness			Nominal Diameter (Approx.)		Weight (Approx.)
		Insulation	Inner covering	Sheath	Armouring wire	Overall	
	mm^2	mm	mm	mm	mm	mm	Kg/Km
LVIE07AXSWY23.5C025S	25	0.90	1.00	1.80	1.60	23.0	1150
LVIE07AXSWY23.5C035S	35	0.90	1.00	1.80	1.60	25.0	1330
LVIE07AXSWY23.5C050S	50	1.00	1.00	2.00	1.60	30.6	1680
LVIE07AXSWY23.5C070S	70	1.10	1.20	2.10	2.00	35.5	2330
LVIE07AXSWY23.5C095S	95	1.10	1.20	2.30	2.00	39.1	2810
LVIE07AXSWY23.5C120S	120	1.20	1.20	2.40	2.50	43.7	3660
LVIE07AXSWY23.5C150S	150	1.40	1.40	2.60	2.50	48.5	4340
LVIE07AXSWY23.5C185S	185	1.60	1.40	2.70	2.50	52.8	5050
LVIE07AXSWY23.5C240S	240	1.70	1.60	2.90	2.50	58.5	6110
LVIE07AXSWY23.5C300S	300	1.80	1.60	3.10	2.50	63.8	7150
LVIE07AXSWY23.5C400S	400	2.00	1.60	3.40	3.15	71.5	9440
LVIE07AXSWY23.5C500S	500	2.20	1.80	3.70	3.15	80.6	11420
LVIE07AXSWY23.5C630S	630	2.40	1.80	3.90	3.15	88.4	13570

Electrical Characteristics:

Current ratting and maximum DC conductor resistance.

Nominal Cross-sectional area	Buried direct in the ground at 20°C	In single way Ducts at 30°C	In air at 30°C	Maximum DC conductor Resistance at 20°C
mm^2	Amp.	Amp.	Amp.	Ω/km
25	103	95	102	1.2
35	123	113	125	0.868

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Nominal Cross-sectional area	Buried direct in the ground at 20°C	In single way Ducts at 30°C	In air at 30°C	Maximum DC conductor Resistance at 20°C
mm²	Amp.	Amp.	Amp.	Ω/km
50	145	134	152	0.641
70	177	164	193	0.443
95	213	196	238	0.32
120	241	222	274	0.253
150	269	248	312	0.206
185	305	281	362	0.164
240	353	324	431	0.125
300	399	364	497	0.1
400	454	412	579	0.0778
500	516	463	673	0.0605
630	585	518	783	0.0469

Maximum conductor temperature	90°C
Ambient air temperature	30°C
Ground temperature	20°C
Depth of laying	750 mm
Thermal resistivity of soil	1.5 K.m/W

De-Rating Factor

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

Air Temperature	20	25	35	40	45	50	55	60
De-rating factor	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.

Ground Temperature	10	15	25	30	35	40	45	50
De-rating factor	1.07	1.04	0.96	0.93	0.89	0.85	0.8	0.76

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Current rating de-rating factors for other than 30°C ground temperature for cables in Ducts.

Ground Temperature	15	25	35	40	45	50
De-rating factor	1.12	1.04	0.96	0.91	0.87	0.82