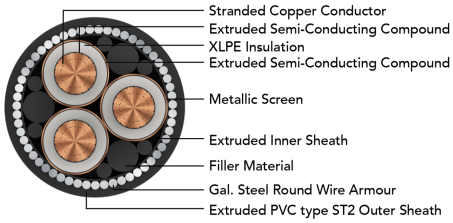
POLYCAB MV CU IEC 60502-2 18/30 KV
Medium Voltage Copper Armoured Cable, 18/30 (36) KV AC



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB medium voltage power cables are for power networks, underground, in cable ducting and also suitable for direct burial.

CHARACTERISTICS

Voltage Rating
Nominal Voltage: 18/30 kV

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

CONSTRUCTION

- Conductor: Circular Compacted Copper conductor as per IEC 60228, 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:

  Single Core: Aluminium Round Wire Armoured (AWA)

  Multi Core: Galvanised Steel Round Wire (SWA)

- Outer Sheath: Extruded Polyvinyl Chloride, Colour: Black

Bending Radius:
Fixed Installation: 12D
D is overall diameter of cable

Test Voltage
63kV AC 50 Hz

Impulse Test Voltage
Peak 170kV AC

OUTSTANDING FEATURES

- Flame retardant
- High life
- UV resistant
- Oil resistant

STANDARD FOLLOWS

IEC 60228
IEC 60502-2
BS 6622

COMPLIANCE

- Conductor resistance IEC 60228
- Insulation resistance IEC 60502-2
- Flammability test IEC 60332-1-2
- Partial Discharge test IEC 60502-2

OUR ACCREDITATIONS

APPROVAL

POLYCAB MV CU IEC 60502-2 18/30 KV
Medium Voltage Copper Armoured Cable, 18/30 (36) KV AC

POLYCAB
IDEAS. CONNECTED.

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			W
			Under armour	Over armour	Overall	(Ap
	No.	mm^2	mm	mm	mm	Kg
MVIE19CXAWY2001C050SA001P	1	50	28.8	32.8	37.0	1
MVIE19CXAWY2001C070SA001P	1	70	30.4	34.4	39.0	2
MVIE19CXAWY2001C095SA001P	1	95	32.2	36.2	41.0	2
MVIE19CXAWY2001C120SA001P	1	120	33.8	37.8	42.0	2
MVIE19CXAWY2001C150SA001P	1	150	35.7	40.7	46.0	3
MVIE19CXAWY2001C185SA001P	1	185	37.4	42.4	47.0	3
MVIE19CXAWY2001C240SA001P	1	240	39.8	44.8	50.0	4
MVIE19CXAWY2001C300SA001P	1	300	42.5	47.5	53.0	5
MVIE19CXAWY2001C400SA001P	1	400	45.7	50.7	56.0	6
MVIE19CXAWY2001C500SA001P	1	500	49.2	54.2	60.0	7
MVIE19CXAWY2001C630SA001P	1	630	52.6	57.6	63.0	8
MVIE19CXAWY2001C800SA001P	1	800	56.9	61.9	68.0	1(
MVIE19CXAWY2001C01KSA001P	1	1000	61.4	66.4	73.0	1:
MVIE19CXSWY2003C050SA001P	3	50	60.8	67.1	74.0	8
MVIE19CXSWY2003C070SA001P	3	70	64.3	70.6	78.0	1(
MVIE19CXSWY2003C095SA001P	3	95	68.3	74.6	82.0	1:
MVIE19CXSWY2003C120SA001P	3	120	71.9	78.2	86.0	1:
MVIE19CXSWY2003C150SA001P	3	150	75.6	81.9	90.0	1-
MVIE19CXSWY2003C185SA001P	3	185	79.4	85.7	94.0	1:
MVIE19CXSWY2003C240SA001P	3	240	85.0	91.3	100.0	1:
MVIE19CXSWY2003C300SA001P	3	300	90.6	96.9	106.0	2
MVIE19CXSWY2003C400SA001P	3	400	97.7	104.0	113.0	2-

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
							Flat	Trefoil	Flat	Trefoil	Flat
No.	mm^2	Ω/km	Ω/km	µF/km	mH/km	Ω/km	Amps				
1	50	0.387	0.494	0.13	0.47	0.15	203	196	188	186	243
1	70	0.268	0.342	0.15	0.45	0.14	246	239	229	227	303
1	95	0.193	0.247	0.16	0.43	0.14	293	285	274	271	369
1	120	0.153	0.196	0.18	0.41	0.13	332	323	311	308	426
1	150	0.124	0.159	0.19	0.40	0.13	366	361	347	343	481
1	185	0.0991	0.127	0.21	0.39	0.12	410	406	391	387	550
1	240	0.0754	0.097	0.23	0.37	0.12	470	469	453	447	647
1	300	0.0601	0.078	0.25	0.36	0.11	524	526	510	504	739
1	400	0.0470	0.062	0.28	0.35	0.11	572	590	571	564	837

1	500	0.0366	0.052	0.32	0.28	0.09	660	655	640	635	970
1	630	0.0283	0.042	0.35	0.27	0.09	735	730	715	710	1110
1	800	0.0221	0.036	0.39	0.26	0.08	770	820	800	790	1260
1	1000	0.0176	0.032	0.42	0.25	0.08	825	885	865	855	1420

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 C	
							In ground at 20°C	In
No.	mm^2	Ω/km	Ω/km	µF/km	mH/km	Ω/km		Ar
3	50	0.387	0.494	0.13	0.41	0.13	181	
3	70	0.268	0.342	0.15	0.39	0.12	220	
3	95	0.193	0.247	0.16	0.37	0.12	263	
3	120	0.153	0.196	0.18	0.36	0.11	298	
3	150	0.124	0.159	0.19	0.35	0.11	332	
3	185	0.0991	0.127	0.21	0.34	0.11	374	
3	240	0.0754	0.097	0.23	0.32	0.10	431	
3	300	0.0601	0.078	0.25	0.31	0.10	482	
3	400	0.0470	0.062	0.28	0.30	0.09	541	

Maximum conductor temperature	90°C
Ambient air temperature	30°C
Ground temperature	20°C
Depth of laying	0.8 m
Thermal resistivity of soil	1.5 K.m/W
Thermal resistivity of earthenware ducts	1.2 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	0.7