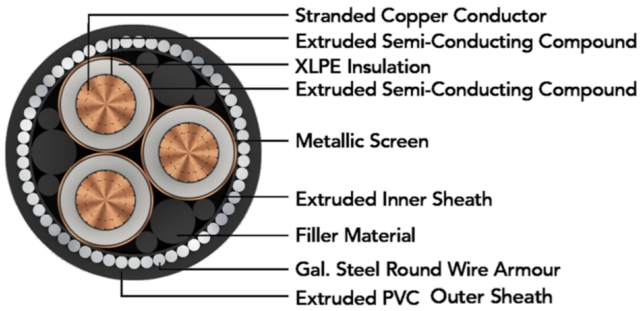
POLYCAB MV CU BS 6622 6.35/11 KV
Medium Voltage Armoured Cable, 6.35/11 (12) KV AC



Images not to scale. Follow table for dimensions

APPLICATION
POLYCAB MV BS 6622 6.35/11 KV XLPE insulated with copper conductor single & multi core cable is suitable to use for power networks, underground and in cable ducting.

CHARACTERISTICS
Voltage Rating
Nominal Voltage: 6.35/11 (12) kV

Operation Temperature
Max. operating temperature: +90°C
Max. Short Circuit Temperature: 250°C
Bending Radius:
Single core cable
Fixed Installation: 15 x Overall diameter
Three core cable
Fixed Installation: 12 x Overall diameter

CONSTRUCTION
• Conductor: Circular Compacted Copper conductor as per BS EN/IEC 60228, class 2
• Conductor Screen: Extruded Semi-conductive compound
• Insulation: XLPE as per BS 7655-1.3 or EPR as per BS 7655-1.2
• Non-Metallic Insulation Screen: Extruded Semi-conductive compound
• Metallic Insulation Screen: Copper tape screen
• Inner Covering: Extruded Polyvinyl Chloride or Halogen free compound
• Armour:
Single Core: Aluminium Round Wire Armoured (AWA)
Multi Core: Galvanised Steel Round Wire Armoured (SWA)
• Outer Sheath: Extruded Polyvinyl Chloride as per BS 7655-4.2 or Medium density Polyethylene as per BS 7655-10.1 Colour: Black

Test Voltage
25.5kV AC

Impulse Test Voltage
Peak 95kV AC

OUTSTANDING FEATURES
• Flame retardant
• High life
• UV resistant
• Oil resistant

STANDARD FOLLOWS
BS EN/IEC 60228
BS 7655-1.3/1.2
BS 7655-4.2/10.1
BS 6622

COMPLIANCE
Conductor resistance BS EN/IEC 60228
Insulation resistance BS 6622
Flame Retardant test EN/IEC 60332-1-2
Partial Discharge test BS 6622

APPROVAL

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WEIGHT & DIMENSION DATA

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
		mm^2	mm	mm	mm	Kg/Km
MVBS22CXAWY2001C070S	1	70	20.8	24.0	28.0	1400
MVBS22CXAWY2001C095S	1	95	22.6	25.8	30.0	1700
MVBS22CXAWY2001C120S	1	120	24.2	27.4	31.0	2000
MVBS22CXAWY2001C150S	1	150	25.9	29.1	33.0	2350
MVBS22CXAWY2001C185S	1	185	28.0	32.0	36.0	2850
MVBS22CXAWY2001C240S	1	240	30.4	34.4	39.0	3450
MVBS22CXAWY2001C300S	1	300	32.9	36.9	41.0	4150
MVBS22CXAWY2001C400S	1	400	36.1	40.1	45.0	5150
MVBS22CXAWY2001C500S	1	500	39.4	44.4	49.0	6400
MVBS22CXAWY2001C630S	1	630	43.2	48.2	53.0	7800
MVBS22CXAWY2001C800S	1	800	47.3	52.3	58.0	9550
MVBS22CXAWY2001C01KS	1	1000	52.0	57.0	63.0	11650
MVBS22CXSWY2003C070S	3	70	43.6	48.6	54.0	5900
MVBS22CXSWY2003C095S	3	95	47.5	52.5	58.0	7050
MVBS22CXSWY2003C120S	3	120	51.2	56.2	62.0	8200
MVBS22CXSWY2003C150S	3	150	55.0	60.0	66.0	9500
MVBS22CXSWY2003C185S	3	185	58.6	63.6	70.0	10800
MVBS22CXSWY2003C240S	3	240	63.9	70.2	77.0	13800
MVBS22CXSWY2003C300S	3	300	69.7	76.0	83.0	16450
MVBS22CXSWY2003C400S	3	400	76.6	82.9	90.0	20000
MVBS22CXSWY2003C500S	3	500	83.7	90.0	98.0	24000
MVBS22CXSWY2003C630S	3	630	91.4	97.7	106.0	28650

Electrical Characteristics

No. of Cores	Nominal Cross sectional Area	Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Short circuit current rating	Capacitance (Approx.)	Inductance (Approx.)	Reactance (Approx.)
	mm^2	Ω/km	Ω/km	kA/s	µF/km	mH/km	Ω/km
1	70	0.268	0.342	10.02	0.26	0.38	0.12
1	95	0.193	0.247	13.59	0.30	0.37	0.12

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	mm^2	Ω/km	Ω/km	kA/s	µF/km	mH/km	Ω/km
1	120	0.153	0.196	17.17	0.33	0.35	0.11
1	150	0.124	0.159	21.46	0.36	0.34	0.11
1	185	0.0991	0.128	26.47	0.39	0.34	0.11
1	240	0.0754	0.098	34.34	0.44	0.32	0.10
1	300	0.0601	0.080	42.93	0.49	0.31	0.10
1	400	0.047	0.064	57.23	0.55	0.30	0.09
1	500	0.0366	0.052	71.54	0.670	0.245	0.077
1	630	0.0283	0.042	90.14	0.739	0.239	0.075
1	800	0.0221	0.036	10.02	0.823	0.231	0.073
1	1000	0.0176	0.032	13.59	0.911	0.225	0.071
3	70	0.268	0.342	10.02	0.26	0.31	0.098
3	95	0.193	0.247	13.59	0.30	0.30	0.094
3	120	0.153	0.196	17.17	0.33	0.29	0.090
3	150	0.124	0.159	21.46	0.36	0.28	0.088
3	185	0.0991	0.128	26.47	0.39	0.27	0.086
3	240	0.0754	0.098	34.34	0.44	0.26	0.083
3	300	0.0601	0.080	42.93	0.49	0.26	0.081
3	400	0.047	0.064	57.23	0.55	0.25	0.078
3	500	0.0366	0.052	71.54	0.61	0.244	0.077
3	630	0.0283	0.042	90.14	0.67	0.239	0.075

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Current Carrying Capacity

No. of core	Nominal cross sectional area	Continuous Current Rating					
		Ground at 20°C		In single-way ducts		In air	
		Trefoil	Flat spaced	Trefoil ducts	Flat touching	Trefoil	Flat touching
	mm²	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.
1	70	239	246	227	229	296	303
1	95	285	293	271	274	361	369
1	120	323	332	308	311	417	426
1	150	361	366	343	347	473	481
1	185	406	410	387	391	543	550
1	240	469	470	447	453	641	647
1	300	526	524	504	510	735	739
1	400	590	572	564	571	845	837
1	500	604	551	525	454	911	837
1	630	660	588	571	482	1023	919
1	800	690	594	594	484	1103	960
1	1000	726	615	621	497	1191	1020

No. of core	Nominal cross sectional area	Continuous Current Rating		
		In ground at 20°C	In a buried duct	In air
	mm²	Amp.	Amp.	Amp.
3	70	220	194	253
3	95	263	232	307
3	120	298	264	352
3	150	332	296	397
3	185	374	335	453
3	240	431	387	529
3	300	482	435	599
3	400	541	492	683
3	500	610	537	804

Maximum conductor temperature 90°C
Ambient air temperature 30°C
Ground temperature 20°C

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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	0.76