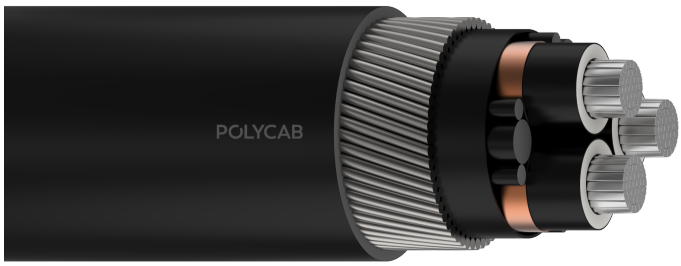
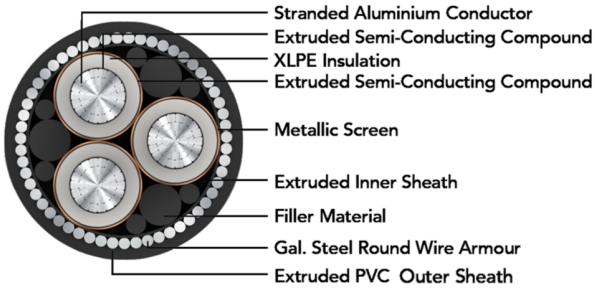
POLYCAB MV AL BS 6622 8.7/15 KV
Medium Voltage Armoured Cable, 8.7/15 (17.5) KV AC





Images not to scale. Follow table for dimensions

APPLICATION
POLYCAB MV AL BS 6622 8.7/15 KV XLPE insulated with aluminium conductor single & multi core cable is suitable to use for power networks, underground and in cable ducting.

CHARACTERISTICS
Voltage Rating
Nominal Voltage: 8.7/15 (17.5) 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 aluminium 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
35kV AC

Impulse Test Voltage
Peak 112kV 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 BS EN/IEC 60332-1-2
Partial Discharge test BS 6622

OUR ACCREDITATIONS
NABL

APPROVAL
FQC CE CPR COMPLIANT

POLYCAB MV AL BS 6622 8.7/15 KV
Medium Voltage Armoured Cable, 8.7/15 (17.5) KV AC

POLYCAB
IDEAS. CONNECTED.

WEIGHT & DIMENSION DATA :

Product Code	No. of Cores	Nominal Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
		mm²	mm	mm	mm	Kg/Km
MVBS23AXAWY2001C070S	1	70	23.0	26.2	30.0	1100
MVBS23AXAWY2001C095S	1	95	24.8	28.0	32.0	1250
MVBS23AXAWY2001C120S	1	120	26.4	30.4	34.0	1500
MVBS23AXAWY2001C150S	1	150	28.5	32.5	37.0	1700
MVBS23AXAWY2001C185S	1	185	30.2	34.2	38.0	1850
MVBS23AXAWY2001C240S	1	240	32.6	36.6	41.0	2150
MVBS23AXAWY2001C300S	1	300	35.1	39.1	44.0	2500
MVBS23AXAWY2001C400S	1	400	38.3	43.3	48.0	3050
MVBS23AXAWY2001C500S	1	500	42.0	47.0	52.0	3600
MVBS23AXAWY2001C630S	1	630	45.4	50.4	56.0	4150
MVBS23AXAWY2001C800S	1	800	49.5	54.5	60.0	4900
MVBS23AXAWY2001C01KS	1	1000	54.2	59.2	65.0	5800
MVBS23AXSWY2003C070S	3	70	48.8	53.8	59.0	5350
MVBS23AXSWY2003C095S	3	95	52.6	57.6	64.0	6050
MVBS23AXSWY2003C120S	3	120	56.0	61.0	67.0	6650
MVBS23AXSWY2003C150S	3	150	59.7	64.7	71.0	7400
MVBS23AXSWY2003C185S	3	185	63.3	69.6	76.0	8950
MVBS23AXSWY2003C240S	3	240	69.1	75.4	82.0	10300
MVBS23AXSWY2003C300S	3	300	74.4	80.7	88.0	11600
MVBS23AXSWY2003C400S	3	400	81.4	87.7	96.0	13500
MVBS23AXSWY2003C500S	3	500	88.9	95.2	103.0	15600
MVBS23AXSWY2003C630S	3	630	96.1	102.4	111.0	17800

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.)
	mm²	Ω/km	Ω/km	kA/s	µF/km	mH/km	Ω/km
1	70	0.443	0.568	6.61	0.22	0.40	0.13
1	95	0.320	0.411	8.98	0.24	0.38	0.12
1	120	0.253	0.325	11.34	0.27	0.37	0.12

POLYCAB MV AL BS 6622 8.7/15 KV
Medium Voltage Armoured Cable, 8.7/15 (17.5) KV AC

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	150	0.206	0.265	14.17	0.29	0.36	0.11
1	185	0.164	0.211	17.48	0.32	0.35	0.11
1	240	0.125	0.161	22.68	0.35	0.33	0.10
1	300	0.100	0.129	28.35	0.39	0.32	0.10
1	400	0.0778	0.101	37.79	0.44	0.32	0.10
1	500	0.0605	0.080	47.24	0.522	0.256	0.080
1	630	0.0469	0.063	59.52	0.574	0.247	0.078
1	800	0.0367	0.051	75.59	0.638	0.239	0.075
1	1000	0.0291	0.042	94.48	0.704	0.232	0.073
3	70	0.443	0.568	6.61	0.22	0.34	0.11
3	95	0.320	0.411	8.98	0.24	0.32	0.10
3	120	0.253	0.325	11.34	0.27	0.31	0.10
3	150	0.206	0.265	14.17	0.29	0.30	0.09
3	185	0.164	0.211	17.48	0.32	0.29	0.09
3	240	0.125	0.161	22.68	0.35	0.28	0.09
3	300	0.100	0.129	28.35	0.39	0.27	0.09
3	400	0.0778	0.101	37.79	0.44	0.26	0.08
3	500	0.0605	0.080	47.24	0.48	0.256	0.080
3	630	0.0469	0.063	59.52	0.53	0.250	0.079

Current Carrying Capacity

No. of core	Nominal cross sectional area	Continues Current Rating					
		Buried direct in the ground		In single-way ducts		In air	
		Trefoil	Flat spaced	Trefoil ducts	Flat touching	Trefoil	Flat touching
	mm^2	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.
1	70	186	192	176	178	230	236
1	95	221	229	210	213	280	287
1	120	252	260	240	242	324	332

POLYCAB MV AL BS 6622 8.7/15 KV
Medium Voltage Armoured Cable, 8.7/15 (17.5) KV AC

No. of core	Nominal cross sectional area	Continues Current Rating					
		Buried direct in the ground		In single-way ducts		In air	
		Trefoil	Flat spaced	Trefoil ducts	Flat touching	Trefoil	Flat touching
	mm²	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.
1	150	281	288	267	271	368	376
1	185	317	324	303	307	424	432
1	240	367	373	351	356	502	511
1	300	414	419	397	402	577	586
1	400	470	466	451	457	673	676
1	500	498	471	433	389	748	712
1	630	555	514	481	421	856	798
1	800	597	536	514	436	949	859
1	1000	643	565	550	457	1049	931

No. of core	Nominal cross sectional area	Continues current capacity		
		In ground at 20°C	In a buried duct	In air
	mm²	Amp.	Amp.	Amp.
3	70	171	150	196
3	95	204	180	238
3	120	232	206	274
3	150	259	231	309
3	185	293	262	354
3	240	338	304	415
3	300	380	343	472
3	400	432	393	545
3	500	494	435	649

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	0.76