

Polycab, XLPE insulated Round Wire armored Power cable conforming to BS 6622.



These includes medium voltage armoured cable confirming the construction and performance of voltage grade 3.8/6.6 (7.2) KV, 6.35/11 (12) KV, 8.7/15(17.5) KV, 12.7/22 (24) KV and 19/33 (36) KV as per BS 6622. These cables are suitable to use in power networks, underground and in cable duct.

These cables are available in single and three core with maximum operating conductor temperature of 90°C and maximum short circuit conductor temperature 250°C.

Conductor: High conductivity stranded compacted copper or aluminium conductor produced in-house from state-of-the art machine.

Screen: Semi-conducting compound

Insulation: High insulation resistance cross-linked polyethylene or EPR insulation.

Screen: Insulation screened by semi-conducting compound followed by copper tape.

Inner covering: Extruded polyvinyl chloride (PVC) or halogen free compound inner covering will be created between insulation screen and armour.

Armour: A steel wire or aluminium wire is provided to allow the cable to withstand mechanical stresses to which it is exposed.

Sheath: In-house developed PVC compound or Medium density polyethylene sheath to withstand mechanical abrasion and weather while in use.

Polycab assures the highest quality standard in every product by having stringent quality control with requisite testing which are applied at every single stage from raw material to finished goods.

The construction based on the application and requirement of the user against BS 6622.



[POLYCAB MV CU BS 6622 3.8/6.6 KV - Medium Voltage Armoured Cable, 3.8/6.6 \(7.2\) KV AC](#)



[POLYCAB MV CU BS 6622 6.35/11 KV - Medium Voltage Armoured Cable, 6.35/11 \(12\) KV AC](#)



[POLYCAB MV CU BS 6622 8.7/15 KV -
Medium Voltage Armoured Cable, 8.7/15 \(17.5\)
KV AC](#)



[POLYCAB MV CU BS 6622 12.7/22 KV -
Medium Voltage Armoured Cable, 12.7/22 \(24\)
KV AC](#)



[POLYCAB MV CU BS 6622 19/33 KV -
Medium Voltage Armoured Cable, 19/33 \(36\)
KV AC](#)



[POLYCAB MV AL BS 6622 3.8/6.6 KV -
Medium Voltage Armoured Cable, 3.8/6.6 \(7.2\)
KV AC](#)



[POLYCAB MV AL BS 6622 6.35/11 KV -
Medium Voltage Armoured Cable, 6.35/11 \(12\)
KV AC](#)



[POLYCAB MV AL BS 6622 8.7/15 KV -
Medium Voltage Armoured Cable, 8.7/15 \(17.5\)
KV AC](#)



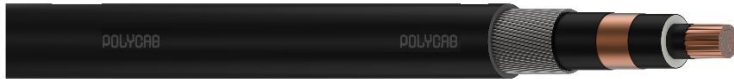
[POLYCAB MV AL BS 6622 12.7/22 KV -
Medium Voltage Armoured Cable, 12.7/22 \(24\)
KV AC](#)

[POLYCAB MV AL BS 6622 19/33 KV -
Medium Voltage Armoured Cable, 19/33 \(36\)
KV AC](#)

POLYCAB MV CU BS 6622 8.7/15 KV

Medium Voltage Armoured Cable, 8.7/15 (17.5) KV AC

Single Core



Three Core



Outstanding Features

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

Application

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

Voltage Rating

Nominal Voltage: 8.7/15 (17.5) kV

Operation Temperature

Max. operating temperature: +90°C

Max. Short Circuit Temperature: 250°C

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

Bending Radius:

Single core cable

Fixed Installation: 15 x Overall diameter

Three core cable

Fixed Installation: 12 x Overall diameter

Standard and References:

BS EN/IEC 60228

BS 7655-1.3/1.2

BS 7655-4.2/10.1

BS 6622

Test Voltage

35kV AC

Impulse Test Voltage

Peak 112kV AC

Compliance

Conductor resistance BS EN/IEC 60228

Insulation resistance BS 6622

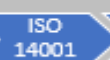
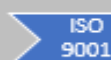
Flame Retardant test BS EN/IEC 60332-1-2

Partial Discharge test BS 6622

Approval



OUR ACCREDITATION



POLYCAB MV CU BS 6622 8.7/15 KV

Medium Voltage Armoured Cable, 8.7/15 (17.5) KV AC

Product Code	No. of Cores	Nominal Cross sectional Area mm ²	Nominal Diameter			Weight (Approx.) Kg/Km
			Under armour mm	Over armour mm	Overall mm	
MVBS23CXAWY2001C070S	1	70	23.0	26.2	30.0	1600
MVBS23CXAWY2001C095S	1	95	24.8	28.0	32.0	1950
MVBS23CXAWY2001C120S	1	120	26.4	30.4	34.0	2200
MVBS23CXAWY2001C150S	1	150	28.5	32.5	37.0	2600
MVBS23CXAWY2001C185S	1	185	30.2	34.2	38.0	3000
MVBS23CXAWY2001C240S	1	240	32.6	36.6	41.0	3650
MVBS23CXAWY2001C300S	1	300	35.1	39.1	44.0	4350
MVBS23CXAWY2001C400S	1	400	38.3	43.3	48.0	5500
MVBS23CXAWY2001C500S	1	500	42.0	47.0	52.0	6700
MVBS23CXAWY2001C630S	1	630	45.4	50.4	56.0	8050
MVBS23CXAWY2001C800S	1	800	49.5	54.5	60.0	9800
MVBS23CXAWY2001C01KS	1	1000	54.2	59.2	65.0	11950
MVBS23CXSWY2003C070S	3	70	48.8	53.8	59.0	6650
MVBS23CXSWY2003C095S	3	95	52.6	57.6	64.0	7850
MVBS23CXSWY2003C120S	3	120	56.0	61.0	67.0	8950
MVBS23CXSWY2003C150S	3	150	59.7	64.7	71.0	10250
MVBS23CXSWY2003C185S	3	185	63.3	69.6	76.0	12450
MVBS23CXSWY2003C240S	3	240	69.1	75.4	82.0	14850
MVBS23CXSWY2003C300S	3	300	74.4	80.7	88.0	17350
MVBS23CXSWY2003C400S	3	400	81.4	87.7	96.0	21100
MVBS23CXSWY2003C500S	3	500	88.9	95.2	103.0	25300
MVBS23CXSWY2003C630S	3	630	96.1	102.4	111.0	29750

OUR ACCREDITATION



POLYCAB MV CU BS 6622 8.7/15 KV

Medium Voltage Armoured Cable, 8.7/15 (17.5) KV AC

Electrical Characteristics:

No. of Cores	Nominal Cross sectional Area mm ²	Max. DC Resistance at 20°C Ω/km	Max. AC Resistance at 90°C Ω/km	Short circuit current rating kA/s	Capacitance (Approx.) μF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
1	70	0.268	0.342	10.02	0.22	0.40	0.13
1	95	0.193	0.247	13.59	0.24	0.38	0.12
1	120	0.153	0.196	17.17	0.27	0.37	0.12
1	150	0.124	0.159	21.46	0.29	0.36	0.11
1	185	0.0991	0.128	26.47	0.32	0.35	0.11
1	240	0.0754	0.098	34.34	0.35	0.33	0.10
1	300	0.0601	0.080	42.93	0.39	0.32	0.10
1	400	0.047	0.064	57.23	0.44	0.32	0.10
1	500	0.0366	0.052	71.54	0.522	0.256	0.080
1	630	0.0283	0.042	90.14	0.574	0.247	0.078
1	800	0.0221	0.036	114.47	0.638	0.239	0.075
1	1000	0.0176	0.032	143.08	0.704	0.232	0.073

No. of Cores	Nominal Cross sectional Area mm ²	Max. DC Resistance at 20°C Ω/km	Max. AC Resistance at 90°C Ω/km	Short circuit current rating kA/s	Capacitance (Approx.) μF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
3	70	0.268	0.342	10.02	0.22	0.34	0.11
3	95	0.193	0.247	13.59	0.24	0.32	0.10
3	120	0.153	0.196	17.17	0.27	0.31	0.10
3	150	0.124	0.159	21.46	0.29	0.30	0.09
3	185	0.0991	0.128	26.47	0.32	0.29	0.09
3	240	0.0754	0.098	34.34	0.35	0.28	0.09
3	300	0.0601	0.080	42.93	0.39	0.27	0.09
3	400	0.047	0.064	57.23	0.44	0.26	0.08
3	500	0.0366	0.052	71.54	0.48	0.256	0.080
3	630	0.0283	0.042	90.14	0.53	0.250	0.079

OUR ACCREDITATION



POLYCAB MV CU BS 6622 8.7/15 KV

Medium Voltage Armoured Cable, 8.7/15 (17.5) KV AC

Current Carrying Capacity

No. of core	Nominal cross sectional area mm ²	Continuous Current Rating					
		Ground at 20°C		In single-way ducts		In air	
		Trefoil Amp.	Flat spaced Amp.	Trefoil ducts Amp.	Flat touching Amp.	Trefoil Amp.	Flat touching 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 mm ²	Continuous Current Rating		
		In ground at 20°C Amp.	In a buried duct Amp.	In air 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
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

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

OUR ACCREDITATION



POLYCAB MV CU BS 6622 12.7/22 KV

Medium Voltage Armoured Cable, 12.7/22 (24) KV AC

Single Core



Three Core



Outstanding Features

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

Application

POLYCAB MV CU BS 6622 12.7/22 KV XLPE insulated with copper conductor single & multi core cable is suitable to use for power networks, underground and in cable ducting.

Voltage Rating

Nominal Voltage: 12.7/22 (24) kV

Operation Temperature

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

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

Standard and References:

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

Test Voltage

51kV AC

Impulse Test Voltage

Peak 144kV AC

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



Bending Radius:

Single core cable
Fixed Installation: 15 x Overall diameter
Three core cable
Fixed Installation: 12 x Overall diameter

OUR ACCREDITATION



POLYCAB MV CU BS 6622 12.7/22 KV

Medium Voltage Armoured Cable, 12.7/22 (24) KV AC

Product Code	No. of Cores	Nominal Cross sectional Area mm ²	Nominal Diameter			Weight (Approx.) Kg/Km
			Under armour mm	Over armour mm	Overall mm	
MVBS19CXAWY2001C070S	1	70	25.0	28.2	32.0	1800
MVBS19CXAWY2001C095S	1	95	26.8	30.8	35.0	2100
MVBS19CXAWY2001C120S	1	120	28.8	32.8	37.0	2450
MVBS19CXAWY2001C150S	1	150	30.5	34.5	39.0	2800
MVBS19CXAWY2001C185S	1	185	32.2	36.2	41.0	3200
MVBS19CXAWY2001C240S	1	240	34.6	38.6	43.0	3850
MVBS19CXAWY2001C300S	1	300	37.1	41.1	46.0	4600
MVBS19CXAWY2001C400S	1	400	40.7	45.7	51.0	5850
MVBS19CXAWY2001C500S	1	500	44.0	49.0	54.0	7050
MVBS19CXAWY2001C630S	1	630	47.4	52.4	58.0	8400
MVBS19CXAWY2001C800S	1	800	51.9	56.9	63.0	10250
MVBS19CXAWY2001C01KS	1	1000	56.2	61.2	67.0	12400
MVBS19CXSWY2003C070S	3	70	53.1	58.1	64.0	7300
MVBS19CXSWY2003C095S	3	95	56.9	61.9	68.0	8500
MVBS19CXSWY2003C120S	3	120	60.3	65.3	72.0	9600
MVBS19CXSWY2003C150S	3	150	64.4	70.7	78.0	11900
MVBS19CXSWY2003C185S	3	185	68.0	74.3	81.0	13350
MVBS19CXSWY2003C240S	3	240	73.4	79.7	87.0	15700
MVBS19CXSWY2003C300S	3	300	78.8	85.1	93.0	18300
MVBS19CXSWY2003C400S	3	400	85.7	92.0	100.0	21750
MVBS19CXAWY2003C500S	3	500	93.2	99.5	108.0	26050
MVBS19CXAWY2003C630S	3	630	100.5	106.8	116.0	30900

OUR ACCREDITATION



POLYCAB MV CU BS 6622 12.7/22 KV

Medium Voltage Armoured Cable, 12.7/22 (24) KV AC

Electrical Characteristics:

No. of Cores	Nominal Cross sectional Area mm ²	Max. DC Resistance at 20°C Ω/km	Max. AC Resistance at 90°C Ω/km	Short circuit current rating kA/s	Capacitance (Approx.) μF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
1	70	0.268	0.342	10.02	0.19	0.41	0.13
1	95	0.193	0.247	13.59	0.21	0.40	0.13
1	120	0.153	0.196	17.17	0.23	0.38	0.12
1	150	0.124	0.159	21.46	0.25	0.37	0.12
1	185	0.0991	0.128	26.47	0.27	0.36	0.11
1	240	0.0754	0.098	34.34	0.30	0.34	0.11
1	300	0.0601	0.080	42.93	0.33	0.33	0.10
1	400	0.047	0.064	57.23	0.37	0.33	0.10
1	500	0.0366	0.052	71.54	0.439	0.264	0.083
1	630	0.0283	0.042	90.14	0.481	0.255	0.080
1	800	0.0221	0.036	10.02	0.533	0.247	0.078
1	1000	0.0176	0.032	13.59	0.588	0.239	0.075

No. of Cores	Nominal Cross sectional Area mm ²	Max. DC Resistance at 20°C Ω/km	Max. AC Resistance at 90°C Ω/km	Short circuit current rating kA/s	Capacitance (Approx.) μF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
3	70	0.268	0.342	10.02	0.19	0.35	0.11
3	95	0.193	0.247	13.59	0.21	0.34	0.11
3	120	0.153	0.196	17.17	0.23	0.32	0.10
3	150	0.124	0.159	21.46	0.25	0.31	0.10
3	185	0.0991	0.128	26.47	0.27	0.30	0.10
3	240	0.0754	0.098	34.34	0.30	0.29	0.09
3	300	0.0601	0.080	42.93	0.33	0.28	0.09
3	400	0.047	0.064	57.23	0.37	0.27	0.09
3	500	0.0366	0.052	71.54	0.41	0.27	0.08
3	630	0.0283	0.042	90.14	0.45	0.26	0.08

OUR ACCREDITATION



POLYCAB MV CU BS 6622 12.7/22 KV

Medium Voltage Armoured Cable, 12.7/22 (24) KV AC

Current Carrying Capacity

No. of core	Nominal cross sectional area mm ²	Continuous Current Rating					
		Ground at 20°C		In single-way ducts		In air	
		Trefoil Amp.	Flat spaced Amp.	Trefoil ducts Amp.	Flat touching Amp.	Trefoil Amp.	Flat touching 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	581	521	499	424	908	828
1	630	633	554	541	449	1012	905
1	800	679	583	594	483	1115	979
1	1000	694	596	605	489	1181	1032

No. of core	Nominal cross sectional area mm ²	Continuous Current Rating		
		In ground at 20°C Amp.	In a buried duct Amp.	In air 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	608	548	820

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

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

OUR ACCREDITATION



POLYCAB MV CU BS 6622 19/33 KV

Medium Voltage Armoured Cable, 19/33 (36) KV AC

Single Core



Three Core



Outstanding Features

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

Application

POLYCAB MV CU BS 6622 19/33 KV XLPE insulated with copper conductor single & multi core cable is suitable to use for power networks, underground and in cable ducting.

Voltage Rating

Nominal Voltage: 19/33 (36) kV

Operation Temperature

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

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

Standard and References:

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

Test Voltage

76kV AC

Impulse Test Voltage

Peak 194kV AC

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



Bending Radius:

Single core cable
Fixed Installation: 15 x Overall diameter
Three core cable
Fixed Installation: 12 x Overall diameter

OUR ACCREDITATION



POLYCAB MV CU BS 6622 19/33 KV

Medium Voltage Armoured Cable, 19/33 (36) KV AC

Product Code	No. of Cores	Nominal Cross sectional Area mm ²	Nominal Diameter			Weight (Approx.) Kg/Km
			Under armour mm	Over armour mm	Overall mm	
MVBS20CXAWY2001C070S	1	70	30.4	34.4	39.0	2200
MVBS20CXAWY2001C095S	1	95	32.2	36.2	41.0	2500
MVBS20CXAWY2001C120S	1	120	33.8	37.8	42.0	2850
MVBS20CXAWY2001C150S	1	150	35.5	39.5	44.0	3250
MVBS20CXAWY2001C185S	1	185	37.2	42.2	47.0	3800
MVBS20CXAWY2001C240S	1	240	40.0	45.0	50.0	4550
MVBS20CXAWY2001C300S	1	300	42.5	47.5	53.0	5300
MVBS20CXAWY2001C400S	1	400	45.7	50.7	56.0	6400
MVBS20CXAWY2001C500S	1	500	49.0	54.0	60.0	7600
MVBS20CXAWY2001C630S	1	630	52.8	57.8	64.0	9050
MVBS20CXAWY2001C800S	1	800	56.9	61.9	68.0	10900
MVBS20CXAWY2001C01KS	1	1000	61.2	66.2	72.0	13050
MVBS20CXSWY2003C070S	3	70	64.3	70.6	77.0	10000
MVBS20CXSWY2003C095S	3	95	68.1	74.4	81.0	11250
MVBS20CXSWY2003C120S	3	120	71.5	77.8	85.0	12550
MVBS20CXSWY2003C150S	3	150	75.2	81.5	89.0	13950
MVBS20CXSWY2003C185S	3	185	78.8	85.1	93.0	15550
MVBS20CXSWY2003C240S	3	240	84.2	90.5	99.0	17950
MVBS20CXSWY2003C300S	3	300	90.0	96.3	105.0	20800
MVBS20CXSWY2003C400S	3	400	96.9	103.2	112.0	24550
MVBS20CXSWY2003C500S	3	500	104.0	110.3	120.0	28800
MVBS20CXSWY2003C630S	3	630	111.3	117.6	127.0	33650

OUR ACCREDITATION



POLYCAB MV CU BS 6622 19/33 KV

Medium Voltage Armoured Cable, 19/33 (36) KV AC

Electrical Characteristics:

No. of Cores	Nominal Cross sectional Area mm ²	Max. DC Resistance at 20°C Ω/km	Max. AC Resistance at 90°C Ω/km	Short circuit current rating kA/s	Capacitance (Approx.) μF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
1	70	0.268	0.342	10.02	0.15	0.45	0.14
1	95	0.193	0.247	13.59	0.16	0.43	0.13
1	120	0.153	0.196	17.17	0.18	0.41	0.13
1	150	0.124	0.159	21.46	0.19	0.40	0.12
1	185	0.0991	0.128	26.47	0.21	0.39	0.12
1	240	0.0754	0.098	34.34	0.23	0.37	0.12
1	300	0.0601	0.080	42.93	0.25	0.36	0.11
1	400	0.047	0.064	57.23	0.28	0.35	0.11
1	500	0.0366	0.052	71.54	0.321	0.283	0.089
1	630	0.0283	0.042	90.14	0.350	0.274	0.086
1	800	0.0221	0.036	10.02	0.386	0.263	0.083
1	1000	0.0176	0.032	13.59	0.424	0.254	0.080

No. of Cores	Nominal Cross sectional Area mm ²	Max. DC Resistance at 20°C Ω/km	Max. AC Resistance at 90°C Ω/km	Short circuit current rating kA/s	Capacitance (Approx.) μF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
3	70	0.268	0.342	10.02	0.15	0.39	0.12
3	95	0.193	0.247	13.59	0.16	0.37	0.12
3	120	0.153	0.196	17.17	0.18	0.36	0.11
3	150	0.124	0.159	21.46	0.19	0.35	0.11
3	185	0.0991	0.128	26.47	0.21	0.34	0.11
3	240	0.0754	0.098	34.34	0.23	0.32	0.10
3	300	0.0601	0.080	42.93	0.25	0.31	0.10
3	400	0.047	0.064	57.23	0.28	0.30	0.09
3	500	0.0366	0.052	71.54	0.31	0.289	0.091
3	630	0.0283	0.042	90.14	0.33	0.281	0.088

OUR ACCREDITATION



POLYCAB MV CU BS 6622 19/33 KV

Medium Voltage Armoured Cable, 19/33 (36) KV AC

Current Carrying Capacity

No. of core	Nominal cross sectional area mm ²	Continuous Current Rating					
		Ground at 20°C		In single-way ducts		In air	
		Trefoil Amp.	Flat spaced Amp.	Trefoil ducts Amp.	Flat touching Amp.	Trefoil Amp.	Flat touching 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	581	521	499	424	908	828
1	630	633	554	541	449	1012	905
1	800	679	583	594	483	1115	979
1	1000	694	596	605	489	1181	1032

No. of core	Nominal cross sectional area mm ²	Continuous Current Rating		
		In ground at 20°C Amp.	In a buried duct Amp.	In air 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	608	548	820

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

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

OUR ACCREDITATION



POLYCAB MV CU BS 6622 3.8/6.6 KV

Medium Voltage Armoured Cable, 3.8/6.6 (7.2) KV AC

Single Core



Three Core



Outstanding Features

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

Application

POLYCAB MV CU BS 6622 3.8/6.6 KV XLPE insulated with copper conductor single & multi core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 3.8/6.6 (7.2) kV

Operation Temperature

Max. operating temperature: +90°C

Max. Short Circuit Temperature: 250°C

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

Standard and References:

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

Test Voltage

15kV AC

Impulse Test Voltage

Peak 75kV AC

Compliance

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

Approval



Bending Radius:

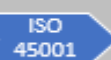
Single core cable

Fixed Installation: 15 x Overall diameter

Three core cable

Fixed Installation: 12 x Overall diameter

OUR ACCREDITATION



POLYCAB MV CU BS 6622 3.8/6.6 KV

Medium Voltage Armoured Cable, 3.8/6.6 (7.2) KV AC

Product Code	No. of Cores	Nominal Cross sectional Area mm ²	Nominal Diameter			Weight (Approx.) Kg/Km
			Under armour mm	Over armour mm	Overall mm	
MVBS21CXAWY2001C070S	1	70	19.00	22.20	26.0	1300
MVBS21CXAWY2001C095S	1	95	20.80	24.00	28.0	1550
MVBS21CXAWY2001C120S	1	120	22.40	25.60	29.5	1850
MVBS21CXAWY2001C150S	1	150	24.10	27.30	31.5	2200
MVBS21CXAWY2001C185S	1	185	25.80	29.00	33.0	2600
MVBS21CXAWY2001C240S	1	240	28.80	32.80	37.0	3350
MVBS21CXAWY2001C300S	1	300	31.70	35.70	40.5	4050
MVBS21CXAWY2001C400S	1	400	35.30	39.30	44.0	5050
MVBS21CXAWY2001C500S	1	500	39.00	44.00	49.0	6400
MVBS21CXAWY2001C630S	1	630	42.90	47.90	53.0	7750
MVBS21CXAWY2001C800S	1	800	46.90	51.90	57.5	9500
MVBS21CXAWY2001C01KS	1	1000	51.60	56.60	62.5	11600
MVBS21CXSWY2003C070S	3	70	39.70	44.70	50.0	5400
MVBS21CXSWY2003C095S	3	95	43.60	48.60	54.0	6500
MVBS21CXSWY2003C120S	3	120	46.90	51.90	58.0	7550
MVBS21CXSWY2003C150S	3	150	51.10	56.10	62.0	8900
MVBS21CXSWY2003C185S	3	185	54.70	59.70	66.0	10200
MVBS21CXSWY2003C240S	3	240	60.40	65.40	72.0	12400
MVBS21CXSWY2003C300S	3	300	67.10	73.40	80.0	15900
MVBS21CXSWY2003C400S	3	400	74.90	81.20	89.0	19650
MVBS21CXSWY2003C500S	3	500	82.00	88.30	96.0	23600
MVBS21CXSWY2003C630S	3	630	89.90	96.20	104.0	28400

OUR ACCREDITATION



POLYCAB MV CU BS 6622 3.8/6.6 KV

Medium Voltage Armoured Cable, 3.8/6.6 (7.2) KV AC

Electrical characteristics:

No. of Cores No.	Nominal Cross sectional Area mm ²	Max. DC Resistance at 20°C Ω/km	Max. AC Resistance at 90°C Ω/km	Short circuit current rating kA/s	Capacitance (Approx.) μF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
1	70	0.268	0.342	10.02	0.33	0.37	0.12
1	95	0.193	0.247	13.59	0.38	0.35	0.11
1	120	0.153	0.196	17.17	0.41	0.34	0.11
1	150	0.124	0.159	21.46	0.46	0.33	0.10
1	185	0.0991	0.128	26.47	0.50	0.32	0.10
1	240	0.0754	0.098	34.34	0.54	0.31	0.10
1	300	0.0601	0.080	42.93	0.57	0.31	0.10
1	400	0.047	0.064	57.23	0.61	0.30	0.09
1	500	0.0366	0.052	71.54	0.708	0.24	0.08
1	630	0.0283	0.042	90.14	0.784	0.24	0.07
1	800	0.0221	0.036	114.47	0.870	0.23	0.07
1	1000	0.0176	0.032	143.08	0.963	0.22	0.07

No. of Cores No.	Nominal Cross sectional Area mm ²	Max. DC Resistance at 20°C Ω/km	Max. AC Resistance at 90°C Ω/km	Short circuit current rating kA/s	Capacitance (Approx.) μF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
3	70	0.268	0.342	10.02	0.33	0.30	0.092
3	95	0.193	0.247	13.59	0.38	0.29	0.088
3	120	0.153	0.196	17.17	0.41	0.28	0.085
3	150	0.124	0.159	21.46	0.46	0.27	0.083
3	185	0.0991	0.128	26.47	0.50	0.26	0.081
3	240	0.0754	0.098	34.34	0.54	0.26	0.079
3	300	0.0601	0.080	42.93	0.57	0.25	0.078
3	400	0.047	0.064	57.23	0.61	0.25	0.077
3	500	0.0366	0.052	71.54	0.68	0.25	0.075
3	630	0.0283	0.042	90.14	0.75	0.25	0.074

OUR ACCREDITATION



POLYCAB MV CU BS 6622 3.8/6.6 KV

Medium Voltage Armoured Cable, 3.8/6.6 (7.2) KV AC

Current Carrying Capacity

No. of core	Nominal cross sectional area mm ²	Continuous Current Rating					
		Ground at 20°C		In single-way ducts		In air	
		Trefoil Amp.	Flat spaced Amp.	Trefoil ducts Amp.	Flat touching Amp.	Trefoil Amp.	Flat touching 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	550	525	454	911	837
1	630	660	586	571	482	1022	917
1	800	689	593	593	483	1102	959
1	1000	726	615	621	497	1191	1020

No. of core	Nominal cross sectional area mm ²	Continuous Current Rating		
		In ground at 20°C Amp.	In a buried duct Amp.	In air 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	803

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

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

OUR ACCREDITATION



POLYCAB MV CU BS 6622 6.35/11 KV

Medium Voltage Armoured Cable, 6.35/11 (12) KV AC

Single Core



Three Core



Outstanding Features

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

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.

Voltage Rating

Nominal Voltage: 6.35/11 (12) kV

Operation Temperature

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

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

Bending Radius:

Single core cable
Fixed Installation: 15 x Overall diameter
Three core cable
Fixed Installation: 12 x Overall diameter

Standard and References:

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

Test Voltage

25.5kV AC

Impulse Test Voltage

Peak 95kV AC

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



OUR ACCREDITATION



POLYCAB MV CU BS 6622 6.35/11 KV

Medium Voltage Armoured Cable, 6.35/11 (12) KV AC

Product Code	No. of Cores	Core Cross sectional Area mm ²	Nominal Diameter			Weight (Approx.) Kg/Km
			Under armour mm	Over armour mm	Overall mm	
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

OUR ACCREDITATION



POLYCAB MV CU BS 6622 6.35/11 KV

Medium Voltage Armoured Cable, 6.35/11 (12) KV AC

Electrical Characteristics:

No. of Cores	Nominal Cross sectional Area mm ²	Max. DC Resistance at 20°C Ω/km	Max. AC Resistance at 90°C Ω/km	Short circuit current rating kA/s	Capacitance (Approx.) μF/km	Inductance (Approx.) mH/km	Reactance (Approx.) 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
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

No. of Cores	Nominal Cross sectional Area mm ²	Max. DC Resistance at 20°C Ω/km	Max. AC Resistance at 90°C Ω/km	Short circuit current rating kA/s	Capacitance (Approx.) μF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
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

OUR ACCREDITATION



POLYCAB MV CU BS 6622 6.35/11 KV

Medium Voltage Armoured Cable, 6.35/11 (12) KV AC

Current Carrying Capacity

No. of core	Nominal cross sectional area mm ²	Continuous Current Rating					
		Ground at 20°C		In single-way ducts		In air	
		Trefoil Amp.	Flat spaced Amp.	Trefoil ducts Amp.	Flat touching Amp.	Trefoil Amp.	Flat touching 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 mm ²	Continuous Current Rating		
		In ground at 20°C Amp.	In a buried duct Amp.	In air 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
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

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

OUR ACCREDITATION



POLYCAB MV AL BS 6622 8.7/15 KV

Medium Voltage Armoured Cable, 8.7/15 (17.5) KV AC

Single Core



Three Core



Outstanding Features

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

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.

Voltage Rating

Nominal Voltage: 8.7/15 (17.5) kV

Operation Temperature

Max. operating temperature: +90°C

Max. Short Circuit Temperature: 250°C

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

Bending Radius:

Single core cable

Fixed Installation: 15 x Overall diameter

Three core cable

Fixed Installation: 12 x Overall diameter

Standard and References:

BS EN/IEC 60228

BS 7655-1.3/1.2

BS 7655-4.2/10.1

BS 6622

Test Voltage

35kV AC

Impulse Test Voltage

Peak 112kV AC

Compliance

Conductor resistance BS EN/IEC 60228

Insulation resistance BS 6622

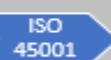
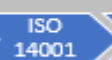
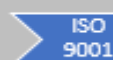
Flame Retardant test BS EN/IEC 60332-1-2

Partial Discharge test BS 6622

Approval



OUR ACCREDITATION



POLYCAB MV AL BS 6622 8.7/15 KV

Medium Voltage Armoured Cable, 8.7/15 (17.5) KV AC

Product Code	No. of Cores	Nominal Cross sectional Area mm ²	Nominal Diameter			Weight (Approx.) Kg/Km
			Under armour mm	Over armour mm	Overall mm	
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

OUR ACCREDITATION



POLYCAB MV AL BS 6622 8.7/15 KV

Medium Voltage Armoured Cable, 8.7/15 (17.5) KV AC

Electrical Characteristics:

No. of Cores	Nominal Cross sectional Area mm ²	Max. DC Resistance at 20°C Ω/km	Max. AC Resistance at 90°C Ω/km	Short circuit current rating kA/s	Capacitance (Approx.) μF/km	Inductance (Approx.) mH/km	Reactance (Approx.) 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
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

No. of Cores	Nominal Cross sectional Area mm ²	Max. DC Resistance at 20°C Ω/km	Max. AC Resistance at 90°C Ω/km	Short circuit current rating kA/s	Capacitance (Approx.) μF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
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

OUR ACCREDITATION



POLYCAB MV AL BS 6622 8.7/15 KV

Medium Voltage Armoured Cable, 8.7/15 (17.5) KV AC

Current Carrying Capacity

No. of core	Nominal cross sectional area mm ²	Continues Current Rating					
		Buried direct in the ground		In single-way ducts		In air	
		Trefoil Amp.	Flat spaced Amp.	Trefoil ducts Amp.	Flat touching Amp.	Trefoil Amp.	Flat touching 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
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 mm ²	Continues current capacity		
		In ground at 20°C Amp.	In a buried duct Amp.	In air 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

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

OUR ACCREDITATION



POLYCAB MV AL BS 6622 12.7/22 KV

Medium Voltage Armoured Cable, 12.7/22 (24) KV AC

Single Core



Three Core



Outstanding Features

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

Application

POLYCAB MV AL BS 6622 12.7/22 KV XLPE insulated with aluminium conductor single & multi core cable is suitable to use for power networks, underground and in cable ducting.

Voltage Rating

Nominal Voltage: 12.7/22 (24) kV

Operation Temperature

Max. operating temperature: +90°C

Max. Short Circuit Temperature: 250°C

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

Standard and References:

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

Test Voltage

51kV AC

Impulse Test Voltage

Peak 144kV AC

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



Bending Radius:

Single core cable

Fixed Installation: 15 x Overall diameter

Three core cable

Fixed Installation: 12 x Overall diameter

OUR ACCREDITATION



POLYCAB MV AL BS 6622 12.7/22 KV

Medium Voltage Armoured Cable, 12.7/22 (24) KV AC

Product Code	No. of Cores	Nominal Cross sectional Area mm ²	Nominal Diameter			Weight (Approx.) Kg/Km
			Under armour mm	Over armour mm	Overall mm	
MVBS19AXAWY2001C070S	1	70	25.0	28.2	32.0	1250
MVBS19AXAWY2001C095S	1	95	26.8	30.8	35.0	1500
MVBS19AXAWY2001C120S	1	120	28.8	32.8	37.0	1700
MVBS19AXAWY2001C150S	1	150	30.5	34.5	39.0	1850
MVBS19AXAWY2001C185S	1	185	32.2	36.2	41.0	2050
MVBS19AXAWY2001C240S	1	240	34.6	38.6	43.0	2350
MVBS19AXAWY2001C300S	1	300	37.1	41.1	46.0	2650
MVBS19AXAWY2001C400S	1	400	40.7	45.7	51.0	3300
MVBS19AXAWY2001C500S	1	500	44.0	49.0	54.0	3850
MVBS19AXAWY2001C630S	1	630	47.4	52.4	58.0	4400
MVBS19AXAWY2001C800S	1	800	51.9	56.9	63.0	5200
MVBS19AXAWY2001C01KS	1	1000	56.2	61.2	67.0	6100
MVBS19AXSWY2003C070S	3	70	53.1	58.1	64.0	6000
MVBS19AXSWY2003C095S	3	95	56.9	61.9	68.0	6700
MVBS19AXSWY2003C120S	3	120	60.3	65.3	72.0	7350
MVBS19AXSWY2003C150S	3	150	64.4	70.7	78.0	9050
MVBS19AXSWY2003C185S	3	185	68.0	74.3	81.0	9850
MVBS19AXSWY2003C240S	3	240	73.4	79.7	87.0	11150
MVBS19AXSWY2003C300S	3	300	78.8	85.1	93.0	12500
MVBS19AXSWY2003C400S	3	400	85.7	92.0	100.0	14400
MVBS19AXAWY2003C500S	3	500	93.2	99.5	108.0	16550
MVBS19AXAWY2003C630S	3	630	100.5	106.8	116.0	18950

OUR ACCREDITATION



POLYCAB MV AL BS 6622 12.7/22 KV

Medium Voltage Armoured Cable, 12.7/22 (24) KV AC

Electrical Characteristics:

No. of Cores	Nominal Cross sectional Area mm ²	Max. DC Resistance at 20°C Ω/km	Max. AC Resistance at 90°C Ω/km	Short circuit current rating kA/s	Capacitance (Approx.) μF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
1	70	0.443	0.568	6.61	0.19	0.41	0.13
1	95	0.320	0.411	8.98	0.21	0.40	0.13
1	120	0.253	0.325	11.34	0.23	0.38	0.12
1	150	0.206	0.265	14.17	0.25	0.37	0.12
1	185	0.164	0.211	17.48	0.27	0.36	0.11
1	240	0.125	0.161	22.68	0.30	0.34	0.11
1	300	0.100	0.129	28.35	0.33	0.33	0.10
1	400	0.0778	0.101	37.79	0.37	0.33	0.10
1	500	0.0605	0.080	47.24	0.439	0.264	0.083
1	630	0.0469	0.063	59.52	0.481	0.255	0.080
1	800	0.0367	0.051	75.59	0.533	0.247	0.078
1	1000	0.0291	0.042	94.48	0.588	0.239	0.075

No. of Cores	Nominal Cross sectional Area mm ²	Max. DC Resistance at 20°C Ω/km	Max. AC Resistance at 90°C Ω/km	Short circuit current rating kA/s	Capacitance (Approx.) μF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
3	70	0.443	0.568	6.61	0.19	0.35	0.11
3	95	0.320	0.411	8.98	0.21	0.34	0.11
3	120	0.253	0.325	11.34	0.23	0.32	0.10
3	150	0.206	0.265	14.17	0.25	0.31	0.10
3	185	0.164	0.211	17.48	0.27	0.30	0.10
3	240	0.125	0.161	22.68	0.30	0.29	0.09
3	300	0.100	0.129	28.35	0.33	0.28	0.09
3	400	0.0778	0.101	37.79	0.37	0.27	0.09
3	500	0.0605	0.080	47.24	0.41	0.27	0.08
3	630	0.0469	0.063	59.52	0.45	0.26	0.08

OUR ACCREDITATION



POLYCAB MV AL BS 6622 12.7/22 KV

Medium Voltage Armoured Cable, 12.7/22 (24) KV AC

Current Carrying Capacity

No. of core	Nominal cross sectional area mm ²	Continues Current Rating					
		Buried direct in the ground		In single-way ducts		In air	
		Trefoil Amp.	Flat spaced Amp.	Trefoil ducts Amp.	Flat touching Amp.	Trefoil Amp.	Flat touching 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
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	483	450	415	367	746	705
1	630	536	489	458	396	847	787
1	800	586	525	513	434	953	868
1	1000	618	549	538	450	1038	936

No. of core	Nominal cross sectional area mm ²	Continues current capacity		
		In ground at 20°C Amp.	In a buried duct Amp.	In air 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	490	441	658

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

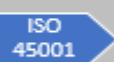
Current rating de-rating factors for other than 30°C ambient air temperature.

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

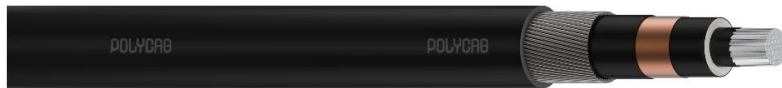
OUR ACREDITATION



POLYCAB MV AL BS 6622 19/33 KV

Medium Voltage Armoured Cable, 19/33 (36) KV AC

Single Core



Three Core



Outstanding Features

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

Application

POLYCAB MV AL BS 6622 19/33 KV XLPE insulated with aluminium conductor single & multi core cable is suitable to use for power networks, underground and in cable ducting.

Voltage Rating

Nominal Voltage: 19/33 (36) kV

Operation Temperature

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

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

Bending Radius:

Single core cable
Fixed Installation: 15 x Overall diameter
Three core cable
Fixed Installation: 12 x Overall diameter

Standard and References:

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

Test Voltage

76kV AC

Impulse Test Voltage

Peak 194kV AC

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



OUR ACCREDITATION



POLYCAB MV AL BS 6622 19/33 KV

Medium Voltage Armoured Cable, 19/33 (36) KV AC

Product Code	No. of Cores	Nominal Cross sectional Area mm ²	Nominal Diameter			Weight (Approx.) Kg/Km
			Under armour mm	Over armour Mm	Overall mm	
MVBS20AXAWY2001C070S	1	70	30.4	34.4	39.0	1750
MVBS20AXAWY2001C095S	1	95	32.2	36.2	41.0	1900
MVBS20AXAWY2001C120S	1	120	33.8	37.8	42.0	2100
MVBS20AXAWY2001C150S	1	150	35.5	39.5	44.0	2300
MVBS20AXAWY2001C185S	1	185	37.2	42.2	47.0	2650
MVBS20AXAWY2001C240S	1	240	40.0	45.0	50.0	3000
MVBS20AXAWY2001C300S	1	300	42.5	47.5	53.0	3400
MVBS20AXAWY2001C400S	1	400	45.7	50.7	56.0	3850
MVBS20AXAWY2001C500S	1	500	49.0	54.0	60.0	4400
MVBS20AXAWY2001C630S	1	630	52.8	57.8	64.0	5100
MVBS20AXAWY2001C800S	1	800	56.9	61.9	68.0	5850
MVBS20AXAWY2001C01KS	1	1000	61.2	66.2	72.0	6750
MVBS20AXSWY2003C070S	3	70	64.3	70.6	77.0	8700
MVBS20AXSWY2003C095S	3	95	68.1	74.4	81.0	9450
MVBS20AXSWY2003C120S	3	120	71.5	77.8	85.0	10250
MVBS20AXSWY2003C150S	3	150	75.2	81.5	89.0	11100
MVBS20AXSWY2003C185S	3	185	78.8	85.1	93.0	12050
MVBS20AXSWY2003C240S	3	240	84.2	90.5	99.0	13400
MVBS20AXSWY2003C300S	3	300	90.0	96.3	105.0	15000
MVBS20AXSWY2003C400S	3	400	96.9	103.2	112.0	17050
MVBS20AXSWY2003C500S	3	500	104.0	110.3	120.0	19250
MVBS20AXSWY2003C630S	3	630	111.3	117.6	127.0	21700

OUR ACREDITATION



POLYCAB MV AL BS 6622 19/33 KV

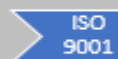
Medium Voltage Armoured Cable, 19/33 (36) KV AC

Electrical Characteristics:

No. of Cores	Nominal Cross sectional Area mm ²	Max. DC Resistance at 20°C Ω/km	Max. AC Resistance at 90°C Ω/km	Short circuit current rating kA/s	Capacitance (Approx.) μF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
1	70	0.443	0.568	6.61	0.15	0.45	0.14
1	95	0.320	0.411	8.98	0.16	0.43	0.13
1	120	0.253	0.325	11.34	0.18	0.41	0.13
1	150	0.206	0.265	14.17	0.19	0.40	0.12
1	185	0.164	0.211	17.48	0.21	0.39	0.12
1	240	0.125	0.161	22.68	0.23	0.37	0.12
1	300	0.100	0.129	28.35	0.25	0.36	0.11
1	400	0.0778	0.101	37.79	0.28	0.35	0.11
1	500	0.0605	0.080	47.24	0.321	0.283	0.089
1	630	0.0469	0.063	59.52	0.350	0.274	0.086
1	800	0.0367	0.051	75.59	0.386	0.263	0.083
1	1000	0.0291	0.042	94.48	0.424	0.254	0.080

No. of Cores	Nominal Cross sectional Area mm ²	Max. DC Resistance at 20°C Ω/km	Max. AC Resistance at 90°C Ω/km	Short circuit current rating kA/s	Capacitance (Approx.) μF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
3	70	0.443	0.568	6.61	0.15	0.39	0.12
3	95	0.320	0.411	8.98	0.16	0.37	0.12
3	120	0.253	0.325	11.34	0.18	0.36	0.11
3	150	0.206	0.265	14.17	0.19	0.35	0.11
3	185	0.164	0.211	17.48	0.21	0.34	0.11
3	240	0.125	0.161	22.68	0.23	0.32	0.10
3	300	0.100	0.129	28.35	0.25	0.31	0.10
3	400	0.0778	0.101	37.79	0.28	0.30	0.09
3	500	0.0605	0.080	47.24	0.31	0.289	0.091
3	630	0.0469	0.063	59.52	0.33	0.281	0.088

OUR ACCREDITATION



POLYCAB MV AL BS 6622 19/33 KV

Medium Voltage Armoured Cable, 19/33 (36) KV AC

Current Carrying Capacity

No. of core	Nominal cross sectional area mm ²	Continues Current Rating					
		Buried direct in the ground		In single-way ducts		In air	
		Trefoil Amp.	Flat spaced Amp.	Trefoil ducts Amp.	Flat touching Amp.	Trefoil Amp.	Flat touching 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
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	483	450	415	367	746	705
1	630	536	489	458	396	847	787
1	800	586	525	513	434	953	868
1	1000	618	549	538	450	1038	936

No. of core	Nominal cross sectional area mm ²	Continues current capacity		
		In ground at 20°C Amp.	In a buried duct Amp.	In air 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	490	441	658

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

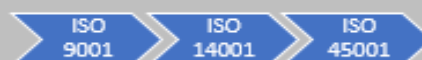
Current rating de-rating factors for other than 30°C ambient air temperature.

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

OUR ACREDITATION



POLYCAB MV AL BS 6622 3.8/6.6 KV

Medium Voltage Armoured Cable, 3.8/6.6 (7.2) KV AC

Single Core



Three Core



Outstanding Features

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

Application

POLYCAB MV AL BS 6622 3.8/6.6 KV XLPE insulated with aluminium conductor single & multi core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 3.8/6.6 (7.2) kV

Operation Temperature

Max. operating temperature: +90°C

Max. Short Circuit Temperature: 250°C

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

Standard and References:

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

Test Voltage

15kV AC

Impulse Test Voltage

Peak 75kV AC

Compliance

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

Approval



Bending Radius:

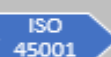
Single core cable

Fixed Installation: 15 x Overall diameter

Three core cable

Fixed Installation: 12 x Overall diameter

OUR ACCREDITATION



POLYCAB MV AL BS 6622 3.8/6.6 KV

Medium Voltage Armoured Cable, 3.8/6.6 (7.2) KV AC

Product Code	No. of Cores	Nominal Cross sectional Area mm ²	Nominal Diameter			Weight (Approx.) Kg/Km
			Under armour mm	Over armour mm	Overall mm	
MVBS21AXAWY2001C070S	1	70	19.00	22.20	26.0	850
MVBS21AXAWY2001C095S	1	95	20.80	24.00	28.0	1000
MVBS21AXAWY2001C120S	1	120	22.40	25.60	29.5	1150
MVBS21AXAWY2001C150S	1	150	24.10	27.30	31.5	1300
MVBS21AXAWY2001C185S	1	185	25.80	29.00	33.0	1450
MVBS21AXAWY2001C240S	1	240	28.80	32.80	37.0	1850
MVBS21AXAWY2001C300S	1	300	31.70	35.70	40.5	2200
MVBS21AXAWY2001C400S	1	400	35.30	39.30	44.0	2650
MVBS21AXAWY2001C500S	1	500	39.00	44.00	49.0	3300
MVBS21AXAWY2001C630S	1	630	42.90	47.90	53.0	3900
MVBS21AXAWY2001C800S	1	800	46.90	51.90	57.5	4600
MVBS21AXAWY2001C01KS	1	1000	51.60	56.60	62.5	5450
MVBS21AXSWY2003C070S	3	70	39.70	44.70	50.0	4050
MVBS21AXSWY2003C095S	3	95	43.60	48.60	54.0	4700
MVBS21AXSWY2003C120S	3	120	46.90	51.90	58.0	5250
MVBS21AXSWY2003C150S	3	150	51.10	56.10	62.0	6050
MVBS21AXSWY2003C185S	3	185	54.70	59.70	66.0	6700
MVBS21AXSWY2003C240S	3	240	60.40	65.40	72.0	8000
MVBS21AXSWY2003C300S	3	300	67.10	73.40	80.0	10150
MVBS21AXSWY2003C400S	3	400	74.90	81.20	89.0	12100
MVBS21AXSWY2003C500S	3	500	82.00	88.30	96.0	14000
MVBS21AXSWY2003C630S	3	630	89.90	96.20	104.0	16400

OUR ACCREDITATION



POLYCAB MV AL BS 6622 3.8/6.6 KV

Medium Voltage Armoured Cable, 3.8/6.6 (7.2) KV AC

Electrical characteristics:

No. of Cores No.	Nominal Cross sectional Area mm ²	Max. DC Resistance at 20°C Ω/km	Max. AC Resistance at 90°C Ω/km	Short circuit current rating kA/s	Capacitance (Approx.) μF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
1	70	0.443	0.568	6.61	0.33	0.37	0.12
1	95	0.320	0.411	8.98	0.38	0.35	0.11
1	120	0.253	0.325	11.34	0.41	0.34	0.11
1	150	0.206	0.265	14.17	0.46	0.33	0.10
1	185	0.164	0.211	17.48	0.50	0.32	0.10
1	240	0.125	0.161	22.68	0.54	0.31	0.10
1	300	0.100	0.129	28.35	0.57	0.31	0.10
1	400	0.0778	0.101	37.79	0.61	0.30	0.09
1	500	0.0605	0.080	47.24	0.708	0.24	0.08
1	630	0.0469	0.063	59.52	0.784	0.24	0.07
1	800	0.0367	0.051	75.59	0.870	0.23	0.07
1	1000	0.0291	0.042	94.48	0.963	0.22	0.07

No. of Cores No.	Nominal Cross sectional Area mm ²	Max. DC Resistance at 20°C Ω/km	Max. AC Resistance at 90°C Ω/km	Short circuit current rating kA/s	Capacitance (Approx.) μF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
3	70	0.443	0.568	6.61	0.33	0.30	0.092
3	95	0.320	0.411	8.98	0.38	0.29	0.088
3	120	0.253	0.325	11.34	0.41	0.28	0.085
3	150	0.206	0.265	14.17	0.46	0.27	0.083
3	185	0.164	0.211	17.48	0.50	0.26	0.081
3	240	0.125	0.161	22.68	0.54	0.26	0.079
3	300	0.100	0.129	28.35	0.57	0.25	0.078
3	400	0.0778	0.101	37.79	0.61	0.25	0.077
3	500	0.0605	0.080	47.24	0.68	0.25	0.075
3	630	0.0469	0.063	59.52	0.75	0.25	0.074

OUR ACCREDITATION



POLYCAB MV AL BS 6622 3.8/6.6 KV

Medium Voltage Armoured Cable, 3.8/6.6 (7.2) KV AC

Current Carrying Capacity

No. of core	Nominal cross sectional area mm ²	Continuous Current Rating					
		Buried direct in the ground		In single-way ducts		In air	
		Trefoil Amp.	Flat spaced Amp.	Trefoil ducts Amp.	Flat touching Amp.	Trefoil Amp.	Flat touching 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
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	513	481	421	855	798
1	800	596	535	514	435	949	858
1	1000	643	565	550	457	1049	931

No. of core	Nominal cross sectional area mm ²	Continuous current capacity		
		In ground at 20°C Amp.	In a buried duct Amp.	In air 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

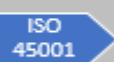
Current rating de-rating factors for other than 30°C ambient air temperature.

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

OUR ACCREDITATION



POLYCAB MV AL BS 6622 6.35/11 KV

Medium Voltage Armoured Cable, 6.35/11 (12) KV AC

Single Core



Three Core



Outstanding Features

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

Application

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

Voltage Rating

Nominal Voltage: 6.35/11 (12) kV

Operation Temperature

Max. operating temperature: +90°C

Max. Short Circuit Temperature: 250°C

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

Standard and References:

BS EN/IEC 60228

BS 7655-1.3/1.2

BS 7655-4.2/10.1

BS 6622

Test Voltage

25.5kV AC

Impulse Test Voltage

Peak 95kV AC

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



Bending Radius:

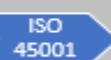
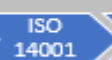
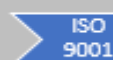
Single core cable

Fixed Installation: 15 x Overall diameter

Three core cable

Fixed Installation: 12 x Overall diameter

OUR ACCREDITATION



POLYCAB MV AL BS 6622 6.35/11 KV

Medium Voltage Armoured Cable, 6.35/11 (12) KV AC

Product Code	No. of Cores	Nominal Cross sectional Area mm ²	Nominal Diameter			Weight (Approx.) Kg/Km
			Under armour mm	Over armour mm	Overall mm	
MVBS22AXAWY2001C070S	1	70	20.8	24.0	28.0	950
MVBS22AXAWY2001C095S	1	95	22.6	25.8	30.0	1100
MVBS22AXAWY2001C120S	1	120	24.2	27.4	31.0	1250
MVBS22AXAWY2001C150S	1	150	25.9	29.1	33.0	1400
MVBS22AXAWY2001C185S	1	185	28.0	32.0	36.0	1700
MVBS22AXAWY2001C240S	1	240	30.4	34.4	39.0	1950
MVBS22AXAWY2001C300S	1	300	32.9	36.9	41.0	2250
MVBS22AXAWY2001C400S	1	400	36.1	40.1	45.0	2700
MVBS22AXAWY2001C500S	1	500	39.4	44.4	49.0	3300
MVBS22AXAWY2001C630S	1	630	43.2	48.2	53.0	3950
MVBS22AXAWY2001C800S	1	800	47.3	52.3	58.0	4650
MVBS22AXAWY2001C01KS	1	1000	52.0	57.0	63.0	5500
MVBS22AXSWY2003C070S	3	70	43.6	48.6	54.0	4600
MVBS22AXSWY2003C095S	3	95	47.5	52.5	58.0	5250
MVBS22AXSWY2003C120S	3	120	51.2	56.2	62.0	5900
MVBS22AXSWY2003C150S	3	150	55.0	60.0	66.0	6650
MVBS22AXSWY2003C185S	3	185	58.6	63.6	70.0	7350
MVBS22AXSWY2003C240S	3	240	63.9	70.2	77.0	9250
MVBS22AXSWY2003C300S	3	300	69.7	76.0	83.0	10700
MVBS22AXSWY2003C400S	3	400	76.6	82.9	90.0	12450
MVBS22AXSWY2003C500S	3	500	83.7	90.0	98.0	14400
MVBS22AXSWY2003C630S	3	630	91.4	97.7	106.0	16700

OUR ACCREDITATION



POLYCAB MV AL BS 6622 6.35/11 KV

Medium Voltage Armoured Cable, 6.35/11 (12) KV AC

Electrical Characteristics:

No. of Cores	Nominal Cross sectional Area mm ²	Max. DC Resistance at 20°C Ω/km	Max. AC Resistance at 90°C Ω/km	Short circuit current rating kA/s	Capacitance (Approx.) μF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
1	70	0.443	0.568	6.61	0.26	0.38	0.12
1	95	0.320	0.411	8.98	0.30	0.37	0.12
1	120	0.253	0.325	11.34	0.33	0.35	0.11
1	150	0.206	0.265	14.17	0.36	0.34	0.11
1	185	0.164	0.211	17.48	0.39	0.34	0.11
1	240	0.125	0.161	22.68	0.44	0.32	0.10
1	300	0.100	0.129	28.35	0.49	0.31	0.10
1	400	0.0778	0.101	37.79	0.55	0.30	0.09
1	500	0.0605	0.080	47.24	0.670	0.245	0.077
1	630	0.0469	0.063	59.52	0.739	0.239	0.075
1	800	0.0367	0.051	75.59	0.823	0.231	0.073
1	1000	0.0291	0.042	94.48	0.911	0.225	0.071

No. of Cores	Nominal Cross sectional Area mm ²	Max. DC Resistance at 20°C Ω/km	Max. AC Resistance at 90°C Ω/km	Short circuit current rating kA/s	Capacitance (Approx.) μF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
3	70	0.443	0.568	6.61	0.26	0.31	0.098
3	95	0.320	0.411	8.98	0.30	0.30	0.094
3	120	0.253	0.325	11.34	0.33	0.29	0.090
3	150	0.206	0.265	14.17	0.36	0.28	0.088
3	185	0.164	0.211	17.48	0.39	0.27	0.086
3	240	0.125	0.161	22.68	0.44	0.26	0.083
3	300	0.100	0.129	28.35	0.49	0.26	0.081
3	400	0.0778	0.101	37.79	0.55	0.25	0.078
3	500	0.0605	0.080	47.24	0.61	0.244	0.077
3	630	0.0469	0.063	59.52	0.67	0.239	0.075

OUR ACCREDITATION



POLYCAB MV AL BS 6622 6.35/11 KV

Medium Voltage Armoured Cable, 6.35/11 (12) KV AC

Current Carrying Capacity

No. of core	Nominal cross sectional area mm ²	Continues Current Rating					
		Buried direct in the ground		In single-way ducts		In air	
		Trefoil Amp.	Flat spaced Amp.	Trefoil ducts Amp.	Flat touching Amp.	Trefoil Amp.	Flat touching 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
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 mm ²	Continues current capacity		
		In ground at 20°C Amp.	In a buried duct Amp.	In air 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

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

OUR ACREDITATION

