Polycab, Medium Voltage Copper Wire Screened Power cable conforming to BS 7870-4-10.

These includes medium voltage copper wire screened cable confirming the construction and performance of voltage rating 6.35/11 (12) KV, 12.7/22 (24) KV and 19/33 (36) KV as per BS 7870-4-10. These cables are designed use in power networks, underground direct buried or in cable ducting.

These cables are available in single core and triplex formation 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 wire and copper tape.

Separator: Water swellable tape applied below and over the metallic screen.

Sheath: In-house developed Medium density polyethylene or Low smoke zero halogen compounding 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 7870-4-10.

POLYCAB MV CU BS 7870-4-10 6.35/11 KV - Medium Voltage Copper wire screened Cable, 6.35/11 (12) KV AC

POLYCAB MV CU BS 7870-4-10 12.7/22 KV - Medium Voltage Copper wire screened Cable, 12.7/22 (24) KV AC

POLYCAB MV CU BS 7870-4-10 19/33 KV - Medium Voltage Copper wire screened Cable, 19/33 (36) KV AC

POLYCAB MV AL BS 7870-4-10 6.35/11 KV - Medium Voltage Copper wire screened Cable, 6.35/11 (12) KV AC

POLYCAB MV AL BS 7870-4-10 12.7/22 KV - Medium Voltage Copper wire screened Cable, 12.7/22 (24) KV AC

POLYCAB MV AL BS 7870-4-10 19/33 KV - Medium Voltage Copper wire screened Cable, 19/33 (36) KV AC

POLYCAB MV AL BS 7870-4-10 6.35/11 KV Triplex - Medium Voltage Copper wire screened Cable, 6.35/11 (12) KV AC

POLYCAB MV AL BS 7870-4-10 12.7/22 KV Triplex - Medium Voltage Copper wire screened Cable, 12.7/22 (24) KV AC

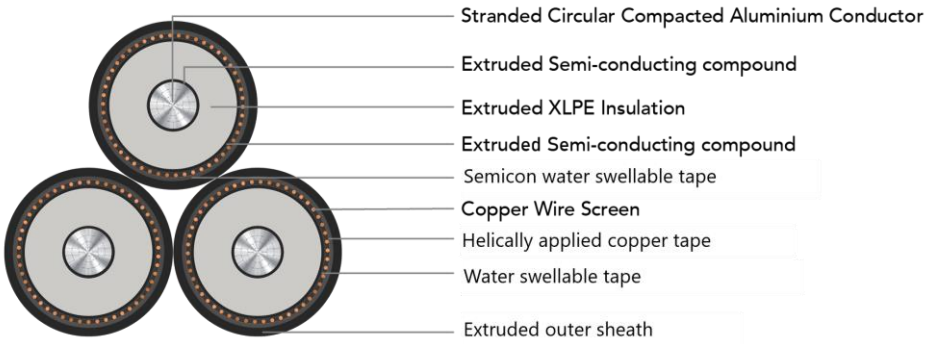
POLYCAB MV AL BS 7870-4-10 19/33 KV Triplex - Medium Voltage Copper wire screened Cable, 19/33 (36) KV AC

POLYCAB MV CU BS 7870-4-10 6.35/11 KV Triplex - Medium Voltage Copper wire screened Cable, 6.35/11 (12) KV AC

POLYCAB MV CU BS 7870-4-10 12.7/22 KV Triplex - Medium Voltage Copper wire screened Cable, 12.7/22 (24) KV AC

POLYCAB MV CU BS 7870-4-10 19/33 KV Triplex - Medium Voltage Copper wire screened Cable, 19/33 (36) KV AC

POLYCAB MV AL BS 7870-4-10 12.7/22 KV Triplex
Medium Voltage Copper wire screened Cable, 12.7/22 (24) KV AC



Outstanding Features

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

Application

POLYCAB MV AL BS 7870-4-10 12.7/22 KV compacted aluminium conductor XLPE insulated, copper wire screened cable generally confirming to BS 7870-4-10. These cables are designed for power networks, underground direct buried or 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: Insulation: XLPE as per BS 7870-1
  - EPR can be provided on demand as per BS 7870-1
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound (Bonded or Cold strippable)
- Separation tape: Semicon water swellable tape
- Metallic Insulation Screen: Copper wire & Copper tape screen
- Separation tape: Plain water swellable tape
- Outer Sheath: Extruded medium density polyethylene or Low smoke zero halogen compound as per BS 7870-1, Colour: Black

Bending Radius:

Fixed Installation: 20 x Overall diameter

Standard and References:

BS EN/IEC 60228
BS 7870-1
BS 7870-4-10

Test Voltage

51kV AC

Impulse Test Voltage

Peak 144kV AC

Compliance

Conductor resistance	BS EN/IEC 60228
Insulation resistance	BS 7870-4-10
Flame Retardant test	BS EN/IEC 60332-1-2
Partial Discharge test	BS 7870-4-10
Smoke Emission test	BS EN/IEC 61034-2

POLYCAB MV AL BS 7870-4-10 12.7/22 KV Triplex

Medium Voltage Copper wire screened Cable, 12.7/22 (24) KV AC

Product Code	No. of Cores	Nominal Cross sectional Area mm^2	Nominal area of metallic screen mm^2	Overall diameter (Approx.) mm	Weight (Approx.) Kg/Km
MVBS19AXAWPM001C070S	3 x 1 (triplex)	70	35	63.3	3150
MVBS19AXAWPM001C095S	3 x 1 (triplex)	95	35	66.8	3450
MVBS19AXAWPM001C120S	3 x 1 (triplex)	120	35	70.2	3900
MVBS19AXAWPM001C150S	3 x 1 (triplex)	150	35	73.7	4200
MVBS19AXAWPM001C185S	3 x 1 (triplex)	185	35	77.4	4650
MVBS19AXAWPM001C240S	3 x 1 (triplex)	240	35	82.6	5400
MVBS19AXAWPM001C300S	3 x 1 (triplex)	300	35	87.5	6150
MVBS19AXAWPM001C400S	3 x 1 (triplex)	400	35	94.2	7200
MVBS19AXAWPM001C500S	3 x 1 (triplex)	500	35	101.1	8400
MVBS19AXAWPM001C630S	3 x 1 (triplex)	630	35	108.5	9750
MVBS19AXAWPM001C800S	3 x 1 (triplex)	800	35	124.2	11850
MVBS19AXAWPM001C01KS	3 x 1 (triplex)	1000	35	134	13950

Electrical Characteristics:

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 of conductor kA/s	Short circuit current rating of metallic screen kA/s	Capacitance (Approx.) µF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
70	0.443	0.565	6.61	4.5	0.19	0.41	0.13
95	0.320	0.408	8.98	4.5	0.21	0.39	0.12
120	0.253	0.323	11.34	4.5	0.23	0.38	0.12
150	0.206	0.263	14.17	4.5	0.25	0.36	0.11
185	0.164	0.210	17.48	4.5	0.27	0.35	0.11
240	0.125	0.161	22.68	4.5	0.30	0.34	0.11
300	0.100	0.129	28.35	4.5	0.33	0.33	0.10
400	0.0778	0.101	37.79	4.5	0.37	0.31	0.10
500	0.0605	0.080	47.24	4.5	0.41	0.25	0.08
630	0.0469	0.064	59.52	4.5	0.45	0.24	0.08
800	0.0367	0.052	75.59	4.5	0.53	0.23	0.07
1000	0.0291	0.044	94.48	4.5	0.59	0.22	0.07

POLYCAB MV AL BS 7870-4-10 12.7/22 KV Triplex

Medium Voltage Copper wire screened Cable, 12.7/22 (24) KV AC

Current Carrying Capacity

Nominal cross sectional area mm²	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.
70	186	192	176	178	230	236
95	221	229	210	213	280	287
120	252	260	240	242	324	332
150	281	288	267	271	368	376
185	317	324	303	307	424	432
240	367	373	351	356	502	511
300	414	419	397	402	577	586
400	470	466	451	457	673	676
500	507	480	441	396	748	712
630	565	524	490	429	856	798
800	608	546	524	444	949	859
1000	655	575	560	465	1049	931

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.

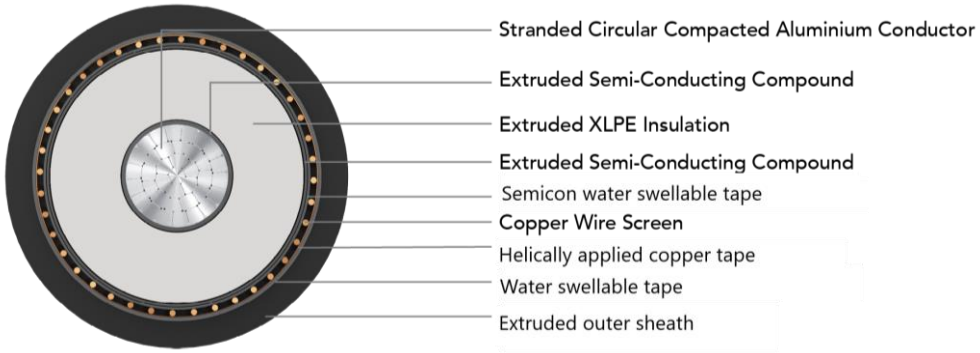
Air Temperature	20	25	35	40	45	50	55	60
De-rating factor	1.08	1.04	0.96	0.91	0.87	0.82	0.76	0.71

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

POLYCAB MV AL BS 7870-4-10 12.7/22 KV

Medium Voltage Copper wire screened Cable, 12.7/22 (24) KV AC



Outstanding Features

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

Application

POLYCAB MV AL BS 7870-4-10 12.7/22 KV compacted aluminium conductor XLPE insulated, copper wire screened single core cable is designed to use for power networks, underground direct buried or 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: Insulation: XLPE as per BS 7870-1
  - EPR can be provided on demand as per BS 7870-1
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound (Bonded or Cold strippble)
- Separation tape: Semicon water swellable tape
- Metallic Insulation Screen: Copper wire & Copper tape screen
- Separation tape: Plain water swellable tape
- Outer Sheath: Extruded medium density polyethylene or Low smoke zero halogen compound as per BS 7870-1, Colour: Black

Bending Radius:

Fixed Installation: 20 x Overall diameter

Standard and References:

BS EN/IEC 60228
BS 7870-1
BS 7870-4-10

Test Voltage

51kV AC

Impulse Test Voltage

Peak 144kV AC

Compliance

Conductor resistance	BS EN/IEC 60228
Insulation resistance	BS 7870-4-10
Flame Retardant test	BS EN/IEC 60332-1-2
Partial Discharge test	BS 7870-4-10
Smoke Emission test	BS EN/IEC 61034-2

POLYCAB MV AL BS 7870-4-10 12.7/22 KV

Medium Voltage Copper wire screened Cable, 12.7/22 (24) KV AC

Product Code	No. of Cores	Nominal Cross sectional Area mm^2	Nominal area of metallic screen mm^2	Overall diameter (Approx.) mm	Weight (Approx.) Kg/Km
MVBS19AXAWPM001C070S	1	70	35	29.3	1050
MVBS19AXAWPM001C095S	1	95	35	30.9	1150
MVBS19AXAWPM001C120S	1	120	35	32.5	1300
MVBS19AXAWPM001C150S	1	150	35	34.1	1400
MVBS19AXAWPM001C185S	1	185	35	35.8	1550
MVBS19AXAWPM001C240S	1	240	35	38.2	1800
MVBS19AXAWPM001C300S	1	300	35	40.5	2050
MVBS19AXAWPM001C400S	1	400	35	43.6	2400
MVBS19AXAWPM001C500S	1	500	35	46.8	2800
MVBS19AXAWPM001C630S	1	630	35	50.2	3250
MVBS19AXAWPM001C800S	1	800	35	57.5	3950
MVBS19AXAWPM001C01KS	1	1000	35	62.0	4650

Electrical Characteristics:

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 of conductor kA/s	Short circuit current rating of metallic screen kA/s	Capacitance (Approx.) µF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
70	0.443	0.565	6.61	4.5	0.19	0.41	0.13
95	0.320	0.408	8.98	4.5	0.21	0.39	0.12
120	0.253	0.323	11.34	4.5	0.23	0.38	0.12
150	0.206	0.263	14.17	4.5	0.25	0.36	0.11
185	0.164	0.210	17.48	4.5	0.27	0.35	0.11
240	0.125	0.161	22.68	4.5	0.30	0.34	0.11
300	0.100	0.129	28.35	4.5	0.33	0.33	0.10
400	0.0778	0.101	37.79	4.5	0.37	0.31	0.10
500	0.0605	0.080	47.24	4.5	0.41	0.25	0.08
630	0.0469	0.064	59.52	4.5	0.45	0.24	0.08
800	0.0367	0.052	75.59	4.5	0.53	0.23	0.07
1000	0.0291	0.044	94.48	4.5	0.59	0.22	0.07

POLYCAB MV AL BS 7870-4-10 12.7/22 KV

Medium Voltage Copper wire screened Cable, 12.7/22 (24) KV AC

Current Carrying Capacity

Nominal cross sectional area mm²	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.
70	186	192	176	178	230	236
95	221	229	210	213	280	287
120	252	260	240	242	324	332
150	281	288	267	271	368	376
185	317	324	303	307	424	432
240	367	373	351	356	502	511
300	414	419	397	402	577	586
400	470	466	451	457	673	676
500	507	480	441	396	748	712
630	565	524	490	429	856	798
800	608	546	524	444	949	859
1000	655	575	560	465	1049	931

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.

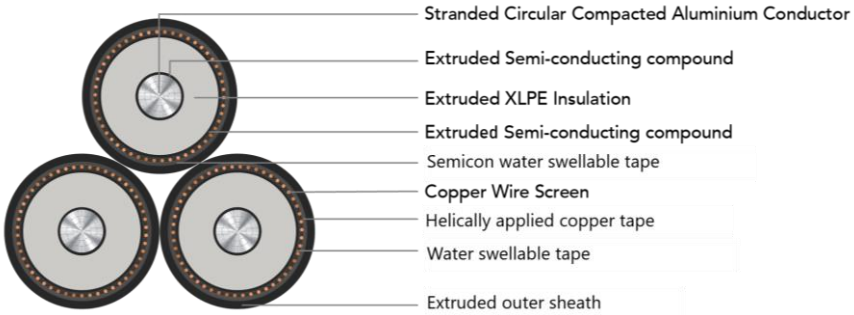
Air Temperature	20	25	35	40	45	50	55	60
De-rating factor	1.08	1.04	0.96	0.91	0.87	0.82	0.76	0.71

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

POLYCAB MV AL BS 7870-4-10 19/33 KV Triplex

Medium Voltage Copper wire screened Cable, 19/33 (36) KV AC



Outstanding Features

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

Application

POLYCAB MV AL BS 7870-4-10 19/33 KV compacted aluminium conductor XLPE insulated, copper wire screened cable generally confirming to BS 7870-4-10. These cables are designed for power networks, underground direct buried or 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 7870-1
  - EPR can be provided on demand as per BS 7870-1
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound (Bonded or Cold strippable)
- Separation tape: Semicon water swellable tape
- Metallic Insulation Screen: Copper wire & Copper tape screen
- Separation tape: Plain water swellable tape
- Outer Sheath: Extruded medium density polyethylene or Low smoke zero halogen compound as per BS 7870-1, Colour: Black

Bending Radius:

Fixed Installation: 20 x Overall diameter

Standard and References:

BS EN/IEC 60228
BS 7870-1
BS 7870-4-10

Test Voltage

76kV AC

Impulse Test Voltage

Peak 194kV AC

Compliance

Conductor resistance	BS EN/IEC 60228
Insulation resistance	BS 7870-4-10
Flame Retardant test	BS EN/IEC 60332-1-2
Partial Discharge test	BS 7870-4-10
Smoke Emission test	BS EN/IEC 61034-2

POLYCAB MV AL BS 7870-4-10 19/33 KV Triplex

Medium Voltage Copper wire screened Cable, 19/33 (36) KV AC

Product Code	No. of Cores	Nominal Cross sectional Area mm^2	Nominal area of metallic screen mm^2	Overall diameter (Approx.) Mm	Weight (Approx.) Kg/Km
MVBS20AXAWPM001C070S	3 x 1 (triplex)	70	35	34.5	1200
MVBS20AXAWPM001C095S	3 x 1 (triplex)	95	35	36.3	1350
MVBS20AXAWPM001C120S	3 x 1 (triplex)	120	35	37.7	1500
MVBS20AXAWPM001C150S	3 x 1 (triplex)	150	35	39.5	1600
MVBS20AXAWPM001C185S	3 x 1 (triplex)	185	35	41.0	1850
MVBS20AXAWPM001C240S	3 x 1 (triplex)	240	35	43.4	2100
MVBS20AXAWPM001C300S	3 x 1 (triplex)	300	35	45.9	2400
MVBS20AXAWPM001C400S	3 x 1 (triplex)	400	35	49.0	2750
MVBS20AXAWPM001C500S	3 x 1 (triplex)	500	35	52.2	3200
MVBS20AXAWPM001C630S	3 x 1 (triplex)	630	35	55.6	3700
MVBS20AXAWPM001C800S	3 x 1 (triplex)	800	35	62.7	4450
MVBS20AXAWPM001C01KS	3 x 1 (triplex)	1000	35	67.4	5200

Electrical Characteristics:

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 of conductor kA/s	Short circuit current rating of metallic screen kA/s	Capacitance (Approx.) µF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
70	0.443	0.565	6.61	4.5	0.15	0.45	0.14
95	0.320	0.408	8.98	4.5	0.16	0.43	0.13
120	0.253	0.323	11.34	4.5	0.18	0.41	0.13
150	0.206	0.263	14.17	4.5	0.19	0.39	0.12
185	0.164	0.210	17.48	4.5	0.20	0.38	0.12
240	0.125	0.161	22.68	4.5	0.23	0.36	0.11
300	0.100	0.129	28.35	4.5	0.25	0.35	0.11
400	0.0778	0.101	37.79	4.5	0.27	0.34	0.11
500	0.0605	0.080	47.24	4.5	0.30	0.28	0.09
630	0.0469	0.063	59.52	4.5	0.33	0.27	0.08
800	0.0367	0.052	75.59	4.5	0.39	0.25	0.08
1000	0.0291	0.043	94.48	4.5	0.42	0.24	0.08

POLYCAB MV AL BS 7870-4-10 19/33 KV Triplex

Medium Voltage Copper wire screened Cable, 19/33 (36) KV AC

Current Carrying Capacity

Nominal cross sectional area mm²	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.
70	186	192	176	178	230	236
95	221	229	210	213	280	287
120	252	260	240	242	324	332
150	281	288	267	271	368	376
185	317	324	303	307	424	432
240	367	373	351	356	502	511
300	414	419	397	402	577	586
400	470	466	451	457	673	676
500	507	480	441	396	748	712
630	565	524	490	429	856	798
800	608	546	524	444	949	859
1000	655	575	560	465	1049	931

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.

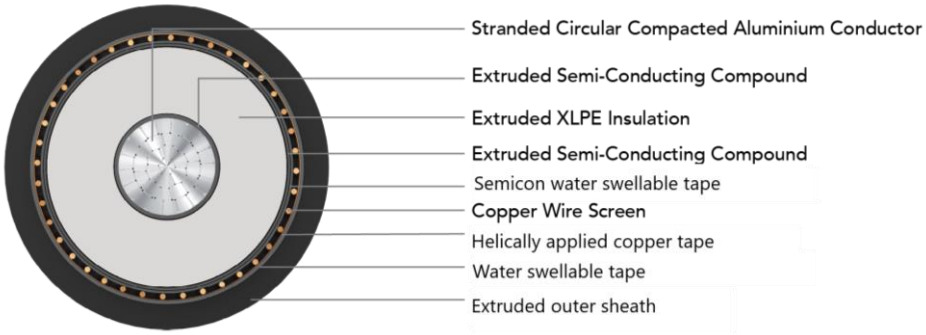
Air Temperature	20	25	35	40	45	50	55	60
De-rating factor	1.08	1.04	0.96	0.91	0.87	0.82	0.76	0.71

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

POLYCAB MV AL BS 7870-4-10 19/33 KV

Medium Voltage Copper wire screened Cable, 19/33 (36) KV AC



Outstanding Features

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

Application

POLYCAB MV AL BS 7870-4-10 19/33 KV compacted aluminium conductor XLPE insulated, copper wire screened single core cable is designed to use for power networks, underground direct buried or 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 7870-1
  - EPR can be provided on demand as per BS 7870-1
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound (Bonded or Cold strippable)
- Separation tape: Semicon water swellable tape
- Metallic Insulation Screen: Copper wire & Copper tape screen
- Separation tape: Plain water swellable tape
- Outer Sheath: Extruded medium density polyethylene or Low smoke zero halogen compound as per BS 7870-1, Colour: Black

Bending Radius:

Fixed Installation: 20 x Overall diameter

Standard and References:

BS EN/IEC 60228
BS 7870-1
BS 7870-4-10

Test Voltage

76kV AC

Impulse Test Voltage

Peak 194kV AC

Compliance

Conductor resistance	BS EN/IEC 60228
Insulation resistance	BS 7870-4-10
Flame Retardant test	BS EN/IEC 60332-1-2
Partial Discharge test	BS 7870-4-10
Smoke Emission test	BS EN/IEC 61034-2

POLYCAB MV AL BS 7870-4-10 19/33 KV

Medium Voltage Copper wire screened Cable, 19/33 (36) KV AC

Product Code	No. of Cores	Nominal Cross sectional Area mm^2	Nominal area of metallic screen mm^2	Overall diameter (Approx.) Mm	Weight (Approx.) Kg/Km
MVBS20AXAWPM001C070S	1	70	35	34.5	1200
MVBS20AXAWPM001C095S	1	95	35	36.3	1350
MVBS20AXAWPM001C120S	1	120	35	37.7	1500
MVBS20AXAWPM001C150S	1	150	35	39.5	1600
MVBS20AXAWPM001C185S	1	185	35	41.0	1850
MVBS20AXAWPM001C240S	1	240	35	43.4	2100
MVBS20AXAWPM001C300S	1	300	35	45.9	2400
MVBS20AXAWPM001C400S	1	400	35	49.0	2750
MVBS20AXAWPM001C500S	1	500	35	52.2	3200
MVBS20AXAWPM001C630S	1	630	35	55.6	3700
MVBS20AXAWPM001C800S	1	800	35	62.7	4450
MVBS20AXAWPM001C01KS	1	1000	35	67.4	5200

Electrical Characteristics:

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 of conductor kA/s	Short circuit current rating of metallic screen kA/s	Capacitance (Approx.) µF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
70	0.443	0.565	6.61	4.5	0.15	0.45	0.14
95	0.320	0.408	8.98	4.5	0.16	0.43	0.13
120	0.253	0.323	11.34	4.5	0.18	0.41	0.13
150	0.206	0.263	14.17	4.5	0.19	0.39	0.12
185	0.164	0.210	17.48	4.5	0.20	0.38	0.12
240	0.125	0.161	22.68	4.5	0.23	0.36	0.11
300	0.100	0.129	28.35	4.5	0.25	0.35	0.11
400	0.0778	0.101	37.79	4.5	0.27	0.34	0.11
500	0.0605	0.080	47.24	4.5	0.30	0.28	0.09
630	0.0469	0.063	59.52	4.5	0.33	0.27	0.08
800	0.0367	0.052	75.59	4.5	0.39	0.25	0.08
1000	0.0291	0.043	94.48	4.5	0.42	0.24	0.08

POLYCAB MV AL BS 7870-4-10 19/33 KV

Medium Voltage Copper wire screened Cable, 19/33 (36) KV AC

Current Carrying Capacity

Nominal cross sectional area mm²	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.
70	186	192	176	178	230	236
95	221	229	210	213	280	287
120	252	260	240	242	324	332
150	281	288	267	271	368	376
185	317	324	303	307	424	432
240	367	373	351	356	502	511
300	414	419	397	402	577	586
400	470	466	451	457	673	676
500	507	480	441	396	748	712
630	565	524	490	429	856	798
800	608	546	524	444	949	859
1000	655	575	560	465	1049	931

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.

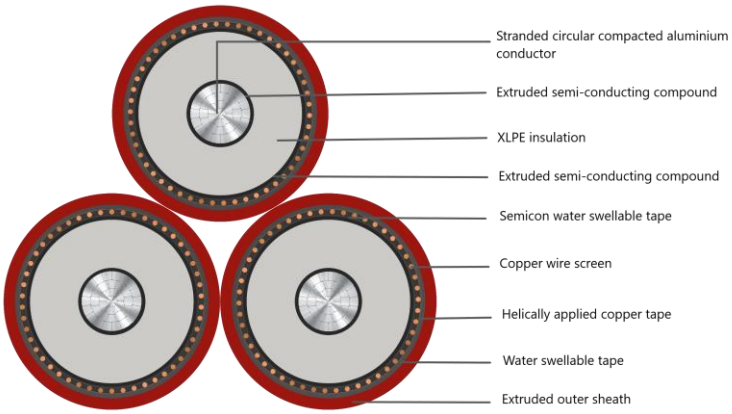
Air Temperature	20	25	35	40	45	50	55	60
De-rating factor	1.08	1.04	0.96	0.91	0.87	0.82	0.76	0.71

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

POLYCAB MV AL BS 7870-4-10 6.35/11 KV Triplex

Medium Voltage Copper wire screened Cable, 6.35/11 (12) KV AC



Outstanding Features

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

Application

POLYCAB MV AL BS 7870-4-10 6.35/11 KV compacted aluminium conductor XLPE insulated, copper wire screened single core cable is designed for power networks, underground direct buried or 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 7870-1
  - EPR can be provided on demand as per BS 7870-1
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound (Bonded or Cold strippable)
- Separation tape: Semicon water swellable tape
- Metallic Insulation Screen: Copper wire & Copper tape screen
- Separation tape: Plain water swellable tape
- Outer Sheath: Extruded medium density polyethylene or Low smoke zero halogen compound as per BS 7870-1, Colour: Red

Bending Radius:

Fixed Installation: 20 x Overall diameter

Standard and References:

BS EN/IEC 60228
BS 7870-1
BS 7870-4-10

Test Voltage

25.5kV AC

Impulse Test Voltage

Peak 95kV AC

Compliance

Conductor resistance	BS EN/IEC 60228
Insulation resistance	BS 7870-4-10
Flame Retardant test	BS EN/IEC 60332-1-2
Partial Discharge test	BS 7870-4-10
Smoke Emission test	BS EN/IEC 61034-2

POLYCAB MV AL BS 7870-4-10 6.35/11 KV Triplex

Medium Voltage Copper wire screened Cable, 6.35/11 (12) KV AC

Product Code	No. of Core	Nominal Cross sectional Area mm^2	Nominal area of metallic screen mm^2	Overall diameter (Approx.) mm	Weight (Approx.) Kg/Km
MVBS22AXAWPM001C070S	3 x 1 (triplex)	70	35	53.4	2550
MVBS22AXAWPM001C095S	3 x 1 (triplex)	95	35	57.3	2850
MVBS22AXAWPM001C120S	3 x 1 (triplex)	120	35	60.3	3150
MVBS22AXAWPM001C150S	3 x 1 (triplex)	150	35	64.2	3600
MVBS22AXAWPM001C185S	3 x 1 (triplex)	185	35	67.4	3900
MVBS22AXAWPM001C240S	3 x 1 (triplex)	240	35	72.6	4650
MVBS22AXAWPM001C300S	3 x 1 (triplex)	300	35	78.0	5250
MVBS22AXAWPM001C400S	3 x 1 (triplex)	400	35	84.7	6300
MVBS22AXAWPM001C500S	3 x 1 (triplex)	500	35	91.6	7500
MVBS22AXAWPM001C630S	3 x 1 (triplex)	630	35	99.0	8850
MVBS22AXAWPM001C800S	3 x 1 (triplex)	800	35	114.3	10650
MVBS22AXAWPM001C01KS	3 x 1 (triplex)	1000	35	124	12750

Electrical Characteristics:

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 of conductor kA/s	Short circuit current rating of metallic screen kA/s	Capacitance (Approx.) µF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
70	0.443	0.565	6.61	4.5	0.28	0.38	0.12
95	0.320	0.408	8.98	4.5	0.31	0.36	0.11
120	0.253	0.323	11.34	4.5	0.34	0.35	0.11
150	0.206	0.263	14.17	4.5	0.37	0.34	0.11
185	0.164	0.210	17.48	4.5	0.40	0.33	0.10
240	0.125	0.161	22.68	4.5	0.45	0.31	0.10
300	0.100	0.129	28.35	4.5	0.50	0.30	0.10
400	0.0778	0.102	37.79	4.5	0.56	0.29	0.09
500	0.0605	0.080	47.24	4.5	0.62	0.23	0.07
630	0.0469	0.064	59.52	4.5	0.68	0.23	0.07
800	0.0367	0.053	75.59	4.5	0.82	0.21	0.07
1000	0.0291	0.044	94.48	4.5	0.91	0.21	0.07

POLYCAB MV AL BS 7870-4-10 6.35/11 KV Triplex

Medium Voltage Copper wire screened Cable, 6.35/11 (12) KV AC

Current Carrying Capacity

Nominal cross sectional area mm²	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.
70	186	192	176	178	230	236
95	221	229	210	213	280	287
120	252	260	240	242	324	332
150	281	288	267	271	368	376
185	317	324	303	307	424	432
240	367	373	351	356	502	511
300	414	419	397	402	577	586
400	470	466	451	457	673	676
500	507	480	441	396	748	712
630	565	524	490	429	856	798
800	608	546	524	444	949	859
1000	655	575	560	465	1049	931

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

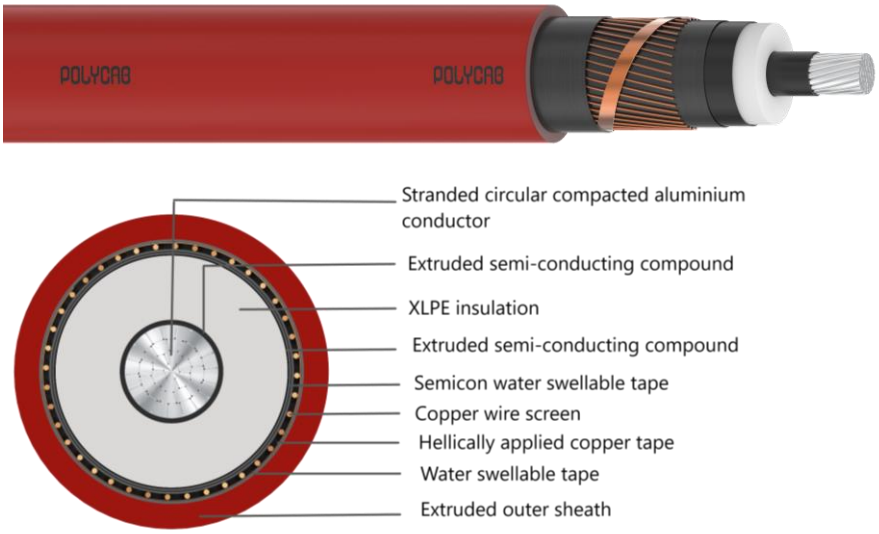
Current rating de-rating factors for other than 30°C ambient air temperature.

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

POLYCAB MV AL BS 7870-4-10 6.35/11 KV
Medium Voltage Copper wire screened Cable, 6.35/11 (12) KV AC



Outstanding Features

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

Application

POLYCAB MV AL BS 7870-4-10 6.35/11 KV compacted aluminium conductor XLPE insulated, copper wire screened single core cable is designed to use for power networks underground direct buried or 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 7870-1
    - EPR can be provided on demand as per BS 7870-1
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound (Bonded or Cold strippable)
- Separation tape: Semicon water swellable tape
- Metallic Insulation Screen: Copper wire & Copper tape screen
- Separation tape: Plain water swellable tape
- Outer Sheath: Extruded medium density polyethylene or Low smoke zero halogen compound as per BS 7870-1, Colour: Red

Bending Radius:

Fixed Installation: 20 x Overall diameter

Standard and References:

BS EN/IEC 60228
BS 7870-1
BS 7870-4-10

Test Voltage

25.5kV AC

Impulse Test Voltage

Peak 95kV AC

Compliance

Conductor resistance	BS EN/IEC 60228
Insulation resistance	BS 7870-4-10
Flame Retardant test	BS EN/IEC 60332-1-2
Partial Discharge test	BS 7870-4-10
Smoke Emission test	BS EN/IEC 61034-2

POLYCAB MV AL BS 7870-4-10 6.35/11 KV

Medium Voltage Copper wire screened Cable, 6.35/11 (12) KV AC

Product Code	No. of Cores	Nominal Cross sectional Area mm^2	Nominal area of metallic screen mm^2	Overall diameter (Approx.) mm	Weight (Approx.) Kg/Km
MVBS22AXAWPM001C070S	1	70	35	24.7	850
MVBS22AXAWPM001C095S	1	95	35	26.5	950
MVBS22AXAWPM001C120S	1	120	35	27.9	1050
MVBS22AXAWPM001C150S	1	150	35	29.7	1200
MVBS22AXAWPM001C185S	1	185	35	31.2	1300
MVBS22AXAWPM001C240S	1	240	35	33.6	1550
MVBS22AXAWPM001C300S	1	300	35	36.1	1750
MVBS22AXAWPM001C400S	1	400	35	39.2	2100
MVBS22AXAWPM001C500S	1	500	35	42.4	2500
MVBS22AXAWPM001C630S	1	630	35	45.8	2950
MVBS22AXAWPM001C800S	1	800	35	52.9	3550
MVBS22AXAWPM001C01KS	1	1000	35	57.4	4250

Electrical Characteristics:

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 of conductor kA/s	Short circuit current rating of metallic screen kA/s	Capacitance (Approx.) µF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
70	0.443	0.565	6.61	4.5	0.28	0.38	0.12
95	0.320	0.408	8.98	4.5	0.31	0.36	0.11
120	0.253	0.323	11.34	4.5	0.34	0.35	0.11
150	0.206	0.263	14.17	4.5	0.37	0.34	0.11
185	0.164	0.210	17.48	4.5	0.40	0.33	0.10
240	0.125	0.161	22.68	4.5	0.45	0.31	0.10
300	0.100	0.129	28.35	4.5	0.50	0.30	0.10
400	0.0778	0.102	37.79	4.5	0.56	0.29	0.09
500	0.0605	0.080	47.24	4.5	0.62	0.23	0.07
630	0.0469	0.064	59.52	4.5	0.68	0.23	0.07
800	0.0367	0.053	75.59	4.5	0.82	0.21	0.07
1000	0.0291	0.044	94.48	4.5	0.91	0.21	0.07

POLYCAB MV AL BS 7870-4-10 6.35/11 KV

Medium Voltage Copper wire screened Cable, 6.35/11 (12) KV AC

Current Carrying Capacity

Nominal cross sectional area mm²	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.
70	186	192	176	178	230	236
95	221	229	210	213	280	287
120	252	260	240	242	324	332
150	281	288	267	271	368	376
185	317	324	303	307	424	432
240	367	373	351	356	502	511
300	414	419	397	402	577	586
400	470	466	451	457	673	676
500	507	480	441	396	748	712
630	565	524	490	429	856	798
800	608	546	524	444	949	859
1000	655	575	560	465	1049	931

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

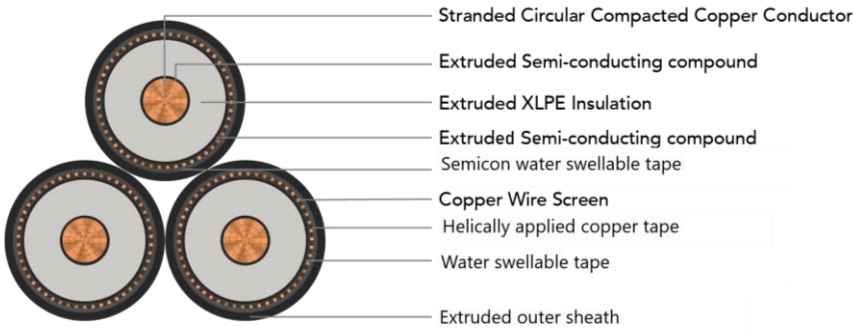
Current rating de-rating factors for other than 30°C ambient air temperature.

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

POLYCAB MV CU BS 7870-4-10 12.7/22 KV Triplex
Medium Voltage Copper wire screened Cable, 12.7/22 (24) KV AC



Outstanding Features

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

Application

POLYCAB MV CU BS 7870-4-10 12.7/22 KV compacted copper conductor XLPE insulated, copper wire screened cable generally confirming to BS 7870-4-10. These cables are designed for power networks, underground direct buried or 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 7870-1
  - EPR can be provided on demand as per BS 7870-1
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound (Bonded or Cold strippable)
- Separation tape: Semicon water swellable tape
- Metallic Insulation Screen: Copper wire & Copper tape screen
- Separation tape: Plain water swellable tape
- Outer Sheath: Extruded medium density polyethylene or Low smoke zero halogen compound as per BS 7870-1, Colour: Black

Bending Radius:

Fixed Installation: 20 x Overall diameter

Standard and References:

BS EN/IEC 60228
BS 7870-1
BS 7870-4-10

Test Voltage

51kV AC

Impulse Test Voltage

Peak 144kV AC

Compliance

Conductor resistance	BS EN/IEC 60228
Insulation resistance	BS 7870-4-10
Flame Retardant test	BS EN/IEC 60332-1-2
Partial Discharge test	BS 7870-4-10
Smoke Emission test	BS EN/IEC 61034-2

POLYCAB MV CU BS 7870-4-10 12.7/22 KV Triplex

Medium Voltage Copper wire screened Cable, 12.7/22 (24) KV AC

Product Code	No. of Cores	Nominal Cross sectional Area mm^2	Nominal area of metallic screen mm^2	Overall diameter (Approx.) mm	Weight (Approx.) Kg/Km
MVBS19CXAWPM001C070S	3 x 1 (triplex)	70	35	63.3	4050
MVBS19CXAWPM001C095S	3 x 1 (triplex)	95	35	66.8	5100
MVBS19CXAWPM001C120S	3 x 1 (triplex)	120	35	70.2	6000
MVBS19CXAWPM001C150S	3 x 1 (triplex)	150	35	73.7	6900
MVBS19CXAWPM001C185S	3 x 1 (triplex)	185	35	77.4	8100
MVBS19CXAWPM001C240S	3 x 1 (triplex)	240	35	82.6	9900
MVBS19CXAWPM001C300S	3 x 1 (triplex)	300	35	87.5	11850
MVBS19CXAWPM001C400S	3 x 1 (triplex)	400	35	94.2	14700
MVBS19CXAWPM001C500S	3 x 1 (triplex)	500	35	101.1	18000
MVBS19CXAWPM001C630S	3 x 1 (triplex)	630	35	108.5	21750
MVBS19CXAWPM001C800S	3 x 1 (triplex)	800	35	124.2	27000
MVBS19CXAWPM001C01KS	3 x 1 (triplex)	1000	35	134	32850

Electrical Characteristics:

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 of conductor kA/s	Short circuit current rating of metallic screen kA/s	Capacitance (Approx.) µF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
70	0.268	0.342	10.02	4.5	0.19	0.41	0.13
95	0.193	0.247	13.59	4.5	0.21	0.39	0.12
120	0.153	0.196	17.17	4.5	0.23	0.38	0.12
150	0.124	0.159	21.46	4.5	0.25	0.36	0.11
185	0.0991	0.128	26.47	4.5	0.27	0.35	0.11
240	0.0754	0.098	34.34	4.5	0.30	0.34	0.11
300	0.0601	0.079	42.93	4.5	0.33	0.33	0.10
400	0.047	0.063	57.23	4.5	0.37	0.31	0.10
500	0.0366	0.051	71.54	4.5	0.41	0.25	0.08
630	0.0283	0.042	90.14	4.5	0.45	0.24	0.08
800	0.0221	0.036	114.47	4.5	0.53	0.23	0.07
1000	0.0176	0.032	143.08	4.5	0.59	0.22	0.07

POLYCAB MV CU BS 7870-4-10 12.7/22 KV Triplex

Medium Voltage Copper wire screened Cable, 12.7/22 (24) KV AC

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	615	561	535	462	911	837
1	630	672	598	582	491	1023	919
1	800	703	605	605	493	1103	960
1	1000	739	626	633	506	1191	1020

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

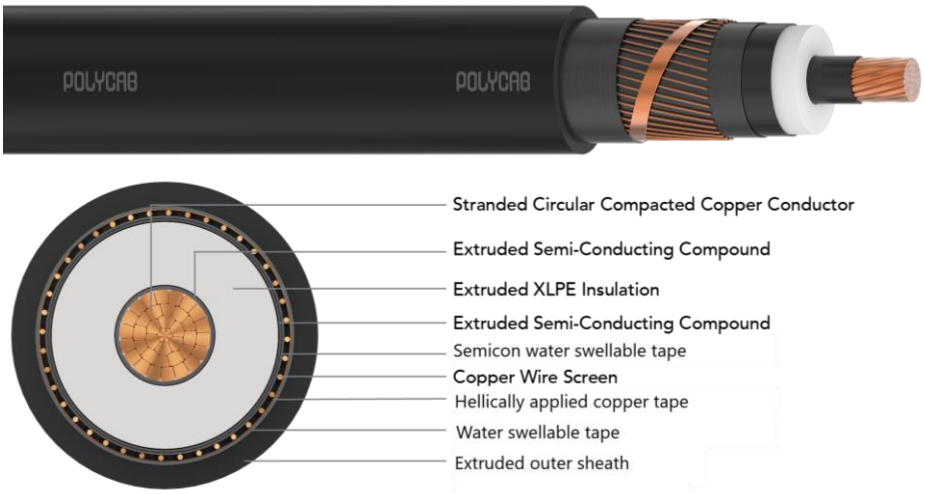
Current rating de-rating factors for other than 30°C ambient air temperature.

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

POLYCAB MV CU BS 7870-4-10 12.7/22 KV
Medium Voltage Copper wire screened Cable, 12.7/22 (24) KV AC



Outstanding Features

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

Application

POLYCAB MV CU BS 7870-4-10 12.7/22 KV compacted copper conductor XLPE insulated, copper wire screened single core cable is designed to use for power networks, underground direct buried or 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 7870-1
  - EPR can be provided on demand as per BS 7870-1
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound (Bonded or Cold strippable)
- Separation tape: Semicon water swellable tape
- Metallic Insulation Screen: Copper wire & Copper tape screen
- Separation tape: Plain water swellable tape
- Outer Sheath: Extruded medium density polyethylene or Low smoke zero halogen compound as per BS 7870-1, Colour: Black

Bending Radius:

Fixed Installation: 20 x Overall diameter

Standard and References:

BS EN/IEC 60228
BS 7870-1
BS 7870-4-10

Test Voltage

51kV AC

Impulse Test Voltage

Peak 144kV AC

Compliance

Conductor resistance	BS EN/IEC 60228
Insulation resistance	BS 7870-4-10
Flame Retardant test	BS EN/IEC 60332-1-2
Partial Discharge test	BS 7870-4-10
Smoke Emission test	BS EN/IEC 61034-2

POLYCAB MV CU BS 7870-4-10 12.7/22 KV

Medium Voltage Copper wire screened Cable, 12.7/22 (24) KV AC

Product Code	No. of Cores	Nominal Cross sectional Area mm^2	Nominal area of metallic screen mm^2	Overall diameter (Approx.) mm	Weight (Approx.) Kg/Km
MVBS19CXAWPM001C070S	1	70	35	29.3	1350
MVBS19CXAWPM001C095S	1	95	35	30.9	1700
MVBS19CXAWPM001C120S	1	120	35	32.5	2000
MVBS19CXAWPM001C150S	1	150	35	34.1	2300
MVBS19CXAWPM001C185S	1	185	35	35.8	2700
MVBS19CXAWPM001C240S	1	240	35	38.2	3300
MVBS19CXAWPM001C300S	1	300	35	40.5	3950
MVBS19CXAWPM001C400S	1	400	35	43.6	4900
MVBS19CXAWPM001C500S	1	500	35	46.8	6000
MVBS19CXAWPM001C630S	1	630	35	50.2	7250
MVBS19CXAWPM001C800S	1	800	35	57.5	9000
MVBS19CXAWPM001C01KS	1	1000	35	62.0	10950

Electrical Characteristics:

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 of conductor kA/s	Short circuit current rating of metallic screen kA/s	Capacitance (Approx.) µF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
70	0.268	0.342	10.02	4.5	0.19	0.41	0.13
95	0.193	0.247	13.59	4.5	0.21	0.39	0.12
120	0.153	0.196	17.17	4.5	0.23	0.38	0.12
150	0.124	0.159	21.46	4.5	0.25	0.36	0.11
185	0.0991	0.128	26.47	4.5	0.27	0.35	0.11
240	0.0754	0.098	34.34	4.5	0.30	0.34	0.11
300	0.0601	0.079	42.93	4.5	0.33	0.33	0.10
400	0.047	0.063	57.23	4.5	0.37	0.31	0.10
500	0.0366	0.051	71.54	4.5	0.41	0.25	0.08
630	0.0283	0.042	90.14	4.5	0.45	0.24	0.08
800	0.0221	0.036	114.47	4.5	0.53	0.23	0.07
1000	0.0176	0.032	143.08	4.5	0.59	0.22	0.07

POLYCAB MV CU BS 7870-4-10 12.7/22 KV

Medium Voltage Copper wire screened Cable, 12.7/22 (24) KV AC

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	615	561	535	462	911	837
1	630	672	598	582	491	1023	919
1	800	703	605	605	493	1103	960
1	1000	739	626	633	506	1191	1020

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.

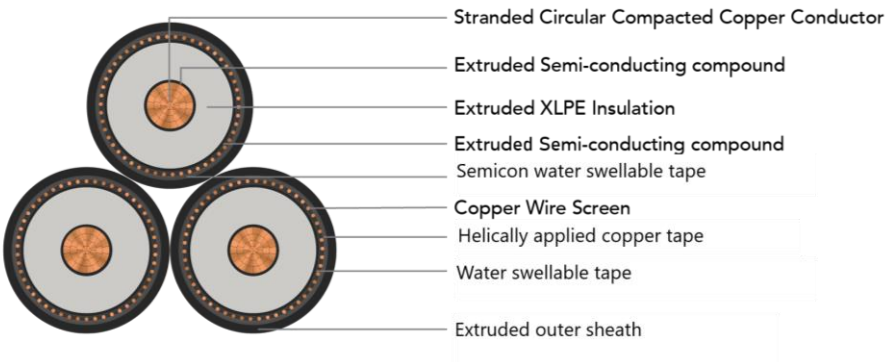
Air Temperature	20	25	35	40	45	50	55	60
De-rating factor	1.08	1.04	0.96	0.91	0.87	0.82	0.76	0.71

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

POLYCAB MV CU BS 7870-4-10 19/33 KV Triplex

Medium Voltage Copper wire screened Cable, 19/33 (36) KV AC



Outstanding Features

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

Application

POLYCAB MV CU BS 7870-4-10 19/33 KV compacted copper conductor XLPE insulated, copper wire screened cable generally confirming to BS 7870-4-10. These cables are designed for power networks, underground direct buried or 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 7870-1
  - EPR can be provided on demand as per BS 7870-1
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound (Bonded or Cold strippable)
- Separation tape: Semicon water swellable tape
- Metallic Insulation Screen: Copper wire & Copper tape screen
- Separation tape: Plain water swellable tape
- Outer Sheath: Extruded medium density polyethylene or Low smoke zero halogen compound as per BS 7870-1, Colour: Black

Bending Radius:

Fixed Installation: 20 x Overall diameter

Standard and References:

BS EN/IEC 60228
BS 7870-1
BS 7870-4-10

Test Voltage

76kV AC

Impulse Test Voltage

Peak 194kV AC

Compliance

Conductor resistance	BS EN/IEC 60228
Insulation resistance	BS 7870-4-10
Flame Retardant test	BS EN/IEC 60332-1-2
Partial Discharge test	BS 7870-4-10
Smoke Emission test	BS EN/IEC 61034-2

POLYCAB MV CU BS 7870-4-10 19/33 KV Triplex

Medium Voltage Copper wire screened Cable, 19/33 (36) KV AC

Product Code	No. of Cores	Nominal Cross sectional Area mm^2	Nominal area of metallic screen mm^2	Overall diameter (Approx.) mm	Weight (Approx.) Kg/Km
MVBS20CXAWPM001C070S	3 x 1 (triplex)	70	35	34.5	1700
MVBS20CXAWPM001C095S	3 x 1 (triplex)	95	35	36.3	2000
MVBS20CXAWPM001C120S	3 x 1 (triplex)	120	35	37.7	2300
MVBS20CXAWPM001C150S	3 x 1 (triplex)	150	35	39.5	2650
MVBS20CXAWPM001C185S	3 x 1 (triplex)	185	35	41.0	3000
MVBS20CXAWPM001C240S	3 x 1 (triplex)	240	35	43.4	3600
MVBS20CXAWPM001C300S	3 x 1 (triplex)	300	35	45.9	4300
MVBS20CXAWPM001C400S	3 x 1 (triplex)	400	35	49.0	5250
MVBS20CXAWPM001C500S	3 x 1 (triplex)	500	35	52.2	6400
MVBS20CXAWPM001C630S	3 x 1 (triplex)	630	35	55.6	7700
MVBS20CXAWPM001C800S	3 x 1 (triplex)	800	35	62.7	9500
MVBS20CXAWPM001C01KS	3 x 1 (triplex)	1000	35	67.4	11500

Electrical Characteristics:

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 of conductor kA/s	Short circuit current rating of metallic screen kA/s	Capacitance (Approx.) µF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
70	0.268	0.342	10.02	4.5	0.15	0.45	0.14
95	0.193	0.247	13.59	4.5	0.16	0.43	0.13
120	0.153	0.196	17.17	4.5	0.18	0.41	0.13
150	0.124	0.159	21.46	4.5	0.19	0.39	0.12
185	0.0991	0.128	26.47	4.5	0.20	0.38	0.12
240	0.0754	0.098	34.34	4.5	0.23	0.36	0.11
300	0.0601	0.079	42.93	4.5	0.25	0.35	0.11
400	0.047	0.063	57.23	4.5	0.27	0.34	0.11
500	0.0366	0.051	71.54	4.5	0.30	0.28	0.09
630	0.0283	0.042	90.14	4.5	0.33	0.27	0.08
800	0.0221	0.036	114.47	4.5	0.39	0.25	0.08
1000	0.0176	0.032	143.08	4.5	0.42	0.24	0.08

POLYCAB MV CU BS 7870-4-10 19/33 KV Triplex

Medium Voltage Copper wire screened Cable, 19/33 (36) KV AC

Current Carrying Capacity

Nominal cross sectional area mm²	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.
70	239	246	227	229	296	303
95	285	293	271	274	361	369
120	323	332	308	311	417	426
150	361	366	343	347	473	481
185	406	410	387	391	543	550
240	469	470	447	453	641	647
300	526	524	504	510	735	739
400	590	572	564	571	845	837
500	615	561	535	462	911	837
630	672	598	582	491	1023	919
800	703	605	605	493	1103	960
1000	739	626	633	506	1191	1020

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.

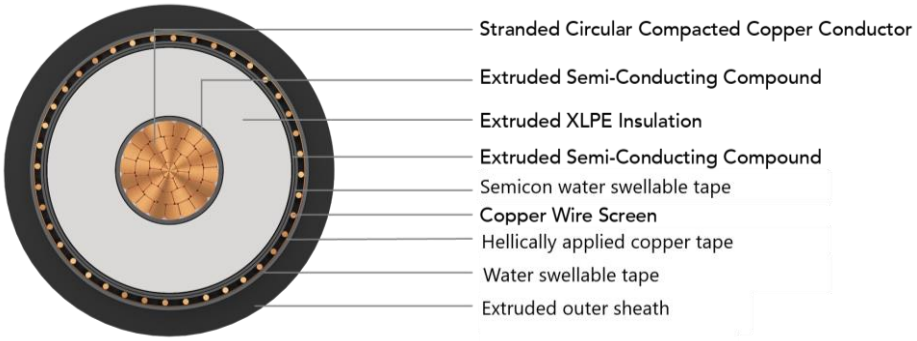
Air Temperature	20	25	35	40	45	50	55	60
De-rating factor	1.08	1.04	0.96	0.91	0.87	0.82	0.76	0.71

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

POLYCAB MV CU BS 7870-4-10 19/33 KV

Medium Voltage Copper wire screened Cable, 19/33 (36) KV AC



Outstanding Features

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

Application

POLYCAB MV CU BS 7870-4-10 19/33 KV compacted copper conductor XLPE insulated, copper wire screened single core cable is designed to use for power networks, underground direct buried or 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 7870-1
  - EPR can be provided on demand as per BS 7870-1
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound (Bonded or Cold strippable)
- Separation tape: Semicon water swellable tape
- Metallic Insulation Screen: Copper wire & Copper tape screen
- Separation tape: Plain water swellable tape
- Outer Sheath: Extruded medium density polyethylene or Low smoke zero halogen compound as per BS 7870-1, Colour: Black

Bending Radius:

Fixed Installation: 20 x Overall diameter

Standard and References:

BS EN/IEC 60228
BS 7870-1
BS 7870-4-10

Test Voltage

76kV AC

Impulse Test Voltage

Peak 194kV AC

Compliance

Conductor resistance	BS EN/IEC 60228
Insulation resistance	BS 7870-4-10
Flame Retardant test	BS EN/IEC 60332-1-2
Partial Discharge test	BS 7870-4-10
Smoke Emission test	BS EN/IEC 61034-2

POLYCAB MV CU BS 7870-4-10 19/33 KV

Medium Voltage Copper wire screened Cable, 19/33 (36) KV AC

Product Code	No. of Cores	Nominal Cross sectional Area mm^2	Nominal area of metallic screen mm^2	Overall diameter (Approx.) mm	Weight (Approx.) Kg/Km
MVBS20CXAWPM001C070S	1	70	35	34.5	1700
MVBS20CXAWPM001C095S	1	95	35	36.3	2000
MVBS20CXAWPM001C120S	1	120	35	37.7	2300
MVBS20CXAWPM001C150S	1	150	35	39.5	2650
MVBS20CXAWPM001C185S	1	185	35	41.0	3000
MVBS20CXAWPM001C240S	1	240	35	43.4	3600
MVBS20CXAWPM001C300S	1	300	35	45.9	4300
MVBS20CXAWPM001C400S	1	400	35	49.0	5250
MVBS20CXAWPM001C500S	1	500	35	52.2	6400
MVBS20CXAWPM001C630S	1	630	35	55.6	7700
MVBS20CXAWPM001C800S	1	800	35	62.7	9500
MVBS20CXAWPM001C01KS	1	1000	35	67.4	11500

Electrical Characteristics:

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 of conductor kA/s	Short circuit current rating of metallic screen kA/s	Capacitance (Approx.) µF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
70	0.268	0.342	10.02	4.5	0.15	0.45	0.14
95	0.193	0.247	13.59	4.5	0.16	0.43	0.13
120	0.153	0.196	17.17	4.5	0.18	0.41	0.13
150	0.124	0.159	21.46	4.5	0.19	0.39	0.12
185	0.0991	0.128	26.47	4.5	0.20	0.38	0.12
240	0.0754	0.098	34.34	4.5	0.23	0.36	0.11
300	0.0601	0.079	42.93	4.5	0.25	0.35	0.11
400	0.047	0.063	57.23	4.5	0.27	0.34	0.11
500	0.0366	0.051	71.54	4.5	0.30	0.28	0.09
630	0.0283	0.042	90.14	4.5	0.33	0.27	0.08
800	0.0221	0.036	114.47	4.5	0.39	0.25	0.08
1000	0.0176	0.032	143.08	4.5	0.42	0.24	0.08

POLYCAB MV CU BS 7870-4-10 19/33 KV

Medium Voltage Copper wire screened Cable, 19/33 (36) KV AC

Current Carrying Capacity

Nominal cross sectional area mm²	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.
70	239	246	227	229	296	303
95	285	293	271	274	361	369
120	323	332	308	311	417	426
150	361	366	343	347	473	481
185	406	410	387	391	543	550
240	469	470	447	453	641	647
300	526	524	504	510	735	739
400	590	572	564	571	845	837
500	615	561	535	462	911	837
630	672	598	582	491	1023	919
800	703	605	605	493	1103	960
1000	739	626	633	506	1191	1020

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

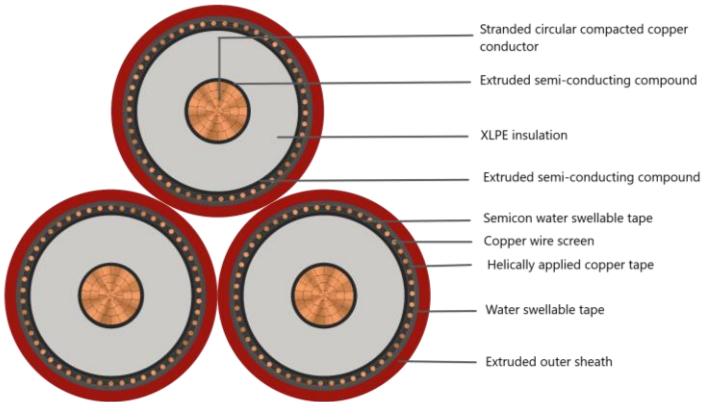
Current rating de-rating factors for other than 30°C ambient air temperature.

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

POLYCAB MV CU BS 7870-4-10 6.35/11 KV Triplex
Medium Voltage Copper wire screened Cable, 6.35/11 (12) KV AC



Outstanding Features

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

Application

POLYCAB MV CU BS 7870-4-10 6.35/11 KV compacted copper conductor XLPE insulated, copper wire screened single core cable is designed for power networks, underground direct buried or 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 7870-1
  - EPR can be provided on demand as per BS 7870-1
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound (Bonded or Cold strippable)
- Separation tape: Semicon water swellable tape
- Metallic Insulation Screen: Copper wire & Copper tape screen
- Separation tape: Plain water swellable tape
- Outer Sheath: Extruded medium density polyethylene or Low smoke zero halogen compound as per BS 7870-1, Colour: Red

Bending Radius:

Fixed Installation: 20 x Overall diameter

Standard and References:

BS EN/IEC 60228
BS 7870-1
BS 7870-4-10

Test Voltage

25.5kV AC

Impulse Test Voltage

Peak 95kV AC

Compliance

Conductor resistance	BS EN/IEC 60228
Insulation resistance	BS 7870-4-10
Flame Retardant test	BS EN/IEC 60332-1-2
Partial Discharge test	BS 7870-4-10
Smoke Emission test	BS EN/IEC 61034-2

POLYCAB MV CU BS 7870-4-10 6.35/11 KV Triplex

Medium Voltage Copper wire screened Cable, 6.35/11 (12) KV AC

Product code	No. of Cores	Nominal Cross sectional Area mm²	Nominal area of metallic screen mm²	Overall diameter (Approx.) mm	Weight (Approx.) Kg/Km
MVBS22CXAWPM001C070S	3 x 1 (triplex)	70	35	53.4	3900
MVBS22CXAWPM001C095S	3 x 1 (triplex)	95	35	57.3	4650
MVBS22CXAWPM001C120S	3 x 1 (triplex)	120	35	60.3	5400
MVBS22CXAWPM001C150S	3 x 1 (triplex)	150	35	64.2	6450
MVBS22CXAWPM001C185S	3 x 1 (triplex)	185	35	67.4	7500
MVBS22CXAWPM001C240S	3 x 1 (triplex)	240	35	72.6	9150
MVBS22CXAWPM001C300S	3 x 1 (triplex)	300	35	78.0	11100
MVBS22CXAWPM001C400S	3 x 1 (triplex)	400	35	84.7	13800
MVBS22CXAWPM001C500S	3 x 1 (triplex)	500	35	91.6	17100
MVBS22CXAWPM001C630S	3 x 1 (triplex)	630	35	99.0	20850
MVBS22CXAWPM001C800S	3 x 1 (triplex)	800	35	114.3	25800
MVBS22CXAWPM001C01KS	3 x 1 (triplex)	1000	35	124	31650

Electrical Characteristics:

Nominal Cross sectional Area mm²	Max. DC Resistance at 20˚C Ω/km	Max. AC Resistance at 90˚C Ω/km	Short circuit current rating of conductor kA/s	Short circuit current rating of metallic screen kA/s	Capacitance (Approx.) µF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
70	0.268	0.342	10.02	4.5	0.28	0.38	0.12
95	0.193	0.247	13.59	4.5	0.31	0.36	0.11
120	0.153	0.196	17.17	4.5	0.34	0.35	0.11
150	0.124	0.159	21.46	4.5	0.37	0.34	0.11
185	0.0991	0.128	26.47	4.5	0.40	0.33	0.10
240	0.0754	0.098	34.34	4.5	0.45	0.31	0.10
300	0.0601	0.080	42.93	4.5	0.50	0.30	0.10
400	0.047	0.064	57.23	4.5	0.56	0.29	0.09
500	0.0366	0.052	71.54	4.5	0.62	0.23	0.07
630	0.0283	0.043	90.14	4.5	0.68	0.23	0.07
800	0.0221	0.037	114.47	4.5	0.82	0.21	0.07
1000	0.0176	0.033	143.08	4.5	0.91	0.21	0.07

POLYCAB MV CU BS 7870-4-10 6.35/11 KV Triplex

Medium Voltage Copper wire screened Cable, 6.35/11 (12) KV AC

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	615	561	535	462	911	837
1	630	672	598	582	491	1023	919
1	800	703	605	605	493	1103	960
1	1000	739	626	633	506	1191	1020

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.

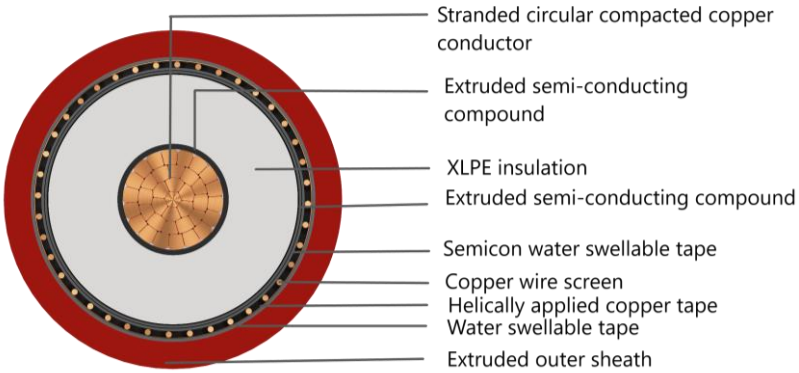
Air Temperature	20	25	35	40	45	50	55	60
De-rating factor	1.08	1.04	0.96	0.91	0.87	0.82	0.76	0.71

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

POLYCAB MV CU BS 7870-4-10 6.35/11 KV

Medium Voltage Copper wire screened Cable, 6.35/11 (12) KV AC



Outstanding Features

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

Application

POLYCAB MV CU BS 7870-4-10 6.35/11 KV compacted copper conductor XLPE insulated, copper wire screened single core cable is designed to use for power networks, underground direct buried or 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 7870-1
    - EPR can be provided on demand as per BS 7870-1
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound (Bonded or Cold strippable)
- Separation tape: Semicon water swellable tape
- Metallic Insulation Screen: Copper wire & Copper tape screen
- Separation tape: Plain water swellable tape
- Outer Sheath: Extruded medium density polyethylene or Low smoke zero halogen compound as per BS 7870-1, Colour: Red

Bending Radius:

Fixed Installation: 20 x Overall diameter

Standard and References:

BS EN/IEC 60228
BS 7870-1
BS 7870-4-10

Test Voltage

25.5kV AC

Impulse Test Voltage

Peak 95kV AC

Compliance

Conductor resistance	BS EN/IEC 60228
Insulation resistance	BS 7870-4-10
Flame Retardant test	BS EN/IEC 60332-1-2
Partial Discharge test	BS 7870-4-10
Smoke Emission test	BS EN/IEC 61034-2

POLYCAB MV CU BS 7870-4-10 6.35/11 KV

Medium Voltage Copper wire screened Cable, 6.35/11 (12) KV AC

Product Code	No. of Cores	Nominal Cross sectional Area mm²	Nominal area of metallic screen mm²	Overall diameter (Approx.) mm	Weight (Approx.) Kg/Km
MVBS22CXAWPM001C070S	1	70	35	24.7	1300
MVBS22CXAWPM001C095S	1	95	35	26.5	1550
MVBS22CXAWPM001C120S	1	120	35	27.9	1800
MVBS22CXAWPM001C150S	1	150	35	29.7	2150
MVBS22CXAWPM001C185S	1	185	35	31.2	2500
MVBS22CXAWPM001C240S	1	240	35	33.6	3050
MVBS22CXAWPM001C300S	1	300	35	36.1	3700
MVBS22CXAWPM001C400S	1	400	35	39.2	4600
MVBS22CXAWPM001C500S	1	500	35	42.4	5700
MVBS22CXAWPM001C630S	1	630	35	45.8	6950
MVBS22CXAWPM001C800S	1	800	35	52.9	8600
MVBS22CXAWPM001C01KS	1	1000	35	57.4	10550

Electrical Characteristics:

Nominal Cross sectional Area mm²	Max. DC Resistance at 20˚C Ω/km	Max. AC Resistance at 90˚C Ω/km	Short circuit current rating of conductor kA/s	Short circuit current rating of metallic screen kA/s	Capacitance (Approx.) µF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
70	0.268	0.342	10.02	4.5	0.28	0.38	0.12
95	0.193	0.247	13.59	4.5	0.31	0.36	0.11
120	0.153	0.196	17.17	4.5	0.34	0.35	0.11
150	0.124	0.159	21.46	4.5	0.37	0.34	0.11
185	0.0991	0.128	26.47	4.5	0.40	0.33	0.10
240	0.0754	0.098	34.34	4.5	0.45	0.31	0.10
300	0.0601	0.080	42.93	4.5	0.50	0.30	0.10
400	0.047	0.064	57.23	4.5	0.56	0.29	0.09
500	0.0366	0.052	71.54	4.5	0.62	0.23	0.07
630	0.0283	0.043	90.14	4.5	0.68	0.23	0.07
800	0.0221	0.037	114.47	4.5	0.82	0.21	0.07
1000	0.0176	0.033	143.08	4.5	0.91	0.21	0.07

POLYCAB MV CU BS 7870-4-10 6.35/11 KV

Medium Voltage Copper wire screened Cable, 6.35/11 (12) KV AC

Current Carrying Capacity

No. of core	Nominal cross sectional area mm²	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	615	561	535	462	911	837
1	630	672	598	582	491	1023	919
1	800	703	605	605	493	1103	960
1	1000	739	626	633	506	1191	1020

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

Polycab, Medium Voltage Copper Wire Screened Power cable conforming to BS 7870-4-20.

These includes medium voltage copper wire screened cable confirming the construction and performance of voltage rating 6.35/11 (12) KV as per BS 7870-4-20. These cables are designed use in power networks, underground direct buried or in cable ducting.

These cables are available in 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.

Inner Covering: Semiconducting water swellable tape inner covering over insulated cores.

Screen: Copper wire screen followed by copper tape applied over inner covering as collective metallic screen.

Sheath: In-house developed Medium density polyethylene or Low smoke zero halogen compounding 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.

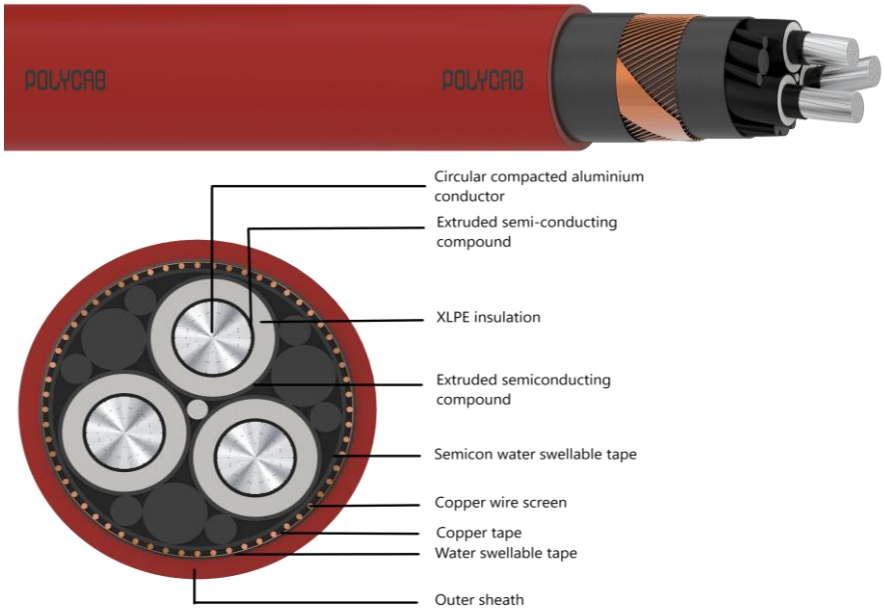
The construction based on the application and requirement of the user against BS 7870-4-20.

POLYCAB MV AL BS 7870-4-20 6.35/11 KV - Medium Voltage Copper wire screened Cable, 6.35/11 (12) KV AC

POLYCAB MV CU BS 7870-4-20 6.35/11 KV - Medium Voltage Copper wire screened Cable, 6.35/11 (12) KV AC

POLYCAB MV AL BS 7870-4-20 6.35/11 KV

Medium Voltage Copper wire screened Cable, 6.35/11 (12) KV AC



Outstanding Features

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

Application

POLYCAB MV AL BS 7870-4-20 6.35/11 KV compacted aluminium conductor, XLPE insulated, copper wire screened three core cable is designed for power networks, underground direct buried or 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 7870-1
  - EPR can be provided on demand as per BS 7870-1
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound (Bonded or Cold strippable)
- Inner covering: Semicon water swellable tape
- Collective Metallic Screen: Copper wire & Copper tape screen
- Separation tape: Plain water swellable tape
- Outer Sheath: Extruded medium density polyethylene or Low smoke zero halogen compound as per BS 7870-1, Colour: Red

Core identification

Black with white numbering

Bending Radius:

Fixed Installation: 15 x Overall diameter

Standard and References:

BS EN/IEC 60228
BS 7870-1
BS 7870-4-20

Test Voltage

25.5kV AC

Impulse Test Voltage

Peak 95kV AC

Compliance

Conductor resistance	BS EN/IEC 60228
Insulation resistance	BS 7870-4-20
Flame Retardant test	BS EN/IEC 60332-1-2
Partial Discharge test	BS 7870-4-20
Smoke Emission test	BS EN/IEC 61034-2

POLYCAB MV AL BS 7870-4-20 6.35/11 KV

Medium Voltage Copper wire screened Cable, 6.35/11 (12) KV AC

Product Code	No. of Cores	Nominal Cross-sectional Area mm^2	Nominal area of metallic screen mm^2	Overall diameter (Approx.) mm	Weight (Approx.) Kg/Km
MVBS22AXUAPM003C070S	3	70	35	51.8	2750
MVBS22AXUAPM003C095S	3	95	35	55.5	3200
MVBS22AXUAPM003C120S	3	120	35	58.8	3550
MVBS22AXUAPM003C150S	3	150	35	62.4	4000
MVBS22AXUAPM003C185S	3	185	35	65.9	4500
MVBS22AXUAPM003C240S	3	240	35	71.1	5300
MVBS22AXUAPM003C300S	3	300	35	76.2	6100

Electrical Characteristics:

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 of conductor kA/s	Short circuit current rating of metallic screen kA/s	Capacitance (Approx.) µF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
70	0.443	0.565	6.61	4.5	0.29	0.33	0.10
95	0.32	0.408	8.98	4.5	0.32	0.32	0.10
120	0.253	0.323	11.34	4.5	0.35	0.30	0.09
150	0.206	0.263	14.17	4.5	0.38	0.29	0.09
185	0.164	0.210	17.48	4.5	0.41	0.29	0.09
240	0.125	0.160	22.68	4.5	0.46	0.27	0.09
300	0.1	0.129	28.35	4.5	0.51	0.27	0.08

POLYCAB MV AL BS 7870-4-20 6.35/11 KV

Medium Voltage Copper wire screened Cable, 6.35/11 (12) KV AC

Current Carrying Capacity

No. of core	Nominal Cross-sectional area mm²	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	503	443	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

Note: The table is in accordance with the IEC 60502-2

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

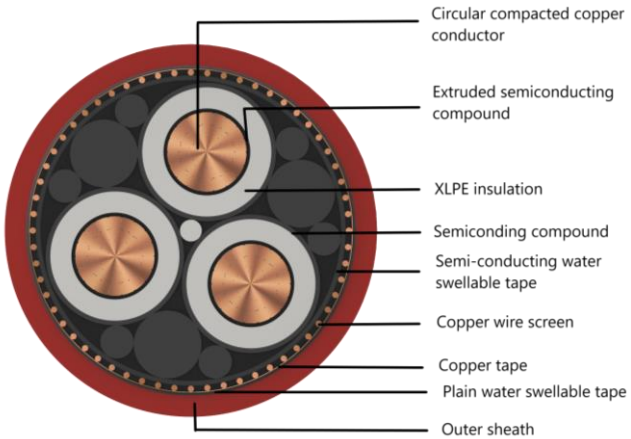
Air Temperature	20	25	35	40	45	50	55	60
De-rating factor	1.08	1.04	0.96	0.91	0.87	0.82	0.76	0.71

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

POLYCAB MV CU BS 7870-4-20 6.35/11 KV

Medium Voltage Copper wire screened Cable, 6.35/11 (12) KV AC



Outstanding Features

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

Application

POLYCAB MV CU BS 7870-4-20 6.35/11 KV compacted copper conductor, XLPE insulated, copper wire screened three core cable is designed for power networks, underground direct buried or 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 7870-1
  - EPR can be provided on demand as per BS 7870-1
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound (Bonded or Cold strippable)
- Inner covering: Semicon water swellable tape
- Collective Metallic Screen: Copper wire & Copper tape screen
- Separation tape: Plain water swellable tape
- Outer Sheath: Extruded medium density polyethylene or Low smoke zero halogen compound as per BS 7870-1, Colour: Red

Core identification

Black with white numbering

Bending Radius:

Fixed Installation: 15 x Overall diameter

Standard and References:

BS EN/IEC 60228
BS 7870-1
BS 7870-4-20

Test Voltage

25.5kV AC

Impulse Test Voltage

Peak 95kV AC

Compliance

Conductor resistance	BS EN/IEC 60228
Insulation resistance	BS 7870-4-20
Flame Retardant test	BS EN/IEC 60332-1-2
Partial Discharge test	BS 7870-4-20
Smoke Emission test	BS EN/IEC 61034-2

POLYCAB MV CU BS 7870-4-20 6.35/11 KV

Medium Voltage Copper wire screened Cable, 6.35/11 (12) KV AC

Product Code	No. of Cores	Nominal Cross sectional Area mm^2	Nominal area of metallic screen mm^2	Overall diameter (Approx.) mm	Weight (Approx.) Kg/Km
MVBS22CXUAPM003C070S	3	70	35	51.8	3950
MVBS22CXUAPM003C095S	3	95	35	55.5	4800
MVBS22CXUAPM003C120S	3	120	35	58.8	5650
MVBS22CXUAPM003C150S	3	150	35	62.4	6700
MVBS22CXUAPM003C185S	3	185	35	65.8	7800
MVBS22CXUAPM003C240S	3	240	35	71.1	9650
MVBS22CXUAPM003C300S	3	300	35	76.2	11700

Electrical Characteristics:

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 of conductor kA/s	Short circuit current rating of metallic screen kA/s	Capacitance (Approx.) µF/km	Inductance (Approx.) mH/km	Reactance (Approx.) Ω/km
70	0.268	0.342	10.02	4.5	0.29	0.33	0.10
95	0.193	0.247	13.59	4.5	0.32	0.32	0.10
120	0.153	0.196	17.17	4.5	0.35	0.30	0.09
150	0.124	0.159	21.46	4.5	0.38	0.29	0.09
185	0.0991	0.127	26.47	4.5	0.41	0.29	0.09
240	0.0754	0.098	34.34	4.5	0.46	0.27	0.09
300	0.0601	0.078	42.93	4.5	0.51	0.27	0.08

POLYCAB MV CU BS 7870-4-20 6.35/11 KV

Medium Voltage Copper wire screened Cable, 6.35/11 (12) KV AC

Current Carrying Capacity

No. of core	Nominal Cross-sectional area mm²	Continues current capacity		
		In ground at 20°C Amp.	In a buried duct Amp.	In air Amp.
3	70	221	193	253
3	95	262	231	304
3	120	298	264	351
3	150	334	297	398
3	185	377	336	455
3	240	434	390	531
3	300	489	441	606

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

Note: The above table in accordance with IEC 60502-2

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