

Type MP-GC XLPE Insulated, PVC Jacketed

5 kV – 25 kV, 100% & 133% I.L., Copper Tape Shielded

CME[®]
wire and cable

A Viakable Company

Features

True Triple extrusion system and closed handling raw materials system, to eliminate any contact with ambient, until extrusion process ends.

Application

High voltage distribution intended for permanent installations. Suitable for underground mining and boreholes.

Can be used in aerial installations, ducts or direct burial.

Standards

ICEA S-75-381/NEMA WC-58

Portable and Power Feeder Cables for Use in Mines and Similar Applications.

CFR Title 30 Federal Regulations, Part 7, Subpart K.

MSHA 7K-228058

Specifications

Maximum operating voltage:

- 5 kV to 25 kV 100% and 133% IL

Maximum conductor operation temperatures:

Wet and dry locations

- Normal: 90 °C
- Emergency: 130 °C
- Short Circuit: 250 °C

Engineering Information

1. Phase, Grounding and Ground

Check Conductors: Soft or annealed uncoated copper compressed Class B stranding, or unilay-compressed per ASTM B8.

On request, compacted strand.

Sizes: 6 AWG up to 500 kcmil.

2. Conductor Shield: Semi conducting cross-linked polyethylene (XLPE).

3. Insulation: Thermoset cross-linked polyethylene (XLPE).

4. Insulation Shield: Semi conducting cross-linked polyethylene (XLPE).

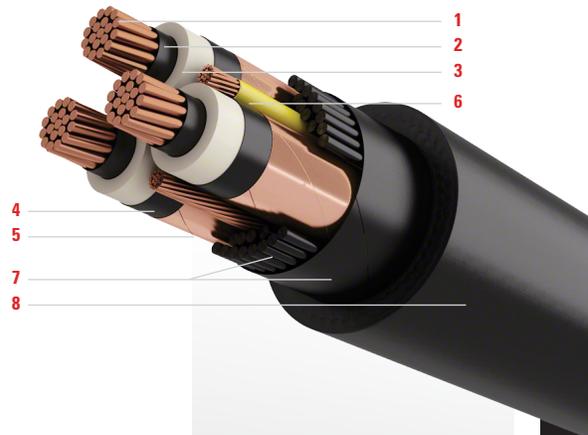
5. Metallic Shield: Soft annealed copper tape, 2.5 mil minimum thickness, 10% minimum overlap.

Phase ID: Color printed on the extruded conducting layer, BL, WH, RE.

6. Ground Check: Thermosetting insulation yellow colored for identification.

7. Assembly: Phase conductors cabled with the ground check between the BL and WH phase conductors, two grounding conductors in intimate contact with the shields, placed on the remaining interstices, suitable fillers, as required and binder tape.

8. Jacket: Black sunlight resistance and flame retardant thermoplastic polyvinyl chloride (PVC) compound.



Technical Data

Type MP-GC XLPE Insulated

Phase Conductor Size	Number of Strands	Nominal Insulation Thickness	Ground Conductor Size	Nominal Outer Jacket Thickness	Maximum Overall Diameter	Approximate Total Weight
AWG or kcmil		mil	AWG	mil	in	lb/kft
Rated Voltage 5 kV						
6	7	90	10	110	1.3	968
4	7	90	8	110	1.4	1230
2	7	90	6	110	1.6	1620
1	19	90	5	110	1.7	1888
1/0	19	90	4	110	1.8	2211
2/0	19	90	3	140	1.9	2715
3/0	19	90	2	140	2.0	3219
4/0	19	90	1	140	2.2	3837
250	37	90	1/0	140	2.3	4408
300	37	90	1/0	140	2.4	5000
350	37	90	2/0	140	2.5	5746
500	37	90	4/0	140	2.9	7983
Rated Voltage 8 kV						
6	7	115	10	110	1.4	1068
4	7	115	8	110	1.5	1344
2	7	115	6	110	1.7	1734
1	19	115	5	110	1.8	2003
1/0	19	115	4	140	1.9	2439
2/0	19	115	3	140	2.0	2849
3/0	19	115	2	140	2.2	3360
4/0	19	115	1	140	2.3	3992
250	37	115	1/0	140	2.4	4570
300	37	115	1/0	140	2.5	5181
350	37	115	2/0	140	2.7	5920
500	37	115	4/0	170	3.0	8340
Rated Voltage 15 kV						
2	7	175	6	140	2.0	2285
1	19	175	5	140	2.1	2594
1/0	19	175	4	140	2.2	2923
2/0	19	175	3	140	2.3	3360
3/0	19	175	2	140	2.4	3965
4/0	19	175	1	140	2.6	4637
250	37	175	1/0	140	2.7	5309
300	37	175	1/0	140	2.9	6014
350	37	175	2/0	140	2.9	6854
500	37	175	4/0	170	3.3	9274

The above data are approximate and subject to normal manufacturing tolerances. Where required, the compatibility with glands, connectors and accessories should be verified using actual dimensions of the product. Other sizes available upon request.

Ampacities: Refer to beginning of section.

Phase Conductor Size	Ground Check Conductor Size
	AWG
6 AWG	10
4 AWG to 500 kcmil	8