Type MP-GC EPR Insulated, CPE 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.

-40 °C Rating CPE Jacket.

Application

High voltage distribution intended for permanent installations.

Suitable for underground mining and boreholes.

Can be used in aerial nstallations, 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.

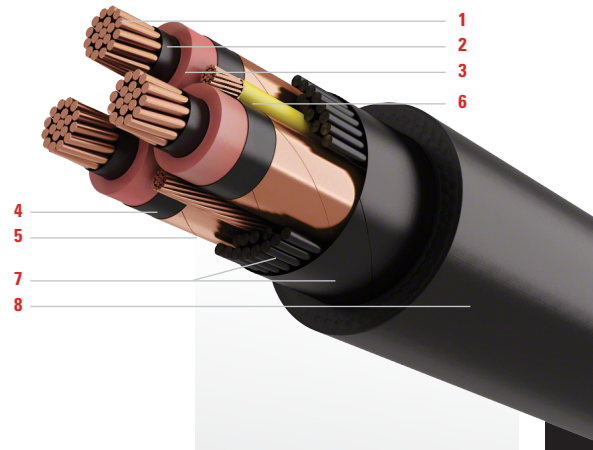
On request, compacted strand.

Sizes: 6 AWG up to 500 kcmil.

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

3. Insulation: Thermoset ethylene propylene rubber (EPR).

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 inmate contact with the shields, placed on the remaining interstices, suitable fillers, as required and binder tape.

8. Jacket: Black sunlight resistance and flame retardant chlorinated polyethylene (CPE) compound.

On request, PVC jacket.

Type MP-GC EPR 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	1015
4	7	90	8	110	1.4	1277
2	7	90	6	110	1.6	1673
1	19	90	5	110	1.7	1949
1/0	19	90	4	110	1.8	2278
2/0	19	90	3	110	1.9	2789
3/0	19	90	2	140	2.0	3300
4/0	19	90	1	140	2.2	3924
250	37	90	1/0	140	2.3	4502
300	37	90	1/0	140	2.4	5100
350	37	90	2/0	140	2.5	5853
500	37	90	4/0	140	2.9	8111
Rated Voltage 8 kV						
6	7	115	10	110	1.4	1129
4	7	115	8	110	1.5	1411
2	7	115	6	110	1.7	1808
1	19	115	5	110	1.8	2083
1/0	19	115	4	140	1.9	2527
2/0	19	115	3	140	2.0	2950
3/0	19	115	2	140	2.2	3468
4/0	19	115	1	140	2.3	4106
250	37	115	1/0	140	2.4	4691
300	37	115	1/0	140	2.5	5309
350	37	115	2/0	140	2.7	6055
500	37	115	4/0	170	3.0	8508
Rated Voltage 15 kV						
2	7	175	6	140	2.0	2473
1	19	175	5	140	2.1	2789
1/0	19	175	4	140	2.2	3179
2/0	19	175	3	140	2.3	3662
3/0	19	175	2	140	2.4	4247
4/0	19	175	1	140	2.6	4966
250	37	175	1/0	140	2.7	5658
300	37	175	1/0	140	2.9	6471
350	37	175	2/0	140	2.9	7305
500	37	175	4/0	170	3.3	9905

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