

# MP-GC 8000V / 15000V

## Mine Power Feeder Cable Extra Heavy Duty EPR / CPE 90°C MSHA Mining Grade



### SPECIFICATIONS & STANDARDS

ICEA S-75-381/NEMA WC58, ASTM B 172

### CONSTRUCTION:

- Conductor:** Bare copper, rope strand ASTM B 172  
**Conductor shield:** Semi-conducting tape and compound, ICEA S-75-381 sec 3.14  
**Insulation:** Ethylene-propylene rubber (EPR), ICEA S-75-381, table 4-3/4-4  
**Insulation shield:** Semi-conducting compound, ICEA S-75-381 and 0.005 copper tape  
**Grounding cond:** Tin copper Class B, ICEA S-75-381, table 4-1  
**Ground check:** Bare copper, ICEA S-75-381 table 4-1; insulation color: yellow  
**Assembly:** Three power conductor, ground check and two non-insulated grounding conductors cabled with rubber fillers to make a round core; Single faced rubber filled binder tape applied overall  
**Jacket:** Black extra heavy duty CPE thermoset compound, ICEA S-75-381, table 3-3, 3-22, sec. 3.21  
**Color code:** Color code tape: black, white, red applied under metallic shielding tape provides circuit identification, ICEA S-75-381 sec 4.6

FEATURES	APPLICATION
<ul style="list-style-type: none"> <li>- Ozone, sun, weather and flame resistant</li> <li>- Oil and heat resistant</li> <li>- Maximum continuous conductor temperature 90°C</li> <li>- Indent printed for easy identification</li> </ul>	<ul style="list-style-type: none"> <li>- For use as trailing mining cables</li> <li>- For use up to 8000 volts when installed in ducts, conduits, open air and for direct burial in wet and dry locations</li> </ul>

### APPROVALS:

MSHA: P-07-KA050003-1

### 8000V – 100% INSULATION LEVEL

Part Number	Power Conductor Size	Power Conductor Stranding	Size		Nominal Insulation Thickness	Nominal Jacket Thickness	Nominal O.D.		Approx. Weight	
			Ground	Ground Check			inches	mm	lbs/1000 ft	kgs/km
MPGC2/0-8KVCPE	2/0 AWG	No. of Stranding	AWG	AWG	inches	inches	inches	mm	lbs/1000 ft	kgs/km
		19	3	8	0.115	0.140	1.88	47.8	2900	4316

### 15000V – 100% INSULATION LEVEL

Part Number	Power Conductor Size	Power Conductor Stranding	Size		Nominal Insulation Thickness	Nominal Jacket Thickness	Nominal O.D.		Approx. Weight	
			Ground	Ground Check			inches	mm	lbs/1000 ft	kgs/km
MPGC4/0-15KVCPE	4/0 AWG	No. of Stranding	AWG	AWG	inches	inches	inches	mm	lbs/1000 ft	kgs/km
		37	1	8	0.175	0.140	2.40	61.0	4605	6853

### ELECTRICAL AND MECHANICAL PARAMETERS

Power-Grounding Conductor Size	Power Conductor Resistance at 25°C	Grounding Conductor Resistance at 25°C	Ground Check Conductor Resistance at 25°C	Inductance per length unit	Operating Capacitance per length unit	Permissible short-circuit Current <sup>(2)</sup> (1s)	Ampacity <sup>(1)</sup> 40°C Ambient Temp.	Maximum Permissible Tension Force
AWG or MCM	Ω/1000Ft	Ω/1000Ft	Ω/1000Ft	mH/1000Ft	μF/1000Ft	kA	A	N
2/0 AWG – 3 AWG	0.081	0.213	0.652	0.098	0.14	9.64	243	4000
4/0 AWG – 1 AWG	0.051	0.134		0.093	0.16	15.30	321	6400

(1) Ampacity- Free air measured; Based on continuous duty at 90°C conductor temperature (2) Short-circuit current (1s) – Based on conductor temperature from 90°C up to 250°C

### STANDARD PRINT LEGEND:

TF CABLE 8000V (SIZE) GROUNDED MP-GC P-07-KA050003-1-MSHA;  
 TF CABLE 15000V (SIZE) GROUNDED MP-GC P-07-KA050003-1-MSHA

### SPECIAL FACTORY OPTIONS:

**Jacket:** Other colors available  
 Neoprene®