



MP-GC

8000V/15000V

EPR/CPE

ICEA S-75-381/NEMA WC-58,ASTM B-8

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

APPLICATIONS

For use as trailing mining cables. For use from 5 kV up to 25kV when installed inducts, conduit, open air and direct burial in wet and dry locations. Other industrial, mining applications

CONSTRUCTION

Conductors	Bare copper concentric strand in accordance with ASTM B 8
Conductor shield	Semi-conductive tape and layer over the conductor. ICEA S-75-381 sec. 3.14
Insulation	Ethylene-propylene rubber (EPR). ICEA S-75-381 Tab. 4-2
Insulation shield	Semi-conducting compound as per 4.5 of ICEA S-75-381 and 0.005" copper tape
Circuit identification	Color thread: black, red white applied under metallic shielding tape. ICEA S-75-381 sec.4.6.
Grounding	Annealed tin coated copper Class B comply with Tab. 4-1 of ICEA S-75-381
Ground check	Bare copper conductor. ICEA S-75-381 Tab. 4-1. Insulation color: yellow
Assembly	Three power, the ground check, two tinned copper grounding conductors cabled with cured rubber fillers as required to make an essentially round core
Separator	A single faced rubber filled binder tape applied over core.
Outer jacket	A CPE thermosetting compound, extra heavy duty as per Table 3-3,sec. 3.21.
Color of outer jacket	Black (other colors available)



Features

Ozone, sun, weather and flame resistant. Oil and heat resistant. Maximum continuous conductor temperature 90°C. Indent printed for easy identification.

Approvals

MSHA:P-07-KA050003-1

Technical and Electrical Characteristic

Part Number	Power Conductor Size	Power Conductor Stranding	Size		Nominal Insulation Thickness	Nominal Jacket Thickness	Nominal O.D.		Approx. O.D.		Maximum Permissible Tensile Force.
	AWG or MCM	No. of wires	Ground	Ground Check			Inches	mm	Lbs /1000ft	kg/km	
TYPE MP-GC -8000 VOLTS -100% INSULATION LEVEL											
MPGC8KV4-3-CPE	4	7	8	8	0,115	0,110	1,43	36,3	1410	2042	950
MPGC8KV2-3-CPE	2	7	6	8	0,115	0,110	1,55	39,4	1750	2604	1500
MPGC8KV1-3-CPE	1	19	5	8	0,115	0,110	1,65	41,9	2050	3051	1900
MPGC8KV1/0-3-CPE	1/0	19	4	8	0,115	0,140	1,75	47,5	2899	4316	2400
MPGC8KV2/0-3-CPE	2/0	19	3	8	0,115	0,140	1,88	49,8	2900	4316	3000
MPGC8KV4/0-3-CPE	4/0	37	1	8	0,115	0,140	2,12	53,8	4100	6102	4800
MPGC8KV250-3-CPE	250	37	1/0	8	0,115	0,140	2,25	57,2	4720	7024	5800
MPGC8KV350-3-CPE	350	37	2/0	8	0,115	0,140	2,46	62,5	6070	9030	7900
TYPE MP-GC -15000 VOLTS -100% INSULATION LEVEL											
MPGC15KV4-3-CPE	4	7	8	8	0,175	0,140	1,84	46,7	2140	3185	950
MPGC15KV2-3-CPE	2	7	6	8	0,175	0,140	1,88	47,8	2285	3400	1500
MPGC15KV1-3-CPE	1	19	5	8	0,175	0,140	1,98	52,0	2680	3990	1900
MPGC15KV1/0-3-CPE	1/0	19	4	8	0,175	0,140	2,05	52,1	2785	4145	2400
MPGC15KV2/0-3-CPE	2/0	19	3	8	0,175	0,140	2,15	54,6	3295	4904	3000
MPGC15KV4/0-3-CPE	4/0	37	1	8	0,175	0,140	2,40	61,0	4605	6853	4800
MPGC15KV250-3-CPE	250	37	1/0	8	0,175	0,140	2,50	63,5	4980	7400	5800
MPGC15KV350-3-CPE	350	37	2/0	8	0,175	0,140	2,75	69,9	6370	9478	7900
MPGC15KV500-3-CPE	500	37	4/0	8	0,175	0,140	3,10	78,7	8760	13030	11400

Electrical 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 unit length	Operating Capacitance per unit length	Permissible short-circuit Current (1s) (2)	Ampacity(1) 40°C Ambient Temp
AWG or MCM	Ω/1000Ft	Ω/1000Ft	Ω/1000Ft	mH/1000Ft	μF/1000Ft	kA	A
TYPE MP-GC -8000 VOLTS -100% INSULATION LEVEL							
4 AWG	0,258	0,678	0,652	0,117	0,09	3,03	122
2 AWG	0,162	0,427	0,652	0,111	0,10	4,80	159
1 AWG	0,129	0,338	0,652	0,107	0,11	6,06	184
1/0 AWG	0,102	0,269	0,652	0,104	0,12	7,65	211
2/0 AWG	0,081	0,213	0,652	0,098	0,14	9,64	243
4/0 AWG	0,051	0,134	0,652	0,093	0,16	15,30	321
250 MCM	0,043	0,102	0,652	0,087	0,20	18,16	355
350 MCM	0,031	0,081	0,652	0,083	0,22	25,31	435
TYPE MP-GC -15000 -100% INSULATION LEVEL							
4 AWG	0,258	0,678	0,652	0,129	0,07	3,03	122
2 AWG	0,162	0,427	0,652	0,122	0,08	4,80	164
1 AWG	0,129	0,338	0,652	0,118	0,08	6,06	187
1/0 AWG	0,102	0,269	0,652	0,114	0,09	7,65	215
2/0 AWG	0,081	0,213	0,652	0,107	0,10	9,64	246
4/0 AWG	0,051	0,134	0,652	0,102	0,11	15,30	325
250 MCM	0,043	0,102	0,652	0,094	0,14	18,16	355
350 MCM	0,031	0,081	0,652	0,090	0,16	25,31	435
500 MCM	0,022	0,051	0,652	0,086	0,18	36,18	536

(1) Ampacity –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 (VOLTAGE) (SIZE) GROUNDED MP-GC P-7K-254064-1-MSHA

Special factory option

Jacket other color available