

3/C CU 15KV 100% EPR/CPE RHINOPOWER™ Type MP-GC. MSHA Approved

Class B Copper conductors, Ethylene Propylene Rubber (EPR) 100% Insulation Level, Copper Tape Shield, Chlorinated Polyethylene (CPE) Jacket with Optional Reflective Stripes



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B compact stranded bare copper per ASTM B3 and ASTM B496
2. **Conductor Shield:** Semi-conducting cross-linked copolymer
3. **Insulation:** Ethylene Propylene Rubber (EPR) 100% and 133% Insulation Level
4. **Insulation Shield:** Strippable semi-conducting cross-linked copolymer
5. **Copper Tape Shield:** Helically wrapped 5 mil copper tape with 25% overlap
6. **Grounding Conductors:** Two Class B compressed stranded bare copper per ASTM B3 and ASTM B8
7. **Ground Check:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8 with yellow high strength, polypropylene insulation
8. **Filler:** Rubber Fillers as needed
9. **Reinforcement:** Tape and Reinforcing twine applied over the core for improved mechanical integrity and ease of stripping
10. **Jacket:** Black, mold cured, single layer, flame resistant, thermosetting Chlorinated Polyethylene (CPE). Alternate jacket colors available
11. **Reflective Stripe:** Highly visible reflective stripe embedded into the outer jacket to increase safety and help prevent cable runover (optional, contact your sales representative for part number)

APPLICATIONS AND FEATURES:

RHINOPOWER™ Type MP-GC mine power feeder cable is a heavy-duty power cable for use in stationary horizontal HV mine power distribution circuits, for permanent or semi-portable applications with power transmission in deep mines, surface mines, open pits, tunnels, in conduit or duct (not to exceed max rated voltage), and suitable for direct burial in wet or dry locations. For vertical drop requirements consult with factory application specialist.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- ASTM B496 Compact Round Concentric-lay-standard copper
- ICEA S-75-381 Portable and Power Feeder Cables for Use in Mines
- MSHA Approved



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SAMPLE PRINT LEGEND:

SOUTHWIRE (R) RHINO™ BRAND CABLE # AWG 3/C COMPACT CU TYPE MP-GC 15000V 100% INS. LEVEL P-07-K140017
MSHA

Table 1 – Weights and Measurements

Stock Number	Cond. Size	Cond. Number	Cond. Strands	Diameter Over Conductor	Insul. Thickness	Diameter Over Insulation	Ground	Ground Check Size	Jacket Thickness	Approx. OD	Approx. Weight
	AWG/Kcmil	No.	No.	inch	mil	inch	No. x AWG	AWG	mil	inch	lb/1000ft
578046	2	3	7	0.268	175	0.648	2 x 6	8	145	1.964	2366
586665	1	3	19	0.298	175	0.679	2 x 5	8	140	1.980	2325
586565	2/0	3	19	0.376	175	0.756	2 x 3	8	145	2.150	3416
578797	4/0	3	19	0.474	175	0.858	2 x 1	8	140	2.400	4900
599635	250	3	37	0.520	175	0.900	2 x 1/0	8	145	2.508	4833
592497	350	3	37	0.615	175	0.996	2 x 2/0	8	140	2.750	6189
580833	500	3	37	0.735	175	1.113	1 x 4/0	8	170	3.100	9015

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

* Strand count meets minimum number per ASTM

Table 2 – Electrical and Engineering Data

Cond. Size	DC Resistance @ 25°C	AC Resistance @ 90°C	Capacitive Reactance	Inductive Reactance	Working Tension	Min Bending Radius	Allowable Ampacity In Air 90°C
AWG/Kcmil	Ω/1000ft	Ω/1000ft	MΩ*1000ft	Ω/1000ft	lb	inch	Amp
2	0.162	0.204	0.046	0.042	453	23.5	164
1	0.128	0.162	0.042	0.041	572	23.7	187
2/0	0.081	0.102	0.036	0.038	910	25.8	246
4/0	0.051	0.065	0.030	0.035	1447	28.8	325
250	0.043	0.056	0.028	0.034	1710	30.0	359
350	0.031	0.041	0.025	0.033	2394	33.0	438
500	0.022	0.030	0.021	0.031	3420	37.2	536

* Ampacities based upon ICEA S-75-381 Table I-1.

* Inductive impedance is based on non-ferrous conduit with one diameter spacing.

Stock Number and Jacket Color

Size	Stock Number	Jacket Color
#2	6741859	Orange

