

3/C CU 133% 15KV EPR/CPE RHINOPOWER™ Type MP-GC

Class B Copper conductors, Ethylene Propylene Rubber (EPR) 133% 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) 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. **Ground Check:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8 with yellow high strength, polypropylene insulation
7. **Grounding Conductors:** Two Class B compressed stranded bare copper per ASTM B3 and ASTM B8
8. **Filler:** Rubber Fillers as needed
9. **Tape:** Polyester tape, applied over the cable core for improved mechanical integrity and ease of stripping
10. **Reinforcement:** Reinforcing twine applied over the taped core
11. **Jacket:** Black, mold cured, single layer, flame resistant, thermosetting Chlorinated Polyethylene (CPE). Alternate jacket colors available
12. **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 Standard Specification for 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



SAMPLE PRINT LEGEND:

SOUTHWIRE (R) RHINO™ BRAND CABLE # AWG 3/C COMPACT CU TYPE MP-GC 15000V 133% 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 Size	Ground Strands	Ground Check Size	Ground Check Strands	Ground Check Insulation Thickness	Jacket Thickness	Approx. OD	Approx. Weight
	AWG/Kcmil	No.	No.	inch	mil	inch	AWG	No.	AWG	No.	mil	mil	inch	lb/1000ft
TBA	2	3	7	0.268	215	0.734	6	7	8	7	45	140	2.11	2720
TBA	1	3	19	0.299	215	0.765	5	7	8	7	45	140	2.20	3060
TBA	1/0	3	19	0.336	215	0.802	4	7	8	7	45	140	2.30	3480
TBA	2/0	3	19	0.376	215	0.842	3	7	8	7	45	140	2.42	4000
TBA	3/0	3	19	0.423	215	0.889	2	7	8	7	45	140	2.53	4590
TBA	4/0	3	19	0.475	215	0.941	1	19	8	7	45	140	2.65	5300
TBA	250	3	37	0.52	215	0.986	1/0	19	8	7	45	140	2.75	5970
TBA	300	3	37	0.57	215	1.036	1/0	19	8	7	45	140	2.86	6630
TBA	350	3	37	0.616	215	1.082	2/0	19	8	7	45	140	3.01	7550
TBA	400	3	37	0.659	215	1.125	3/0	19	8	7	45	170	3.09	8350
TBA	450	3	37	0.7	215	1.166	3/0	19	8	7	45	170	3.17	8960
TBA	500	3	37	0.736	215	1.202	4/0	19	8	7	45	170	3.29	9930

All dimensions are nominal and subject to normal manufacturing tolerances

◇ Cable marked with this symbol is a standard stock item

Table 2 – Electrical and Engineering Data

Stock Number	Cond. Size	Cond. Number	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	No.	Ω/1000ft	Ω/1000ft	MΩ*1000ft	MΩ/1000ft	lb	inch	Amp
TBA	2	3	0.164	0.205	0.054	0.047	454.000	25.3	164
TBA	1	3	0.130	0.163	0.051	0.045	572.000	26.4	187
TBA	1/0	3	0.104	0.130	0.047	0.043	722.000	27.6	215
TBA	2/0	3	0.082	0.103	0.044	0.042	910.000	29	246
TBA	3/0	3	0.065	0.081	0.040	0.040	1147.000	30.4	283
TBA	4/0	3	0.052	0.065	0.037	0.039	1446.000	31.8	325
TBA	250	3	0.044	0.055	0.035	0.038	1709.000	33	359
TBA	300	3	0.037	0.046	0.032	0.037	2051.000	34.3	401
TBA	350	3	0.031	0.039	0.030	0.036	2393.000	36.1	438
TBA	400	3	0.027	0.034	0.029	0.035	2734.000	37.1	473
TBA	450	3	0.024	0.030	0.028	0.035	3075.000	38	504
TBA	500	3	0.022	0.028	0.026	0.034	3418.000	39.5	536

† Ampacity based on ICEA S-75-381 Table I-1 and is for a single isolated cable in air operated with an open-circuited shield at an ambient temperature of 40°C and a conductor temperature of 90°C



Southwire



Services