3/C CU 25kV 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 25000V 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	Jacket Color
	AWG/ Kcmil	No.	No.	inch	mil	inch	No. x AWG	AWG	mil	inch	lb/1000ft	
TBA	2	3	7	0.268	260	0.824	2 x 6	8	140	2.340	3190	BK
TBA	1	3	19	0.299	260	0.855	2 x 5	8	140	2.420	3530	BK
TBA	1/0	3	19	0.336	260	0.892	2 x 4	8	140	2.510	3950	BK
TBA	2/0	3	19	0.376	260	0.932	2 x 3	8	140	2.600	4430	BK
TBA	3/0	3	19	0.423	260	0.979	2 x 2	8	140	2.710	5040	BK
648793	4/0	3	19	0.475	260	1.025	2 x 1	8	170	2.850	4820	BK
TBA	250	3	37	0.520	260	1.076	2 x 1/0	8	140	2.990	6590	BK
TBA	350	3	37	0.616	260	1.172	2 x 2/0	8	170	3.210	8130	BK
TBA	500	3	37	0.736	260	1.292	2 x 4/0	8	170	3.500	10600	BK

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
TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.

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	0.164	0.205	0.061	0.049	454	28.1	168
1	0.130	0.163	0.057	0.047	572	29.0	191
1/0	0.104	0.130	0.053	0.046	722	30.1	218
2/0	0.082	0.103	0.049	0.044	910	31.2	249
3/0	0.065	0.081	0.045	0.042	1147	32.5	286
4/0	0.052	0.065	0.042	0.041	1446	34.7	326
250	0.044	0.055	0.039	0.040	1709	35.9	360
350	0.031	0.039	0.035	0.038	2393	38.5	439
500	0.022	0.028	0.030	0.036	3418	42.0	536

* Ampacities based upon ICEA S-75-381 Table I-1.
* Inductive impedance is based on non-ferrous conduit with one diameter spacing center-to-center.