

## 3/C CU 25KV 100% XLP/PVC RHINOPOWER™ Type MP-GC

Class B Copper conductors, XLP 100% Insulation Level, Copper Tape Shield, Polyvinyl Chloride (PVC) Jacket, 90°C



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:** Cross-Linked Polyethylene (XLP), 100% 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, single layer, flame resistant, thermoplastic Polyvinyl Chloride (PVC). Alternate colors available

### 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 COMPACT CU 3/C TYPE MP-GC 25000V 100% INS. LEVEL 90°C P-07-K130025 MSHA



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**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	260	0.824	6	7	8	7	45	140	2.34	3300
TBA	1	3	19	0.299	260	0.855	5	7	8	7	45	140	2.42	3660
TBA	1/0	3	19	0.336	260	0.892	4	7	8	7	45	140	2.51	4080
TBA	2/0	3	19	0.376	260	0.932	3	7	8	7	45	140	2.60	4580
TBA	3/0	3	19	0.423	260	0.979	2	7	8	7	45	140	2.71	5200
TBA	4/0	3	19	0.475	260	1.031	1	19	8	7	45	140	2.89	6100
TBA	250	3	37	0.52	260	1.076	1/0	19	8	7	45	140	2.99	6790
TBA	300	3	37	0.57	260	1.126	1/0	19	8	7	45	170	3.10	7500
TBA	350	3	37	0.616	260	1.172	2/0	19	8	7	45	170	3.21	8360
TBA	400	3	37	0.659	260	1.215	3/0	19	8	7	45	170	3.33	9310
TBA	450	3	37	0.7	260	1.256	3/0	19	8	7	45	170	3.42	9980
TBA	500	3	37	0.736	260	1.292	4/0	19	8	7	45	170	3.50	10880

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	0.073	0.049	454.000	28.1	168
TBA	1	3	0.130	0.163	0.069	0.047	572.000	29	191
TBA	1/0	3	0.104	0.130	0.064	0.046	722.000	30.1	218
TBA	2/0	3	0.082	0.103	0.059	0.044	910.000	31.2	249
TBA	3/0	3	0.065	0.081	0.055	0.042	1147.000	32.5	286
TBA	4/0	3	0.052	0.065	0.051	0.041	1446.000	34.7	326
TBA	250	3	0.044	0.055	0.047	0.040	1709.000	35.9	360
TBA	300	3	0.037	0.046	0.044	0.039	2051.000	37.2	402
TBA	350	3	0.031	0.039	0.042	0.038	2393.000	38.5	439
TBA	400	3	0.027	0.034	0.040	0.037	2734.000	40	473
TBA	450	3	0.024	0.030	0.038	0.036	3075.000	41	504
TBA	500	3	0.022	0.028	0.037	0.036	3418.000	42	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



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