

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

Class B Copper conductors, Cross-Linked Polyethylene (XLPE) 100% Insulation Level, Copper Tape Shield, Polyvinyl Chloride (PVC) Jacket, 90°C



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

- Conductor:** Class B compact stranded bare copper per ASTM B3 and B496
- Conductor Shield:** Semi-conducting cross-linked copolymer
- Insulation:** 100% Insulation Level Ethylene Propylene Rubber (EPR)
- Insulation Shield:** Strippable semi-conducting cross-linked copolymer
- Copper Tape Shield:** Helically wrapped 5 mil copper tape with 25% overlap
- Grounding Conductors:** Two class B compressed stranded bare copper per ASTM B3 and B8
- Ground Check:** Class B compressed stranded bare copper per ASTM B3 and B8 with yellow high strength, polypropylene insulation
- Filler:** Rubber fillers as needed
- Reinforcement:** Tape and reinforcing twine applied over the core for improved mechanical integrity and ease of stripping
- Jacket:** Black, single layer, Polyvinyl Chloride (PVC). Alternate jacket colors available
- Reflective Stripe:** (optional) Highly visible reflective stripe embedded into the outer jacket to increase safety and help prevent cable runover (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

SAMPLE PRINT LEGEND:

SOUTHWIRE (R) RHINO™ BRAND CABLE # AWG COMPACT CU 3/C TYPE MP-GC 15000V 100% INS. LEVEL 90°C P-07-K130025 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	
570247	2	3	7	0.268	175	0.648	2 x 6	8	145	1.952	2080	BK
578496	1/0	3	19	0.336	175	0.722	2 x 4	8	140	2.025	2704	BK
570246	2/0	3	19	0.376	175	0.756	2 x 3	8	140	2.150	3090	BK
578497	3/0	1	19	0.422	175	0.803	2 x 2	8	140	2.205	3671	BK
570248	4/0	3	19	0.474	175	0.855	2 x 1	8	150	2.400	3540	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	0.162	0.204	0.060	0.042	453	23.4	164
1/0	0.104	0.130	0.043	0.039	722	24.3	218
2/0	0.081	0.102	0.047	0.038	910	25.8	246
3/0	0.064	0.081	0.043	0.036	1147	26.4	279
4/0	0.051	0.065	0.040	0.035	1447	28.8	325

* 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.