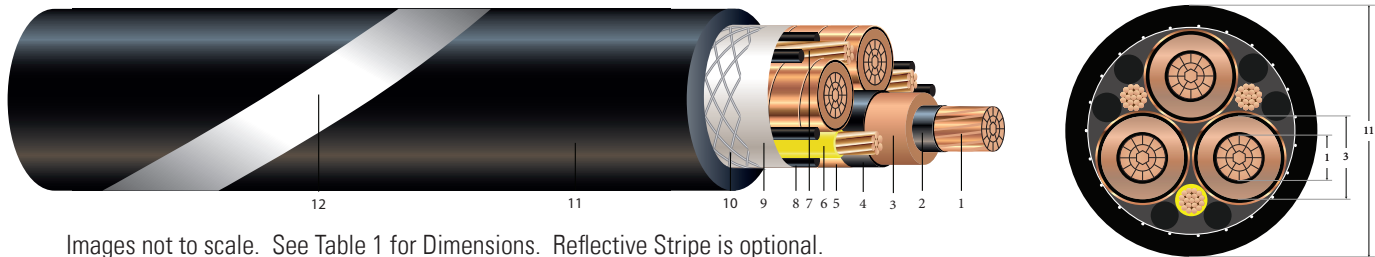


3/C CU 15KV 100% EPR/CPE RHINOPOWER™ Type MP-GC

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



Images not to scale. See Table 1 for Dimensions. Reflective Stripe is optional.

CONSTRUCTION:

- Conductor:** Class B compact stranded bare copper per ASTM B3 and ASTM B496.
- Conductor Shield:** Semi-conducting cross-linked copolymer.
- Insulation:** Ethylene Propylene Rubber (EPR) 100% Insulation Level.
- Insulation Shield:** Stripable semi-conducting cross-linked copolymer.
- Copper Tape Shield:** Helically wrapped 5 mil copper tape with 25% overlap.
- Ground Check:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8 with yellow high strength, polypropylene insulation.
- Grounding Conductor:** Two Class B compressed stranded bare copper per ASTM B3 and ASTM B8.
- Filler:** Rubber Fillers as needed.
- Tape:** Polyester tape, applied over the cable core for improved mechanical integrity and ease of stripping.
- Reinforcement:** Reinforcing twine applied over the taped core.
- Jacket:** Black, mold cured, single layer, flame resistant, thermosetting Chlorinated Polyethylene (CPE). Alternate jacket colors available.
- 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:

- MSHA Approved.
- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- ASTM B496 Compact Round Concentric-Lay-Stranded Copper Conductors.
- ICEA S-75-381/NEMA WC 58 Portable and Power Feeder Cables for use in Mines and Similar Applications

SAMPLE PRINT LEGEND:

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



Southwire Company, LLC | One Southwire Drive, Carrollton, GA 30119 | www.southwire.com



Table 1 – Weights & Measurements

Stock Code	Phase Conductors			Insulation		Ground Conductors		Ground Check Conductor			Jacket Thickness	Nominal OD (11)	Weight
	Size	Strands	Diameter (1)	Thickness	Diameter (3)	Size	Strands	Size	Strands	Insul. Thickness			
	AWG	No.	inches	mils	inches	AWG	No.	AWG	No.	mils.			
57804699	2	7	0.268	175	0.654	6	7	8	7	45	140	1.88	2,310
58666599	1	19	0.299	175	0.685	5	7	8	7	45	140	1.98	2,650
TBD	1/0	19	0.336	175	0.722	4	7	8	7	45	140	2.05	3,000
58656599	2/0	19	0.376	175	0.762	3	7	8	7	45	140	2.15	3,460
TBD	3/0	19	0.423	175	0.809	2	7	8	7	45	140	2.26	4,020
57879799	4/0	19	0.475	175	0.861	1	19	8	7	45	140	2.40	4,140
59963599	250	37	0.520	175	0.906	1/0	19	8	7	45	140	2.50	5,380
TBD	300	37	0.570	175	0.956	1/0	19	8	7	45	140	2.64	6,080
59249799	350	37	0.616	175	1.002	2/0	19	8	7	45	140	2.75	6,890
TBD	400	37	0.659	175	1.045	3/0	19	8	7	45	140	2.92	7,870
TBD	450	37	0.700	175	1.086	3/0	19	8	7	45	140	3.00	8,470
58083399	500	37	0.736	175	1.122	4/0	19	8	7	45	170	3.10	9,370

All dimensions are nominal and subject to normal manufacturing tolerances

Table 2 – Electrical and Engineering Data

Stock Code	Conductor Size	Resistance		Reactance		Minimum Bending Radius	Allowable Ampacities †
		DC @ 25°C	AC @ 90°C	X _c @ 60Hz	X _L @ 60Hz		
		Ω/MFT	Ω/MFT	MΩ*MFT	Ω/MFT		
57804699	2	0.164	0.205	0.048	0.044	22.6	164
58666599	1	0.13	0.163	0.045	0.043	23.8	187
TBD	1/0	0.104	0.130	0.041	0.041	24.6	215
58656599	2/0	0.082	0.103	0.038	0.04	25.8	246
TBD	3/0	0.065	0.081	0.035	0.038	27.1	283
57879799	4/0	0.052	0.065	0.032	0.037	24.5	325
59963599	250	0.044	0.055	0.03	0.036	30	359
TBD	300	0.037	0.046	0.028	0.035	31.7	401
59249799	350	0.031	0.039	0.026	0.034	33	438
TBD	400	0.027	0.034	0.025	0.034	35	473
TBD	450	0.024	0.030	0.024	0.033	36	504
58083399	500	0.022	0.028	0.023	0.033	37.2	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

