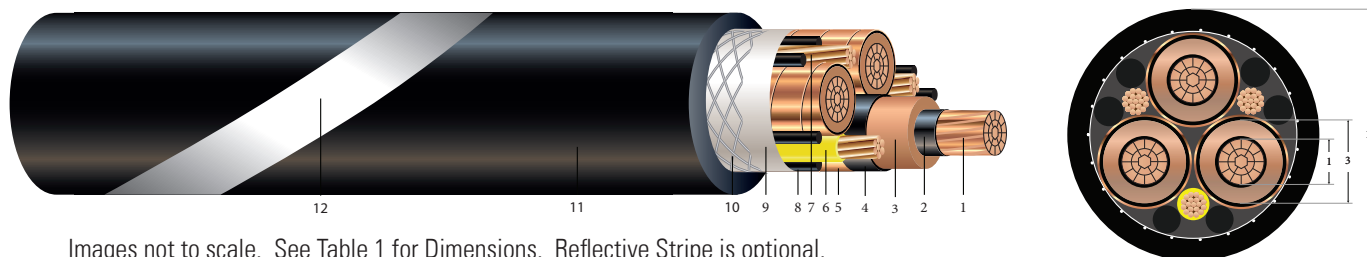


3/C CU 5KV 100% & 133% EPR/CPE RHINOPOWER™ Type MP-GC

Class B Cu Conductors, Ethylene Propylene Rubber (EPR) 100% & 133% Insulation Level, Cu Tape Shield, Chlorinated Polyethylene (CPE) Jacket w/ Optional Reflective Stripes, 90°C



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% and 133% 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 5000V 100% OR 133% 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.			
TBD	6	7	0.169	90	0.385	10	7	10	7	30	110	1.21	950
TBD	4	7	0.213	90	0.429	8	7	8	7	45	110	1.32	1250
TBD	2	7	0.268	90	0.484	6	7	8	7	45	110	1.45	1660
TBD	1	19	0.299	90	0.515	5	7	8	7	45	110	1.53	1940
TBD	1/0	19	0.336	90	0.552	4	7	8	7	45	110	1.63	2290
57841001	2/0	19	0.376	90	0.592	3	7	8	7	45	110	1.74	2730
58691299	3/0	19	0.423	90	0.639	2	7	8	7	45	140	1.88	3290
TBD	4/0	19	0.475	90	0.691	1	19	8	7	45	140	2.00	3930
58701399	250	37	0.520	90	0.736	1/0	19	8	7	45	140	2.13	4580
TBD	300	37	0.570	90	0.786	1/0	19	8	7	45	140	2.25	5190
TBD	350	37	0.616	90	0.832	2/0	19	8	7	45	140	2.35	5940
TBD	400	37	0.659	90	0.875	3/0	19	8	7	45	140	2.45	6740
TBD	450	37	0.700	90	0.916	3/0	19	8	7	45	140	2.55	7340
TBD	500	37	0.736	90	0.952	4/0	19	8	7	45	140	2.64	8180

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		
TBD	6	0.417	0.521	0.044	0.044	14.5	93
TBD	4	0.262	0.328	0.038	0.041	15.8	122
TBD	2	0.164	0.205	0.032	0.038	17.4	159
TBD	1	0.130	0.163	0.029	0.037	18.4	184
TBD	1/0	0.104	0.130	0.027	0.035	19.6	211
57841001	2/0	0.082	0.103	0.024	0.034	20.9	243
58691299	3/0	0.065	0.081	0.022	0.033	22.6	279
TBD	4/0	0.052	0.065	0.020	0.032	24.0	321
58701399	250	0.044	0.055	0.019	0.031	25.6	355
TBD	300	0.037	0.046	0.017	0.031	27.0	398
TBD	350	0.031	0.039	0.016	0.030	28.2	435
TBD	400	0.027	0.034	0.015	0.030	29.4	470
TBD	450	0.024	0.030	0.015	0.029	30.6	502
TBD	500	0.022	0.028	0.014	0.029	31.7	539

† 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

