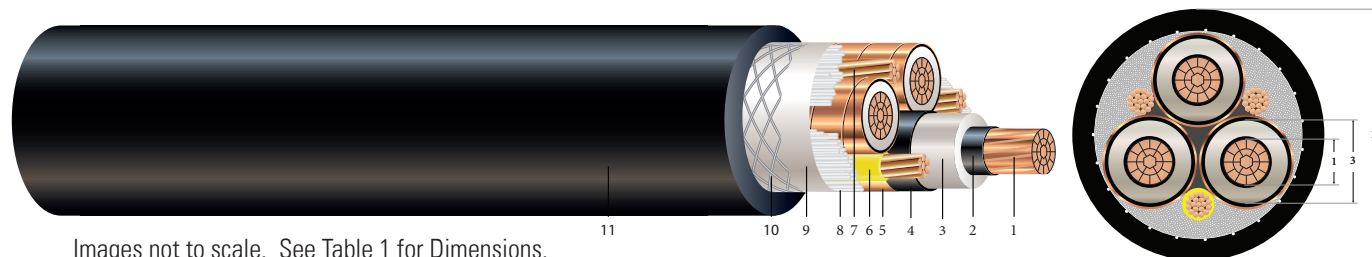


3/C CU 8KV 100% XLP/PVC RHINOPOWER™ Type MP-GC

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



Images 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:** Stripable semi-conducting cross-linked copolymer.
5. **Copper Tape Shield:** Helically wrapped 5 mil copper tape with 25% overlap.
6. **Grounding Check:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8 with yellow Ethylene Propylene Rubber (EPR) insulation.
7. **Grounding Conductor:** 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:

- 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 Application

SAMPLE PRINT LEGEND:

SOUTHWIRE (R) RHINO™ BRAND CABLE # AWG COMPACT CU 3/C TYPE MP-GC 8000V 100% INS. LEVEL 90°C
P-07-K130025 MSHA



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

Copyright © 2017 Southwire Company, LLC. All Rights Reserved



SPEC 47812_PSS DIVISION DATE: 07/12/2017 Rev:1.0.00M

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	115	0.435	10	7	10	7	30	110	1.33	1,130
TBD	4	7	0.213	115	0.479	8	7	8	7	45	110	1.43	1,440
57172499	2	7	0.268	115	0.534	6	7	8	7	45	110	1.55	1,850
TBD	1	19	0.299	115	0.565	5	7	8	7	45	110	1.65	2,170
TBD	1/0	19	0.336	115	0.602	4	7	8	7	45	110	1.75	2,550
56994999	2/0	19	0.376	115	0.642	3	7	8	7	45	140	1.88	3,040
TBD	3/0	19	0.423	115	0.689	2	7	8	7	45	140	2.00	3,600
56994899	4/0	19	0.475	115	0.741	1	19	8	7	45	140	2.12	4,270
TBD	250	37	0.520	115	0.786	1/0	19	8	7	45	140	2.25	4,950
TBD	300	37	0.570	115	0.836	1/0	19	8	7	45	140	2.35	5,560
TBD	350	37	0.616	115	0.882	2/0	19	8	7	45	140	2.46	6,350
TBD	400	37	0.659	115	0.925	3/0	19	8	7	45	140	2.57	7,190
TBD	450	37	0.700	115	0.966	3/0	19	8	7	45	140	2.66	7,790
58765799	500	37	0.736	115	1.002	4/0	19	8	7	45	140	2.75	8,660

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	0.062	0.046	16.0	93
TBD	4	0.262	0.328	0.053	0.043	17.2	122
57172499	2	0.164	0.205	0.045	0.040	18.6	159
TBD	1	0.130	0.163	0.042	0.039	19.8	184
TBD	1/0	0.104	0.130	0.038	0.037	21.0	211
56994999	2/0	0.082	0.103	0.035	0.036	22.6	243
TBD	3/0	0.065	0.081	0.032	0.035	24.0	279
56994899	4/0	0.052	0.065	0.029	0.034	25.4	321
TBD	250	0.044	0.055	0.027	0.033	27.0	355
TBD	300	0.037	0.046	0.025	0.032	28.2	398
TBD	350	0.031	0.039	0.023	0.031	29.5	435
TBD	400	0.027	0.034	0.022	0.031	30.8	470
TBD	450	0.024	0.030	0.021	0.030	31.9	502
58765799	500	0.022	0.028	0.020	0.030	33.0	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

