3/C CU 2KV Type SHD-GC RHINOSHIELD™ CPE Mining Cable 90°C. CSA - MSHA Approved

Flexible Copper conductors, EPR 100% Insulation Level, Cu/Nylon Braid Shield, Extra Heavy Duty Two Layer Chlorinated Polyethylene (CPE) Jacket with Optional Reflective Stripes

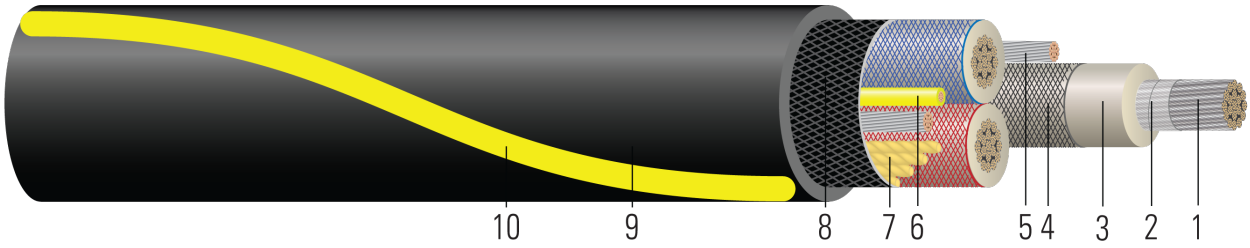

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Tin coated, soft drawn, annealed, flexible, rope-lay stranded copper per ASTM B33/B172
2. **Separator Tape:** Semi-conducting tape applied between the conductor and insulation to facilitate stripping
3. **Insulation:** Ethylene Propylene Rubber (EPR) 100% Insulation Level
4. **Braid Shield:** Tin coated, soft drawn, annealed, copper braid shield (60% minimum coverage), combined with color coded nylon (Black, Red, Blue) with a 40% maximum coverage
5. **Ground Conductors:** Two uninsulated, tin coated, soft drawn, annealed, rope stranded, flexible lay copper per ASTM B33/B172
6. **Ground Check Conductor:** Tin coated, soft drawn, annealed, rope stranded, flexible lay copper per ASTM B33/B172 with yellow, high strength, polypropylene insulation
7. **Filler:** Rubber fillers as needed
8. **Tape:** SBR tape applied over the cabled core for improved mechanical integrity and ease of stripping. Reinforcing twine applied between SBR tape and outer jacket
9. **Outer Jacket:** Black, mold cured, extra heavy-duty, flame resistant, thermosetting Chlorinated Polyethylene (CPE). Other colors available
10. **Reflective Stripe (Optional):** Highly visible reflective stripe embedded into the outer jacket to increase safety and help prevent cable runover.

APPLICATIONS AND FEATURES:

RHINOSHIELD™ Type SHD-GC is a heavy-duty trailing cable where flexibility and maximum protection is required. For use with mobile, reeling, or stationary mining equipment, continuous mining machines, longwall mining systems, and blast hole drillers. It is also an ex- cellent choice for shovels, draglines, dredges, cranes and marine shore-to-ship power supplies, and anytime extra-durable, flexible cable is required. Suitable for continuous submersion in water. Ground check conductor provides fail-safe ground monitoring. Embossed print legend for easy cable identification. Cold Bend and Impact Tested to -50°C.

SPECIFICATIONS:

- ASTM B33 Standard Specification for Tin-Coated Soft or Annealed Copper Wire
- ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors
- CSA C22.2 No. 96 Portable Power Cables

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- ICEA S-75-381 Portable and Power Feeder Cables for Use in Mines
- MSHA Approved

SAMPLE PRINT LEGEND:

SOUTHWIRE{R} RHINO{TM} BRAND CABLE XXX AWG CU 3/C EPR TYPE SHD-GC 2000V -50{D}C 90{D}C SR {CSA} LL90458 FT FT5 MASTER-DESIGN P-07-KA-140013-MSHA
Stock Number 584907: SOUTHWIRE{R} RHINO{TM} BRAND CABLE 2/0 AWG 3/C TYPE SHD-GC 2000V -50{D}C FT1 FT4 FT5 {CSA} LL90458 P-07-KA-140013 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	Ground Check Size	Inner Jacket Thickness	Jacket Thickness	Approx. OD	Approx. Weight	Jacket Color
	AWG/ Kcmil	No.	No.	inch	mil	inch	No. x AWG	AWG	mil	mil	inch	lb/1000ft	
649320	500	3	1221	0.987	100	1.106	2 x 4/0	6	155	190	3.189	9022	BK

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
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	Inductive Reactance	Working Tension	Min Bending Radius	Allowable Ampacity In Air 90°C
AWG/ Kcmil	Ω/1000ft	Ω/1000ft	Ω/1000ft	lb	inch	Amp
500	0.024	0.034	0.024	3420	25.5	487

***** Ampacities based upon ICEA S-75-381 Table H-1.

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