



# SHD-GC

## 5000 V

CSA C22.2 No. 96-17

Round portable power cable. Mining grade

### APPLICATIONS

- Use on AC off track equipment such as long wall miners loaders, drills, shovels, conveyors, pumps and mobile equipment requiring grounding conductors and a ground check conductor and metallic shielding overall
- Other industrial, mining applications

### CONSTRUCTION

Conductors	Soft drawn flexible stranded tinned copper wires
Conductor shield	Semi-conducting layer over the conductor
Insulation	Ethylene-propylene rubber (EPR)
Insulation shield	Non-conducting bedding tape + composite tinned copper/ polyamide braid. Covering minimum 60%
Circuit identification	The polyamide in the shielding braid is colored black, blue, red
Grounding	Soft drawn flexible stranded tinned copper wires
Ground check	Yellow PP insulated soft drawn flexible stranded tinned copper wires
Assembly	Three power, ground check and two non-insulated grounding conductors cabled together to form a round cable core
Separator	A single faced rubber filled binder tape applied over core
Outer jacket	Extra heavy duty, high torsion resistant, integral-filled, reinforced poly-chloroprene (CR) thermosetting jacket
Color of outer jacket	Black
Minimum bending radius	Six times overall diameter of the cable



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## Features

Excellent flexibility	Excellent impact and abrasion resistant
Highly ozone, sun, weather and flame resistant	Oil and heat resistant
Rated and flexible at -40°C	Indent printed for easy identification

## Approvals

CSA:	1523058 (LR 103932)
MSHA:	P-07-KA060012-2 (for sizes 6AWG-500MCM)
Standard length cable packing	1000ft on drums. Other forms of packing and delivery are available on request

## Selection Data

Part Number	Cond. Size	Cond. Strand	Cond. Size		Nominal Insulation Thickness		Nominal Jacket Thickness		Approx. O.D.		Approx. Weight		Maximum Tensile Force
	AWG/MCM	No.	AWG	GRD	GC	Inches	mm	Inches	mm	Inches	mm	Lbs./1kft.	kg/km
SHDGC5KV6-3CSA	6	133	10	8	0.110	2.79	0.185	4.70	1.50	38.1	1380	2053	600
SHDGC5KV4-3CSA	4	259	9	8	0.110	2.79	0.185	4.70	1.59	40.4	1656	2465	950
SHDGC5KV2-3CSA	2	259	7	8	0.110	2.79	0.205	5.21	1.79	45.5	2429	3614	1500
SHDGC5KV1-3CSA	1	259	6	8	0.110	2.79	0.205	5.21	1.85	47.1	2448	3643	1900
SHDGC5KV1/0-3CSA	1/0	266	5	8	0.110	2.79	0.220	5.59	2.15	54.5	3216	4786	2400
SHDGC5KV2/0-3CSA	2/0	342	4	8	0.110	2.79	0.220	5.59	2.07	52.6	3353	4989	3000
SHDGC5KV3/0-3CSA	3/0	418	3	8	0.110	2.79	0.235	5.97	2.23	56.6	3951	5880	3800
SHDGC5KV4/0-3CSA	4/0	532	2	8	0.110	2.79	0.235	5.97	2.37	60.2	4693	6983	4800
SHDGC5KV250-3CSA	250	627	1	8	0.120	3.05	0.250	6.35	2.57	65.3	5427	8076	5800
SHDGC5KV350-3CSA	350	888	1/0	8	0.120	3.05	0.265	6.73	2.82	71.7	6960	10357	7900
SHDGC5KV500-3CSA	500	1221	3/0	8	0.120	3.05	0.280	7.11	3.18	80.7	9255	13772	11400

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## Electrical parameters

Power-Grounding Conductor Size	Power Conductor Resistance at 25°C	Grounding Conductor Resistance at 25°C	Ground-check Conductor Resistance at 25°C	Inductance per unit length	Operating Capacitance per unit length	Permissible short-circuit Current (1s) (2)	Ampacity(1) 40°C Ambient Temp
<b>MCM</b>	<b>Ω/1000Ft</b>	<b>Ω/1000Ft</b>	<b>Ω/1000Ft</b>	<b>mH/1000Ft</b>	<b>μF/1000Ft</b>	<b>kA</b>	<b>A</b>
6 AWG	0.436	0.857	0.679	0.132	0.08	1.90	93
4 AWG	0.274	0.857	0.679	0.119	0.09	3.03	122
2 AWG	0.172	0.539	0.679	0.112	0.10	4.80	159
1 AWG	0.137	0.436	0.679	0.108	0.11	6.06	184
1/0 AWG	0.109	0.346	0.679	0.105	0.12	7.65	211
2/0 AWG	0.0868	0.274	0.679	0.099	0.14	9.64	243
3/0 AWG	0.0688	0.217	0.679	0.098	0.14	12.15	279
4/0 AWG	0.0546	0.172	0.679	0.094	0.16	15.30	321
250 MCM	0.0466	0.137	0.679	0.089	0.18	18.16	355
350 MCM	0.0333	0.109	0.679	0.085	0.21	25.31	435
500 MCM	0.0233	0.0688	0.679	0.082	0.24	36.18	536

(1) Ampacity –Based on continuous duty at 90°C conductor temperature

(2) Short-circuit current (1s) – Based on conductor temperature from 90°C up to 250°C

## Special Factory Options:

Jacket:	Other colors available
Jacket:	TPU jacket available

## Standard Print Legend

TF CABLE (VOLTAGE) 3/C (SIZE) TYPE SHD-GC CSA LR 103932 100% FT1 FT5 (-40°C) +90°C P-07-KA060012-2-MSHA

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