



# SHD-GC

## 5kV



**CSA C22.2 No. 96-13**

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



## Features

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

## Approvals

**CSA:** 1523058 (LR 103932), FT 1, FT-5. **MSHA:** P-07-KA060012

## Selection Data

Part Number	Cond. Size	Cond. Strand	Cond. Size		Nominal Insulation Thickness		Nominal Jacket Thickness		Outside Diameter		Approx. Weight		Max. Tensile Force
	AWG/MCM	No. of wires	AWG	GC	Inches	mm	Inches	mm	Inches	mm	Lbs./1000ft.	kg/km	N
SHDGC5KV6-3 CSA	6	133	10	8	0.110	2.79	0.185	4.70	1.86	47.2	2099	3123	600
SHDGC5KV4-3 CSA	4	259	9	8	0.110	2.79	0.185	4.70	1.86	47.2	2099	3123	950
SHDGC5KV2-3 CSA	2	259	7	8	0.110	2.79	0.205	5.21	2.00	50.9	2603	3874	1500
SHDGC5KV1-3 CSA	1	259	6	8	0.110	2.79	0.205	5.21	2.12	53.9	2967	4415	1900
SHDGC5KV1/0-3 CSA	1/0	266	5	8	0.110	2.79	0.220	5.59	2.19	55.7	3316	4934	2400
SHDGC5KV2/0-3 CSA	2/0	342	4	8	0.110	2.79	0.220	5.59	2.35	59.8	3958	5890	3000
SHDGC5KV3/0-3 CSA	3/0	418	3	8	0.110	2.79	0.235	5.97	2.49	63.2	4541	6757	3800
SHDGC5KV4/0-3 CSA	4/0	532	2	8	0.110	2.79	0.235	5.97	2.61	66.4	5270	7843	4800
SHDGC5KV250-3 CSA	250	627	1	8	0.120	3.05	0.250	6.35	2.78	70.5	6096	9071	5800
SHDGC5KV350-3 CSA	350	888	1/0	8	0.120	3.05	0.265	6.73	3.06	77.8	7801	11609	7900
SHDGC5KV500-3 CSA	500	1221	3/0	8	0.120	3.05	0.280	7.11	3.39	86.2	9940	14792	11400

## 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
AWG or MCM	$\Omega/1000\text{Ft}$	$\Omega/1000\text{Ft}$	$\Omega/1000\text{Ft}$	mH/1000Ft	$\mu\text{F}/1000\text{Ft}$	kA	A
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

## Standard print legend:

TF CABLE 5000V 3/C (SIZE) TYPE SHD-GC CSA LR 103932 FT1 FT5 (-40C) +90C P-07-KA060012-MSHA

## Special factory option

Jacket:	Other colors available
Jacket:	TPU jacket available
MSHA:	P-07-KA120001 (TPU)