

# SHD-GC 8000V / 15000V

## Portable Power Cable Extra Heavy Duty EPR / NEO 90°C CSA MSHA Mining Grade



### SPECIFICATIONS & STANDARDS

ICEA S-75-381/NEMA WC58, ASTM B 172, ASTM B 33, CSA C22.2 No. 96-03

### CONSTRUCTION:

- Conductors:** Flexible strand tinned copper, ASTM B 172 and ASTM B33, C22.2 No. 96-03 sec4.3.1 table 3
- Separator:** Polyester tape between conductor and insulation
- Conductor Shield:** Extruded semi-conducting layer over conductor. C22.2 No. 96-03
- Insulation:** Ethylene-propylene rubber (EPR) C22.2 No. 96-03 sec 4.3.3
- Insulation Shield:** Semi-conducting bedding tape and composite tinned copper/polyamide braid 60% minimum coverage
- Color Code:** Polyamide braid color code - black, red, blue C22.2 No. 96-03 table 1
- Grounding Cond:** Tinned copper - C22.2 No. 96-03 sec 4.3.5
- Ground Check:** Yellow polypropylene-insulated tinned copper conductor, C22.2 No. 96-03 sec 4.3.3/4.3.7
- Cable Assembly:** Three power conductors, ground check and two non-insulated grounding conductors cabled together to form a round cable core
- Separator:** Single faced rubber-filled binder tape applied over core
- Jacket:** Black, extra heavy duty, high torsion-resistant, integral-filled, reinforced Neoprene thermoset jacket, C22.2 No. 96-03 sec 4.3.9 table 2

FEATURES	APPLICATION
<ul style="list-style-type: none"> <li>- Excellent flexibility</li> <li>- Highly ozone, sun, weather, water and flame resistant</li> <li>- Rated and flexible at -40°C</li> <li>- Excellent impact and abrasion resistant</li> <li>- Oil and heat resistant</li> <li>- Indent printed for easy identification</li> </ul>	<ul style="list-style-type: none"> <li>- Use on AC off track equipment such as longwall miners loaders, drills, conveyors, pumps and mobile equipment requiring grounding conductors and a ground check conductor and metallic shielding overall</li> <li>- Maximum continuous conductor temperature is 90°C</li> </ul>

### APPROVALS:

**CSA:** 1523058 (LR 103932) - FT1; FT5; -50°C + 90°C

**MSHA:** P-07-KA060012

Part Number	Power Conductor Size	Power Conductor Stranding	Ground Check Conductor Size	Grounding Conductor		Nominal Insulation Thickness	Nominal Jacket Thickness	Nominal O.D.		Approx. Weight	
				Size	Stranding			inches	mm	lbs/1000 ft	kgs/km
SHDGC8KV1-3CSA	1 AWG	259 7x37	8	5	133 7x19	0.150	0.220	2.21	56.0	3300	4911
SHDGC8KV1/0-3CSA	1/0 AWG	266 19x14		4	259 7x37			2.32	58.9	3530	5112
SHDGC8KV2/0-3CSA	2/0 AWG	342 19x18		3	259 7x37			2.46	62.5	4160	6191
SHDGC15KV4/0-3	4/0 AWG	532 19x28	8	1	259 7x37	0.210	0.265	3.05	77.5	6821	10151

### ELECTRICAL AND MECHANICAL 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 <sup>(2)</sup> (1s)	Ampacity <sup>(1)</sup> 40°C Ambient Temp.	Maximum Permissible Tensile Force
AWG or MCM	Ω/1000Ft	Ω/1000Ft	Ω/1000Ft	mH/1000Ft	μF/1000Ft	kA	A	N
1 AWG - 5 AWG	0.137	0.349	0.679	0.117	0.09	6.06	184	1900
1/0 AWG - 4 AWG	0.109	0.274		0.113	0.10	7.65	211	2400
2/0 AWG - 3 AWG	0.0868	0.227		0.107	0.11	9.64	243	3000
4/0 AWG - 1 AWG	0.0546	0.137		0.101	0.13	15.30	321	4800

(1) Ampacity- Free air measured; 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 (VOLTAGE) (SIZE) TYPE SHD-GC CSA LR 103932  
FT1 FT5 (-50C) +90C P-07-KA060012-MSHA

### SPECIAL FACTORY OPTIONS:

- Jacket:** Red, yellow, green, orange, blue
- MSHA:** P-7K-268101 (CPE)
- Jacket:** TPU Red, yellow, green, orange, blue
- MSHA:** P-07-KA030001 (TPU)