

SHD-GC 5000V

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:** Non-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"> - Excellent flexibility - Highly ozone, sun, weather, water and flame resistant - Rated and flexible at -40°C - Excellent impact and abrasion resistant - Oil and heat resistant - Indent printed for easy identification 	<ul style="list-style-type: none"> - 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 - Maximum continuous conductor temperature is 90°C

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/1000ft	kgs/km
	AWG or MCM	No. of Stranding	AWG	AWG	No. of Wires	inches	inches	inches	mm	lbs/1000ft	kgs/km
SHDGC5KV2-3CSA	2 AWG	259 7x37		6	133 7x19	0.110	0.205	1.87	47.5	2370	3527
SHDGC5KV1/0-3CSA	1/0 AWG	266 19x14	8	4	259 7x37	0.110	0.220	2.08	52.8	3200	4762
SHDGC5KV2/0-3CSA	2/0 AWG	342 19x18		3	259 7x37	0.110	0.220	2.20	55.9	3615	5380

ELECTRICAL AND MECHANICAL PARAMETERS

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 ⁽²⁾ (1s)	Ampacity ⁽¹⁾ 40°C Ambient Temp.	Maximum Permissible Tensile Force
Power	Grounding								
AWG or MCM		Ω/1000Ft	Ω/1000Ft	Ω/1000Ft	mH/1000Ft	μF/1000Ft	kA	A	N
2 AWG	6 AWG	0.172	0.436	0.679	0.101	0.13	4.80	159	1500
1/0 AWG	4 AWG	0.109	0.274	0.679	0.097	0.14	7.65	211	2400
2/0 AWG	3 AWG	0.0868	0.227	0.679	0.092	0.16	9.64	243	3000

(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 2000V (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)