

TYPE SHD-GC 3/c 8kV

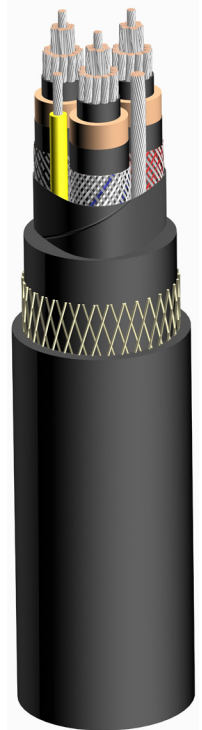
Three conductor Round portable power cable Mining grade

SPECIFICATIONS & STANDARDS

ICEA S-75-381/NEMA WC58
ASTM B 172, ASTM B 33

CONSTRUCTION:

- Conductors:** Annealed flexible stranded tin coated copper in accordance with ASTM B 172 and ICEA S-75-381
- Conductors shield:** Semi-conducting layer over the conductor
- Insulation:** Ethylene-propylene rubber (EPR)
- Insulation shield:** Semi-conducting tape + composite tinned copper/nylon braid covering minimum 60%
- Circuit identification:** The nylon in the shielding braid is colored black, white, red in accordance with ICEA S-75-381
- Grounding conductors:** Annealed tin coated copper as per Tab. 3-24 of ICEA S-75-381
- Ground check:** Annealed tin coated copper as per Tab. 3-21 of ICEA S-75-381
Color of insulation: yellow
- Assembly:** Three power conductor, ground check and two non-insulated grounding conductors cabled together; Single faced rubber filled binder tape applied overall; Integral filled jacket for higher torsion resistance
- Jacket:** Reinforced Neoprene® (optional CPE, TPU jacket available)
Type extra heavy duty in accordance with Par. 3.21 of ICEA S-75-381
- Color of jacket:** Black; Other colors available



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">- These cables are used for heavy mobile equipment such as drag lines, shovels, dredges, drills, other track equipment and for power feeders in underground mines- Maximum continuous conductor temperature is 90°C

Standard length cable packing: 1000 ft reels; Other forms of packaging available

APPROVALS:

- MSHA:** P-07-KA060012 (Neoprene), P-7K-268101 (CPE), P-07-KA030001 (TPU)
- CSA:** 1523058 (LR 103932) - "FT1"; "FT5"; "90°C"; "(-40°C)" (Neoprene)



Neoprene is a registered trademark of DuPont



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12/08 v2.4

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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
	AWG or MCM	No. of Stranding		AWG	AWG	No. of Wires	inches	inches	inches	mm	lbs/1000 ft	kgs/km
SHDGC8KV4-3 Mining	4 AWG	259	7x37	8	8	133 7x19	0.150	0.205	1.94	49.3	2132	3173
SHDGC8KV2-3 Mining	2 AWG	259	7x37	8	6	133 7x19	0.150	0.220	2.12	53.8	2780	4137
SHDGC8KV1-3 Mining	1 AWG	259	7x37	8	5	133 7x19	0.150	0.220	2.21	56.0	3300	4911
SHDGC8KV1/0-3 Mining	1/0 AWG	266	19x14	8	4	259 7x37	0.150	0.220	2.32	58.9	3530	5112
SHDGC8KV2/0-3 Mining	2/0 AWG	342	19x18	8	3	259 7x37	0.150	0.235	2.46	62.5	4160	6191
SHDGC8KV3/0-3 Mining	3/0 AWG	418	19x22	8	2	259 7x37	0.150	0.250	2.62	66.6	5000	7440
SHDGC8KV4/0-3 Mining	4/0 AWG	532	19x28	8	1	259 7x37	0.150	0.250	2.75	69.9	5590	8319
SHDGC8KV250-3 Mining	250 MCM	627	19x33	8	1/0	266 19x14	0.150	0.250	2.89	73.4	6680	9941
SHDGC8KV350-3 Mining	350 MCM	888	37x24	8	2/0	342 19x18	0.150	0.280	3.20	81.3	8410	12515
SHDGC8KV500-3 Mining	500 MCM	1221	37x33	8	4/0	532 19x28	0.150	0.295	3.39	86.1	9909	14746

ELECTRICAL AND MECHANICAL PARAMETERS

Power-Grounding Conductor Size	Power Conductor Resistance at 20°C	Grounding Conductor Resistance at 20°C	Ground Check Conductor Resistance at 20°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
AWG or MCM	Ω/1000Ft	Ω/1000Ft	Ω/1000Ft	mH/1000Ft	μF/1000Ft	kA	A	N
4 AWG – 8 AWG	0.274	0.697	0.679	0.129	0.08	3.03	122	950
2 AWG – 6 AWG	0.172	0.436	0.679	0.122	0.09	4.80	159	1500
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	0.679	0.113	0.10	7.65	211	2400
2/0 AWG – 3 AWG	0.0868	0.227	0.679	0.107	0.11	9.64	243	3000
3/0 AWG – 2 AWG	0.0688	0.172	0.679	0.106	0.11	12.15	279	3800
4/0 AWG – 1 AWG	0.0546	0.137	0.679	0.101	0.13	15.30	321	4800
250 MCM – 1/0 AWG	0.0466	0.109	0.436	0.094	0.16	18.16	355	5800
350 MCM – 2/0 AWG	0.0333	0.0868	0.436	0.090	0.18	25.31	435	7900
500 MCM – 4/0 AWG	0.0233	0.0546	0.436	0.086	0.21	36.18	536	11400

(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:

TELE-FONIKA 8000V (SIZE) TYPE SHD-GC P-07-KA060012-MSHA

