

TYPE SHD-GC 3/c 15kV

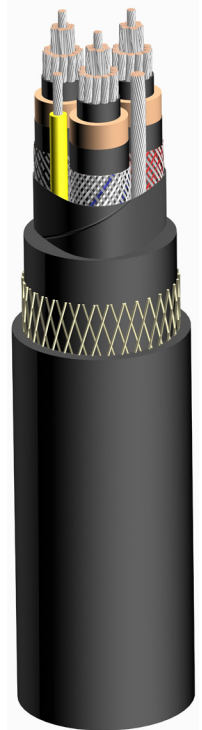
Three conductor Round portable power cable Mining grade

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 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-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	AWG or MCM	No. of Stranding	AWG	AWG	No. of Wires	inches	inches	inches	mm	lbs/1000 ft	kgs/km
SHDGC15KV2-3 Mining	2 AWG	259 7x37	8	6	133 7x19	0.210	0.235	2.41	61.2	3505	5216
SHDGC15KV1-3 Mining	1 AWG	259 7x37	8	5	133 7x19	0.210	0.235	2.52	64.0	4084	6078
SHDGC15KV1/0-3 Mining	1/0 AWG	266 19x14	8	4	259 7x37	0.210	0.250	2.64	67.1	4614	6867
SHDGC15KV2/0-3 Mining	2/0 AWG	342 19x18	8	3	259 7x37	0.210	0.250	2.73	69.3	4895	7285
SHDGC15KV3/0-3 Mining	3/0 AWG	418 19x22	8	2	259 7x37	0.210	0.265	2.90	73.7	5900	8779
SHDGC15KV4/0-3 Mining	4/0 AWG	532 19x28	8	1	259 7x37	0.210	0.265	3.05	77.5	6821	10151
SHDGC15KV250-3 Mining	250 MCM	627 19x33	8	1/0	266 19x14	0.210	0.265	3.20	81.8	7256	10800
SHDGC15KV350-3 Mining	350 MCM	888 37x24	8	2/0	342 19x18	0.210	0.280	3.43	87.2	7982	11880
SHDGC15KV500-3 Mining	500 MCM	1221 37x33	8	4/0	532 19x28	0.210	0.295	3.92	99.6	9406	14000

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
2 AWG – 6 AWG	0.172	0.436	0.679	0.131	0.07	4.80	164	1500
1 AWG – 5 AWG	0.137	0.349	0.679	0.126	0.07	6.06	187	1900
1/0 AWG – 4 AWG	0.109	0.274	0.679	0.122	0.08	7.65	215	2400
2/0 AWG – 3 AWG	0.0868	0.227	0.679	0.115	0.09	9.64	246	3000
3/0 AWG – 2 AWG	0.0688	0.172	0.679	0.114	0.09	12.15	283	3800
4/0 AWG – 1 AWG	0.0546	0.137	0.679	0.109	0.10	15.30	325	4800
250 MCM – 1/0 AWG	0.0466	0.109	0.436	0.101	0.12	18.16	355	5800
350 MCM – 2/0 AWG	0.0333	0.0868	0.436	0.096	0.13	25.31	435	7900
500 MCM – 4/0 AWG	0.0233	0.0546	0.436	0.091	0.16	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 15000V (SIZE) TYPE SHD-GC P-07-KA060012-MSHA

