



SHD-GC

2kV

ICEA S-75-381/NEMA WC-58

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
Separator	Polyester tape
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, white, 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	Polyamide open braid applied overall
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

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
			GRD	GC	Inches	mm	Inches	mm	Inches	mm	Lbs./1000ft.	kg/km	
SHDGC2KV8-3	8*	133	10	12	0.070	1.78	0.155	3.94	1.07	27.2	764	1137	380
SHDGC2KV6-3	6	133	10	10	0.070	1.78	0.155	3.94	1.24	31.6	1038	1545	600
SHDGC2KV4-3	4	259	8	10	0.070	1.78	0.155	3.94	1.35	34.3	1331	1980	950
SHDGC2KV2-3	2	259	6	8	0.070	2.03	0.170	4.32	1.53	38.9	1816	2702	1500
SHDGC2KV1-3	1	259	5	8	0.080	2.03	0.190	4.83	1.69	43.0	2226	3313	1900
SHDGC2KV1/0-3	1/0	266	4	8	0.080	2.03	0.190	4.83	1.79	45.4	2605	3876	2400
SHDGC2KV2/0-3	2/0	342	3	8	0.080	2.03	0.205	5.21	1.92	48.8	3121	4645	3000
SHDGC2KV3/0-3	3/0	418	2	8	0.080	2.03	0.205	5.21	2.05	52.0	3674	5467	3800
SHDGC2KV4/0-3	4/0	532	1	8	0.080	2.03	0.220	5.59	2.22	56.3	4439	6606	4800
SHDGC2KV250-3	250	627	1/0	8	0.095	2.41	0.220	5.59	2.41	61.1	5167	7689	5800
SHDGC2KV300-3	300	740	1/0	8	0.095	2.41	0.235	5.97	2.57	65.2	5879	8749	6825
SHDGC2KV350-3	350	888	2/0	8	0.095	2.41	0.235	5.97	2.69	68.3	6591	9808	7900
SHDGC2KV500-3	500	1221	4/0	8	0.095	2.41	0.265	6.73	3.05	77.5	9178	13657	11400

* Based on ICEA S-75-381 NEMA WC 58

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	Ω/1000Ft	Ω/1000Ft	Ω/1000Ft	mH/1000Ft	μF/1000Ft	kA	A
6 AWG	0,436	1,08	1,08	0,118	0,09	1,90	93
4 AWG	0,274	0,679	1,08	0,107	0,11	3,03	122
2 AWG	0,172	0,436	0,679	0,101	0,13	4,80	159
1 AWG	0,137	0,346	0,679	0,100	0,13	6,06	184
1/0 AWG	0,109	0,274	0,679	0,097	0,14	7,65	211
2/0 AWG	0,0868	0,217	0,679	0,092	0,16	9,64	243

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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
3/0 AWG	0,0688	0,172	0,679	0,091	0,17	12,15	279
4/0 AWG	0,0546	0,137	0,679	0,088	0,19	15,30	321
250 MCM	0,0466	0,109	0,679	0,084	0,21	18,16	355
300 MCM	0,0389	0,109	0,679	0,083	0,22	21,74	398
350 MCM	0,0333	0,0868	0,679	0,081	0,24	25,31	435
500 MCM	0,0233	0,0546	0,679	0,078	0,28	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 2000V 3/C (SIZE) TYPE SHD-GC FT1 FT5 (-40C) +90C P-07-KA060012-MSHA

Special factory option

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