SHD-GC

8kV

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
Conductor shield	Semi-conducting layer over the conductor
Insulation	Ethylene-propylene rubber (EPR)
Insulation shield	Semi-conducting 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	A single faced rubber filled binder tape applied over core
Outer jacket	Extra heavy duty, high torsion resistant, integral-filled, reinforced poly-chloroprene (CR) thermosetting jacket
Color of outer jacket	Black
Minimum bending radius	Eight 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-KA060012-2

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									
	AWG/ MCM	**No. of wires**	**AWG**		**Inches**	**mm**	**Inches**	**mm**	**Inches**	**mm**	**Lbs./ 1000ft.**	**kg/km**	**N**
SHDGC8KV1/0-3	1/0	266	4	8	0.150	3.81	0.220	5.59	2.23	56.7	3450	5134	2400
SHDGC8KV2/0-3	2/0	342	3	8	0.150	3.81	0.235	5.97	2.37	60.2	4045	6020	3000
SHDGC8KV4/0-3	4/0	532	1	8	0.150	3.81	0.250	6.35	2.63	66.9	5413	8055	4800
SHDGC8KV250-3	250(1)	627	1/0	8	0.150	3.81	0.250	6.35	2.78	70.5	6096	9071	5800
SHDGC8KV350-3	350(1)	888	2/0	8	0.150	3.81	0.280	7.11	3.06	77.8	7801	11609	7900
SHDGC8KV500-3	500(1)	1221	4/0	8	0.150	3.81	0.295	7.49	3.41	86.6	10237	15234	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**
1/0 AWG	0,109	0,274	0,679	0,105	0,12	7,65	211
2/0 AWG	0,0868	0,217	0,679	0,099	0,14	9,64	243
4/0 AWG	0,0546	0,137	0,679	0,094	0,16	15,30	321
250 MCM	0,0466	0,109	0,679	0,089	0,18	18,16	355
350 MCM	0,0333	0,0868	0,679	0,085	0,21	25,31	435
500 MCM	0,0233	0,0546	0,679	0,082	0,24	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 8000V 3/C (SIZE) TYPE SHD-GC FT1 FT5 (-40C) +90C P-07-KA060012-2-MSHA

Special factory option

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