

SHD-GC 2000V

Portable Power Cable Extra Heavy Duty EPR / NEO 90°C MSHA Mining Grade



SPECIFICATIONS & STANDARDS

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

CONSTRUCTION:

- Conductors:** Flexible strand tinned copper conductor, ASTM B-172 and ICEA S-75-381, table 3-22
- Separator:** Polyester tape between conductor and insulation. ICEA S-75-381
- Insulation:** Ethylene-propylene rubber (EPR) ICEA S-75-381, table 3-22
- Insulation Shield:** Non-conducting bedding tape and composite tinned copper/polyamide braid 60% minimum coverage
- Color Code:** Polyamide braid color code - black, white, red, ICEA S-75-381
- Grounding Cond:** Tinned copper - ICEA S-75-381 Tab. 3-25
- Ground Check:** Yellow polypropylene-insulated tinned copper conductor, ICEA S-75-381 Tab. 3-22
- Cable Assembly:** Three power conductors, ground check and two non-insulated grounding conductors cabled together to form a round cable core
- Separator:** Nylon open braid applied overall
- Jacket:** Black, extra heavy duty, high torsion-resistant, integral-filled, reinforced Neoprene thermoset jacket, ICEA S-75-381 Tab. 3-3, 3-22, Sec. 3.21

FEATURES	APPLICATION
<ul style="list-style-type: none"> - Excellent flexibility - Highly ozone, sun, weather, water and flame resistant - Rated and flexible at -50°C - Excellent impact and abrasion resistant - Oil and heat resistant - Indent printed for easy identification 	<ul style="list-style-type: none"> - For use as trailing mining cables. - Use on AC off track equipment such as longwall & continuous miners, loaders, blast hole drillers, conveyors, pumps and mobile equipment requiring grounding conductors and ground check and metallic shielding overall. - For use in applications where ground check conductor is required for added safety. - Maximum continuous conductor temperature 90C

APPROVALS:

MSHA: P-07-KA060012

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)

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
SHDGC2KV12-3	12AWG	49 7x7	10	12	49 7x7	0.070	0.125	0.92	23.4	557	829
SHDGC2KV10-3	10AWG	49 7X7	10	12	49 7x7	0.070	0.125	0.95	24.1	623	927
SHDGC2KV8-3	8 AWG	133 7X19	10	10	49 7x7	0.070	0.155	1.13	28.7	818	1217
SHDGC2KV6-3	6 AWG	133 7x19	8	10	49 7x7	0.070	0.155	1.29	32.8	1056	1571
SHDGC2KV4-3	4 AWG	259 7x37	8	8	133 7x19	0.070	0.155	1.40	35.6	1400	2083
SHDGC2KV2-3	2 AWG	259 7x37	8	6	133 7x19	0.070	0.170	1.59	40.4	1848	2750
SHDGC2KV1-3	1 AWG	259 7x37	8	5	133 7x19	0.080	0.170	1.76	44.7	2350	3497
SHDGC2KV1/0-3	1/0 AWG	266 19x14	8	4	259 7x37	0.080	0.190	1.86	47.2	2700	4018
SHDGC2KV2/0-3	2/0 AWG	342 19x18	8	3	259 7x37	0.080	0.205	2.00	50.8	3241	4824
SHDGC2KV3/0-3	3/0 AWG	418 19x22	8	2	259 7x37	0.080	0.205	2.13	54.1	3800	5654
SHDGC2KV4/0-3	4/0 AWG	532 19x28	8	1	259 7x37	0.080	0.220	2.31	58.7	4349	6919
SHDGC2KV250-3	250 MCM	627 19x33	6	1/0	266 19x14	0.095	0.220	2.51	63.8	5750	8557
SHDGC2KV300-3	300 MCM	740 37x20	6	1/0	266 19x14	0.095	0.235	2.70	68.6	6602	9827
SHDGC2KV350-3	350 MCM	888 37x24	6	2/0	342 19x18	0.095	0.235	2.81	71.4	7200	10713
SHDGC2KV500-3	500 MCM	1221 37x33	6	4/0	532 19x28	0.095	0.265	3.19	81.0	9900	14731

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
6 AWG – 10 AWG	0.436	1.109	0.679	0.118	0.09	1.90	93	600
4 AWG – 8 AWG	0.274	0.697	0.679	0.107	0.11	3.03	122	950
2 AWG – 6 AWG	0.172	0.436	0.679	0.101	0.13	4.80	159	1500
1 AWG – 5 AWG	0.137	0.349	0.679	0.100	0.13	6.06	184	1900
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
3/0 AWG – 2 AWG	0.0688	0.172	0.679	0.091	0.17	12.15	279	3800
4/0 AWG – 1 AWG	0.0546	0.137	0.679	0.088	0.19	15.30	321	4800
250 MCM – 1/0 AWG	0.0466	0.109	0.436	0.084	0.21	18.16	355	5800
300MCM – 1/0 AWG	0.0389	0.109	0.436	0.083	0.22	21.74	395	6825
350 MCM – 2/0 AWG	0.0333	0.0868	0.436	0.081	0.24	25.31	435	7900
500 MCM – 4/0 AWG	0.0233	0.0546	0.436	0.078	0.28	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: TF CABLE 2000V (SIZE) TYPE SHD-GC FT1 FT5 (-40C) +90C P-07-KA060012-MSHA



555 Remington Blvd, Bolingbrook, IL 60440 | tel: 630-406-9000 fax: 630-406-6574
e-mail: sales@tfcable.com | http://www.tfcable.com