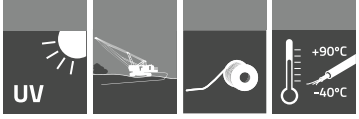

SHD-GC CSA 5kV
EL TPE-E CPE XFSN

CSA C22.2 No. 96-23

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 extra flexible stranded tinned copper wires
Separator	Semi-conducting layer over the conductor
Insulation	Extra light ethylene-propylene rubber (EPR)
Insulation shield	Non-conducting bedding tape + composite tinned copper/polyamide braid. Covering minimum 60%
Circuit identification	Polyamide in the shielding braid is colored black, blue, red
Grounding	Soft drawn flexible stranded tinned copper wires
Ground check	Yellow TPE-E insulated soft drawn extra flexible stranded tinned copper wires
Assembly	Three power, ground check and two non-insulated grounding conductors cabled together to form a round cable core. Single faced rubber filled binder tape applied over core
Separator	Polyamide open braid applied overall
Jacket	Extra heavy duty, high torsion resistant, integral-filled, reinforced chlorinated polyethylene (CPE) thermosetting jacket (two-layer)
Color of outer jacket	Black or other color can be provided
Minimum bending radius	Eight times overall diameter of the cable

SHD-GC CSA 5kV
EL TPE-E CPE XFSN

Features

Excellent flexibility, Highly ozone, sun, weather and flame resistant, Rated and flexible at -40°C, Minimum ambient temperature for fixed installation -40°C, Minimum ambient temperature for mobile installation -25°C, Excellent impact and abrasion resistant, Oil and heat resistant, Indent printed for easy identification

Approvals

MSHA	P-7K-268101-MSHA
CSA	1523058 (LR 103932)

Standard length cable packing	1000ft on drums. Other forms of packing and delivery are available on request

Selection Data

Cond. Size	Cond. Strand	Cond. Size		Nominal Insulation Thickness		Nominal Jacket Thickness		Approx. O.D.		Approx. Weight		Maximum Tensile Force
		GRD	GC									
AWG/ MCM	**No.**	**AWG**		**Inches**	**mm**	**Inches**	**mm**	**Inches**	**mm**	**Lbs./1kft.**	**kg/km**	**N**
6	252	10	8	0.110	2.79	0.185	4.69	1.48	37.7	1269	1889	600
4	413	9	8	0.110	2.79	0.185	4.69	1.59	40.5	1546	2301	950
2	455	7	8	0.110	2.79	0.205	5.20	1.78	45.3	2036	3030	1500
1	336	6	8	0.110	2.79	0.205	5.20	1.85	47.1	2330	3468	1900
1/0	406	5	8	0.110	2.79	0.220	5.59	1.98	50.3	2698	4015	2400
2/0	513	4	8	0.110	2.79	0.220	5.59	2.09	53.2	3136	4667	3000
3/0	646	3	8	0.110	2.79	0.235	5.97	2.25	57.1	3734	5557	3800
4/0	814	2	8	0.110	2.79	0.235	5.97	2.39	60.7	4381	6521	4800
250	999	1	8	0.120	3.04	0.250	6.35	2.59	65.9	5294	7879	5800
350	1403	1/0	8	0.120	3.04	0.265	6.73	2.87	72.9	6787	10101	7900
500	2013	3/0	8	0.120	3.04	0.280	7.11	3.20	81.4	9081	13515	11400

All information contained in this document, including the tables and drawings, are provided for information only and not a commercial offer; nor may it constitute the basis for pursuing any claim against TELE-FONIKA KABLE S.A.

SHD-GC CSA 5kV
EL TPE-E CPE XFSN

Electrical parameters

Power-Grounding Conductor Size	Power Conductor Resistance at 25ºC	Grounding Conductor Resistance at 25ºC	Ground-check Conductor Resistance at 25ºC	Inductance per unit length	Operating Capacitance per unit length	Permissible short-circuit Current (1s) (2)	Ampacity(1) 400C Ambient Temp
MCM	**Ω/1000Ft**	**Ω/1000Ft**	**Ω/1000Ft**	**mH/1000Ft**	**µF/1000Ft**	**kA**	**A**
6 AWG	0.460	1.138	0.731	0.132	0.08	1.90	93
4 AWG	0.289	0.920	0.731	0.119	0.09	3.03	122
2 AWG	0.182	0.578	0.731	0.112	0.10	4.80	159
1 AWG	0.140	0.460	0.731	0.108	0.11	6.06	184
1/0 AWG	0.112	0.364	0.731	0.105	0.12	7.65	211
2/0 AWG	0.0886	0.289	0.731	0.099	0.14	9.64	243
3/0 AWG	0.0700	0.222	0.731	0.098	0.14	12.15	279
4/0 AWG	0.0560	0.182	0.731	0.094	0.16	15.30	321
250 MCM	0.0476	0.140	0.731	0.089	0.18	18.16	355
350 MCM	0.0339	0.112	0.731	0.085	0.21	25.31	435
500 MCM	0.0238	0.0700	0.731	0.082	0.24	36.18	536

(1) Ampacity –Based on continuous duty at 90ºC conductor temperature, per ICEA S-75-381.
(2) Short-circuit current (1s) – Based on conductor temperature from 90ºC up to 250ºC

Special factory options

Jacket	Other colors available
Jacket	TPU and Neoprene jacket available

Standard print legend:

TF CABLE (VOLTAGE) 3/C (SIZE) TYPE SHD-GC CSA LR 103932 FT1 FT5 (-40°C) +90°C P-7K-268101-MSHA + feet + coded date

All information contained in this document, including the tables and drawings, are provided for information only and not a commercial offer; nor may it constitute the basis for pursuing any claim against TELE-FONIKA KABLE S.A.