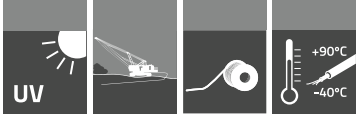

SHD-GC CSA 2kV
EL TPE-E CPE XFSN

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	Polyester tape
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 2kV
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

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

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	10	0.070	1.77	0.155	3.94	1.22	31.0	948	1411	600
4	413	9	10	0.070	1.77	0.155	3.94	1.32	33.8	1206	1795	950
2	455	7	8	0.070	1.77	0.170	4.32	1.52	38.6	1674	2491	1500
1	336	6	8	0.080	2.03	0.190	4.83	1.67	42.5	2063	3071	1900
1/0	406	5	8	0.080	2.03	0.190	4.83	1.78	45.3	2388	3554	2400
1/0	406	4	8	0.080	2.03	0.190	4.83	1.78	45.3	2430	3616	2400
2/0	513	4	8	0.080	2.03	0.205	5.21	1.89	48.1	2806	4176	3000
3/0	646	3	8	0.080	2.03	0.205	5.21	2.04	51.9	3366	5010	3800
4/0	814	2	8	0.080	2.03	0.220	5.59	2.19	55.7	4010	5968	4800
250	999	1	8	0.095	2.41	0.220	5.59	2.38	60.4	4859	7232	5800
350	1403	1/0	8	0.095	2.41	0.235	5.97	2.68	68.0	6349	9449	7900
500	2013	3/0	8	0.095	2.41	0.265	6.73	3.05	77.5	8694	12939	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 2kV
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	1.138	0.118	0.09	1.90	93
4 AWG	0.289	0.920	1.138	0.107	0.11	3.03	122
2 AWG	0.182	0.578	0.731	0.101	0.13	4.80	159
1 AWG	0.140	0.460	0.731	0.100	0.13	6.06	184
1/0 AWG	0.112	0.364	0.731	0.097	0.14	7.65	211
1/0 AWG	0.112	0.289	0.731	0.097	0.14	7.65	211
2/0 AWG	0.0886	0.289	0.731	0.092	0.16	9.64	243
3/0 AWG	0.0700	0.222	0.731	0.091	0.17	12.15	279
4/0 AWG	0.0560	0.182	0.731	0.088	0.19	15.30	321
250 MCM	0.0476	0.140	0.731	0.084	0.21	18.16	355
350 MCM	0.0339	0.112	0.731	0.081	0.24	25.31	435
500 MCM	0.0238	0.0700	0.731	0.078	0.28	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.