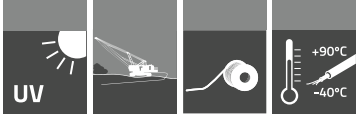

SHD-GC 5kV
EL TPE-E CPE XFSN

ICEA S-75-381:2025/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 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, white, 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	Six times overall diameter of the cable

SHD-GC 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

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	4.70	1.50	38.1	1290	1920	600
4	413	9	8	0.110	2.79	0.185	4.70	1.63	41.3	1590	2366	950
2	455	7	8	0.110	2.79	0.205	5.20	1.80	45.7	2060	3066	1500
1	336	6	8	0.110	2.79	0.205	5.20	1.88	47.7	2368	3525	1900
1/0	406	5	8	0.110	2.79	0.220	5.60	2.00	50.7	2724	4054	2400
2/0	513	4	8	0.110	2.79	0.220	5.60	2.11	53.6	3165	4711	3000
3/0	646	3	8	0.110	2.79	0.236	6.00	2.26	57.5	3765	5603	3800
4/0	814	2	8	0.110	2.79	0.236	6.00	2.40	60.9	4398	6546	4800
250	999	1	8	0.120	3.05	0.252	6.40	2.59	65.9	5295	7880	5800
350	1403	1/0	8	0.120	3.05	0.264	6.70	2.86	72.7	6768	10073	7900
500	2013	3/0	8	0.120	3.05	0.280	7.10	3.20	81.4	9079	13513	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 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	0.459	1.142	0.729	0.132	0.08	1.90	93
4 AWG	0.289	0.920	0.729	0.119	0.09	3.03	122
2 AWG	0.175	0.578	0.729	0.112	0.10	4.80	159
1 AWG	0.140	0.459	0.729	0.108	0.11	6.06	184
1/0 AWG	0.111	0.364	0.729	0.105	0.12	7.65	211
2/0 AWG	0.0885	0.289	0.729	0.099	0.14	9.64	243
3/0 AWG	0.0702	0.221	0.729	0.098	0.14	12.15	279
4/0 AWG	0.0557	0.175	0.729	0.094	0.16	15.30	321
250 MCM	0.0475	0.140	0.729	0.089	0.18	18.16	355
350 MCM	0.0340	0.111	0.729	0.085	0.21	25.31	435
500 MCM	0.0238	0.0702	0.729	0.082	0.24	36.18	536

(1) Ampacity –Based on continuous duty at 90ºC conductor temperature.
(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 FT1 FT5 (-40ºC) +90ºC P-7K-268101-MSHA + feet + coded date

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