## SHD-GC

25000 V
CSA C22.2 No. 96-17

## 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, blue, 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 |



## SHD-GC

## Features

| Excellent flexibility |  | Excellent impact and abrasion resistant |
| :--- | :--- | :--- |
| Highly ozone, sun, weather and flame resistant | Oil and heat resistant |  |
| Rated and flexible at $-40^{\circ} \mathrm{C}$ |  | Indent printed for easy identification |

## Approvals

| CSA: | 1523058 (LR 103932) |
| :---: | :---: |
| MSHA: | P-07-KA060012-2 (for sizes 1AWG-500MCM) |
| Standard length cable packing | 1000ft on drums. Other forms of packing and delivery are available on request |

## Selection Data

| Part Number | Cond. <br> Size | Cond. <br> Strand | $\frac{\text { Cond. }}{\text { GRD }}$ | Size | Nominal Insulation Thickness |  | Nominal <br> Jacket <br> Thickness |  | Approx. O.D. |  | Approx. Weight |  | Maximum <br> Tensile <br> Force |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AWG/ MCM | No. | AWG |  | Inches | mm | Inches | mm | Inches | mm | Lbs./1kft. | kg/km | N |
| SHDGC25KV1-3CSA | 1 | 259 | 6 | 8 | 0.295 | 7.49 | 0.265 | 6.73 | 2.82 | 71.7 | 4636 | 6899 | 1900 |
| SHDGC25KV1/0-3CSA | 1/0 | 266 | 5 | 8 | 0.295 | 7.49 | 0.265 | 6.73 | 2.90 | 73.7 | 4990 | 7426 | 2400 |
| SHDGC25KV2/0-3CSA | 2/0 | 342 | 4 | 8 | 0.295 | 7.49 | 0.280 | 7.11 | 3.05 | 77.4 | 5701 | 8484 | 3000 |
| SHDGC25KV3/0-3CSA | 3/0 | 418 | 3 | 8 | 0.295 | 7.49 | 0.280 | 7.11 | 3.19 | 80.9 | 6297 | 9371 | 3800 |
| SHDGC25KV4/0-3CSA | 4/0 | 532 | 2 | 8 | 0.295 | 7.49 | 0.295 | 7.49 | 3.35 | 85.1 | 7272 | 10822 | 4800 |
| SHDGC25KV250-3CSA | 250 | 627 | 1 | 8 | 0.295 | 7.49 | 0.295 | 7.49 | 3.42 | 86.8 | 7949 | 11829 | 5800 |
| SHDGC25KV350-3CSA | 350 | 888 | 1/0 | 8 | 0.295 | 7.49 | 0.295 | 7.49 | 3.66 | 93.0 | 9695 | 14427 | 7900 |

## SHD-GC

## Electrical parameters

| Power- <br> Grounding <br> Conductor <br> Size | Power | Grounding | Ground- | Inductance <br> per unit <br> length | Operating | Permissible | Ampacity(1) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Conductor | Conductor | check |  | Capacitance per unit length | short-circuit | $40^{\circ} \mathrm{C}$ |
|  | Resistance | Resistance at | Conductor |  |  | Current (1s) | Ambient |
|  | at $25^{\circ} \mathrm{C}$ | $25^{\circ} \mathrm{C}$ | Resistance at |  |  | (2) | Temp |
|  |  |  | $25^{\circ} \mathrm{C}$ |  |  |  |  |
| AWG/MCM | ת/1000Ft | ת/1000Ft | ת/1000Ft | mH/1000Ft | $\mu \mathrm{F} / 1000 \mathrm{Ft}$ | kA | A |
| 1 AWG | 0.137 | 0.436 | 0.679 | 0.137 | 0.06 | 6.06 | 191 |
| 1/0 AWG | 0.109 | 0.346 | 0.679 | 0.132 | 0.06 | 7.65 | 218 |
| 2/0 AWG | 0.0868 | 0.274 | 0.679 | 0.125 | 0.07 | 9.64 | 249 |
| 3/0 AWG | 0.0688 | 0.217 | 0.679 | 0.124 | 0.07 | 12.15 | 286 |
| 4/0 AWG | 0.0546 | 0.172 | 0.679 | 0.118 | 0.08 | 15.30 | 326 |
| 250 MCM | 0.0466 | 0.137 | 0.679 | 0.115 | 0.08 | 18.10 | 360 |
| 350 MCM | 0.0333 | 0.109 | 0.679 | 0.107 | 0.10 | 25.31 | 439 |

(1) Ampacity - Based on continuous duty at $90^{\circ} \mathrm{C}$ conductor temperature
(2) Short-circuit current (1s) - Based on conductor temperature from $90^{\circ} \mathrm{C}$ up to $250^{\circ} \mathrm{C}$

## Special Factory Options:

| Jacket: | Other colors available |
| :---: | :---: |
| Jacket: | TPU jacket available |

## Standard Print Legend

## TF CABLE (VOLTAGE) 3/C (SIZE) TYPE SHD-GC CSA LR 103932 100\% FT1 FT5 ( $-40^{\circ} \mathrm{C}$ ) $+90^{\circ} \mathrm{C}$ P-07-KA060012-2-MSHA

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