Caledonian Mining Cables Portable Power Cables



Type SHD-PCG Three-Conductor

Round Portable Power Cable 5kV

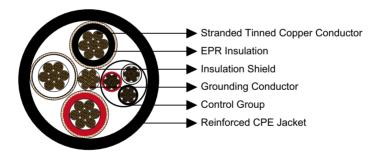
» Applications

These heavy duty cables are designed for use on longwall shearers, where three shielded power conductors, three unshielded control conductors, and a grounding conductor are required.

» Standards

ICEA S-75-381/NEMA WC 58 ASTM B 172 ASTM B 33 CAN/CSA-C22.2 No.96

» Construction



Conductors:

Stranded annealed tinned copper conductor.

Insulation:

Ethylene Propylene Rubber (EPR).

Insulation Shield:

Tinned copper/textile braid.

Control Group (3 Conductors):

Tinned copper conductor, EPR insulation and thermosetting jacket. Colour of insulation: Black, white and red.



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Grounding Conductor:

Tinned copper conductor, located in the center of the cable.

Jacket:

Reinforced extra-heavy-duty Chlorinated Polyethylene (CPE), black.

Options

- Other jacket materials such as CSP/PCP/NBR/PVC/TPU are available upon request.
- Two-layer jacket with reinforcing fibre between the two layers can be offered as an option.

Mechanical and Thermal Properties

Minimum Bending Radius: 6×OD

Maximum Conductor Operating Temperature: +90°C

Dimensions and Weight

| Construction | No. of Strands | Grounding Conductor Size | Control Conductor Size | Nominal Insulation Thickness | | Nominal Jacket Thickness | | Nominal Overall Diameter | | Nominal Weight | | Ampacity |
|-------------------------------|-------------------|--------------------------------|------------------------------|------------------------------------|-----|--------------------------------|-----|--------------------------------|------|-------------------|-------|----------|
| No. of cores×AWG/ kcmil | - | AWG/ kcmil | AWG/ kcmil | inch | mm | inch | mm | inch | mm | lbs/kft | kg/km | А |
| 3×2 | 259 | 4 | 8 | 0.11 | 2.8 | 0.205 | 5.2 | 2.03 | 51.5 | 2769 | 4120 | 159 |
| 3×1 | 259 | 4 | 8 | 0.11 | 2.8 | 0.220 | 5.6 | 2.12 | 53.8 | 2825 | 4205 | 184 |
| 3×1/0 | 266 | 3 | 8 | 0.11 | 2.8 | 0.220 | 5.6 | 2.27 | 57.7 | 3571 | 5313 | 211 |
| 3×2/0 | 329 | 2 | 8 | 0.11 | 2.8 | 0.220 | 5.6 | 2.45 | 62.2 | 3774 | 5615 | 243 |
| 3×3/0 | 418 | 1 | 8 | 0.11 | 2.8 | 0.235 | 6.0 | 2.58 | 65.3 | 4752 | 7070 | 279 |
| 3×4/0 | 532 | 1/0 | 6 | 0.11 | 2.8 | 0.250 | 6.4 | 2.76 | 69.9 | 6030 | 8971 | 321 |

Ampacity-Based on a conductor temperature of 90°C and an ambient air temperature of 40°C, per ICEA S-75-381.