BS 5467 Copper Conductor Single Core AWA PVC BASEC 0.6/1kV Cable

APPLICATION
Single core PVC cable with aluminium wire armour (AWA). Power and auxiliary fixed wiring cables for use in power networks, underground, outdoor and indoor applications and for use in cable ducting.

CHARACTERISTICS

Voltage Rating U₀/U
0.6/1kV

Temperature Rating
Fixed: -25°C to +90°C

Minimum Bending Radius
Fixed: 8 x overall diameter

CONSTRUCTION

Conductor
Class 2 stranded copper conductor

Insulation
XLPE (Cross-Linked Polyethylene)

Bedding
PVC (Polyvinyl Chloride)

Armour
AWA (Aluminium Wire Armour)

Sheath
PVC (Polyvinyl Chloride)

Core Identification
● Brown

Sheath Colour
● Black

CABLE THIRD-PARTY ACCREDITATIONS

STANDARDS
BS 5467, BS EN/IEC 60502-1, BS EN IEC 60228
Flame Retardant according to BS EN/IEC 60332-1-2

ISO/IEC 17025 LABORATORY TESTED
This product is subject to the Quality Assurance protocols of The Cable Lab®, an ISO/IEC 17025 accredited cable testing laboratory. Testing includes vertical flame, conductor resistance, tensile & elongation, and dimensional consistency, verified to published standards and approved product drawings.

REGULATORY COMPLIANCE
This cable meets the requirements of the Low Voltage Directive 2014/35/EU and the RoHS Directive 2011/65/EU. RoHS compliance has been tested and confirmed by The Cable Lab® as meeting the requirements of the BSI RoHS Trusted Kitemark™.
## Dimensions

<table>
<thead>
<tr>
<th>ELAND PART NO.</th>
<th>NO. OF CORES</th>
<th>NOMINAL CROSS SECTIONAL AREA mm²</th>
<th>NOMINAL THICKNESS OF INSULATION mm</th>
<th>NOMINAL OVERALL DIAMETER mm</th>
<th>NOMINAL WEIGHT kg/km</th>
<th>BW / CW GLAND</th>
<th>WRAPAROUND CLEATS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A9AWA1050</td>
<td>1</td>
<td>50</td>
<td>1</td>
<td>12.7</td>
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<td>A9AWA1500</td>
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<td>36</td>
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<tr>
<td>A9AWA1630</td>
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</table>

## Conductors

### Class 2 Stranded Conductors for Single Core and Multi-Core Cables

<table>
<thead>
<tr>
<th>NOMINAL CROSS SECTIONAL AREA mm²</th>
<th>MINIMUM NO. OF WIRES IN CONDUCTOR</th>
<th>MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km</th>
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<tbody>
<tr>
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<td>Circular</td>
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<tr>
<td></td>
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<td>400</td>
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</tr>
<tr>
<td>1000</td>
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</tbody>
</table>

The above table is in accordance with BS EN 60228 (previously BS 6360)
## ELECTRICAL CHARACTERISTICS XLPE/PVC/AWA/PVC

### Current Carrying Capacity

<table>
<thead>
<tr>
<th>NOMINAL CROSS SECTIONAL AREA mm²</th>
<th>REFERENCE METHOD C (CLIPPED DIRECT)</th>
<th>REFERENCE METHOD F (IN FREE AIR OR ON A PERFORATED CABLE TRAY, HORIZONTAL OR VERTICAL)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TOUCHING</td>
<td>SPACED BY ONE CABLE DIAMETER</td>
</tr>
<tr>
<td></td>
<td>TOUCHING</td>
<td>Horizontal</td>
</tr>
<tr>
<td></td>
<td>2 Cables Single-Phase AC or DC Flat</td>
<td>3 or 4 Cables Three-Phase AC Flat</td>
</tr>
<tr>
<td>50</td>
<td>237</td>
<td>220</td>
</tr>
<tr>
<td>70</td>
<td>303</td>
<td>277</td>
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<tr>
<td>95</td>
<td>367</td>
<td>333</td>
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<td>853</td>
<td>717</td>
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<td>500</td>
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<td>791</td>
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<td>630</td>
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<td>1170</td>
<td>904</td>
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<tr>
<td>1000</td>
<td>1261</td>
<td>961</td>
</tr>
</tbody>
</table>

**Notes**

1. Where a conductor operates at a temperature exceeding 70°C it must be ascertained that the equipment connected to the conductor is suitable for the conductor operating temperature (see Regulation 512.1.2 of the 17th Edition of IEE Wiring Regulations).

2. Where cables in this table are connected to equipment or accessories designed to operate at a temperature not exceeding 70°C, the current ratings given in the equivalent table for 70°C thermoplastic insulated cables (Table 4D3A) must be used (see Regulation 523.1 of the 17th Edition of IEE Wiring Regulations).

The above table is in accordance with Table 4E3A of the 17th Edition of IEE Wiring Regulations.
### Voltage Drop

<table>
<thead>
<tr>
<th>NOMINAL CROSS SECTIONAL AREA (mm²)</th>
<th>TWO CORE CABLE DC</th>
<th>REFERENCE METHOD C &amp; F (CLIPPED DIRECT, ON TRAY OR IN FREE AIR) mV/A/m</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 Cables Single-Phase AC</td>
<td>3 or 4 Cables Three-Phase AC</td>
</tr>
<tr>
<td></td>
<td>Touching</td>
<td>Spaced*</td>
</tr>
<tr>
<td>50 0.980</td>
<td>0.990</td>
<td>0.210</td>
</tr>
<tr>
<td>70 0.670</td>
<td>0.680</td>
<td>0.200</td>
</tr>
<tr>
<td>95 0.490</td>
<td>0.510</td>
<td>0.195</td>
</tr>
<tr>
<td>120 0.390</td>
<td>0.410</td>
<td>0.190</td>
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<tr>
<td>150 0.310</td>
<td>0.330</td>
<td>0.185</td>
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<tr>
<td>185 0.250</td>
<td>0.270</td>
<td>0.185</td>
</tr>
<tr>
<td>240 0.195</td>
<td>0.210</td>
<td>0.180</td>
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<tr>
<td>300 0.155</td>
<td>0.170</td>
<td>0.175</td>
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<td>400 0.115</td>
<td>0.145</td>
<td>0.170</td>
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<td>500 0.093</td>
<td>0.125</td>
<td>0.170</td>
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<tr>
<td>630 0.073</td>
<td>0.105</td>
<td>0.165</td>
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<tr>
<td>800 0.056</td>
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<td>0.160</td>
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<tr>
<td>1000 0.045</td>
<td>0.092</td>
<td>0.155</td>
</tr>
</tbody>
</table>

Conductor operating temperature: 90°C

- **r** = Resistive Component
- **x** = Reactive Component
- **z** = Impedance Value

* Spacings larger than one cable diameter will result in a larger voltage drop.

The above table is in accordance with Table 4E3B of the 17th Edition of IEE Wiring Regulations.

For cables having conductors of 16mm² or less cross sectional area their inductances can be ignored and (mV/A/m)r values only are tabulated. For cables having conductors greater than 16mm², cross sectional area the impedance values are given as (mV/A/m)z, together with the resistive component (mV/A/m)r and the reactive component (mV/A/m)x.

The above paragraph is extracted from Appendix 4 of the 17th Edition of IEE Wiring Regulations.

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The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.