

# DBC1.0 & DBC2.5 Direct Burial Cable

Ampetronic DBC cables are intended to be used for direct burial in soil or concrete (usually in the screed layer). This provides a cable installation option where there is no floor covering or other installation location, even if the planned screed is too thin to accommodate conduit. The EPR-CSP HOFR insulation of the cable is resistant to attack from the strong alkalis present in concrete (unlike standard PVC-insulated wire), and prevents loop failure due to corrosion of the copper.

**Safety:** DBC cables are not suitable for connection to AC mains power supplies or other high voltage systems except in secondary containment. Only qualified electrical installers should use the cables for such purposes. To do so incorrectly could result in injury or death.



## Installation Method:

1. Check that all reels of cable are undamaged. Do not use damaged cable - it may have a reduced service life.
2. The cable should be installed above any structural metalwork in the floor, in order to minimise the effects of metal loss.
3. The cable can then be run out along the route required. The following notes may be of use:
  - (a) It may be best to temporarily hold the cable in place using an occasional piece of adhesive tape or a clip at corners, etc.
  - (b) A joint in the cable will be a point of increased vulnerability to chemical attack, and should be avoided where possible. The cable is supplied on 100m and 200m drums, minimising the need to join cable sections.
  - (c) Where it is necessary to join two pieces of cable, it is important that a good solder joint is made, and that the resulting joint is fully insulated, preferably using a resin-type product which resists chemical attack.
  - (d) The feed cable between the amplifier and the loop can also use DBC cable, or the loop can be joined to a standard tri-rated cable as necessary. The joint to standard cable should be made away from potentially corrosive materials. If there is any risk of exposure to moisture, use appropriate protection for the joint. The two feed wires should be twisted together between the driver and the loop.

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4. When the cable is all laid out in the correct position and jointed, test the loops for continuity across the ends of each loop. It may be sensible to test the loop continuity following pouring of the screed and/or after floor finish installation to avoid any disagreement in the event of subsequent damage.
5. Advise construction or site management of cable location - this should be clearly indicated on as-built drawings to minimise the risk of damage during future works.

**Note to Distributors:** Distributors must include a copy of this document when DBC1.0 or DBC2.5 is despatched to installers.

## Warranty Information:

The loop cable is warranted against defects in manufacture present at the time of supply. The warranty does not cover installation errors or mechanical damage to this product. Failure to follow these instructions properly could invalidate any warranty.



**This symbol is used to alert the user to important operating or maintenance instructions.**

## Specification:

Cable Type	DBC1.0	DBC2.5
Reel length:	100m	100m or 200m
Conductor Size:	1.0mm <sup>2</sup> (32x0.21mm <sup>2</sup> )	2.5mm <sup>2</sup> (50x0.26mm <sup>2</sup> )
Max Outer Dia.:	3.7mm	5.6mm
Voltage rating*:	300VAC	600VAC
Weight, kg/100m:	1.9	4.1
Colour:	Black	
Minimum bend radius:	Fixed 4 x outer diameter / Flexed 6 x outer diameter	
Insulation:	Composite Ethyl-Propylene Rubber & Chlorosulphonated Polyethylene (EPR-CSP) - Heat & Oil resistant, Flame Retardant (HOFR)	
Standards:	BS6195 Type 4 (where applicable) flexible cables	
Operating Temp.:	Max. 90 ° C, Min. (flexing): -20 ° C	

Ampetronic Ltd

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