



Cable Description

High conductivity annealed stranded copper conductors to SANS 1411 Part 1. Insulated with PVC and skin coloured in plain colours to SANS 1411 Part 2. Cable is manufactured to SANS 1507 Part 2. **SLIPDAC®** is the Aberdare Power Cables trade name for a newly developed range of General Purpose wires with superior low friction characteristics.

Installation Information

For the wiring of Industrial Buildings, Housing, Control Panels, where **SLIPDAC®** will be easier to pull through conduit, than standard housewire particularly on long and difficult runs.

Properties

Specification : SANS 1507-2
 Temperature Range : -10°C to 70°C
 Voltage Rating : 600 / 1000V
 Core Identification : Complete range of colours
 Packaging : 100m shrink-wrapped perforated coils / 500m reels

A specially developed low friction PVC compound which is used in the insulation of House wire for supply to the South African market.

Technical Data

Cable Size	Nominal Stranding No. x diameter	Approx. Overall Diameter	Current Rating *	Conductor Resistance @ 20°C Maximum	1 ϕ Volt Drop	Approx. Cable Mass per 100m Coil
(mm ²)		(mm)	(A)	(Ω /km)	(mV/A/m)	(kg)
600 / 1000 V						
1	7/0,42	3,0	17	18,1	43	1,7
1,5	7/0,53	3,3	21	12,1	29	2,2
2,5	7/0,66**	3,6	27	7,41	18	3,2
4	7/0,86**	4,5	36	4,61	11	5,2
6	7/1,04**	5,0	45	3,08	7,4	7,0
10	7/1,35**	6,0	61	1,83	4,4	11,1
16	7/1,67**	6,9	78	1,15	2,8	16,7

* **Note:** - Rating based on two touching cables, installed in a duct.
 - Assumed ambient air temperature is 30°C.
 - Assumed maximum conductor temperature is 70°C.

** **Note:** - Compacted Conductors

What are the benefits of this product solution compared to standard housewire?

The following benefits are relevant:

- The pulling force required to pull the product through conduit, is significantly reduced, as the cable-to-conduit and cable to cable friction is lower than on the standard product.
- The product is neatly and accurately coiled on automatic coilers, which reduces the risk of entanglement.
- The **SLIPDAC®** coils are sized for placement in a standard **SLIPDAC®** bucket where they may be stored securely after use. Refer PHOTO 3.
- The heat-shrunk plastic used in the packaging, keeps the coil in a sturdy, compact form until such time as it is used, thus there is a reduced risk of entanglement due to poor handling.
- The perforated packaging allows for easy access to the wire end on the inside of the coil, without having to disturb the packaging or the body of the coil during use. Refer PHOTO 1.
- The packaging is perforated on both the top and bottom, thus allowing coils to be stacked for simultaneous extraction of all required colours. A useful tool for this purpose is a bucket, which will hold the stacked coils in place while the wire is being withdrawn. Refer PHOTO 2.

ABERDARE CABLES has established a procedure for testing of the pulling force required to pull a sample of cable through a preformed length of standard 20mm SABS conduit. The initial force required to move the cable was measured and recorded for a number of samples of different sizes in the house wire range of colours, for both standard products as well as for **SLIPDAC®**

See attached photograph of the **SLIPDAC®** rig used during testing. (The conduit was exchanged for an unused piece from the same batch, at regular intervals).



Photo 1:
The SLIPDAC® coil - Note the perforation marks in the centre part of the coil.



Photo 3:
The bucket lid is replaced with partially used coils remaining in the bucket for future use.



Photo 2:
Extraction of 3 or 4 wires simultaneously from coils held