



## INTRODUCTION

In the UK domestic wiring market, PVC flexible cables (PVC insulated and/or PVC sheathed) generally refer to those cables designed for use in household appliances such as washing machines, spin dryers and refrigerators. Used extensively for trailing and flexible supply leads. Manufactured to BS EN 50525-2-11 and BS 6004.

## CONSTRUCTION

### 218-Y H03VV-F

- Class 5 flexible copper conductor
- Voltage Rating: 300/300V
- Temperature Rating: -5°C to 70°C
- 0.5 & 0.75mm<sup>2</sup> 2, 3 and 4 core
- Sheath colour White or Black

Light duty cable for use in domestic premises, kitchens and offices. For use with light portable appliances such as radios, table lamps and light weight electrical equipment (Electric Razors).



### 219-Y H03VVH2-F

- Class 5 flexible copper conductor
- Voltage Rating: 300/300V
- Temperature Rating: -5°C to 70°C
- 0.5 & 0.75mm<sup>2</sup> 2 core
- Sheath colour White or Black

Light duty cable used as an indoor general wiring cable primarily for installations in public areas. Examples include use on pendant lighting drops or as a general supply lead.



### 318-Y H05VV-F

- Class 5 flexible copper conductor
- Voltage Rating: 300/500V
- Temperature Rating: -5°C to 70°C
- 0.75 & 2.5mm<sup>2</sup> 2, 3, 4 and 5 core
- Sheath colour White or Black

Ordinary duty cable for use in domestic appliances, kitchens and offices. For use with light portable appliances, electric tools and extension leads.



### 309-Y H05V2V2-F

- Class 5 flexible copper conductor
- Voltage Rating: 300/500V
- Temperature Rating: -5°C to 90°C
- 0.75 & 2.5mm<sup>2</sup> 2, 3, 4 and 5 core
- Sheath colour White or Black

Heat Resistant cable for use in domestic appliances, kitchens and offices. For use where exposure to heat is required such as electrical appliances and immersion heating systems.



### Arctic BS 6004

- Class 5 flexible copper conductor
- Voltage Rating: 300/500V
- Temperature Rating: -40°C to 70°C
- 0.75 & 4.0mm<sup>2</sup> 2 and 3 core
- Sheath colour Blue or Yellow

Designed to withstand and remain flexible at temperatures down to -40°C. Particularly suitable for temporary outdoor applications and for use where flexibility is required at sub zero temperatures.

Primarily used as extension leads: Blue Sheath for 220V applications, Yellow Sheath for 110V applications



## APPLICATION

Designed for low voltage appliances, power tools, washing machines, vacuum cleaners, lawn mowers etc. with medium mechanical stress. They are not suitable for fixed outdoor use. There is also a selection of different voltage ratings to meet different applications, and a selection of different materials suitable for heat resisting and low temperature applications. BASEC Approved.



## FREQUENTLY ASKED QUESTIONS

### What does H03VV-F stand for?

H03VV-F is a harmonised code. The H means the cable conforms with harmonised standards. The 03 identifies the cable's voltage rating as 300/300V. The V refers to Ordinary Duty 70°C PVC insulation. The V refers to Ordinary Duty 70°C PVC sheath. The -F highlights flexible copper conductors.

### What does H05VV-F stand for?

H05VV-F is a harmonised code. The H means the cable conforms with harmonised standards. The 05 identifies the cable's voltage rating as 300/500V. The V refers to Ordinary Duty 70°C PVC insulation. The V refers to Ordinary Duty 70°C PVC sheath. The -F highlights flexible copper conductors.

### What does V2V2 stand for?

The V2 refers to the Heat Resistant 90°C PVC Insulation. The V2 refers to the Heat Resistant 90°C PVC Sheath.

### What does H2 stand for?

The H2 refers to special construction, flat construction of non divisible cables and cords.

### What is the difference between Harmonised codes and 218(N)Y/318(N)Y?

These are the UK system of references:

- 2 stands for a voltage rating of 300/300V
- 3 stands for a voltage rating of 300/500V
- 18 references Insulated and sheathed circular cables
- 19 references Insulated and sheathed flat cables
- 09 identifies Heat resistant PVC flexible cables
- N stands for the Number of Cores
- Y references PVC insulation and sheath material

### Can these PVC flexible cable be installed outdoors in direct sunlight?

These cables are not generally suitable for permanent use outdoors and are not specifically designed for installation in direct sunlight. Use in these conditions without containment or additional protection may significantly reduce the service life and may breach national wiring regulations.

### Are they available in LSZH versions?

Yes, whether directly or with comparable cables. 318-B to BS EN 50525-3-11 primarily for installation in public areas where smoke and acid gas emissions would pose a major fire hazard. Applications include general supply leads in airports, hospitals and shopping centres.

### How flexible are the cables?

The cables are subjected to flexing tests, which is conducted on a sample energised with an A.C. Voltage and mechanical loading. It must withstand 60,000 cycles (3½ days) without loss of electrical integrity.

### What are the core colours?

- 2 core: ● Blue, ● Brown
- 3 core: ● Green/Yellow, ● Blue, ● Brown
- 4 core: ● Green/Yellow, ● Brown, ● Black, ● Grey
- 5 core: ● Green/Yellow, ● Brown, ● Black, ● Grey, ● Blue

### What makes Arctic Cables Special?

The cable is suitable for installation and handling down to a temperature of -40°C, e.g. suitable for construction site installations and is often seen in use on temporary road works for supplies to traffic lights.

### Are Arctic Cables Harmonised?

No, commonly referred to as 3183A (Arctic Grade Flex), was specifically designed for use at 110 V a.c. from centre tapped transformers, hence, included in the British Standard BS 6004 (previously BS 7919). Arctic Flex have not been harmonised to European HDs because the use of 110 V a.c. supplies from centre tapped transformers (55 V - 0 - 55 V) is a UK only practice.