

## SWIFT FIT - FLEXIBLE INSTALLATION CABLE

**STANDARD:** Generally to HD21.14, BS 7211 & PR EN 50525.

**VOLTAGE RATING:** 300/500V

**APPLICATION:** Flexible cable for fixed installation within buildings.

**CONDUCTOR TYPE:** Plain Annealed Copper (Flexible).

**CORE COLOURS:**  
 3 Core - Brown, Blue & Green/Yellow.  
 4 Core - Brown, Black, Grey & Green/Yellow.  
 5 Core - Brown, Black, Grey, Blue & Green/Yellow.  
 7+12 Core - White numbered cores & Green/Yellow.

**INSULATION MATERIAL:** OHLS - Halogen Free Low Smoke.

**LAY UP:** Twisted Cores.

**SHEATH MATERIAL:** OHLS - Halogen Free Low Smoke.

**SHEATH COLOUR:** Grey

**MINIMUM BEND RADIUS** : 6 x OD

**MAXIMUM CONDUCTOR TEMP:** 70°C

**MINIMUM INSTALLATION TEMP:** 0°C

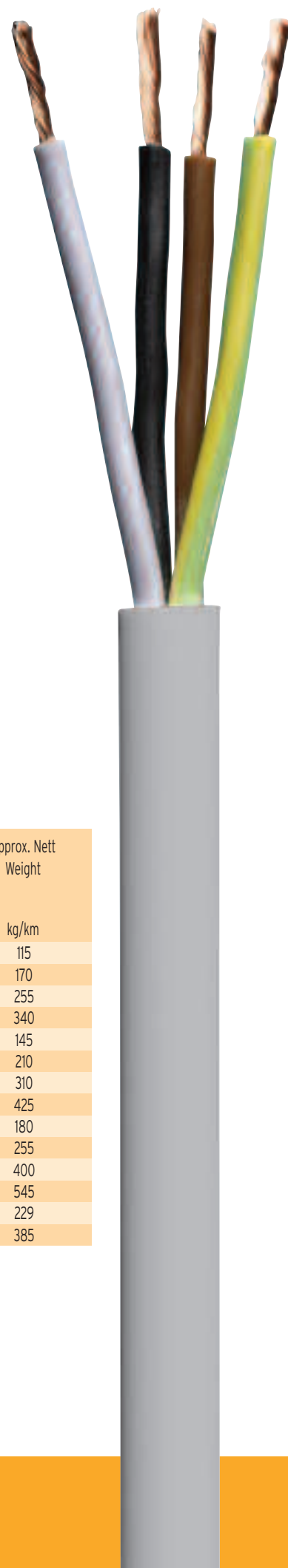
**CURRENT RATING:** Refer to table 4D2A in BS 7671 or page 97.

### FIRE PERFORMANCE CHARACTERISTICS:

**Smoke emission:** BS EN 61034

**Acid gas emission:** BS EN 50267-2, IEC 60754-2

**Flame propagation:** BS EN 60332-1



Ref.	Nominal Area of Conductors	Part Number	Class of Conductor	Maximum Conductor Resistance	Insulation Thickness	Sheath Thickness	Nominal Cable Diameter	Approx. Nett Weight
	mm <sup>2</sup>			Ω/km @ 200C	mm	mm	mm	kg/km
3 Core	1.5	YYOHL33G1.5GY	5	12.1	0.7	0.9	8.4	115
	2.5	YYOHL33G2.5GY	5	7.41	0.8	1.1	10.1	170
	4.0	YYOHL33G4.0GY	5	4.61	0.8	1.2	11.4	255
4 Core	6.0	YYOHL33G6.0GY	5	3.08	0.8	1.3	12.8	340
	1.5	YYOHL44G1.5GY	5	12.1	0.7	1.0	9.4	145
	2.5	YYOHL44G2.5GY	5	7.41	0.8	1.1	11.0	210
	4.0	YYOHL44G4.0GY	5	4.61	0.8	1.2	12.5	310
5 Core	6.0	YYOHL44G6.0GY	5	3.08	0.8	1.3	14.1	425
	1.5	YYOHL55G1.5GY	5	12.1	0.7	1.1	10.4	180
	2.5	YYOHL55G2.5GY	5	7.41	0.8	1.2	12.1	255
	4.0	YYOHL55G4.0GY	5	4.61	0.8	1.4	14.1	400
7 Core	6.0	YYOHL55G6.0GY	5	3.08	0.8	1.6	16.0	545
	1.5	YYOHL77G1.5GY	5	12.1	0.7	1.2	11.5	229
	1.5	YYOHL12G1.5GY	5	12.1	0.7	1.5	15.6	385

# Frequently Asked Questions

## WHY HAS DRAKA PRODUCED SAFFIRE® SWIFT FIT?

The latest installation practises in commercial buildings are showing an increase in the amount of cable basket being used. Draka have produced a cable which will sit straight in the basket off of the drum, and removes the requirement for excessive dressing and strapping down of the cable, thus considerably reducing installation costs.

## WHERE CAN THIS CABLE BE USED?

As above, this cable is advantageous in fixed installations, where groups of cables are laid in cable basket. The fact that it is a SAFFIRE® OHLS® cable makes it suitable for all commercial applications

## AREN'T THERE A NUMBER OF THESE CABLES ON THE MARKET TODAY?

Yes, however the cables on the market today are generally classed as "Flexible cords", and are not strictly rated as installation cables. Draka have addressed this issue.

## HOW IS A "FLEX" DIFFERENT TO SAFFIRE® SWIFT FIT?

Stranded flexible conductors (class 5) are allowed within the standards, to have a higher Conductor resistance (CR) than the equivalent solid or stranded rigid conductors. This equates to between 7 and 10% difference in Conductor resistance. This would, if nothing was done, negatively affect the current rating, by as much as 4%. In respect of this Draka have matched the Conductor resistance of the flexible conductor in the SAFFIRE® YY OHLS® product to meet class 2 (stranded rigid) requirements.

## DOES SWIFFIT HAVE A BASEC APPROVAL?

Draka have worked with BASEC and hold a certificate of assessed design (CAD), however there is no British Standard (BS) against which to manufacture these cables, although they are generally manufactured in accordance with aspects of BS7211, HD 21.14 and PR EN 50525. However, notice has been taken that the intended use for these cables is as an INSTALLATION CABLE and NOT a CORD, and they are therefore not intended to be flexed repetitively. The use of these cables for fixed installations should include consideration of the influences that the cable is subject to in use (Installation methods such as grouping). Please refer to question below on current ratings. All of these factors were taken into account in the formation of the CAD.

## IF I INSTALL THESE CABLES, AM I COMPLYING WITH THE WIRING REGULATIONS?

The answer to this is yes, as long as attention is drawn to certain clauses within the 17th edition. These clauses are 120.3, 120.4, 133.1 and 511. Clauses 133.1 and 511 refer to compliance with standards, and there is a statement that everything should comply to a British or Harmonised standard. There is a rider to this that where "equipment is not covered by a British or harmonised standard, or is used outside the scope of its standard, the designer or person responsible for specifying the installation shall confirm that the equipment provides the same degree of safety as that afforded by compliance with the regulations". Work is being undertaken to provide a standard to produce this cable against, and in the meantime, as above, Draka have a "Certificate of Assessed Design" from BASEC, to substantiate the safety of the cable.

## WITH RESPECT TO THE WIRING REGULATIONS, WHICH TABLES DO I USE FOR CURRENT RATINGS?

Historically, stranded flexible class 5 conductors have been allowed to have a higher resistance than class 1 (solid) or class 2 (stranded) within BSEN 60228 - the conductor standard for the cable industry. This now means that flexible conductors have a higher resistance than the equivalent class 1 or 2 conductors that are most commonly found in installation cables. This would, if nothing was done, negatively affect the current rating, by as much as 4%. In light of this Draka has responded by matching the conductor resistance for its flexible conductors in these cables, with those of the class 1 and 2 equivalents. In light of this Draka YY OHLS can be rated using table 4D2A from the 17th edition wiring regulations (Multicore 70°C thermoplastic insulated and sheathed cables, non armoured).

## DO THESE CABLES HAVE CORE COLOURS, OR IS IT A CASE OF BLACK NUMBERED CORES?

Draka YY OHLS is available in 3, 4 and 5 core designs with core colours as below:-

3 Core - Brown, Blue & Green/Yellow.

4 Core - Brown, Black, Grey & Green/Yellow.

5 Core - Brown, Black, Grey, Blue & Green/Yellow

7+12 Core - White numbered cores & Green/Yellow

Please note that all values shown are nominal, based on current design practices/formulae and could be subject to change. (Rev5 - 20/07/09)