

Multi-purpose LSF sheathed power cable

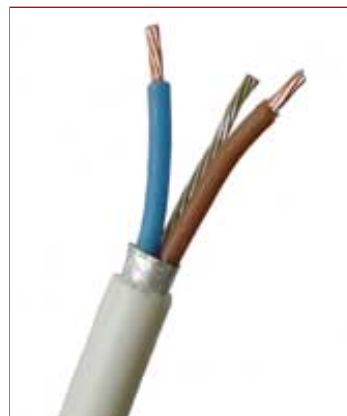
### Description

**Protected fixed wiring cable with bonded aluminium tape giving excellent mechanical resistance and an effective screen to help reduce electrical interference.**

### Benefits

Installed benefits compared to traditional fixed wiring installations include:  
Large time/cost savings, much lighter and smaller compared to SWA

- Cost saving - no need to purchase trunking
- Labour saving - less terminations and jointing
- Easy to use
- Ideal for thin partitions and building voids



### Applications

Partitioned walls and voids, has ability to fail safe if penetrated by a sharp object. Ring main power, lighting, screened fixed wiring.

### Standards

**National** BS 6004; BS 8436

### Design

#### 1. Conductor

- Bare copper: Stranded class 5 to BS EN60228:2005

#### 2. Insulation

- XLPE to BS7655 Type GP8

#### 3. Uninsulated protective conductor

- Tinned copper stranded class 5 to BS EN60228:2005

#### 4. Screen

- Bonded Aluminium Tape

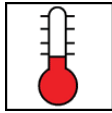
#### 5. Outer sheath

- Low smoke zero halogen free UV stable

### Marking

ALSECURE NXS Pre wired conduit cable

### Core Identification

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| Halogen free<br>Yes                                                                 | Flame retardant<br>BS EN60332-1-2                                                   | Smoke density<br>EN 50268-2                                                         | Gases toxicity<br>BS EN50267-2-1                                                    | Operating temperature,<br>range<br>-10 .. 90 °C                                      | Electro magnetic interference<br>resistance<br>Yes                                    |

- 2 cores: brown - blue
- 3 cores: brown - black - grey
- 4 cores: brown - black - grey - blue

## Installation

Standard stuffing glands can be used. The wiring regulations BS7671 should be adhered to at all times. NXS can be installed in cable trays and baskets, direct on most surfaces and behind plaster. Indoors and outside.

Bending radius: 6D

## Contact

Fire Performance Cables  
Nexans Logistics, Bleak Hall,  
Chesney Wold  
MK6 1LA Milton Keynes  
United Kingdom  
Phone: 01908 250850  
Fax: 01908 250851  
peter.jackson@nexans.com



Halogen free  
Yes



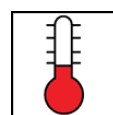
Flame retardant  
BS EN60332-1-2



Smoke density  
EN 50268-2



Gases toxicity  
BS EN50267-2-1



Operating temperature,  
range  
-10 .. 90 °C



Electro magnetic interference  
resistance  
Yes

### Characteristics

#### Construction characteristics

|              |     |
|--------------|-----|
| Halogen free | Yes |
|--------------|-----|

#### Usage characteristics

|                                          |                |
|------------------------------------------|----------------|
| Flame retardant                          | BS EN60332-1-2 |
| Smoke density                            | EN 50268-2     |
| Gases toxicity                           | BS EN50267-2-1 |
| Operating temperature, range             | -10 .. 90 °C   |
| Electro magnetic interference resistance | Yes            |

### Temperature Correcting factors NXS

| Ambient Temp oC                                                 | 25   | 35   | 40   | 45   | 50   | 55   | 60   | 65   | 70   | 75   | 80   | 85   |
|-----------------------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Fuse to BS88 or BS1361 or circuit breakers to BS3871 or BS60898 | 1.02 | 0.96 | 0.91 | 0.87 | 0.82 | 0.76 | 0.71 | 0.65 | 0.58 | 0.5  | 0.41 | 0.29 |
| Semi enclosed fuse to BS3036                                    | 1.02 | 0.98 | 0.95 | 0.93 | 0.91 | 0.89 | 0.87 | 0.85 | 0.79 | 0.69 | 0.56 | 0.39 |

### Correction rating for grouping

| No of Cables   | 2    | 3    | 4    | 5    | 6    | 8    | 10   | 12   |
|----------------|------|------|------|------|------|------|------|------|
| Clipped direct | 0.8  | 0.7  | 0.65 | 0.6  | 0.57 | 0.52 | 0.48 | 0.45 |
| On cable tray  | 0.86 | 0.81 | 0.77 | 0.75 | 0.74 | 0.73 | 0.71 | 0.7  |

### Electrical Data

#### Electrical Data for NXS

| Area mm <sup>2</sup> | Max DC Resistance<br>ohms/KM @ 20oC | Nom AC resistance<br>ohms/km @90oC @ 50Hz | Inductive reactance<br>ohms/km @ 50Hz | Short circuit rating<br>in KA for 1 second |
|----------------------|-------------------------------------|-------------------------------------------|---------------------------------------|--------------------------------------------|
| 1.5                  | 12.1                                | 15.3                                      | 0.1                                   | 0.21                                       |
| 2.5                  | 7.41                                | 9.43                                      | 0.097                                 | 0.35                                       |
| 4                    | 4.61                                | 5.86                                      | 0.092                                 | 0.57                                       |
| 6                    | 3.08                                | 3.93                                      | 0.088                                 | 0.85                                       |