

# 2-CORE XLPE,SWA,HFFR SHEATHED CABLES AS PER QCS 2014

2C X 2.5 Sq.mm CU/XLPE/SWA/HFFR

**International Designation:** CU/XLPE/SWA/HFFR

**Nexans Ref.:** 22003SXZHSH30BS0

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## DESCRIPTION

### Scope

This specification covers two core, XLPE insulated cables for use on the Qatar Power Systems ,Street lightning and Small wiring systems. These cables are complying with BS 6724 and QCS 2014 Standards .

### Design

#### 1. Conductor

Plain annealed high-conductivity Stranded Copper Class 2 conforming to BS EN 60228

#### 2. Insulation

XLPE insulation Type GP8 conforming to BS 7655-1

#### 3. Filling or Bedding

Extruded HFFR

#### 4. Armour

Single layer of Galvanised Steel Wires (GSAW)

#### 5. Outer Sheath

Halogen Free Flame Retardant (HFFR)

- Flame retardant : IEC60332-3-24 CAT C

- Colour : Black

### Marking

2 X 2.5 CU/XLPE/SWA/HFFR 600/1000 V BS 6724 MADE IN QATAR QICC-NEXANS  
Years Meters



## STANDARDS

**International**  
IEC 60332-3-24 Cat.C

**National** BS 6724



Conductor flexibility  
Stranded class 2



Halogen free  
Yes



Rated Voltage Uo/U (Um)  
0.6/1 kV



Max.conductor temp.in service  
90 °C



Bending factor when laying  
12 (xD)



Flame retardant  
Yes

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# QICC

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2C X 2.5 Sq.mm CU/XLPE/SWA/HFFR

## CHARACTERISTICS

### Construction characteristics

|                       |                              |
|-----------------------|------------------------------|
| Conductor material    | Copper                       |
| Conductor shape       | Circular                     |
| Conductor flexibility | Stranded class 2             |
| Armour type           | Galvanized steel wires       |
| Colour                | Black                        |
| Core identification   | Red,Black                    |
| Halogen free          | Yes                          |
| Inner sheath          | Halogen free flame retardant |
| Insulation            | XLPE                         |
| Outer sheath          | Halogen free flame retardant |

### Dimensional characteristics

|                              |                     |
|------------------------------|---------------------|
| Number of cores              | 2                   |
| Conductor cross-section      | 2.5 mm <sup>2</sup> |
| Approximate weight           | 270 kg/km           |
| Nominal armour wire diameter | 0.9 mm              |
| Nominal insulation thickness | 0.7 mm              |
| Nominal outer diameter       | 12.6 mm             |

### Electrical characteristics

|   |             |
|---|-------------|
| Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> ) | 0.6/1 kV    |
| Max. DC resistance of the conductor at 20°C       | 7.41 Ohm/km |
| Permissible current rating in open air            | 33 A        |
| Permissible current rating when buried            | 30 A        |
| Thermal soil resistivity dry zone                 | 2.5 °K.m/W  |
| Voltage drop, 3 conductors                        | 14.0 V/A.km |

### Usage characteristics

|  |                      |
|--|----------------------|
| Max. conductor temperature in service    | 90 °C                |
| Short-circuit max. conductor temperature | 250 °C               |
| Bending factor when laying               | 12 (xD)              |
| Ambient air temperature                  | 30 °C                |
| Ambient ground temperature               | 20 °C                |
| Laying depth, center of system           | 700 mm               |
| Max. pulling force during laying         | 50 N/mm <sup>2</sup> |
| Flame retardant                          | Yes                  |