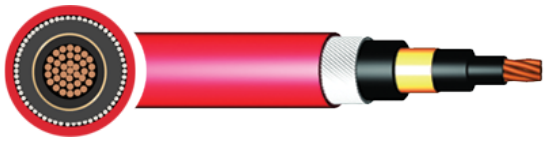
# Nexans - BS7835 Single Core Armoured Power Cable 11kV - XLPE, AWA, LSZH - 50mm² to 630mm²



## Description

BS7835 cables from Nexans are armoured power cables designed for medium voltage fixed installations, such as power networks and industrial installations, including power supply stations, and substations. Can be installed indoors, outdoors, underground, and in cable ducts. These single core cables have copper conductors with cross-linked polyethylene (XLPE) insulation, various screen options, water blocking options, aluminium wire armour and LSZH bedding and outer sheath.

The UV resistant LSZH outer sheath means this cable is suitable for internal use in buildings, power stations, or switchboards and are often run in cable tray for industrial applications. They can also be used externally in cable duct and due to the armour can be buried directly in free draining soil.

## Key Features

**Voltage Rating**
6.35kV / 11kV (12kV)
Tested To Voltage And Duration of BS7835

**Minimum Bending Radius**
15 x Overall Diameter

**Flame Retardancy**
BS EN/IEC 60332-1
BS EN/IEC 60332-3-24

**Temperature Limits**
Maximum operating temp: 90°C
Initial temperature at S.C.C for screen: 80°C
Maximum temp during short circuit: 250°C

## Core Colours

**Outer Sheath:** Red or Black

## Standards

- BS 7835
- IEC 61034-1
- BS EN/IEC 60228
- BS EN/IEC 60754-1
- BS EN/IEC 60332-1-2 & BS EN/IEC 60332-3-24

## Construction

- **Conductor**: Class 2 stranded copper conductor
- **Insulation**: Cross Linked polyethylene (XLPE)
- **Insulation Screen**: Semi-Conductive XLPE
- **Bedding**: LSZH (Low smoke Zero Halogen)
- **Metallic Screen**: Individual copper tape screen
- **Armour**: Aluminium Wire Armour (AWA)
- **Outer Sheath**: Low Smoke Zero Halogen (LSZH)

## Training & Testing Lab

AN ISO/IEC 17025 ACCREDITED FACILITY

**Cleveland Cable Test & Training Lab**
Our state-of-the-art cable testing facility ensures that every cable meets the highest standards of quality and compliance through continuous, rigorous testing.

ISO/IEC 17025 Accredited Testing Laboratory
UKAS TESTING 31196

**CPR**
Cleveland Cable Company is committed to compliance with the Construction Products Regulation (CPR). Where applicable, all cables manufactured after 1st July 2017 have been assessed in accordance with CPR requirements, with full supporting documentation available.

## Our Sustainability Commitment

We are committed to the journey to Net Zero as a business partner, an employer and a community member.

By thinking and acting sustainably, we deliver excellent customer service while reducing carbon emissions in collaboration with our customers and suppliers.

**ecovadis**
Cleveland Cable Company has been independently assessed by EcoVadis, a globally recognised provider of business sustainability ratings. Our score places us among the top 35% of companies evaluated worldwide, reflecting our strong commitment to environmental, social, and ethical performance

## Nexans - BS7835 Single Core Armoured Power Cable 11kV - XLPE, AWA, LSZH - 50mm² to 630mm² - Dimensions

| Reference | Conductor Size (mm2) | No Of Cores | Stranding(mm) | Overall Diameter(mm) | Weight(Kg/Km) | Trefoil Cleat | Nylon Cleat Size |
|---|---|---|---|---|---|---|---|
| 10050 | 50 | 1 | 19/1.78 | 28.7 | 1200 | TASB04 | 12 |
| 10051 | 70 | 1 | 19/2.14 | 30.5 | 1461 | TASB05 | 14 |
| 10052 | 95 | 1 | 19/2.52 | 32.2 | 1761 | TASB06 | 14 |
| 10053 | 120 | 1 | 37/2.03 | 33.8 | 2049 | TASB07 | 14 |
| 10054 | 150 | 1 | 37/2.25 | 36.2 | 2451 | TASB08 | 16 |
| 10055 | 185 | 1 | 37/2.52 | 37.9 | 2848 | TASB09 | 16 |
| 10056 | 240 | 1 | 61/2.25 | 40.4 | 3470 | TASB11 | 16 |
| 10057 | 300 | 1 | 61/2.52 | 42.6 | 4103 | TASB12 | 18 |
| 10058 | 400 | 1 | 61/2.85 | 46.1 | 4995 | TASB15 | 18 |
| 10059 | 500 | 1 | 61/3.20 | 50 | 6320 | TASB17 | 20 |
| 10060 | 630 | 1 | 127/2.52 | 54 | 7840 | TASB19 | TC9 |
| 10061 | 800 | 1 | 127/2.85 | 56.6 | 9510 | TASB20 | TC10 |

11KV SINGLE CORE ELECTRICAL CHARACTERISTICS

| CONDUCTOR SIZE | MAX. DC RESISTANCE AT 20°C | CONDUCTOR AC RESISTANCE AT MAX OPERATING TEMPERATURE AND 50hz | CAPACITANCE | CHARGING CURRENT | DIELECTRIC LOSSES | RESISTANCE AT 50HZ | CONDUCTOR S.C.C FOR 1 SEC | SCREEN S.C.C FOR 1 SEC | CURRENT RATING | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | LAID IN GROUND | LAID IN DUCT | LAID IN FREE AIR |
| $MM^2$ | ( Ω/km) | (Ω/km) | mf/km | (A/Km) | (W/Km) | (Ω/km) | (KA) | (KA) | AMPS | AMPS | AMPS |
| 70 | 0.268 | 0.342 | 0.303 | 0.605 | 15.35 | 0.127 | 10.01 | 0.3 | 277 | 227 | 313 |
| 95 | 0.193 | 0.247 | 0.332 | 0.662 | 16.81 | 0.122 | 13.585 | 0.3 | 329 | 277 | 376 |
| 120 | 0.153 | 0.196 | 0.362 | 0.723 | 18.37 | 0.119 | 17.16 | 0.3 | 370 | 308 | 430 |
| 150 | 0.124 | 0.159 | 0.397 | 0.793 | 20.15 | 0.115 | 21.45 | 0.4 | 412 | 345 | 484 |
| 185 | 0.0991 | 0.128 | 0.43 | 0.859 | 21.81 | 0.111 | 26.455 | 0.4 | 460 | 390 | 546 |
| 240 | 0.0754 | 0.098 | 0.483 | 0.964 | 24.47 | 0.107 | 34.32 | 0.4 | 520 | 451 | 629 |
| 300 | 0.0601 | 0.078 | 0.535 | 1.068 | 27.13 | 0.103 | 42.9 | 0.5 | 571 | 507 | 708 |
| 400 | 0.047 | 0.062 | 0.592 | 1.181 | 30 | 0.101 | 57.2 | 0.5 | 609 | 564 | 777 |
| 500 | 0.0366 | 0.049 | 0.666 | 33.76 | 33.76 | 0.097 | 71.5 | 0.6 | 661 | 631 | 863 |
| 630 | 0.0283 | 0.039 | 0.76 | 1.516 | 38.51 | 0.095 | 90.09 | 0.6 | 707 | 698 | 945 |
| 800 | 0.0221 | 0.032 | 0.849 | 1.694 | 43.03 | 0.092 | 114.4 | 0.7 | 750 | 764 | 1032 |

**Electrical Data:**

Maximum conductor operating temperature: 90°C
Maximum screen operating temperature: 80°C
Maximum conductor temperature during S.C: 250°C

**Laying conditions at trefoil formation are as below:**

Soil thermal resistivity: 120°C. Cm/Watt
Burial depth: 0.5m
Ground temperature: 15°C
Air temperature: 25°C
Frequency: 50Hz

THE INFORMATION CONTAINED WITHIN THIS DATASHEET IS FOR GUIDANCE ONLY AND IS SUBJECT TO CHANGE WITHOUT NOTICE OR LIABILITY. WE BELIEVE THE INFORMATION IS CORRECT AT THE TIME OF PUBLICATION. PLEASE NOTE WHEN SELECTING CABLE ACCESSORIES THAT ACTUAL CABLE DIMENSIONS MAY VARY DUE TO MANUFACTURING TOLERANCES.