



**fedcab**

*Quality Unmatched..*



[www.federalcables.com](http://www.federalcables.com)



## Introduction

"Federal Cables"(Fedcab) is part of Federal group of companies established in the year 1999. We are proud partners to the various energy needs of Middle East through different sectors. **Fedcab's** manufacturing facility is located in Abudhabi, UAE with state of the art machineries and integrated technical expertise.

Apart from Cables, Federal manufactures Power and Distribution transformers, Bus Ducts and Switchgear Panels.

**Fedcab** manufacture cables of different types like XLPE, PVC, LSZH insulated & HO7RN-F to the specifications like BS, IEC, VDE, GOST or any other international standards.



## Quality Standards

### Quality Management System Certified To ISO 9001:2015

**Fedcab's** Quality Management System conforms to the ISO 9001:2015 certified by TUV NORD who are an internationally recognized quality authority.

Certification to the ISO 9001 standard demonstrates that **Fedcab** has documented procedures to ensure and demonstrate full compliance with all requirements of the standard and that these procedures are followed by every department in the company, thus ensuring that goods leaving **Fedcab's** factory are of the highest quality and meet each customer's requirements in every respect.

### Environmental Management System Certified To ISO 14001

**Fedcab's** Environmental Management System confirms to the ISO 14001:2015 International Environmental Management Standard and is certified by TUV NORD who are an internationally recognized certifying authority accredited in the UK and throughout Europe.

Certification to the ISO 14001:2015 International standard shows that Fedcab has a well defined structure and established working practices aimed at limiting its impact on the environment. Measurement and monitoring of effects, issuing work instructions, training of personnel and taking corrective actions are all essential elements to limiting the impact on the environment. Fedcab has set improvement targets to reduce the significant environmental impacts associated with its activities and thus ensuring sustainability.

### Occupational Health And Safety Assessment Certified To OHSAS 18001:2007

**Fedcab** is certified to OHSAS, 18001-2007 TUV NORD an internationally accepted Standard for occupational health and safety management systems. This certification demonstrates **Fedcab's** adherence to sound occupational health and safety practices





## Manufacturing, Inhouse Testing & Quality Measures

**FedCab** takes utmost care while manufacturing its products. We have the latest manufacturing machineries from renowned names like **Niehoff-Germany, Rosendhal-Austria and Royle systems-USA**. We have online diameter gauges from **BETA Lasermike -USA** and state of the art **Cable Quickie** optical non-contact measurement system from **Sweden**. We have online high voltage testing facility on our extrusion lines. Entire production process is carried out in-house and quality checks are carried out at each stage of production right from raw material to the finished product. We procure raw materials from best available sources which must qualify to our stringent in-house quality standards, prior to their use.

Federal Cables have most modern and fully equipped laboratory for testing raw materials, semi-finished products and finished cables. The laboratory is operated and managed by engineers and managers with extensive experience in the testing field. We have complete in-house facility for testing cables manufactured for fire performance, flame retardance, low smoke, halogen free applications etc.

**Fedcab** has the latest test facility for conducting fire tests as per BS 50399 where multiple cables are mounted on a vertical cable ladder and burnt with a specified ignition source in a chamber to assess the reaction to fire performance of cables. Fire parameter like flame spread, heat release rate, total heat release, smoke production rate, total smoke production, fire growth rate index and occurrence of flaming droplets/particles are measured. The test ensures compliance to Construction Product Regulation (CPR) requirements of the EU.

## Product Range

### Low Voltage XLPE or PVC Insulated Power cables

**Application:** These cables are used for power supply in low voltage installation systems used in buildings or plants. They are well adapted to underground use in industrial applications.

**Manufacturing Standards:** BS5467 & IEC-60502-1

**Voltage Rating:** 600/1000V

**Max. Operating temperature:** 90°C.

**Sizes:** **Single core** armoured or unarmoured, PVC sheathed cables up to and including 1000 mm<sup>2</sup>

**Two core** armoured or unarmoured, PVC sheathed cables up to and including 400mm<sup>2</sup>

**Three core** armoured or unarmoured, PVC sheathed cables up to and including 400mm<sup>2</sup>

**Four core** armoured or unarmoured, PVC sheathed cables up to and including 400mm<sup>2</sup>

**Four core cables with reduced neutral conductor(3.5 Core)** armoured or unarmoured, PVC sheathed cables up to and including 400mm<sup>2</sup>

**Five core** armoured or unarmoured, PVC sheathed cables up to and including 95mm<sup>2</sup>.

Cables with FR PVC sheath or MDPE/HDPE sheath can also be supplied as per customer requirement.





## LV PVC Insulated Building Wires

**Application:** These cables consist of bare copper conductor, PVC insulated solid, stranded or flexible conductors used as power supply cables for protected installations for lighting in buildings, wiring appliances, control gear etc. The voltage range is 450/750 V AC or 600/1000 V AC (when used in fixed installation with mechanical protection) with sizes ranging from 1.5mm<sup>2</sup> to 630mm<sup>2</sup> single core.

**Manufacturing Standards:** BSEN-50525-2-31/BS6004

**Voltage Rating:** 450/750V.

**Max. Operating temperature:** 70°C.

H07V-R, stranded Class2 copper conductor, PVC insulated

H07V-K, flexible Class5 copper conductor, PVC insulated

H07V-U, solid Class1 copper conductor, PVC insulated

These cables can also be supplied for 90°C continuous operation as well as 105°C applications with suitable PVC insulation.



## LV XLPE Insulated LSZH cables

**Application:** These cables are used in residential buildings, malls, commercial places where human life is under risk. Normal cables when exposed to fire will produce toxic gases and chemicals which are dangerous for human life. **Fedcab-LSZH** smoke free cables use specially formulated non-halogenated polymers to restrict the evolution of smoke and acid gases.

**Manufacturing Standards:** BS6724, IEC60332-3 & IEC-60754

**Voltage Rating:** 600/1000V .

**Max. Operating temperature:** 90°C.

**Sizes:** **Single core** armoured or unarmoured, LSZH sheathed cables up to and including 1000 mm<sup>2</sup>

**Two core** armoured or unarmoured, LSZH sheathed cables up to and including 400mm<sup>2</sup>

**Three core** armoured or unarmoured, LSZH sheathed cables up to and including 400mm<sup>2</sup>

**Four core** armoured or unarmoured, LSZH sheathed cables up to and including 400mm<sup>2</sup>

**Four core cables with reduced neutral conductor(3.5 Core)** armoured or unarmoured, LSZH sheathed cables up to and including 400mm<sup>2</sup>

**Five core** armoured or unarmoured, LSZH sheathed cables up to and including 95mm<sup>2</sup>.



## LV LSZH Insulated Wires

**Application:** These Wires are used in residential buildings, malls, commercial places etc where human life is under risk. Normal cables when exposed to fire will produce hazardous gases and chemicals which are harmful for human life. **Fedcab-LSZH Smoke free cables** is flame retardant and will not emit toxic gases when exposed to fire.

**Manufacturing Standards:** BSEN-50525-3-41/ BS7211

**Voltage Rating:** 450/750V.

**Max. Operating temperature:** 90°C.

**Sizes:** Manufactured in sizes from 1.5mm<sup>2</sup> to 630 mm<sup>2</sup>



## PVC Flexible Cables

**Application:** Power supply for household accessories like Fan, Air Conditioner, Washing Machine etc.

**Manufacturing Standards:** BSEN50525-2-11/BS6500

**Voltage Rating:** 300/500V.

**Max. Operating temperature:** 70°C.

**Sizes:** **Single core** 0.75mm<sup>2</sup> to 35mm<sup>2</sup> & **Multi core**(2core, 3Core, 4core & 5 Core ) up to 35mm<sup>2</sup>.

These cables can also be supplied for 90°C continuous operation as well as 105°C applications with suitable PVC insulation and sheath.



## Instrumentation Cables

**Application:** Used for control, data & voice transmission, communication for industrial and oil & Gas sectors.

**Manufacturing Standards:** BSEN50288-7 : 2005

**Voltage Rating:** 300/500V.

**Max. Operating temperature:** 70°C for PE/PVC & 90°C for XLPE.

**Type1.1:** Single & Multipar, PE or XLPE Insulated, Overall Screened & PVC Sheathed.

**Type1.2:** Single & Multipar, PE or XLPE Insulated, Individual & Overall Screened, PVC Sheathed.

**Sizes:** 2Pair to 50 pairs in size ranging from 0.5 mm<sup>2</sup> to 2.5mm<sup>2</sup>

**Type2.1:** Single & Multipar, PE or XLPE Insulated, Overall Screened Armoured & PVC Sheathed.

**Type2.2:** Single & Multipar, PE or XLPE Insulated, Individual & Overall Screened Armoured, PVC Sheathed.

**Sizes:** 2Pair to 50 pairs in size ranging from 0.5 mm<sup>2</sup> to 2.5mm<sup>2</sup>

Cables with FR PVC, MDPE/HDPE or LSZH sheath can also be supplied as per customer requirement.



## Control or Auxiliary Cables

**Application:** These cables are used for power supply in low voltage installation systems in industries for control application.

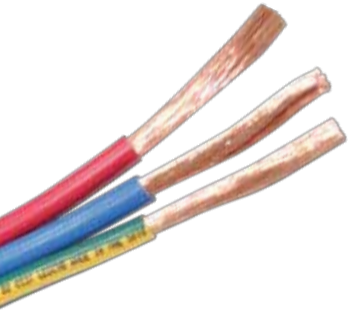
**Manufacturing Standards:** BS5467 or ICE60502-1

**Voltage Rating:** 600/1000V.

**Max. Operating temperature:** 70°C for PVC & 90°C for XLPE.

Control or Auxiliary cables with XLPE or PVC insulation ranging from 1.5mm<sup>2</sup> to 4mm<sup>2</sup> in 2 core to 48 cores.

## Panel Wires



**Application:** In wiring of switch, control, metering, relay and instrumentation panels of power switchgear, internal connections in rectifier equipment and its motor starters and controllers.

**Manufacturing standard :** BS 6231, Type CK

**Voltage rating:** 600/1000 V

**Max. operating temperature :** 105°C

**Sizes:** single core 0.5 Sq.mm to 240 Sq.mm with flexible class 5 conductor and special PVC heat resistant insulation.

**Colours :** Red, Yellow, Blue, Black, Brown, White, Grey, Yellow-Green.

## Rubber Flexible Cables - H07RN-F



**Application:** For use with appliances and equipment in industrial or similar environments. They provide very good flexibility, resistant to oil and can withstand mechanical and thermal stresses.

**Manufacturing standards :** BS EN 50525-2-21 (BS 7919)

**Voltage rating :** 450/750 V

**Max. operating temperature :** 60°C. (Cables with max. operating temperature 90°C can also be supplied if requested)

**Sizes:** 0.5 Sq.mm to 300 Sq.mm. single core and multicore cables with flexible copper conductor, synthetic rubber insulation and sheath.

## Fire Resistant Cables



### Fire Resistant Single & Multicore Power Cables

**Application:** For use in emergency power supply, fire fighting systems, hospitals, underground railway etc.

**Manufacturing standard:** BS 7846

**Voltage rating:** 600/1000 V

**Max. operating temperature:** 90°C

**Sizes:** 1.5 Sq.mm to 400 Sq.mm, single and multicore cables meeting circuit integrity tests as per IEC 60331, BS 6387 Cat. CWZ & BS 7846 cat. F30, 60, F120.

### Fire Resistant Screened Multicore & Multipair Cables

**Application:** For use in fire alarms, emergency lighting systems, public address systems etc.

Enhanced type can be used in high rise buildings, hospitals, underground railway etc

**Manufacturing standard:** BS 7629

**Voltage rating:** 300/500 V

**Max. operating temperature :** 70°C

Enhanced type Class PH 120 as per BS EN 50200 and meeting BS 8434.







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