

J2 LED Lighting, LLC

www.j2ledlighting.com

Application Note: AN-1701

UL2464 18/2 cable for LED lighting controls and equipment

J2 LED Lighting, LLC P/N: RBC-18AWG-UL2464



The installation process of LED lighting often requires the use of an interconnect cable. This interconnect cable is often of varying lengths and requires characteristics suitable for the application. The RBC-18AWG-UL2464 is a UL rated general purpose round jacketed equipment interconnect cable for LED lighting installation. This UL2464 cable is also used as interconnect cable for controls and other equipment needing a low voltage DC power cable. With broad application coverage, the UL2464 style cable can be used for 12 volt LED power supply output extension cables and for the wiring of lighting controls such as dimmers, switches, and other power and control accessories.

The UL2464 cable has red and black inner wire insulation for polarity identification, which simplifies the LED installation process with the wires clearly color coded for polarity in low voltage DC applications. The UL2464 cable is also found on low voltage output side of LED driver power supplies of both constant voltage and constant current types. Most LED driver power supplies have short output cable stubs that often need extended out to the LED light source.

The small 5mm outer diameter of the UL2464 cable is optimized for the low wattage and low voltage of 12 volt LED lighting installations. The polarity colors are industry standardized for the positive "+" connection while the black is for the negative "-" connection. The use of stranded copper conductors provides for cable flexibility along with PVC insulation for the conductor wires and outside jacket. The small size and flexibility of the cable enables multiple uses in specialty lighting installations. The smooth round outside jacket is compatible with many types of cable glands for panel pass through wiring and strain relief. Applications range from decorative lighting, themed entertainment projects, theatrical prop and scenery lighting, to animatronics and show control projects.

The round design and robust outside jacket material of the cable provides additional protection over that of "side by side" zip cord style cable. The UL2464 is also rated VW-1 for flammability. The UL2464 type cable is intended for indoor use. If an application needs an outdoor rated cable, see our SJTW cable type, suitable for sun and moisture exposure in low voltage outdoors applications. Cabling should always be fused to provide adequate circuit protection. J2 LED Lighting also has available larger bulk coils up to 1,000 feet for OEM light fixture and equipment manufacturers and lighting installers. Contact us for additional information on bulk cable needs. It is up to the user to determine suitability for a given application.

J2 LED Lighting, LLC: UL2464 18/2 cable for LED lighting controls and equipment

**Application Note: AN-1701
Rev-A 02/25/17 John H. Kahl**

(Page 1 of 1)