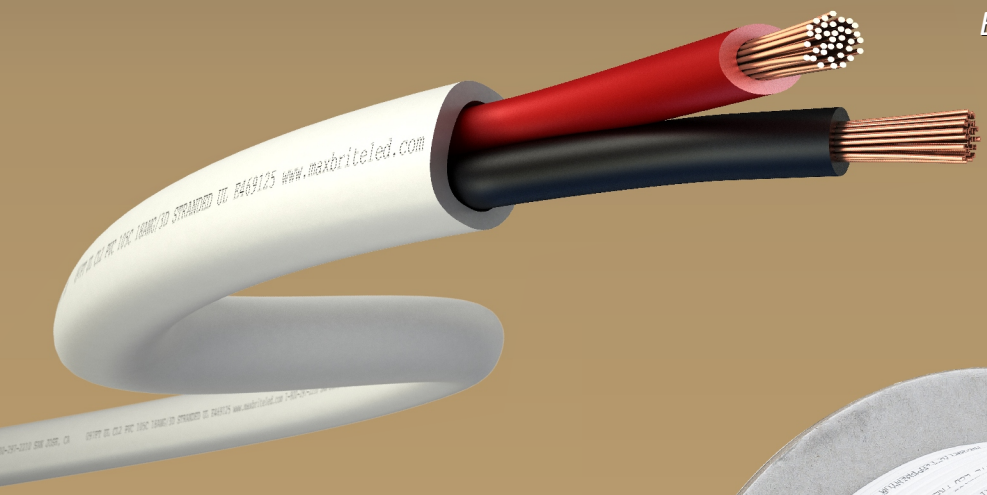
MAXBrite®

LED PREMIUM CABLE

Engineered for the Sign Industry



CERTIFIED
SAFETY US
E469125



- Stranded Wire
- Pure Copper Conductors
- In-Wall PVC Jacked
- Outdoor Sunlight Resistant
- Class 2 Rated
- **18 AWG 2 Conductor**

NEC 725 CE FC RoHS

Part Number	Gauges	Color Code	Conductors	Jacked OD Dimensions	Voltage	Temperature	Packages Dimensions
182C-100FX	18 AWG	Red - Black	2 Stranded	0.25±0.008	300V	105°	100 ft. Roll
182C-200FX	18 AWG	Red - Black	2 Stranded	0.25±0.008	300V	105°	200 ft. Roll
182C-500FX	18 AWG	Red - Black	2 Stranded	0.25±0.008	300V	105°	500 ft. Roll

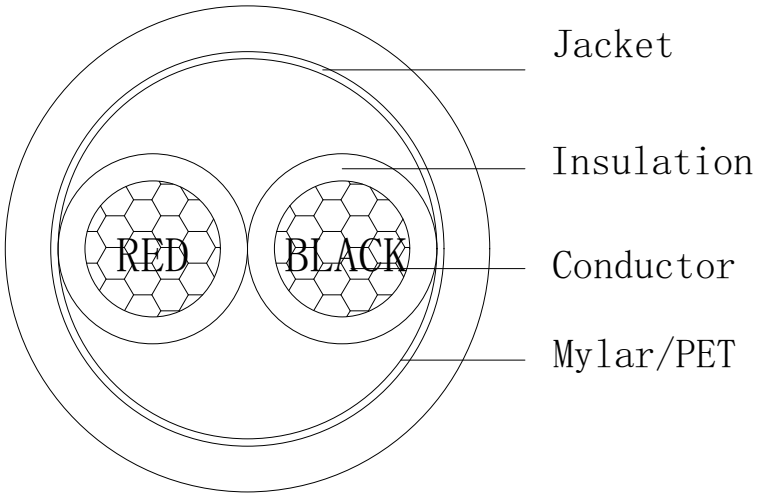
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CABLE SPECIFICATION

PART NO.	182C-XXXFX	CUSTOMER	
SPECIFICATION	Power-Limit Circuit Cable/Speaker/LED Cable 18AWG 2C	REV.	A0

Item		Unit	Specification
AWG		Awg	18 gage
No. of conductor		p,c	2C
Conductor	Material	--	Stranded bare copper
	Construction	No./mm	16/0.254BS±0.008
	Stranded diameter	mm	1.17
Insulation	Material	---	CL2 105℃ 32 PVC
	Nom. Thickness	mm	0.42(Ref.)
	Diameter	mm	2.0±0.1
	Color	---	Red ,Black
Jacket	Material	---	CL2 105℃ 55P PVC (UV RESISTANT)
	Min. Thickness	mm	1.00
	Nom. Thickness	mm	1.25(Ref.)
	O.D	mm	6.5±0.2
	Color	---	White
Marking	MAXBRITE LED PREMIUM CABLE UL E469125 OUTDOOR SUNLIGHT RESISTANT 18AWG/2C STRANDED UL CL2 PVC 105C NEC725 WWW.MAXBRITELED.COM SAN JOSE, CA 95112 USA 002FT,004FT,006FT-->500FT		
	Marking color: Black (Coil marking 002FT start to 500FT)		

Configuration:



RATIFY		APPROVED	2014	DESIGN	Michael Lyman

Wiring Guide for Low Voltage Systems:

How to specify the right cable – Voltage drop is created by internal resistance to the flow of electricity through electrical cable. It is the difference between the voltage at the beginning (transformer or source) of a cable run and that at its end. If the voltage drop is great enough, there will be a noticeable decrease in lamp brightness along the cable. The maximum acceptable voltage drop is 1.3 to 1.5 volts. Use the formula described below to determine voltage drop and to correct for it by using the appropriate kind of lighting cable. Multiply the length of the wire run in feet by the total wattage on that run. Divide the result by the selected cable size constant. This will give you the amount of voltage drop for fixtures more or less evenly distributed along the run. This figure may need to be adjusted, depending on fixture placement.

Voltage Drop Formula

Length of run in feet _____ X (multiply)

Number of watts on run _____

Total = _____ ÷ (divide)

Cable Size Constant

Voltage Drop

Maximum allowable voltage drop is 1.5 volts.

Cable size constants

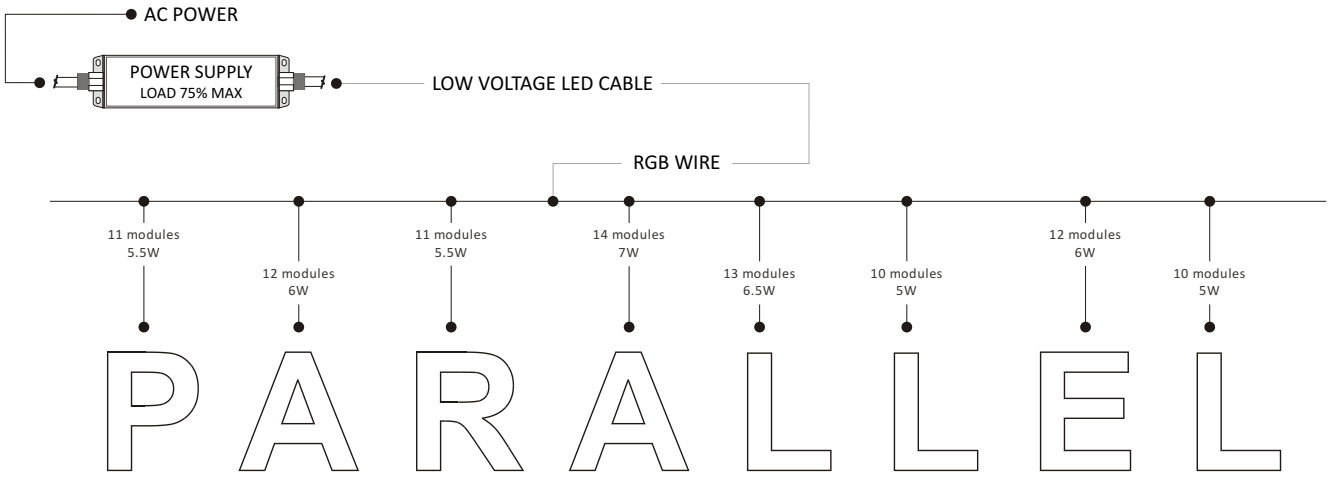
18 gauge	7500
16 gauge	10000
14 gauge	15000

Wiring LED Circuits for Best Results:

We recommend using the parallel wiring method wherever possible. Use other methods so long as you test with a volt meter at each test point for voltage between 10.8 to 12 volts. Multi-taps on transformer can also help correct for voltage drop.

Wiring LED lighting circuits in parallel design is not difficult and delivers a result which best suits all type of LED module. The essence of a parallel LED lighting circuit is independency. As you can see from the parallel circuit diagram below all of the low voltage DC power feeds route back to the transformer. By wiring your LED's in this way it ensure that each component part of the LED installation draw s power direct from the transformer at the same level. This eliminates problems caused by resistance build up as component illuminated with LED's draws powder independently.

Parallel led lighting circuits are easy to create and give the best results - this is the format you should use NOT series.



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CERTIFICATE OF COMPLIANCE

Certificate Number	20141114-E469125
Report Reference	E469125-20140613
Issue Date	2014-NOVEMBER-14

Issued to: MAXBRITE LED LIGHTING TECHNOLOGY L L C
1740-B JUNCTION AVE
SAN JOSE, CA 95112 USA

This is to certify that representative samples of Power-limited Circuit Cable
Model CL2

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: Standard UL 13, Power-Limited Circuit Cables

Additional Information: See the UL Online Certifications Directory at www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.

Bruce Mahrenholz, Assistant Chief Engineer, Global Inspection and Field Services

UL LLC

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