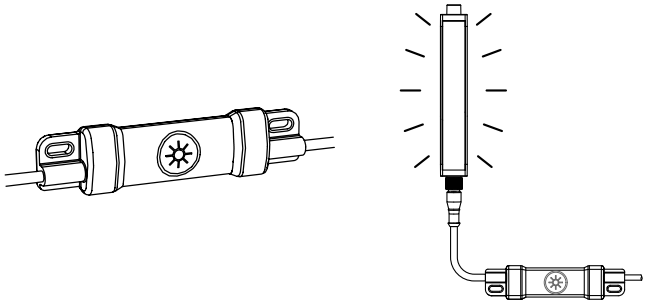
LC15T In-Line Touch Switch

more sensors, more solutions

Datasheet



- In-line capacitive touch switch with M12 connectors
- On/Off or PWM Control Models available
- Low profile, rugged, water-resistant design
- Perfect for DC-powered devices
- Rated for up to 30 V DC
- Capability to dim lights using PWM output
- Optional snap clips, VHB, or velcro, for easy installation and repositioning
- Models available with up to 4A maximum output current

Important: Read the following instructions before operating the light. Please download the complete LC15T In-Line Touch Switch technical documentation, available in multiple languages, from www.bannerengineering.com for details on the proper use, applications, Warnings, and installation instructions of this device.

Important: Lea el siguiente instructivo antes de operar el luminario. Por favor descargue desde www.bannerengineering.com toda la documentación técnica de los LC15T In-Line Touch Switch, disponibles en múltiples idiomas, para detalles del uso adecuado, aplicaciones, advertencias, y las instrucciones de instalación de estos dispositivos.

Important: Lisez les instructions suivantes avant d'utiliser le luminaire. Veuillez télécharger la documentation technique complète des LC15T In-Line Touch Switch sur notre site www.bannerengineering.com pour les détails sur leur utilisation correcte, les applications, les notes de sécurité et les instructions de montage.

Models

Models	Model Function	Power Applied to LC15T	10%-90% PWM Output*	LC15T Output On 100%	Used With
LC15T-127AL2RGQP	On/Off	Red	N/A	Green	2-wire DC Devices
LC15T-127AP1RBGQP	3-Wire PWM Control		Blue		3-Wire PWM Controlled Devices
LC15T-127AP2RBGQP	2-Wire PWM Control		Blue		2-wire PWM Controlled Devices

*Intensity corresponds to PWM output.

Device Configuration

Device Interface	Function	Color	Applicable Models
 Single Touch	**ON/OFF** A single touch in the off-state turns the device on. A single touch in the on-state turns the device off.	Red = Off Green = On	All Models
 Touch and Hold	**PWM Control** Touch and hold to increase the PWM Output from 0% to 100%.* Continue to touch and hold to decrease the PWM Output from 100% to 0%.	Red = Off; 0% PWM Output Blue = On; 10-90% PWM Output Green = On; 100% PWM Output	2-Wire PWM Models 3-Wire PWM Models (See Compatible Devices on p. 2)
 Double Touch	**100% ON** Double touch to return to 100% PWM Output.	Green = On; 100% PWM Output	2-Wire PWM Models 3-Wire PWM Models (See Compatible Devices on p. 2)

*The device saves the last PWM state when turned off. When turned back on again with a single touch, it returns to the last saved state.

Compatible Devices
On/Off Devices

The LC15T models with On/Off function are compatible with any type of DC device that requires constant power on the Brown (Pin 1) and Blue (Pin 3) wires.

2-Wire PWM Lights

The LC15T works with special models of the following 2-Wire PWM LED lights:

- WLS15 Single Color LED Strip Light
- WLH60 High Temperature LED Light

3-Wire PWM Lights

The LC15T works with special models of the following 3-Wire PWM LED lights. These models include **PWM** in the model key:

- WLS27 LED Strip Light, P/N 189556
- WLS28-2 LED Strip Light, P/N 179493
- HLS27 Hazardous Area LED Strip Light, P/N 197949
- WLB92 DC LED Strip Light, P/N 183983
- WLA LED Area Light, P/N 179494
- WLC90 Heavy Duty LED Light, P/N 179495
- WLC60 Heavy Duty LED Light, P/N 179496
- WLB32 DC LED Strip Light, P/N 176313

Specifications

Supply Voltage
12 V DC to 30 V DC
See electrical characteristics on product label

Supply Current
11 mA typical at 24 V DC (exclusive of load)
22mA maximum (exclusive of load)

Maximum Pass-Through Current
4 A

Maximum PWM Output Current
3-wire models: 150 mA
2-wire models: 4 A
On/Off modes: 4 A

Operating Temperature
–40 °C to +60 °C (–40 °F to +140 °F)
Storage Temperature: –40 °C to +70 °C (–40 °F to +158 °F)

Environmental Rating
IEC IP66, IEC IP67

Vibration and Mechanical Shock
Vibration: 10 Hz to 55 Hz, 1.0 mm peak-to-peak amplitude per IEC 60068-2-6
Shock: 15G 11 ms duration, half sine wave per IEC 60068-2-27
Impact: IK06 (IEC EN 60068-2-75)

Construction
Polycarbonate outer housing; polyamide end caps

Mounting
Integral mounting slots for M4 (#8) screws, tighten to 5 in·lbf max torque
Multiple bracket options available

Connections
Input: 150 mm (6 in) PVC cable with a 4-pin M12/Euro-style male quick disconnect
Output: 150 mm (6 in) PVC cable with a 4-pin M12/Euro-style female quick disconnect

PWM Frequency
500 Hz

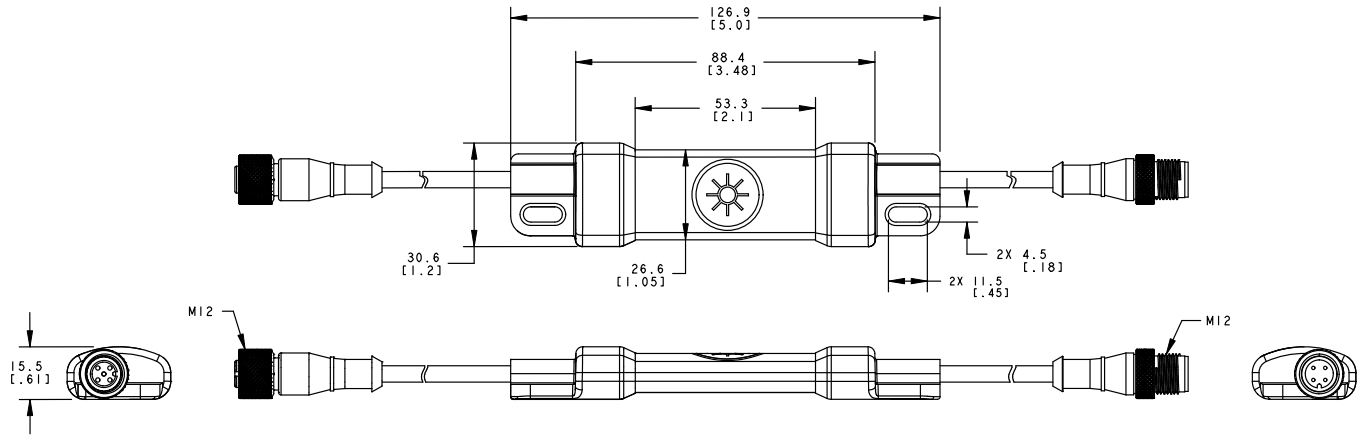
Dimming Range
0%-100% in 10% increments

Certifications
CE

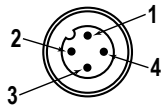
Color	Dominant Wavelength (nm) or Color Temperature (CCT)	Color Coordinates		Lumen Output (Typical at 25 °C)
		x	y	
Red	620	0.689	0.309	1.3
Green	522	0.154	0.700	2.5
Blue	466	0.140	0.054	0.9

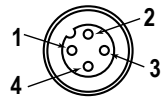
Dimensions

All measurements are listed in millimeters [inches], unless noted otherwise.



Wiring Diagrams

Male - Input	Pin	Wire Color	Connection
	1	Brown	12 V DC to 30 V DC
	3	Blue	DC common
	4	Black	Not used
	2	White	Not used

Female - Output	Pin	Wire Color	Connection		
			On/Off (L2 Models)	2-Wire (P2 Models)	3-Wire (P1 Models)
	1	Brown	12 V DC to 30 V DC	Pulse width modulation (PWM) output	12 V DC to 30 V DC
	3	Blue	DC common	DC common	DC common
	4	Black	Not used	Not used	Pulse width modulation (PWM) output
	2	Not Used	Not used	Not used	Not used

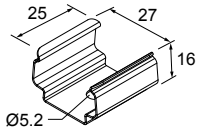
Accessories

Mounting Accessories

All measurements are listed in millimeters [inches], unless noted otherwise.

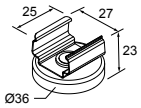
LMBLC15T

- Stainless steel clip bracket
- Includes 1 clip bracket and 2 plastic spacers
- Clearance hole for M5 hardware



LMBLC15TMAG

- Magnetic mounting bracket for attachment to steel and iron surfaces



LMBLC15TTD

- Includes 2 50 mm (2 in) strips of 3M™ Dual Lock™ reclosable fasteners
- Recommended for mounting to metal and plastic surfaces
- Strong, pressure-sensitive adhesive bonds on contact

LMBLC15TTF

- Includes 1 50 mm (2 in) strip of double-sided foam urethane strips
- Acrylic adhesive provides high bond strength to most surfaces
- Bonds to low surface energy plastics such as polypropylene and powder coated paints

Power Supplies

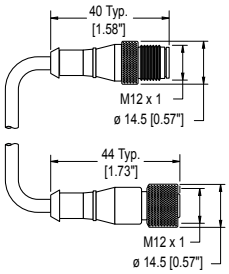
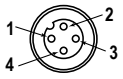
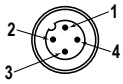
PSW-24-1

- 24 V DC, 1 A Class 2 UL Listed power supply
- 100 V AC to 240 V AC 50/60 Hz input
- 2 m (6.5 ft) PVC cable with M12/Euro-style quick disconnect
- Includes Type A (US, Canada, Japan, Puerto Rico, Taiwan), Type C (Germany, France, South Korea, Netherlands, Poland, Spain, Turkey), Type G (United Kingdom, Ireland, Singapore, Vietnam), and Type I (China, Australia, New Zealand) AC detachable input plugs

PSD-24-4

- 90 to 264 V AC 50/60 Hz input
- Includes a 1.8 m (6 ft) US style 5-15P input plug
- 24 V DC UL Listed Class 2 M12/ Euro-style connector output
- 4 A total current

Cordsets

4-Pin Threaded M12/Euro-Style Cordsets—Double Ended				
Model	**Length**	**Style**	**Dimensions**	**Pinout**
MQDEC-401SS	0.31 m (1 ft)	Male Straight/Female Straight		Female  Male  1 = Brown 2 = White 3 = Blue 4 = Black
MQDEC-403SS	0.91 m (2.99 ft)			
MQDEC-406SS	1.83 m (6 ft)			
MQDEC-412SS	3.66 m (12 ft)			
MQDEC-420SS	6.10 m (20 ft)			
MQDEC-430SS	9.14 m (30.2 ft)			
MQDEC-450SS	15.2 m (49.9 ft)			

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For patent information, see www.bannerengineering.com/patents.

Mexican Importer

Banner Engineering de Mèxico, S. de R.L. de C.V.
David Alfaro Siqueiros 103 Piso 2 Valle oriente
San Pedro Garza Garcia Nuevo Leòn, C. P. 66269

81 8363.2714

FCC Part 15 and CAN ICES-3 (B)/NMB-3(B)

This device complies with part 15 of the FCC Rules and CAN ICES-3 (B)/NMB-3(B). Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules and CAN ICES-3 (B)/NMB-3(B). These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the manufacturer.