

WLS27 Segmented LED Strip Light



Datasheet

Banner's WLS27 Segmented LED Strip Light has a sturdy aluminum housing and is encased in a shatterproof, UV-stabilized, copolyester shell, making it ideal for harsh indoor and outdoor applications.

- Ultra-bright, multi-segment indicator
- Models with 2 or 3 segments available in two different segment sizes
- Rugged, water-resistant IP69K per DIN 40050-9 rating
- Four available lengths: 285 mm, 430 mm, 570 mm, or 850 mm
- Daisy chain power to multiple lights
- Heavy diffused housing option provides softer, more uniform light

Figure 1. Stand-alone light or end light in a cascade

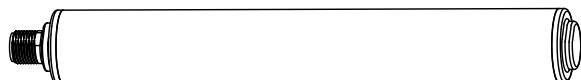
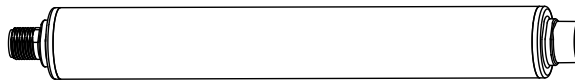


Figure 2. First or middle of a cascade



Available as stand-alone models, or as cascade models that can be daisy-chained together for a continuous length of lighting, with a minimum of wiring. Stand-alone models have a male quick disconnect at one end for power connection and no connections at the opposite end. A stand-alone model may be used as the last model in the cascade series. Cascade models have a male quick disconnect at one end for power connection and a female quick disconnect at the opposite end for connecting to other lights in the cascade. A double-ended accessory cordset must be used between each pair of lights in a cascade.



Important: Read the following instructions before operating the light. Please download the complete WLS27 Segmented LED Strip Light technical documentation, available in multiple languages, from www.bannerengineering.com for details on the proper use, applications, Warnings, and installation instructions of this device.

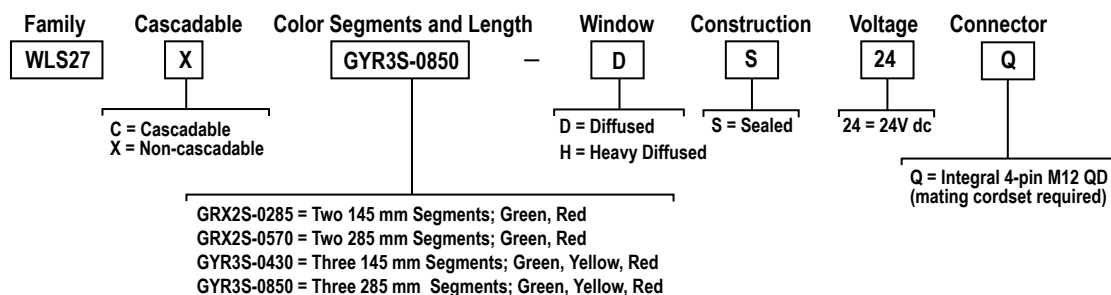


Important: Lea el siguiente instructivo antes de operar el luminario. Por favor descargue desde www.bannerengineering.com toda la documentación técnica de los WLS27 Segmented LED Strip Light, disponibles en múltiples idiomas, para detalles del uso adecuado, aplicaciones, advertencias, y las instrucciones de instalación de estos dispositivos.



Important: Lisez les instructions suivantes avant d'utiliser le luminaire. Veuillez télécharger la documentation technique complète des WLS27 Segmented LED Strip Light 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



Wiring Diagrams

Male	Female	Pin	Wire Color	Description
		1	Brown	Input 1
		2	White	Input 3
		3	Blue	DC common
		4	Black	Input 2

2 Segment Strip Lights		
Input 1: Pin 1 Brown Wire	Input 2: Pin 4 Black Wire	LED Color
-	-	Light OFF
+24 V DC	-	Segment 1 ON
-	+24 V DC	Segment 2 ON
+24 V DC	+24 V DC	Segment 1 and 2 ON



3 Segment Strip Lights			
Input 1: Pin 1 Brown Wire	Input 2: Pin 4 Black Wire	Input 3: Pin 2 White Wire	LED Color
-	-	-	Light OFF
+24 V DC	-	-	Segment 1 ON
-	+24 V DC	-	Segment 2 ON
+24 V DC	+24 V DC	-	Segment 1 and 2 ON
-	-	+24 V DC	Segment 3 ON
+24 V DC	-	+24 V DC	Segment 1 and 3 ON
-	+24 V DC	+24 V DC	Segment 2 and 3 ON
+24 V DC	+24 V DC	+24 V DC	Segment 1, 2, and 3 ON

Specifications

Supply Protection Circuitry

Protected against reverse polarity and transient voltages

Mounting

Bracket LMBWLS27EC included (2 for lights up to 570 mm or 3 for 850 mm lights)

Connections

Integral 4-pin M12 male quick-disconnect connector

Application Notes

When connecting cascadable lights in series it is important not to exceed maximum current limitations: Maximum length of light at 24 V DC: 3.0 m (9.8 ft)
Do not spray cable with high-pressure sprayer or cable damage will result.

Supply Voltage

24 V DC (+ 20% / - 10%)

Use only with suitable Class 2 power supply (UL) or a SELV power supply (CE)

See electrical characteristics on product label

Construction

Clear anodized aluminum inner housing and FDA-grade copolyester outer housing

Environmental Rating

IP66, IP67, and IP69K per DIN 40050-9

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

Operating Temperature

-40 °C to +50 °C (-40 °F to +122 °F)

Storage Temperature: -40 °C to +70 °C (-40 °F to +158 °F)

Lighted Length	Segments	Typical Current (A) at 25 °C per Segment ¹	Typical Current (A) at 25 °C for all Segments	Maximum Current (A)
285 mm	2	0.155	0.360	0.4
430 mm	3	0.155	0.540	0.6
570 mm	2	0.315	0.630	0.8
850 mm	3	0.315	0.945	1.2

Light Characteristics

Color	Dominant Wavelength (nm) or Color Temperature	Lighted Length Lumens (Typical at 25 °C) ¹	
		285 and 430 mm	570 and 850 mm
Green	525 nm	150	400
Yellow	580 nm	215	570
Red	625 nm	70	185

Certifications



Banner Engineering BV Park Lane, Culliganlaan 2F
bus 3, 1831 Diegem, BELGIUM

Turck Banner LTD Blenheim House, Blenheim Court,
Wickford, Essex SS11 8YT, Great Britain

Dimensions

All measurements are listed in millimeters, unless noted otherwise.

Figure 3. Non-cascade models, two segment example model shown

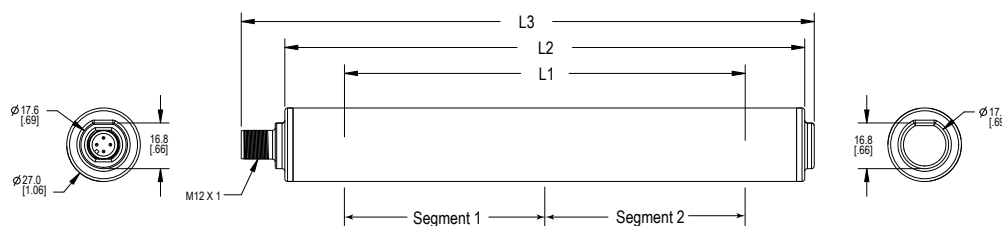


Figure 4. Cascade models, three segment example model shown



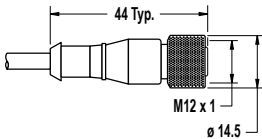
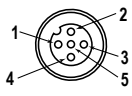
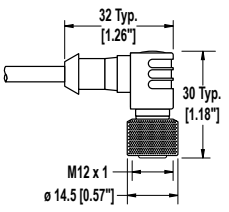
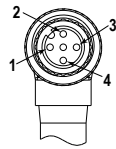
¹ Values are shown at 25 °C. Current and lumen values decrease 0.4% per 1 °C from the ambient temperature. For example, an 850 mm unit will have a maximum current of 0.851 A at -40 °C and 1.2 A at +50 °C.

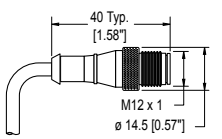
Models	L1	L2	L3	L4	Segment 1	Segment 2	Segment 3
WLS27..0285..	286 mm (11.3 in)	332 mm (13.1 in)	351.5 mm (13.8 in)	360 mm (14.2 in)	143 mm (5.7 in)	143 mm (5.7 in)	-
WLS27..0430..	427 mm (16.8 in)	473 mm (18.6 in)	492.5 mm (19.4 in)	501 mm (19.7 in)	143 mm (5.7 in)	143 mm (5.7 in)	143 mm (5.7 in)
WLS27..0570..	568 mm (22.4 in)	614 mm (24.2 in)	633.5 mm (24.9 in)	642 mm (25.3 in)	286 mm (11.3 in)	286 mm (11.3 in)	-
WLS27..0850..	850 mm (33.5 in)	896 mm (35.3 in)	915.5 mm (36 in)	924 mm (36.4 in)	286 mm (11.3 in)	286 mm (11.3 in)	286 mm (11.3 in)

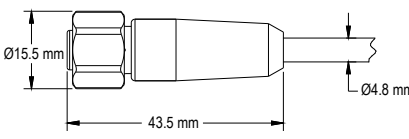
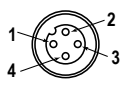
Accessories

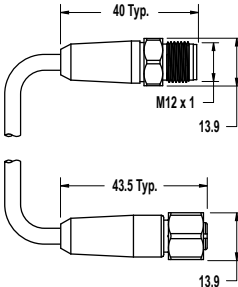
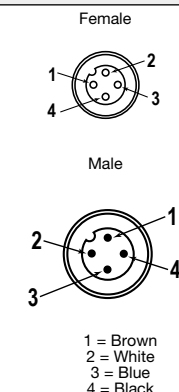
Cordsets

Use single-ended cordsets between the power source and the quick disconnect connection of a stand-alone light or the first light in a cascade. Use double-ended cordsets between lights in a cascade.

4-Pin Threaded M12 Cordsets—Single Ended				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-406	2 m (6.56 ft)	Straight		
MQDC-415	5 m (16.4 ft)			
MQDC-430	9 m (29.5 ft)			
MQDC-450	15 m (49.2 ft)	Right-Angle		
MQDC-406RA	2 m (6.56 ft)			
MQDC-415RA	5 m (16.4 ft)			
MQDC-430RA	9 m (29.5 ft)			
MQDC-450RA	15 m (49.2 ft)			

4-Pin Threaded M12 Cordsets—Double Ended				
Model	Length	Style	Dimensions	Pinout
MQDEC-401SS	0.31 m (1 ft)	Male Straight/Female Straight		Female
MQDEC-403SS	0.91 m (2.99 ft)			
MQDEC-406SS	1.83 m (6 ft)			Male
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)			

4-Pin Threaded M12 Cordsets—Washdown, Stainless Steel, Single Ended				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-WDSS-0406	2 m (6.56 ft)	Straight		
MQDC-WDSS-0415	5 m (16.4 ft)			
MQDC-WDSS-0430	9 m (29.5 ft)			

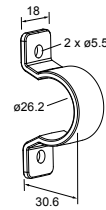
4-Pin Threaded M12 Cordsets—Double Ended, Washdown, Stainless Steel				
Model	Length	Style	Dimensions	Pinout
MQDEC-WDSS-401SS	0.31 m (1 ft)	Male Straight/Female Straight		
MQDEC-WDSS-403SS	0.91 m (2.99 ft)			
MQDEC-WDSS-406SS	1.83 m (6 ft)			
MQDEC-WDSS-412SS	3.66 m (12 ft)			

4-Pin Threaded M12 Splitter Cordsets—Flat Junction			
Model	Branches (Female)	Trunk (Male)	Pinout
CSB-M1240M1240	No branch	No trunk	Female  Male  1 = Brown 2 = White 3 = Blue 4 = Black
CSB-M1240M1241	2 × 0.3 m (1 ft)	No trunk	
CSB-M1241M1241		0.30 m (1 ft)	
CSB-M1248M1241		2.44 m (8 ft)	
CSB-M12415M1241		4.57 m (15 ft)	
CSB-M12425M1241		7.60 m (25 ft)	
CSB-UNT425M1241		7.60 m (25.0 ft) Unterminated	

Brackets

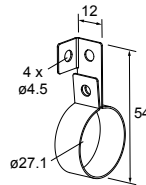
LMBWLS27EC

- Clear copolyester
- Clearance for M5 or #10 hardware



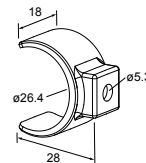
LMBWLS27H

- 300 series stainless steel mounting brackets
- M4 stainless steel hardware included



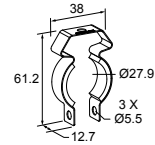
LMBWLS27SP

- Clear copolyester
- Clearance for M5 or #10 hardware
- Snap bracket for light duty applications

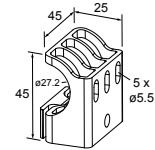


LMBWLS27T

- Stainless steel mounting brackets with rubber grips
- M5 stainless steel hardware included
- Clearance for M5 or #10 hardware

**LMBWLS27U**

- Clear copolyester
- Clearance for M5 or #10 hardware
- Clamps securely around the light body



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