WLS27 Segmented LED Strip Light

more sensors, more solutions

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.

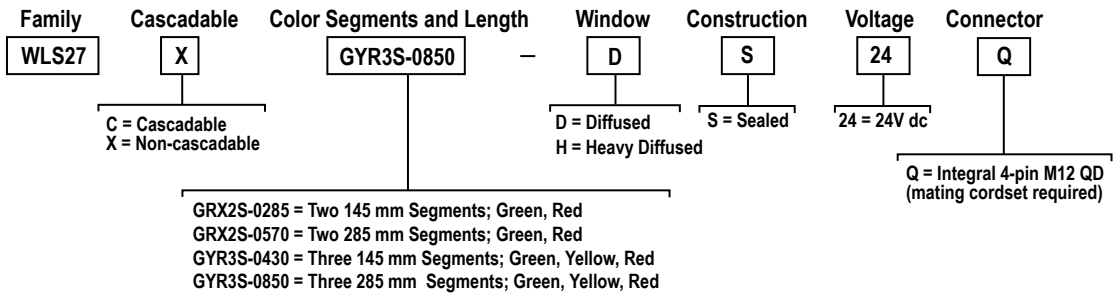
- Ultra-bright, multi-segment indicator
- Models with 2 or 3 segments available in two different segment sizes
- Rugged, water-resistant IP69K per DIN 40050-9 rating
- Four available lengths: 285 mm, 430 mm, 570 mm, or 850 mm
- Daisy chain power to multiple lights
- Heavy diffused housing option provides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

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

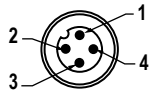
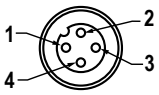
Figure 2. First or middle of a cascade

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.

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

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

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

Specifications

Supply Voltage
24 V dc (+ 20% / - 10%)
Use only with suitable Class 2 power supply (UL) or a SELV power supply (CE)

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

Supply Protection Circuitry
Protected against reverse polarity and transient voltages

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.

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

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

Connections
Integral 4-pin M12/Euro-style quick disconnect

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

Environmental Rating
IEC IP66, IEC 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)

Certifications

Dimensions

All measurements are listed in millimeters, unless noted otherwise.

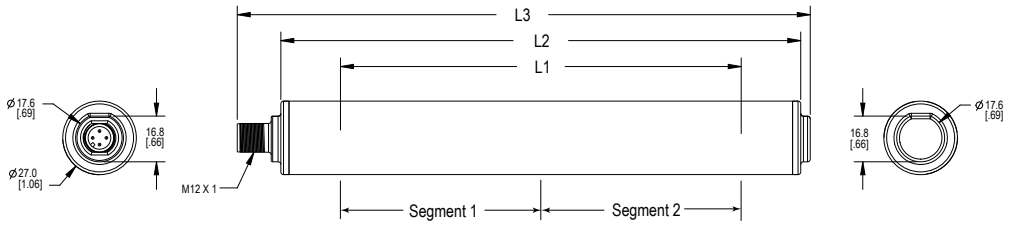


Figure 3. Non-cascade models, two segment example model shown

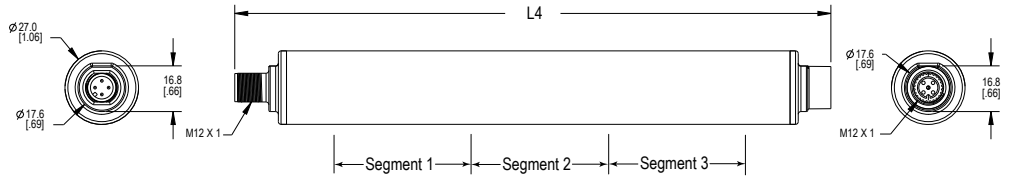


Figure 4. Cascade models, three segment example model shown

Models	L1	L2	L3	L4	Segment 1	Segment 2	Segment 3
WLS27..0285..	286 mm (11.3 in)	330 (13 in)	349.5 mm (13.8 in)	358 mm (14.1 in)	143 mm (5.7 in)	143 mm (5.7 in)	-
WLS27..0430..	427 mm (16.8 in)	471 mm (18.5 in)	490.5 mm (13.3 in)	499 mm (19.6 in)	143 mm (5.7 in)	143 mm (5.7 in)	143 mm (5.7 in)
WLS27..0570..	569 mm (22.4 in)	612 mm (24.1 in)	631.5 mm (24.9 in)	640 mm (25.2 in)	286 mm (11.3 in)	286 mm (11.3 in)	-
WLS27..0850..	849 mm (33.4 in)	893 mm (35.2 in)	912.5 mm (35.9 in)	921 mm (36.2 in)	286 mm (11.3 in)	286 mm (11.3 in)	286 mm (11.3 in)

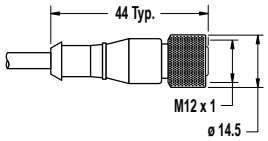
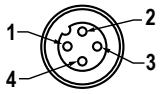
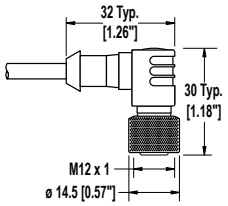
Accessories

Cordsets

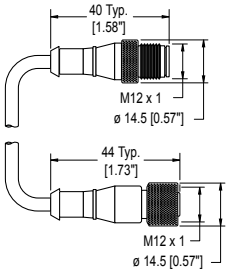
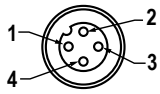
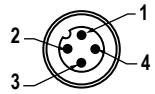
Use single-ended cordsets between the power source and the quick disconnect connection of a stand-alone light or the first light in a cascade. Use double-ended cordsets between lights in a cascade.

[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.

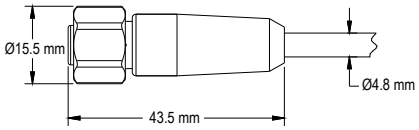
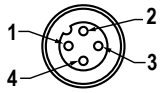
4-Pin Threaded M12/Euro-Style Cordsets—Single Ended

Model	Length	Style	Dimensions	Pinout (Female)
MQDC-406	1.83 m (6 ft)	Straight		 1 = Brown 2 = White 3 = Blue 4 = Black
MQDC-415	4.57 m (15 ft)			
MQDC-430	9.14 m (30 ft)			
MQDC-450	15.2 m (50 ft)			
MQDC-406RA	1.83 m (6 ft)	Right-Angle		
MQDC-415RA	4.57 m (15 ft)			
MQDC-430RA	9.14 m (30 ft)			
MQDC-450RA	15.2 m (50 ft)			

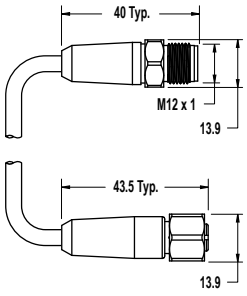
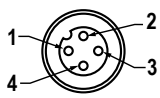
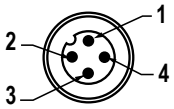
4-Pin Threaded M12/Euro-Style Cordsets—Double Ended

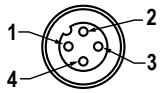
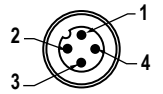
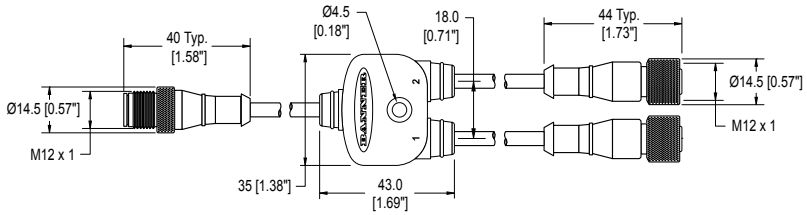
Model	Length	Style	Dimensions	Pinout
MQDEC-401SS	0.31 m (1 ft)	Male Straight/Female Straight		Female  Male  1 = Brown 2 = White 3 = Blue 4 = Black
MQDEC-403SS	0.91 m (3 ft)			
MQDEC-406SS	1.83 m (6 ft)			
MQDEC-412SS	3.66 m (12 ft)			
MQDEC-420SS	6.10 m (20 ft)			
MQDEC-430SS	9.14 m (30 ft)			
MQDEC-450SS	15.2 m (50 ft)			

4-Pin Threaded M12/Euro-Style Cordsets—Washdown, Stainless Steel, Single Ended

Model	Length	Style	Dimensions	Pinout (Female)
MQDC-WDSS-0406	1.83 m (6 ft)	Straight		 1 = Brown 2 = White 3 = Blue 4 = Black
MQDC-WDSS-0415	4.57 m (15 ft)			
MQDC-WDSS-0430	9.14 m (30 ft)			

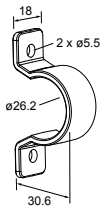
4-Pin Threaded M12/Euro-Style Cordsets—Double Ended, Washdown, Stainless Steel

Model	Length	Style	Dimensions	Pinout
MQDEC-WDSS-401SS	0.3 m (1 ft)	Male Straight/Female Straight		Female  Male  1 = Brown 2 = White 3 = Blue 4 = Black
MQDEC-WDSS-403SS	0.91 m (3 ft)			
MQDEC-WDSS-406SS	1.83 m (6 ft)			
MQDEC-WDSS-412SS	3.66 m (12 ft)			

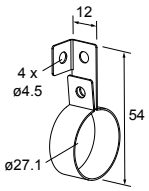
4-Pin Threaded M12/Euro-Style Splitter Cordsets—Flat Junction			
Model	**Branches (Female)**	**Trunk (Male)**	**Pinout**
CSB-M1240M1240	No branch	No trunk	Female  Male  1 = Brown 2 = White 3 = Blue 4 = Black
CSB-M1240M1241	2 x 0.30 m (1 ft)	No trunk	
CSB-M1241M1241		0.30 m (1 ft)	
CSB-M1248M1241		2.50 m (8 ft)	
CSB-M12415M1241		4.57 m (15 ft)	
CSB-M12425M1241		7.60 m (25 ft)	
CSB-UNT425M1241		7.60 m (25 ft) Unterminated	
			

Brackets

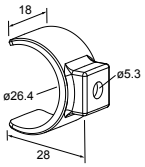
LMBWLS27EC
- Clear copolyester
- Clearance for M5 or #10 hardware



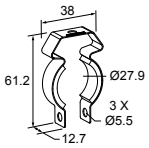
LMBWLS27H
- 300 series stainless steel mounting brackets
- M4 stainless steel hardware included



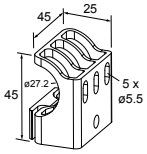
LMBWLS27SP
- Clear copolyester
- Clearance for M5 or #10 hardware
- Snap bracket for light duty applications



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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