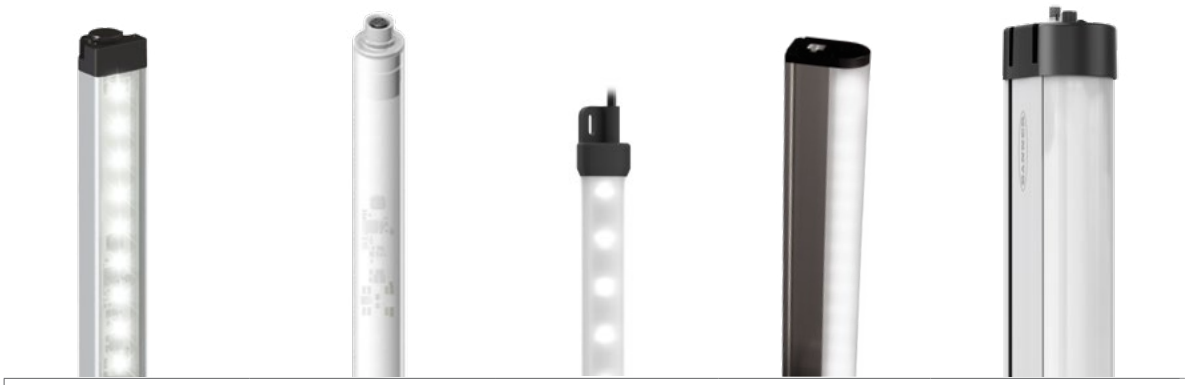
LED Lighting

Banner Engineering's industrial LED lighting products are high-quality and energy-efficient lights that provide bright illumination for up to 50,000 hours. Robust, vibration-resistant housings and sleek designs make Banner Engineering's LED lighting ideal for a wide range of industrial applications, including machine lighting, enclosure lighting, visual inspection illumination and work cell lighting.

Selection Guide



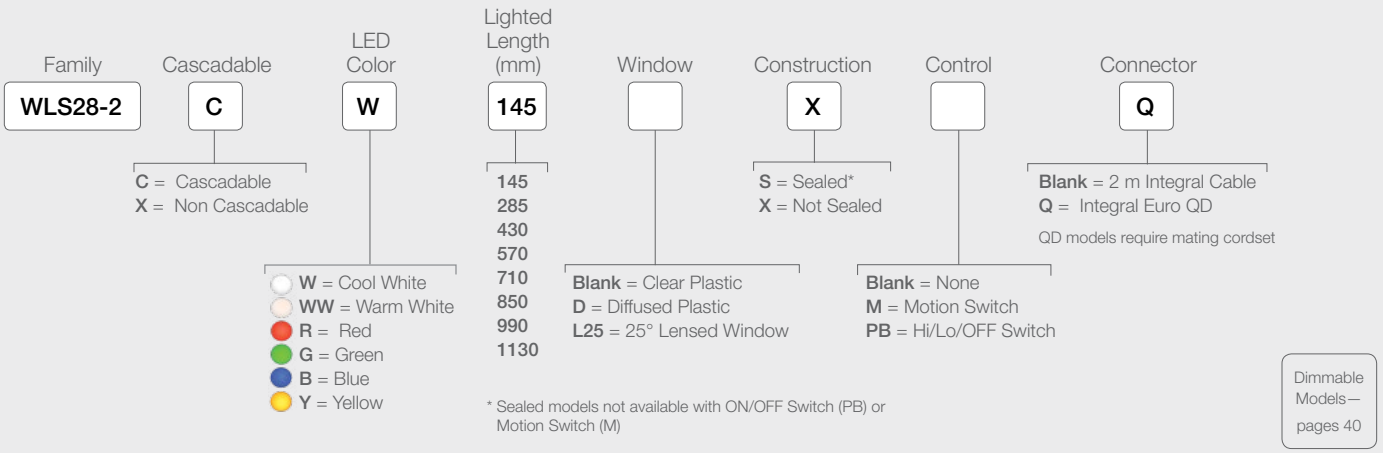
Page	16	26	20	22	24
Family Name	**WLS28-2**	**WLS27**	**WLS15**	**WLB32**	**WLB92**
Length (mm)	145 to 1130	145 to 1130	220 to 1200	285 to 1130	550 and 1100
AC/DC	DC	DC	DC	AC and DC	AC and DC
Lumens per Foot (300 mm)	650	650	350	650	1750
Dual/Multi Color Options					
Color Options					
IP Rating	IP50 (unsealed) IP67, IP69K (sealed)	IP66, IP67, IP69K	IP66, IP67	IP50	IP40
Cascadeable					

30	30	32	34	36	38
WLC60	**WLH60 High Temp**	**WLC90**	**WLA**	**WL50S**	**WL50-2**
340 and 640	340 and 640	89 x 91	105 x 180 to 360 x 180	ø 50	ø 50
DC	DC	DC	DC	DC	DC
1300	1000	700	550	295	185
IP68, IP68g, IP69K	IP68, IP69K	IP68, IP68g, IP69K	IP67, IP69K	IP67, IP69K	IP67, IP69K

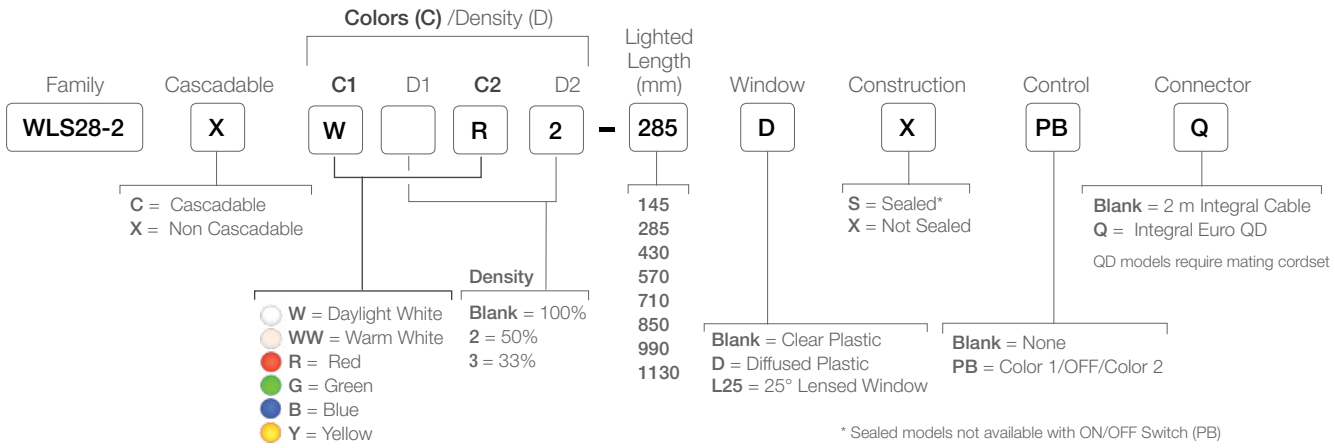
WLS28-2 LED Strip Lights

- Compact, space-saving design
- Rugged, water-resistant IP69K option
- Available in 8 lengths from 145 to 1130 mm
- Lensed models or choice of clear or diffuse window
- Cascade models for connecting multiple lights end-to-end, minimizing wiring
- UV 365 nm and 395 nm wavelength models available for UV fluorescent and non-fluorescent applications
- High/Lo/Off switch and non-switch models available
- Low power consumption less than 9 watts per foot
- Optional snap clips for easy installation and repositioning
- Automatic temperature protection built into the unit. Above 50 °C, the light dims to manage heat and protect product lifetime

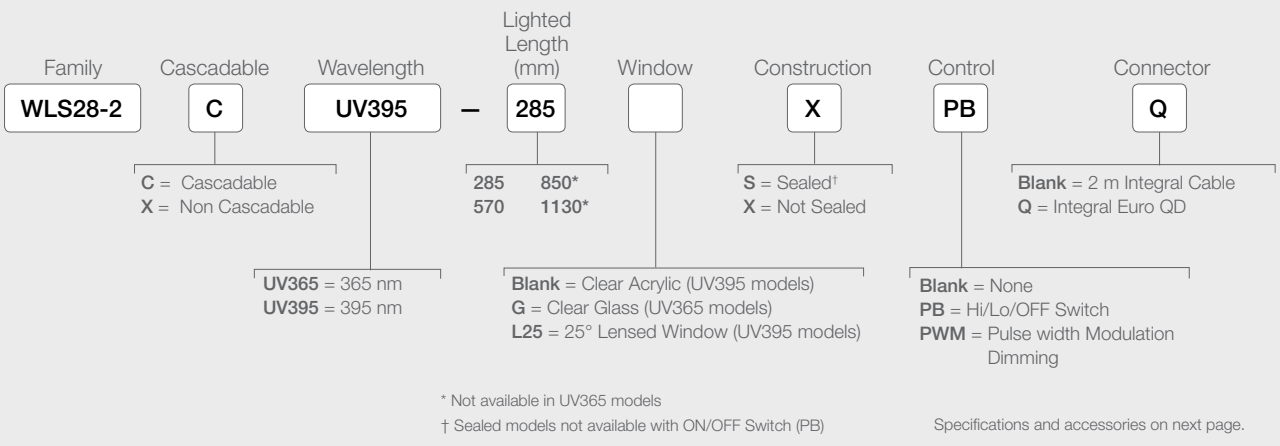
Single-Color



Dual-Color



UV Models



Specifications and accessories on next page.

Supply Voltage	12 to 30 V dc
Construction	Housing: Clear anodized aluminum End Caps: Painted zinc Window: Polycarbonate.
Environmental Rating	Non-sealed Models: IEC IP50 Sealed Models: IEC IP67/IP69K per DIN 40050
Operating Temperature	-40 to +70 °C (-40 to +158 °F)
Certifications	

Single-Color

Length (mm)	Lumens* (Typical @ 25 °C)						Typical Wattage** (Watts)
	Cool White	Warm White	Red	Green	Blue	Yellow	
145	325	325	55	180	40	50	3.6
285	650	650	110	360	80	100	7.2
430	975	975	165	540	120	150	11.0
570	1300	1300	220	720	160	200	14.6
710	1625	1625	275	900	200	250	18.5
850	1950	1950	330	1080	240	300	22.1
990	2275	2275	385	1260	280	350	25.9
1130	2600	2600	440	1440	320	400	29.8

*Lumen values lowered by 35% on diffused window models
**Typical operating wattage is measured at 24 V dc

Dual-Color

Length (mm)	Lumens* (Typical @ 25 °C)					Typical Wattage** (Watts)
	Daylight White	Red	Green	Blue	Yellow	
285	475	200	300	110	150	7.2
570	950	400	600	220	300	14.6
850	1425	600	900	330	450	22.1
1130	1900	800	1200	440	600	29.8

*Lumen values lowered by 35% on diffused window models
**Typical operating wattage is measured at 24 V dc

Top Mount

SMBWLS28RA
(included with light)

Side Mount

SMBWLS28SM

Magnetic Mount
Shown with SMBWLS28RA

SMBWLSMAG
SMBWLSMAGR
Protective cover for magnet sold separately

Snap Mount

SMBWLS28SP

PSD-24-4
Class 2 Power Supply
Input: 90-264 V ac 1.5A
Output: 24 V dc 3.9A
2 m (6.5') 4-Pin Euro Connector

WLS28-2MQ
In-Line Motion Detection Switch with M12 Connectors

WLS28-2PBQ
In-Line Switch with M12 Connectors

4-Pin M12/ Euro-Style
Straight connector models listed; for right-angle, add RA to the end of the model number (example, MQDC-406RA)

MQDC-406
2 m (6.5')
MQDC-415
5 m (15')
MQDC-430
9 m (30')

4-Pin M12/Euro-Style
Double-Ended (straight male/straight female connectors)

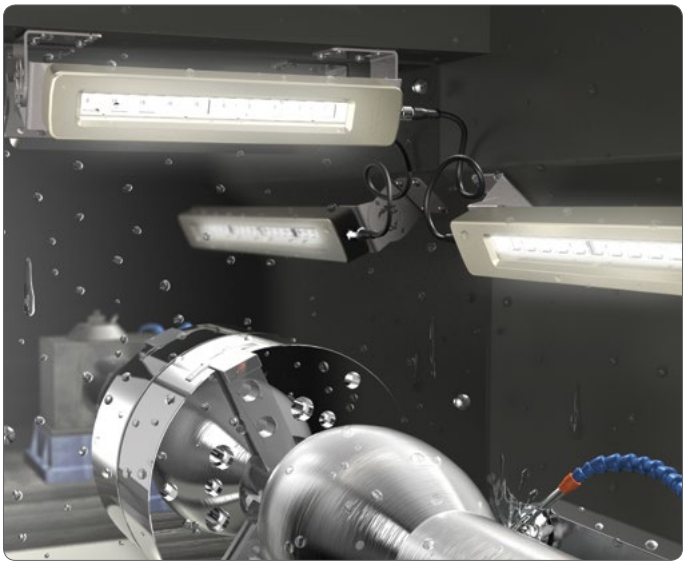
MQDEC-401SS
0.3 m (1')
MQDEC-403SS
1 m (3')
MQDEC-406SS
2 m (6.5')

4-Pin M12/Euro-Style
Splitter

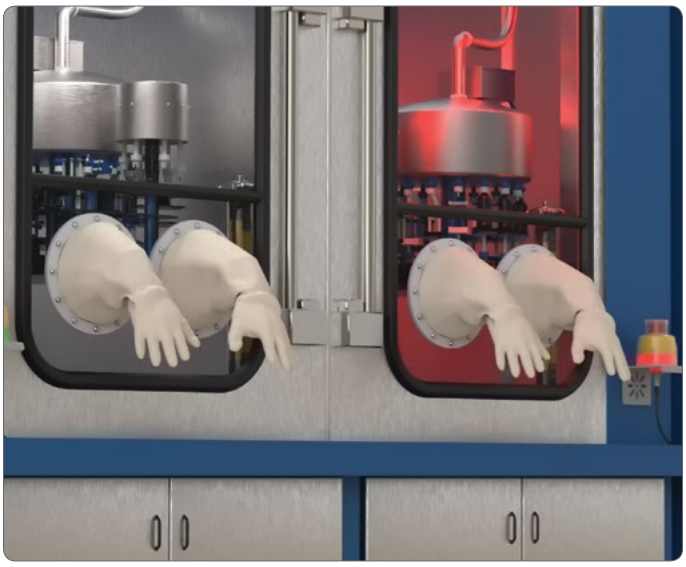
CSB-M1241M1241
0.3 m (1') male trunk; 2 x 0.3 m (1') female branches

Additional cordset lengths and accessories are available at bannerengineering.com

WLB32



WLC60



WLS27

WLS15 LED Strip Lights

- Low-profile design for easy installation in tight spaces
- 12 or 24 V dc operation in one model
- Completely sealed with an IP67 rating for use in wet or dusty environments
- The rugged construction and polycarbonate shell resists shock and vibration while remaining lightweight
- LED lighting technology saves energy and minimizes replacement costs
- Brackets and connectors are available to keep installation simple
- Draws half the current of other lights for a low power device and high energy savings
- Offers stability in the presence of line voltage fluctuations

Family	Cascadable	Color	Length (mm)	Window	Construction	Connector
WLS15	X	DW	0360	D	S	C2

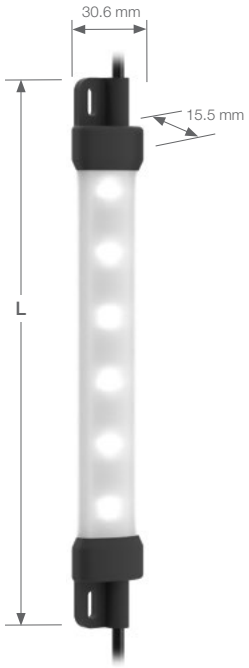
- **C** = Cascadable
- **X** = Non Cascadable

- **DW** = Daylight White
- **WW** = Warm White

- **0220**
- **0360**
- **0500**
- **0640**
- **0920**
- **1200**

- **D** = Diffused
- **S** = Sealed (IP66, IP67)
- **C2** = 2 m Integral
- **QP** = 150 mm Integral Euro QD
- **QS** = 150 mm Integral cable with Deutsch DTM

Supply Voltage and Current	12 V dc or 24 V dc nominal
Construction	Clear anodized aluminum inner housing; Polycarbonate outer housing, Polyamide end caps
Environmental Rating	Rated IEC IP66 and IEC IP67 Suitable for wet locations per UL 2108
Operating Conditions	**Temperature:** –40 to +60 °C **Storage Temperature:** –40 to +70 °C
Certifications	



Length (mm)	Typical Current (A) at 25 °C		Maximum Current (A) at -40 °C		Lumens	
	12 V dc	24 V dc	12 V dc	24 V dc	Daylight White	Warm White
0220	0.19	0.10	0.24	0.12	175	170
0360	0.38	0.20	0.48	0.24	350	340
0500	0.57	0.30	0.72	0.36	525	510
0640	0.76	0.40	0.96	0.48	700	680
0920	1.14	0.60	1.44	0.72	1050	1020
1200	1.52	0.80	1.92	0.96	1400	1360

LMBWLS15

LMBWLS15-150S

LMBWLS15MAG

PSW-24-1
Power Supply

4-Pin M12/ Euro-Style
Straight connector models listed; for right-angle, add RA to the end of the model number (example, MQDC-406RA)

- **MQDC-406** 2 m (6.5')
- **MQDC-415** 5 m (15')
- **MQDC-430** 9 m (30')

4-Pin M12/Euro-Style
Double-Ended (straight male/straight female connectors)

- **MQDEC-401SS** 0.3 m (1')
- **MQDEC-403SS** 1 m (3')
- **MQDEC-406SS** 2 m (6.5')

4-Pin M12/Euro-Style
Splitter

- **CSB-M1241M1241** 0.3 m (1') male trunk; 2 x 0.3 m (1') female branches

4-Pin M12/Euro-Style
Splitter

- **CSB-M1241M1241** 0.3 m (1') male trunk; 2 x 0.3 m (1') female branches

Deutsch
Single-ended cordset with straight connectors

- **DTMC-206** 2 m (6.5')
- **DTMC-215** 5 m (15')
- **DTMC-230** 9 m (30')

Deutsch
Double-ended cordset with straight connectors

- **DTMEC-2005** 0.16 m (0.5')
- **DTMEC-206** 2 m (6')
- **DTMEC-230** 9 m (30')

Additional cordset lengths and accessories are available at bannerengineering.com

WLB32 LED Light Bar

- Energy efficient for overall cost savings
- High/Low/Off switch allows users to customize light levels
- Available as cascadable models for a continuous length of lighting, with a minimum of wiring
- Metal housing, shatterproof window
- Easy installation with snap clips, or a choice of magnetic or angle brackets
- Available in AC or DC models
- Available in 285 mm, 570 mm, 850 mm or 1130 mm
- Motion detection models are ideal for locations that cannot use a physical switch or where the placement of the switch is not useful
- Models featuring an eye shield window block direct line of sight to the domed window to increase eye comfort

Family	Power	Cascadable	Lighted Length (mm)	Shield	Control	Connector	Plug Type (AC Models)
WLB32	Z	C	285		PB	QM	B

Power
- **Z** = AC
- **Blank** = DC

Cascadable
- **C** = Cascadable

Lighted Length (mm)
- **285**
- **570**
- **850**
- **1130**

Shield
- **Blank** = No Shield
- **E** = Eye Shield

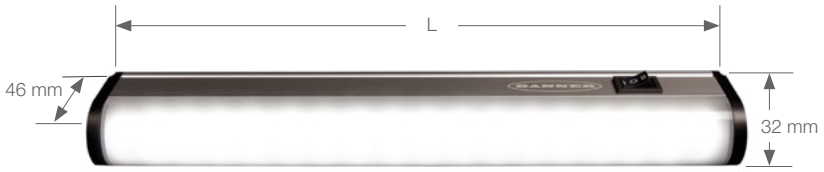
Control
- **Blank** = No Switch
- **M** = Motion Switch
- **PB** = Hi/Low/OFF

Connector
- **Blank** = Cable (dc)
- **Q** = Euro QD (dc)
- **QM** = AC

QD models require mating cordset

Plug Type (AC Models)
- **B** = North & Central America, Japan, Taiwan
- **D** = India, Sri Lanka, Nepal, Namibia
- **EF** = France, Belgium, Slovakia, Tunisia, Germany, Austria, Netherlands, Spain, S. Korea
- **G** = UK, Ireland, Cyprus, Malta, Malaysia, Singapore, Hong Kong, Vietnam
- **I** = Australia, New Zealand, Papua New Guinea, Argentina, China
- **N** = Brazil, South Africa
- **C** = AC connector with flying leads
- **Blank** = No power cord

Operating Voltage	12 to 30 V dc (dc models) 90 to 264 V ac (ac models)
Lumen Output	≈ 650/ft
LED Lifetime	50,000 hours
Color Temperature	Daylight White — 5000 k
Switch	High = 100% intensity Low = 50% intensity
Environmental Rating	IP50 — Dry location only
Certifications	



Lighted Length (L)
285 mm 850 mm
570 mm 1130 mm

Length (mm)	Lumens (Typical @ 25 °C) Daylight White	AC Models Typical Wattage* (Watts)	DC Models Typical Wattage* (Watts)
285	650	9	7.4
570	1300	18	14.8
850	1950	27	22.2
1130	2600	36	29.6

* Typical operating wattage is measured at 120 V ac or 24 V dc, depending on model

Cascadable

AC or DC

Hi/Low/Off Switch

Motion Detection

Eye Shield

AC Cascade and Power Cordsets

(DC Cascade and Power cordsets shown on page 25)

1 Power Cordset
1.8 m (6')

LQMAC-306	Flying Leads
LQMAC-306B	North & Central America, Japan, Taiwan
LQMAC-306D	India, Sri Lanka, Nepal, Namibia
LQMAC-306EF	France, Belgium, Slovakia, Tunisia, Germany, Austria, Netherlands, Spain, S. Korea
LQMAC-306G	UK, Ireland, Cyprus, Malta, Malaysia, Singapore, Hong Kong, Vietnam
LQMAC-306I	Australia, New Zealand, Papua New Guinea, Argentina, China
LQMAC-306N	Brazil

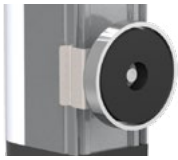
2 Double-Ended Cascading Cordset
Male straight/Male straight connectors

LQMAEC-3005SS
0.15 m (0.5')
LQMAEC-301SS
0.31 m (1.0')
LQMAEC-303SS
0.91 m (3.0')

Additional cordset lengths and accessories are available at bannerengineering.com

LMBWLB32

LMBWLB32-180S


LMBWLB32MAG

LMBWLB32U

LMBWLB32UT

WLB92 Industrial Light Bar

- Increase worker productivity and ergonomics with bright, high-quality, uniform light
- Durable light stands up in your environment with a rugged metal housing and shatterproof light cover
- No maintenance time or cost with long-life, energy-efficient LEDs
- Flexibility to place light where needed with ac and dc models
- Easy installation with variety of mounting options: surface, swivel, snap and hanging brackets
- Available in daylight white, warm white, blue, red, yellow and green
- AC models are DLC qualified and have a five year warranty

DC Models

Family	Cascadable	Color	Lighted Length	Control	Connector
WLB92	X		550	PB	Q

- **X** = Non-Cascadable
- Color:
  - **Blank** = Daylight White
  - **WW** = Warm White
  - **R** = Red
  - **G** = Green
  - **B** = Blue
  - **Y** = Yellow
- Lighted Length: **550 mm**, **1100 mm**
- **PB** = Switch, Dimming Knob*
- Connector:
  - **Blank** = 2 m Integral Cable
  - **Q** = Integral 4-pin Euro QD

QD models require mating cordset

* Models include dimming knob for manual intensity control

DIMMABLE MODELS— pages 40

AC Models

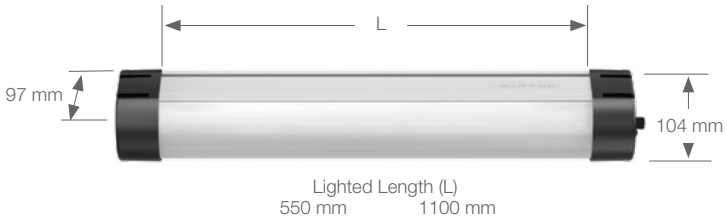
Family	Voltage	Cascadable	Color	Lighted Length	Control	Connector	Plug Type† (1.8 m cable)
WLB92	Z	C		550	PB	QM	B

- **Z** = AC
- **C** = Cascadable
- Color:
  - **Blank** = Daylight White
  - **WW** = Warm White
  - **R** = Red
  - **G** = Green
  - **B** = Blue
  - **Y** = Yellow
- Lighted Length: **550 mm**, **1100 mm**
- Control:
  - **A** = 0-10 V Analog Dimming (CT models)
  - **PB** = Switch, Dimming Knob (AC QM models)
- Connector:
  - **QM** = AC*
  - **CT** = Conduit Entry**
- † Only needed for AC QM models
- Plug Type:
  - **B** = North & Central America, Japan, Taiwan
  - **D** = India, Sri Lanka, Nepal, Namibia
  - **EF** = France, Belgium, Slovakia, Tunisia, Germany, Austria, Netherlands, Spain, S. Korea
  - **G** = UK, Ireland, Cyprus, Malta, Malaysia, Singapore, Hong Kong, Vietnam
  - **I** = Australia, New Zealand, Papua New Guinea, Argentina, China
  - **N** = Brazil, South Africa
  - **C** = AC connector with flying leads
  - **Blank** = No power cord

* Models with a connector include ON/Off switch as well as dimming knob for intensity control

** Conduit entry models includ dimmability via a 0 to 10 V input circuit

Operating Voltage	24 V dc (dc models) 100 to 277 V ac (ac models)
Construction	Housing: Anodized aluminum Window: Polycarbonate
LED Lifetime	50,000 hours
Color Temperature	Daylight White — 5000 k Warm White — 3000 k
Environmental Rating	IEC IP40
Certifications	



Lighted Length (L)
550 mm 1100 mm

Length (mm)	Lumens (Typical @ 25 °C) Daylight White	Warm White	Green	Red	Yellow	Blue	AC Models Typical Wattage* (Watts)	DC Models Typical Wattage* (Watts)
550	3510	3510	1430	745	620	405	34	35
1100	7150	7150	2975	1545	1295	840	70	70

* Typical operating wattage is measured at 120 V ac or 24 V dc, depending on model

LMBWLB92

LMBWLB92-CLIP

LMBWLB92S

LMBWLB92HK5

LMBWLB92RAS

AC Power Cordset 1.8 m (6')
for use with models using QM connector.
Cascadable model cables available on page 19.

LQMAC-306	Flying Leads
LQMAC-306B	North & Central America, Japan, Taiwan
LQMAC-306D	India, Sri Lanka, Nepal, Namibia
LQMAC-306EF	France, Belgium, Slovakia, Tunisia, Germany, Austria, Netherlands, Spain, S. Korea
LQMAC-306G	UK, Ireland, Cyprus, Malta, Malaysia, Singapore, Hong Kong, Vietnam
LQMAC-306I	Australia, New Zealand, Papua New Guinea, Argentina, China
LQMAC-306N	Brazil, South Africa

For use with DC models
4-Pin M12/Euro-Style
Straight connector models listed; for right-angle, add **RA** to the end of the model number
(example, **MQDC-406RA**)

MQDC-406
2 m (6.5')
MQDC-415
5 m (15')
MQDC-430
9 m (30')

Additional accessories are available at bannerengineering.com

WLS27 LED Strip Lights

- Cylindrical shape design, ideal for laminar airflow applications
- Rugged, water-resistant IP66, IP67 and IP69K construction
- Chemically resistant copolyester housing
- Available in eight lengths from 145 mm to 1130 mm
- Daisy chain power to multiple lights
- Capability to dim lights using the wiring pinout (Hi/Lo/Off)
- Optional snap clips for easy installation and repositioning
- Automatic temperature protection built into the unit. Above 50 °C, the light dims to manage heat and protect product lifetime

Single Color

Family	Cascadable	Color	Lighted Length (mm)	Window	Construction	Connector
WLS27	X	W	285	D	S	Q

Cascadable: C = Cascadable; X = Non Cascadable

Lighted Length (mm): 145, 285, 430, 570, 710, 850, 990, 1130

Window: D = Diffused Plastic

Construction: S = Sealed

Connector: Q = Integral Euro QD. QD models require mating cordset

Color: W = Cool White; WW = Warm White; R = Red; G = Green; B = Blue; Y = Yellow

Dimmable Models— pages 40

Dual-Color

Family	Cascadable	Colors (C) /Density (D)				Lighted Length (mm)	Window	Construction	Connector
		C1	D1	C2	D2				
WLS27	X	W		R	2	– 285	D	S	Q

Cascadable: C = Cascadable; X = Non Cascadable

Lighted Length (mm): 145, 285, 430, 570, 710, 850, 990, 1130

Window: D = Diffused Plastic

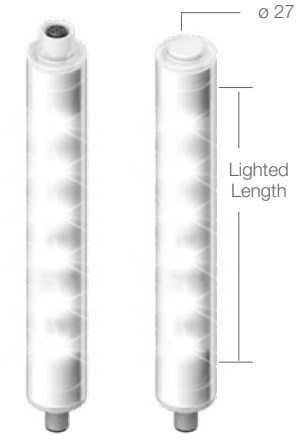
Construction: S = Sealed

Connector: Q = Integral Euro QD. QD models require mating cordset

Colors (C): W = Daylight White; WW = Warm White; R = Red; G = Green; B = Blue; Y = Yellow

Density: Blank = 100%; 2 = 50%; 3 = 33%

Supply Voltage	12 to 30 V dc
Construction	Housing: Copolyester
LED Lifetime	50,000 hours
Environmental Rating	IEC IP67, IP66, IP69K per DIN 40050
Operating Temperature	-40 to +70 °C (-40 to +158 °F)
Certifications	



First or Middle of Cascade

Stand-Alone or Cascade End Light

Length (mm)	Lumens* (Typical @ 25 °C)						Typical Wattage** (Watts)
	Cool White	Warm White	Red	Green	Blue	Yellow	
145	325	325	55	180	40	50	4
285	660	660	110	360	80	100	7
430	975	975	65	540	120	150	11
570	1300	1300	220	720	160	200	15
710	1625	1625	275	900	200	250	19
850	1950	1950	330	1080	240	300	22
990	2275	2275	385	1260	280	350	26
1130	2600	2600	440	1440	320	400	30

* Lumen values lowered by 35% on diffused window models
** Typical operating wattage is measured at 24 V dc

Length (mm)	Lumens (Typical @ 25 °C)					Typical Wattage* (Watts)
	White	Red	Green	Blue	Yellow	
145	238	100	150	55	75	4
285	475	200	300	110	150	7
430	713	300	450	165	225	11
570	950	400	600	220	300	15
710	1188	500	750	275	375	18
850	1425	600	900	330	450	22
990	1663	700	1050	385	525	26
1130	1900	800	1200	440	600	30

*Typical operating wattage is measured at 24 V dc

LMBWLS27EC

LMBWLS27H
Stainless Steel

LMBWLS27T
Stainless Steel

WLS28-2PBQ
In-Line Switch with M12 connector

LMBWLS27U

LMBWLS27SP

WLS28-2MQ
In-Line Motion Detection Switch with M12 connector

(1) Power Cordsets
4 pin M12 Euro-style

(1) Power Cordsets - Washdown
4 pin M12 Euro-style

(2) Double-Ended
(straight male/straight female connectors) 4-Pin M12/Euro-Style

Splitter
4-Pin M12/Euro-Style

MQDC-406
MQDC-406RA
2 m (6.5')

MQDC-WDSS-0406
2 m (6.5')

MQDEC-401SS
0.3 m (1')

CSB-M1241M1241
0.3 m (1') male trunk; 2 x 0.3 m (1') female branches

Additional cordset lengths and accessories are available at bannerengineering.com

WLS27 Multicolor LED Strip Lights

- Three- and five-color models with EZ-STATUS™ combine illumination and indication in one robust light fixture
- Rugged, water-resistant IEC IP69K rating
- Four available lengths from 285 mm to 1130 mm
- Daisy chain power to multiple lights

Family	Cascadable	Color		Lighted Length (mm)	Window	Construction	Voltage	Connector
WLS27	X	WYRXX3	–	0285	D	S	24	Q

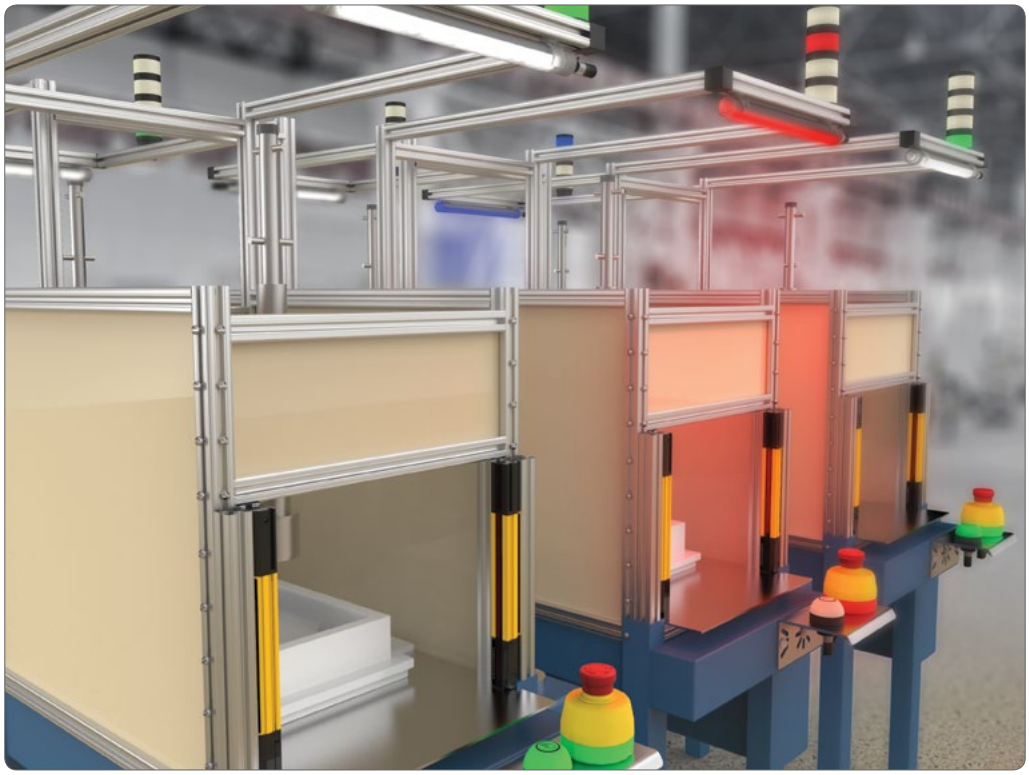
- **C** = Cascadable
- **X** = Non Cascadable

- **0285**
- **0570**
- **0850**
- **1130**

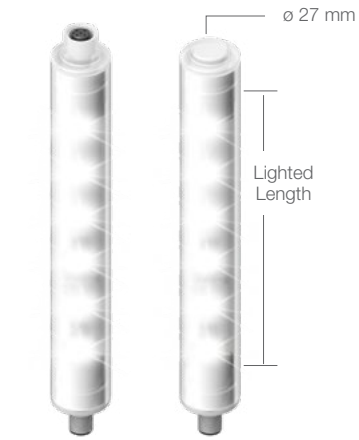
- **D** = Diffused Plastic
- **S** = Sealed
- **24** = 24 V
- **Q** = Integral Euro QD

QD models require mating cordset

- **WGRXX3** = White, Green, and Red with override control
- **WYRXX3** = White, Yellow, and Red with override control
- **GYRXX3** = Green, Yellow, and Red with override control
- **WGRYB5** = White, Green, Red, Yellow, and Blue with binary control
- **WGRXX6** = White, Green, and Red with I/O Block control
- **WYRXX6** = White, Yellow, and Red with I/O Block control
- **GYRXX6** = Green, Yellow, and Red with I/O Block control



Supply Voltage	24 V dc
Construction	Housing: Copolyester
LED Lifetime	50,000 hours
Environmental Rating	IEC IP66, IP67, IP69K per DIN 40050
Operating Temperature	-40 to +50 °C (-40 to +122 °F)
Certifications	



First or Middle of Cascade

Stand-Alone or Cascade End Light

Length (mm)	Lumens (Typical @ 25 °C) White	Red	Green	Blue	Yellow	Typical Wattage* (Watts)
285	650	185	400	125	570	7
570	1300	370	800	250	1140	12
850	1950	555	1200	375	1710	22
1130	2600	740	1600	500	2280	30

*Typical operating wattage is measured at 24 V dc

Accessories are listed on pages 26

Heavy-Duty LED Lights

- Oil, chemical, and water resistant with IP67, IP68g, and IP69K ratings
- High brightness paired with advanced glare-reducing optics
- Easy-to-install with a wide variety of mounting solutions
- Resistant to vibration and shock
- Input voltage of 12–30 V dc
- Models have four discrete intensity level settings
- Available with stainless steel or nickel-plated aluminum housing
- High temperature models now available in a black E-coated aluminum housing

WLC60 Standard

Family	Cascadable	LED Color	Lighted Length (mm)	Window	Mounting Type	Construction	Connector Exit	Connector
WLC60	X	W	340	G		A		Q

- **Family:** WLC60
- **Cascadable:** **C** = Cascadable; **X** = Non-Cascadable**
- **LED Color:** **W** = Cool White; **WW** = Warm White; **R** = Red; **G** = Green; **B** = Blue; **Y** = Yellow
- **Lighted Length (mm):** 340*; 640
- **Window:** **Blank** = Polycarbonate; **G** = Borosilicate Glass
- **Mounting Type:** **Blank** = Base Mount; **F** = Flush Mount
- **Construction:** **A** = Nickel-Plated Aluminum; **SS** = 316 Stainless Steel
- **Connector Exit:** **Blank** = Side Exit; **R** = Rear Exit
- **Connector:** **Blank** = 2 m Integral Cable; **Q** = Euro Integral QD
  - QD models require mating cordset

Dimmable Models— pages 40

* Flush, rear exit and stainless steel models available in 340 mm length only

** Cascading not available for stainless steel models

WLH60 High-Temp

Family	Cascadable	LED Color	Lighted Length (mm)	Window	Construction
WLH60	X	W	340	G	B

- **Family:** WLH60
- **Cascadable:** **X** = Non-Cascadable
- **LED Color:** **W** = Cool White
- **Lighted Length (mm):** 340; 640
- **Window:** **Blank** = Polycarbonate; **G** = Borosilicate Glass
- **Construction:** **B** = Black E-Coated Aluminum

NOTE: Connection for all WLH60 models is a 2 m (6.5') integral FEP cable

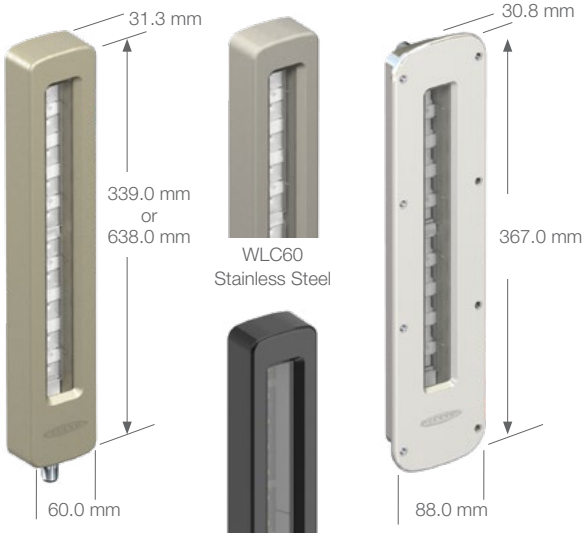
Supply Voltage	WLC60: 12 to 30 V dc WLH60: 21 to 28 V dc
Construction	WLC60 Housing: Nickel-plated aluminum or 316 Stainless steel WLH60 Housing: Black electro-coated aluminum Window: Polycarbonate or Borosilcate Glass
Environmental Rating	Rated IEC IP68, IP68g, IP69K per DIN 40050
Operating Temperature	WLC60: -40 to +70 °C (-40 to +158 °F) WLH60: -40 to +100 °C (-40 to +212 °F)
Certifications	

Length (mm)	WLC60 Lumens (Typical @ 25 °C) Cool White	Typical Wattage* (Watts)
340	1300	14.2
640	2600	28.1

*Typical operating wattage is measured at 24 V dc

Length (mm)	WLH60 Lumens (Typical @ 25 °C) Cool White	Typical Wattage* (Watts)
340	1150	14.2
640	2300	28.1

*Typical operating wattage is measured at 24 V dc



LMBWLC60F

LMBWLC60RA

LMBWLC60RAS
4 bracket kit for swivel option. Can mount SMBMAG3 magnet also

LMBWLC60MAG*
SMBWLSMAGR
Protective cover for magnet sold separately

* Do not use with stainless steel models

PSD-24-4
Class 2 Power Supply
Input: 90-264 V ac 1.5A
Output: 24 V dc 3.9A
2 m (6.5') 4-Pin Euro Connector

4-Pin M12/Euro-Style
Straight connector models listed; for right-angle, add RA to the end of the model number (example, MQDC-406RA)

- **MQDC-406** 2 m (6.5')
- **MQDC-415** 5 m (15')
- **MQDC-430** 9 m (30')

4-Pin M12/Euro-Style
Double-Ended (straight male/ straight female connectors)

- **MQDEC-401SS-PUR** 0.3 m (1')
- **MQDEC-403SS-PUR** 1 m (3')
- **MQDEC-406SS-PUR** 2 m (6.5')

4-Pin M12/ Euro-Style Washdown
Straight connector models only

- **MQDC-WDSS-0406** 2 m (6.5')
- **MQDC-WDSS-0415** 5 m (15')
- **MQDC-WDSS-0430** 9 m (30')

Additional accessories are available at bannerengineering.com

WLC90 Heavy-Duty LED Light

- Oil, chemical and water resistant with IP67, IP68g and IP69K ratings
- Vast operating temperature range internal monitoring circuit dims the LEDs to a safe level at extreme temperatures
- Three lens choices to suit many application needs
- Pan-and-tilt brackets for versatile mounting to direct the light in any direction
- Models have three discrete intensity level settings

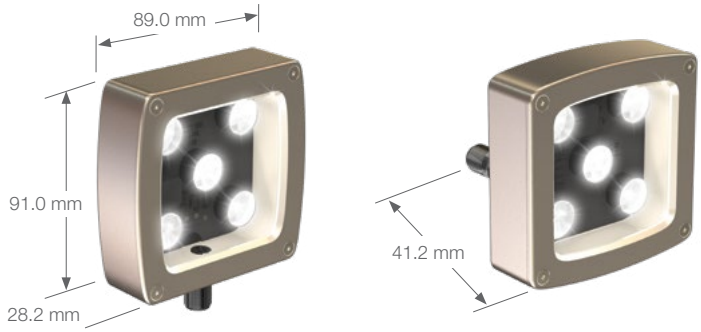
Family	LED Color	Window	Lensing	Connector Exit	Connector
WLC90	W	G	L15		Q
	W = Cool White	**Blank** = Polycarbonate **G** = Borosilicate Glass	**L8** = ± 8° **L15** = ± 15° **L30** = ± 30°	**Blank** = Side Exit **R** = Rear Exit	**Blank** = 2 m Integral Cable **Q** = Euro Integral QD QD models require mating cordset

DIMMABLE MODELS— pages 40

Supply Voltage	12 to 30 V dc
Construction	Housing: Nickel-plate aluminum Window: polycarbonate or borosilicate glass
Environmental Rating	Rated IEC IP68, IP68g, IP69K per DIN 40050
Operating Temperature	-40 to +70 °C (-40 to +158 °F)
Certifications	CE, cULus LISTED

Lumens (Typical @ 25 °C) Cool White	Typical Wattage* (Watts)
625	8.1

*Typical operating wattage is measured at 24 V dc



Rear-Exit Models

LMBWLC90PT

Side-Exit Models

SMBAMS70AS

4-Pin M12/Euro-Style
Straight connector models listed; for right-angle, add RA to the end of the model number (example, MQDC-406RA)

MQDC-406
2 m (6.5')
MQDC-415
5 m (15')
MQDC-430
9 m (30')

4-Pin M12/ Euro-Style Washdown
Straight connector models only

MQDC-WDSS-0406
2 m (6.5')
MQDC-WDSS-0415
5 m (15')
MQDC-WDSS-0430
9 m (30')

PSD-24-4
Class 2 Power Supply
Input: 90-264 V ac 1.5A
Output: 24 V dc 3.9A
2 m (6.5') 4-Pin Euro Connector

Additional accessories are available at bannerengineering.com

WLA LED Area Lights

- High power solid state LED array with cool white, warm white, red, green, blue or yellow light
- Illuminates a large area with an even pattern of light and no shadows
- Available in four sizes
- Designed for area and machine lighting
- Rugged thermoplastic housing rated to IP69K
- Lensed models provide a concentrated, intense light beam
- Cabled and Quick Disconnect models available

Family	LED Color	Array Size (mm)	Window	Lensing	Connector
WLA	W	105X180		L11	Q

LED Color
- **W** = Cool White
- **WW** = Warm White
- **R** = Red
- **G** = Green
- **B** = Blue
- **Y** = Yellow

Array Size (mm)
- **105X180**
- **190X180**
- **275X180**
- **360X180**

Window
- **Blank** = Clear Plastic
- **D** = Diffused Plastic
- **E** = Encapsulated in Polyurethane

Lensing
- **Blank** = No Lenses
- **L11** = ± 11°
- **L22** = ± 22°
- **L30** = ± 30°

Connector
- **Blank** = 2 m Integral Cable
- **Q** = Euro Integral QD

QD models require mating cordset

DIMMABLE MODELS— pages 40

Supply Voltage	12 to 30 V dc
Construction	Housing: PBT Window: Acrylic or polyurethane Connector: Nickel-plated brass or PVC-jacketed cable
Environmental Rating	Rated IEC IP67 and IP69K, per DIN 40050
Operating Temperature	-20 to +50 °C (-4 to +122 °F)
Certifications	Encapsulated models not UL listed

Size (mm)	Lumens* (Typical @ 25 °C) Cool White	Warm White	Red	Green	Blue	Yellow	Typical Wattage** (Watts)
105x180	550	435	125	325	95	275	9.6
190x180	1100	870	250	650	190	550	19.2
275x180	1650	1305	375	975	285	825	28.8
360x180	2200	1740	500	1300	380	1100	38.4

* Lumen values lowered by 35% on diffused window models
**Typical operating wattage is measured at 24 V dc

SMBBSSM

SMBBSRA

Magnetic Mount

SMBWLAMAG
SMBWLAMAGR — Protective cover for magnet sold separately

4-Pin M12/Euro-Style
Straight connector models listed; for right-angle, add RA to the end of the model number (example, MQDC-406RA)

- **MQDC-406** 2 m (6.5')
- **MQDC-415** 5 m (15')
- **MQDC-430** 9 m (30')

4-Pin M12/ Euro-Style Washdown
Straight connector models only

- **MQDC-WDSS-0406** 2 m (6.5')
- **MQDC-WDSS-0415** 5 m (15')
- **MQDC-WDSS-0430** 9 m (30')

PSD-24-4
Class 2 Power Supply
Input: 90-264 V ac 1.5A
Output: 24 V dc 3.9A
2 m (6.5') 4-Pin Euro Connector

Additional accessories are available at bannerengineering.com

WL50S LED Spot Lights

- Highly concentrated, focused light available in three colors (white, red, or green)
- Lenses come in three angles to cover area of concentration
- Illuminates a large area with an even pattern of light and no shadows
- 12 to 30 V dc operation
- Cabled and quick-disconnect models available
- 56 mm diameter with flat profile and 30 mm mounting base
- Rugged sealed housing rated to IP69K
- Available in a chemically resistant 316 stainless steel housing for use in harsh environments

Family

WL50S

Black Anodized Aluminum

LED Color

W

- **W** = White
- **G** = Green
- **R** = Red

Lens Angle

L11

- **L5** = ±5° (small)
- **L11** = ±11° (large)
- **L20** = ±20° (largest)

Connector

Q

- **Blank** = 2 m Integral Cable
- **Q** = Euro Integral QD

QD models require mating cordset

Family

WL50S

Stainless Steel

LED Color

W

- **W** = White
- G = Green
- **R** = Red

Housing

SS

- **SS** = Stainless Steel

Window Material

G

- **Blank** = Acrylic
- **G** = Glass

Lens Angle

L11

- **L5** = ±5° (small)
- **L11** = ±11° (large)
- **L20** = ±20° (largest)

Connector

Q

- **Q** = Euro Integral QD

QD models require mating cordset

Dimmable Models— pages 40

Supply Voltage	12 to 30 V dc
Construction	Housing: Black anodized aluminum or Stainless Steel with FDA-grade silicone gasket and Viton® o-ring seal Window: Polycarbonate or glass window Connector: Nickel-plated QD connector or PVC-jacketed cable Mounting Nut: Black zinc-plated steel or Stainless Steel mounting nut
Environmental Rating	IEC IP67, IP69K per DIN 40050
Operating Temperature	-20 to +50 °C (-4 to +122 °F)
Certifications	

Lens	Lumens (Typical @ 25 °C) Cool White	Green	Red	Typical Wattage* (Watts)
±5°	295	210	110	
±11°	285	200	105	4.3
±20°	270	190	100	

*Typical operating wattage is measured at 24 V dc

SMB30FA

SMB30SC

SMBAMS30P

SMBAMS30RA

FLX18 Flex Arm Mounts
See page 42 for more information

4-Pin M12/Euro-Style
Straight connector models listed; for right-angle, add RA to the end of the model number (example, MQDC-406RA)

MQDC-406
2 m (6.5')
MQDC-415
5 m (15')
MQDC-430
9 m (30')

4-Pin M12/ Euro-Style Washdown
Straight connector models only

MQDC-WDSS-0406
2 m (6.5')
MQDC-WDSS-0415
5 m (15')
MQDC-WDSS-0430
9 m (30')

Additional accessories are available at bannerengineering.com

WL50-2 LED Work Lights

- Designed for enclosure or area lighting use with an optional flex arm mount for adjustable, industrial task lighting
- Standard or push-button models available
- Flat-mount or 30 mm base-mount models available
- Rugged, sealed polycarbonate housing rated to IP69K (standard models) or IP67 (push-button models)
- 12 to 30 V dc operation
- Cabled and quick-disconnect models available
- Low power consumption less than 3 watts

Family	Control	Connector
WL50-2	PB	Q
WL50-2 = 30 mm Mount **WL50F-2** = Flat Mount	**Blank** = Standard **PB** = ON/OFF Switch	**Blank** = 2 m Integral Cable **Q** = Euro Integral QD QD models require mating cordset

Dimmable Models— pages 40

Supply Voltage	12 to 30 V dc
Construction	Housing: Polycarbonate Connector: Nickel-plated brass or PVC-jacketed cable
Environmental Rating	Standard Models: IP69K per DIN 40050 Push-Button Models: IEC IP67
Operating Temperature	-40 to +50 °C (-40 to +122 °F)
Certifications	

Lumens (Typical @ 25 °C)	Typical Wattage* (Watts)
Cool White	
185	2.4

*Typical operating wattage is measured at 24 V dc

Mounting Options for Flat Mount Models

Screw Mount

VELCRO® Brand VELCOIN® Fasteners (included)

Mounting Options for 30 mm Mount Models

FLX18 Flex Arm Mounts
See page 42 for more information

4-Pin M12/ Euro-Style straight connector models listed; for right-angle models, add RA to the end of the model number (example, MQDC-406RA)	**MQDC-406** 2 m (6.5') **MQDC-415** 5 m (15') **MQDC-430** 9 m (30')

Additional accessories are available at bannerengineering.com

LC6P1T shown

LED Dimming Controller & Dimmable LED Lights

- Works with special models of the strip lights, heavy-duty lights, area lights, spot lights and work lights
- High-frequency modulation allows for precise intensity control and flicker-free illumination
- Allows for control of multiple lights with one module
- LED Pulse-Width Modulation (PWM) versions of LED lights can be controlled by other PWM output devices as well as Banner's controller
- Ability to control intensity from zero to 100 percent to suit the level required for the application
- Helps further increase energy savings, helping to reduce overall energy costs

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WLS27 LED Strip Lights

Family	Cascadable	LED Color	Lighted Length (mm)	Window	Construction	Intensity Control	Connector
WLS27	**C**	**W**	**145**	**D**	**S**	**PWM**	**Q**
	C = Cascadable **X** = Non Cascadable	**W** = Cool White	**145** 710 285 850 430 990 570 1130	**D** = Diffused Plastic	**S** = Sealed	**PWM** = Dimmable	**Q** = Integral Euro QD QD models require mating cordset

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WLS28-2 LED Strip Lights

Family	Cascadable	LED Color	Lighted Length (mm)	Window	Construction	Intensity Control	Connector
WLS28-2	**C**	**W**	**145**		**X**	**PWM**	**Q**
	C = Cascadable **X** = Non Cascadable	**W** = Cool White	145 285 430 570 710 850 990 1130	**Blank** = Clear Plastic **D** = Diffused Plastic **L25** = 25° Lensed Window	**S** = Sealed* **X** = Not Sealed	**PWM** = Dimmable	**Blank** = 2 m Integral Cable **Q** = Integral Euro QD QD models require mating cordset

* Sealed models not available with ON/OFF switch

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WLB92 DC Models

Family	Cascadable	LED Color	Lighted Length (mm)	Control	Connector
WLB92	**X**		**550**	**PWM**	**Q**
	X = Non-Cascadable	**Blank** = Daylight White	550 1100	**PWM** = Dimmable	**Blank** = 2 m Integral Cable **Q** = Integral 4-pin Euro QD QD models require mating cordset

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WLA LED Area Lights

Family	LED Color	Array Size (mm)	Window	Lensing	Intensity Control	Connector
WLA	**W**	**105X180**		**L11**	**PWM**	**Q**

- LED Color: **W** = Cool White
- Array Size (mm): **105X180**, **190X180**, **275X180**, **360X180**
- Window: **Blank** = Clear Plastic; **D** = Diffused Plastic; **E** = Encapsulated in Polyurethane
- Lensing: **Blank** = No Lenses; **L11** = ± 11°; **L22** = ± 22°; **L30** = ± 30°
- Intensity Control: **PWM** = Dimmable
- Connector: **Blank** = 2 m Integral Cable; **Q** = Euro Integral QD; QD models require mating cordset

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WLC90 Heavy-Duty LED Light

Family	LED Color	Window	Lensing	Connector Exit	Intensity Control	Connector
WLC90	**W**	**G**	**L15**		**PWM**	**Q**

- LED Color: **W** = Cool White
- Window: **Blank** = Polycarbonate; **G** = Borosilicate Glass
- Lensing: **L8** = ± 80°; **L15** = ± 15°; **L30** = ± 30°
- Connector Exit: **Blank** = Side Exit; **R** = Rear Exit
- Intensity Control: **PWM** = Dimmable
- Connector: **Blank** = 2 m Integral Cable; **Q** = Euro Integral QD; QD models require mating cordset

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WLC60 Heavy-Duty LED Light

Family	Cascadable	LED Color	Lighted Length (mm)	Window	Mounting Type	Construction	Connector Exit	Intensity Control	Connector
WLC60	**X**	**W**	**340**	**G**		**A**		**PWM**	**Q**

- Cascadable: **C** = Cascadable; **X** = Non-Cascadable
- LED Color: **W** = Cool White
- Lighted Length (mm): **340** *; **640**
- Window: **Blank** = Polycarbonate; **G** = Borosilicate Glass
- Mounting Type: **Blank** = Base Mount
- Construction: **A** = Nickel-Plated Aluminum
- Connector Exit: **Blank** = Side Exit
- Intensity Control: **PWM** = Dimmable
- Connector: **Blank** = 2 m Integral Cable; **Q** = Euro Integral QD; QD models require mating cordset

* Flush Mount models only available in 340 mm length

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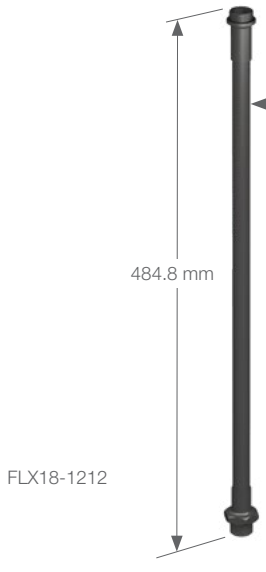
WL50S and WL50-2 also have the PWM option available.
Contact factory for more information.

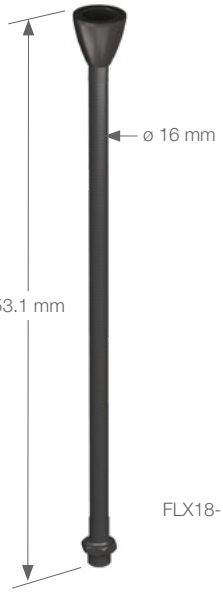
Flex Arm

- Versatile mounting options including magnetic mount, clamp mount and flange mount
- Vinyl coated to protect against moisture
- Adjustable arm allows for easy repositioning of light to suit many application needs
- Concentrate light exactly where needed
- Portability with magnetic and clamp mount options
- Available for use with spot lights, work lights and vision spot lights

Models	Base Connection	Light Connection	Brackets		
FLX18-1212	1/2-14 NPSM	1/2-14 NPSM (Male) Use with: WL50-2 WL50-2PB	SMB22	SMBFLXMAG	LMB12RA
FLX18-F12	3-Hole Flange	1/2-14 NPSM (Male) Use with: WL50-2 WL50-2PB	Direct Mount		
FLX18-12M30	1/2-14 NPSM	M30 x 1.5 (Female) Use with: WL50-2 WL50-2PB WL50S	SMB22	SMBFLXMAG	LMBE12RA
FLX18-DM30	2 x 1/4-20W 1.375 spacing	M30 x 1.5 (Female) Use with: WL50-2 WL50-2PB WL50S	SMBFLXCLAMPD	SMBFLXMAGD	
FLX18-FM30	3-Hole Flange	M30 x 1.5 (Female) Use with: WL50-2 WL50-2PB WL50S	Direct Mount		



FLX18-1212



FLX18-12M30