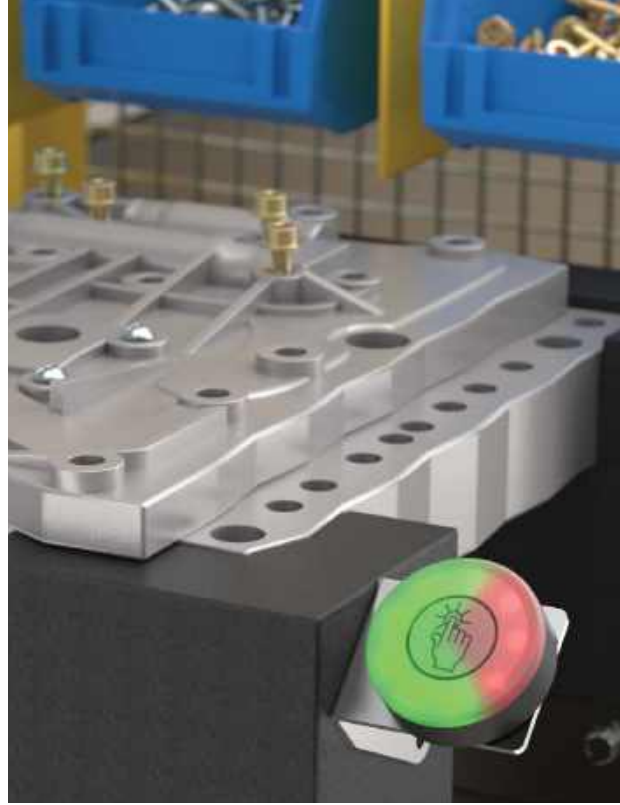


# Lighting & Indication Solutions





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# Light Up the Visual Factory

- LED indicators provide at-a-glance status indication
- Rugged illumination for the harshest environments, including areas exposed to abrasive chemicals, extreme temperatures, and high-pressure washdown
- Give your equipment a voice with programmable colors, animations, and audible alerts that communicate every condition



### Illuminate the Work Area with LED Lighting

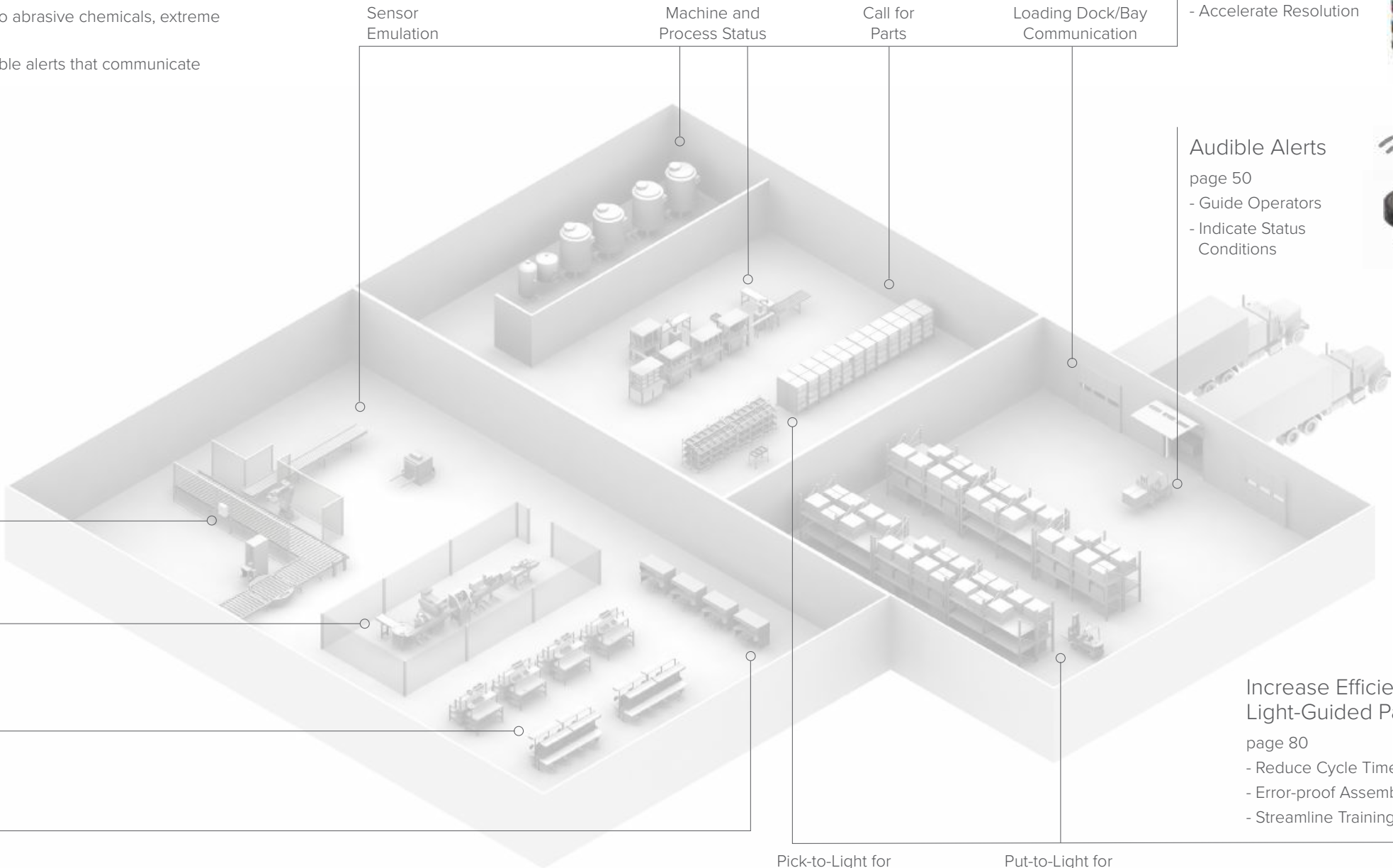
- page 12
- Boost Worker Productivity
  - Improve Product Quality
  - Increase Worker Safety

Electrical Panel Lighting

Machine Lighting

Workstation Lighting

Visual Inspection Station



### Communicate Status

- pages 40, 56
- Empower Operators
  - Alert Supervisors
  - Accelerate Resolution



### Audible Alerts

- page 50
- Guide Operators
  - Indicate Status Conditions



### Increase Efficiency with Light-Guided Part Picking

- page 80
- Reduce Cycle Time
  - Error-proof Assembly
  - Streamline Training



Pick-to-Light for Assembly and Kitting

Put-to-Light for Warehouse and Logistics



Wireless options to avoid costly wiring runs



Variety of audible options, including programmable



Color and animation options available



Multiple colors in one unit with flexible I/O configuration



Cascadeable lights

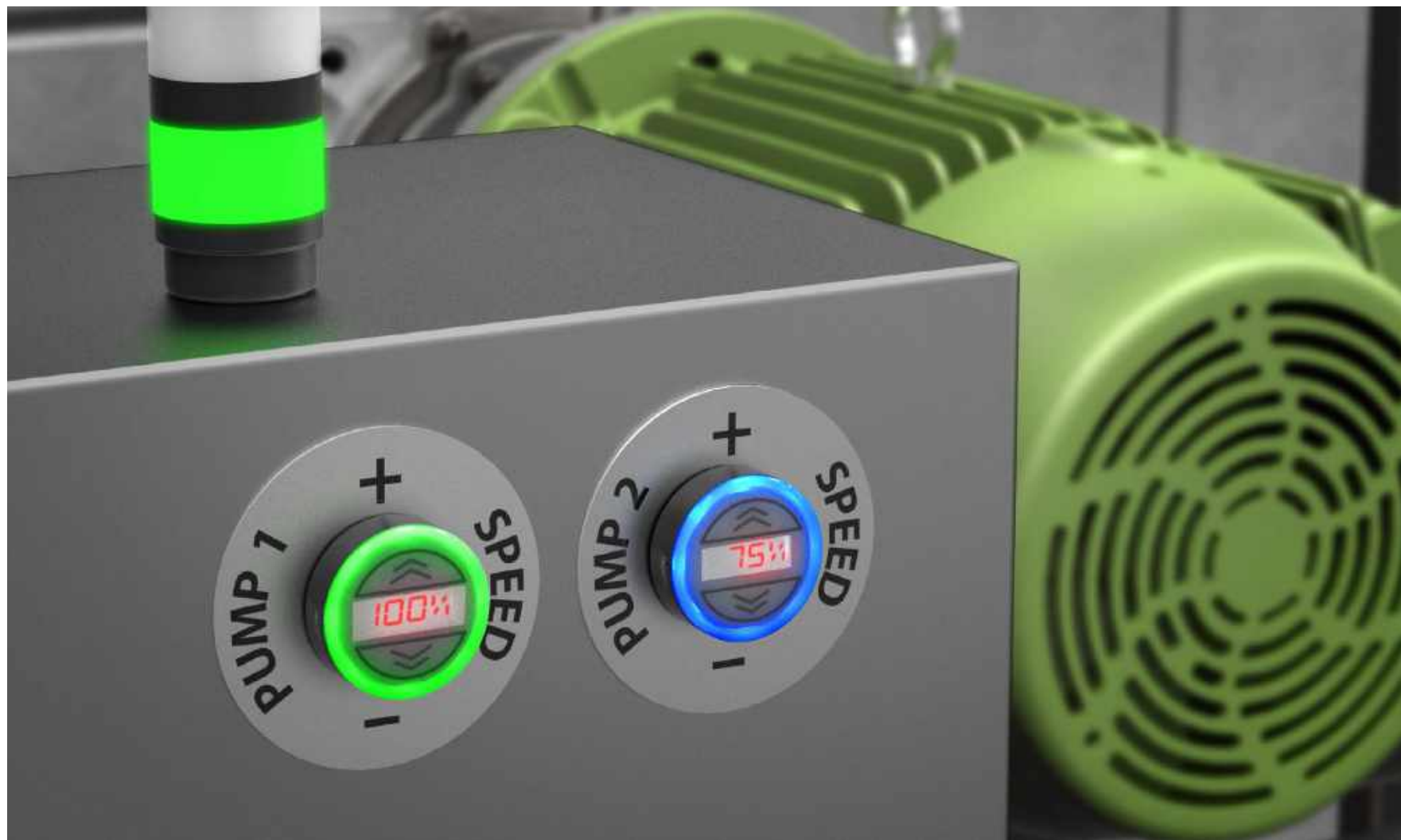
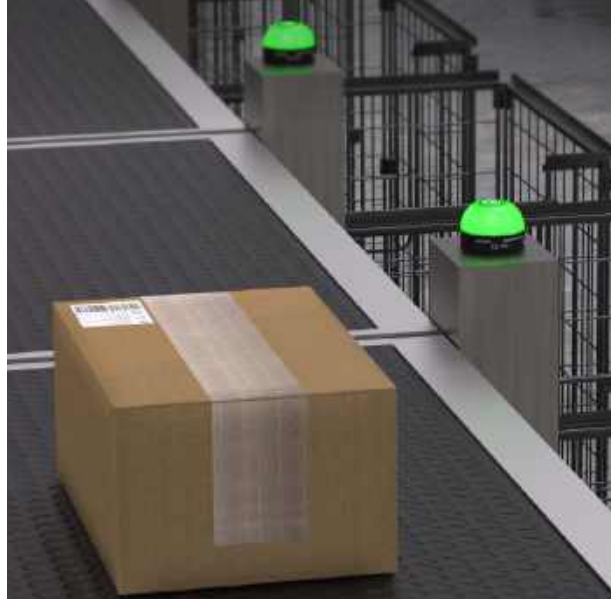


Magnetic mounting options for easy installation and portability



Light sections can be permanently laser marked with custom text or images

# New Products





### K50 I/O Touch Control with Display

- Onboard analog, PWM, PFM, and discrete outputs enable control of core applications such as adjusting VFD speed, dimming LED lights, and signaling part-picking details
- Two capacitive touch zones provide reliable input with gloved or bare hands—with no mechanical parts to wear out
- Four-character display improves operator response by showing output values and system messages
- Bright, multicolor LEDs provide operators with at-a-glance equipment status. All colors and animations are easily configured with Banner's free Pro Editor software



### K50 Programmable Indicators, Touch Buttons, and Touchless Buttons

- Cost-efficient, lightweight design and bright, clear colors solve indication and feedback challenges across many industries and applications
- Delivers long-lasting performance in industrial environments with its rugged, sealed IP66-, IP67-, and IP69K-rated housing
- Consolidate inventory and simplify ordering processes by purchasing and configuring one part that does the job of multiple devices
- Easily control and configure additional colors, animations, and other parameters with Banner's free, PC-based Pro Editor software



### SD50 Status Display

- Easily configurable, versatile display can be installed nearly anywhere, making it a simple yet powerful alternative to complex HMIs and other displays
- Great for displaying takt time, equipment status, assembly sequences, counts, and measurements where they are most useful
- Discrete and IO-Link models integrate into many different systems and applications, especially Banner sensing, safety, and monitoring solutions
- Quick and easy configuration—define the desired text and call it via discrete control or process data



### GS60 Programmable Guide Spotlights

- Reduce errors, improve productivity, and enhance operator interaction with increased visibility provided by the bright, focused spot
- Enhance worker comfort and safety by easily setting lighting levels to match the environment and application needs
- Reliably use in harsh environments with the long-lasting, impact resistant, durable anodized aluminum housing and polycarbonate window
- Communicate operational information with seven-color Programmable models



### TL70 Pro Modular Tower Lights with Modbus RTU, Ethernet, and Power over Ethernet (PoE)

- Expand what is visually communicated via tower lights by using multicolor light segments with animations including flash, strobe, rotate, and more
- Allow users to stock just a few unique parts and construct the exact tower light needed for their application with a modular design, scaling easily from just one segment up to six segments
- Combine sound with visual notifications to bring greater awareness to people working near equipment by adding an audible segment with selectable tones and intensities
- Control dynamic indication and audible alerts throughout a facility using a choice of IO-Link, Modbus RTU, Ethernet, and/or PoE models



### WLF12 Flexible Strip Lights

- Durable, silicone-encapsulated housing provides long-lasting, worry-free performance
- Plug-and-play standard M12 connections simplify installation by eliminating soldering
- Models available with 19 colors and 15 animation effects visually communicate machine states to people working on or near equipment
- Housing lengths (from 300 to 4000 mm) can be cut in 50 mm increments to fit to exact application specifications
- Peel-and-stick installation using high-strength adhesive backing ensures quick and secure mounting



### WLB32 PoE Workstation Lights with Modbus

- Easily connect directly to a Power over Ethernet (PoE)-enabled port on an Ethernet switch instead of needing skilled labor to wire simple lighting to a power source
- On models with power and control over Ethernet, configure light intensity and flashing alerts in real time via Modbus®/TCP communication for consistent control over area lighting
- Reduce errors and scrap by providing proper lighting for assembly and inspection tasks
- Decrease glare and eye strain and improve worker comfort and productivity by using models that include eye shield windows

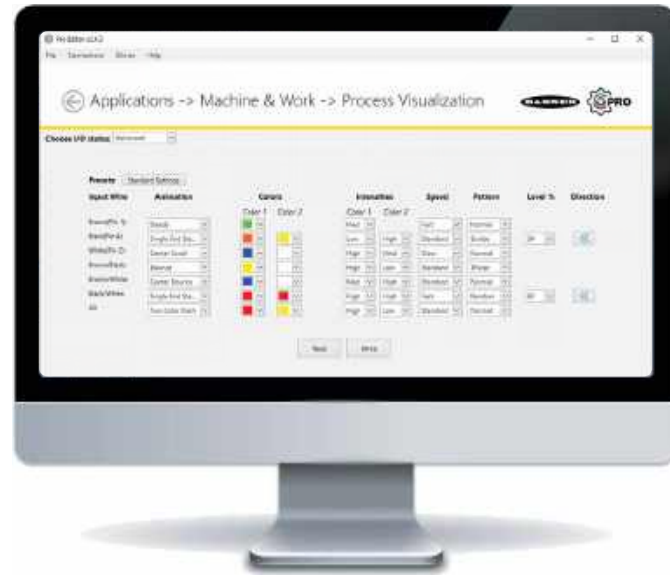


### K100 Programmable Display Beacons

- Improve awareness across a full 360-degrees with bright white alphanumeric display and dynamic color indication combined in a single rugged device
- Easily configure color, messages, and display behavior in discrete models with free software, or take full control via protocol with IO-Link and Modbus models
- Convey more detail with up to 32 scrolling alphanumeric characters legible from 10 meters
- Enhance visibility and status recognition with 14 distinct, configurable color options
- Make critical messages unmistakable with optional audible alerts that capture attention in noisy environments
- Integrate seamlessly into any system with discrete, IO-Link, and Modbus models

# Programmable Lighting

The Programmable Series configurable multicolor LED devices from Banner Engineering offer limitless possibilities for advanced indication of dynamic machine states, operator interaction, and process status. The Programmable Series is ideal if you are looking for advanced capabilities or flexibility beyond a traditional factory indicator. Whether you have discrete or protocol controlled devices, the Programmable Series use Discrete I/O, IO-Link, Ethernet, or Modbus for real-time communication across your factory.



## Software for Configurable Devices

Banner's free Pro Editor Software allows users to configure device status, colors, animations, and much more for control via discrete inputs, bringing intuitive indication and interaction to the visual factory. Configurable RGB devices make supply chains more efficient by allowing you to standardize on one model that can be customized as needed. The application-based interface makes it easy to configure a device for a wide range of applications such as displaying machine warm-up time, indicating unique steps in an assembly process, showing distance and position information, or communicating multiple machine states.



pg. 58	pg. 82	pg. 62, 85	pg. 65, 67, 88-94	pg. 79	pg. 47	pg. 45	pg. 50
S15L	S22 Indicator and Touch Button	K30 Indicator, Touch, and Touchless	K50 Indicator, Touch, Touchless, and Audible	GS60	LCA130T	CL50	TL50

	✓	✓	✓	✓	✓	✓	✓
			✓	✓	✓	✓	✓
	✓		✓	✓			

## Technologies



allows control via discrete inputs with advanced software configuration of colors, logic, modes, and more.



is an open standard serial communication protocol that allows for the bi-directional exchange of data from IO-Link supported devices, lights, or indicators that are also connected through a master.



is a serial data communication protocol that is based on a request-response model.



is a purpose-built, Modbus-compatible serial bus protocol that uses a Common ID to reduce the typical latency that results from polling multiple devices.



is an industrial network protocol that adapts the Common Industrial Protocol to standard Ethernet.



is an industrial network protocol for data communication over Industrial Ethernet

## Modes and Applications

**Equipment Status** Translate machine outputs to actionable information

**Assembly Instructions** Step through sequential operator guidance

**Measurement** Convert and display dynamic sensor outputs like distance, level, and more

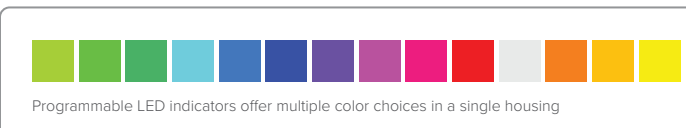
**Timer** Start, stop, and reset the timer to display takt time and more

**Counter** Increase or decrease the count value based on input pulses

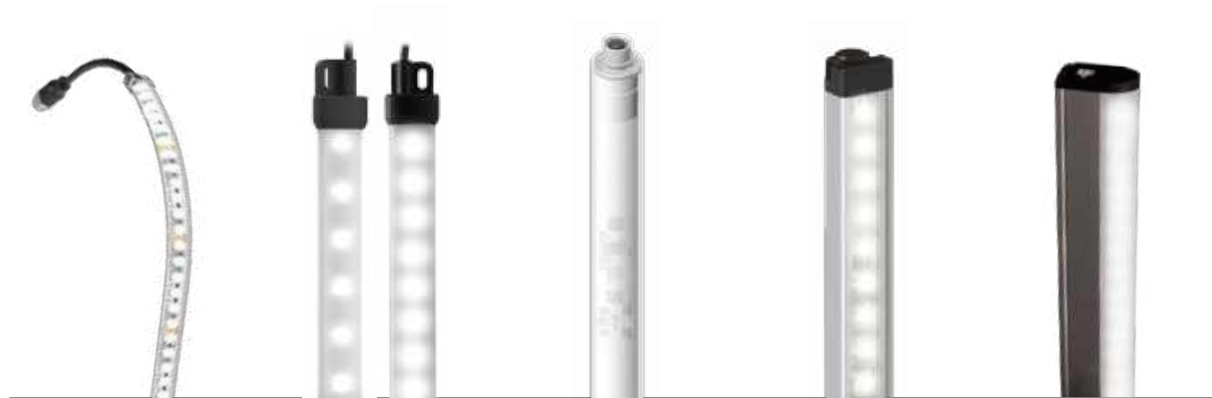


pg. 53	pg. 71	pg. 72	pg. 54	pg. 74	pg. 75	pg. 76	pg. 77	pg. 78	pg. 99	pg. 100	pg. 95
TL70	K90	K100	TLF100	WLF12	WLS15	WLS27	RLS27	WLS28	SD50 Display	K100 Display	PTL110

✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
✓	✓		✓	✓	✓	✓		✓	✓	✓	
✓				✓	✓				✓	✓	✓
✓											
✓											



# LED Task Lighting Selection Guide



pg. 16

pg. 17

pg. 18

pg. 22

pg. 21

Series Name	WLF12	WLS15	WLS27	WLS28-2	WLB32
Length (mm)	300 to 4000	220 to 1200	145 to 1130	145 to 1130	285 to 1130
AC/DC	DC	DC	DC	DC	AC and DC
White Lumens per Foot (300 mm)	285	350 standard 750 high intensity	800	800	750
IP Rating	IP66, IP67, IP69K	IP66, IP67	IP66, IP67, IP69K	Unsealed: IP50 Sealed: IP67, IP69K	IP50
Programmable	(see page 56)	(see page 56)	(see page 56)	(see page 56)	
Color Options		✓	✓	✓	
Communication Protocol		IO-Link® Modbus	IO-Link®	IO-Link®	Modbus TCP
Hazardous Location Models			HLS27	HLS28	



pg. 20

pg. 24

pg. 25

pg. 26

pg. 27

pg. 28

pg. 29

Series Name	RLS27	WLS70	WLB72	WLB92	BL60	WLC60	WLH60 High Temp
Length (mm)	285 to 2270	300 to 1200	1200 and 2400	550 and 1100	340 and 640	340 and 640	340 and 640
AC/DC	DC	AC and DC	AC	AC and DC	DC	DC	DC
White Lumens per Foot (300 mm)	850	1350	1700	1755	1375	1300	1150
IP Rating	IP67, IP69K	IP65	IP20	IP40	IP67, IP68g, IP69K	IP68, IP68g, IP69K	IP68, IP69K
Programmable	(see page 56)						
Color Options	✓				✓	✓	
Communication Protocol							
Hazardous Location Models							

# LED Task Lighting Selection Guide



pg. 30



pg. 32



pg. 33

<b>Series Name</b>	<b>S15WL</b>	<b>WL50S</b>	<b>WL50-3</b>
<b>Dimensions (mm)</b>	ø 15	ø 50	ø 50
<b>AC/DC</b>	DC	DC	DC
<b>White Lumens</b>	55	295	300
<b>IP Rating</b>	IP65, IP67, IP68	IP67, IP69K	IP67, IP69K
<b>Programmable</b>	(see page 56)		
<b>Color Options</b>		✓	



pg. 31



pg. 36



pg. 37



pg. 38

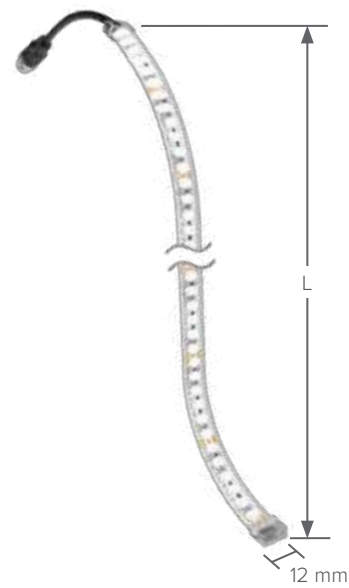
<b>Series Name</b>	<b>GS60</b>	<b>WLC90</b>	<b>WLR95</b>	<b>WLA-2</b>
<b>Dimensions (mm)</b>	ø 60	89 x 91	94 x 49	105 x 180 to 360 x 180
<b>AC/DC</b>	DC	DC	DC	DC
<b>White Lumens</b>	300	700	600	1025 per 85 mm panel
<b>IP Rating</b>	IP66, IP67	IP68, IP68g, IP69K	IP65, IP67, IP68	Sealed: IP67, IP69K Encapsulated: IP67, IP68, IP69K
<b>Programmable</b>	(see page 56)			
<b>Color Options</b>	✓		✓	



## WLF12 Flexible Strip Lights

- Provides bright illumination in workspaces, cabinets, and machines with 285 lumens per foot
- Durable, silicone-encapsulated housing and advanced circuitry provide long-lasting, worry-free performance
- The flexible, cut-to-length design and direct 24 V DC operation with M12 connector give users quality light where needed
- Plug-and-play standard M12 connections simplify installation by eliminating soldering
- Peel-and-stick installation using high-strength adhesive backing ensures quick and secure mounting
- Six housing lengths (from 300 to 4000 mm) can be cut in 50 mm increments to fit exact application specifications

Series	Cascadable	Color	Lighted Length (mm)	Construction	Voltage	Connection
<b>WLF12</b>	<b>X</b>	<b>W</b>	<b>300</b>	<b>S</b>	<b>24</b>	<b>QP</b>
X = Non-cascadable		W = Daylight white	300 600 1200 2000 3000 4000	S = Sealed	24 = 24 V	QP = 150 mm PVC-jacketed cable with 4-pin M12 male quick disconnect



**Length (L)**  
300 mm  
600 mm  
1200 mm  
2000 mm  
3000 mm  
4000 mm

**Supply Voltage** 24 V DC  
**Bend Radius** 15 mm  
**Construction** Silicone material, suitable for damp location use. Fully overmolded and encapsulated LEDs.  
**Operating Conditions** -20 to +45 °C  
**Environmental Rating** IP66, IP67, IP69K  
**Certifications** CE, UL LISTED, UK CA



### Brackets



**LMBWLF12C**  
Set of 10 clamp brackets, translucent silicone



## 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

### Single and Multicolor Models

Series	Cascadable	Color	Length (mm)	Window	Construction	Connector
<b>WLS15</b>	<b>X</b>	<b>DW</b>	<b>0360</b>	<b>D</b>	<b>S</b>	<b>C2</b>
C = Cascadable X = Non-cascadable		DW = Daylight white WW = Warm white GR = Green and red WR = White and red	0220 0640 0360 0920 0500 1200	D = Diffuse	S = Sealed (IP66, IP67)	C2 = 2 m integral QP = 150 mm M12 integral QD QS = 150 mm integral cable with Deutsch DTM*

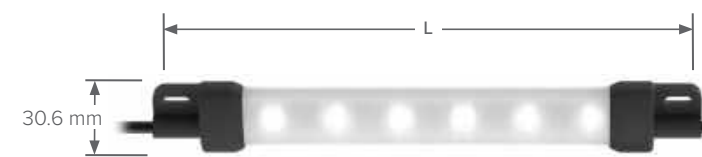
QD models require mating cordset  
\*Not available with multicolor models

### High Intensity Models

Series	Cascadable	Color	Length (mm)	Window	Construction	Voltage	Connector
<b>WLS15H</b>	<b>X</b>	<b>DW</b>	<b>0360</b>	<b>L</b>	<b>S</b>	<b>24</b>	<b>C2</b>
C = Cascadable X = Non-cascadable		DW = Daylight white WW = Warm white	0360 0640 0920 1200	L = Light diffuse	S = Sealed (IP66, IP67)	24 = 24 V DC	C2 = 2 m integral QP = 150 mm M12 integral QD

QD models require mating cordset

Dimming Accessories page 110



**Length (L)**  
220 mm 640 mm  
360 mm 920 mm  
500 mm 1200 mm

**Supply Voltage** 12 or 24 V DC nominal  
**Lumens** Standard: 175–1400  
High Intensity: 750–3000  
**Construction** Inner Housing: Clear anodized aluminum  
Outer Housing: Polycarbonate  
End Caps: Polyamide  
-40 to +60 °C  
**Operating Conditions** -40 to +60 °C  
**Environmental Rating** IP66, IP67, UL 2108  
**Certifications** CE, UL LISTED, UK CA, UL-NOM

### Brackets



**LMBWLS15-150S**



**LMBWLS15**



**LMBWLS15MAG**  
Magnetic Mount



**LMBWLS15TF**  
Tape



**LMBWLS15TD**  
Velcro



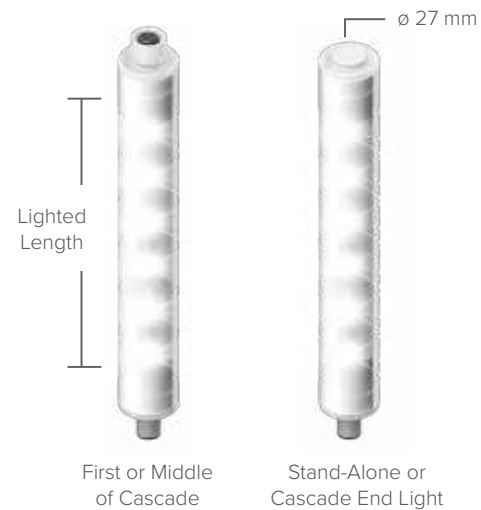


# WLS27

## LED Strip Lights

- Cylindrical 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
- Power can be daisy-chained to multiple lights
- Capability to dim lights using the wiring pinout (Hi/Low/Off)\*
- Intensity can be controlled from 0% to 100% using Pulse Width Modulation (PWM) dimming\*
- 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

\*Hi/low/off and PWM are for single color models only



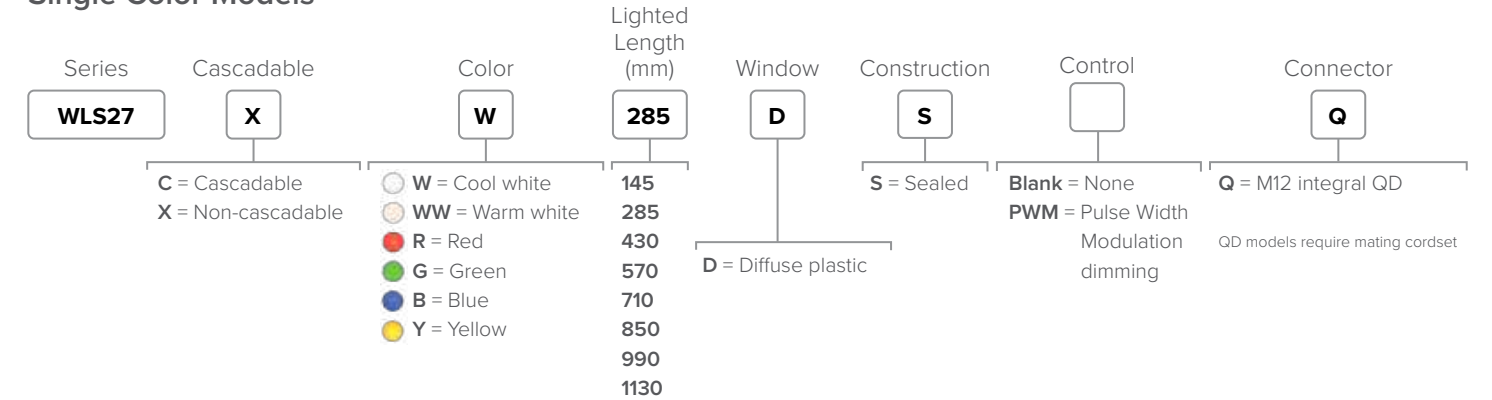
<b>Supply Voltage</b>	White: 12 to 30 V DC Multicolor: 24 V DC
<b>Lumens</b>	White: 400–3200** Multicolor: 125–2600**
<b>Construction</b>	Housing: Copolyester Inner Housing: Clear anodized aluminum Outer Housing: FDA grade copolyester
<b>Operating Conditions</b>	Single Color: -40 to +70 °C Multicolor: -40 to +50 °C
<b>Environmental Rating</b>	IP67, IP66, IP69K per DIN 40050
<b>Certifications</b>	

\*\*Depending on length and color

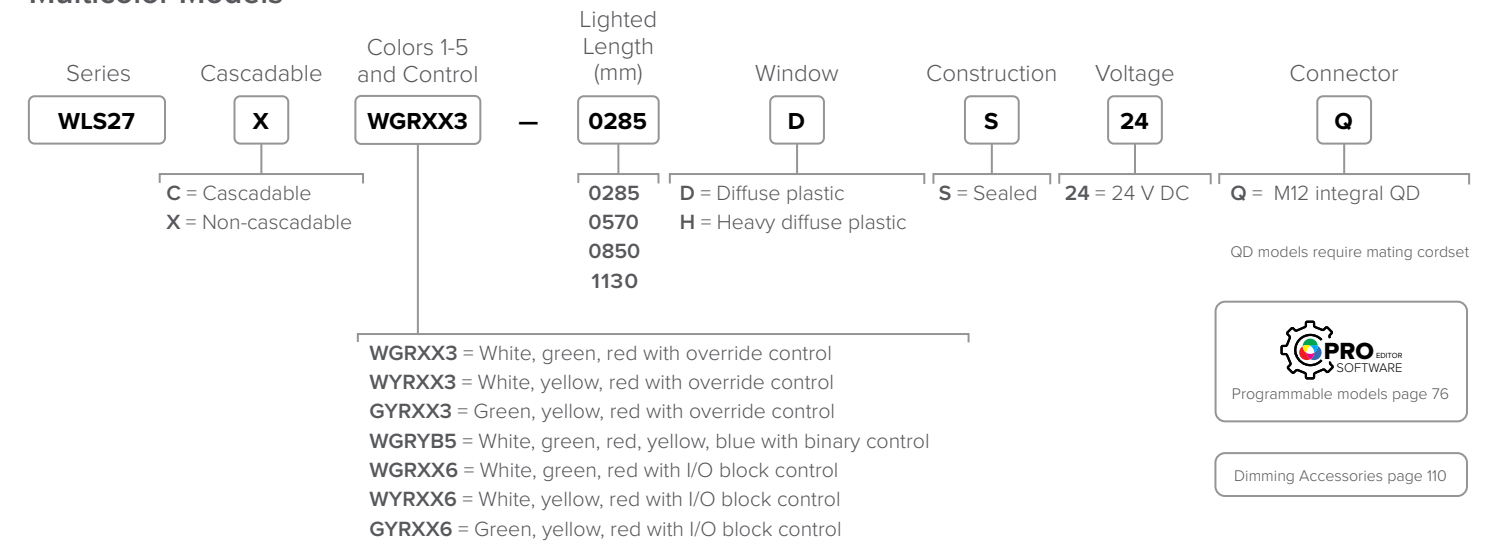
Lighted Length (L)

145 mm	710 mm
285 mm	850 mm
430 mm	990 mm
570 mm	1130 mm

### Single Color Models



### Multicolor Models

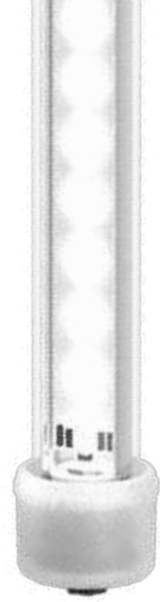


Dimming Accessories page 110

### Brackets



**LMBWLS27EC** Clear Copolyester  
**LMBWLS27H**  
**LMBWLS27T**  
**LMBWLS27U** Clear Copolyester (Also available with magnet LMBWLS27U-MAG)  
**LMBWLS27SP** Clear Copolyester

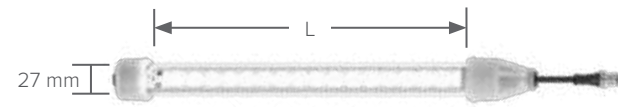
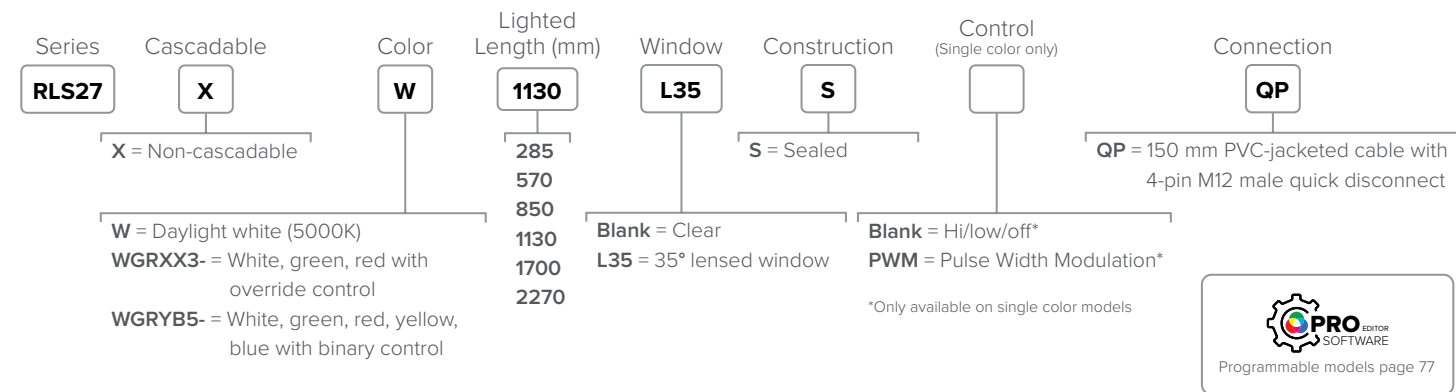


# RLS27

## Rugged LED Strip Lights

- Shatterproof, UV-stabilized polycarbonate shell offers superior chemical resistance and protection to withstand harsh environments such as car washes
- Sturdy aluminum housing and robust endcaps provide dependable use outside in any weather
- High-intensity focused lens delivers long-range illumination for easy viewing outdoors
- IP67- and IP69K-rated for reliable operation in demanding applications with high temperatures and high pressure washdowns

### Single and Multicolor Models



Lighted Length (L)	
285 mm	1130 mm
570 mm	1700 mm
850 mm	2270 mm

<b>Supply Voltage</b>	Single color: 12 to 30 V DC Multicolor: 24 V DC
<b>Lumens</b>	White: 850–6800** Multicolor: 125–5200**
<b>Construction</b>	Inner housing: clear anodized aluminum Outer housing: UV-stabilized polycarbonate Connector: Nickel-plated
<b>Operating Conditions</b>	–40 to +70 °C (–40 to +158 °F)
<b>Environmental Rating</b>	IP67, IP69K per DIN 40050-9
<b>Certifications</b>	CE, cUL LISTED, UK CA, UL LISTED

\*\*Depending on length and color

### Brackets



**LMBHLS27S**  
Impact absorbing brackets,  
set of two (included)



**LMBHLS27O**  
Impact absorbing clamp brackets,  
set of two (optional)



**LMBWLS27H**  
Hanging clamp brackets,  
set of two (optional)



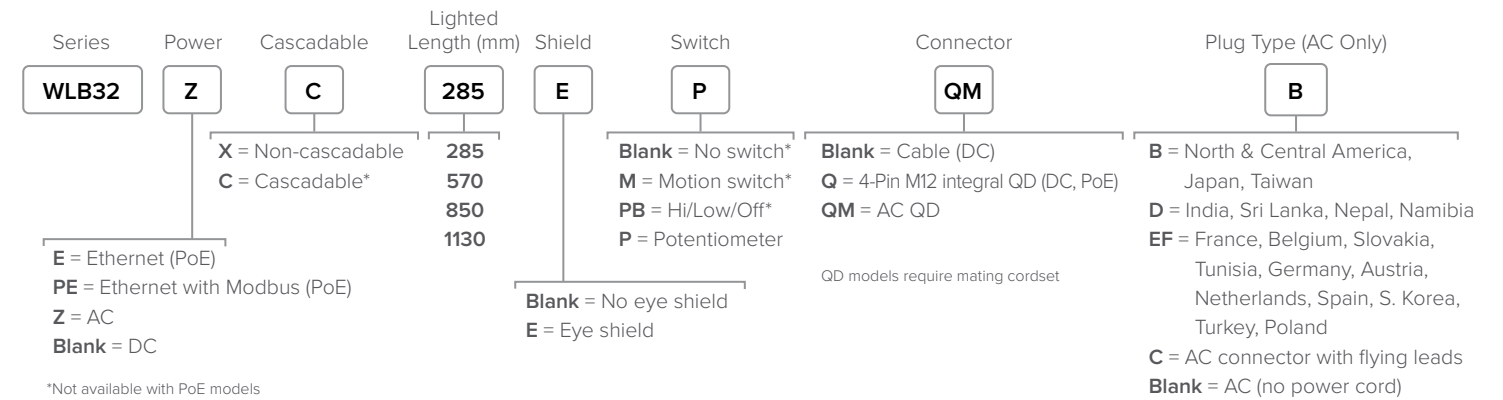
**LMBWLS27U**  
Universal clamp bracket  
(optional)



# WLB32

## LED Strip Lights

- Energy efficient for overall cost savings
- Integrated switch allows users to customize light levels: high/low/off switch on AC/DC models and an 11-position rotary knob on PoE models
- Available as cascadable models for a continuous length of lighting, with a minimal amount of wiring
- Metal housing, shatterproof window
- Easy installation with snap clips, or a choice of magnetic or angle brackets
- Flexible use with AC, DC, or Power over Ethernet (PoE) models
- 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 block direct line of sight to increase operator comfort



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

<b>Supply Voltage</b>	DC: 12 to 30 V DC AC: 90 to 264 V AC PoE: 42.5 to 57 DC
<b>Lumens</b>	750–3000
<b>Color Temperature</b>	5000K
<b>Switch</b>	PoE: Dimming knob, 10 levels of intensity adjustment, off position All other: High/low/off = 100/50/0%
<b>Construction</b>	Housing: Anodized aluminum Window and end caps: Polycarbonate
<b>Operating Conditions</b>	DC: –40 to +70 °C AC: –25 to +45 °C PoE: –40 to +50 °C
<b>Environmental Rating</b>	PoE: IP40 All other: IP50
<b>Certifications</b>	CE, cUL LISTED, UK CA, UL LISTED, NOM

\*Not available with PoE models

### Brackets



**LMBWLB32**



**LMBWLB32-180S**



**LMBWLB32MAG**  
Magnetic Mount



**LMBWLB32U**



**LMBWLB32UT**



# WLS28-2

## LED Strip Lights

- Compact, space-saving design
- Lensed models or choice of clear or diffuse window
- Cascade models for connecting multiple lights end-to-end, minimizing wiring
- Hi/Low/Off switch, motion 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

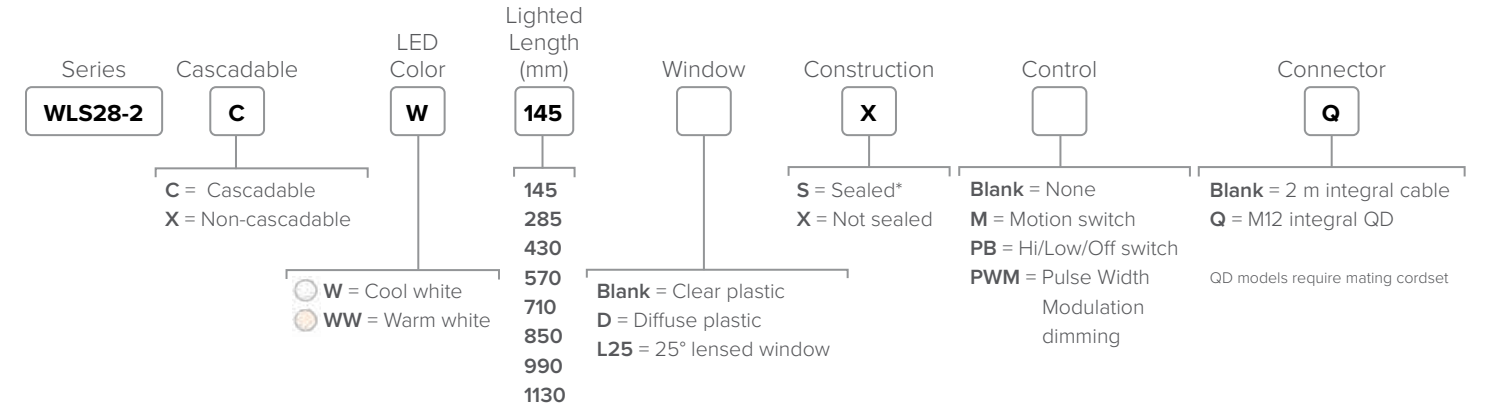


<b>Supply Voltage</b>	12 to 30 V DC
<b>Lumens</b>	White: 400–3200* Multicolor: 125–2600*
<b>Construction</b>	Housing: Clear anodized aluminum Window: Polycarbonate (clear and diffuse plastic models) or acrylic (lensed models) End Caps: Painted zinc
<b>Operating Conditions</b>	–40 to +70 °C
<b>Environmental Rating</b>	Non-sealed: IP50 Sealed: IP67, IP69K per DIN 40050
<b>Certifications</b>	

\*Depending on length and color

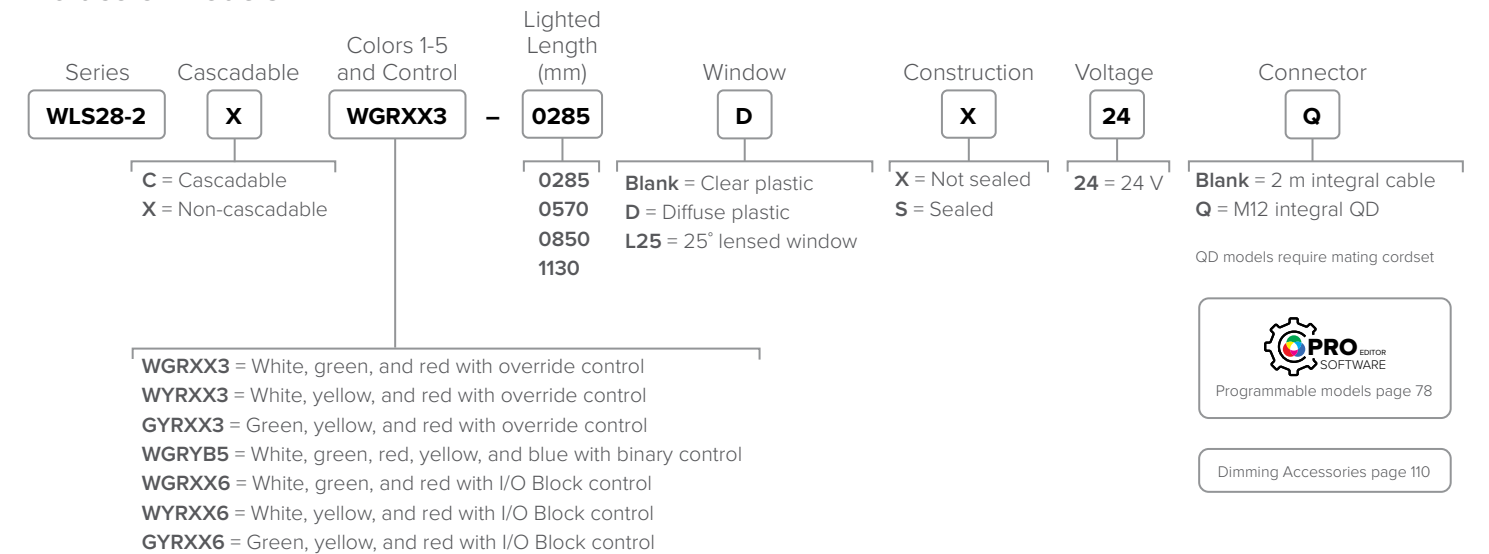
Lighted Length (L)	
145 mm	710 mm
285 mm	850 mm
430 mm	990 mm
570 mm	1130 mm

### White Models



\*Sealed models not available with ON/OFF Switch (PB) or Motion Switch (M)

### Multicolor Models



Dimming Accessories page 110

### Brackets

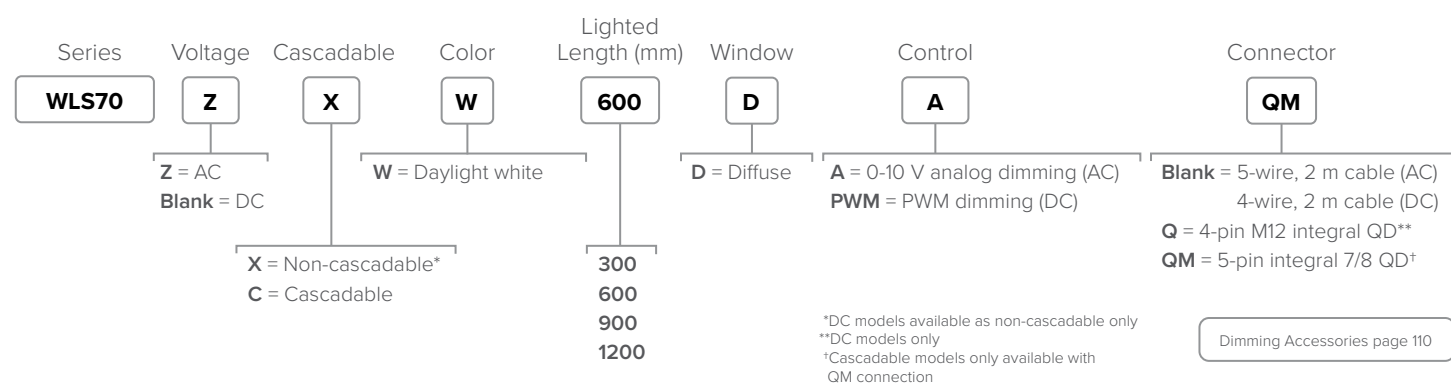




## WLS70

### Sealed High-Output Strip Lights

- Exceptionally efficient for overall energy and cost savings
- Increase worker productivity and ergonomics with bright, high-quality, uniform light
- Sturdy aluminum housing encased in a shatterproof, UV-stabilized polycarbonate shell
- Daisy-chain long runs of AC lights quickly and easily with cascade quick disconnect models
- Dimming standard on all models



Lighted Length (L)  
300 mm    900 mm  
600 mm    1200 mm

<b>Supply Voltage</b>	DC: 12 to 30 V DC (300–900 mm models) 18 to 30 V DC (1200 mm models) AC: 100 to 277 V AC
<b>Lumens</b>	1350–5400
<b>Construction</b>	Inner Housing: Anodized aluminum Outer Housing: Polycarbonate
<b>Operating Conditions</b>	–40 to +50 °C
<b>Environmental Rating</b>	IP65
<b>Impact Rating</b>	IK10
<b>Certifications</b>	CE, cUL US LISTED, UK CA, UL-MX, NOM

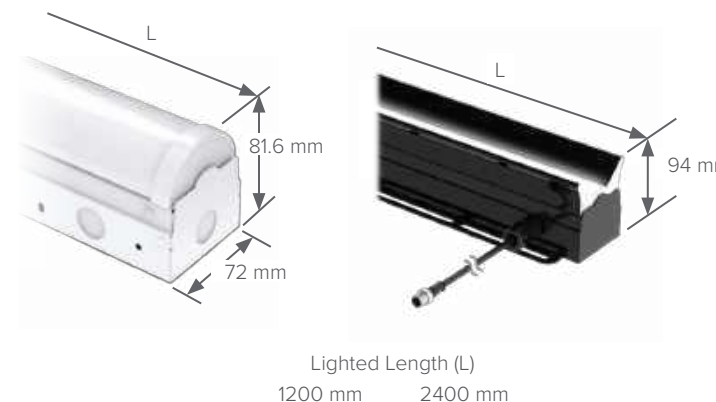
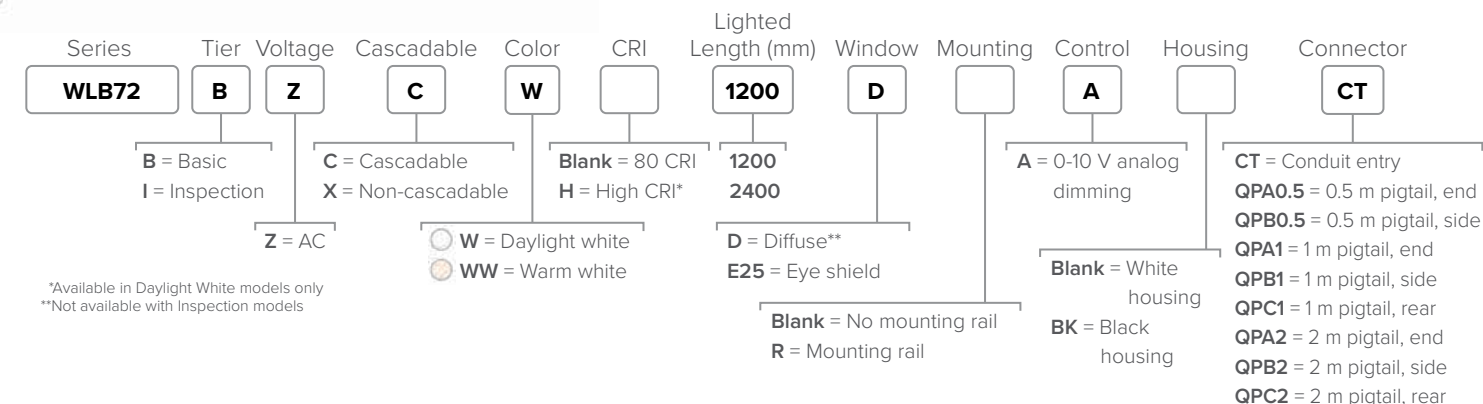
### Brackets



## WLB72

### Industrial LED Strip Lights

- Features a low total cost of ownership (TCO) and provides years of reliable, maintenance-free operation—with no bulb or ballast changes required throughout the entire lifespan of the device
- Eye shield window option for superior glare control and “zebra striping” effect for inspection applications
- Durable metal housing and shatter-resistant window
- Models with Quick Disconnect (QD) connectors provide trouble-free installation
- Energy-efficient with an output up to 130 lumens per watt
- 0-10 V dimming so users can control light levels to their preferred brightness
- Optional LCS10 controller for plug-and-play installation



<b>Supply Voltage</b>	120 to 277 V AC
<b>Lumens</b>	Diffuse: 6800–1300 Eye Shield: 3800–7600
<b>Construction</b>	Housing: Galvanized steel with corrosion resistant polyester powder coat Window: Polycarbonate End caps: Polycarbonate
<b>Operating Conditions</b>	–40 to +50 °C
<b>Environmental Rating</b>	IP20
<b>Certifications</b>	CE, cUL US LISTED, UK CA, UL-MX, NOM

### Brackets



### Controller





# WLB92

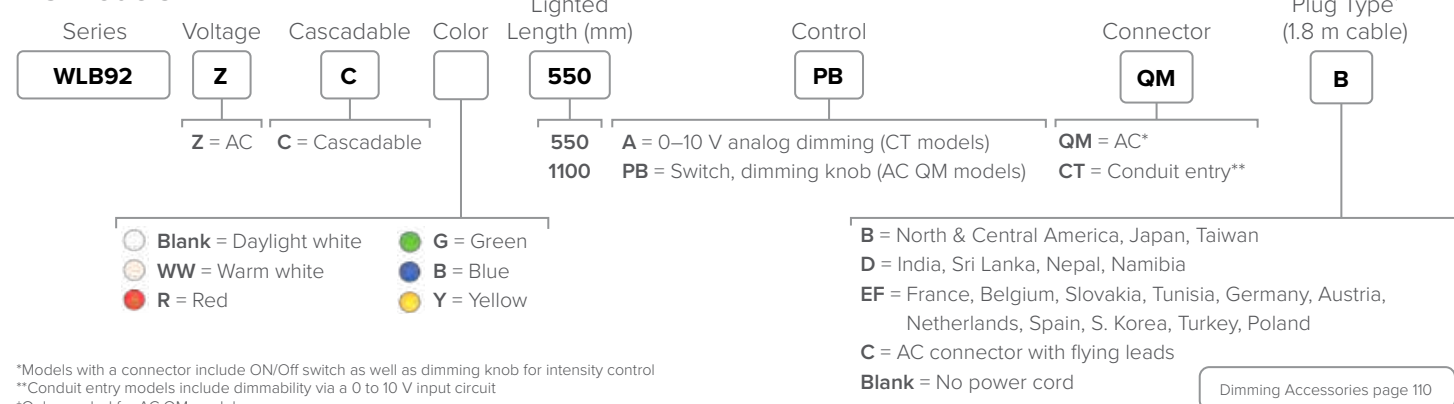
## Industrial LED Strip Lights

- Increases 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
- Save maintenance time and lower utilities expenses with long-life, energy-efficient LEDs
- Flexibility to place light where needed with AC and DC models
- Easy installation with a variety of mounting options: surface, swivel, snap, and hanging brackets

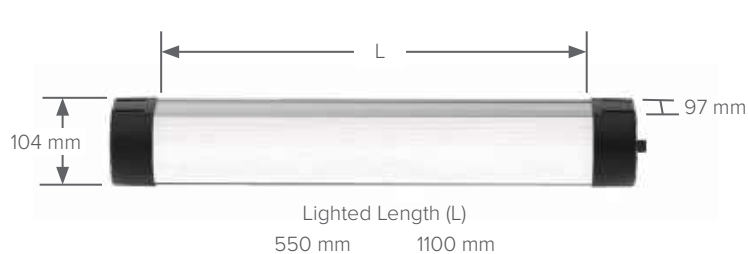
### DC Models



### AC Models



\*Models with a connector include ON/Off switch as well as dimming knob for intensity control  
 \*\*Conduit entry models include dimmability via a 0 to 10 V input circuit  
 \*Only needed for AC QM models



Supply Voltage	DC: 24 V DC, AC: 100 to 277 V AC
Lumens	405-7150*
Construction	Housing: Anodized aluminum, Window: Polycarbonate
Operating Conditions	-40 to +70 °C
Environmental Rating	IP40
Certifications	CE, UL LISTED, UK CA

\*Depending on length and color

### Brackets

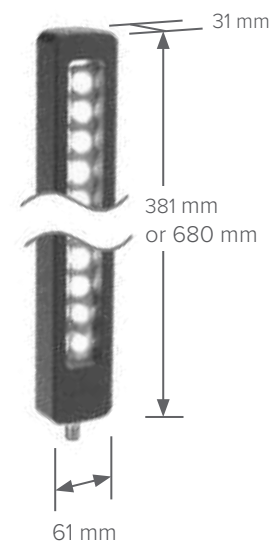
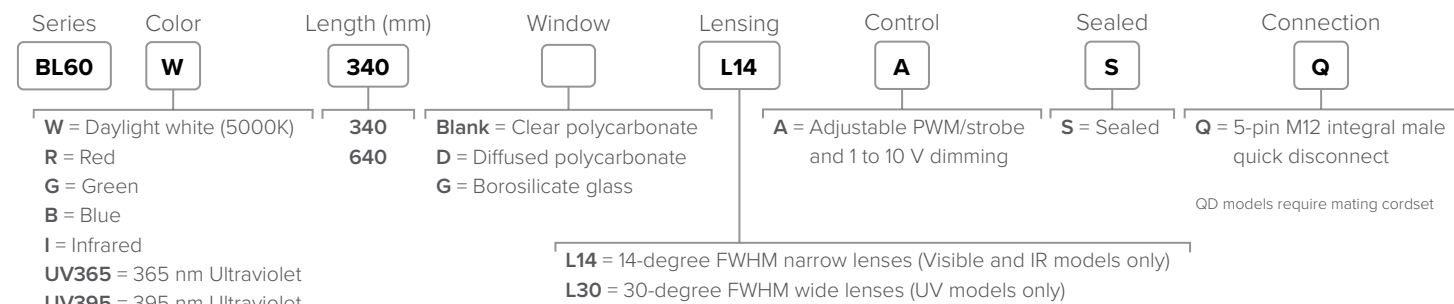


# BL60

## Sealed LED Bar Lights



- Helps vision systems identify defects and scan targets by completely illuminating objects in front of camera with bright, lensed LEDs
- Provides long-lasting performance and minimal replacement costs with sealed, IP67/IP69K-rated aluminum housing; -40° to +50° temperature range; and three window options: clear or diffused polycarbonate and borosilicate glass
- Delivers ideal application intensity with adjustable PWM/strobing and 1 to 10 V dimming control
- Enables comprehensive inspection capabilities with multiple color options: red, green, blue, white, UV, and IR



Supply Voltage	12 to 30 V DC
Lumens	300 to 2600*
Construction	Housing: Black e-coated aluminum housing Window: Clear or diffuse polycarbonate window, or clear borosilicate glass window
Operating Conditions	-40 to +50 °C
Environmental Rating	IP67, IP68g, IP69K
Certifications	UL LISTED

\*Depending on length and color

### Brackets



\*Do not use with stainless steel models. Protective cover for magnet sold separately (SMBWLSMAGR).

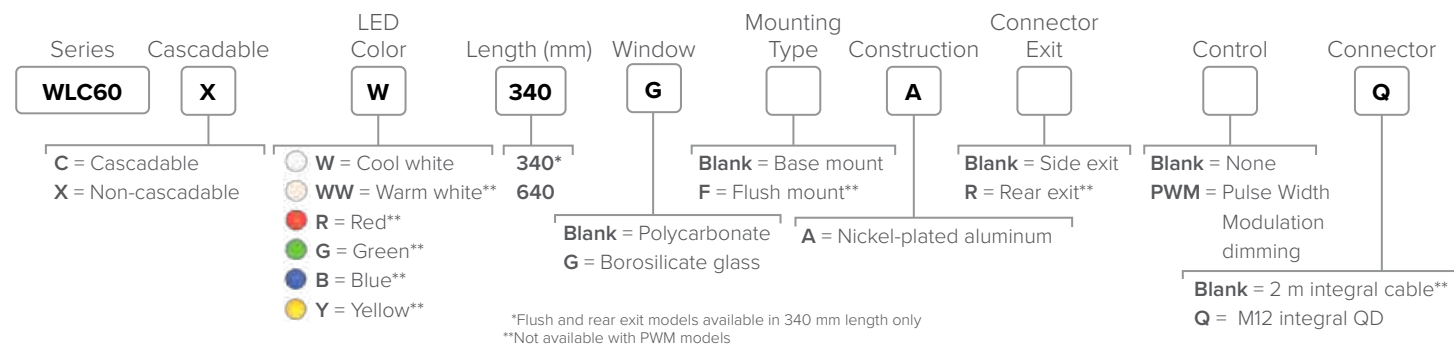
Note: Not all models are shown. Visit bannerengineering.com for other available models.



## WLC60

### Heavy Duty LED Strip 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
- Integral 4-pin M12 quick disconnect connector
- Models have four discrete intensity level settings



Supply Voltage	12 to 30 V DC
Lumens	340 mm = 1300 640 mm = 2600
Construction	Housing: Nickel-plated aluminum Window: Polycarbonate or borosilicate glass
Operating Conditions	-40 to +70 °C
Environmental Rating	IP68, IP68G, IP69K per DIN 40050
Certifications	CE, UL LISTED, UK CA

### Brackets



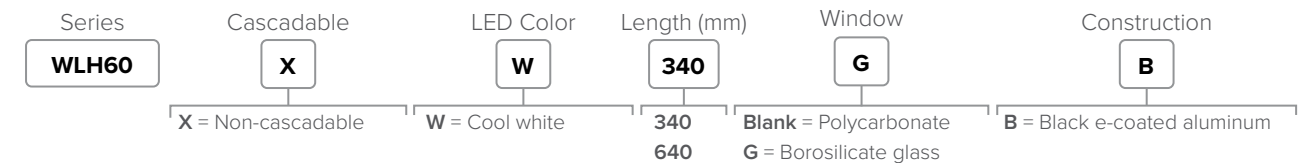
**LMBWLC60F**  
**LMBWLC60RA**  
**LMBWLC60RAS**  
 4 Bracket Swivel Kit, can mount with SMBMAG3 magnet  
**LMBWLC60MAG\***  
 Magnetic Mount  
 \*Do not use with stainless steel models. Protective cover for magnet sold separately (SMBWLSMAGR).



## WLH60

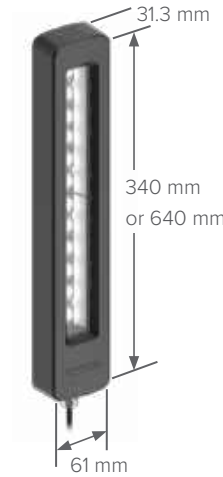
### High Temperature LED Strip Lights

- Approved for use in environments up to 100 °C
- IEC IP67, IEC IP68G, and IEC IP69K rated
- Rugged and durable for harsh environments
- Resists high pressure, high-temperature washdown, oils, and many chemicals
- Easy to install with a wide variety of mounting solutions
- Highly resistant to vibration and shock



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

Dimming Accessories page 110



Supply Voltage	21 to 28 V DC
Lumens	340 mm = 1150 640 mm = 2300
Construction	Housing: Black electro-coated aluminum Window: Polycarbonate or borosilicate glass
Operating Conditions	-40 to +100 °C
Environmental Rating	IP68, IP68G, IP69K per DIN 40050
Certifications	CE, UL LISTED, UK CA

### Brackets



**LMBWLC60F**  
**LMBWLC60RA**  
**LMBWLC60RAS**  
 4 Bracket Swivel Kit, can mount with SMBMAG3 magnet  
**LMBWLC60MAG\***  
 Magnetic Mount  
 \*Do not use with stainless steel models. Protective cover for magnet sold separately (SMBWLSMAGR).

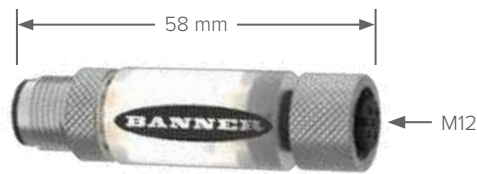
Note: Not all models are shown. Visit bannerengineering.com for other available models.



## S15WL In-Line Work Lights

- Miniature devices providing 360-degree illumination to be added easily to existing components
- All signals pass through, simplifying installation
- Designed for enclosure or area lighting
- Rugged, overmolded design meets IEC IP65, IEC IP67, and IEC IP68
- Dimmable via two-wire PWM input

Color	Connection	Model
Cool white	4-pin male/female M12 quick disconnect	S15WLWQ



<b>Supply Voltage</b>	12 or 24 V DC
<b>Lumens</b>	55
<b>Construction</b>	Coupling Material: Nickel-plated brass Connector Body: PVC translucent white Removable cap covering female quick disconnect included
<b>Operating Conditions</b>	-40 to +45 °C
<b>Environmental Rating</b>	IP65, IP67, IP68, NEMA/UL Type 1
<b>Certifications</b>	

### Brackets



**LMBM12MAG**  
Attaches to  
M12 cordset end



**LMBM12SP**  
Attaches to  
M12 cordset end



**LMBS15MAG**  
Magnetic Mount



**LMBS15SP**



## GS60 Guide Spotlights

- Reduce errors, improve productivity, and enhance operator interaction with increased visibility provided by the bright, focused spot
- Enhance worker comfort and safety by easily setting lighting levels to match the environment and application needs
- Reliably use in harsh environments with the long-lasting, impact resistant, durable anodized aluminum housing and polycarbonate window

Color	Control	Models
Daylight White - 5000K	High/low/off	<b>GS60WL4Q</b>
Red		<b>GS60RL4Q</b>
Green		<b>GS60GL4Q</b>
Blue		<b>GS60BL4Q</b>
Yellow		<b>GS60YL4Q</b>
Infrared (IR)		<b>GS60IL4Q</b>
Ultraviolet (UV) - 395 nm	Adjustable PWM/strobe and 1 to 10 V dimming	<b>GS60UV395L8Q</b>
Daylight White - 5000K		<b>GS60WL4AQ</b>
Infrared (IR)		<b>GS60IL4AQ</b>
Ultraviolet (UV) - 395 nm		<b>GS60UV395L8AQ</b>



<b>Supply Voltage</b>	12 to 30 V DC
<b>Construction</b>	Housing: Black anodized aluminum Window: Polycarbonate Connector: Nickel-plated quick-disconnect M30 mounting nut: Black anodized aluminum
<b>Operating Conditions</b>	-40 to +50 °C (-40 to +122 °F)
<b>Environmental Rating</b>	IP66, IP67

### Brackets



**SMB30A**



**SMBAMS30P**



**SMBAMS30RA**



**SMB30MM**



**ACC-GS60**  
M48 x 2 front mounting  
knurl nut

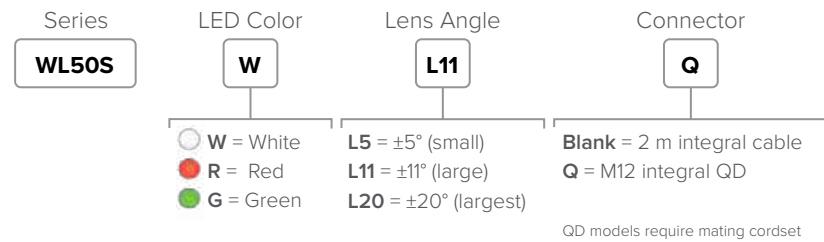


# WL50S

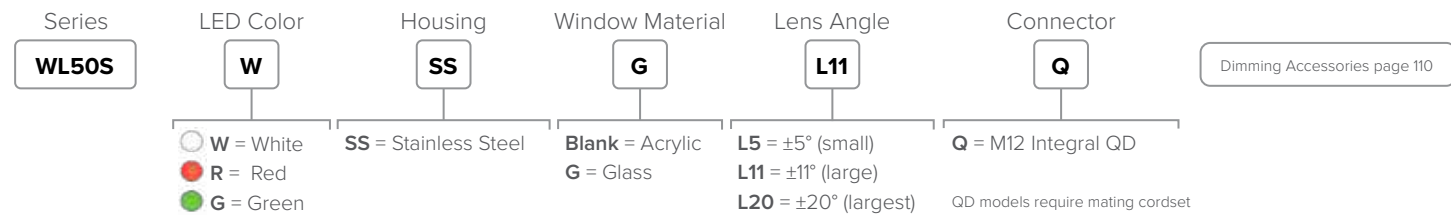
## LED Spot Lights

- Highly concentrated, focused light available in three colors (white, red, or green)
- Lenses come in three angles to cover an area of concentration
- Illuminates a large area with an even pattern of light and no shadows
- 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

### Black Anodized Aluminum Models



### Stainless Steel Models



<b>Supply Voltage</b>	12 to 30 V DC
<b>Lumens</b>	100–295*
<b>Construction</b>	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
<b>Operating Conditions</b>	-20 to +50 °C
<b>Environmental Rating</b>	IEC IP67, IP69K per DIN 40050
<b>Certifications</b>	

\*Depending on lens angle and color

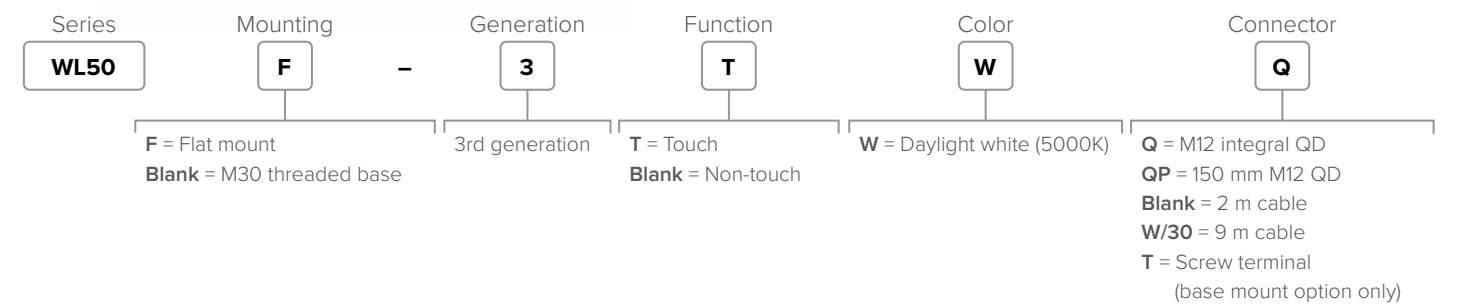
### Brackets



# WL50-3

## LED Work Lights

- Designed for desk, work station, enclosure, and small area lighting with optional flex arm mount for adjustable, industrial task lighting
- Standard or touch models available
- Touch models can be actuated with bare hands or gloves via the integrated capacitive switch on the face of the model
- Flat-mount or 30 mm base-mount models available
- Cabled, quick-disconnect, and terminal connection models available
- High lumen output and low power consumption at less than 3 watts



Dimming Accessories page 110



<b>Supply Voltage</b>	12 to 30 V DC
<b>Lumens</b>	300
<b>Construction</b>	Housing: Polycarbonate Connector: Nickel-plated QD or PVC-jacketed cable
<b>Operating Conditions</b>	-40 to +50 °C
<b>Environmental Rating</b>	IP65, IP67, and IP69K per DIN 40050-9
<b>Certifications</b>	

### Brackets





# Flex Arm Lights

## Bright LED Task Lights

- Designed for desk, work station, enclosure, and small area lighting
- Excellent, even light distribution for close-range lighting applications
- WL50 models offer touch and PWM control for on/off and dimming functions
- Touch models can be actuated with bare hands or gloves via the integrated capacitive switch on the face of the light
- Plug-and-play with 300 mm M12 cable connection directly into PSW-24-1 or other power supply (sold separately)
- 457 mm (18 in) long, vinyl-coated flexible arm



<b>Supply Voltage</b>	12 to 30 V DC
<b>Lumens</b>	300
<b>Construction</b>	Housing: Polycarbonate Flex Arm: Vinyl coated material
<b>Operating Conditions</b>	-40 to +50 °C
<b>Environmental Rating</b>	The illuminated side of the terminal models meets IP65, IP67, and IP69K per DIN 40050-9 when installed in an enclosure. Terminal connection points meet IEC IP00.
<b>Certifications</b>	

Flexible Length  
446.5 mm

WL50

118.1 mm

50 mm

**Supply Voltage**

12 to 30 V DC

**Lumens**

300

**Construction**

Housing: Polycarbonate  
Flex Arm: Vinyl coated material

**Operating Conditions**

-40 to +50 °C

**Environmental Rating**

The illuminated side of the terminal models meets IP65, IP67, and IP69K per DIN 40050-9 when installed in an enclosure. Terminal connection points meet IEC IP00.

**Certifications**



Flexible Length  
446.5 mm

S18

59.3 mm

23.5 mm

**Supply Voltage**

9 to 30 V DC

**Lumens**

20

**Construction**

Housing: Polycarbonate  
Flex Arm: Vinyl coated material

**Operating Conditions**

-40 to +60 °C

**Environmental Rating**

Indicator side of the terminal models meet IP67 and IP69K per DIN 40050-9 when installed in an enclosure. Screw connection points meet IEC IP00.

**Certifications**



## Brackets



SMB22A



SMBFLXCLAMPD



SMBFLXMAGR  
Protective Magnet Cover

Light	Base Connection or Bracket	Control	Models
WL50	Magnet	Touch	K-FLX18-50TWD MAGDQP
		No button	K-FLX18-50WDMAGDQP
	1/2-14 NPSM	Touch	K-FLX18-50TW12XQP
		No button	K-FLX18-50W12XQP
	2 × 1/4-20W 1.375 spacing	Touch	K-FLX18-50TWDXQP
		No button	K-FLX18-50WDXQP
	Flange	Touch	K-FLX18-50TW12FQP
		No button	K-FLX18-50W12FQP
	Quick connect	Touch	K-FLX18-50TWQCXQP
		No button	K-FLX18-50WQCXQP

Dimming Accessories page 110

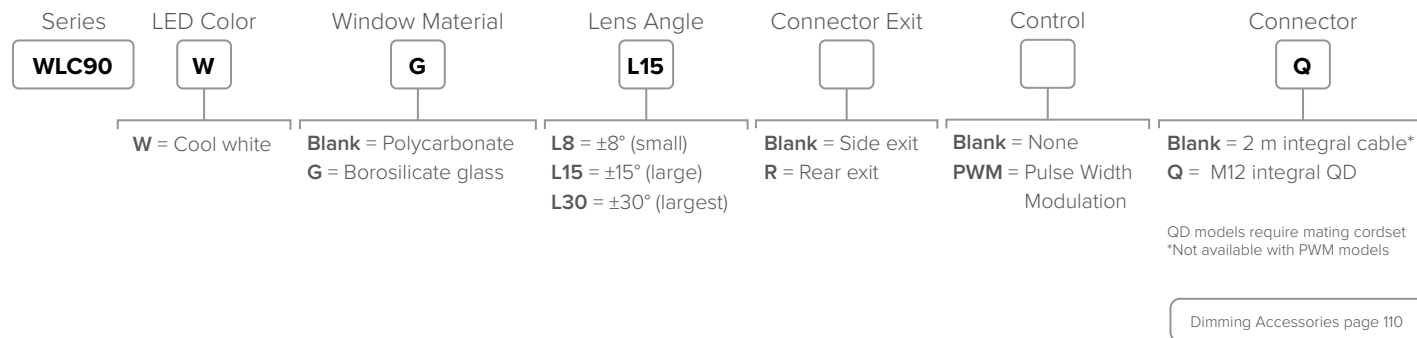
S18	Magnet	No button	K-FLX18-18WDMAGDQP
			K-FLX18-18W12XQP
	2 × 1/4-20W 1.375 spacing		K-FLX18-18WDXQP
			Flange
	Quick connect		K-FLX18-18WQCXQP



## WLC90

### Heavy-Duty LED Lights

- 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



<b>Supply Voltage</b>	12 to 30 V DC
<b>Lumens</b>	625
<b>Construction</b>	Housing: Nickel-plate aluminum Window: Polycarbonate or borosilicate glass
<b>Operating Conditions</b>	-40 to +70 °C
<b>Environmental Rating</b>	IP68, IP68G, IP69K per DIN 40050
<b>Certifications</b>	CE, UL LISTED, UK CA

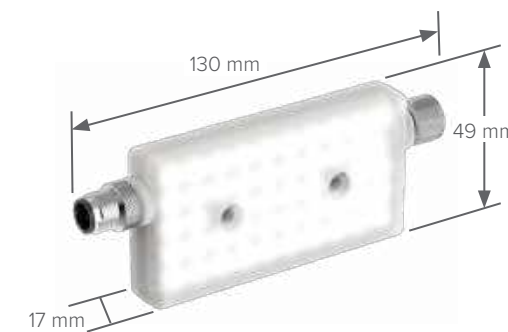
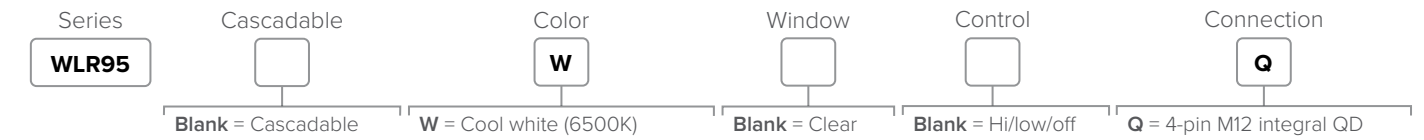
### Brackets



## WLR95

### Compact Area Lights

- Compact footprint delivers exceptional illumination for enclosures, conveyors, machines, and vision applications
- Daisy chain multiple units effortlessly with the unique double-ended cascade feature
- When it comes to lumens per dollar spent, it outshines the competition, making it the perfect fixer for any lighting oversight
- Featuring an impressive output relative to its size, this small, affordable light fits effortlessly into any space
- Engineered with a rugged, overmolded exterior and built to withstand harsh conditions



<b>Supply Voltage</b>	12 to 30 V DC
<b>Lumens</b>	600
<b>Construction</b>	Connector: Nickel-plated brass Housing: TPU (Removable cap covering female quick disconnect included)
<b>Operating Conditions</b>	-40 to +50 °C
<b>Environmental Rating</b>	IP65, IP67, IP68, UL Type 1
<b>Certifications</b>	CE, UL LISTED, UK CA, UL-NOM

### Brackets





# WLA-2

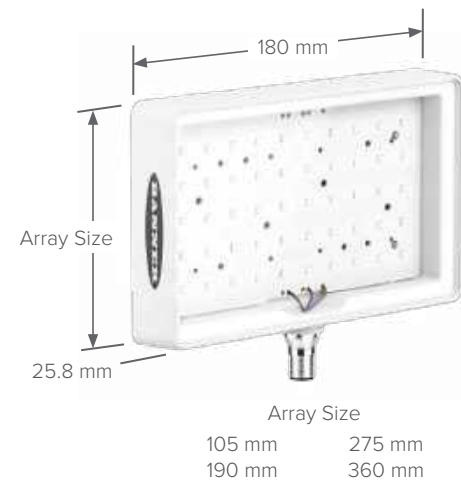
## LED Area Lights

- An LED dense array with high output ideal for area lighting, machine lighting, and machine vision
- Illuminates a large area with an even pattern of light and no shadows
- Rugged thermoplastic housing rated to IP69K for heavy duty washdown
- Encapsulated housing option rated IP68 for prolonged exposure to water and submersion
- Lensed models available for intense, close-range inspection or long-range projection
- Available in four sizes

Series	Color	Array Size (mm)	Window Material	Lens Angle*	Control	Connector
<b>WLA-2</b>	<b>W</b>	<b>105 x 180</b>	<b>D</b>			<b>Q</b>
	W = Daylight white WW = Warm white**	105 x 180 190 x 180 275 x 180 360 x 180	Blank = Clear D = Diffuse E = Encapsulated	Blank = No lenses L30 = ±30°	Blank = Hi/Low/Off PWM = Pulse Width Modulation	Q = 4-Pin M12 integral QD <small>QD models require mating cordset</small>

\*No lens option on encapsulated or diffuse window models  
\*\*No warm white option on encapsulated models

Dimming Accessories page 110



<b>Supply Voltage</b>	12 to 30 V DC
<b>Lumens</b>	800–4100*
<b>Construction</b>	Housing: PBT Window: Polycarbonate or polyurethane encapsulated Connector: Nickel-plated brass
<b>Operating Conditions</b>	Clear and Diffuse: –40 to +70 °C Encapsulated: –20 to +50 °C
<b>Environmental Rating</b>	Clear and Diffuse: IP67 and IP69K per DIN 40050-9 Encapsulated: IP67, IP68, and IP69K per DIN 40050-9
<b>Certifications</b>	

\*Depending on length and color

### Brackets



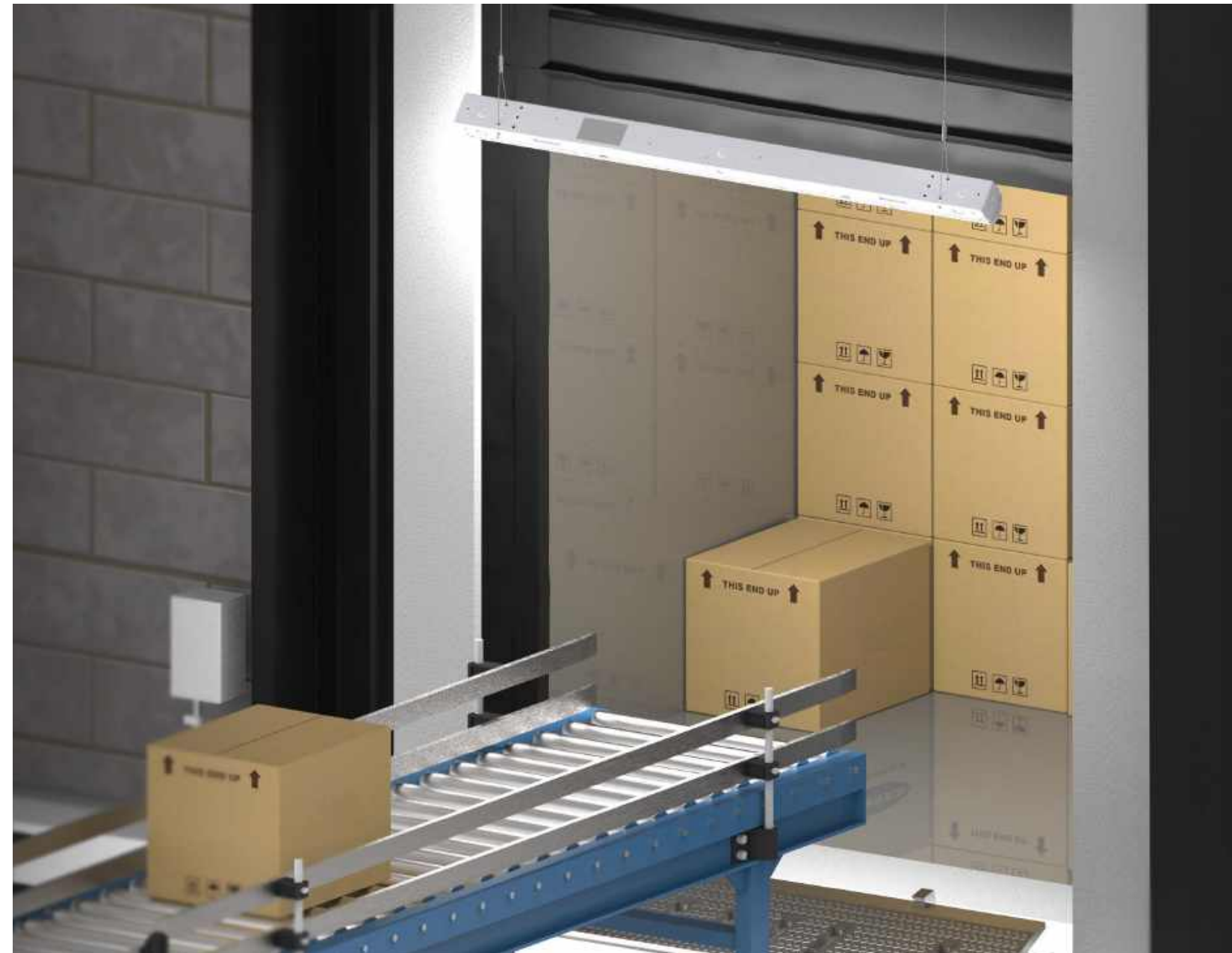
SMBBSSM



SMBBSRA



SMBWLAG  
Magnetic Mount  
(SMBWLAGR Protective cover for magnet sold separately)



# Tower Lights

## Selection Guide



pg. 46                      pg. 48                      pg. 52                      pg. 54

Series Name	TL30	TL50	TL70	TLF100
Segment Diameter (mm)	30	50	70	100
Mounting Hole Diameter (mm)	30	30	30	—
AC/DC	DC	AC or DC	AC or DC	DC
IP Rating	IP65	IP65, IP67	IP65	IP65, IP69K
Programmable		✓	✓	✓
Communication Protocol		IO-Link®	IO-Link® Modbus EtherNet/IP PROFINET	IO-Link®
Audible	✓	✓	✓	✓
Daylight Visible		✓		✓
Wireless			✓	
Modular Construction			✓	



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Series Name	TL50 Andon	CL50	TL15	WLS27
Segment Diameter (mm)	50	50	15	27
Mounting Hole Diameter (mm)	—	30	—	—
AC/DC	DC	DC	DC	DC
IP Rating	IP54	IP67	IP66, IP67, IP68	IP66, IP67, IP69K
Programmable		✓		✓
Communication Protocol		IO-Link®		IO-Link®
Audible	✓	✓	✓	
Daylight Visible				
Wireless	✓			
Modular Construction			✓	



Programmable LED indicators offer multiple color choices in a single housing

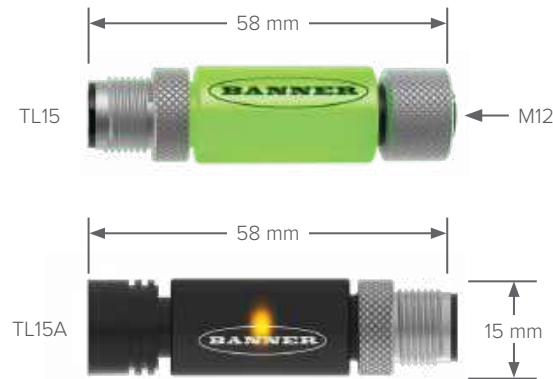


## TL15 In-Line Tower Light Indicators

- Modular 15 mm diameter indicator
- Multiple devices can be connected together to form a tower light
- Overmolded design for use in harsh environments
- Green, yellow, red, and blue models, each with a specific activation pin
- All signals pass through an M12 in-line connection, simplifying installation without disruption to I/O
- TL15A offers additional audible capability so users can receive color status and audio alerts locally

### TL15 In-Line Tower Light Models

Color (Input Active Pin)	Models	Color (Input Active Pin)	Models
Green (pin 4)	TL15G4Q	Red (pin 1)	TL15R1Q
Yellow (pin 1)	TL15Y1Q	Red (pin 4)	TL15R4Q
Red (pin 2)	TL15R2Q	Green (pin 4), yellow (pin 1), red (pin 2)	TL15GYRQ
Blue (pin 4)	TL15B4Q	Blue (pin 4), green (pin 1), yellow (pin 2), red (pin 5)	TL15BGYRQ
Green (pin 1)	TL15G1Q	Audible, no color (pin 5)	TL15A5Q
Yellow (pin 2)	TL15Y2Q	Audible, no color (pin 1)	TL15A1Q
Red (pin 5)	TL15R5Q	Audible, no color (pin 2)	TL15A2Q



<b>Supply Voltage</b>	12 or 24 V DC
<b>Bimodal Inputs</b>	PNP/NPN
<b>Vibration and Mechanical Shock</b>	Meets IEC 60068-2-6 requirements Vibration: 10 to 55 Hz, 0.5 mm amplitude, 5 minutes sweep, 30 minutes dwell Meets IEC 60068-2-27 requirements Shock: 15G 11 ms duration, half sine wave
<b>Operating Conditions</b>	-40 to +50 °C
<b>Environmental Rating</b>	IP66, IP67, IP68, NEMA/UL Type 1
<b>Certifications</b>	

### Brackets

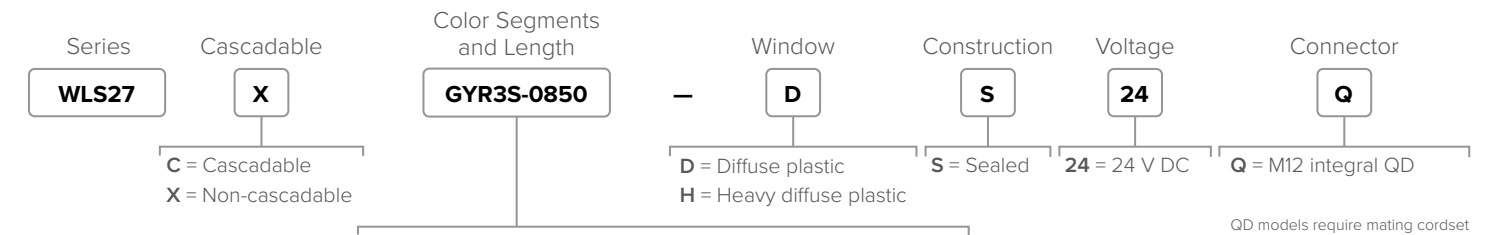


**LMBM12MAG** Attaches to M12 cordset end  
**LMBM12SP** Attaches to M12 cordset end  
**LMBS15MAG** Magnetic Mount  
**LMBS15SP**



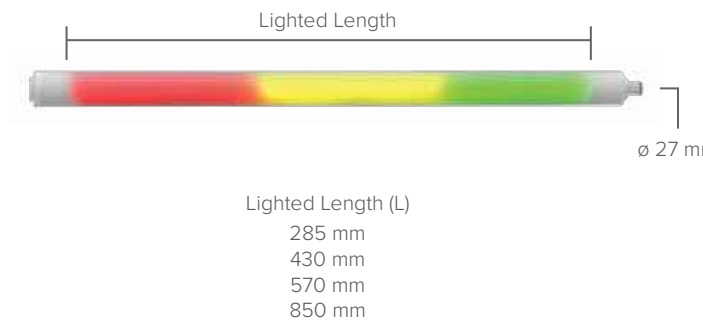
## WLS27 Segmented LED Strip Lights

- Ultra-bright, multi-segment indicator
- Models with two or three segments available in two different segment sizes
- Rugged, water-resistant IP69K per DIN 40050-9 rating
- Power can be daisy-chained to multiple lights
- Heavy diffuse housing option provides softer, more uniform light



GRX2S-0285 = Two 145 mm segments; green, red  
 GRX2S-0570 = Two 285 mm segments; green, red  
 GYR3S-0430 = Three 145 mm segments; green, yellow, red  
 GYR3S-0850 = Three 285 mm segments; green, yellow, red

QD models require mating cordset



<b>Supply Voltage</b>	24 V DC
<b>Lumens</b>	70–570*
<b>Construction</b>	Inner Housing: Clear anodized aluminum Outer Housing: FDA grade copolyester
<b>Operating Conditions</b>	-40 to +50 °C
<b>Environmental Rating</b>	IP66, IP67, IP69K per DIN 40050-9
<b>Certifications</b>	

\*Depending on length and color

### Brackets



**LMBWLS27EC** Clear Copolyester  
**LMBWLS27H**  
**LMBWLS27T**  
**LMBWLS27U** Clear Copolyester (Also available with magnet LMBWLS27U-MAG)  
**LMBWLS27SP** Clear Copolyester



# CL50 Series

## 50 mm Multicolor Column Lights

- Rugged, versatile, and easy-to-install multicolor indicators
- Bright, easy-to-see operator guidance and indication of equipment status
- Audible models available

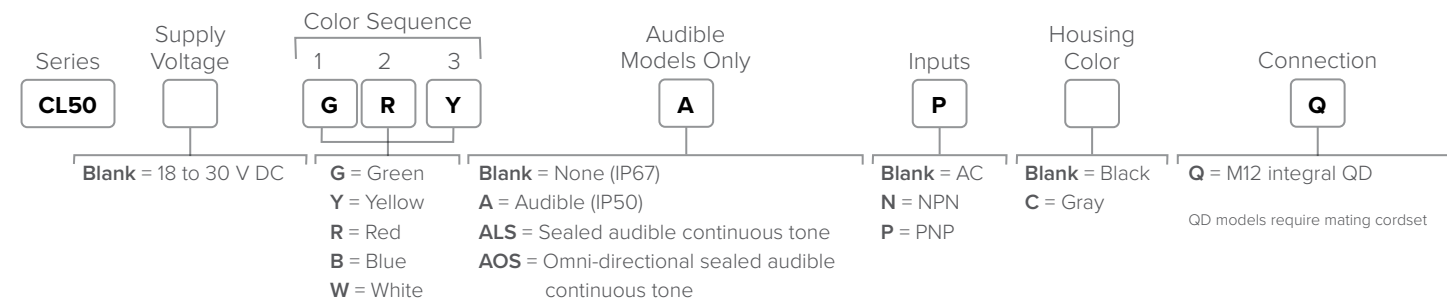


# Programmable Models

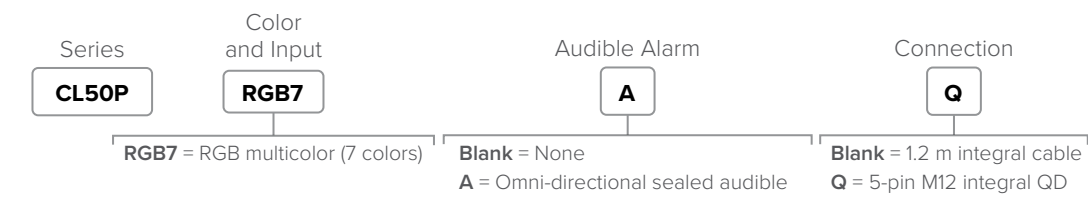
## Same Functionality as Standard with Additional Features Below

- Programmable using Pro Editor Software or dynamically controlled with IO-Link
- Customized indication possibilities, including color, flash patterns, and light intensity
- Audible models available with sealed, omni-directional audible element

### Standard Models



### Programmable Models



**Supply Voltage** 18 to 30 V DC

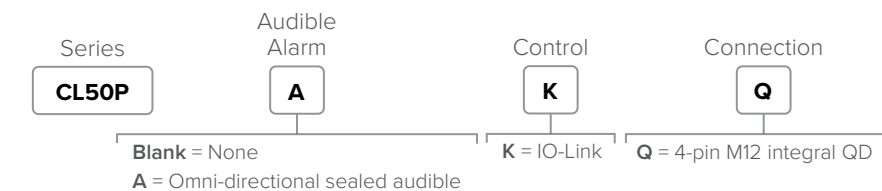
**Construction** Polycarbonate

**Operating Conditions** Non-Audible: -40 to +50 °C  
Audible: -20 to +50 °C

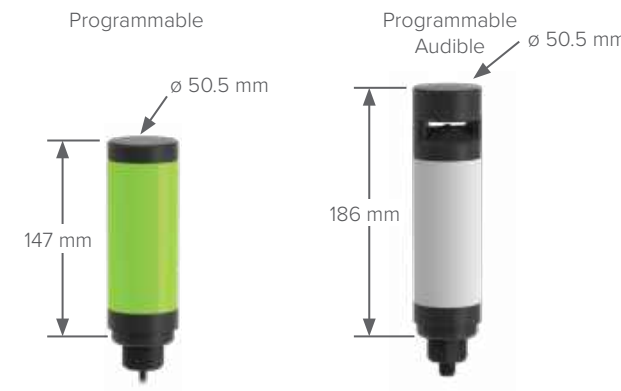
**Environmental Rating** General-Purpose and Sealed Audible: IEC IP67  
Standard Audible: IEC IP50

**Certifications**

### Programmable Models with IO-Link



### Brackets



**Supply Voltage** Programmable: 12 to 30 V DC  
IO-Link: 18 to 30 V DC

**Construction** Polycarbonate

**Operating Conditions** Non-Audible: -40 to +50 °C  
Audible: -20 to +50 °C

**Environmental Rating** IP65, UL Type 4X

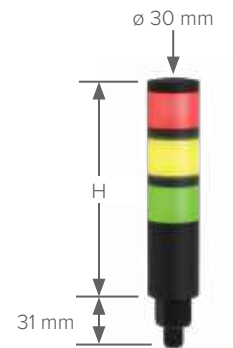
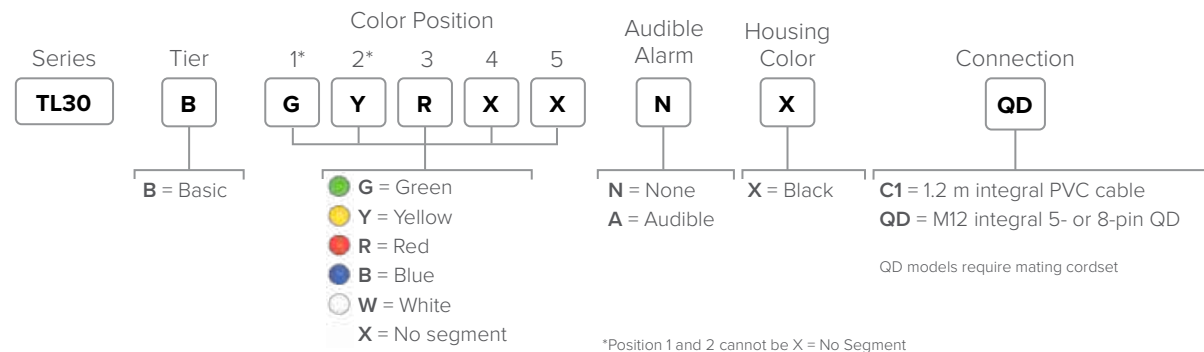
**Certifications**



## TL30

### 30 mm LED Tower Light with Optional Alarm

- Slim design, affordable, and easy-to-install multi-segment tower lights
- Illuminated segments provide easy-to-see operator guidance and indication of equipment status
- Devices are completely self-contained; no controller needed
- No assembly required; mounting nut and gasket supplied



Tower Height (H)	
2 colors	100 mm
3 colors	127 mm
4 colors	154 mm
5 colors	181 mm

<b>Supply Voltage</b>	12 to 30 V DC Maximum current per LED segment: 40 mA Omni-Directional Sealed Audible Alarm: 20 mA maximum current
<b>Construction</b>	Base, Segments, and Audible: UV-stabilized polycarbonate Grommet: TPV Mounting Nut: PBT Sealing Gasket: PVC/NBR/CR
<b>Operating Conditions</b>	-40 to +50 °C
<b>Environmental Rating</b>	IP65*
<b>Certifications</b>	CE, UL LISTED, UK CA

\*Models also meet UL Type 4X when mounted in suitable enclosure

### Brackets

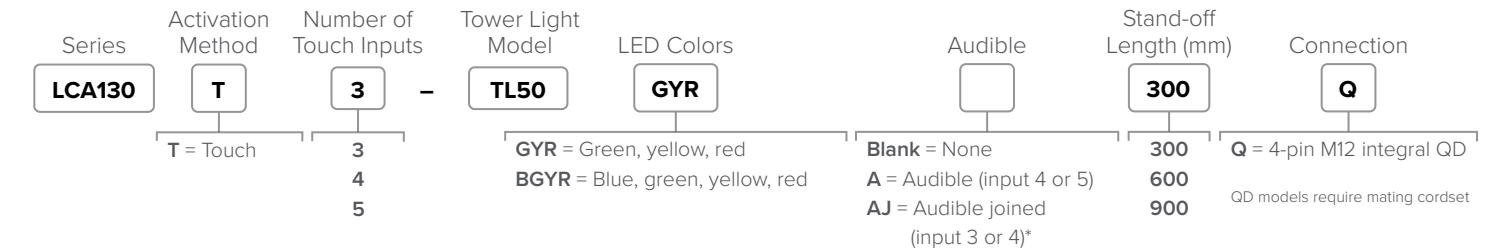


## TL50 Andon

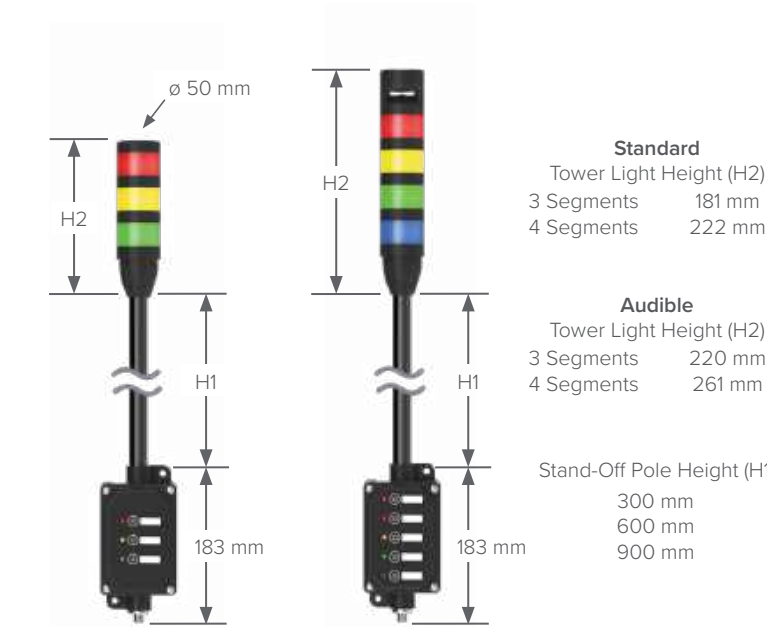
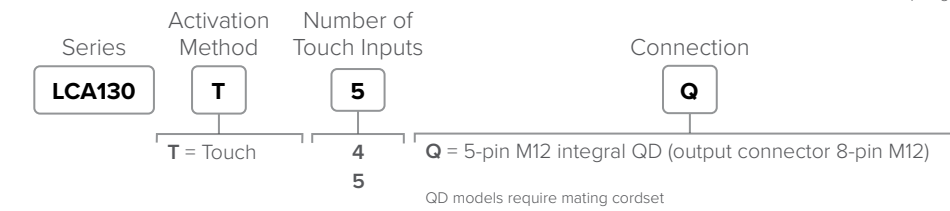
### 50 mm Pre-assembled Tower Lights

- Model options for 3 or 4 color segments, with or without omnidirectional audible
- Tower light segments appear grey when powered off, eliminating false indication from ambient conditions
- Available in two color combinations: green, yellow, and red or blue, green, yellow and red
- Simple to install, pre-assembled devices that are available in 3 lengths
- Pre-assembled control box has capacitive touch buttons as well as status LEDs to mimic the tower light status color and animation

### Preassembled Tower Light with Control Box Models



### Standalone Control Box Models



<b>Supply Voltage</b>	18 to 30 V DC
<b>Audible Intensity</b>	92 dB at 1 m
<b>Construction</b>	Polycarbonate
<b>Operating Conditions</b>	Non-Audible: -40 to +50 °C Audible: -20 to +50 °C
<b>Environmental Rating</b>	Assembly: IP54 Stand-alone tower light: IP65
<b>Certifications</b>	CE, UL LISTED, UK CA



# TL50 Series

## 50 mm General Purpose Tower Lights

- Bright, uniform lighted segments with ten color choices available
- Available with standard, sealed, or omni-directional audible
- DC models work down to 12 volts, allowing for use in battery-powered mobile equipment
- Audible alarm: continuous, pulsed, and staccato models available
- Omni-directional audible models provide clear annunciation in the noisiest environments



### Standard Models

Inputs	Audible	Connection	LED Colors	Models
Bimodal (NPN or PNP)	None	4-pin M12 integral QD	Red	TL50RQ
			Green, red	TL50GRQ
			Green, yellow, red	TL50GYRQ
		5-pin M12 integral QD	Blue, green, yellow, red	TL50BGYRQ
	8-pin M12 integral QD	White, blue, green, yellow, red	TL50WBGYRQ	
	Standard	4-pin M12 integral QD	Red	TL50RAQ
			Green, red	TL50GRAQ
			5-pin M12 integral QD	Green, yellow, red
8-pin M12 integral QD			Blue, green, yellow, red	TL50BGYRAQ
			White, blue, green, yellow, red	TL50WBGYRAQ

Select models available with AC supply voltage. Search TL50Z.



<b>Supply Voltage</b>	Standard: 18 to 30 V DC or 100 to 240 V AC Compact: 12 to 30 V DC or 21 to 27 V AC; 100 to 240 V AC Beacon: 12 to 30 V DC, 24 V AC, or 100 to 240 V AC
<b>Construction</b>	Bases and Covers: ABS Light Segment: Polycarbonate
<b>Operating Conditions</b>	General-Purpose: -40° to +50 °C Standard and Sealed Audible: -20° to +50 °C
<b>Environmental Rating</b>	General-Purpose and Sealed Audible: IP67 Standard Audible: IP50
<b>Certifications</b>	CE, UL LISTED, UK CA

### Brackets



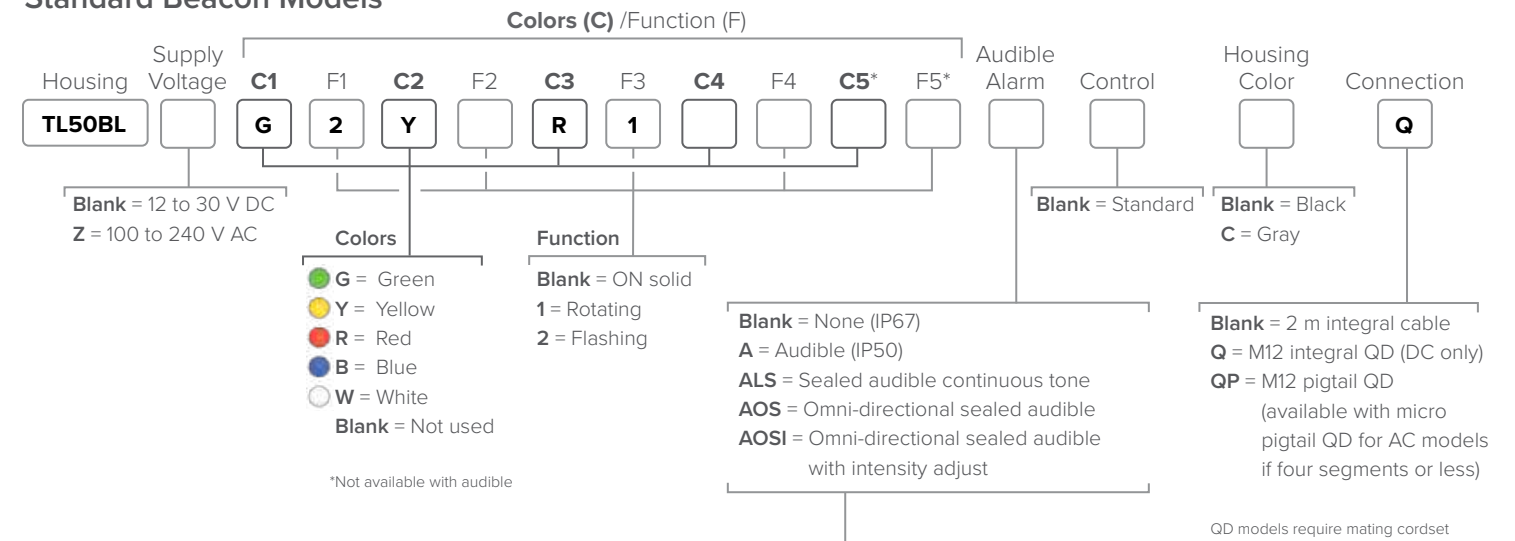
# TL50BL and TL50C Models

## 50 mm Beacon and Compact Tower Lights

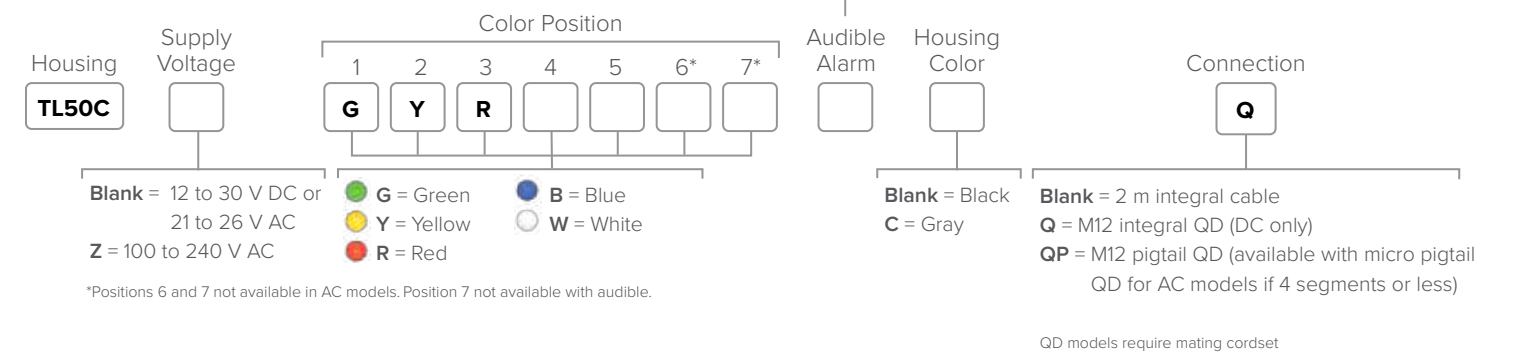
- Housing is UV stabilized, making it suitable for use in outdoor environments
- Highly visible indication for indoor or outdoor applications
- Compact, stylish design with rotating and flashing options
- Compact tower lights are half the height of standard TL50 models
- Models available with rugged, water-resistant IP67 housing



### Standard Beacon Models



### Standard Compact Models



Laser Marking Available



Note: Not all models are shown. Visit bannerengineering.com for other available models.

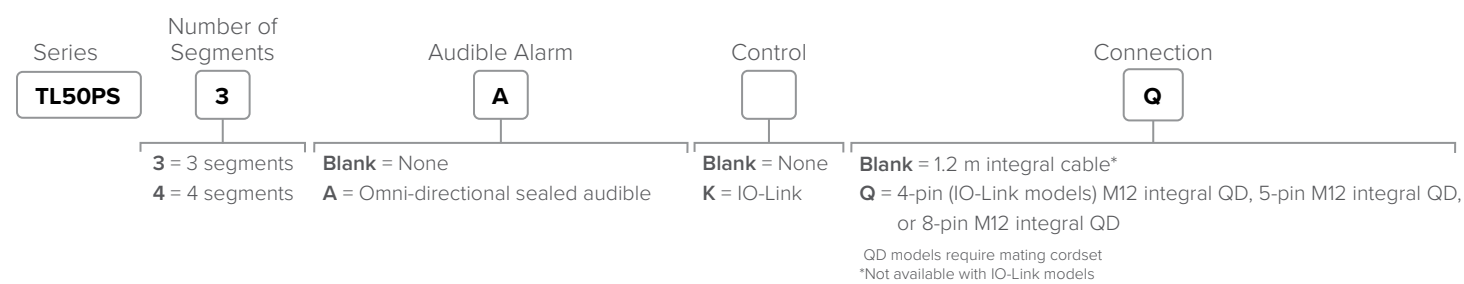


## Pro Select Models

50 mm Programmable Tower Lights

- Rugged and easy-to-install three- and four-segment tower lights
- Advanced animations like level, timer, counter, and action mode provide dynamic visual response
- Parameter and process data options on IO-Link models enable fast and complete control of functionality
- Programmable using Banner's Pro Editor Software and Pro Converter Cable
- Audible models available with omni-directional audible element

### Pro Select Models



<b>Supply Voltage</b>	Programmable: 10 to 30 V DC IO-Link: 18 to 30 V DC
<b>Construction</b>	Bases and Covers: ABS Light Segment: Polycarbonate
<b>Operating Conditions</b>	Non-Audible: -40 to +50 °C Standard and Sealed Audible: -20 to +50 °C
<b>Environmental Rating</b>	NEMA/UL Type 13 Non-Audible and Sealed Audible: IP67 Standard Audible: IP50
<b>Certifications</b>	

### Brackets

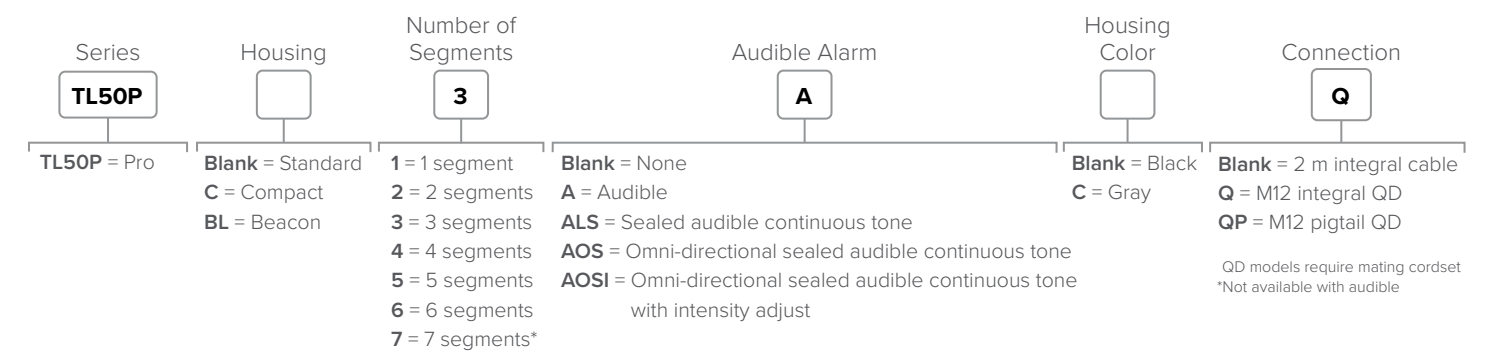


## Advanced Feature Models

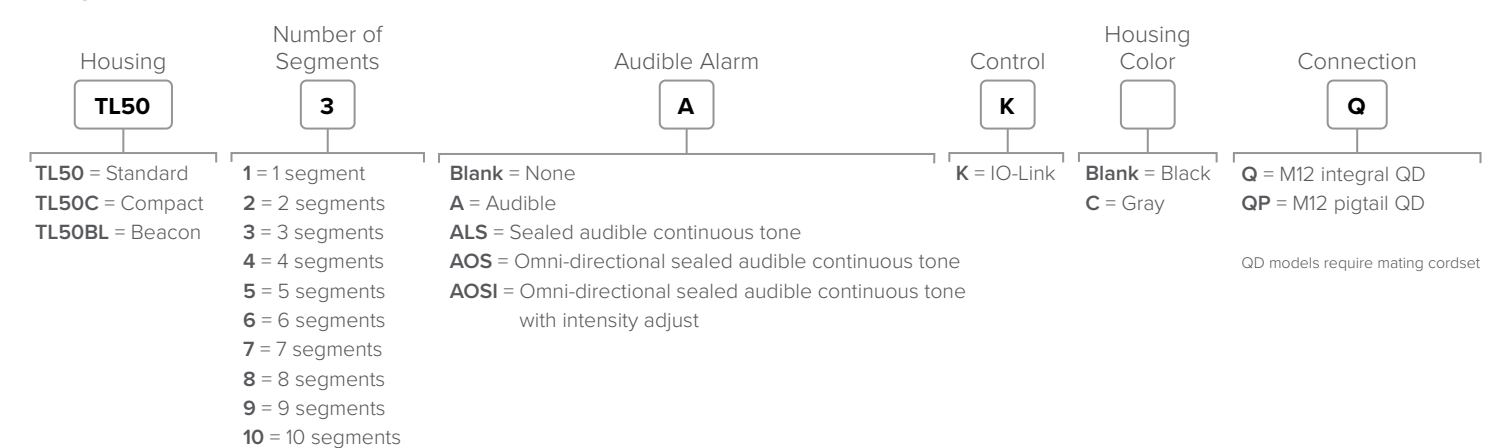
50 mm Programmable Tower Lights for Specialized Applications

- Up to ten segments (depending on model) for advanced status signaling and high-resolution process details
- Advanced animations like level, timer, counter, and action mode provide dynamic visual response
- Parameter and process data options on IO-Link models enable fast and complete control of functionality
- Discrete models are programmable using Banner's Pro Editor Software and Pro Converter Cable
- Audible models available with standard, sealed, or omni-directional audible element
- Compact and beacon models are shorter and have a more intense display than standard models

### Programmable Models



### Programmable Models with IO-Link





# TL70 Series

## 70 mm General Purpose Tower Lights

- Bright, colored LEDs for long-range visibility
- Light segments appear gray when off to eliminate false indication from ambient light
- Modular design and simple wiring for fast field configuration; preassembled models also available
- Top-mounted audible modules from 75 to 101 dB, including multi-tone and programmable audible models, allow for custom alerts or announcements; all work with the same standard bases
- Wireless base and segment models quickly enable remote monitoring and control of status lights; unleash IIoT capability
- Match your machine with a choice of black or gray housing

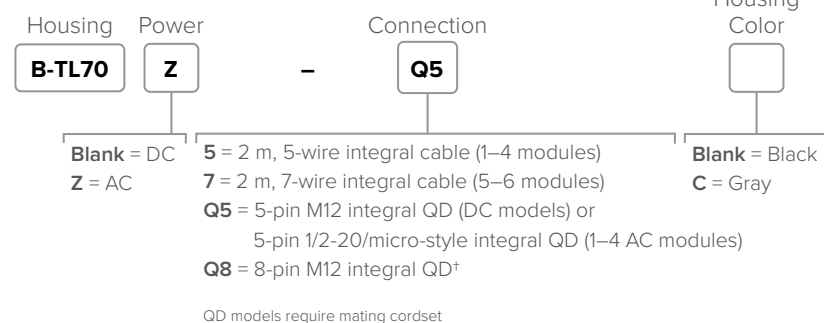


# Programmable Models

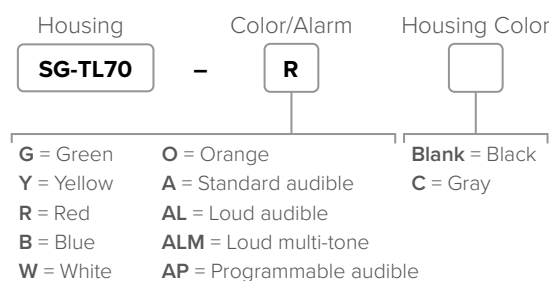
## Same Functionality as Standard with Additional Features Below

- Programmable series tower lights provide classic segment control as well as advanced status indication that adds nuance to the visual factory
- Multiple communication options make integrating into existing systems easy, allowing users to configure and control color, flashing, rotation, light intensity, and audible alerts, delivering dynamic indication throughout a facility using a choice of models:
  - Modbus RTU: Integrates into Banner's Snap Signal ecosystem for easy equipment monitoring and status communication without a PLC
  - Ethernet communication via EtherNet/IP, Modbus TCP, or PROFINET: Takes advantage of industrial Ethernet's high bandwidth and scalability using separate data and power connections
  - Power over Ethernet (PoE) via with EtherNet/IP, Modbus TCP, or PROFINET: Eliminates the need for a separate power supply by using one cordset connected to a PoE-equipped Ethernet switch
  - IO-Link: Provides almost unlimited custom configuration options, with nearly infinite RGB-blended colors plus advanced animations like run and level modes that provide dynamic response to changing machine conditions

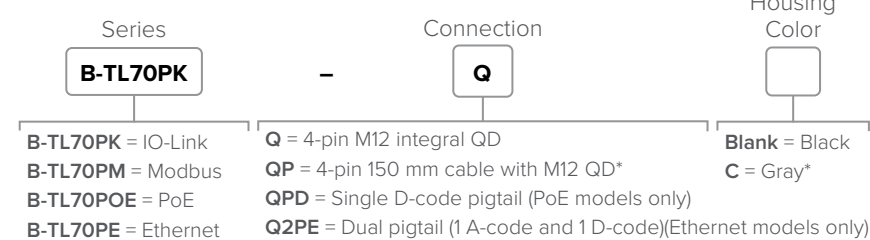
### Bases or Base Models



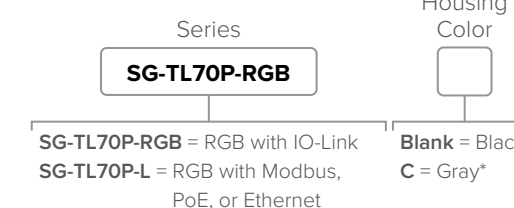
### Segments or Segment Models



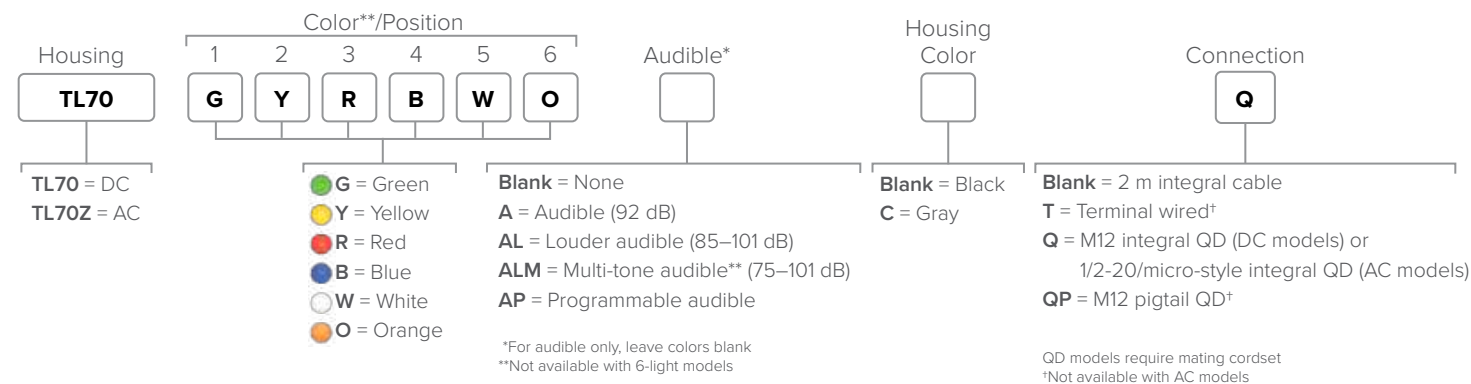
### Programmable Bases or Base Models



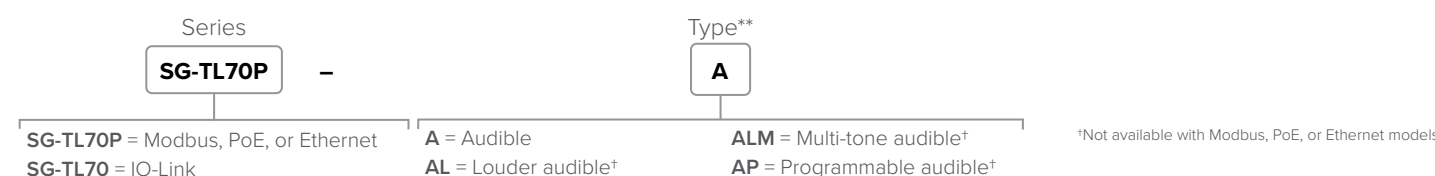
### Programmable Segments or Segment Models



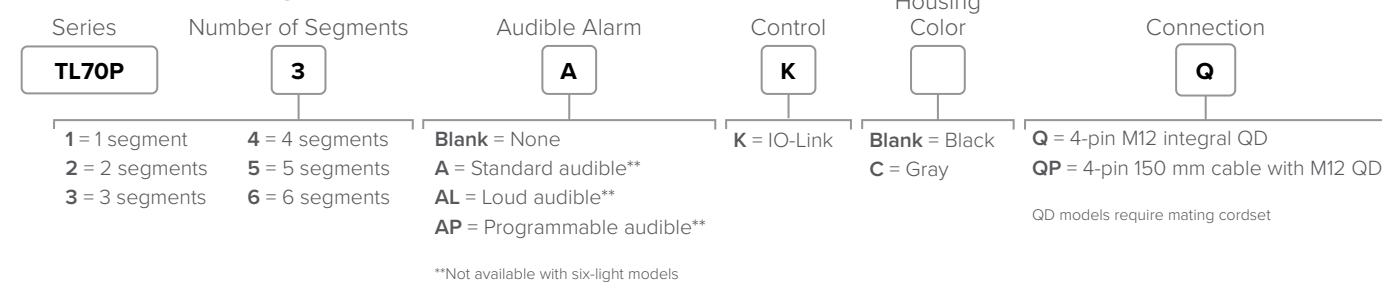
### Preassembled Standard Models



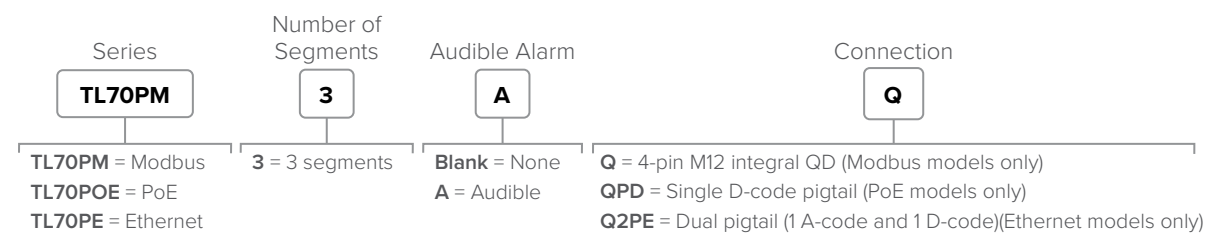
### Optional Programmable Audible Models



### Preassembled Programmable Models with IO-Link



### Preassembled Programmable Models with Modbus, PoE, or Ethernet



**Supply Voltage** | 12 to 30 V DC or 100 to 240 V AC

**Construction** | Polycarbonate

**Operating Conditions** | -40 to +50 °C

**Environmental Rating** | IP65

**Certifications** | CE, UL LISTED, UK CA

For compatible brackets see page 50

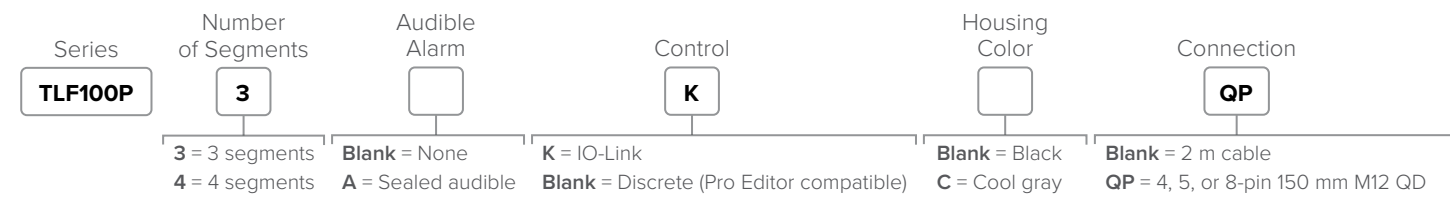


# TLF100 Series

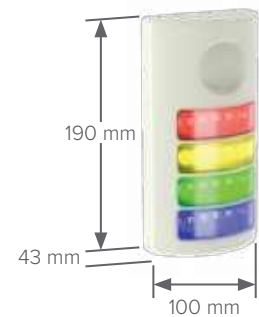
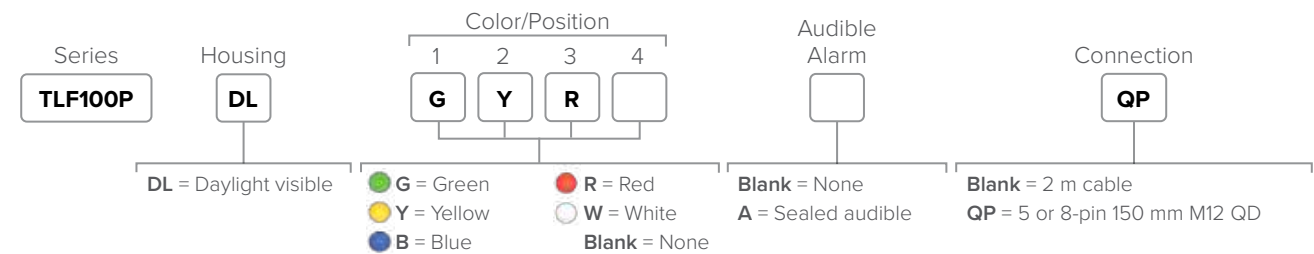
## Programmable Flush Mount Tower Lights

- Rugged, versatile, and easy-to-install three and four-segment tower lights
- Flush mounting allows for easy integration to machines and equipment
- Illuminated segments provide easy-to-see operator guidance and indication of equipment status
- Audible models available with sealed audible element, fourteen selectable audible tones, and audible intensity control
- IO-Link gives full access to color, flashing, and dimming settings, as well as advanced animations like run and level modes, which provide dynamic response to changing machine conditions
- Daylight Visible models use bright, single-color LEDs to provide highly visible indication for indoor or outdoor applications

### Programmable Models



### Programmable Daylight Visible Models



**Supply Voltage** Programmable: 12 to 30 V DC  
IO-Link: 18 to 30 V DC

**Construction** Polycarbonate

**Operating Conditions** -40 to 50 °C

**Environmental Rating** IP65, IP69K per DIN 40050-9, and UL Type 4X

**Certifications** CE, UL LISTED, UK CA

### Brackets



**SMBTLF100F**  
Mounted Vertically



**SMBTLF100F**  
Mounted Horizontally



# Indicators

## Selection Guide



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Series Name	S18L/S22L	S22	K30	K50	K70	K90	K100
Housing Diameter (mm)	18 or 22	22	30	50	70	90	100
Mounting Hole Diameter (mm)	18/22	22	30	30	30	30	36
AC/DC	DC	DC	DC	DC	DC	DC	AC or DC
IP Rating	IP67, IP69K	IP66, IP67, IP69K	IP67, IP69K	IP65, IP67, IP69K	IP65	IP66, IP67	IP69K
Programmable		✓	✓	✓		✓	✓ (DC models only)
Communication Protocol			IO-Link® Modbus	IO-Link® Modbus		IO-Link®	
Audible				✓			✓
Daylight Visible	✓			✓			✓



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Series Name	GS60	S15L	WLF12	WLS15	WLS27	RLS27	WLS28
Housing Diameter (mm)	60	15	12	15	27	27	28
Mounting Hole Diameter (mm)	30	—	—	—	—	—	—
AC/DC	DC	DC	DC	DC	DC	DC	DC
IP Rating	IP66, IP67	IP66, IP67, IP68	IP66, IP67, IP69K	IP66, IP67	IP66, IP67, IP69K	IP67, IP69K	Unsealed: IP50 Sealed: IP67, IP69K
Programmable	✓	✓	✓	✓	✓	✓	✓
Communication Protocol		Modbus	IO-Link® Modbus	IO-Link® Modbus	IO-Link®		IO-Link®
Audible							
Daylight Visible						✓	



Programmable LED indicators offer multiple color choices in a single housing



## S15L Series In-Line Sensor Status Indicators

- Connect directly to or in-line with a sensor for 360-degree visibility of status
- Standard models available with two-color indication to mimic output status
- Programmable models available with Modbus control, RGB LEDs, and five animations (steady, flash, two-sided flash, intensity sweep, and two-color shift)
- Highly visible body allows workers to identify and troubleshoot problems faster
- Overmolded design is reliable and rugged to withstand harsh industrial environments

### Programmable Model

Housing	Style	Control	Connection	Model
S15	Programmable	Serial Modbus RS-485	4-pin M12 integral male/female quick-disconnect	<b>S15LPSQ</b>

### Standard Models

Power ON (Color 1)	Input Active (Color 2)	Input Type	Connection	Models
Green	Yellow	PNP	4-pin male/female M12 quick disconnect	<b>S15LGYPQ</b>
		NPN		<b>S15LGYNQ</b>
	Red	PNP		<b>S15LGRPQ</b>
		NPN		<b>S15LGRNQ</b>
Red	Green	PNP		<b>S15LRGPQ</b>
Yellow	Green	PNP		<b>S15LYGPQ</b>



#### Supply Voltage

Programmable: 12 to 30 V DC  
Standard: 10 to 30 V DC

#### Vibration and Mechanical Shock

Meets IEC 60068-2-6 requirements  
Vibration: 10 to 55 Hz, 0.5 mm amplitude, 5 minutes sweep, 30 minutes dwell  
Meets IEC 60068-2-27 requirements  
Shock: 15G 11 ms duration, half sine wave

#### Operating Conditions

-40 to +50 °C

#### Environmental Rating

IP66, IP67, IP68, NEMA/UL Type 1

#### Certifications



### Brackets



**LMBM12MAG**  
Attaches to M12 cordset end



**LMBM12SP**  
Attaches to M12 cordset end



**LMBS15MAG**  
Magnetic Mount



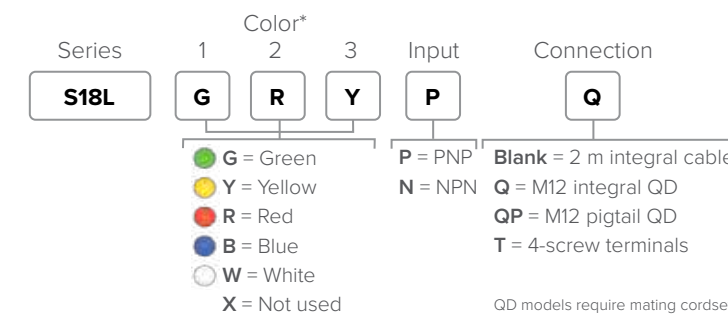
**LMBS15SP**



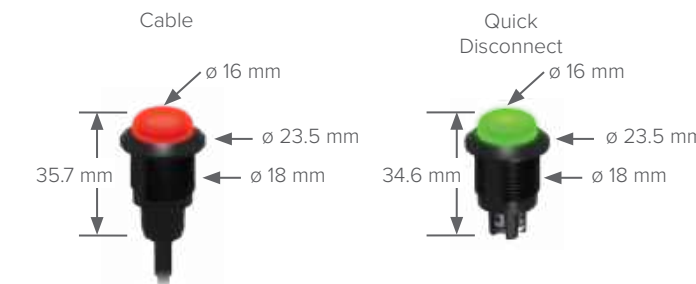
## S18L Series 18 mm Barrel Indicators

- Gasketed face flange for sealing to enclosures
- Daylight Visible models are also available for areas with high levels of ambient light
- M12 connector models available for plug-and-play indication
- 10 to 30 V DC operating range allows for use in battery-powered mobile applications
- Terminal-wired models available to simplify panel wiring
- Up to three independent colors in one unit
- Translucent face appears gray when off to avoid false indication
- Multiple colors available, including green, red, yellow, blue, white, orange

### Standard Models



\*Single-color models are available and should be ordered as PNP, but can be wired for either PNP or NPN input



### Brackets



**SMB18A**  
Use with S18L



**SMB18FA**  
Use with S18L



**SMBAMS18RA**  
Use with S18L



**SMBC18**  
Use with S18L on 28 mm Pipe

#### Supply Voltage

General Purpose: 10 to 30 V DC  
High-Intensity: 9 to 30 V DC

#### Construction

Housing: UV stabilized polycarbonate  
Mounting Nut: PBT  
Sealing Washer: Nitrile

#### Operating Conditions

General Purpose: -40 to +50 °C  
Other: -40 to +60 °C

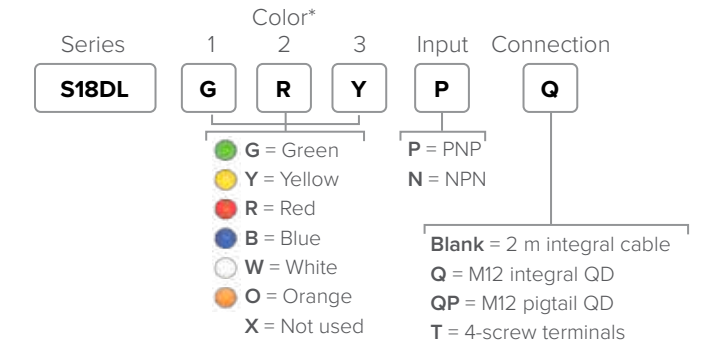
#### Environmental Rating

IP67, IP69K, per DIN 40050

#### Certifications



### Daylight Visible Models



QD models require mating cordset

Laser Marking Available



# S22L Series

## 22 mm Barrel Indicators

- Gasketed face flange for sealing to enclosures
- Daylight Visible models are also available for areas with high levels of ambient light
- M12 connector models available for plug-and-play indication
- 10 to 30 V DC operating range allows for use in battery-powered mobile applications
- Terminal-wired models available to simplify panel wiring
- Up to three independent colors in one unit
- Translucent face appears gray when off to avoid false indication
- Multiple colors available, including green, red, yellow, blue, white, orange

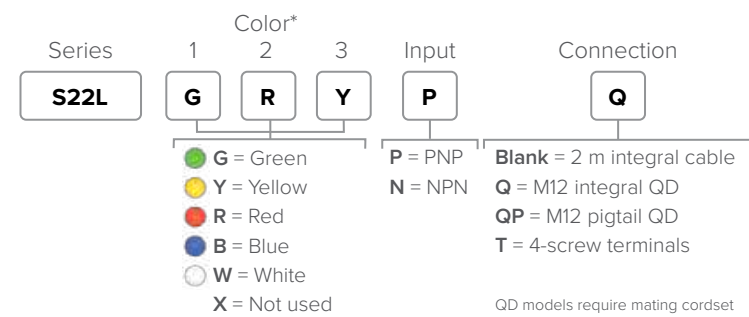


# Programmable Models

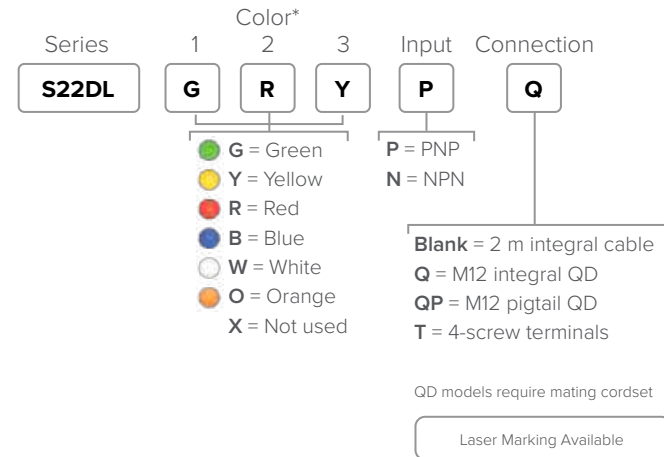
## 22 mm Flush Mount Indicators

- Bright, even indication in up to fourteen colors
- Programmable using Banner Pro Editor Software and Pro Converter Cable
- Seven-color models have flashing input control
- Models constructed from FDA grade materials available for use in food and beverage applications
- Terminal connector options for fast, economical installation in panels
- Flush design matches S22 Touch buttons, see page 82

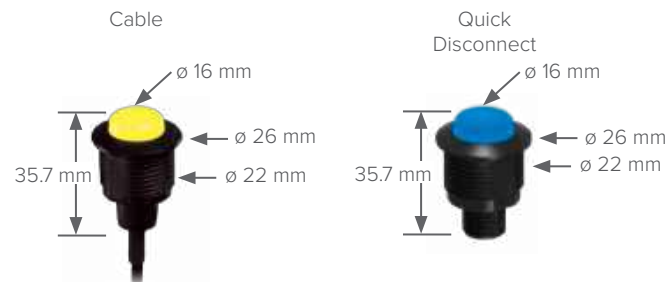
### Standard Models



### Daylight Visible Models



\*Single-color models are available and should be ordered as PNP, but can be wired for either PNP or NPN input



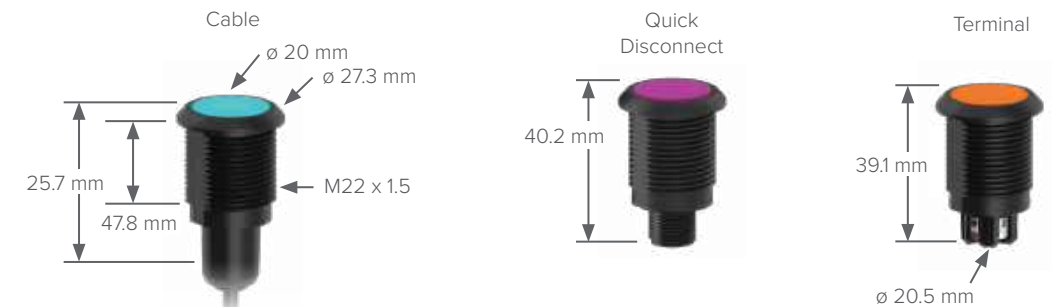
<b>Supply Voltage</b>	General Purpose: 10 to 30 V DC High-Intensity: 9 to 30 V DC
<b>Construction</b>	Housing: UV stabilized polycarbonate Mounting Nut: PBT Sealing Washer: Nitrile
<b>Operating Conditions</b>	General Purpose: -40 to +50 °C Other: -40 to +60 °C
<b>Environmental Rating</b>	IP67, IP69K, per DIN 40050
<b>Certifications</b>	CE, UL LISTED, UK CA

### Brackets



\*7 colors = Green, yellow, red, blue, white, cyan, magenta with flash input  
14 colors = Above colors, plus, orange, amber, lime green, spring green, sky blue, violet, and rose

Laser Marking Available



<b>Supply Voltage</b>	10 to 30 V DC
<b>Construction</b>	Housing: Polycarbonate or FDA grade plastic, depending on model Translucent dome: Polycarbonate or FDA grade plastic, depending on model Mounting Nut: PBT or FDA food grade plastic
<b>Operating Conditions</b>	-40 to +50 °C
<b>Environmental Rating</b>	Standard: UL Type 4x, 13 FDA Grade: UL Type 4x Cable, Pigtail, QD models: IP66, IP67, IP69K per DIN 40050-9 Terminal: IP66, IP69K per DIN 40050-9 on front only
<b>Certifications</b>	CE, UL LISTED, UK CA



## K30 Series

### 30 mm Multicolor Indicators

- Bright, even indication in three standard colors
- Polycarbonate housing protects against impact and withstands high-pressure, high-temperature washdown to ensure reliable performance in challenging environments
- Simple wiring plan enables quick installation and allows users to consolidate controller outputs



## Programmable Models

### Same Functionality as Standard with Additional Features Below

- Bright, even indication in seven standard colors, with additional color and animation options available with the exclusive Pro Editor Software
- K30 Programmable devices with PICK-IQ™ and IO-Link give full access to color, flashing, rotating, and dimming settings as well as advanced animations such as dynamic sequence mode and LED control
- PICK-IQ brings faster response speed and simplified programming to Modbus RTU communication

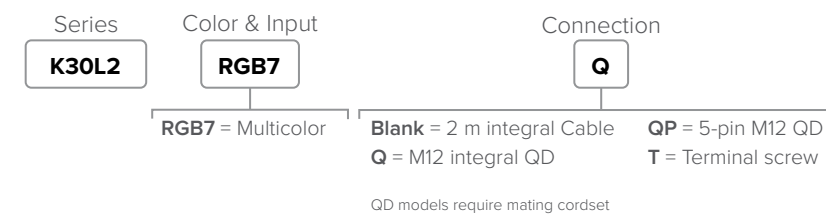


### Standard Models

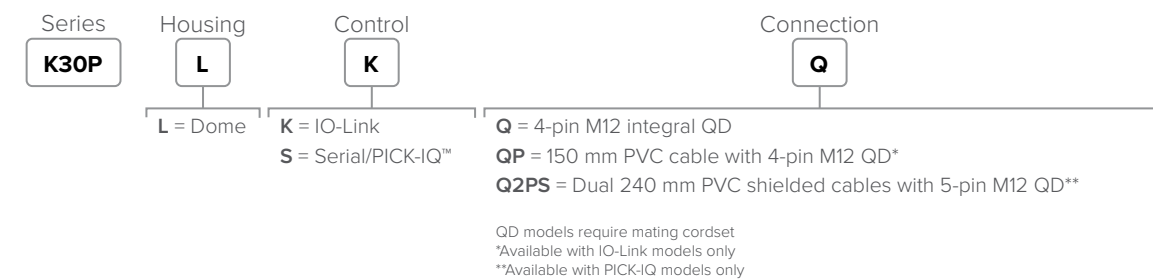
Number of Colors	Colors	Input	Connection	Models
3	Green, red, yellow	PNP	4-pin M12 integral QD	<b>K30LGRYPQ</b>
		NPN		<b>K30LGRYNQ</b>

QD models require mating cordset

### Programmable Models



### Programmable Models with IO-Link or PICK-IQ



**Supply Voltage** | 10 to 30 V DC  
**Construction** | Polycarbonate  
**Operating Conditions** | -40 to +50 °C  
**Environmental Rating** | IP66, IP67, IP69K  
**Certifications** | CE, UL LISTED, UK CA

### Brackets



**Supply Voltage** | 10 to 30 V DC  
**Construction** | Polycarbonate  
**Operating Conditions** | -40 to +50 °C  
**Environmental Rating** | IP66, IP67, IP69K  
**Certifications** | CE, UL LISTED, UK CA

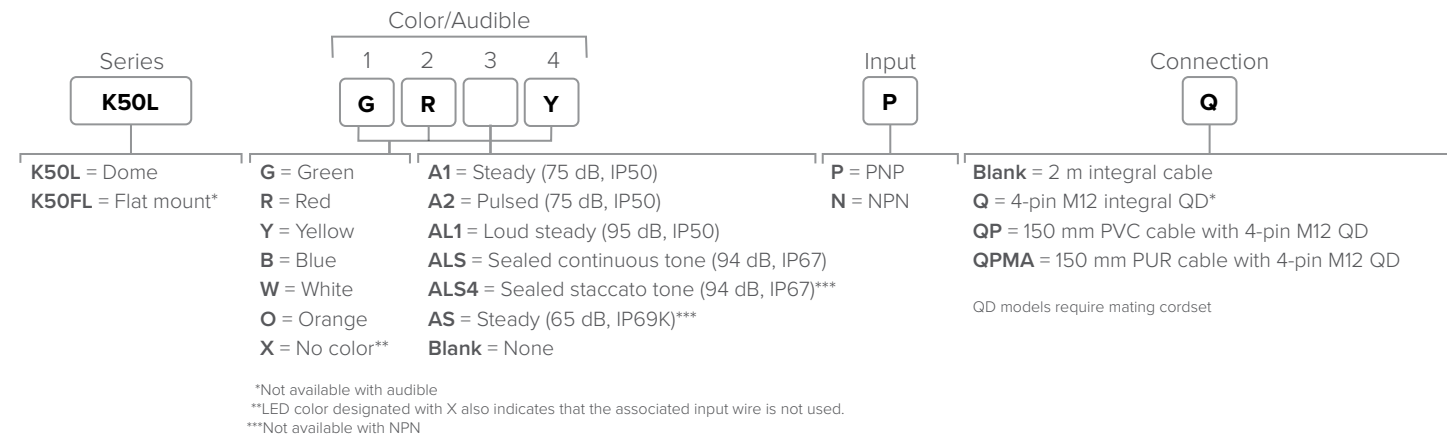


## K50 Series

### 50 mm Multicolor Indicators

- Bright, uniform indicator light
- Displays up to five colors
- Compact models available for lower profile applications
- Bimodal inputs (PNP/NPN), depending on source wiring
- Models with integrated audible alarm available
- Variety of connector options

### Standard Models



Supply Voltage	18 to 30 V DC
Construction	Polycarbonate
Operating Conditions	-40 to +50 °C
Environmental Rating	Standard Dome: IP66, IP67, IP69K Standard Audible Dome: IP50 Sealed Audible Dome: IP66, IP67, IP69K Compact: IP66, IP67, IP69K
Certifications	

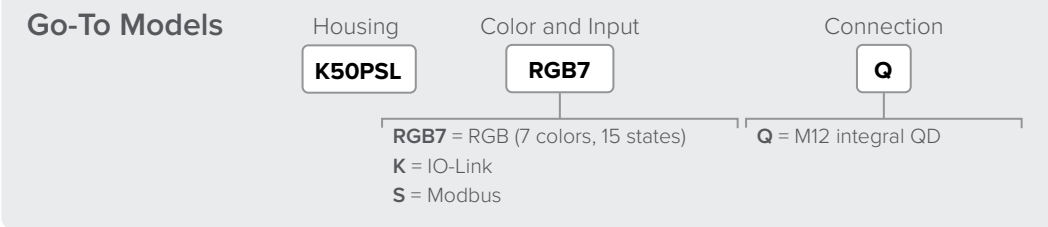
### Brackets



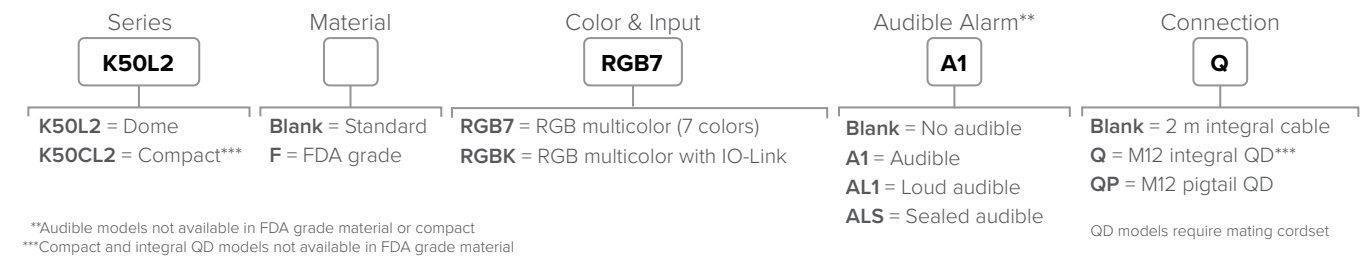
## Programmable Models

### Same Functionality as Standard with Additional Features Below

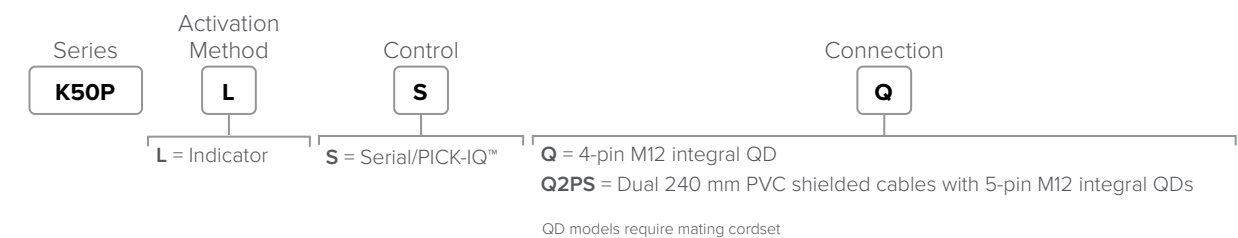
- Seven default colors in one device (green, red, yellow, blue, white, cyan, magenta)
- Programmable using Banner's Pro Editor Software and Pro Converter Cable
- Compact models available for lower profile applications
- Models constructed from FDA grade materials available
- PICK-IQ™ brings faster response speed and simplified programming to Modbus RTU communication
- IO-Link models give full access to color, flashing, rotating, and dimming settings as well as advanced animations such as dynamic sequence mode and LED control



### Programmable Models



### Programmable Models with PICK-IQ



Supply Voltage	RGB7: 10 to 30 V DC RGBK: 24 V DC ±25%
Construction	Standard: Polycarbonate FDA: Copolyester
Operating Conditions	-40 to +50 °C
Environmental Rating	Dome: Standard: IP66, IP67, IP69K Standard Audible: IP50 Sealed Audible: IP66, IP67, IP69K Compact: IP66, IP67, IP69K
Certifications	



## K50 Beacon

50 mm Multicolor Indicators

- Bright indicator with individually visible LEDs
- Intense levels of light output for areas with high ambient light, including outdoor environments
- Viewable around entire perimeter
- Five default colors in one device
- Bimodal inputs (PNP/NPN), depending on source wiring
- Variety of connector options



## Programmable Models

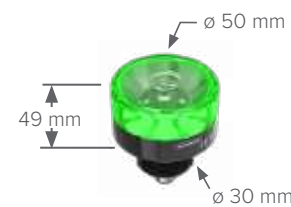
Same Functionality as Standard with Additional Features Below

- Seven default colors in one device (green, red, yellow, blue, white, cyan, magenta)
- Programmable using Banner's Pro Editor Software and Pro Converter Cable
- IO-Link control allows access to full color, flashing, and dimming controls as well as advanced animations for millions of color possibilities
- PICK-IQ™ models provide faster response speed and simplified programming to Modbus RTU communication

### Standard Models

LED Color(s)	Viewable Area	Input Type	Supply Voltage	Connection	Models
Green	Perimeter view only	PNP	12 to 30 V DC	4-pin M12 integral quick disconnect	K50BLXGXPQ
	Perimeter and top view				K50BCLXGXPQ
Red	Perimeter view only				K50BLXRXYPQ
	Perimeter and top view				K50BCLXRXYPQ
Yellow	Perimeter view only				K50BLXYXPQ
	Perimeter and top view				K50BCLXYXPQ
Blue	Perimeter view only				K50BLXBXPQ
	Perimeter and top view				K50BCLXBXPQ
White	Perimeter view only			K50BLXWXPQ	
	Perimeter and top view			K50BCLXWXPQ	
Green, red, yellow	Perimeter view only			5-pin M12 integral quick disconnect	K50BLGRYPQ
	Perimeter and top view				K50BCLGRYPQ

\*AC, rotating, and strobing models available. Visit [bannerengineering.com](http://bannerengineering.com) for other available models.



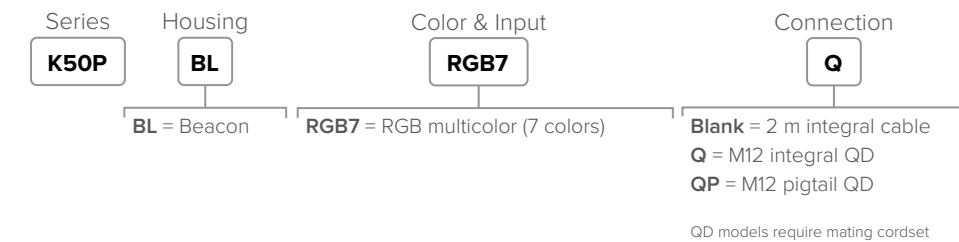
**Supply Voltage** 12 to 30 V DC  
**Construction** Polycarbonate  
**Operating Conditions** -40 to +50 °C  
**Environmental Rating** IP67, IP69K per DIN 40050-9\*

\*Models also meet UL Type 4X and UL Type 13 when mounted in suitable enclosure. Cabled models also meet IP69K per DIN 40050-9 if the cable and cable entrance are protected from high-pressure spray.

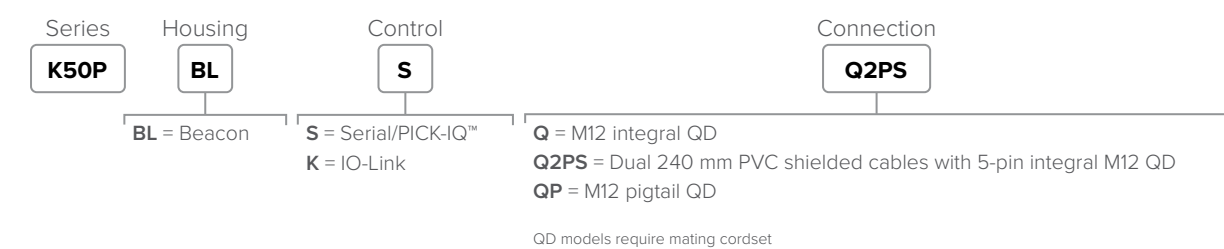
### Brackets



### Programmable Models



### Programmable Models with IO-Link or PICK-IQ



**Supply Voltage** 10 to 30 V DC  
**Construction** Polycarbonate  
**Operating Conditions** -40 to +50 °C  
**Environmental Rating** IP67, IP69K per DIN 40050-9\*

\*Models also meet UL Type 4X and UL Type 13 when mounted in suitable enclosure. Cabled models also meet IP69K per DIN 40050-9 if the cable and cable entrance are protected from high-pressure spray.



# K70 Series

## 70 mm General Purpose Indicators

- Bright, uniform indicator light
- All models have flashing input control
- Models are available with up to five colors in one device

Number of Colors	Colors	Input	Connection	Models
1	Green	PNP	5-pin M12 integral QD	K70LGPQ
	Red			K70LRPQ
	Yellow			K70LYPQ
	Blue			K70LBPQ
	White			K70LWPQ
	Green	NPN		K70LGNQ
	Red			K70LRNQ
	Yellow			K70LYNQ
	Blue			K70LBNQ
	White			K70LWNQ
2	Green, red	PNP	8-pin M12 integral QD	K70LGRPQ
		NPN		K70LGRNQ
3	Green, red, yellow	PNP		K70LGYRPQ
		NPN		K70LGYRNQ
4	Blue, green, yellow, red	PNP		K70LBGYRPQ
		NPN		K70LBGYRNQ
5	White, blue, green, yellow, red	PNP		K70LWBGYRPQ
		NPN		K70LWBGYRNQ



**Supply Voltage** 12 to 30 V DC  
**Construction** Polycarbonate  
**Operating Conditions** -40 to +50 °C  
**Environmental Rating** IP65  
**Certifications**



### Brackets



SMB30A SMB30FVK SMB30RAVK SMBAMS30P SMBAMS30RA SMB30MM SMB30SC SMB30FA





## K90 Series 90 mm Multicolor Indicators

- Large, bright, uniform indicator light
- Models are available with up to five colors in one device
- Bimodal inputs (PNP/NPN), depending on source wiring
- Translucent polycarbonate dome
- Variety of connector options

### Standard Models

Number of Colors	Colors	Input	Connection	Models
2	Green, red	PNP	5-pin M12 integral QD	<b>K90LGRPQ</b>
		NPN		<b>K90LGRNQ</b>
3	Green, red, yellow	PNP		<b>K90LGYRPQ</b>
		NPN		<b>K90LGYRNQ</b>
5	White, blue, green, yellow, red	PNP	8-pin M12 integral QD	<b>K90LWBGYRPQ</b>
		NPN		<b>K90LWBGYRNQ</b>



<b>Supply Voltage</b>	12 to 30 V DC
<b>Construction</b>	Polycarbonate
<b>Operating Conditions</b>	-40 to +50 °C
<b>Environmental Rating</b>	IP67, UL Type 4X, UL Type 13
<b>Certifications</b>	

### Brackets



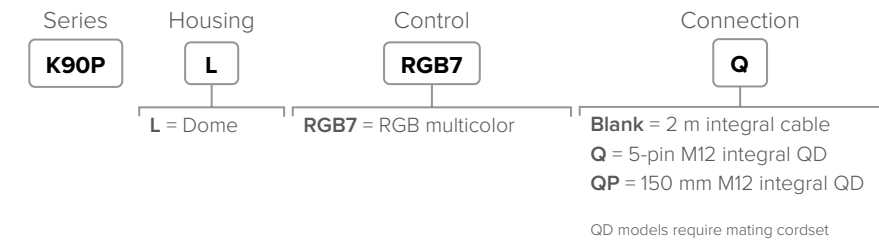
SMB30A SMB30FVK SMB30RAVK SMBAMS30P SMBAMS30RA SMB30MM SMB30SC SMB30FA



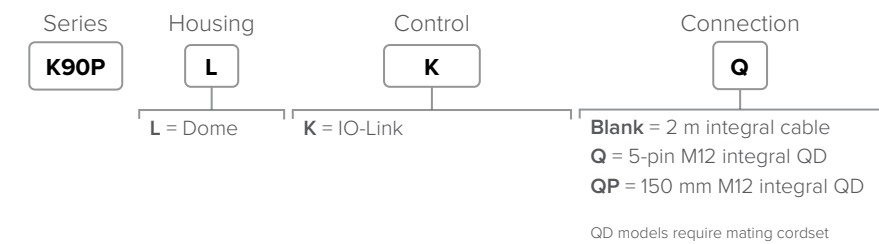
## Programmable Models Same Functionality as Standard with Additional Features Below

- Seven default colors in one device (green, red, yellow, blue, white, cyan, magenta)
- Programmable using Banner's Pro Editor Software and Pro Converter Cable
- IO-Link models provide access to full color, flashing, and dimming controls as well as advanced animations for millions of color possibilities

### Programmable Models



### Programmable Models with IO-Link



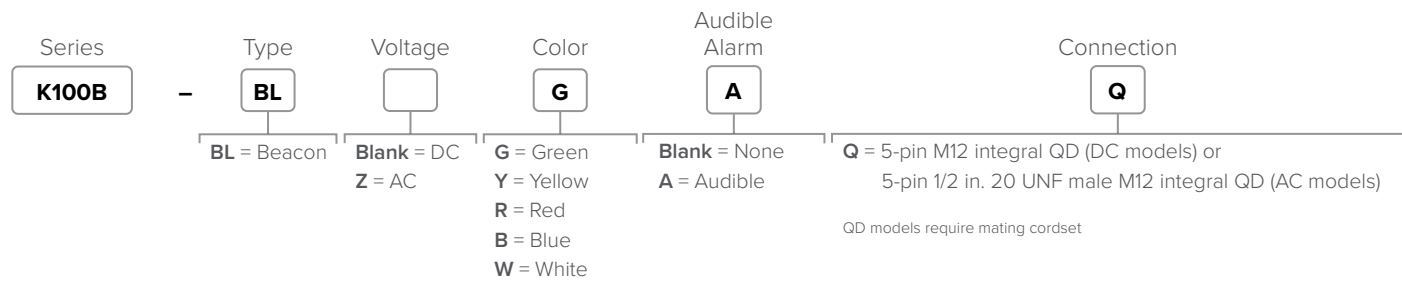
<b>Supply Voltage</b>	Programmable: 10 to 30 V DC IO-Link: 18 to 30 V DC
<b>Construction</b>	Polycarbonate
<b>Operating Conditions</b>	-40 to +50 °C
<b>Environmental Rating</b>	IP67, UL Type 4X, UL Type 13
<b>Certifications</b>	



# K100 Series

## 100 mm Standard Beacons

- Daylight Visible beacon provides critical signaling in indoor and outdoor environments
- Single color device with five colors to choose from
- Clear lens avoids false indications
- Easy installation with brackets or on conduit and M12 quick disconnect
- Four unique animations enable intuitive indication
- Sealed audible model with continuous audible tone at 101 dB



**Supply Voltage** 12 to 48 V DC  
100 to 240 V AC, 50 Hz to 60 Hz

**Audible Characteristics** 101 dB, 2.5 KHz, at 1 m

**Operating Conditions** -40 to +60 °C

**Construction** Polycarbonate

**Environmental Rating** IP66, UL Type 4X

**DC Certifications**



### Brackets



LMB36RA



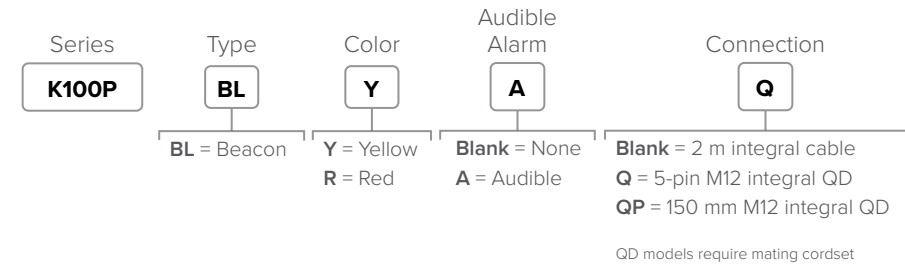
# Programmable Models

## Multicolor Indicators

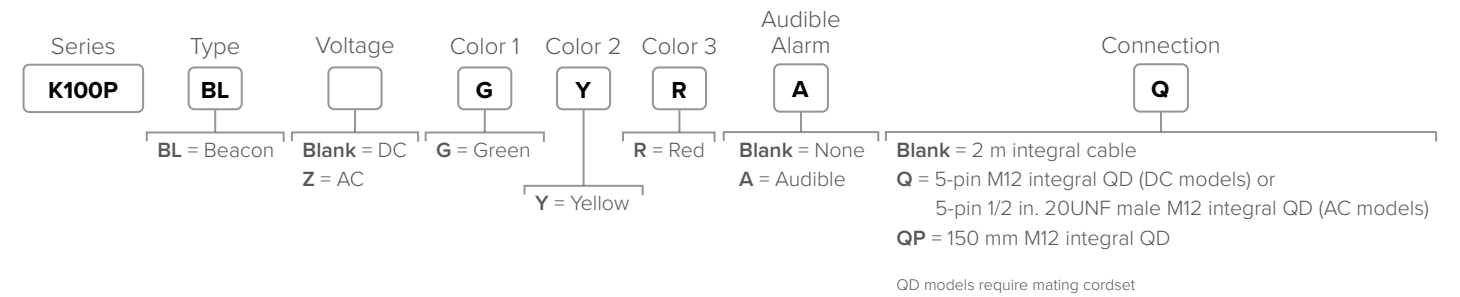
- Industrial beacon delivers bright, configurable indication for OEMs and users that need visible status information
- Daylight Visible models provide bright light, even in direct sunlight
- Rugged construction provides years of uninterrupted operation
- Programmable using Banner's Pro Editor Software and Pro Converter Cable (DC models)
- Rugged UV-stabilized polycarbonate base and window
- Models available for indoor and outdoor applications



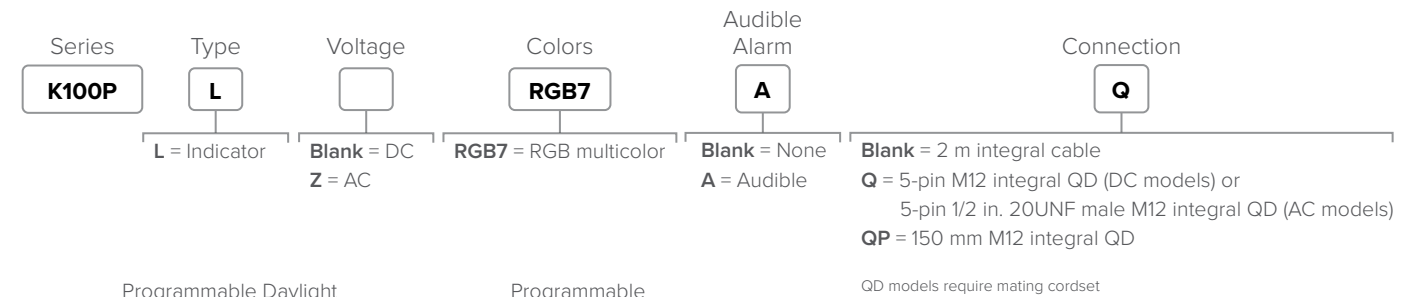
### Programmable Daylight Visible Single Color Models



### Programmable Daylight Visible Three Color Models



### Programmable Multicolor Models



**Supply Voltage** 12 to 48 V DC  
100 to 240 V AC

**Construction** Polycarbonate

**Operating Conditions** -40 to +60 °C

**Environmental Rating** IP69K, UL Type 4X

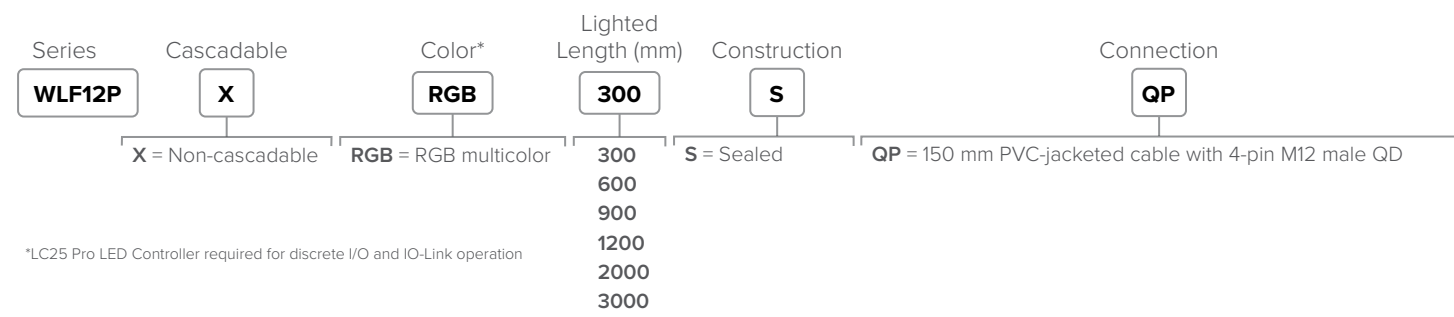
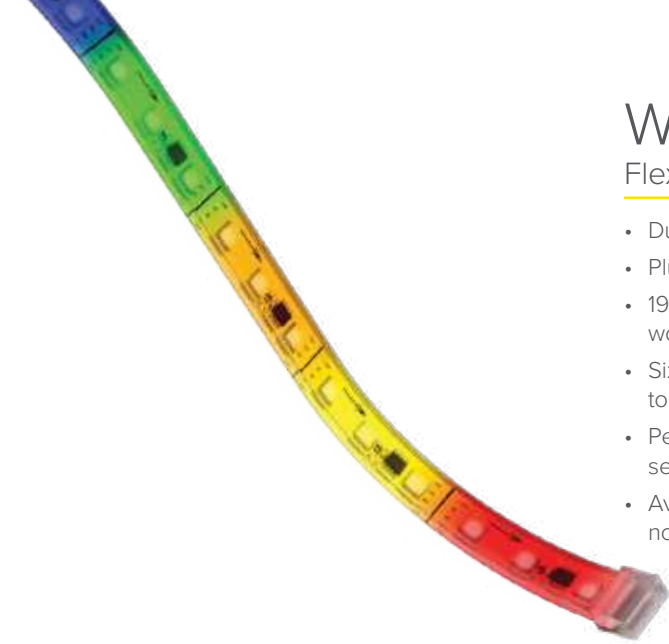
**Certifications**



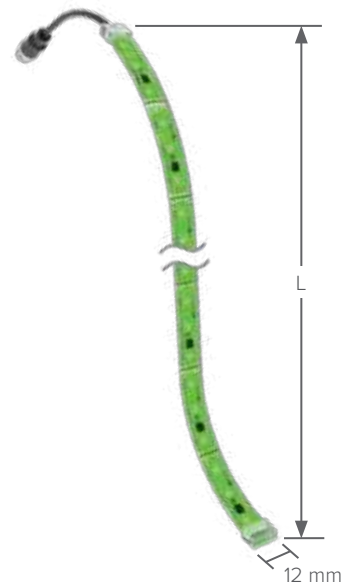
# WLF12 Series

## Flexible Multicolor Strip Lights

- Durable, silicone-encapsulated housing provides long-lasting, worry-free performance
- Plug-and-play standard M12 connections simplify installation by eliminating soldering
- 19 colors and 15 animation effects visually communicate machine states to people working on or near equipment
- Six standard lengths (from 300 to 3000 mm) can be cut in 50 mm increments to fit to exact application specifications
- Peel-and-stick installation using high-strength adhesive backing ensures quick and secure mounting
- Available LC25 LED Controller enables simple discrete I/O or IO-Link operation and no-code configuration



\*LC25 Pro LED Controller required for discrete I/O and IO-Link operation



**Length (L)**  
300 mm  
600 mm  
900 mm  
1200 mm  
2000 mm  
3000 mm

<b>Supply Voltage</b>	Strip light: 12 V DC with Discrete LC25: 12 to 30 V DC with IO-Link LC25: 18 to 30 V DC
<b>Bend Radius</b>	15 mm
<b>Construction</b>	Silicone material, suitable for damp location use. Fully overmolded and encapsulated LEDs.
<b>Operating Conditions</b>	-20 to +45 °C
<b>Environmental Rating</b>	IP66, IP67, IP69K
<b>Certifications</b>	CE, UL LISTED, UK CA

### Brackets



**LMBWLF12C**  
Set of 10 clamp brackets,  
translucent silicone

### Controllers



**LC25C-WLF12-RGB7Q**  
Programmable LED Controller\*



**LC25C-WLF12-KQ**  
Programmable LED Controller  
with IO-Link\*

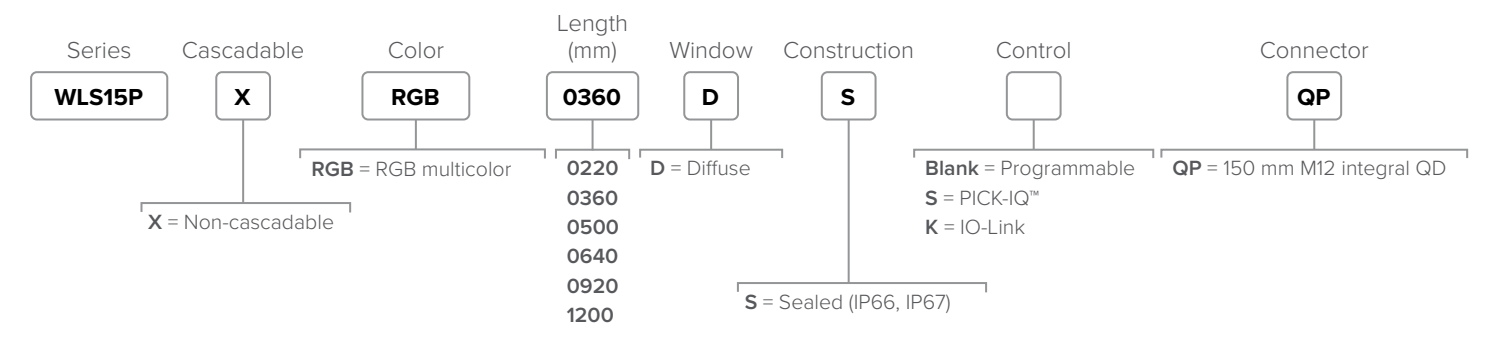
\*LC25 Programmable LED Controller required for discrete I/O and IO-Link operation



# WLS15 Series

## LED Strip Lights with Pro Editor, IO-Link, or PICK-IQ™

- Configurable, dynamic indication in a slim, sealed LED strip light
- Nineteen color options plus animations and direct sensor interface give limitless options to convey status, resulting in clear communication and improved productivity
- Available in six lengths: 220, 360, 500, 640, 920, 1200 mm
- Provides operator guidance for assembly and manufacturing processes
- Pro Editor compatibility allows for field configuration of modes, colors, animations, and more on discrete (controlled) models
- IO-Link and serial (RS-485) PICK-IQ models are available with even more capabilities such as individual LED control and the ability to divide the light into ten total segments



**Length (L)**  
220 mm    640 mm  
360 mm    920 mm  
500 mm    1200 mm

<b>Supply Voltage</b>	Programmable: 12 to 30 V DC PICK-IQ: 12 to 30 V DC IO-Link: 18 or 30 V DC
<b>Construction</b>	Clear anodized aluminum inner housing; Polycarbonate outer housing, Polyamide end caps
<b>Operating Conditions</b>	-40 to +50 °C
<b>Environmental Rating</b>	IP66, IP67 Suitable for wet locations per UL 2108
<b>Certifications</b>	CE, UL LISTED, UK CA, UL NOM, IEC 60730

### Brackets



**LMBWLS15-150S**



**LMBWLS15**

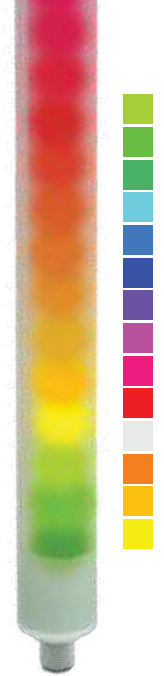


**LMBWLS15MAG**  
Magnetic Mount



**LMBWLS15TF**  
Tape

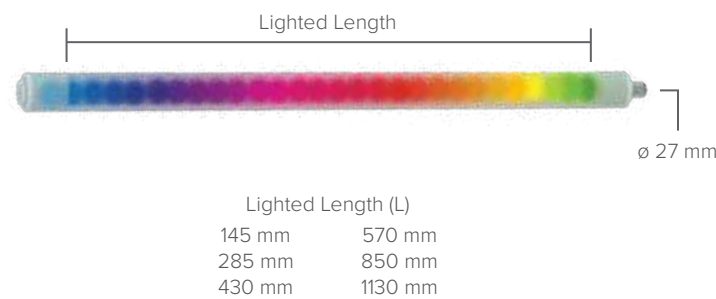
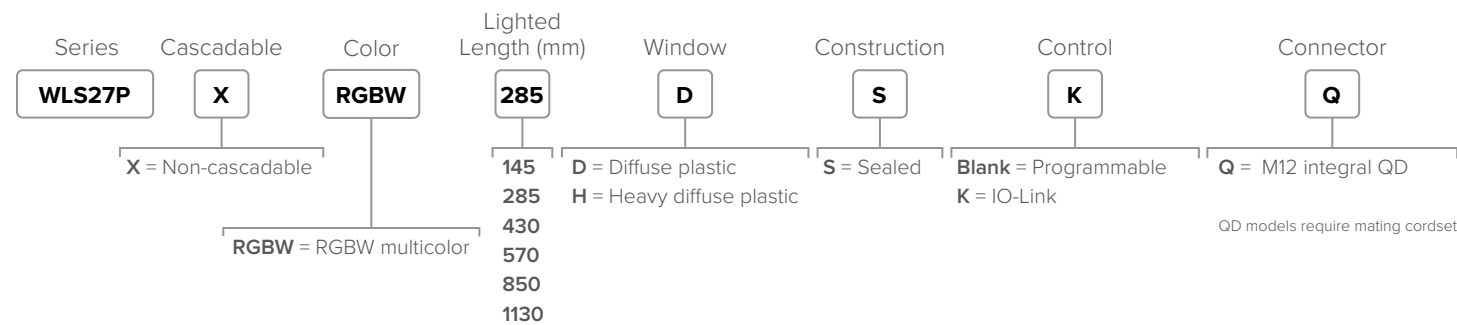
Note: Not all models are shown. Visit bannerengineering.com for other available models.



## WLS27 Series

### Programmable LED Strip Lights

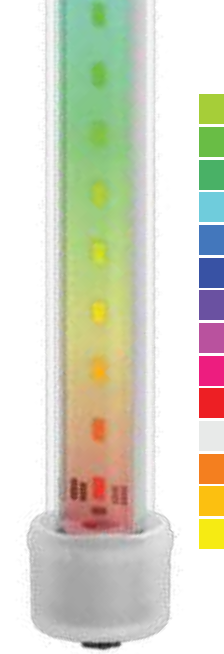
- Programmable models with RGBW LEDs for use in indication, illumination, and inspection applications
- Banner's Pro Editor Software allows users to program device status, colors, and animations for control via three discrete inputs
- IO-Link helps reduce costs, increase process efficiency, and improves machine availability
- Offers illumination and multiple indication capabilities in a single device with EZ-STATUS
- Use its bright light for illumination or colors for broad status information
- Bright white light for efficiency, quality, and safety during normal operation
- Heavy diffuse window for smooth glow and close-range indication



<b>Supply Voltage</b>	18 to 30 V DC
<b>Construction</b>	Copolyester
<b>Operating Conditions</b>	-40 to +50 °C
<b>Environmental Rating</b>	IP66, IP67, IP69K per DIN 40050-9
<b>Certifications</b>	

\*Depending on length and color

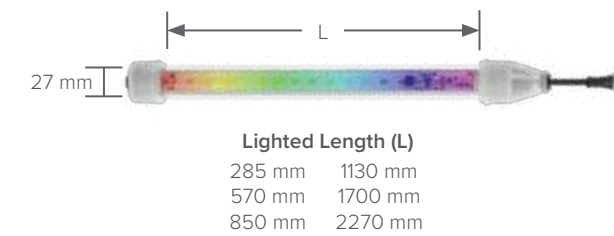
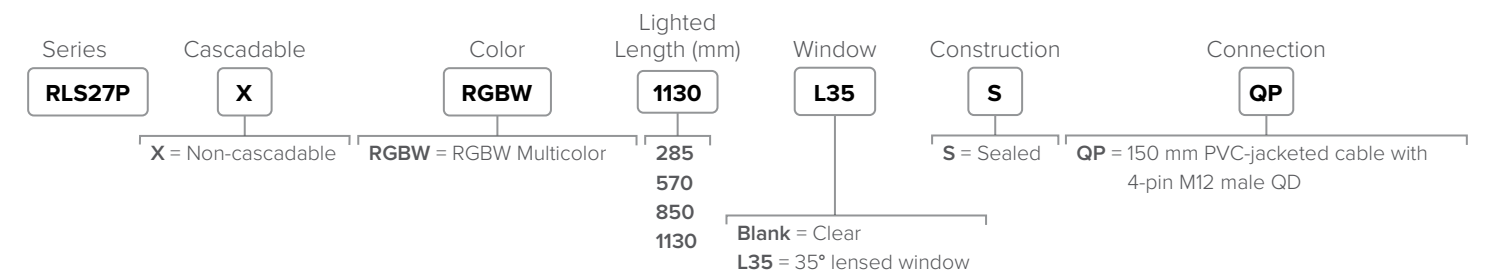
### Brackets



## RLS27 Series

### Programmable Rugged LED Strip Lights

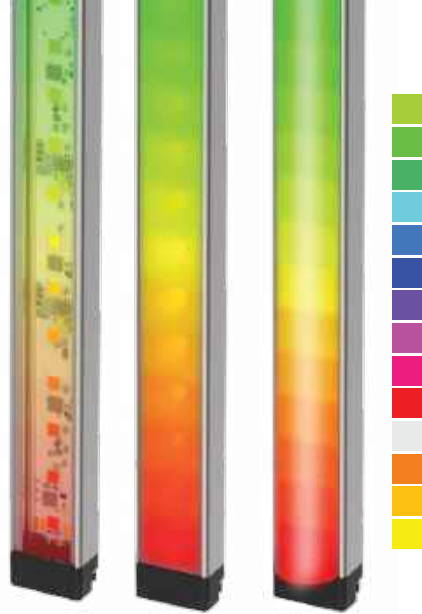
- Shatterproof, UV-stabilized polycarbonate shell offers superior chemical resistance and protection to withstand harsh environments such as car washes
- Sturdy aluminum housing and robust endcaps provide dependable use outside in any weather
- High-intensity focused lens delivers long-range illumination for easy viewing outdoors
- IP67- and IP69K-rated for reliable operation in demanding applications with high temperatures and high pressure washdowns
- Colors, animations, and device status on Programmable models can be customized using Banner's Pro Editor software to meet any user needs



<b>Supply Voltage</b>	18 to 30 V DC
<b>Construction</b>	Inner housing: Clear anodized aluminum Outer housing: UV-stabilized polycarbonate Connector: Nickel-plated
<b>Operating Conditions</b>	-40 to +70 °C (-40 to +158 °F)
<b>Environmental Rating</b>	IP67, IP69K per DIN 40050-9
<b>Certifications</b>	

### Brackets

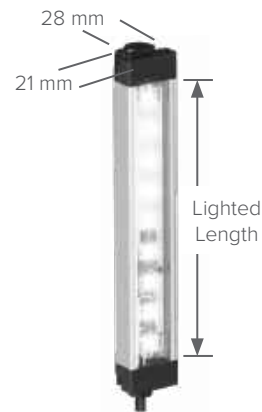
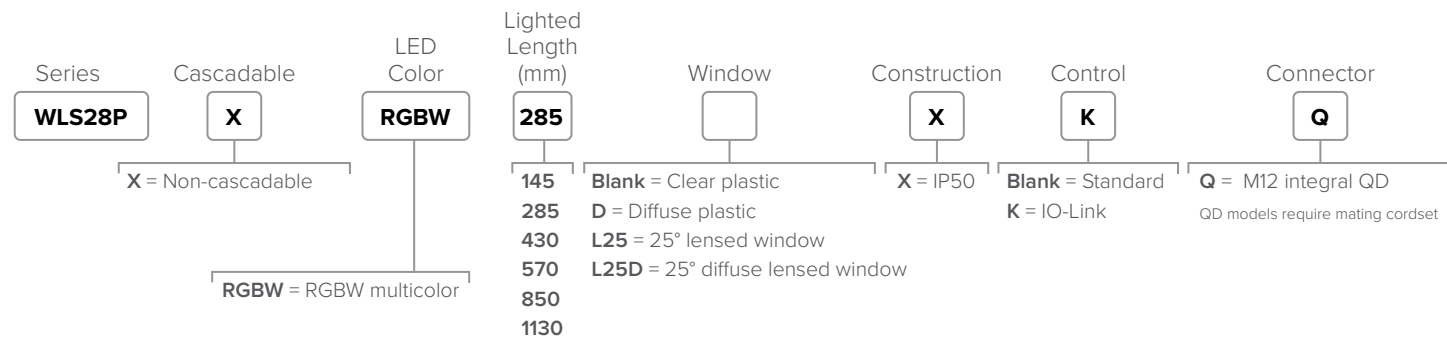




## WLS28 Series

### Programmable LED Strip Lights

- High quality illumination and indication from RGBW LEDs
- Six white color temperatures for comfort and compatibility
- Thirteen color options for varied indication and inspection uses
- IO-Link gives full access to individual LED control, color, flashing, intensity, and animation settings, as well as advanced operating modes for displaying distance, count, time, and position
- Lensed models or choice of clear or diffuse window
- Banner's Pro Editor Software allows users to program device status, colors, and animations for control via three discrete outputs
- Offers illumination and multiple indication capabilities in a single device with EZ-STATUS



Lighted Length (L)

- 145 mm
- 285 mm
- 430 mm
- 570 mm
- 850 mm
- 1130 mm

**Supply Voltage** | 18 to 30 V DC

**Construction** | Housing: Clear anodized aluminum  
End Caps: Painted zinc  
Clear/Diffuse Window: Polycarbonate  
L25 Window: Acrylic

**Operating Conditions** | -40 to +50 °C

**Environmental Rating** | IP66, IP67, and IP69K per DIN 40050-9

**Certifications** |

\*Depending on length and color

### Brackets



**SMBWLS28RA** Top Mount (included)

**SMBWLS28SM** Side Mount

**SMBWLSMAG** Magnetic Mount  
Protective cover for magnet sold separately (SMBWLSMAGR).

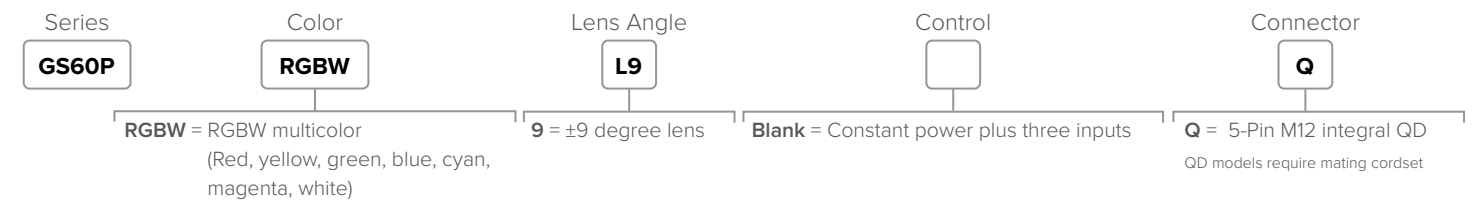
**SMBWLS28SP** Snap Mount



## GS60 Series

### Programmable Guide Spotlights

- Reduce errors, improve productivity, and enhance operator interaction with increased visibility provided by the bright, focused spot
- Enhance worker comfort and safety by easily setting lighting levels to match the environment and application needs
- Reliably use in harsh environments with the long-lasting, impact resistant, durable anodized aluminum housing and polycarbonate window
- Communicate operational information with seven-color Programmable models



**Supply Voltage** | 12 to 30 V DC

**Construction** | Housing: Black anodized aluminum  
Window: Polycarbonate  
Connector: Nickel-plated M12 QD  
Mounting nut: Black anodized aluminum

**Operating Conditions** | -40 to +50 °C (-40 to +122 °F)

**Environmental Rating** | IP66, IP67

**Certifications** |

### Brackets



**SMB30A**

**SMBAMS30P**

**SMBAMS30RA**

**SMB30MM**

**ACC-GS60** M48 x 2 front mounting knurl nut

# Touch Button and Pick-to-Light Selection Guide



pg. 82



pg. 85



pg. 86



pg.92

Series Name	S22 Touch	K30 Touch	K50 Touch	K70 Touch
Indicator Diameter (mm)	22	30	50	70
Mounting Hole Diameter (mm)	22	22	30	30
AC/DC	DC	DC	DC	DC
IP Rating	IP66, IP67, IP69K	IP67, IP69K	IP65, IP66, IP67, IP69K	IP65
Programmable	✓	✓	✓	✓
Communication Protocol		IO-Link® PICK-IQ® Modbus	IO-Link® PICK-IQ® Modbus	
Sensor Range	—	—	—	—
Audible			✓	✓



pg. 83



pg. 90



pg. 94



pg. 95

Series Name	K30 Touchless	K50 Touchless	K50 Touch Display	PTL110
Indicator Diameter (mm)	30	50	50	15
Mounting Hole Diameter (mm)	22	30	30	—
AC/DC	DC	DC	DC	DC
IP Rating	IP65	IP66, IP67, IP69K	IP67, IP69K	IP66, IP67
Programmable	✓	✓	✓	✓
Communication Protocol		IO-Link® PICK-IQ® Modbus	IO-Link® PICK-IQ® Modbus	PICK-IQ®
Sensor Range	20 to 1000 mm	20 to 1000 mm	—	100, 200 mm
Audible				



Programmable LED indicators offer multiple color choices in a single housing



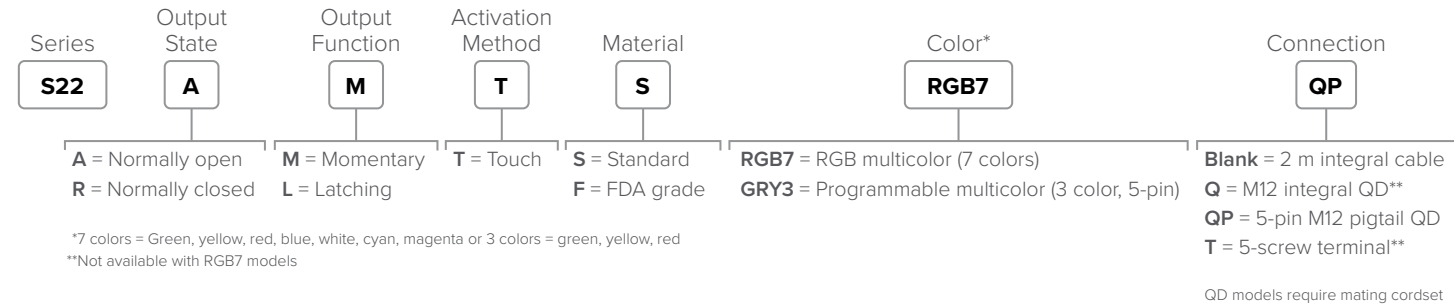
# S22 Programmable Touch

## Flush Mount Touch Button Indicators

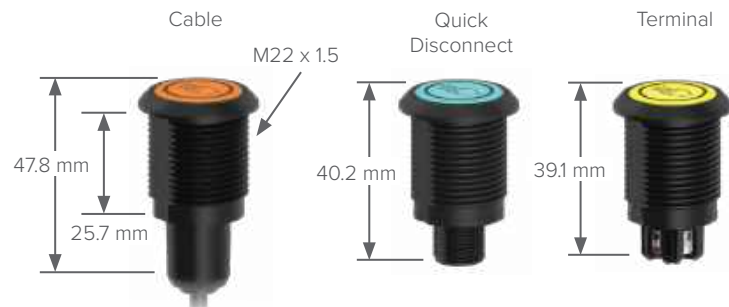
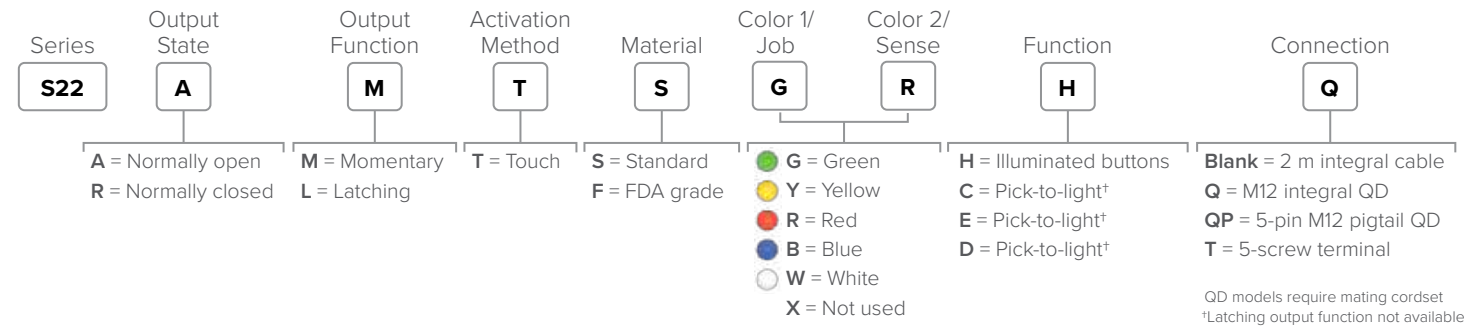
- Programmable using Banner Pro Editor Software and Pro Converter Cable
- Resistance to false triggering by water spray, detergents, oils, and other foreign materials
- Rugged, cost effective, and easy to install
- Up to seven independent colors in one unit
- Ergonomically designed to eliminate hand, wrist, and arm stresses associated with repeated switch operation; requires no physical force to operate
- Can be actuated with bare hands or gloves



### Multicolor Models



### One- or Two-Color/Function Models



<b>Supply Voltage</b>	10 to 30 V DC
<b>Construction</b>	Standard: Polycarbonate FDA: FDA grade Copolyester
<b>Operating Conditions</b>	-40 to +50 °C
<b>Environmental Rating</b>	Standard: IP66, IP67, IP69K per DIN 40050-9+ Terminal: Screw connection points meet IP00 FDA: IP66, IP67, IP69K per DIN 40050-9
<b>Certifications</b>	CE, UL LISTED, UK CA

\*\*Indicator side of terminal models also meet IP69K per DIN 40050-9 when mounted in suitable enclosure. Cabled Models also meet IP69K per DIN 40050-9 if the cable and cable entrance are protected from high-pressure spray.

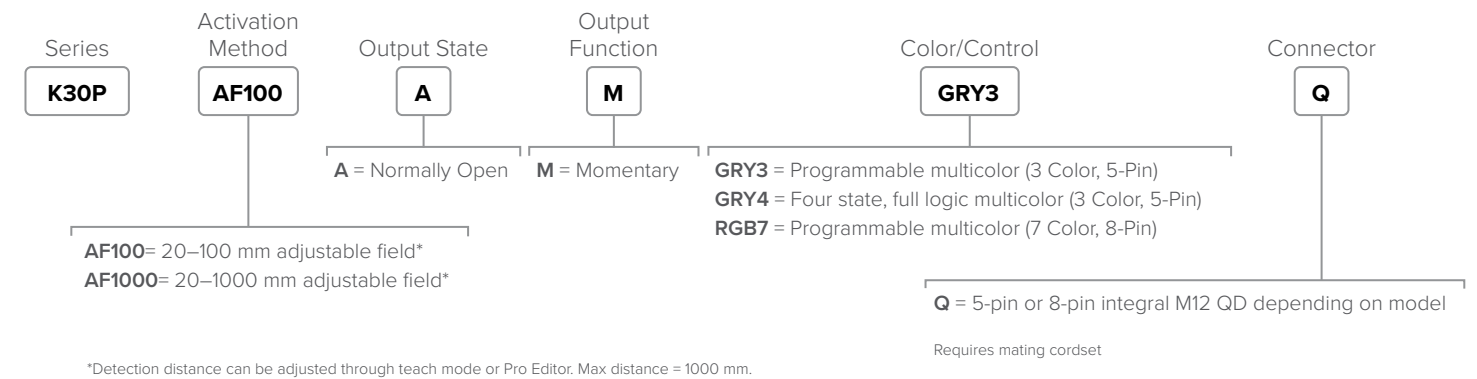
### Brackets



# K30 Programmable Touchless

## 30 mm Indicators with Optical Sensor

- Sensing and Indication in one device
- Pro Editor Software gives users the flexibility to define indication colors, range, and logic
- Remote input enables range definition without a controller for fast, simple setup
- Touchless activation eliminates the need for physical force to operate or contaminate
- Adjustable range from 20 to 1000 mm for detection where needed, and ignores objects in the background
- Uses configurable indication states to show target position/distance



<b>Supply Voltage</b>	10 to 30 V DC
<b>Range</b>	20 mm to 1000 mm
<b>Construction</b>	Polycarbonate
<b>Operating Conditions</b>	-20 °C to +50 °C
<b>Environmental Rating</b>	IP65
<b>Certifications</b>	CE, UL LISTED, UK CA

### Brackets





## K30 Touch Series

### 30 mm Multicolor Touch Button Indicators

- Excellent immunity to false triggering by water spray, detergents, oils, and other foreign materials
- One- and two-color models available to solve a variety of applications
- Devices are completely self-contained—no controller needed
- Ergonomically designed to eliminate hand, wrist, and arm stresses associated with repeated switch operation; no physical force required to operate
- Can be actuated with bare hands or gloves

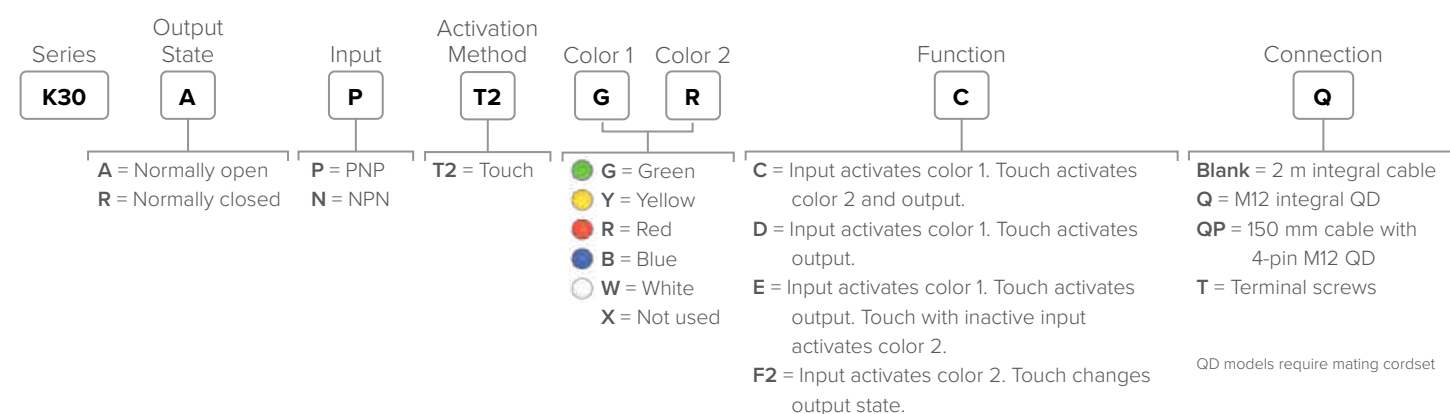


## Programmable Models

Same Functionality as Standard with Additional Features Below

- Programmable using Banner's Pro Editor Software and Pro Converter Cable
- Up to seven colors in one device
- Adjustable sensitivity using Pro Editor Software
- PICK-IQ™ brings faster response speed and simplified programming to Modbus RTU communication
- IO-Link models give full access to color, flashing, rotating, and dimming settings as well as advanced animations such as dynamic sequence mode and LED control

### Standard Touch Models



<b>Supply Voltage</b>	10 to 30 V DC
<b>Construction</b>	Polycarbonate
<b>Operating Conditions</b>	-40 to +50 °C
<b>Environmental Rating</b>	IP67, IP69K per DIN 40050-9
<b>Certifications</b>	

### Brackets



SMB22A

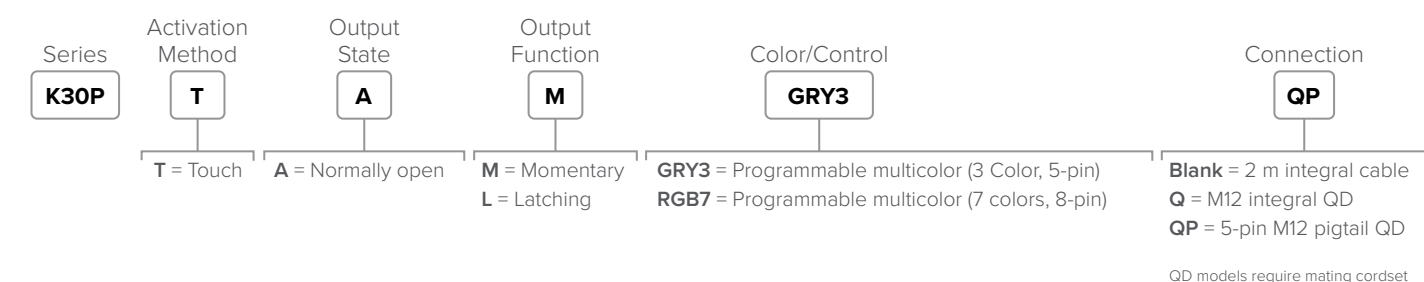


SMBAMS22P

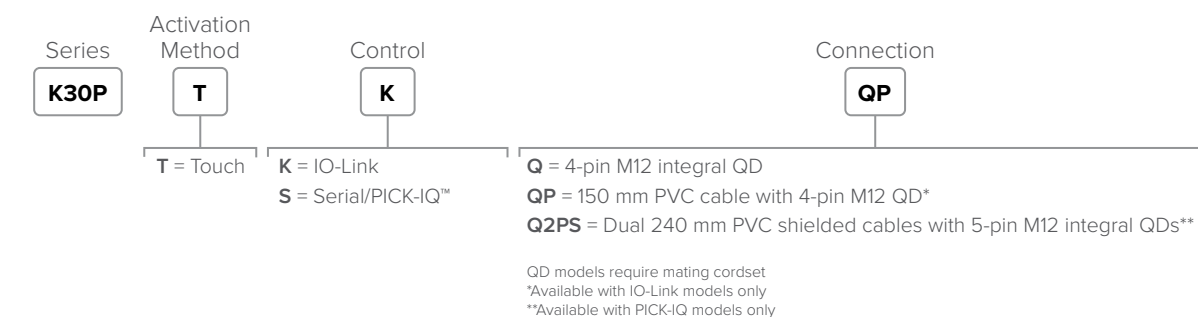


SMBAMS22RA

### Programmable Touch Models



### Programmable Touch Models with IO-Link or PICK-IQ



<b>Supply Voltage</b>	Programmable: 12 to 30 V DC IO-Link: 18 to 30 V DC
<b>Construction</b>	Polycarbonate
<b>Operating Conditions</b>	-40 to +50 °C
<b>Environmental Rating</b>	IP67, IP69K per DIN 40050-9
<b>Certifications</b>	



## K50 Touch Series

### 50 mm Multicolor Touch Button Indicators

- Bright LED indicators combined with touch-activated switching capabilities
- Advanced touch technology allows for high immunity to water while still working with gloves
- Up to three color variations in one device (green, red, and yellow)
- Mechanical button models available for classic, tactile feedback



## Programmable with Audible Models

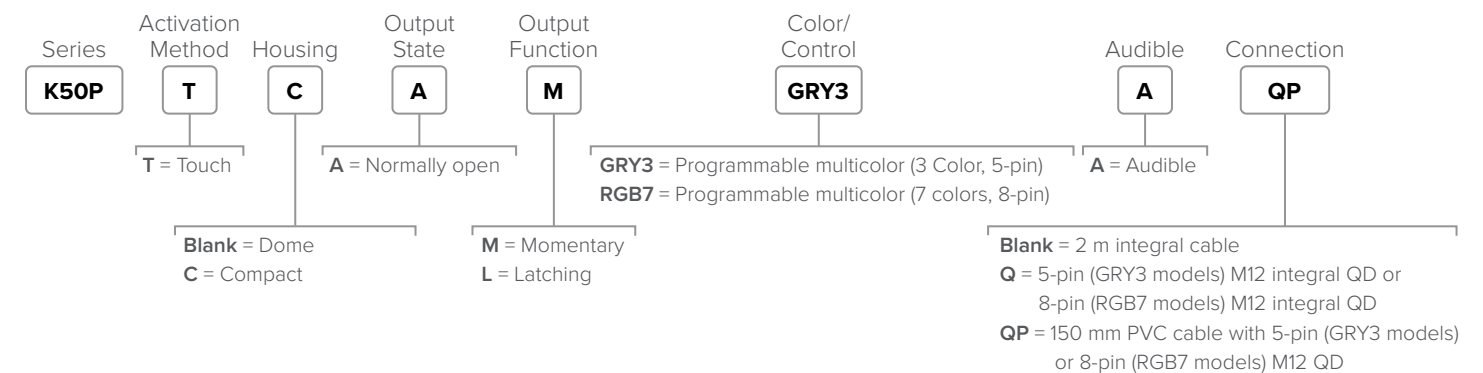
### 50 mm Multicolor Touch Button Indicators

- Integral audible alarm has fourteen tones with customization and intensity control
- Excellent immunity to false triggering by water spray, detergents, oils, and other foreign materials
- Integral audible can be used as standalone indicator or as an input to touch conditions
- Can be actuated with bare hands or gloves
- Compact models available for lower profile applications
- Configurable input/output with Pro Editor Software
- IO-Link models give full access to color, flashing, rotating, and dimming settings as well as advanced animations such as dynamic sequence mode and LED control

### Standard Touch Models

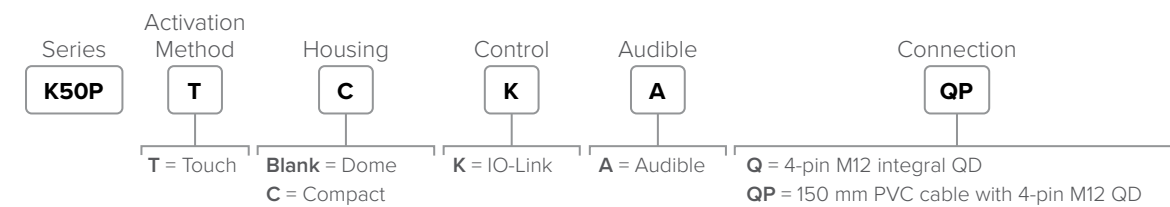
Colors	Function	Output	Connection	Models
Green	Input activates color 1. Touch activates output.	PNP, N.O.	4-pin M12 integral QD	<b>K50APT2GXDQ</b>
Green, red	Input activates color 1. Touch activates color 2 and output.			<b>K50APT2GRCQ</b>
	Input activates color 1. Touch activates output. Touch with inactive input activates color 2.			<b>K50APT2GREQ</b>
Green, red, yellow	Power activates color 1. Touch changes bipolar output state and activates color 2. Latch and momentary options.	PNP & NPN	5-pin M12 integral QD	<b>K50ALBT2GRHQ</b>
	Three inputs activate three colors. Color 3 overrides colors 1 and 2, and color 2 overrides color 1. Touch changes output state.	PNP, N.O.	8-pin M12 integral QD	<b>K50APT2GRYF2Q</b>

### Programmable Touch with Audible Models



QD models require mating cordset

### Programmable Touch with Audible and IO-Link Models



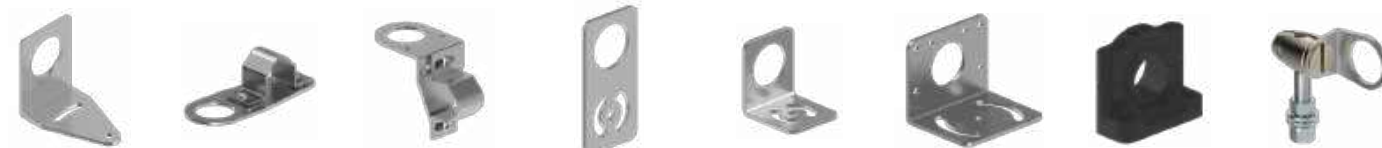
QD models require mating cordset



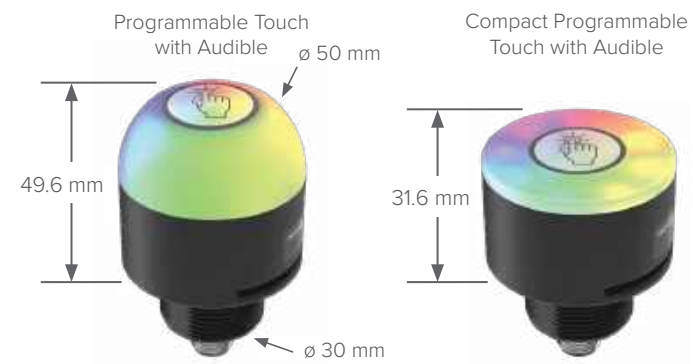
<b>Supply Voltage</b>	12 to 30 V DC
<b>Construction</b>	Polycarbonate
<b>Operating Conditions</b>	-40 to +50 °C
<b>Environmental Rating</b>	IP67, IP69K per DIN 40050-9*
<b>Certifications</b>	CE, cUL LISTED, UK CA

\*Cabled models also meet DIN IP69K if the cable and cable entrance are protected from high-pressure spray

### Brackets



SMB30A SMB30FVK SMB30RAVK SMBAMS30P SMBAMS30RA SMB30MM SMB30SC SMB30FA



<b>Supply Voltage</b>	Programmable: 12 to 30 V DC IO-Link: 18 to 30 V DC
<b>Construction</b>	Polycarbonate
<b>Operating Conditions</b>	-40 to +70 °C
<b>Environmental Rating</b>	IP67, IP69K per DIN 40050-9*
<b>Certifications</b>	CE, cUL LISTED, UK CA

\*Cabled models also meet DIN IP69K if the cable and cable entrance are protected from high-pressure spray



# Programmable Models

Same Functionality as Standard with Additional Features Below

- Programmable using Pro Editor software and converter cable
- Combine proven touch technology and ruggedness with the added versatility of RGB LEDs
- Programmable using Banner's IO-Link system for customization of colors and animation
- Models made with FDA-approved materials are available for use in the food and beverage industries
- Up to fourteen color variations in one device
- PICK-IQ™ brings faster response speed and simplified programming to Modbus RTU communication

## Go-To Models



**Supply Voltage** Programmable: 12 to 30 V DC  
IO-Link: 18 to 30 V DC

**Construction** Standard: Polycarbonate  
FDA: FDA grade copolyester

**Operating Conditions** -40 to +50 °C

**Environmental Rating** Standard: IP67, IP69K per DIN 40050-9\*  
FDA: IP67, DIN IP69K  
Push Button: IP65

**Certifications**

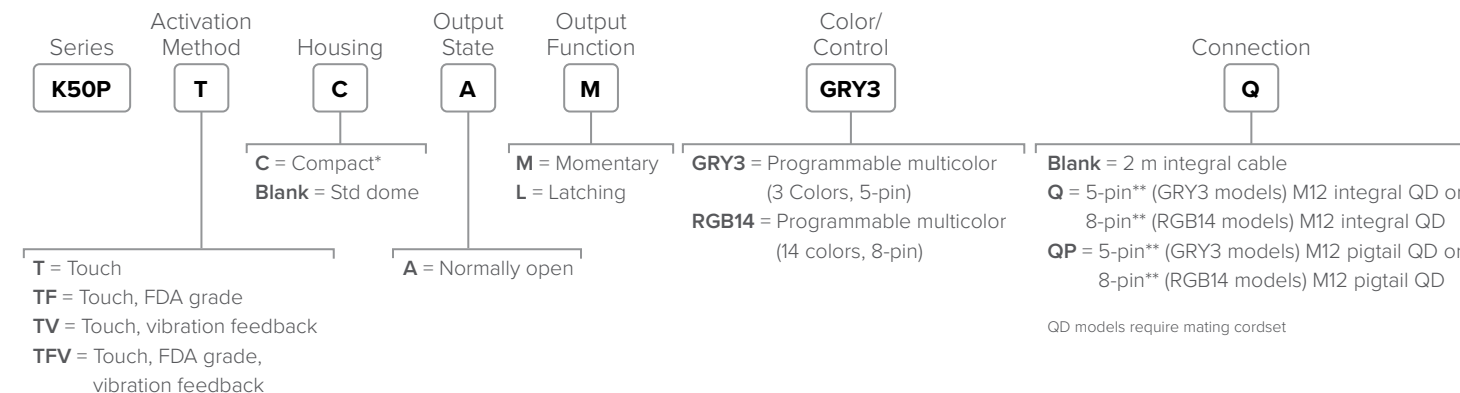
\*Cabled models also meet DIN IP69K if the cable and cable entrance are protected from high-pressure spray

## Brackets



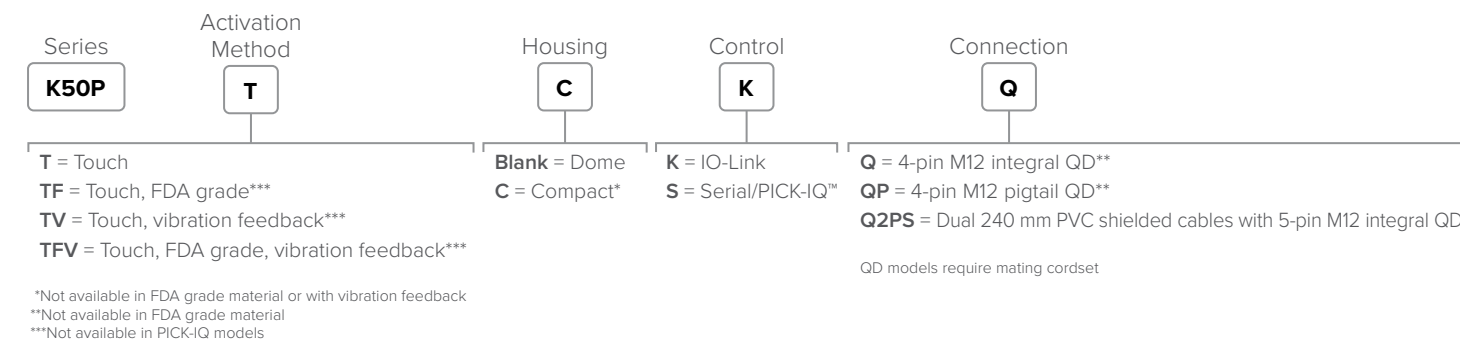
SMB30A SMB30FVK SMB30RAVK SMBAMS30P SMBAMS30RA SMB30MM SMB30SC SMB30FA

## Programmable Touch Models

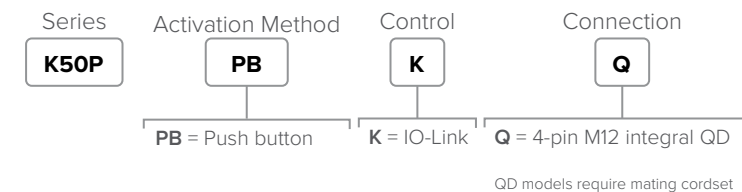


\*Not available in FDA grade material or with vibration feedback  
 \*\*Not available in FDA grade material

## Programmable Touch Models with IO-Link or PICK-IQ



## Programmable Push Button Models with IO-Link





# K50 Touchless Series

50 mm Indicators with Optical Sensor

- Rugged, cost-effective, and easy-to-install solutions for error-proofing and parts-verification applications
- Illuminated dome provides easy-to-see job light status
- Choose either polarized retro-reflective or fixed field models

## Standard Touchless Models

Colors	Function	Sensing Mode/LED	Range	Output	Connection	Models
Green	Input activates color 1. Presence of hand activates output.		50 mm cutoff			<b>K50APFF50GXDQ</b>
Green, red	Input activates color 1. Presence of hand activates output and overrides job light.	Fixed field, infrared, 880 nm	100 mm cutoff	PNP, N.O.	4-pin M12 integral QD	<b>K50APFF100GRCQ</b>
	Input activates color 1. Presence of hand activates output. Presence of hand while input is inactive causes unit to light red.					<b>K50APFF100GREQ</b>



<b>Supply Voltage</b>	12 to 30 V DC
<b>Construction</b>	Standard: Polycarbonate
<b>Operating Conditions</b>	-40 to +50 °C
<b>Environmental Rating</b>	Standard: IP67, IP69K per DIN 40050-9*
<b>Certifications</b>	

\*Cabled models also meet DIN IP69K if the cable and cable entrance are protected from high-pressure spray

## Brackets



SMB30A SMB30FVK SMB30RAVK SMBAMS30P SMBAMS30RA SMB30MM SMB30SC SMB30FA

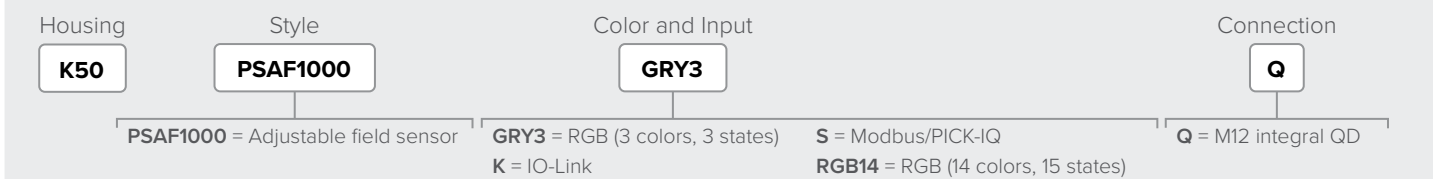


# Programmable Models

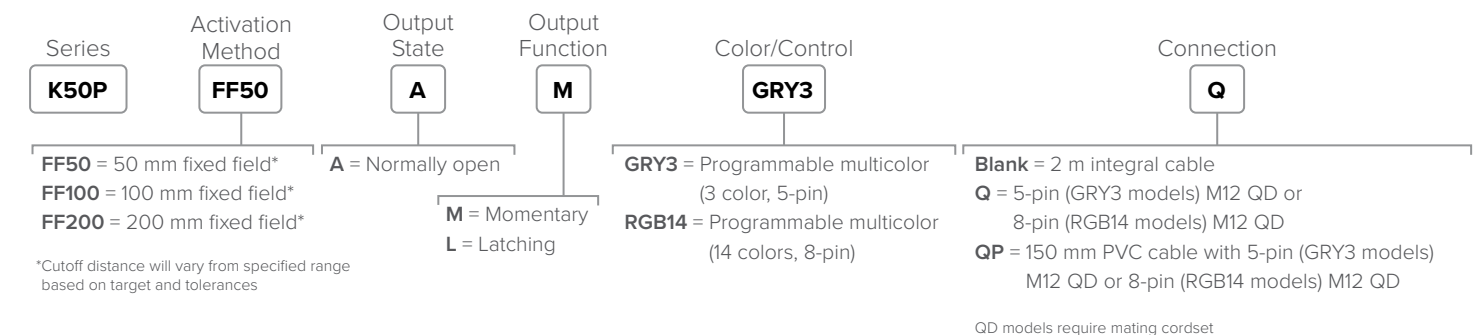
Same Functionality as Standard with Additional Features Below

- Up to fourteen standard colors in one device
- IO-Link models enable even more color and animation customization managed dynamically by the master, plus individual LED control
- Discrete model featuring Pro Editor compatibility improves speed in deployment and machine interface. Get control of colors, logic, and outputs in a discrete controlled K50 with integrated optical sensor.
- Sequence mode can be used to indicate level, takt time, and more
- PICK-IQ™ gives full access to color, flashing, rotating, and dimming settings as well as advanced animations such as dynamic sequence mode and LED control

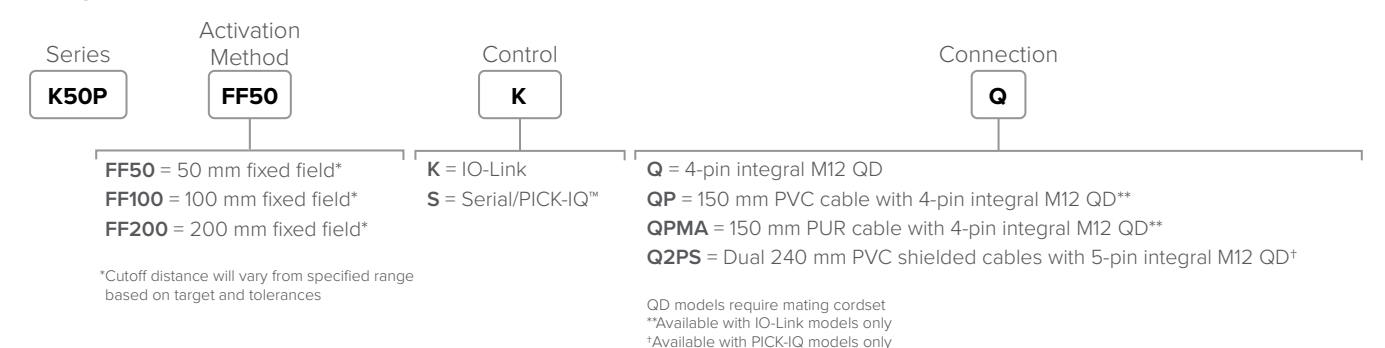
## Go-To Models



## Programmable Touchless Models



## Programmable Touchless Models with IO-Link or PICK-IQ



<b>Supply Voltage</b>	Programmable: 12 to 30 V DC IO-Link: 18 to 30 V DC PICK-IQ: 10 to 30 V DC
<b>Construction</b>	Polycarbonate
<b>Operating Conditions</b>	-40 to +50 °C
<b>Environmental Rating</b>	IP67, IP69K per DIN 40050-9*
<b>Certifications</b>	

\*Cabled models also meet DIN IP69K if the cable and cable entrance are protected from high-pressure spray



## K70 Touch Series

### 70 mm Multicolor Touch Button Indicators

- Capacitive touch technology requires no physical force to operate
- Excellent immunity to false triggering by water spray, detergents, oils, and other foreign materials
- Can be actuated with bare hands or in gloves
- Available in three color options and one-, two-, and three-color models



## K70 Programmable Touch with Audible

### 70 mm Multicolor Touch Button Indicators

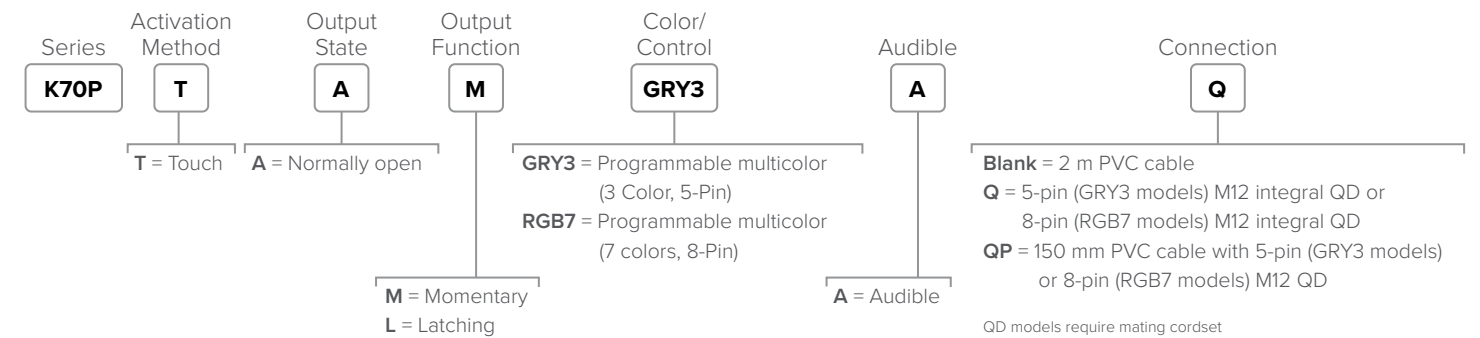
- Integrated audible alarm provides additional indication and feedback for enhanced operator experience and improved productivity
- Integral audible alarm can be toggled on and off discretely and as a function of touch logic
- Twelve different tones available, including intensity and input control
- Programmable using Banner's Pro Editor Software and Pro Converter Cable



### Standard Touch Models

Colors	Function	Output	Connection	Models
Green (activated)	Momentary	PNP & NPN	4-pin M12 integral QD	K70ABT2XGHQ
Green	Job light is on while input is active. Touch activates output.	PNP		K70APT2GXDQ
Green, red	Job light is green while job input is active. Touch activates output.			K70APT2GRCQ
Green, red, yellow	Multipurpose			K70APT2GREQ
	Job light always on with job input until touched. Touch activates output and overrides job light with sense light. Touch with inactive job input activates mispick light and activates output.			K70APT2GRYF2Q
				K70APT2GRYC3Q

### Programmable Touch Models



**Supply Voltage** 12 to 30 V DC  
**Audible Intensity** 95–103 dB at 1 m  
**Construction** Polycarbonate  
**Operating Conditions** –40 to +50 °C  
**Environmental Rating** IP65  
**Certifications** CE, UL LISTED, UK CA



**Supply Voltage** 12 to 30 V DC  
**Audible Intensity** 95–103 dB at 1 m  
**Construction** Polycarbonate  
**Operating Conditions** –40 to +50 °C  
**Environmental Rating** IP65  
**Certifications** CE, UL LISTED, UK CA

### Brackets



### Brackets



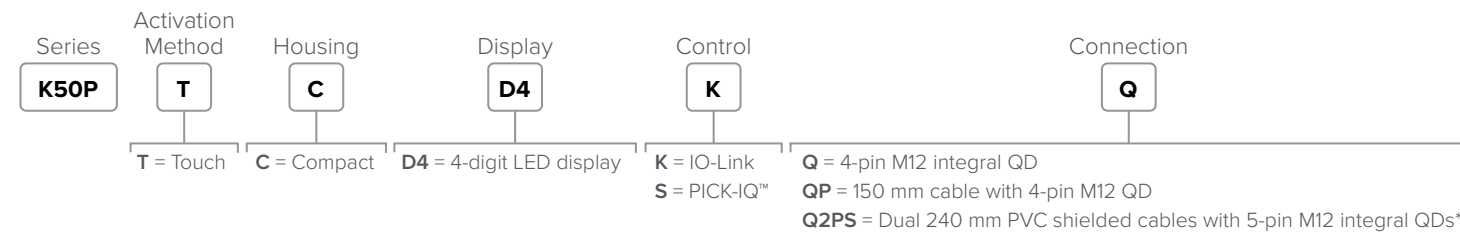


# K50 Programmable Touch with Display

## 50 mm Advanced Touch Button Indicators

- Four-digit, seven-segment LED display
- Two independent touch areas
- Clearly communicate status and receive feedback, improving throughput and productivity
- Ideal interface device for pick-to-light, condition monitoring, and general operator interaction in industrial environments
- Excellent immunity to false triggering by water spray, oils, and other foreign materials
- Can be actuated with bare hands or gloves

### IO-Link and PICK-IQ Models



QD models require mating cordset  
 \*Available with PICK-IQ models only



**Supply Voltage** Programmable: 10 to 30 V DC  
 IO-Link: 18 to 30 V DC

**Construction** Polycarbonate

**Operating Conditions** -40 to +50 °C

**Environmental Rating** IP67, IP69K per DIN 40050-9\*\*

**Certifications** CE, UL LISTED, UK CA

\*\*Cabled models also meet DIN IP69K if the cable and cable entrance are protected from high-pressure spray

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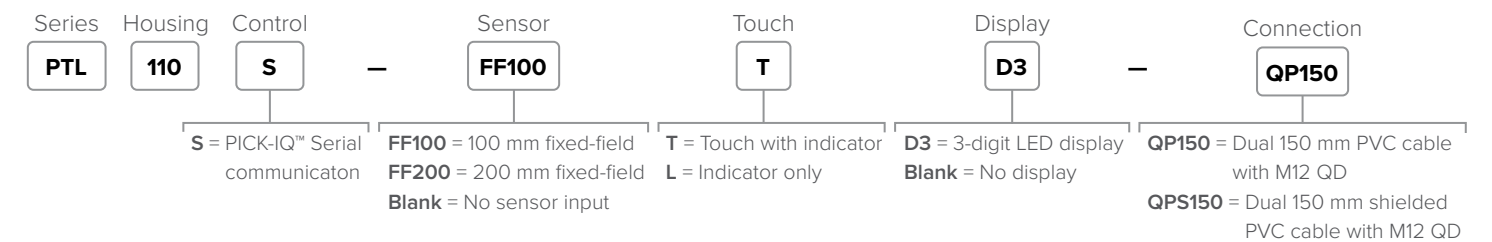


# PTL110

## Scalable, Versatile Pick-To-Light Devices



- Customizable pick-to-light logic with up to fourteen colors in one device
- Translucent face appears gray when off to avoid false indication
- M12 connector models for plug-and-play indication
- Wide 180° field of view
- Three-digit, fourteen-segment LED display
- Photoelectric and touch sensing options
- RS-485 Modbus communication featuring PICK-IQ™ technology for faster response speed



**Supply Voltage** 10 to 30 V DC; 1.35 Watts max. power draw

**Communication** PICK-IQ™ is compatible with Modbus RS-485  
 DXM700 converts Modbus RTU to Modbus TCP/IP or Ethernet/IP

**Connected Devices** 64 or more under standard usage with a single power supply  
 >200 possible depending on power supply, cable length and device usage

**Construction** Housing: ABS  
 Indicator: Polycarbonate  
 Display Lens: Acrylic (if present)

**Operating Conditions** -40 to +50 °C

**Environmental Rating** IP54

**Certifications** CE, UL LISTED, UK CA

### Brackets



# Display Selection Guide



pg. 94



pg. 98



pg. 99



pg. 100



pg. 95

Series Name	K50 Touch Display	K50 I/O Controller with Display	SD50	K100	PTL110
Dimensions (mm)	ø 50	ø 50	386 x 52	ø 100	35 x 110
Number of Characters	4	4	16 or 29 scrolling	32 scrolling	3
IP Rating	IP67, IP69K	IP67, IP69K	IP65	IP65	IP66, IP67
Control Capabilities	✓	✓			✓
Programmable	✓	✓	✓	✓	✓
Communication Protocol	IO-Link® PICK-IQ®		IO-Link® Modbus	IO-Link® Modbus	PICK-IQ®



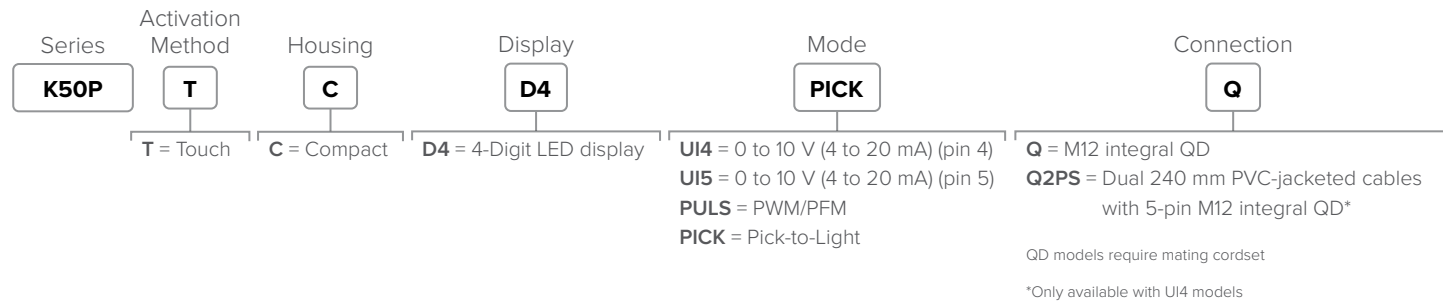
Programmable LED indicators offer multiple color choices in a single housing



# K50 I/O Touch Control with Display

50 mm Programmable Touch Button Indicators

- Onboard analog, PWM, PFM, and discrete outputs enable control of core applications such as adjusting VFD speed, dimming LED lights, and signaling part-picking details
- Two capacitive touch zones provide reliable input with gloved or bare hands—with no mechanical parts to wear out
- Four-character display improves operator response by showing output values and system messages
- Bright, multicolor LEDs provide operators with at-a-glance equipment status. All colors and animations are easily configured with Banner's free Pro Editor software



<b>Supply Voltage</b>	UI4/UI5 models: 18 to 30 V DC PULS/PICK models: 12 to 30 V DC
<b>Supply Current</b>	225 mA at 12 V 100 mA at 24 V 85 mA at 30 V
<b>Construction</b>	Polycarbonate
<b>Operating Conditions</b>	-40 to +50 °C
<b>Environmental Rating</b>	IP67, IP69K
<b>Certifications</b>	CE, UL LISTED, UK CA

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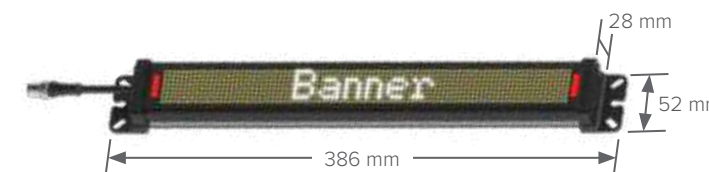


# SD50 Status Display

50 mm Programmable Text and Multicolor LED Indicator

- Easily configurable, versatile display can be installed nearly anywhere, making it a simple yet powerful alternative to complex HMIs and other displays
- Great for displaying takt time, equipment status, assembly sequences, counts, and measurements where they are most useful
- Discrete and IO-Link models integrate into many different systems and applications, especially Banner sensing, safety, and monitoring solutions
- Quick and easy configuration—define the desired text and call it via discrete control or process data
- Bright white LED display and multicolored status LEDs legible from 10 meters away inform operators about exactly what is going on so they can respond quickly and accurately

Description	Display Length	Control	Connection	Models
SD50 Programmable Status Display	300 mm	Discrete	150 mm PVC-jacketed cable with 4-pin M12 male QD	SD50P300WD15QP
		IO-Link		SD50P300WKQP



<b>Supply Voltage</b>	18 to 30 V DC
<b>Construction</b>	Polycarbonate
<b>Operating Conditions</b>	-20 to +60 °C
<b>Environmental Rating</b>	IP65
<b>Certifications</b>	CE, UL LISTED, UK CA

## Brackets





# K100 Programmable Display

## 100 mm Beacons

- Improve awareness across a full 360-degrees with bright white alphanumeric display and dynamic color indication combined in a single rugged device
- Easily configure color, messages, and display behavior in discrete models with free software, or take full control via protocol with IO-Link and Modbus models
- Convey more detail with up to 32 scrolling alphanumeric characters legible from 10 meters
- Enhance visibility and status recognition with 14 distinct, configurable color options
- Make critical messages unmistakable with optional audible alerts that capture attention in noisy environments
- Integrate seamlessly into any system with discrete, IO-Link, and Modbus models

Series	Style	Type	Color	Control	Audible Alarm	Connection
<b>K100P</b>	<b>D</b>	<b>BL</b>	<b>RGB</b>	<b>D15</b>	<input type="checkbox"/>	<b>Q</b>
D = Display	BL = Beacon light	RGB = Multicolor	D15 = Discrete 15 states K = IO-Link S = Modbus	Blank = No audible A = Audible	Q = 5-pin M12 integral QD (Discrete) 4-pin M12 integral QD (IO-Link, Modbus)	QD models require mating cordset



M36 x 2.0 threaded base  
Inner 3/4 in. NPT thread for direct pipe mounting

<b>Supply Voltage</b>	Discrete and Modbus: 12 to 30 V DC IO-Link: 18 to 30 V DC
<b>Audible Alarm</b>	101 dB at 1 m
<b>Operating Conditions</b>	-40 to +50 °C
<b>Construction</b>	Polycarbonate
<b>Environmental Rating</b>	IP66, IP69K

### Brackets



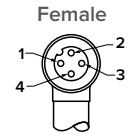
LMB36RA



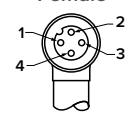
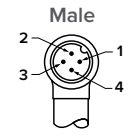
# Connectivity Accessories

## 4-Pin M12 (Voltage: 250 V DC/AC, Current: 4 A)



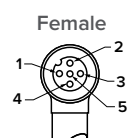
	Length	Straight	Right-Angle	Pinout
4-Pin Female QD to Flying Leads	1 m	MQDC-403	—	 1 = Brown 2 = White 3 = Blue 4 = Black
	2 m	MQDC-406	MQDC-406RA	
	3 m	MQDC-410	—	
	5 m	MQDC-415	MQDC-415RA	
	9 m	MQDC-430	MQDC-430RA	
	15 m	MQDC-450	MQDC-450RA	
	18 m	MQDC-460	MQDC-460RA	
	21 m	MQDC-470	MQDC-470RA	
	30 m	MQDC-4100	MQDC-4100RA	22 AWG Cable ø – 5.2 mm



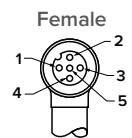
	Length	Straight/Straight (female/male)	Straight/Right-Angle (female/male)	Pinout
4-Pin Double-Ended	0.3 m	MQDEC-401SS	MQDEC-401RS	 1 = Brown 2 = White 3 = Blue 4 = Black
	0.6 m	MQDEC-402SS	—	
	0.9 m	MQDEC-403SS	MQDEC-403RS	
	1.8 m	MQDEC-406SS	MQDEC-406RS	
	3.0 m	MQDEC-410SS	—	
	3.6 m	MQDEC-412SS	MQDEC-412RS	
	4.5 m	MQDEC-415SS	—	
	6.1 m	MQDEC-420SS	MQDEC-420RS	
	9.2 m	MQDEC-430SS	MQDEC-430RS	 1 = Brown 2 = White 3 = Blue 4 = Black
	15.2 m	MQDEC-450SS	MQDEC-450RS	

## 5-Pin M12 (Voltage: 60 V DC/AC, Current: 4 A)



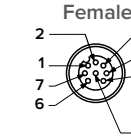
	Length	Straight	Right-Angle	Pinout
5-Pin Female QD to Flying Leads	0.9 m	MQDC1-503	—	 1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
	2 m	MQDC1-506	MQDC1-506RA	
	5 m	MQDC1-515	MQDC1-515RA	
	9 m	MQDC1-530	MQDC1-530RA	
	18 m	MQDC1-560	—	
	30 m	MQDC1-5100	—	



	Length	Straight/Straight (female/male)	Straight/Right-Angle (female/male)	Pinout
5-Pin Double-Ended	0.3 m	MQDEC-501SS	—	 1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
	1 m	MQDEC-503SS	—	
	2 m	MQDEC-506SS	—	
	5 m	MQDEC-515SS	—	
	9 m	MQDEC-530SS	—	
	15 m	MQDEC-550SS	—	

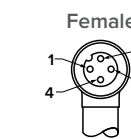
## 8-Pin M12 (Voltage: 30 V DC/AC, Current: 2 A)



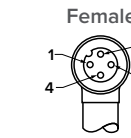
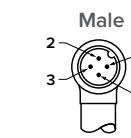
	Length	Straight	Right-Angle	Pinout
8-Pin Female QD to Flying Leads Open Shield with Drain Wire	2 m	MQDC2S-806	MQDC2S-806RA	 1 = White 2 = Brown 3 = Green 4 = Yellow 5 = Gray 6 = Pink 7 = Blue 8 = Red
	5 m	MQDC2S-815	MQDC2S-815RA	
	10 m	MQDC2S-830	MQDC2S-830RA	
	16 m	MQDC2S-850	MQDC2S-850RA	
	31 m	MQDC2S-8100	—	
				24 AWG Cable ø – 5.6 mm

## 4-Pin M12 PUR (Voltage: 250 V DC/AC, Current: 4 A)

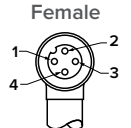
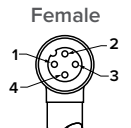


	Length	Straight	Right-Angle	Pinout
4-Pin Female QD to Flying Leads	2 m	MQDC-406-PUR	MQDC-406RA-PUR	 1 = Brown 2 = White 3 = Blue 4 = Black
	5 m	MQDC-415-PUR	MQDC-415RA-PUR	
	10 m	MQDC-430-PUR	MQDC-430RA-PUR	
				22 AWG Cable ø – 4.1 mm




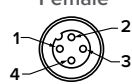

	Length	Straight/Straight (female/male)	Right-Angle/Straight (female/male)	Pinout
4-Pin Double-Ended	0.3 m	MQDEC-401SS-PUR	MQDEC-401SR-PUR	 1 = Brown 2 = White 3 = Blue 4 = Black
	0.6 m	MQDEC-402SS-PUR	MQDEC-402SR-PUR	
	1 m	MQDEC-403SS-PUR	MQDEC-403SR-PUR	
	2 m	MQDEC-406SS-PUR	MQDEC-406SR-PUR	
	3 m	MQDEC-409SS-PUR	MQDEC-409SR-PUR	
	5 m	MQDEC-415SS-PUR	MQDEC-415SR-PUR	
	10 m	MQDEC-430SS-PUR	MQDEC-430SR-PUR	 22 AWG Cable ø – 4.1 mm

### 4-Pin M12 Lighted (Voltage: 10 to 30 V DC at 15 mA max)

	Length	Straight	Right-Angle	Pinout
4-Pin PNP	2 m	MQDC-406-GYP	MQDC-406-GYPRA	 <p>Female</p> <p>1 = Brown 2 = White 3 = Blue 4 = Black (ouput LED)</p>
	5 m	MQDC-415-GYP	MQDC-415-GYPRA	
	9 m	MQDC-430-GYP	MQDC-430-GYPRA	
				22 AWG Cable ø – 5.2 mm
4-Pin NPN	2 m	MQDC-406-GYN	MQDC-406-GYNRA	 <p>Female</p> <p>1 = Brown 2 = White 3 = Blue 4 = Black (ouput LED)</p>
	5 m	MQDC-415-GYN	MQDC-415-GYNRA	
	9 m	MQDC-430-GYN	MQDC-430-GYNRA	
				22 AWG Cable ø – 5.2 mm

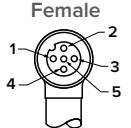
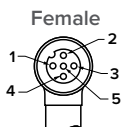


### 4-Pin M12 Washdown (Voltage: 250 V DC/AC, Current: 4 A)

	Length	Straight	Pinout
4-Pin	2 m	MQDC-WDSS-0406	 <p>Female</p> <p>1 = Brown 2 = White 3 = Blue 4 = Black</p>
	5 m	MQDC-WDSS-0415	
	9 m	MQDC-WDSS-0430	
			22 AWG Cable ø – 4.8 mm
4-Pin Double-Ended	0.31 m	MQDEC-WDSS-401SS	 <p>Female</p> <p>1 = Brown 2 = White 3 = Blue 4 = Black</p>
	0.91 m	MQDEC-WDSS-403SS	
	1.83 m	MQDEC-WDSS-406SS	 <p>Male</p> <p>1 = Brown 2 = White 3 = Blue 4 = Black</p>
	3.7 m	MQDEC-WDSS-412SS	
			22 AWG Cable ø – 4.8 mm






### 5-Pin M12 Lighted (Voltage: 10 to 30 V DC at 15 mA max)

	Length	Straight	Right-Angle	Pinout
5-Pin PNP	2 m	MQDC-506-GYP	MQDC-506-GYPRA	 <p>Female</p> <p>1 = Brown 2 = White 3 = Blue 4 = Black (ouput LED) 5 = Gray</p>
	5 m	MQDC-515-GYP	MQDC-515-GYPRA	
	9 m	MQDC-530-GYP	MQDC-530-GYPRA	
				22 AWG Cable ø – 5.6 mm
5-Pin NPN	2 m	MQDC-506-GYN	MQDC-506-GYNRA	 <p>Female</p> <p>1 = Brown 2 = White 3 = Blue 4 = Black (ouput LED) 5 = Gray</p>
	5 m	MQDC-515-GYN	MQDC-515-GYNRA	
	9 m	MQDC-530-GYN	MQDC-530-GYNRA	
				22 AWG Cable ø – 5.6 mm



### 5-Pin M12 Washdown (Voltage: 60 V DC/AC, Current: 4 A)

	Length	Straight	Pinout
5-Pin	2 m	MQDC-WDSS-0506	 <p>Female</p> <p>1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray</p>
	5 m	MQDC-WDSS-0515	
	9 m	MQDC-WDSS-0530	
			22 AWG Cable ø – 5.2 mm
5-Pin Double-Ended	1.5 m	MQDEC-WDSS-505SS	 <p>Female</p> <p>1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray</p>
	3 m	MQDEC-WDSS-510SS	
	4.57 m	MQDEC-WDSS-515SS	 <p>Male</p> <p>1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray</p>



### 4-Pin M12 Splitters (Voltage: 250 V DC/AC, Current: 4 A)



Models	Cable Lengths		Pinout
	Trunk (Male)	Branches (Female)	
CSB-M1240M1241	No Trunk/Integral QD	2 x 0.3 m	 1 = Brown 2 = White 3 = Blue 4 = Black   1 = Brown 2 = White 3 = Blue 4 = Black
CSB-M1241M1241	0.3 m	2 x 0.3 m	
CSB-M1243M1243	1 m	2 x 1 m	
CSB-M1248M1241	2.4 m	2 x 0.3 m	
CSB-M12415M1241	4.6 m	2 x 0.3 m	
CSB-UNT425M1241	7.6 m Unterminated	2 x 0.3 m	

22 AWG Cable ø – 6.0 mm

### 4-Pin M12 Splitters (Voltage: 30 V DC/AC, Current: 4 A)



Models	Cable Lengths		Wiring Diagrams
	Branches (Female)	Trunk (Male)	
S15YB-M124-M124-0.2M	2 x 0.2 m	No Trunk	
S15YA4-M124-M124-0.2M			
S15YA24-M124-M124-0.2M			

### 5-Pin M12 Splitters (Voltage: 30 V DC/AC, Current: 2 A)



Models	Cable Lengths		Pinout
	Trunk	Branches	
CSB-M1251M1251B	0.3 m (Male)	2 x 0.3 m (Female)	 1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray   1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
CSB-M1251FM1251M	0.3 m (Female)	2 x 0.3 m (Male)	

22 AWG Cable ø – 5.9 mm

### Wall Plug Cordsets



Plug Type	Length	Countries	Models
Flying Leads	1.8 m	General use	LQMAC-306
NEMA 5-15 grounded (IEC Type B)		United States, Canada, Japan, Puerto Rico, Taiwan	LQMAC-306B
BS 546 (IEC Type D)		India	LQMAC-306D
CEE 7/7 (IEC Type E or F)		Germany, France, South Korea, The Netherlands, Poland, Spain, Turkey	LQMAC-306EF
BS 1363 (IEC Type G)		United Kingdom, Ireland, Singapore, Vietnam	LQMAC-306G
AS/NZS 3112 (IEC Type I)		China, Australia, New Zealand	LQMAC-306I
NBR 14136 (IEC Type N)		Brazil	LQMAC-306N
NEMA 5-15 grounded (IEC Type B)	3 m	United States, Canada, Japan, Puerto Rico, Taiwan	LQMAC-310B

### Cascade Cordsets



	Length	Models
Male Straight/Male Straight	0.15 m	LQMAEC-3005SS
	0.31 m	LQMAEC-301SS
	0.91 m	LQMAEC-303SS
	1.83 m	LQMAEC-306SS
	3.66 m	LQMAEC-312SS
	6.1 m	LQMAEC-320SS
	9.14 m	LQMAEC-330SS

### 2-Pin Single Color Only Cordsets



	Length	Models
2-Pin Straight	1.83 m	DTMC-206
	4.57 m	DTMC-215
	9.15 m	DTMC-230
2-Pin Double-Ended	0.16 m	DTMEC-2005
	0.31 m	DTMEC-201
	0.91 m	DTMEC-203
	1.83 m	DTMEC-206
	3.66 m	DTMEC-212
	6.1 m	DTMEC-220
	9.15 m	DTMEC-230

# Programmable Accessories

# Power Accessories

## Pro Editor Cable Accessory Kit



Description	Length	Connections	Model
Pro Editor Software Adapter	1.83 m	USB and 5-pin M12 QD	PRO-KIT
Power Supply	2 m	5-pin M12 QD	
5-pin M12 Splitter	Female Trunk: 0.3 m Male Branches: 2 x 0.3 m	5-pin M12 QD	

## Pro Editor Converter Cable



Description	Length	Connections	Model
Pro Editor Software Adapter	1.83 m	USB and 5-pin M12 QD	MQDC-506-USB

## Programmable Mating Accessory



Description	Length	Connections	Model
Mating accessory for cabled and terminal models, Includes: Cable and 5 Lever Wire Nuts	150 mm (6 in)	5-pin M12 QD	ACC-PRO-CABLE5

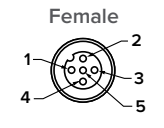
## Programmable Cordset



Description	Length	Connections	Model
A-Code M12 to A-Code M12 Double Ended	0.30 m	8-pin Straight Female, 5-pin Straight Male	MQDC-801-5M-PRO

## 5-Pin Power Supply



Model	Input	Output	Length	Pinout
PSW-24-1	100 to 240 V AC	Voltage: 24 V DC $\pm$ 5% Current: 1.0 Amp Power: 24 W max.	2 m	 <p>Female</p> <p>1 = V+ 2 = NC 3 = V- 4 = NC 5 = NC</p>
PSD-24-4	90 to 264 V AC	Voltage: 24 V DC $\pm$ 5% Current: 3.9 Amp Power: 96 W max.	1.5 m	

## Inline AC/DC Power Converter\*



AC Output	DC Output	Connector	DC Device Remote Input Type and Pin Assignment	Model
Normally Open, E/M Relay	PNP	150 mm PVC cable with an M12 QD	PNP on Pin 2	SPS30PAR2PQ5
			PNP on Pin 5	SPS30PAR5PQ5
	NPN		NPN on Pin 5	SPS30PAR5NQ5
			NPN on Pin 2	SPS30NAR5NQ5
	PNP	150 mm PVC cable with an M8 QD	NPN on Pin 2	SPS30PAR2NQ3

\*For use with actuator products

# Switches and Dimming Accessories

## WLS28 In-Line Switches

Description	Used With	Models
2 position in-line switch	2-Wire DC LED lights	WLS28PBQ
3 position in-line switch	WLS28-2 and WLS28-2 dual color	WLS28-2PBQ
In-line motion detector switch	2-Wire DC LED lights	WLS28-2MQ
Three 2-position in-line switch	4-Wire DC LED lights	LC28PB2-3Q

## LC15T and LC25T In-Line Touch Switches

Model Function	Power Applied	10%-90% PWM Output*	Output On 100%	Used With	Models
On/off		N/A		2-Wire DC devices	LC15T-127AL2RGQP LC25T-AL2RGQ
3-Wire PWM control	Red	Blue	Green	3-Wire PWM controlled devices	LC15T-127AP1RBGQP LC25T-AP1RBGQ
2-Wire PWM control		Blue		2-Wire PWM controlled devices	LC15T-127AP2RBGQP LC25T-AP1RBGQ

## LC65 LED Dimmer Module

Connection	Pulse Width Modulation Type	Models
Terminal block	3-Wire	LC65P1T
	2-Wire	LC65P2T
	3-Wire	LC65P1Q5
	2-Wire	LC65P2Q5

1 - 150 mm 5-pin M12 PVC cable with a female, stainless steel QD  
1 - 150 mm 4-pin M12 PVC cable with a female, stainless steel QD

# Standoff Pipe Accessories

## Standoff Pipes

Description	Construction	Length	Models
0.5 in NPT thread	Polished 304 Stainless Steel	150 mm	SOP-E12-150SS
		300 mm	SOP-E12-300SS
		900 mm	SOP-E12-900SS
	Black Anodized Aluminum	150 mm	SOP-E12-150A
		300 mm	SOP-E12-300A
		900 mm	SOP-E12-900A
Clear Anodized Aluminum	150 mm	SOP-E12-150AC	
	300 mm	SOP-E12-300AC	
	900 mm	SOP-E12-900AC	
0.75 in NPT thread	Black Anodized Aluminum	150 mm	SOP-E34-150A
		300 mm	SOP-E34-300A
		600 mm	SOP-E34-600A
		900 mm	SOP-E34-900A

## Adapters and Covers

Description	Construction	Models
M36 thread to 12-14 NPSM thread base	Black plastic	SA-M36E12
M36 thread with clearance for 0.75 in pipe	Black plastic	SA-M36SOP
Mounting base, M30 x 1.5 thread (for use with TL50)	Black ABS	SA-M30TE12
	White UHMW	SA-M30TE12C
M30 x 1.5 thread (for use with K70 and K90 EZ-Light)	Black polycarbonate	SA-M30
	Gray polycarbonate	SA-M30C
30 mm light base to 0.5 in pipe (mounting hardware included)	Black ABS	SA-E12M30
	White UHMW	SA-E12M30C
22 mm light base to 0.5 in pipe	Black polycarbonate	SA-M22E12

## Pipe Mounting Flange

Description	Construction	Models
0.5 in NPSM/DN15 Elevated-use standoff pipe (M5 mounting hardware and nitrile gasket included)	Die-cast zinc base with black paint	SA-F12
	Black polycarbonate	SA-F12-3

# Audible Indication



## K50 Programmable Compact Audible

K50 Programmable Compact Audible Indicators are a bright, sealed indicator, designed with an integrated audible alarm. It offers fourteen different tones that can be customized and adjusted to different intensity levels. All K50 models are programmable using Banner's Pro Editor Software or IO-Link. It offers seven default colors in one multicolor RGB device and is available without indication.



## TL50 Audible

TL50 Programmable Audible Indicators are rugged and easy to install. Audible models are available with standard, sealed, or omni-directional audible element.



## TL70 Audible

TL70 Tower Lights feature adjustable audible modules for tremendous flexibility and can be customized as needed.



## TL15 Audible

TL15A in-line audible alert indicators can be used as standalone devices, connected in-line with TL15 tower lights, or paired with sensors so users can receive color status and audio alerts locally.

# Hazardous Location



## HLS27 Bright LED Strip Lights

HLS27 LED Strip Lights for hazardous locations have a sturdy aluminum housing and are encased in a shatterproof, UV-stabilized polycarbonate shell, making them ideal for harsh indoor and outdoor applications. The option of having multiple colors in one device makes this ideal for mobile vehicle, machine status, and vision lighting applications. It has certifications for cULus and ATEX/UKCA/IECEX.



## HLS28 LED Strip Lights for Enclosures

HLS28 Hazardous Location LED Strip Lights have a sturdy aluminum housing, shatterproof windows, and a low-profile, space-saving design for use in certified enclosures in hazardous locations. The light is available with an integrated motion sensor for auto-on when the enclosure door is opened, or anytime motion is detected. It has certifications for cULus and ATEX/UKCA/IECEX.



## K30 30 mm Multicolor Indicators

Rugged, cost-effective multicolor indicator light made for use in hazardous areas. It is ATEX, CSA c/us, and IECEx certified; fully sealed; and rated to IP67/IP69K for harsh environments.



## K50 50 mm Multicolor Indicators

K50L indicators feature an illuminated dome for easy-to-see operator guidance and indication of equipment status. Ideal for use in hazardous areas, it is rated IP67/IP69K for washdown and has certifications in ATEX, CSA c/us, and IECEx.



## K100 Programmable Hazardous Beacons

K100 Programmable Hazardous Beacons are designed for use in oil, gas, and other hazardous locations. With an environmental rating of IP66 and IP69K, these durable hazardous models can withstand high temperatures, protect against vibration, and are dustproof. They are rated cULus, CID2, CIID2, CIID1, and CIID2 for use in settings in which flammable gases, vapors, mists, or dusts are present.

# Heavy Duty and Washdown



## RLS27 Rugged LED Strip Lights

The RLS27 Strip lights feature a shatterproof, UV-stabilized polycarbonate shell that provides superior environmental resistance. Along with a sturdy aluminum inner housing and waterproof IP67/IP69K-rated design, these highly efficient strip lights deliver reliable operation in the most challenging environments. Choose from single-color, multicolor, or programmable models.



## WLS27 LED Strip Lights

Banner's WLS27 LED Strip Lights have a sturdy internal aluminum structure, encased in shatterproof, UV-stabilized, copolyester shells, making them ideal for harsh indoor and outdoor applications.



## WLC60 Heavy Duty LED Strip Lights

Designed to operate in harsh environments, the WLC60 can withstand high-pressure washdown and exposure to coolants and detergents.



## WLH60 High Temperature LED Lights

Banner's WLH60 is a heavy-duty LED light fixture offering best-in-class brightness to illuminate applications in high-temperature environments. Its rugged, heat-resistant design enables installation in or near high-temperature areas that challenge other lighting solutions.



## WLC90 Heavy Duty LED Work Lights for High Temperatures

Designed to operate in harsh environments, the WLC90 can withstand high-pressure washdown and exposure to coolants and detergents.



## WLA LED Area Lights for Industrial Work Cells

Developed for lighting industrial work cells, including areas with exposure to liquids, such as food and beverage processing applications.

# Vision Lighting



## Linear Array Lights

Linear Array Lights provide high-intensity illumination of large areas, at long distances.



## Linear Array Backlights

Linear Array Backlights provide maintenance-free LED illumination of large objects from far away.



## Area Lights

Area Lights create shadows to detect changes in depth, illuminate specific surface angles, and avoid glare from reflective surfaces when directed at an angle away from the lens.



## Backlights

Backlights offer a highly diffuse surface and uniform brightness, with a lower intensity than other lights.



## Ring Lights

Ring Lights brightly illuminate small objects and reduce shadows on images with protrusions.



## Low-Angle Ring Lights

Low-Angle Ring Lights illuminate from an angle nearly perpendicular to objects to emphasize surface irregularities such as dust, dents, scratches and other surface defects.



## Spot Lights

Spot Lights provide extremely bright, even light with a single high-power LED.



## On-Axis Lights

On-Axis Lights evenly illuminate flat reflective surfaces and deliver collimated illumination in the same optical path as a camera.



## Structured Lights

A laser line generator is an example of a structured lighting scheme. This technique uses a high-quality, uniform laser line to infer the presence of a difficult-to-see target.

# Smarter Automation. Better Solutions.™

Banner Engineering designs and manufactures industrial automation products including sensors, smart IIoT and industrial wireless technologies, LED lights and indicators, measurement devices, machine safety equipment, as well as barcode scanners and machine vision. These solutions help make many of the things we use every day, from food and medicine to cars and electronics. A high-quality, reliable Banner product is installed somewhere around the world every two seconds. Headquartered in Minneapolis since 1966, Banner is an industry leader with more than 10,000 products, operations on five continents, and a world-wide team of more than 5,500 employees and partners. Our dedication to innovation and personable service makes Banner a trusted source of smart automation technologies to customers around the globe.

