

Lighting & Indication Solutions



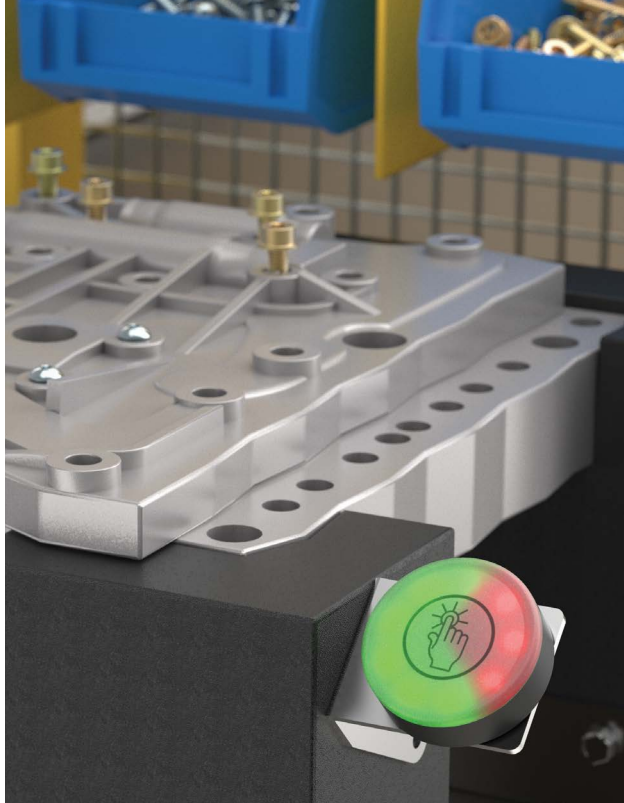
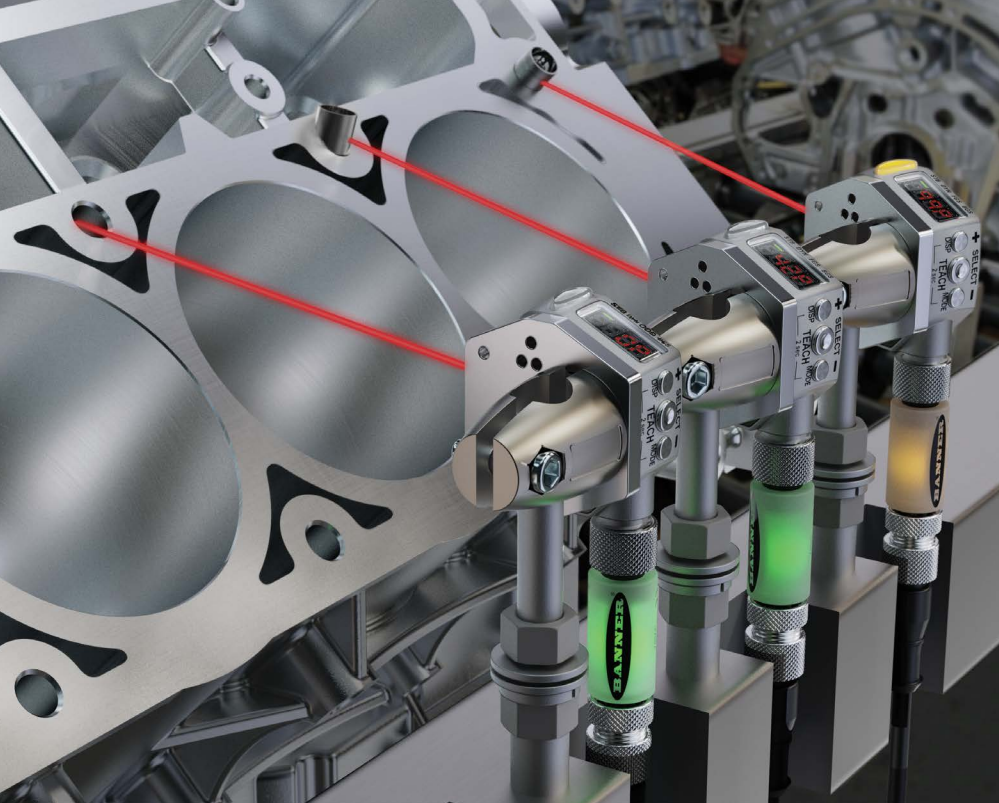


Table of Contents

Visual Factory	4
New Products	8
Programmable Products	10

Lighting and Indication Solutions

LED Task Lighting	12
Tower Lights	40
Indicators	56
Touch Button and Pick-to-Light	80
Display	96

Accessories

Connectivity	102
Programmable	108
Power	109
Switches and Dimming	110
Standoff Pipes	111

Specialty Solutions

Audible Indication	50
Hazardous Location	113
Heavy Duty and Washdown	114
Vision Lighting	115

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

Sensor Emulation

Machine and Process Status

Call for Parts

Loading Dock/Bay Communication

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

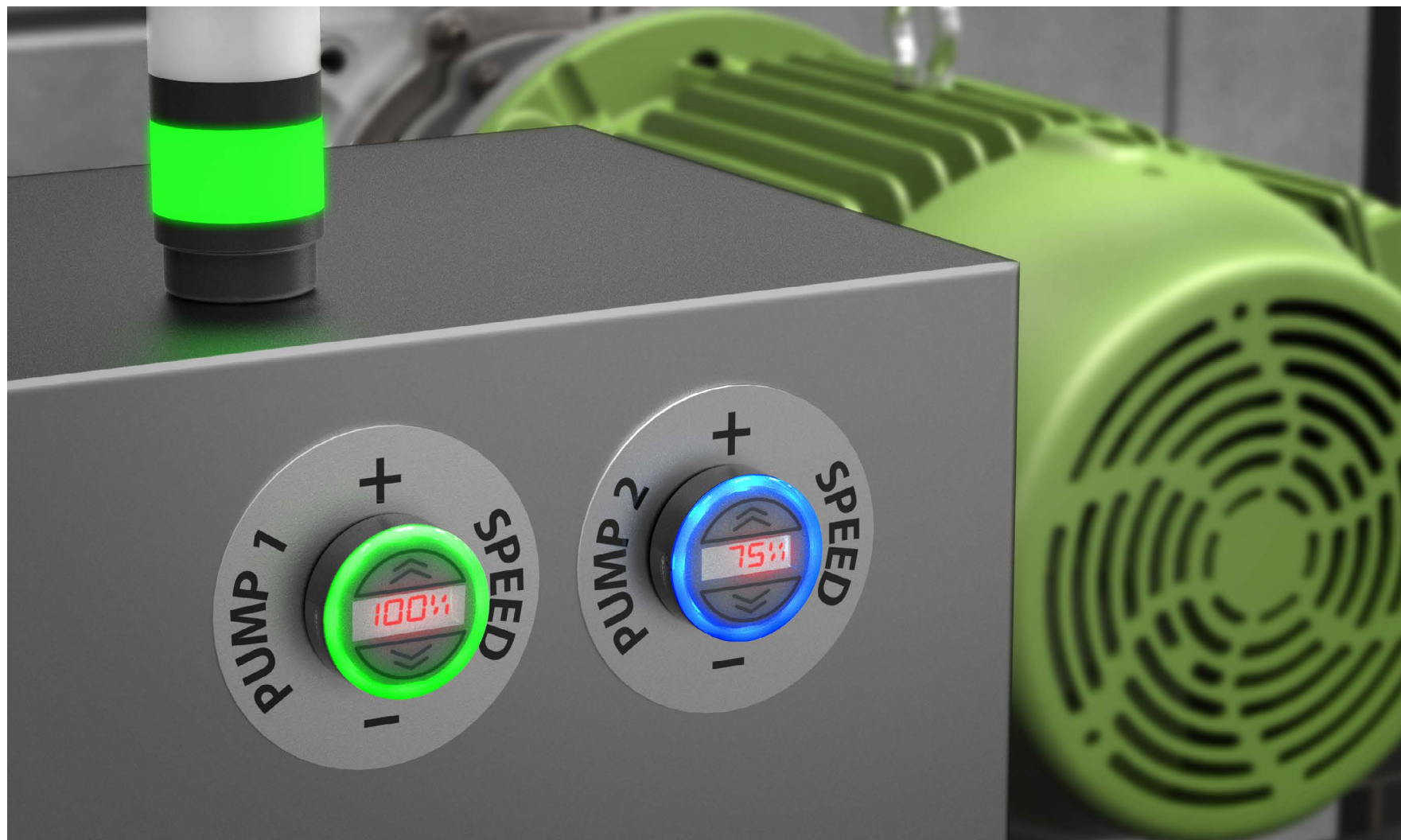
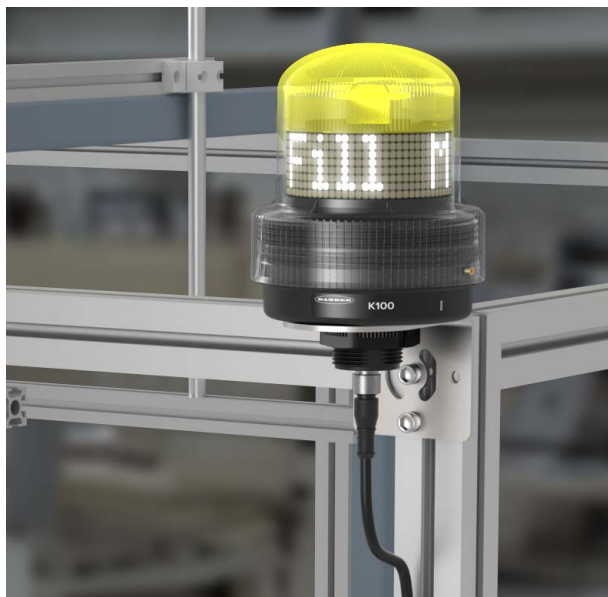
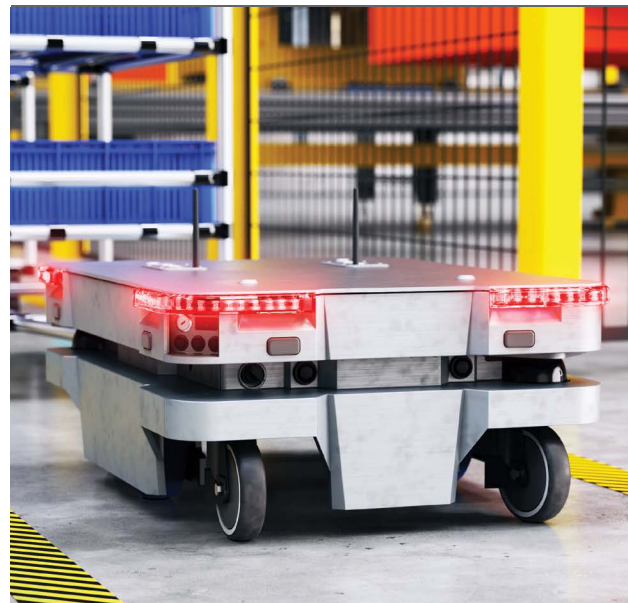
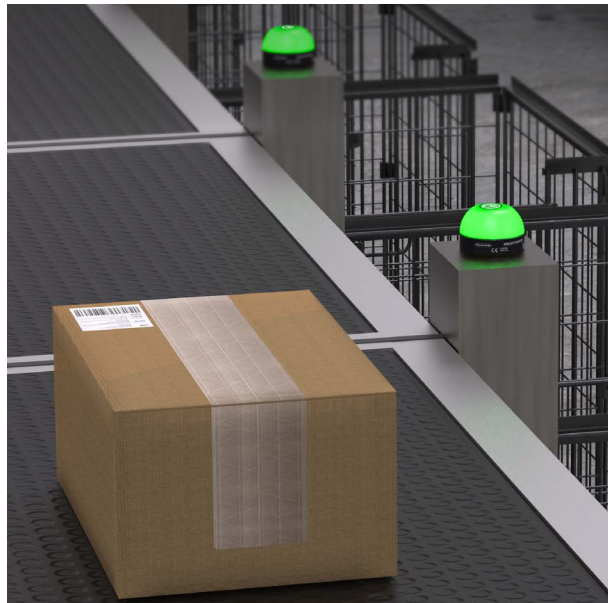


Magnetic mounting options for easy installation and portability



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

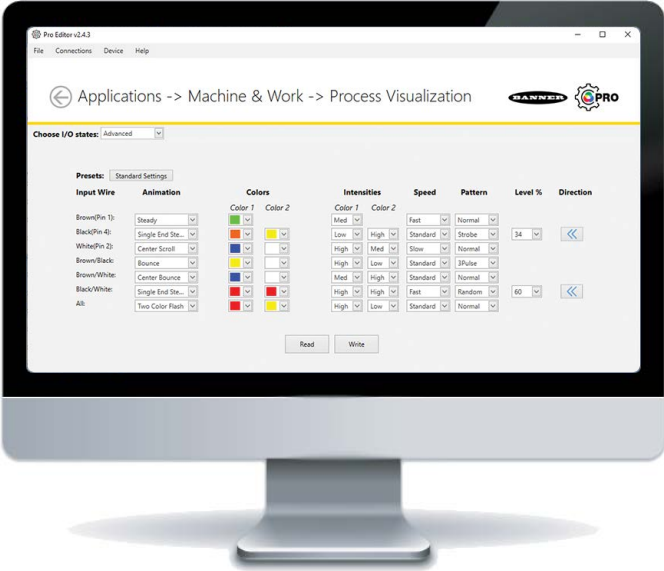


K100 Programmable Display Beacons

- 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.



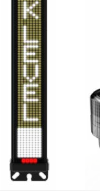
is an industrial network protocol that adapts the Common Industrial Protocol to standard Ethernet.



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

✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
✓	✓		✓	✓	✓	✓		✓	✓	✓	
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Programmable LED indicators offer multiple color choices in a single housing

LED Task Lighting

Selection Guide



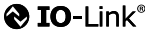
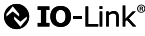
pg. 16

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					
Hazardous Location Models			HLS27	HLS28	



pg. 20

pg. 24

pg. 25

pg. 26

pg. 27

pg. 28

pg. 29

RLS27	WLS70	WLB72	WLB92	BL60	WLC60	WLH60 High Temp
285 to 2270	300 to 1200	1200 and 2400	550 and 1100	340 and 640	340 and 640	340 and 640
DC	AC and DC	AC	AC and DC	DC	DC	DC
850	1350	1700	1755	1375	1300	1150
IP67, IP69K	IP65	IP20	IP40	IP67, IP68g, IP69K	IP68, IP68g, IP69K	IP68, IP69K
(see page 56)						
✓				✓	✓	

LED Task Lighting

Selection Guide



pg. 30



pg. 32



pg. 33

Series Name

S15WL

WL50S

WL50-3

Dimensions (mm)

ø 15

ø 50

ø 50

AC/DC

DC

DC

DC

White Lumens

55

295

300

IP Rating

IP65, IP67, IP68

IP67, IP69K

IP67, IP69K

Programmable

(see page 56)

Color Options

✓



pg. 31



pg. 36



pg. 37



pg. 38

GS60

WLC90

WLR95

WLA-2

ø 60

89 x 91

94 x 49

105 x 180 to 360 x 180

DC

DC

DC

DC

300

700

600

1025 per 85 mm panel

IP66, IP67

IP68, IP68g, IP69K

IP65, IP67, IP68

Sealed: IP67, IP69K
Encapsulated:
IP67, IP68, IP69K

(see page 56)

✓

✓

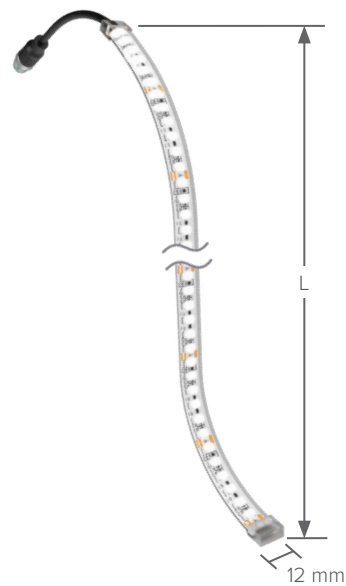


WLF12

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
WLF12	X	W	300	S	24	QP
X = Non-cascadable		W = Daylight white		S = Sealed	24 = 24 V	QP = 150 mm PVC-jacketed cable with 4-pin M12 male quick disconnect
			300 600 1200 2000 3000 4000			



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

Supply Voltage
Bend Radius
Construction
Operating Conditions
Environmental Rating
Certifications

24 V DC
15 mm
Silicone material, suitable for damp location use.
Fully overmolded and encapsulated LEDs.

–20 to +45 °C

IP66, IP67, IP69K



Programmable models page 74



WLS15

LED Strip Lights

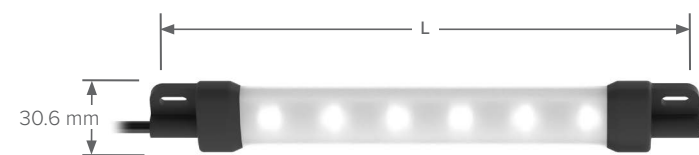
- Low-profile design for easy installation in tight spaces
- 12 or 24 V DC operation in one model
- Completely sealed with an IP67 rating for use in wet or dusty environments
- The rugged construction and polycarbonate shell resists shock and vibration while remaining lightweight
- LED lighting technology 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
WLS15	X	DW	0360	D	S	C2
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
WLS15H	X	DW	0360	L	S	24	C2
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
Lumens

Construction

Operating Conditions
Environmental Rating
Certifications

12 or 24 V DC nominal
Standard: 175–1400
High Intensity: 750–3000
Inner Housing: Clear anodized aluminum
Outer Housing: Polycarbonate
End Caps: Polyamide
–40 to +60 °C
IP66, IP67, UL 2108



Programmable models page 75

Brackets



LMBWLF12C

Set of 10 clamp brackets,
translucent silicone



LMBWLS15-150S



LMBWLS15



LMBWLS15MAG
Magnetic Mount



LMBWLS15TF
Tape



LMBWLS15TD
Velcro

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



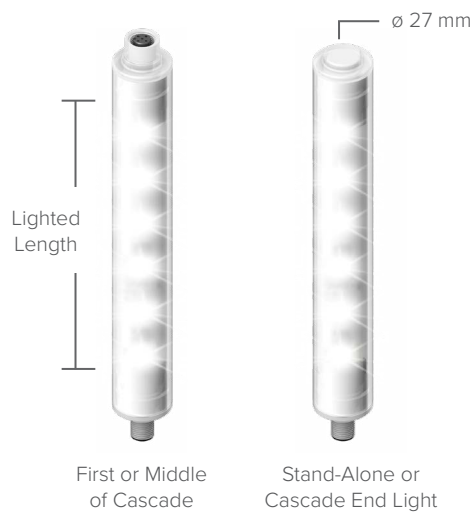


WLS27

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



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

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

**Depending on length and color

Single Color Models

Series	Cascadable	Color	Lighted Length (mm)	Window	Construction	Control	Connector
WLS27	X	W	285	D	S		Q
	C = Cascadable X = Non-cascadable	W = Cool white WW = Warm white R = Red G = Green B = Blue Y = Yellow	145 285 430 570 710 850 990 1130	D = Diffuse plastic	S = Sealed	Blank = None PWM = Pulse Width Modulation dimming	Q = M12 integral QD QD models require mating cordset

Multicolor Models

Series	Cascadable	Colors 1-5 and Control	Lighted Length (mm)	Window	Construction	Voltage	Connector
WLS27	X	WGRXX3	0285	D	S	24	Q
	C = Cascadable X = Non-cascadable		0285 0570 0850 1130	D = Diffuse plastic H = Heavy diffuse plastic	S = Sealed	24 = 24 V DC	Q = M12 integral QD QD models require mating cordset
WGRXX3 = White, green, red with override control WYRXX3 = White, yellow, red with override control GYRXX3 = Green, yellow, red with override control WGRYB5 = White, green, red, yellow, blue with binary control WGRXX6 = White, green, red with I/O block control WYRXX6 = White, yellow, red with I/O block control GYRXX6 = Green, yellow, red with I/O block control							



Programmable models page 76

Dimming Accessories page 110

Brackets



LMBWLS27EC
Clear Copolyester



LMBWLS27H



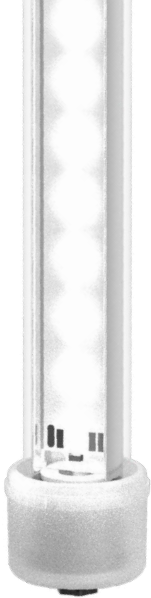
LMBWLS27T



LMBWLS27U
Clear Copolyester
(Also available with magnet
LMBWLS27U-MAG)



LMBWLS27SP
Clear Copolyester

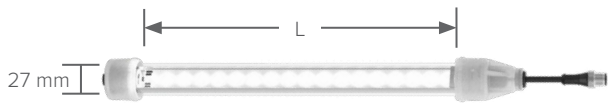
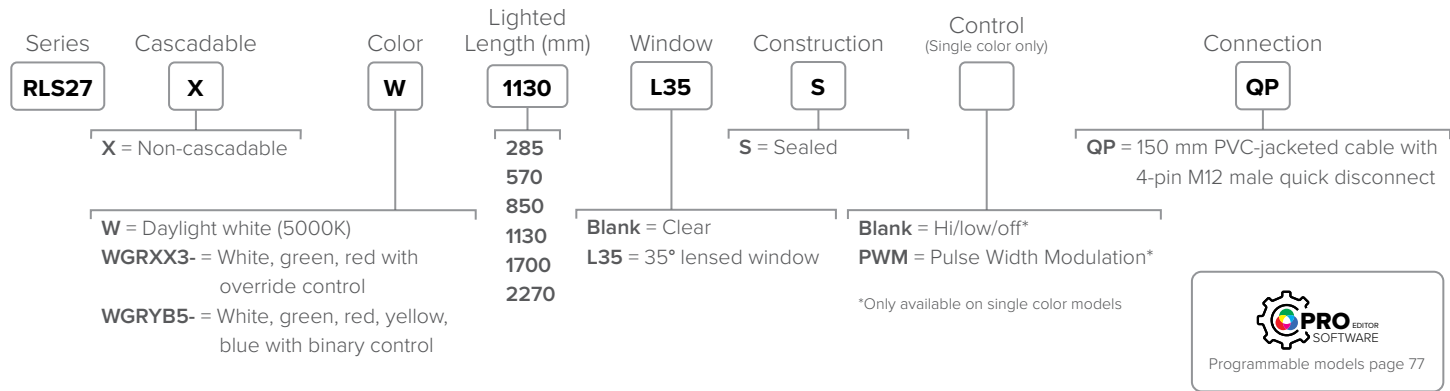


RLS27

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

Supply Voltage

Lumens

Construction

Operating Conditions

Environmental Rating

Certifications

Single color: 12 to 30 V DC
Multicolor: 24 V DC
White: 850–6800**
Multicolor: 125–5200**
Inner housing: clear anodized aluminum
Outer housing: UV-stabilized polycarbonate
Connector: Nickel-plated
–40 to +70 °C (–40 to +158 °F)
IP67, IP69K per DIN 40050-9



**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

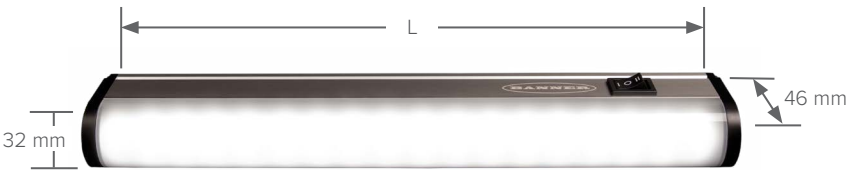
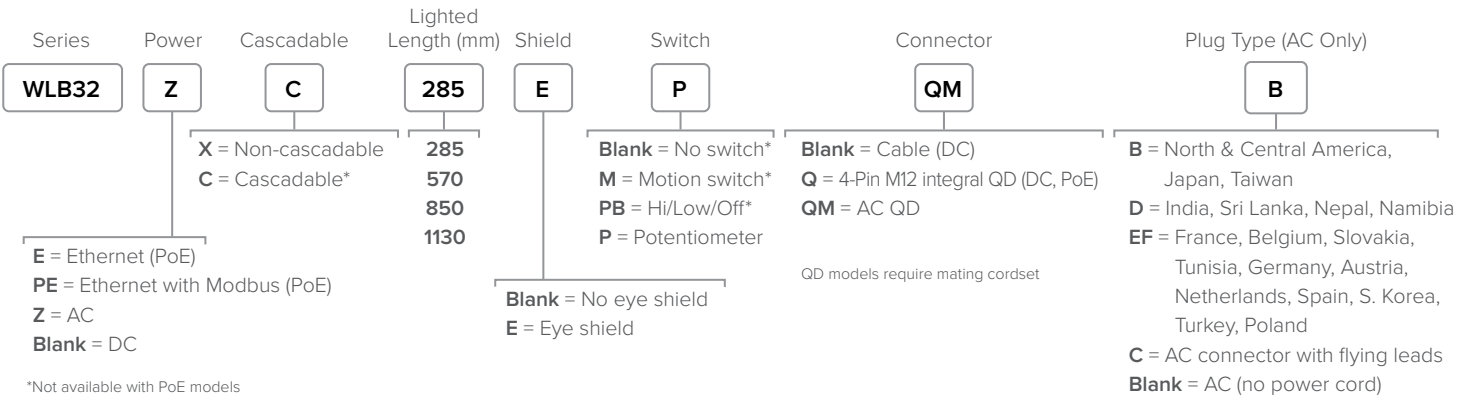
Universal clamp bracket (optional)



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

Supply Voltage

Lumens

Color Temperature

Switch

Construction

Operating Conditions

Environmental Rating

Certifications

DC: 12 to 30 V DC
AC: 90 to 264 V AC
PoE: 42.5 to 57 DC
750–3000
5000K
PoE: Dimming knob, 10 levels of intensity adjustment, off position
All other: High/low/off = 100/50/0%
Housing: Anodized aluminum
Window and end caps: Polycarbonate
DC: –40 to +70 °C
AC: –25 to +45 °C
PoE: –40 to +50 °C
PoE: IP40
All other: IP50

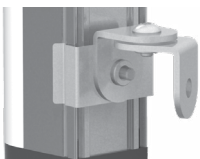


*Not available with PoE models

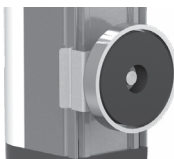
Brackets



LMBWLB32



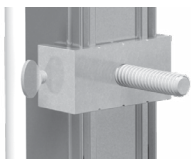
LMBWLB32-180S



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

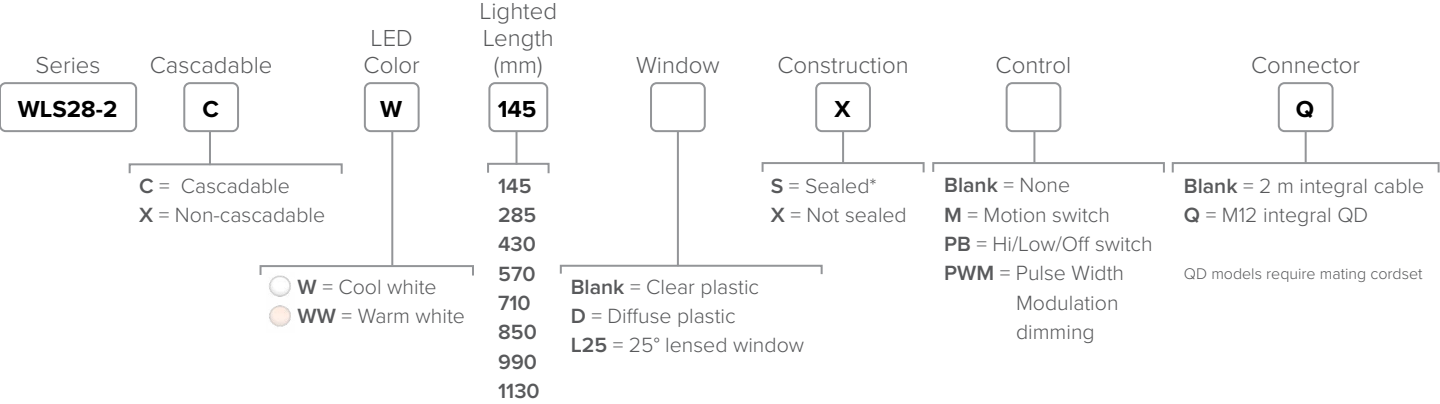


Lighted Length (L)	
145 mm	710 mm
285 mm	850 mm
430 mm	990 mm
570 mm	1130 mm

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

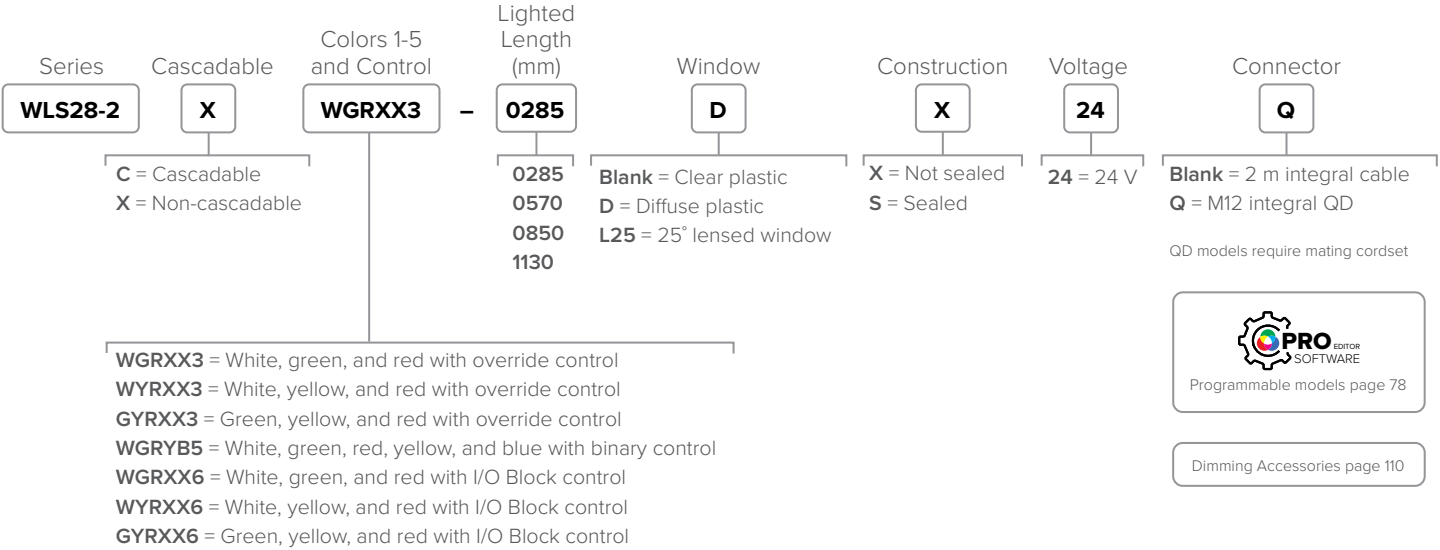
*Depending on length and color

White Models

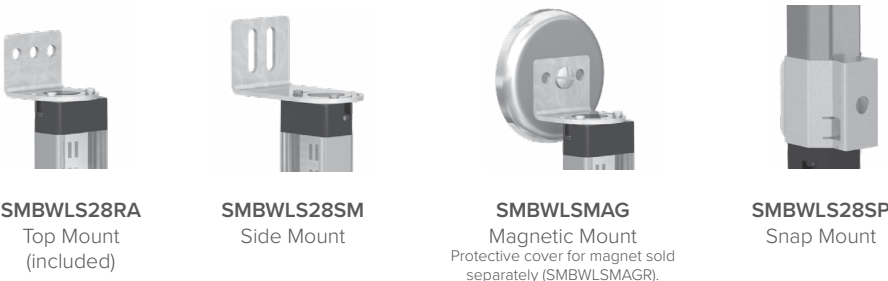


*Sealed models not available with ON/OFF Switch (PB) or Motion Switch (M)

Multicolor Models



Brackets

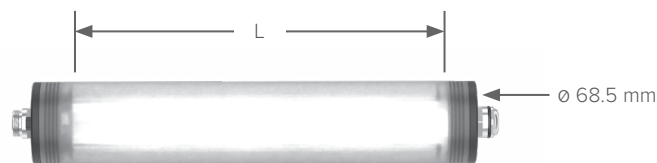
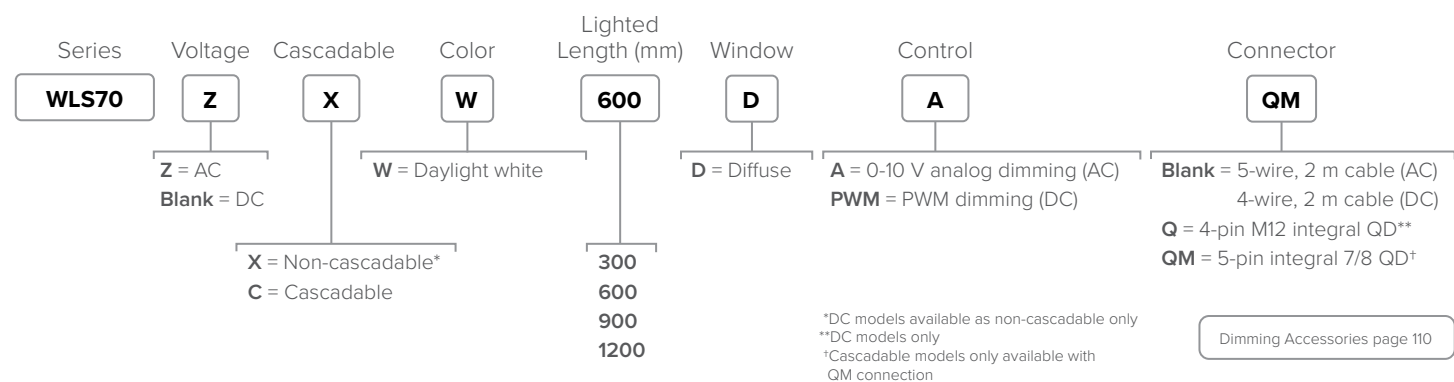




WLS70

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

Supply Voltage	DC: 12 to 30 V DC (300–900 mm models) 18 to 30 V DC (1200 mm models) AC: 100 to 277 V AC
Lumens	1350–5400
Construction	Inner Housing: Anodized aluminum Outer Housing: Polycarbonate
Operating Conditions	–40 to +50 °C
Environmental Rating	IP65
Impact Rating	IK10
Certifications	

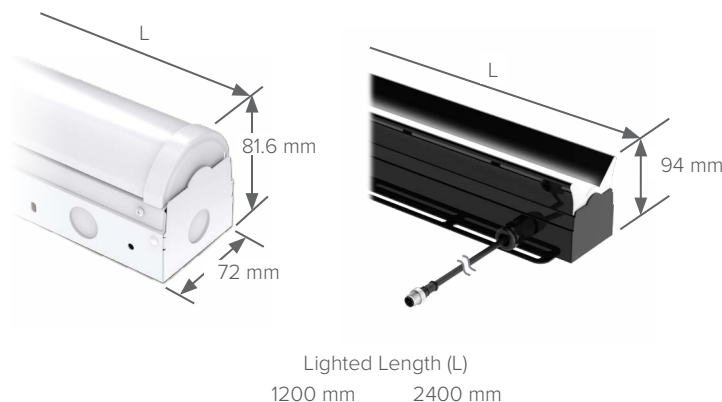
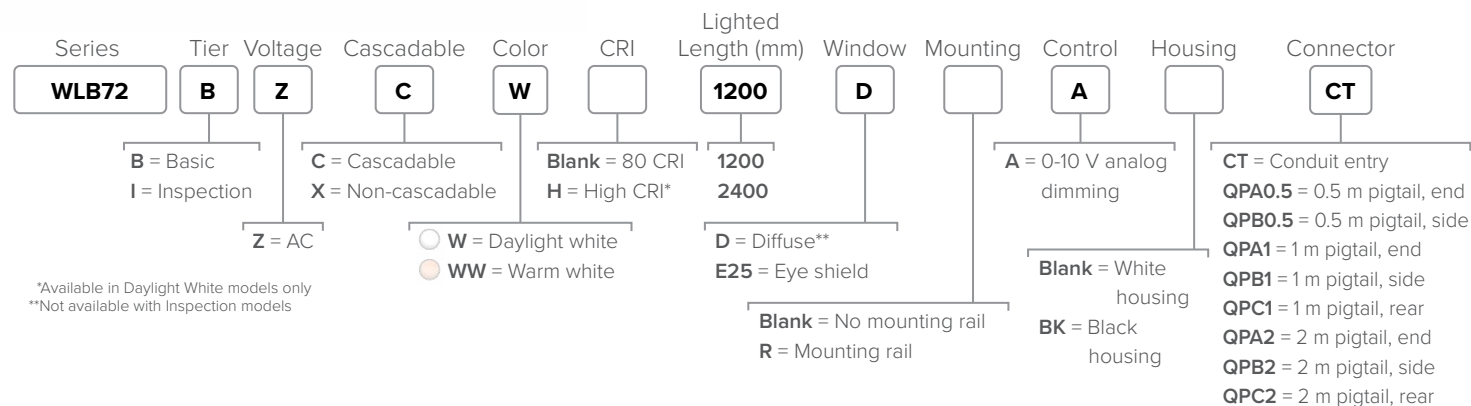
Brackets



WLB72

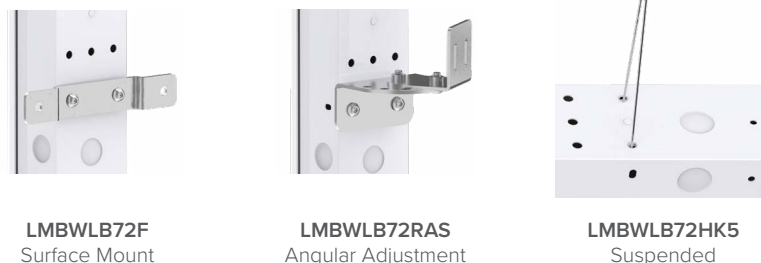
Industrial LED Strip Lights

- 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



Supply Voltage	120 to 277 V AC
Lumens	Diffuse: 6800–1300 Eye Shield: 3800–7600
Construction	Housing: Galvanized steel with corrosion resistant polyester powder coat Window: Polycarbonate End caps: Polycarbonate
Operating Conditions	–40 to +50 °C
Environmental Rating	IP20
Certifications	

Brackets



Controller



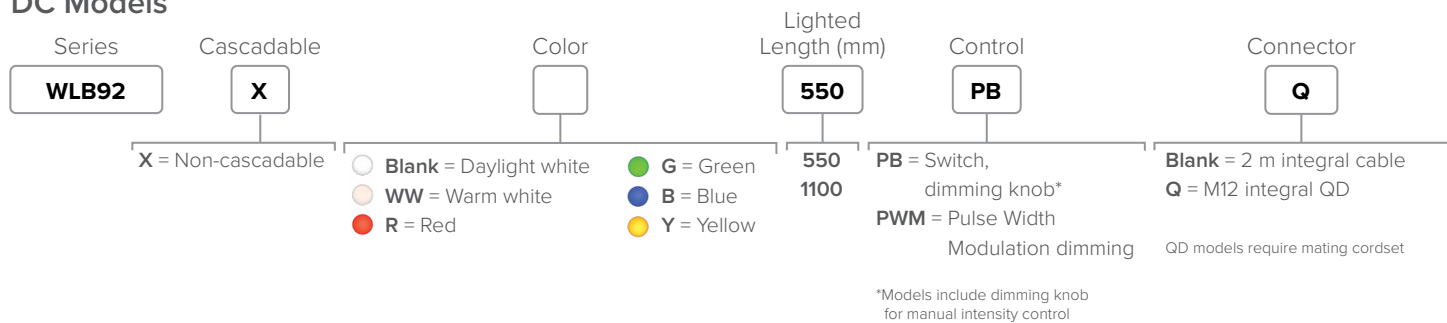


WLB92

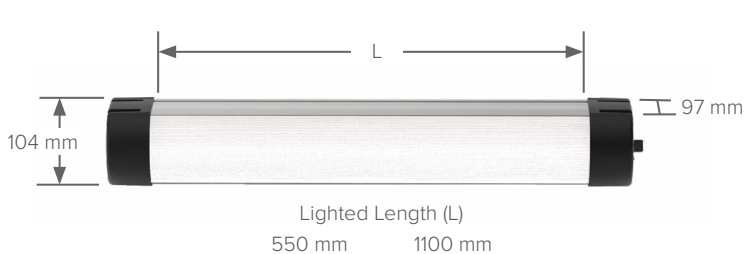
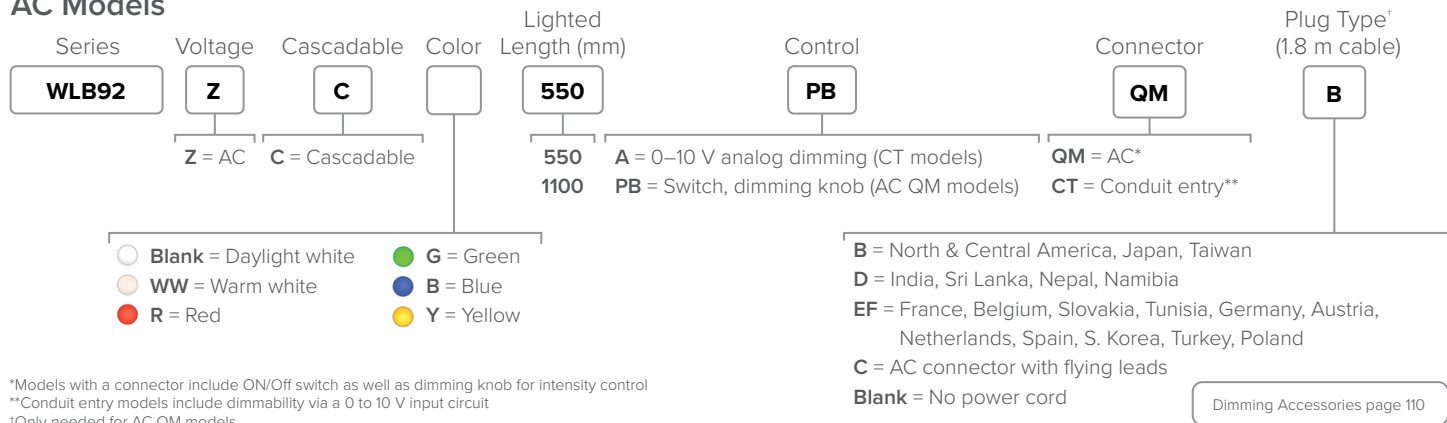
Industrial LED Strip Lights

- 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



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, cULus LISTED, UKCA

*Depending on length and color

Brackets



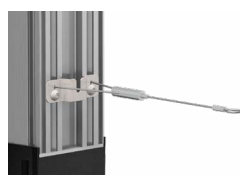
LMBWLB92



LMBWLB92CLIP



LMBWLB92S



LMBWLB92HK5
Suspended



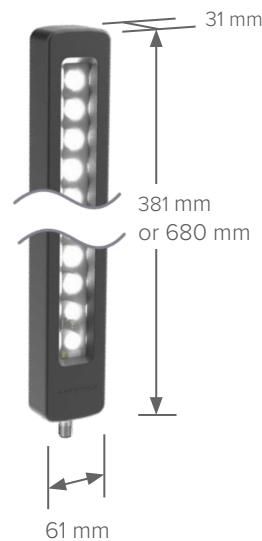
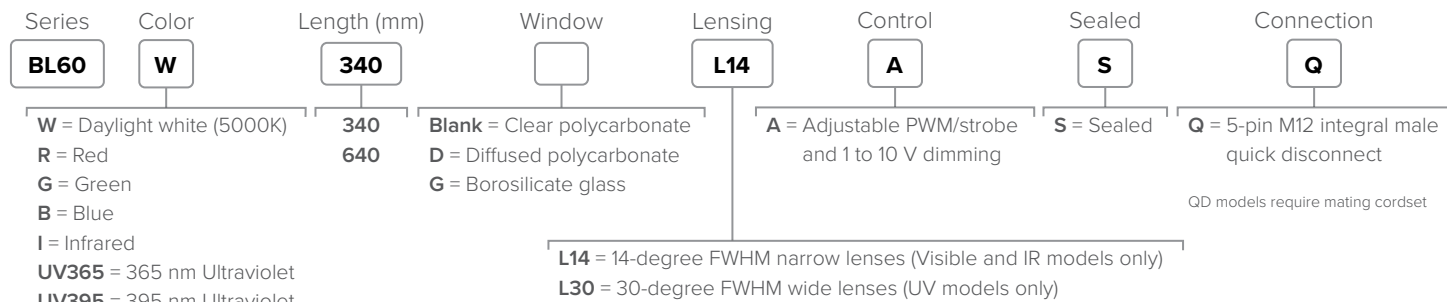
LMBWLB92RAS



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	cULus LISTED

*Depending on length and color

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).

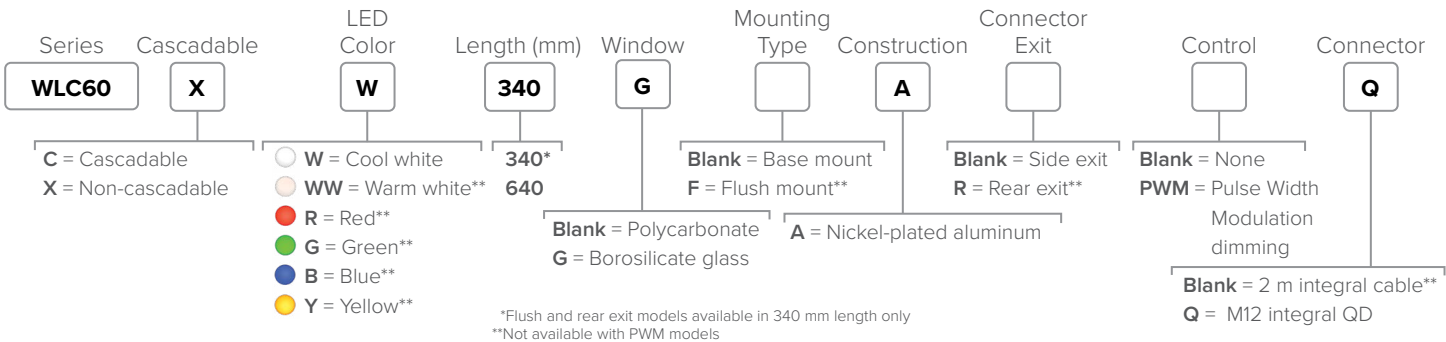
Note: Not all models are shown. Visit bannerengineering.com for other available models.



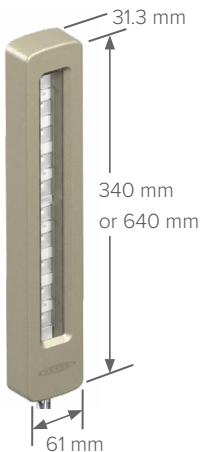
WLC60

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



WLC60



WLC60 Flush



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	

Dimming Accessories page 110

QD models require mating cordset

Brackets



LMBWLC60F



LMBWLC60RA



LMBWLC60RAS
4 Bracket Swivel Kit,
can mount with
SMBMAG3 magnet



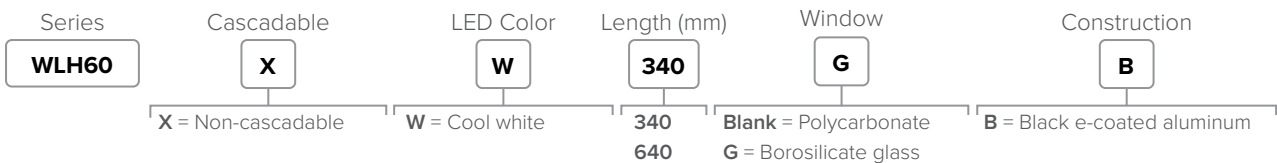
LMBWLC60MAG*
Magnetic Mount
*Do not use with stainless steel models.
Protective cover for magnet sold
separately (SMBWLSMAGR).



WLH60

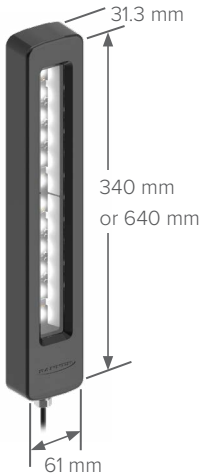
High Temperature LED Strip Lights

- 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	

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

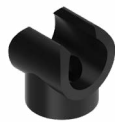


Supply Voltage	12 or 24 V DC
Lumens	55
Construction	Coupling Material: Nickel-plated brass Connector Body: PVC translucent white Removable cap covering female quick disconnect included
Operating Conditions	−40 to +45 °C
Environmental Rating	IP65, IP67, IP68, NEMA/UL Type 1
Certifications	

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



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

Brackets



SMB30A



SMBAMS30P



SMBAMS30RA



SMB30MM



ACC-GS60
M48 x 2 front mounting
knurl nut

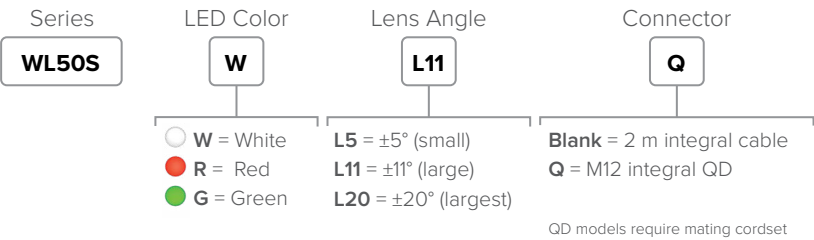


WL50S

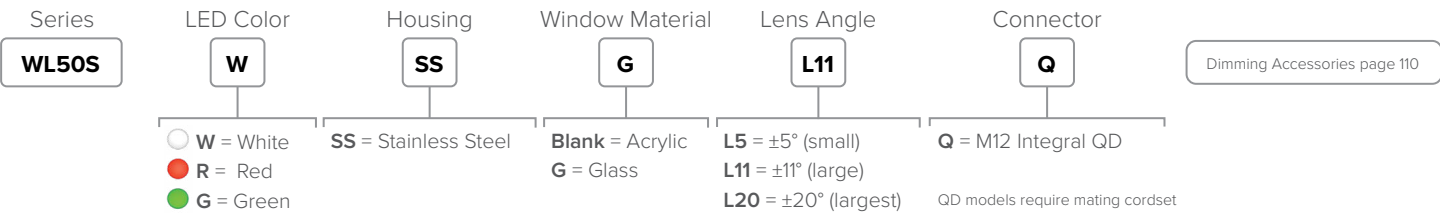
LED Spot Lights

- 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



Supply Voltage	12 to 30 V DC
Lumens	100–295*
Construction	Housing: Black anodized aluminum or stainless steel with FDA grade silicone gasket and Viton® o-ring seal Window: Polycarbonate or glass window Connector: Nickel-plated QD connector or PVC-jacketed cable Mounting Nut: Black zinc-plated steel or stainless steel mounting nut
Operating Conditions	–20 to +50 °C
Environmental Rating	IEC IP67, IP69K per DIN 40050
Certifications	CE, UL LISTED, UK CA, ENEC

*Depending on lens angle and color

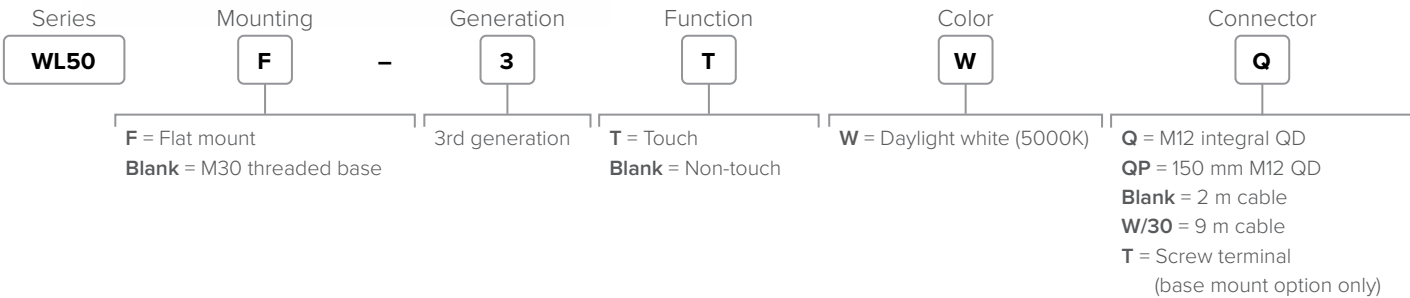
Brackets



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



Supply Voltage	12 to 30 V DC
Lumens	300
Construction	Housing: Polycarbonate Connector: Nickel-plated QD or PVC-jacketed cable
Operating Conditions	–40 to +50 °C
Environmental Rating	IP65, IP67, and IP69K per DIN 40050-9
Certifications	CE, UL LISTED, UK CA, ENEC

Brackets



FLX18 Flex Arm Mounts
See page 34 for more information



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



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	



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-FLX18-50TWDMAGDQP
		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
	1/2-14 NPSM		K-FLX18-18W12XQP
	2 × 1/4-20W 1.375 spacing		K-FLX18-18WDXQP
	Flange		K-FLX18-18W12FQP
	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

Series

WLC90

LED Color

W

W = Cool white

Window Material

G

Blank = Polycarbonate
G = Borosilicate glass

Lens Angle

L15

L8 = ±8° (small)
L15 = ±15° (large)
L30 = ±30° (largest)

Connector Exit

Blank = Side exit
R = Rear exit

Control

Blank = None
PWM = Pulse Width Modulation

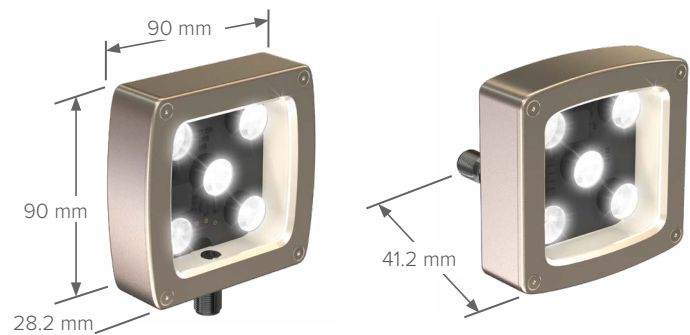
Connector

Q

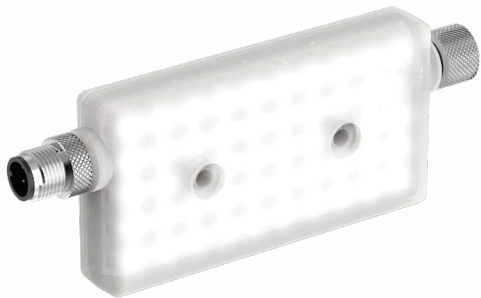
Blank = 2 m integral cable*
Q = M12 integral QD

QD models require mating cordset
*Not available with PWM models

Dimming Accessories page 110



Supply Voltage	12 to 30 V DC
Lumens	625
Construction	Housing: Nickel-plate 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



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

Series

WLR95

Cascadable

Blank = Cascadable

Color

W

W = Cool white (6500K)

Window

Blank = Clear

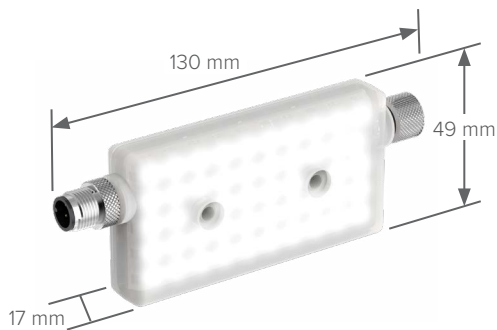
Control

Blank = Hi/low/off

Connection

Q

Q = 4-pin M12 integral QD



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

Brackets



Brackets





WLA-2

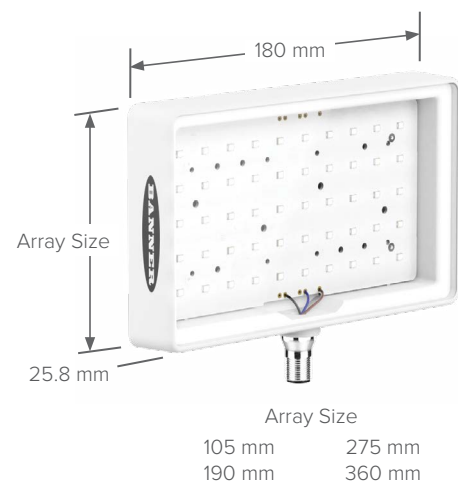
LED Area Lights

- 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
WLA-2	W	105 x 180	D			Q
	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 QD models require mating cordset

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

Dimming Accessories page 110



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

Brackets



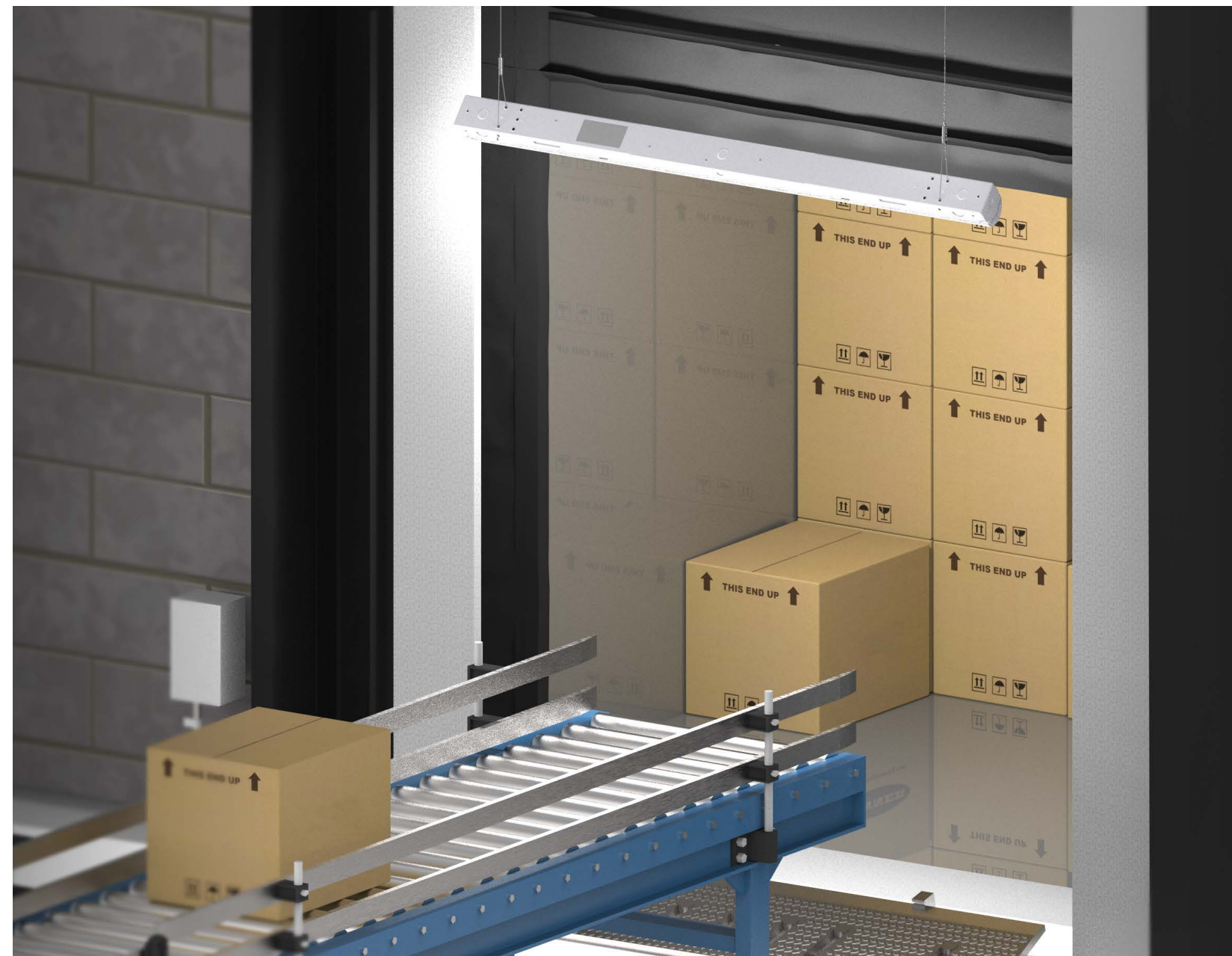
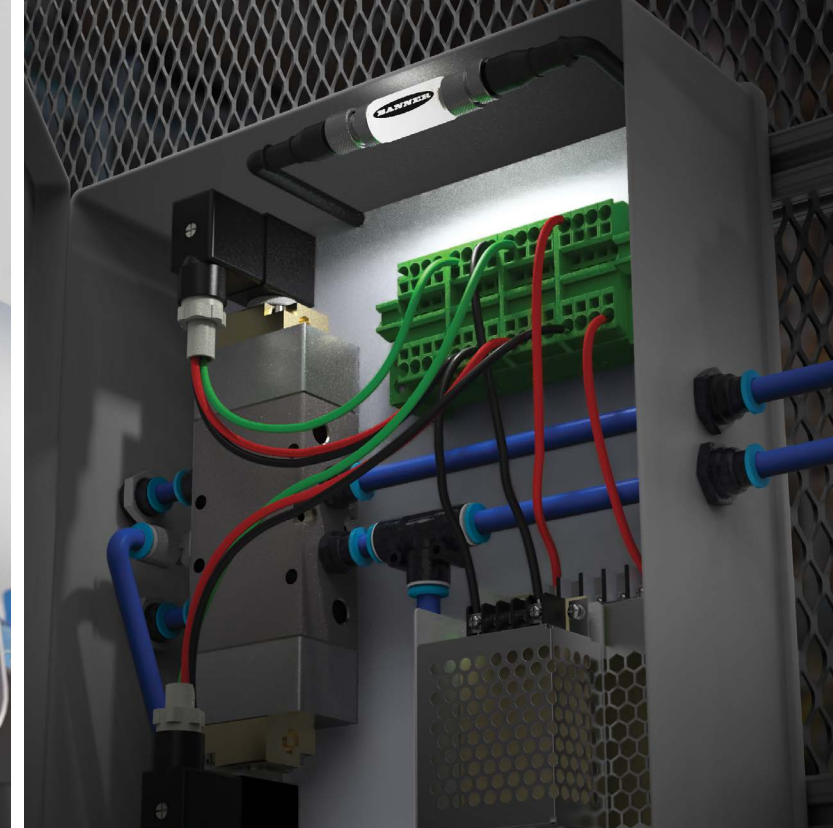
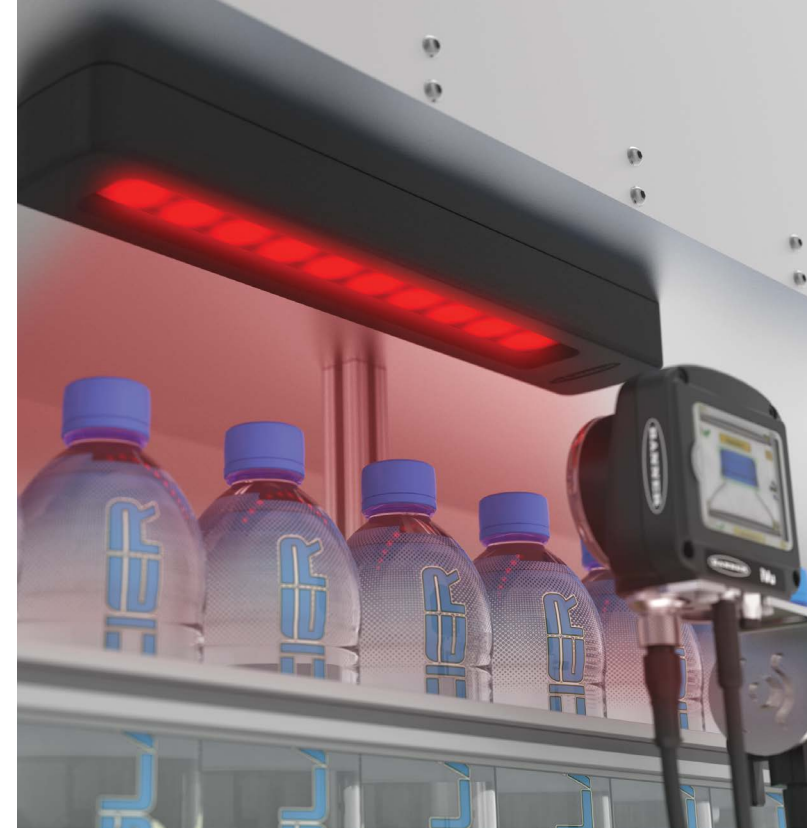
SMBBSSM



SMBBSRA



SMBWLAMAG
Magnetic Mount
(SMBWLAMAGR 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			✓	



pg. 47



pg. 45



pg. 42



pg. 43

TL50 Andon	CL50	TL15	WLS27
50	50	15	27
—	30	—	—
DC	DC	DC	DC
IP54	IP67	IP66, IP67, IP68	IP66, IP67, IP69K
	✓		✓
	IO-Link®		IO-Link®
✓	✓	✓	
✓			
		✓	



Programmable LED indicators offer multiple color choices in a single housing



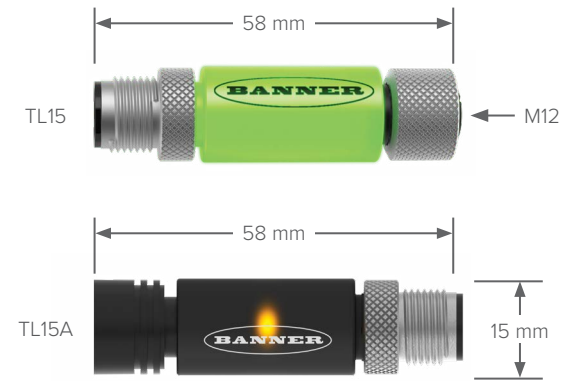
TL15

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

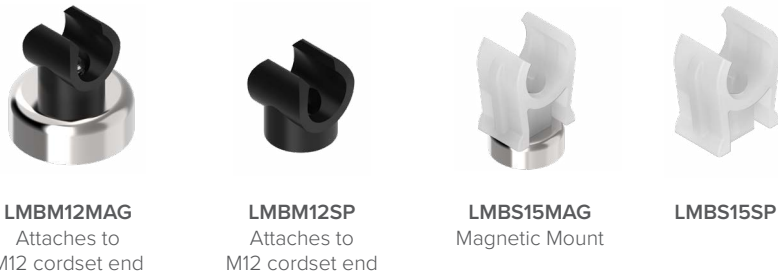
TL15 In-Line Tower Light Models

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



Supply Voltage	12 or 24 V DC
Bimodal Inputs	PNP/NPN
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	CE, UL LISTED, UK CA

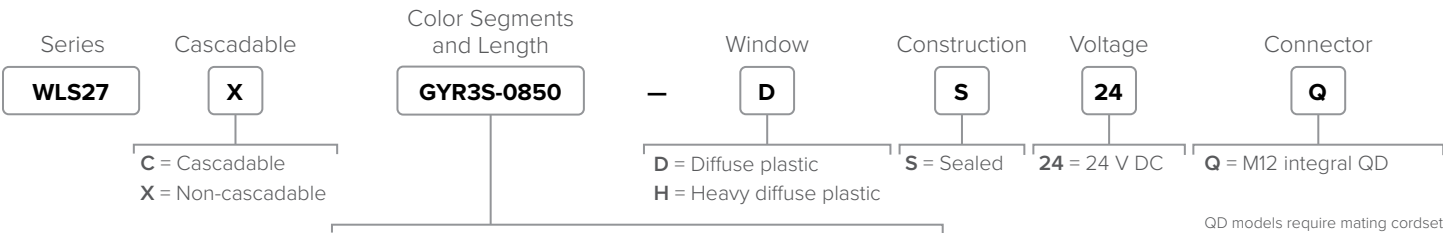
Brackets



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



Supply Voltage	24 V DC
Lumens	70–570*
Construction	Inner Housing: Clear anodized aluminum Outer Housing: FDA grade copolyester
Operating Conditions	–40 to +50 °C
Environmental Rating	IP66, IP67, IP69K per DIN 40050-9
Certifications	CE, UL LISTED, UK CA, UL NOM, D

*Depending on length and color

Brackets





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

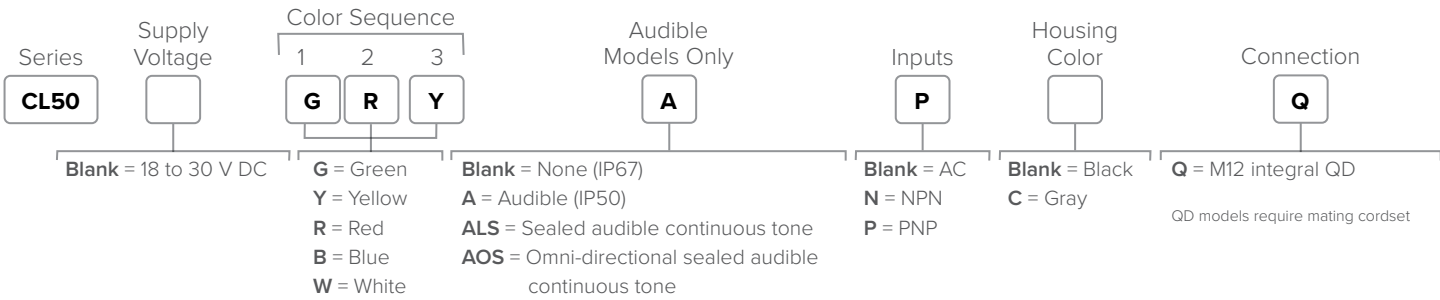


Programmable Models

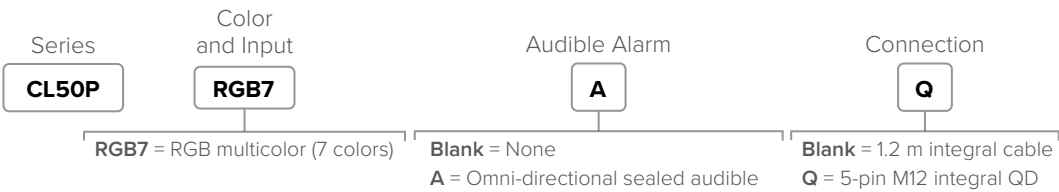
Same Functionality as Standard with Additional Features Below

- 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

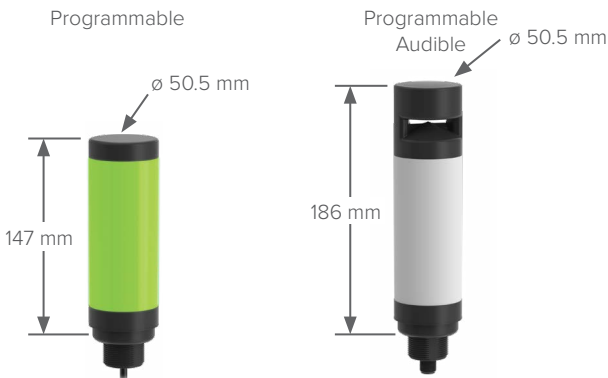
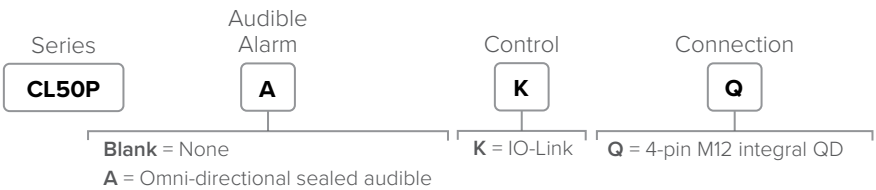


Programmable Models



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	CE, UL LISTED, UK CA

Programmable Models with IO-Link



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	CE, UL LISTED, UK CA

Brackets

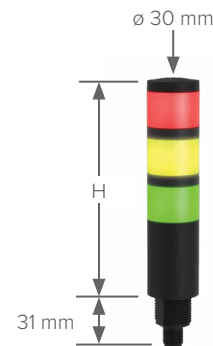
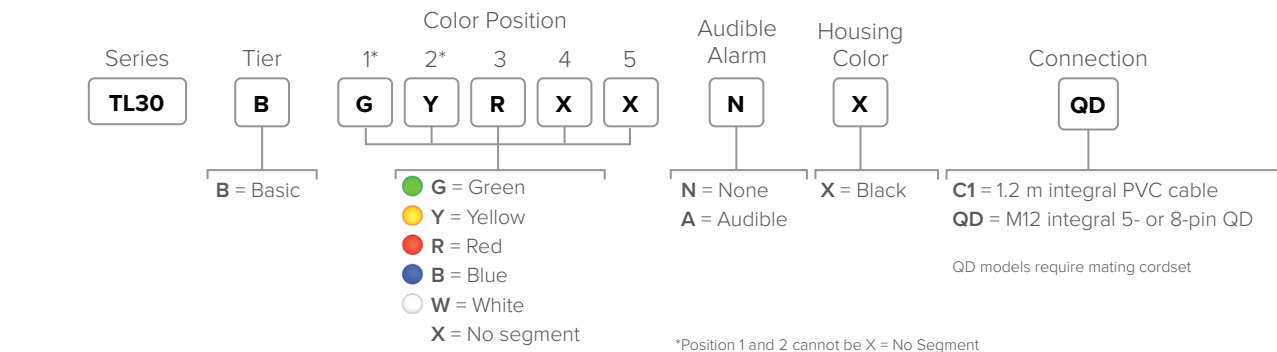




TL30

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

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

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

Brackets

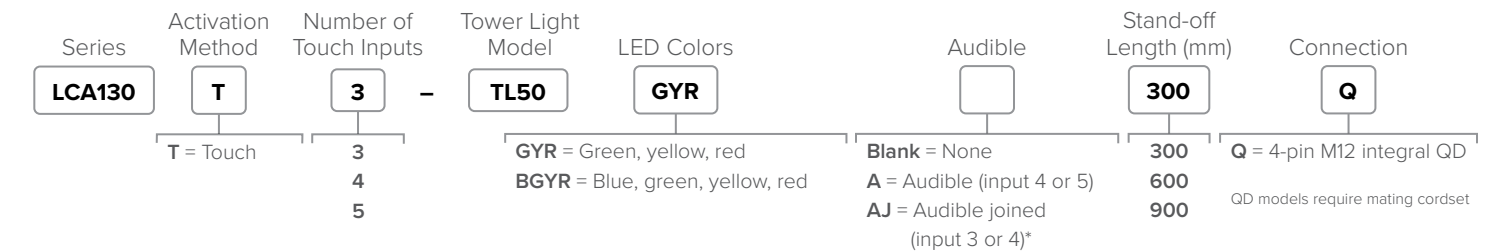


TL50 Andon

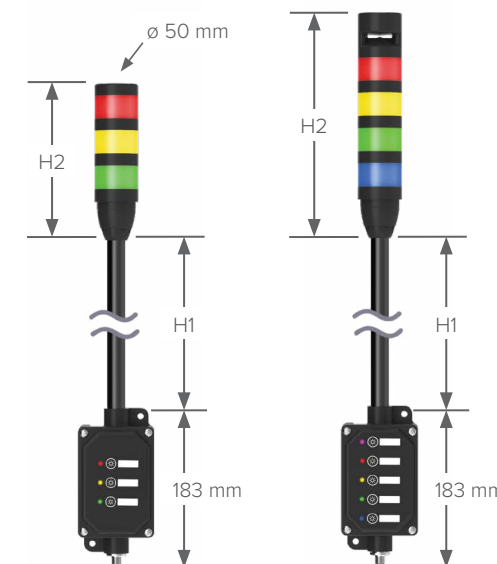
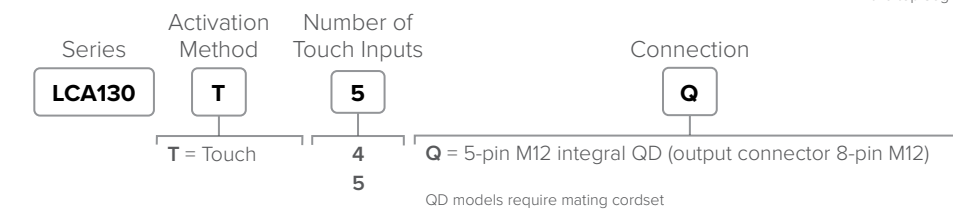
50 mm Pre-assembled Tower Lights

- 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



Standard	
Tower Light Height (H2)	
3 Segments	181 mm
4 Segments	222 mm

Audible	
Tower Light Height (H2)	
3 Segments	220 mm
4 Segments	261 mm

Stand-Off Pole Height (H1)	
300 mm	
600 mm	
900 mm	

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



TL50 Series

50 mm General Purpose Tower Lights

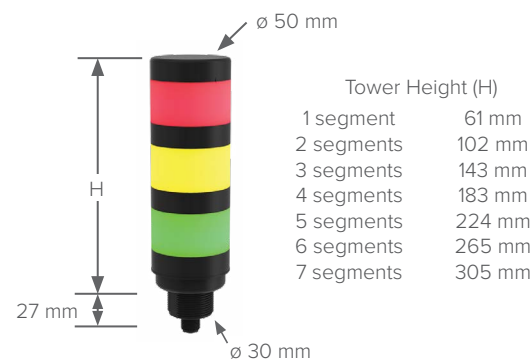
- Bright, uniform lighted segments with ten color choices available
- Available with standard, sealed, or omni-directional audible
- DC models work down to 12 volts, allowing for use in battery-powered mobile equipment
- Audible alarm: continuous, pulsed, and staccato models available
- Omni-directional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



Standard Models

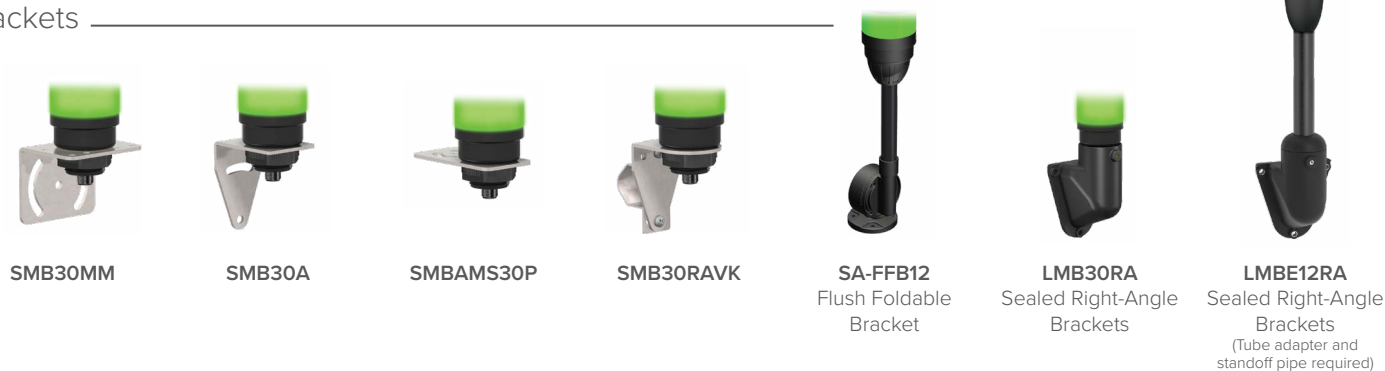
Inputs	Audible	Connection	LED Colors	Models
Bimodal (NPN or PNP)	None	4-pin M12 integral QD	Red	TL50RQ
			Green, red	TL50GRQ
			Green, yellow, red	TL50GYRQ
		5-pin M12 integral QD	Blue, green, yellow, red	TL50BGYRQ
		8-pin M12 integral QD	White, blue, green, yellow, red	TL50WBGYRQ
	Standard	4-pin M12 integral QD	Red	TL50RAQ
			Green, red	TL50GRAQ
		5-pin M12 integral QD	Green, yellow, red	TL50GYRAQ
		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.



Supply Voltage	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
Construction	Bases and Covers: ABS Light Segment: Polycarbonate
Operating Conditions	General-Purpose: -40° to +50 °C Standard and Sealed Audible: -20° to +50 °C
Environmental Rating	General-Purpose and Sealed Audible: IP67 Standard Audible: IP50
Certifications	CE, UL LISTED, UK CA

Brackets



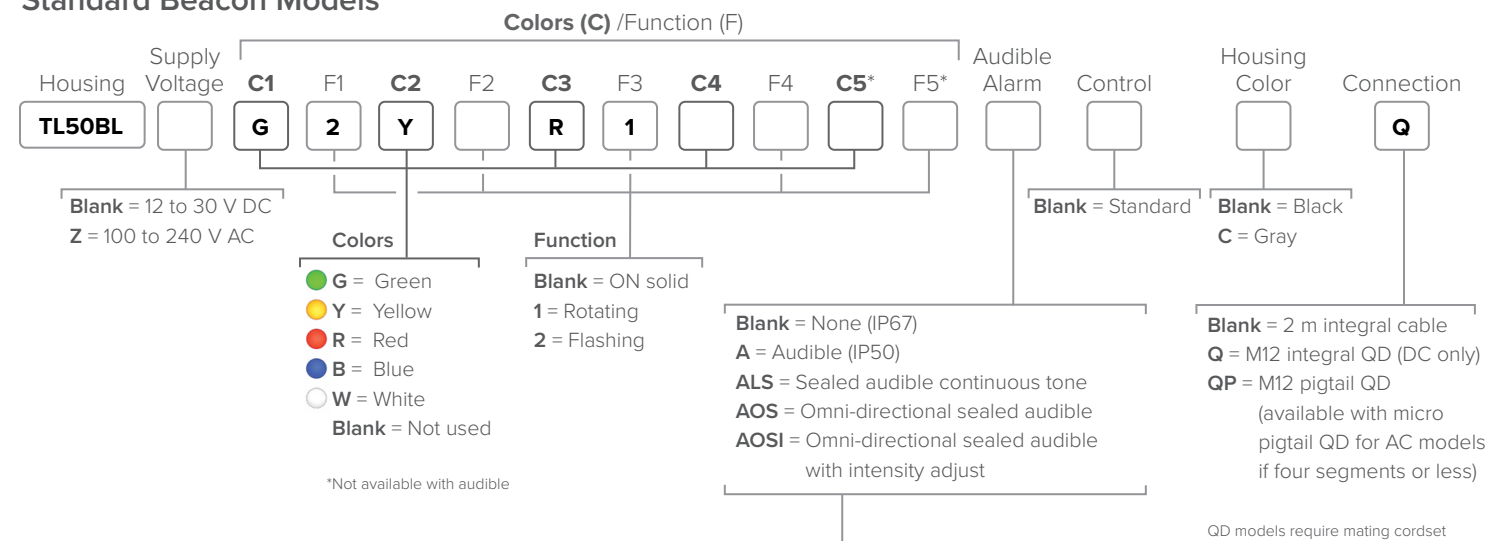
TL50BL and TL50C Models

50 mm Beacon and Compact Tower Lights

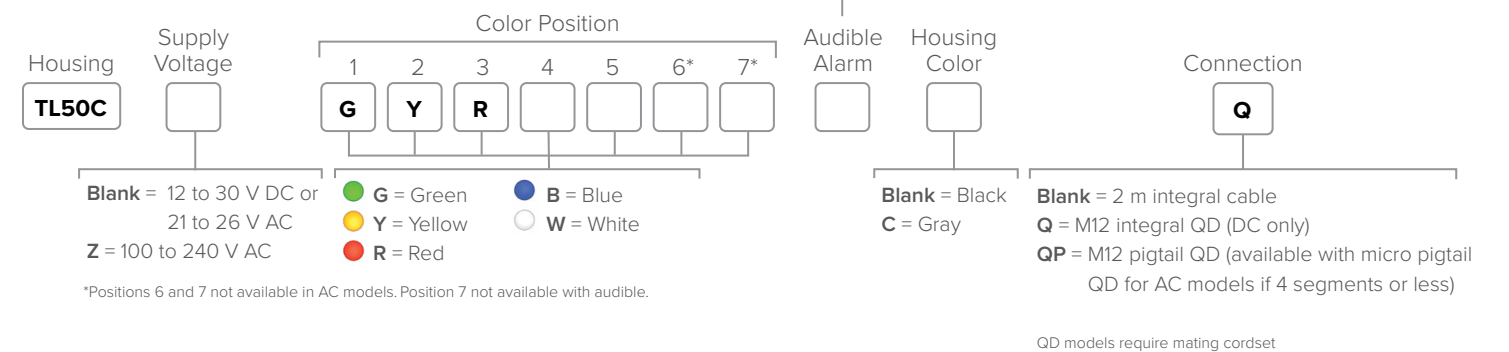
- Housing is UV stabilized, making it suitable for use in outdoor environments
- Highly visible indication for indoor or outdoor applications
- Compact, stylish design with rotating and flashing options
- Compact tower lights are half the height of standard TL50 models
- Models available with rugged,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



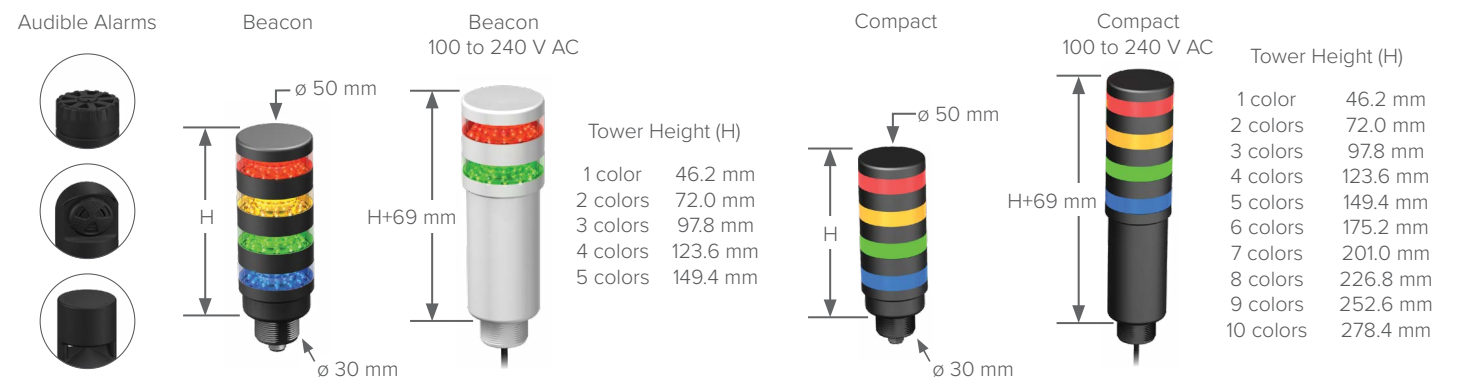
Standard Beacon Models



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



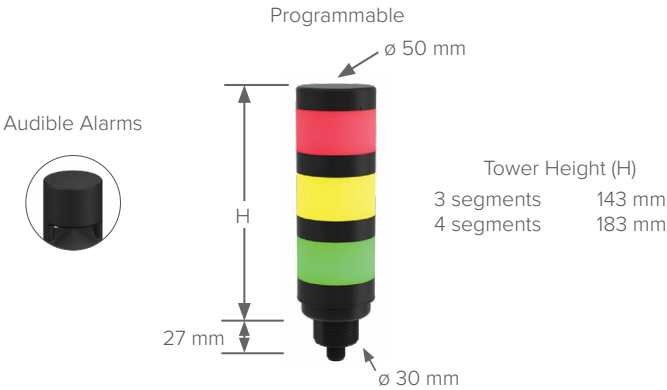
Advanced Feature Models

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

Pro Select Models

Series	Number of Segments	Audible Alarm	Control	Connection
TL50PS	3	A		Q
	3 = 3 segments 4 = 4 segments	Blank = None A = Omni-directional sealed audible	Blank = None K = IO-Link	Blank = 1.2 m integral cable* Q = 4-pin (IO-Link models) M12 integral QD, 5-pin M12 integral QD, or 8-pin M12 integral QD QD models require mating cordset *Not available with IO-Link models



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

Brackets

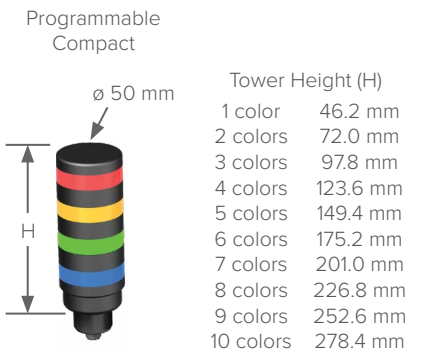
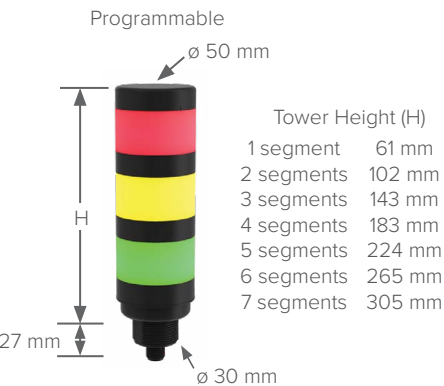


Programmable Models

Series	Housing	Number of Segments	Audible Alarm	Housing Color	Connection
TL50P		3	A		Q
TL50P = Pro	Blank = Standard C = Compact BL = Beacon	1 = 1 segment 2 = 2 segments 3 = 3 segments 4 = 4 segments 5 = 5 segments 6 = 6 segments 7 = 7 segments*	Blank = None A = Audible ALS = Sealed audible continuous tone AOS = Omni-directional sealed audible continuous tone AOSI = Omni-directional sealed audible continuous tone with intensity adjust	Blank = Black C = Gray	Blank = 2 m integral cable Q = M12 integral QD QP = M12 pigtail QD QD models require mating cordset *Not available with audible

Programmable Models with IO-Link

Housing	Number of Segments	Audible Alarm	Control	Housing Color	Connection
TL50	3	A	K		Q
TL50 = Standard TL50C = Compact TL50BL = Beacon	1 = 1 segment 2 = 2 segments 3 = 3 segments 4 = 4 segments 5 = 5 segments 6 = 6 segments 7 = 7 segments 8 = 8 segments 9 = 9 segments 10 = 10 segments	Blank = None A = Audible ALS = Sealed audible continuous tone AOS = Omni-directional sealed audible continuous tone AOSI = Omni-directional sealed audible continuous tone with intensity adjust	K = IO-Link	Blank = Black C = Gray	Q = M12 integral QD QP = M12 pigtail QD QD models require mating cordset



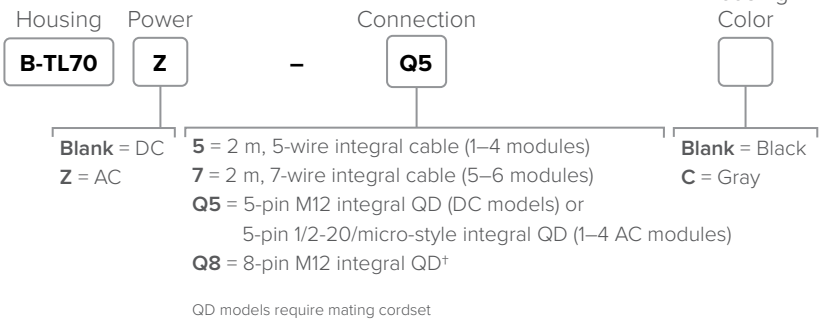


TL70 Series

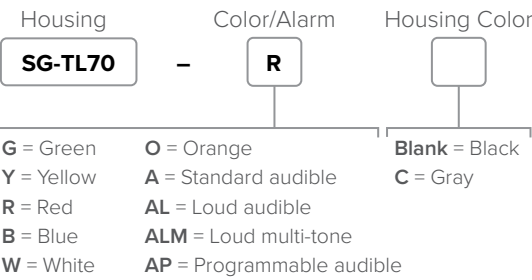
70 mm General Purpose Tower Lights

- 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

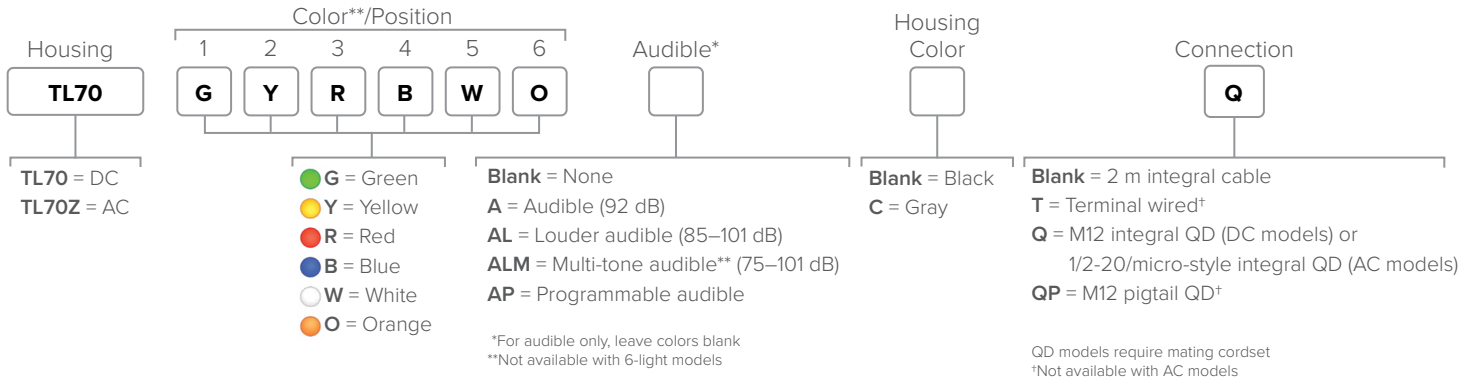
Bases or Base Models



Segments or Segment Models



Preassembled Standard Models



For compatible brackets see page 50

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

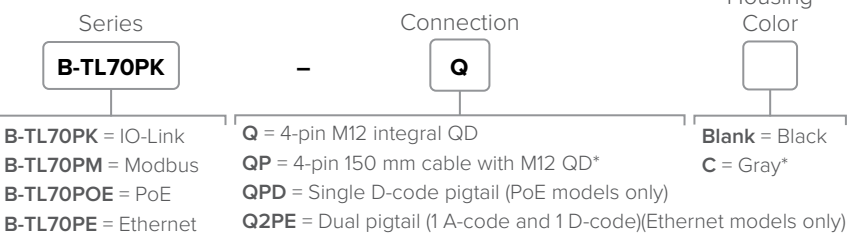


Programmable Models

Same Functionality as Standard with Additional Features Below

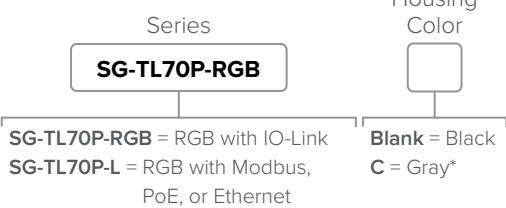
- Programmable series tower lights provide classic segment control as well as advanced status indication that adds nuance to the visual factory
- Multiple communication options make integrating into existing systems easy, allowing users to configure and control color, flashing, rotation, light intensity, 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

Programmable Bases or Base Models

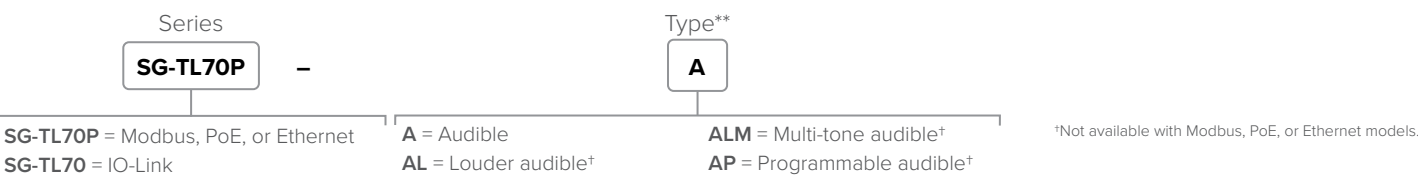


QD models require mating cordset
*Not available with Modbus, PoE, or Ethernet models

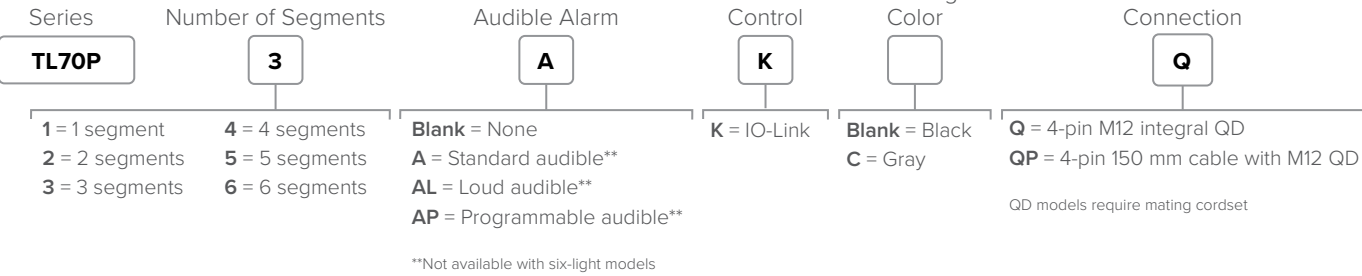
Programmable Segments or Segment Models



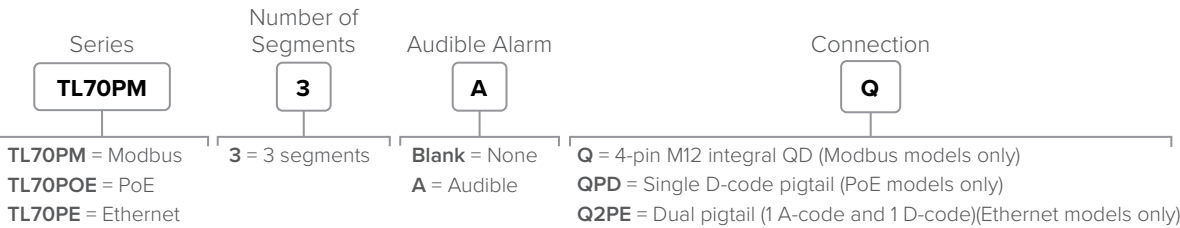
Optional Programmable Audible Models



Preassembled Programmable Models with IO-Link



Preassembled Programmable Models with Modbus, PoE, or Ethernet



QD models require mating cordset

Note: Not all models are shown. Visit [bannerengineering.com](https://www.bannerengineering.com) for other available models.

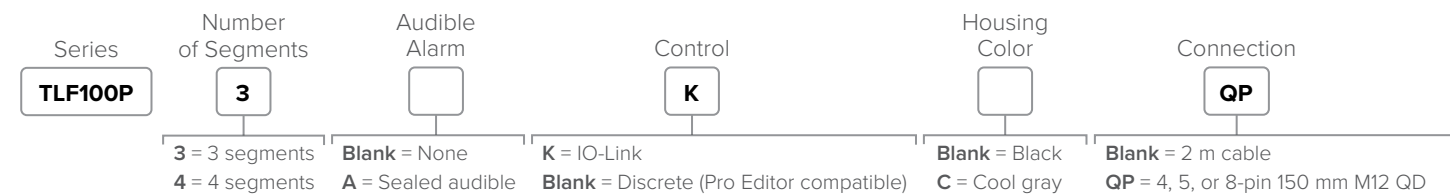


TLF100 Series

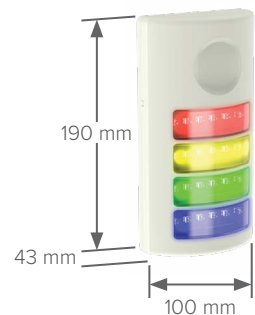
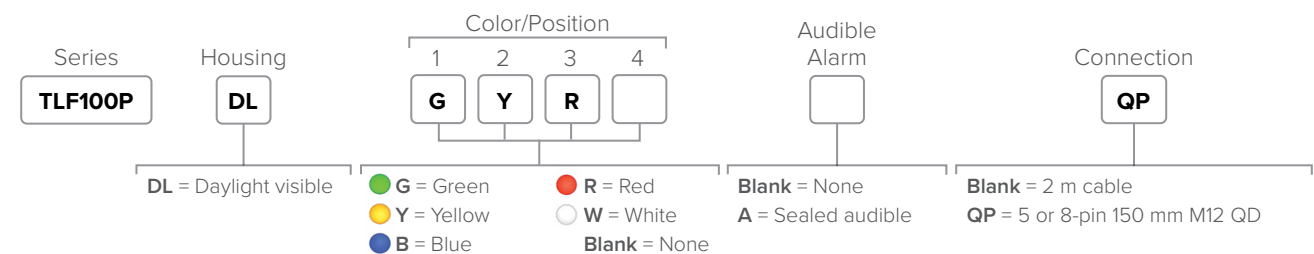
Programmable Flush Mount Tower Lights

- 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



Brackets



SMBTLF100F
Mounted Vertically



SMBTLF100F
Mounted Horizontally



Indicators Selection Guide



	pg. 59	pg. 61	pg. 62	pg. 65	pg. 68	pg. 71	pg. 72
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	✓			✓			✓



pg. 79	pg. 58	pg. 74	pg. 75	pg. 76	pg. 77	pg. 78
GS60	S15L	WLF12	WLS15	WLS27	RLS27	WLS28
60	15	12	15	27	27	28
30	—	—	—	—	—	—
DC	DC	DC	DC	DC	DC	DC
IP66, IP67	IP66, IP67, IP68	IP66, IP67, IP69K	IP66, IP67	IP66, IP67, IP69K	IP67, IP69K	Unsealed: IP50 Sealed: IP67, IP69K
✓	✓	✓	✓	✓	✓	✓
	 Modbus	 IO-Link®  Modbus	 IO-Link®  Modbus	 IO-Link®		 IO-Link®
					✓	



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	S15LPSQ

Standard Models

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



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

CE, UL LISTED, UK CA

Brackets



LMBM12MAG
Attaches to M12 cordset end



LMBM12SP
Attaches to M12 cordset end



LMBS15MAG
Magnetic Mount



LMBS15SP

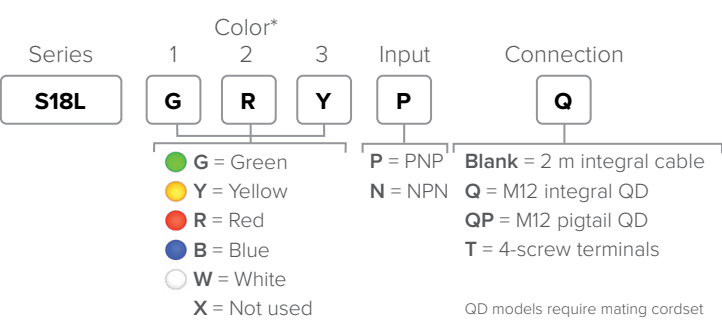


S18L Series

18 mm Barrel Indicators

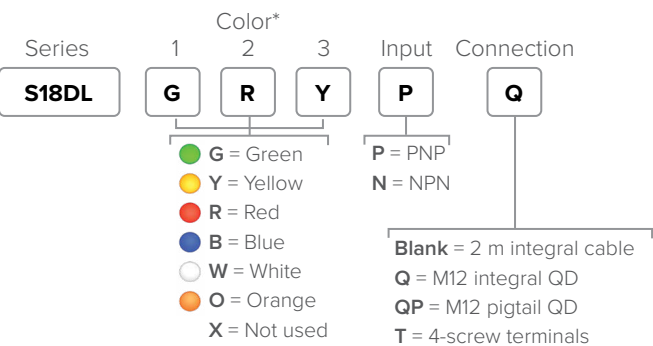
- Gasketed face flange for sealing to enclosures
- Daylight Visible models are also available for areas with high levels of ambient light
- M12 connector models available for plug-and-play indication
- 10 to 30 V DC operating range allows for use in battery-powered mobile applications
- Terminal-wired 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



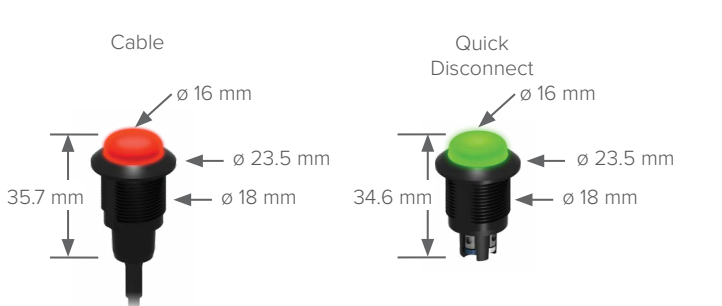
*Single-color models are available and should be ordered as PNP, but can be wired for either PNP or NPN input

Daylight Visible Models



QD models require mating cordset

Laser Marking Available



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

CE, UL LISTED, UK CA

Brackets



SMB18A
Use with S18L



SMB18FA
Use with S18L



SMBAMS18RA
Use with S18L



SMBC18
Use with S18L on 28 mm Pipe



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

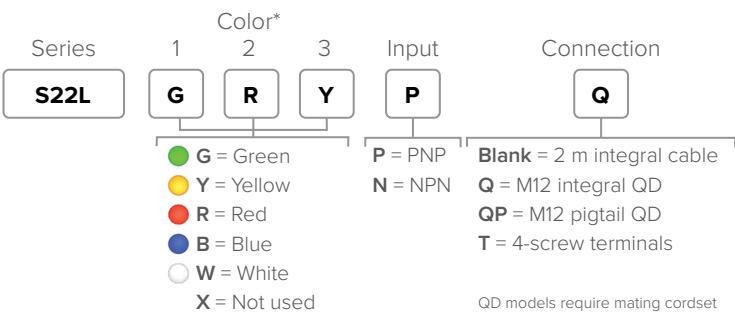


Programmable Models

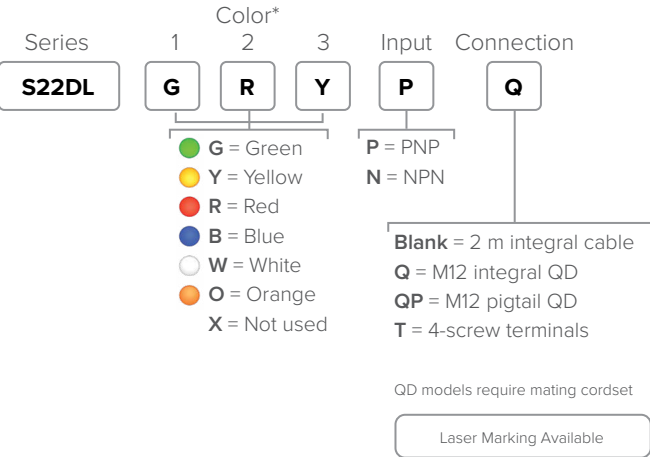
22 mm Flush Mount Indicators

- 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

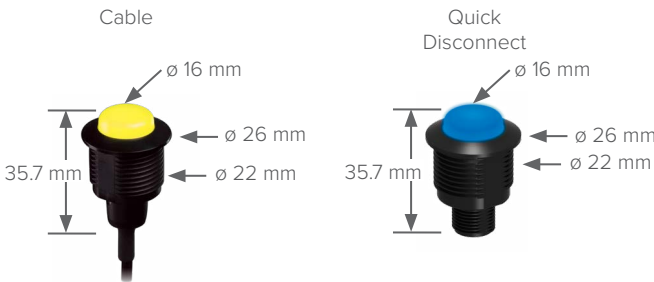


*7 colors = Green, yellow, red, blue, white, cyan, magenta with flash input

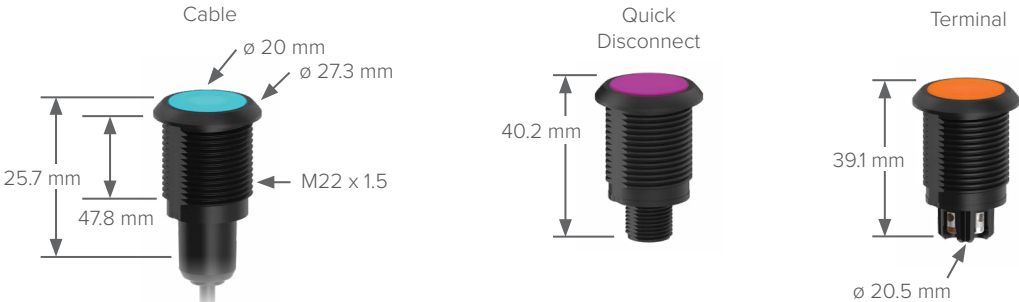
14 colors = Above colors, plus, orange, amber, lime green, spring green, sky blue, violet, and rose

Laser Marking Available

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

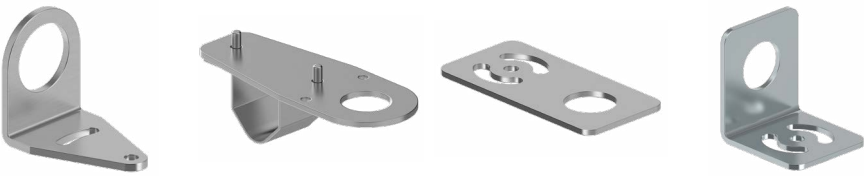


Supply Voltage	General Purpose: 10 to 30 V DC High-Intensity: 9 to 30 V DC
Construction	Housing: UV stabilized polycarbonate Mounting Nut: PBT Sealing Washer: Nitrile
Operating Conditions	General Purpose: -40 to +50 °C Other: -40 to +60 °C
Environmental Rating	IP67, IP69K, per DIN 40050
Certifications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



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

Brackets



SMB22A

SMB22FVK

SMBAMS22P

SMBAMS22RA



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

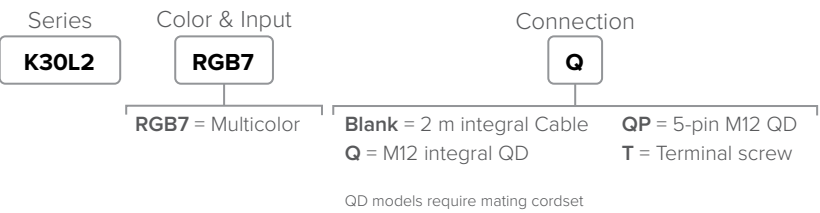
- Bright, even indication in seven standard colors, with additional color and animation options available with the exclusive Pro Editor Software
- K30 Programmable devices with PICK-IQ™ and IO-Link give full access to color, flashing, rotating, and dimming settings as well as advanced animations such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

Standard Models

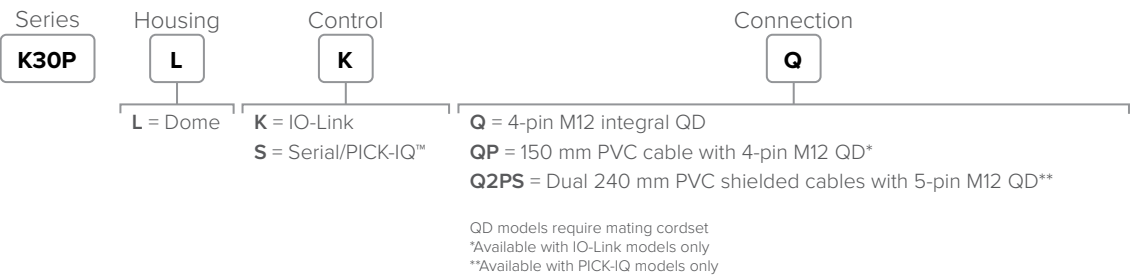
Number of Colors	Colors	Input	Connection	Models
3	Green, red, yellow	PNP	4-pin M12 integral QD	K30LGrypQ
		NPN		K30LGryNQ

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



SMB22A



SMB22FVK



SMB22RAVK



SMBAMS22P



SMBAMS22RA



LMB22LPC



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

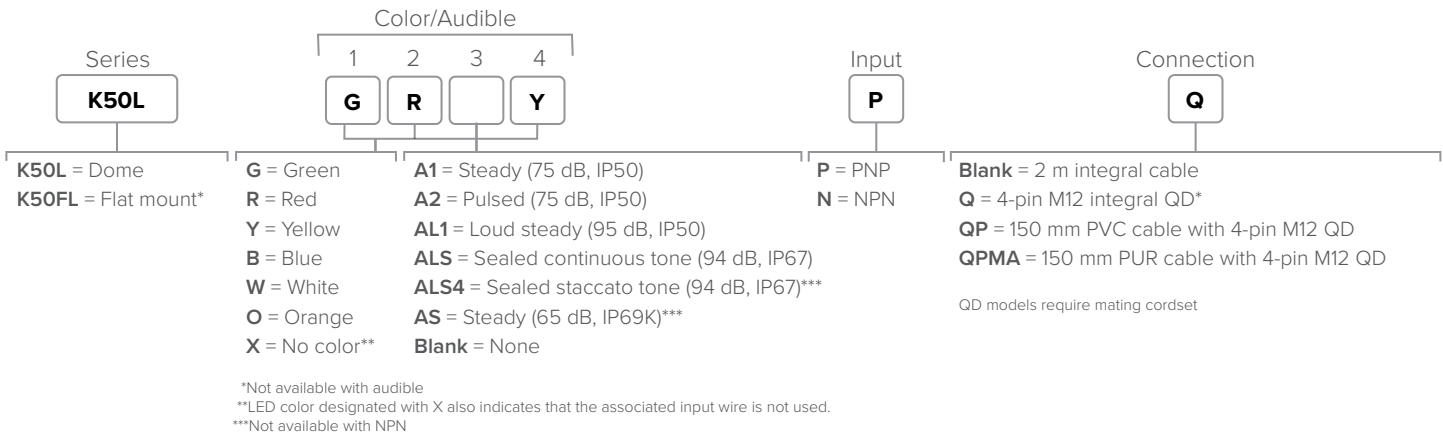


K50 Series

50 mm Multicolor Indicators

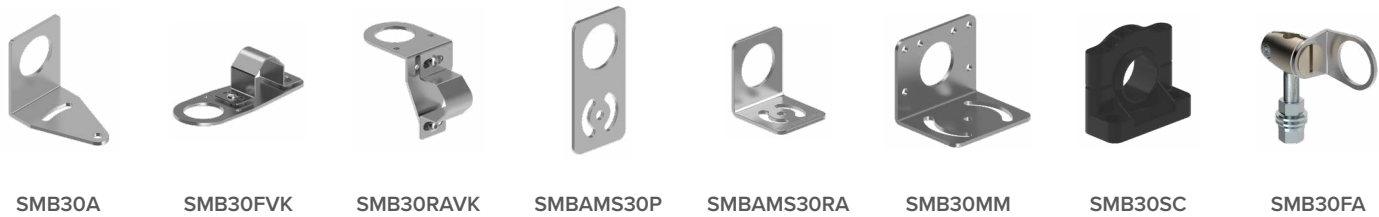
- Bright, uniform indicator light
- Displays up to five colors
- Compact models available for lower profile applications
- Bimodal inputs (PNP/NPN), depending on source wiring
- Models with integrated audible alarm available
- Variety of connector options

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	CE cULus LISTED UK CA

Brackets

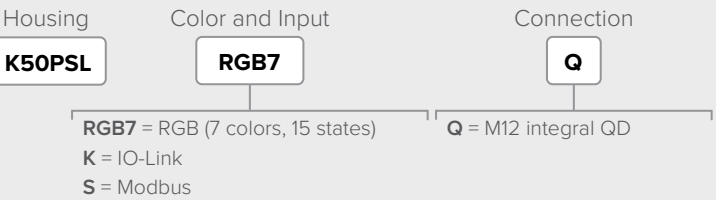


Programmable Models

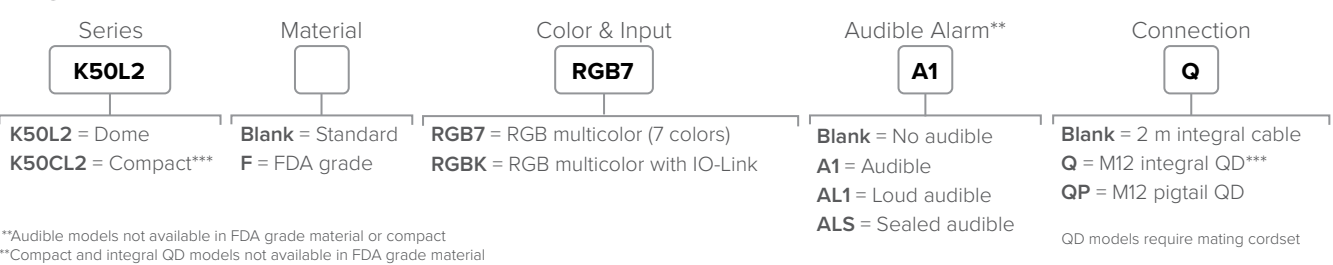
Same Functionality as Standard with Additional Features Below

- 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

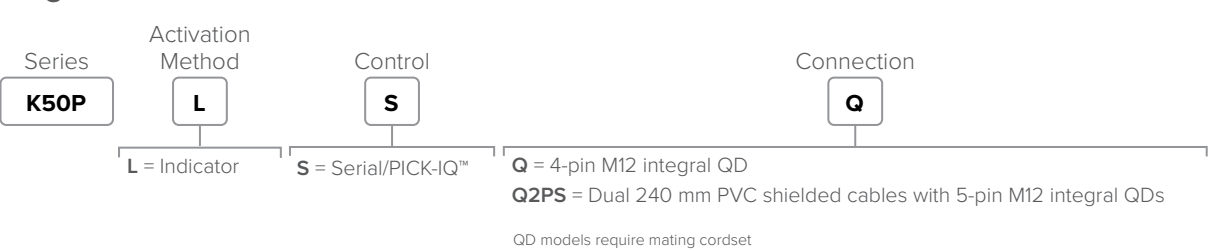
Go-To Models



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	CE cULus LISTED UK CA



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

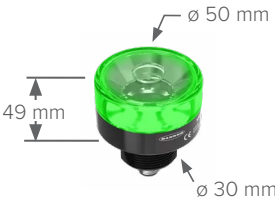
Same Functionality as Standard with Additional Features Below

- 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				K50BLXRXPQ
	Perimeter and top view				K50BCLXRXPQ
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](https://www.bannerengineering.com) for other available models.



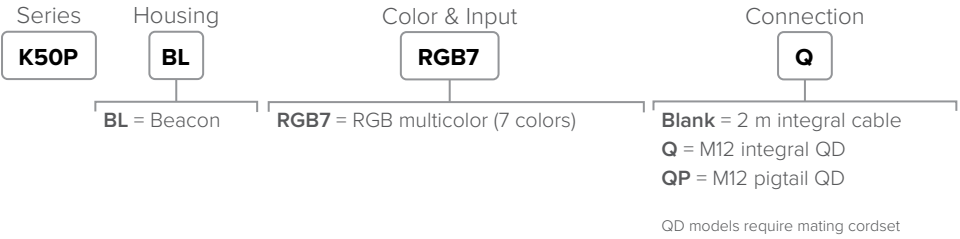
Supply Voltage	12 to 30 V DC
Construction	Polycarbonate
Operating Conditions	–40 to +50 °C
Environmental Rating	IP67, IP69K per DIN 40050-9*

*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.

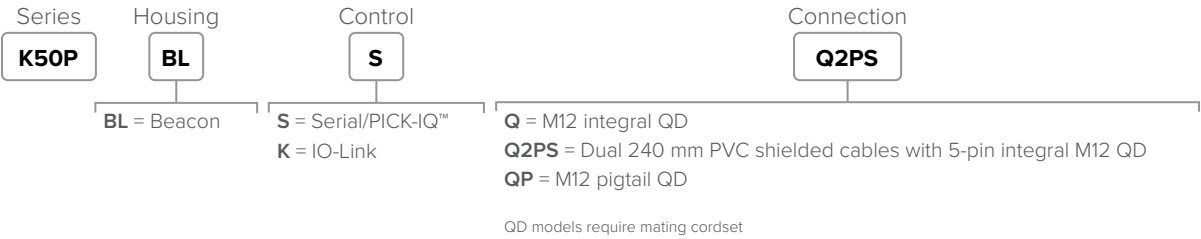
Brackets



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



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



Standard Models

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



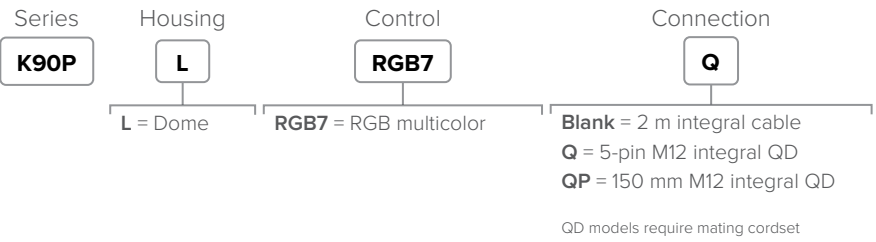
Supply Voltage	12 to 30 V DC
Construction	Polycarbonate
Operating Conditions	−40 to +50 °C
Environmental Rating	IP67, UL Type 4X, UL Type 13
Certifications	CE, UL LISTED, UK CA

Brackets

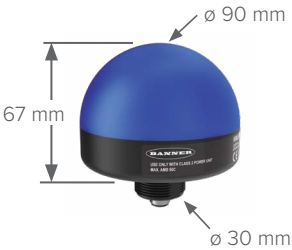
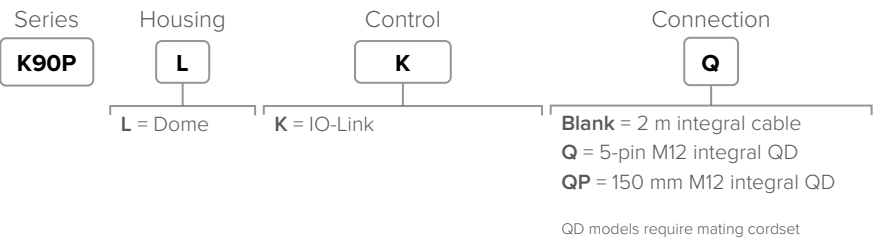


SMB30A SMB30FVK SMB30RAVK SMBAMS30P SMBAMS30RA SMB30MM SMB30SC SMB30FA

Programmable Models



Programmable Models with IO-Link



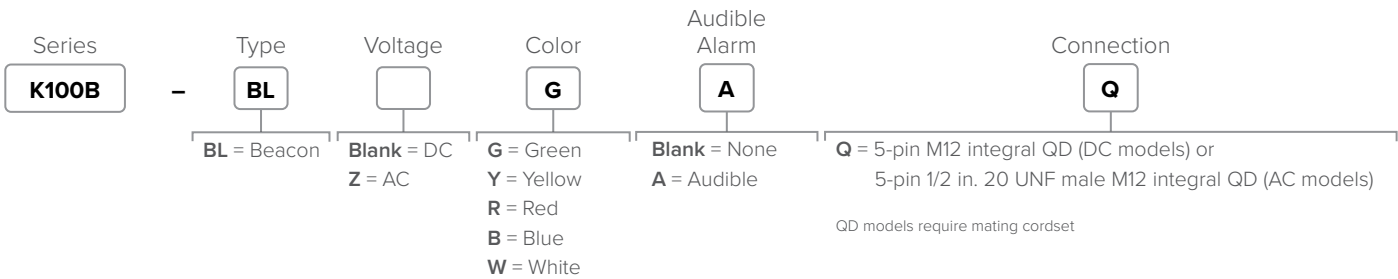
Supply Voltage	Programmable: 10 to 30 V DC IO-Link: 18 to 30 V DC
Construction	Polycarbonate
Operating Conditions	−40 to +50 °C
Environmental Rating	IP67, UL Type 4X, UL Type 13
Certifications	CE, UL LISTED, UK CA



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	CE, cUL US LISTED, UK CA

Brackets



LMB36RA

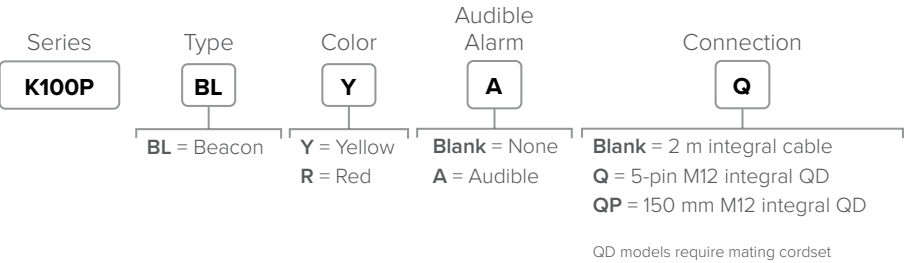


Programmable Models

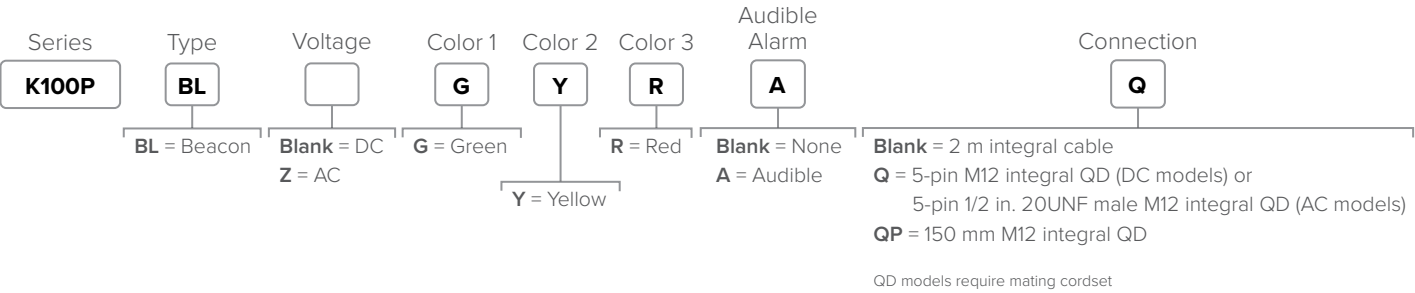
Multicolor Indicators

- 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

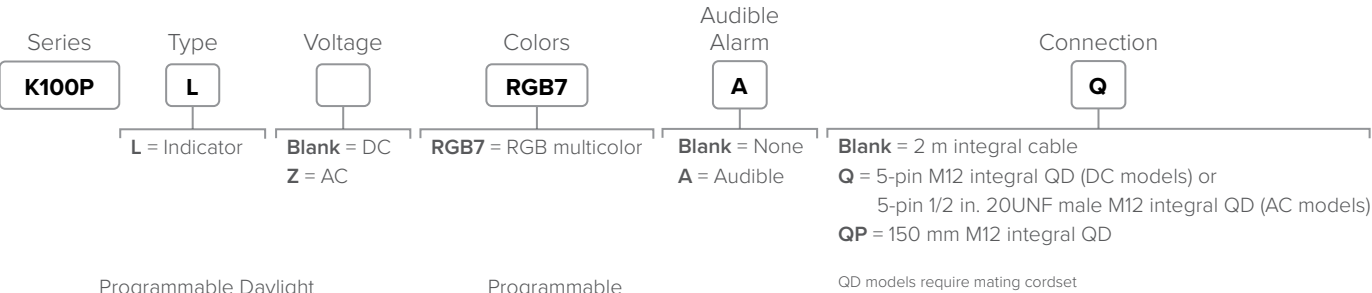
Programmable Daylight Visible Single Color Models



Programmable Daylight Visible Three Color Models



Programmable Multicolor Models



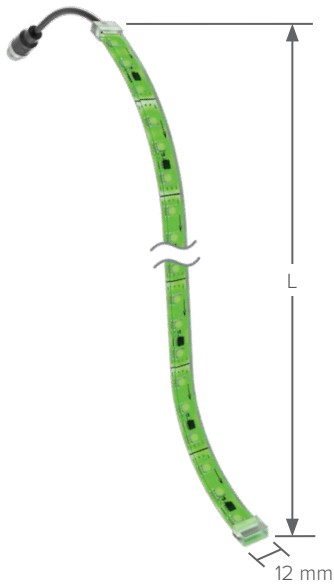
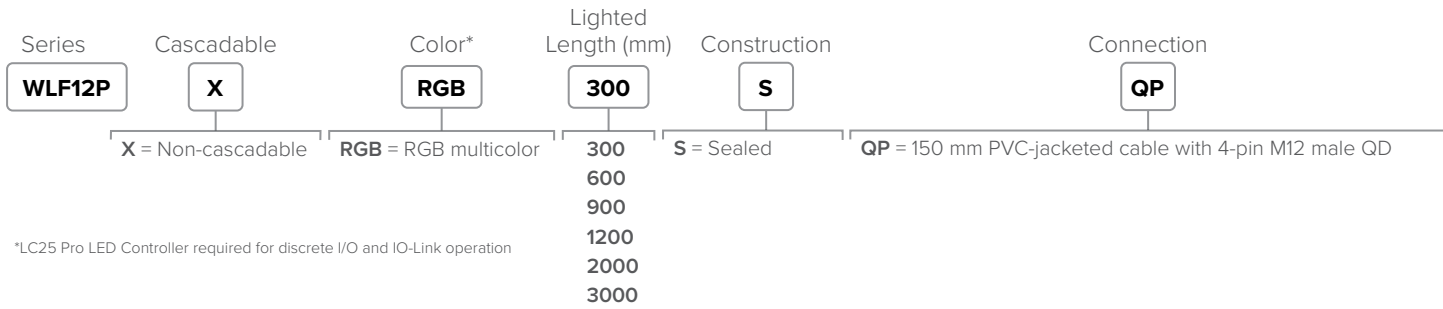
Supply Voltage	12 to 48 V DC 100 to 240 V AC
Construction	Polycarbonate
Operating Conditions	–40 to +60 °C
Environmental Rating	IP69K, UL Type 4X
Certifications	CE, cUL US LISTED, UK CA

Note: Not all models are shown. Visit [bannerengineering.com](https://www.bannerengineering.com) for other available models.

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



Supply Voltage	Strip light: 12 V DC with Discrete LC25: 12 to 30 V DC with IO-Link LC25: 18 to 30 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

Controllers



LC25C-WLF12-RGB7Q
Programmable LED Controller*



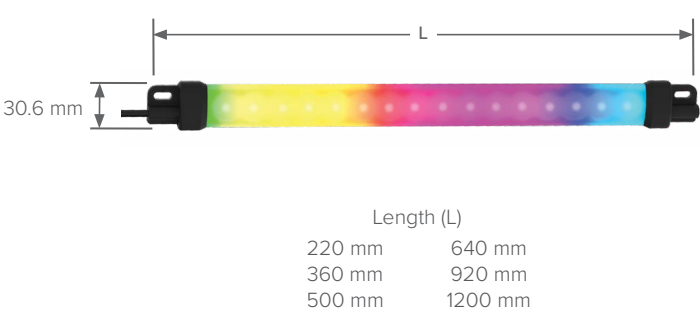
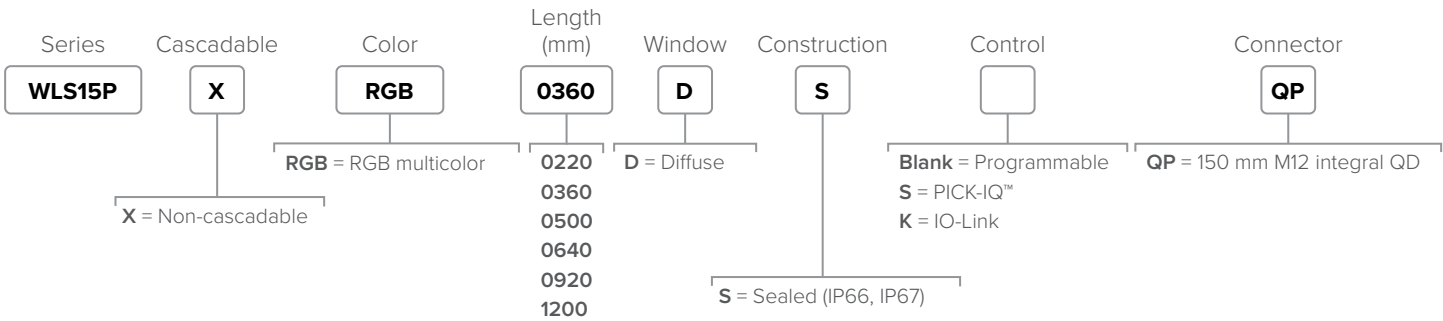
LC25C-WLF12-KQ
Programmable LED Controller
with IO-Link*

*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



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

Brackets



LMBWLS15-150S



LMBWLS15



LMBWLS15MAG
Magnetic Mount



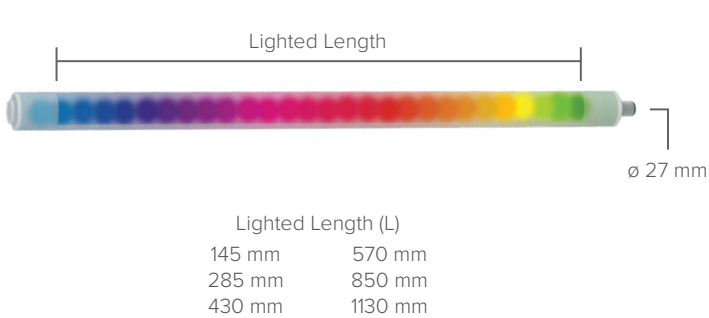
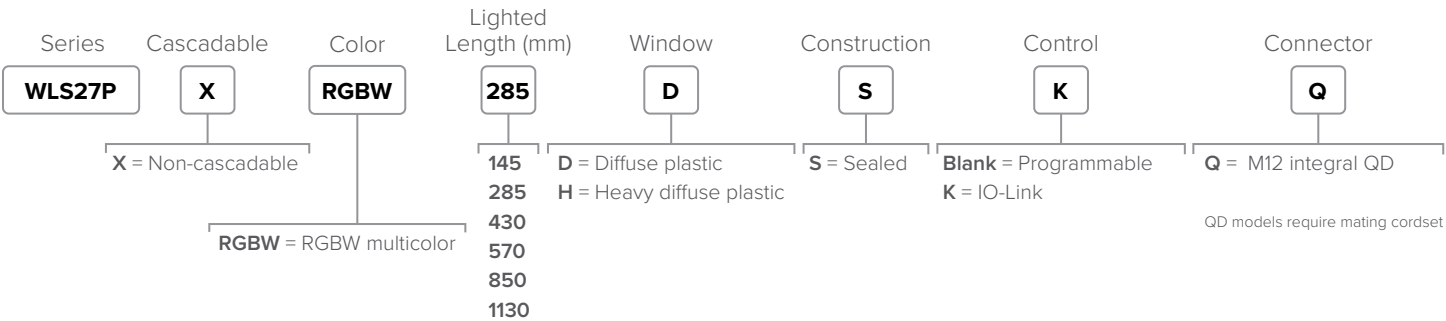
LMBWLS15TF
Tape

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



Supply Voltage	18 to 30 V DC
Construction	Copolyester
Operating Conditions	−40 to +50 °C
Environmental Rating	IP66, IP67, IP69K per DIN 40050-9
Certifications	CE, cULUS LISTED, UKCA, UL-MX, NOM, D

*Depending on length and color

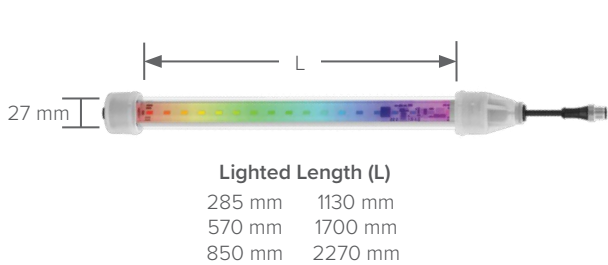
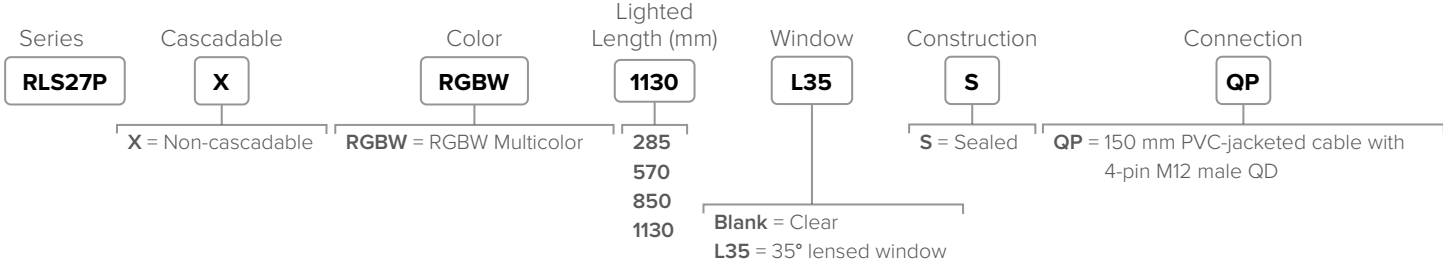
Brackets



RLS27 Series

Programmable Rugged LED Strip Lights

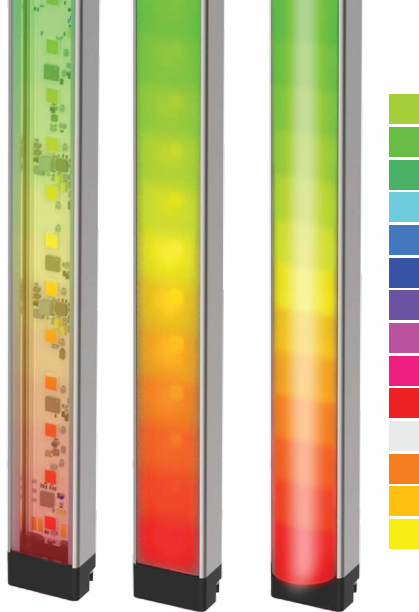
- Shatterproof, UV-stabilized polycarbonate shell offers superior chemical resistance and protection to withstand harsh environments such as car washes
- Sturdy aluminum housing and robust endcaps provide dependable use outside in any weather
- High-intensity focused lens delivers long-range illumination 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



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

Brackets

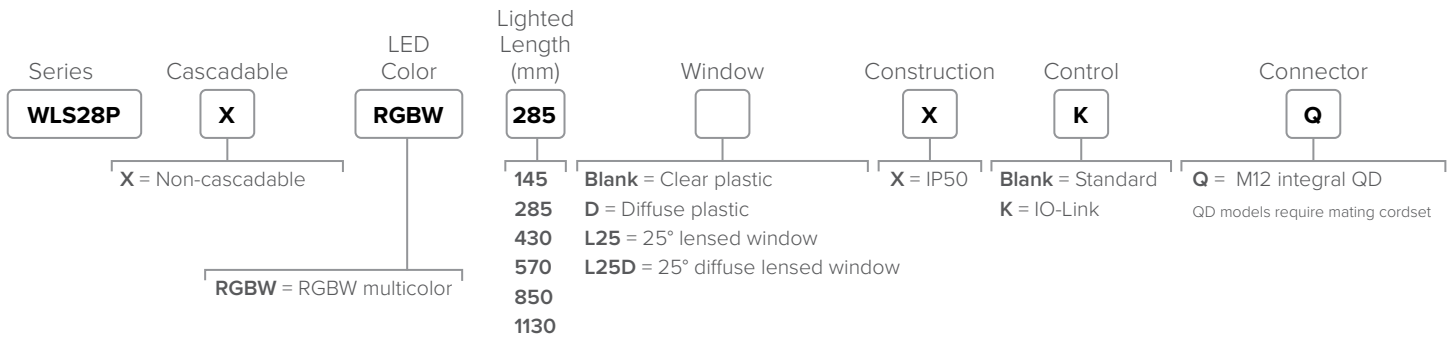




WLS28 Series

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



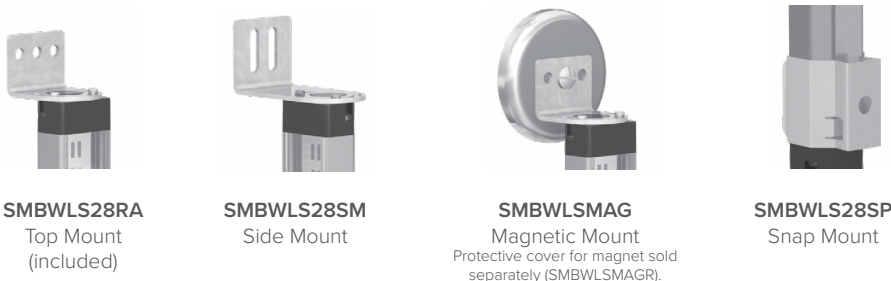
Lighted Length (L)

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	CE, UL LISTED, UK CA, D

*Depending on length and color

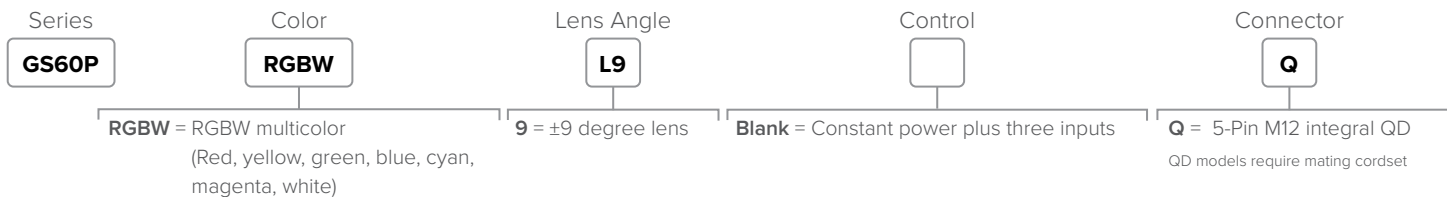
Brackets



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	CE, UL LISTED, UK CA

Brackets



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

K30 Touchless	K50 Touchless	K50 Touch Display	PTL110
30	50	50	15
22	30	30	—
DC	DC	DC	DC
IP65	IP66, IP67, IP69K	IP67, IP69K	IP66, IP67
✓	✓	✓	✓
	IO-Link® PICK-IQ® Modbus	IO-Link® PICK-IQ® Modbus	PICK-IQ®
20 to 1000 mm	20 to 1000 mm	—	100, 200 mm



Programmable LED indicators offer multiple color choices in a single housing

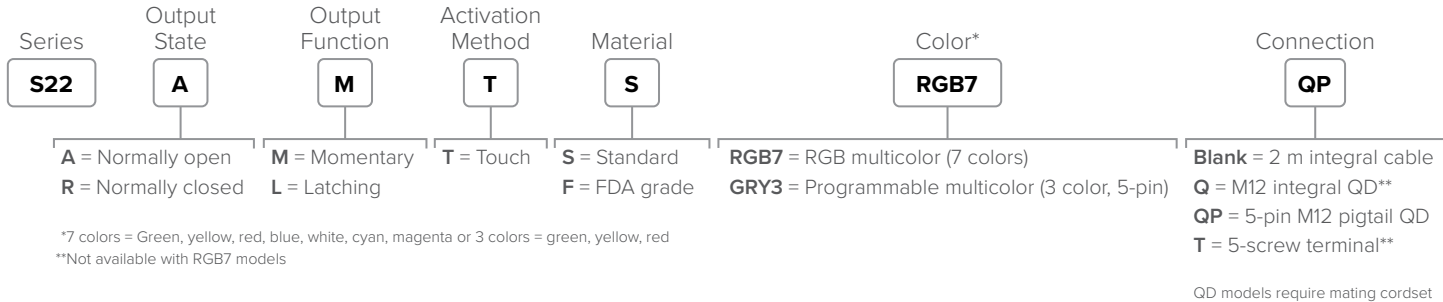


S22 Programmable Touch

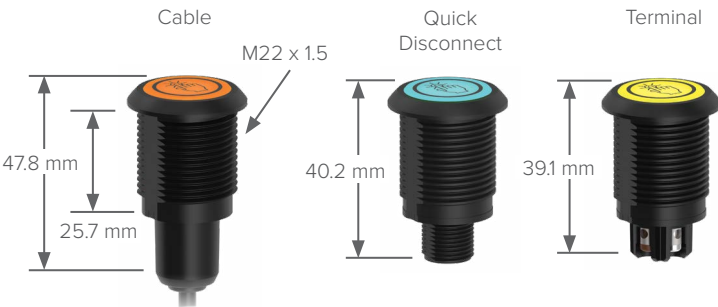
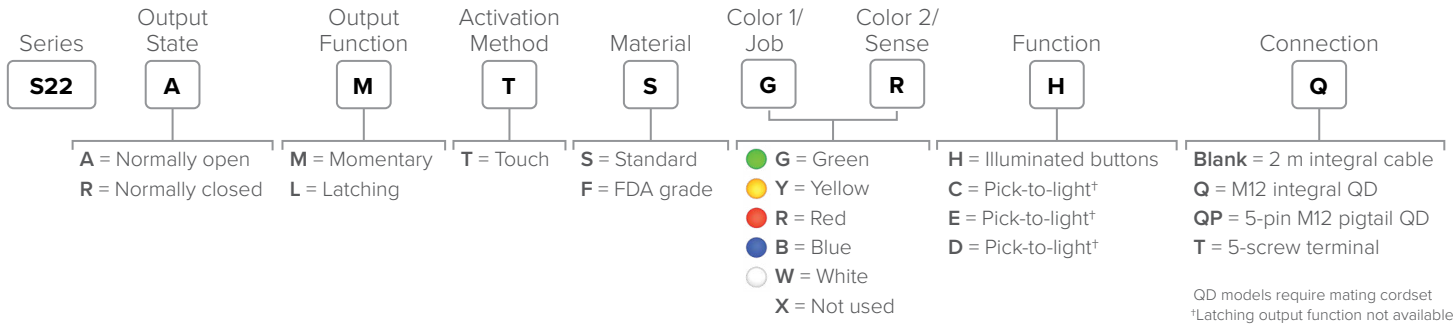
Flush Mount Touch Button Indicators

- 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



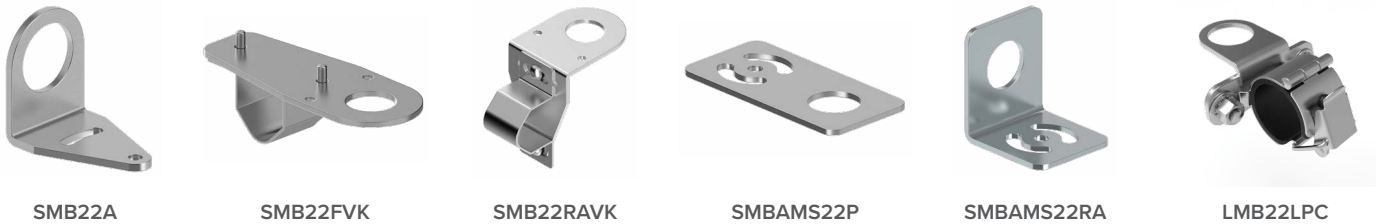
One- or Two-Color/Function Models



Supply Voltage	10 to 30 V DC
Construction	Standard: Polycarbonate FDA: FDA grade Copolyester
Operating Conditions	−40 to +50 °C
Environmental Rating	Standard: IP66, IP67, IP69K per DIN 40050-9†† Terminal: Screw connection points meet IP00 FDA: IP66, IP67, IP69K per DIN 40050-9
Certifications	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.

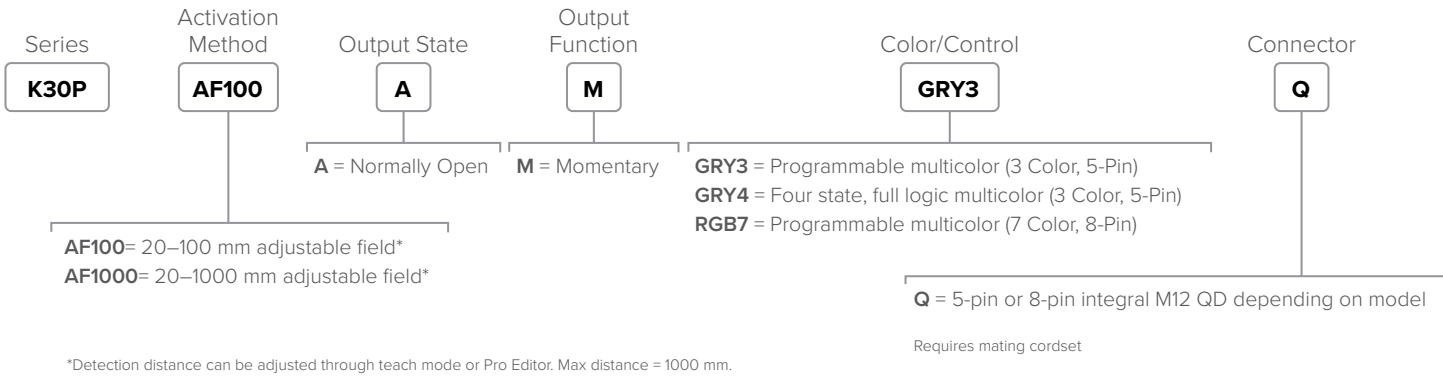
Brackets



K30 Programmable Touchless

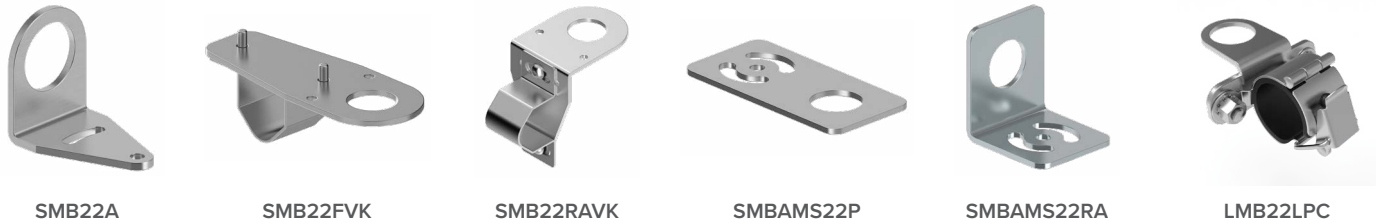
30 mm Indicators with Optical Sensor

- 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



Supply Voltage	10 to 30 V DC
Range	20 mm to 1000 mm
Construction	Polycarbonate
Operating Conditions	−20 °C to +50 °C
Environmental Rating	IP65
Certifications	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

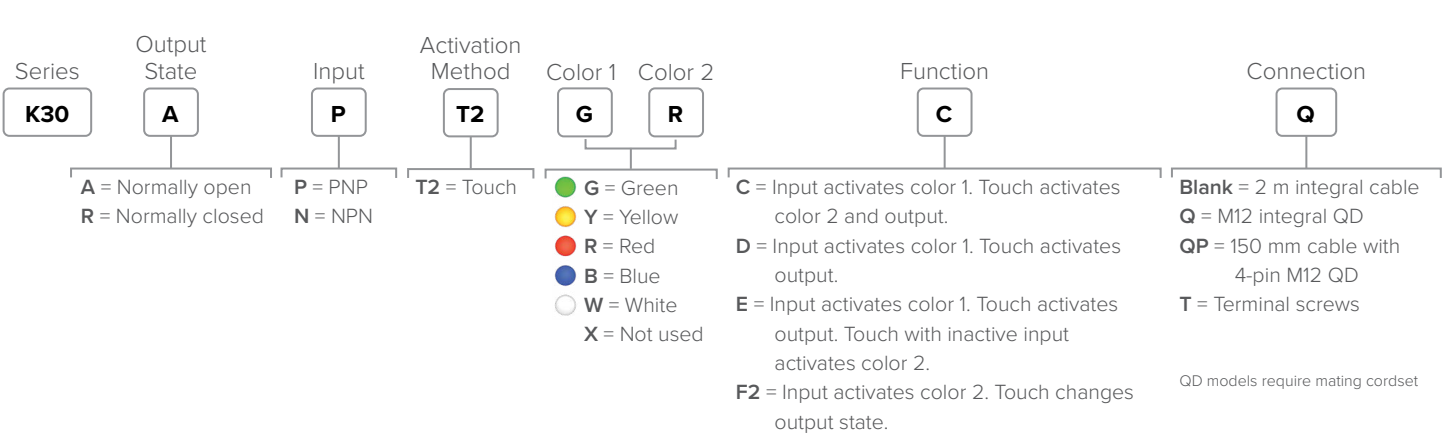


Programmable Models

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



Supply Voltage	10 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

Brackets



SMB22A

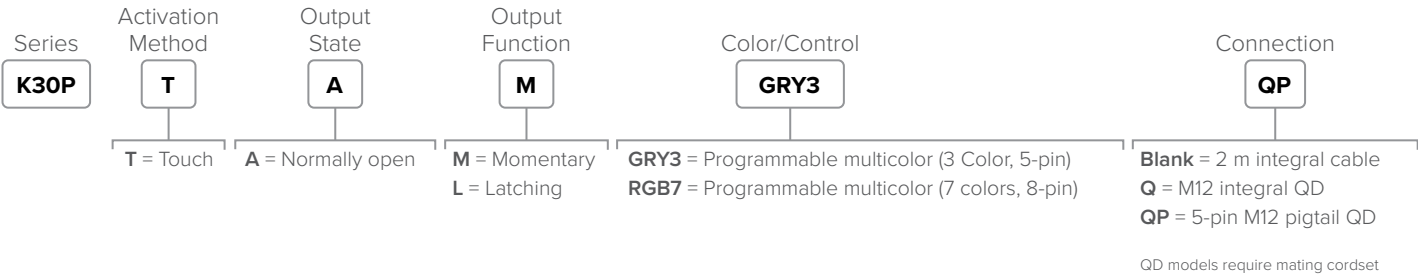


SMBAMS22P

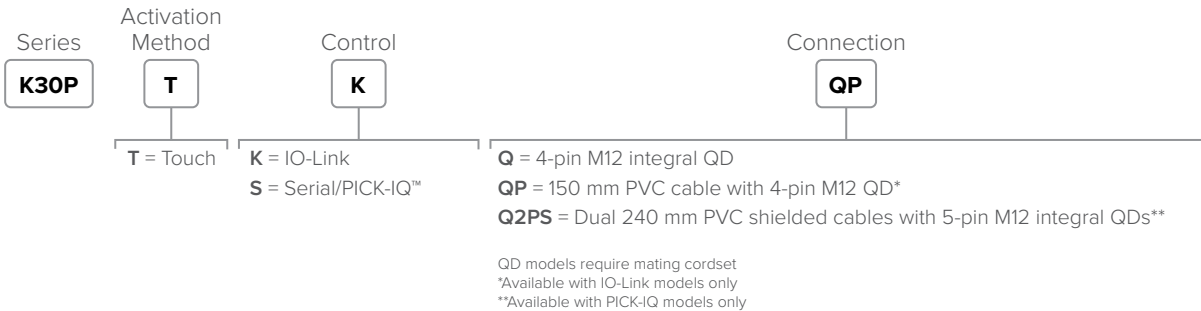


SMBAMS22RA

Programmable Touch Models



Programmable Touch Models with IO-Link or PICK-IQ



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	IP67, IP69K per DIN 40050-9
Certifications	CE, UL LISTED, UK CA



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

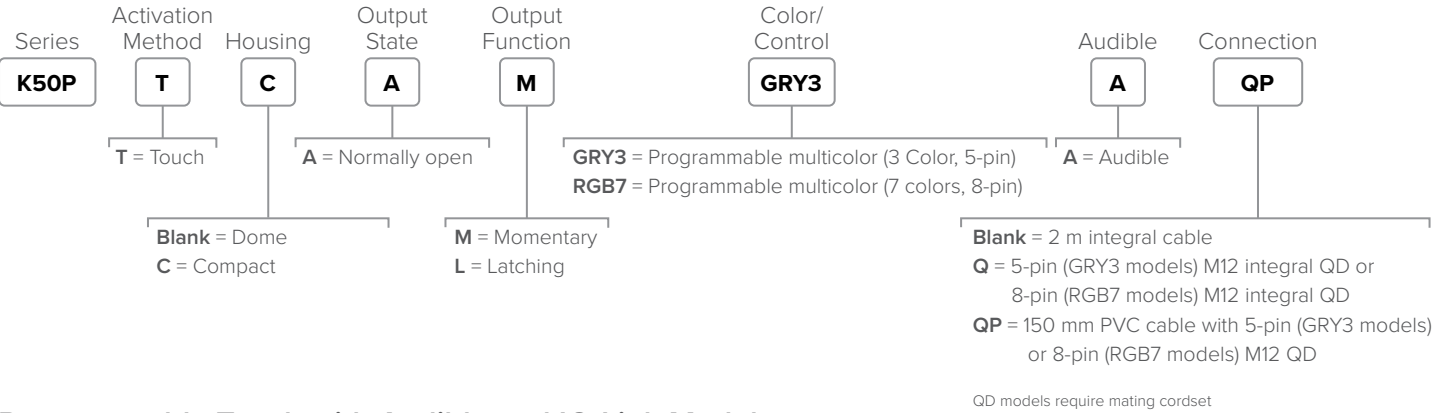
50 mm Multicolor Touch Button Indicators

- 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

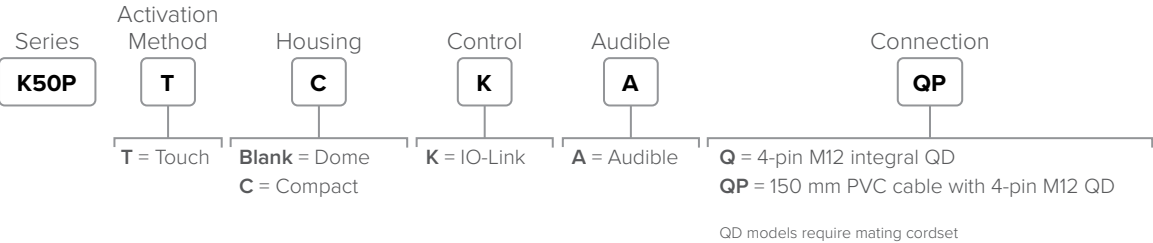
Standard Touch Models

Colors	Function	Output	Connection	Models
Green	Input activates color 1. Touch activates output.	PNP, N.O.	4-pin M12 integral QD	K50APT2GXDQ
Green, red	Input activates color 1. Touch activates color 2 and output.			K50APT2GRCQ
	Input activates color 1. Touch activates output. Touch with inactive input activates color 2.			K50APT2GREQ
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	K50ALBT2GRHQ
	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	K50APT2GRYF2Q

Programmable Touch with Audible Models



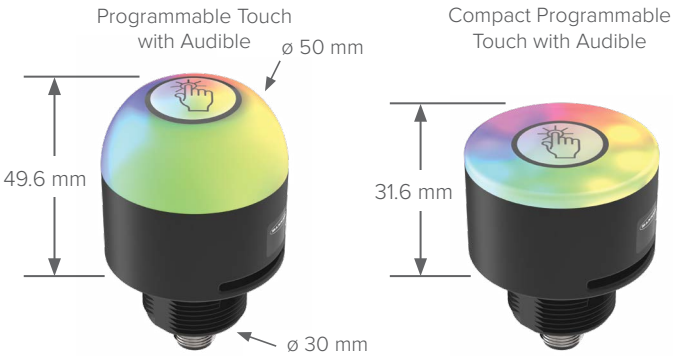
Programmable Touch with Audible and IO-Link Models



Supply Voltage	12 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

Brackets



Supply Voltage	Programmable: 12 to 30 V DC IO-Link: 18 to 30 V DC
Construction	Polycarbonate
Operating Conditions	−40 to +70 °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



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

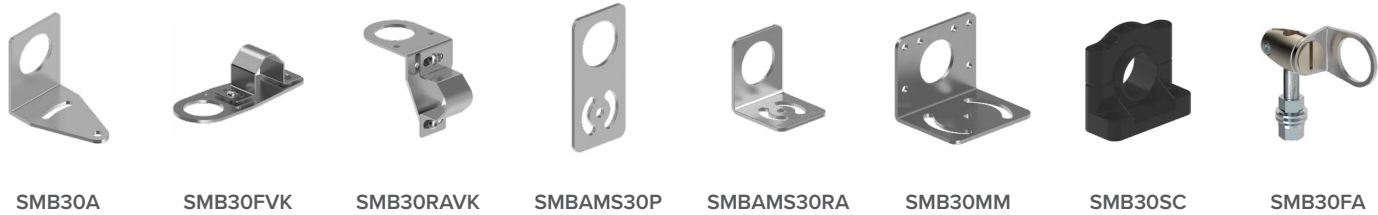
Go-To Models



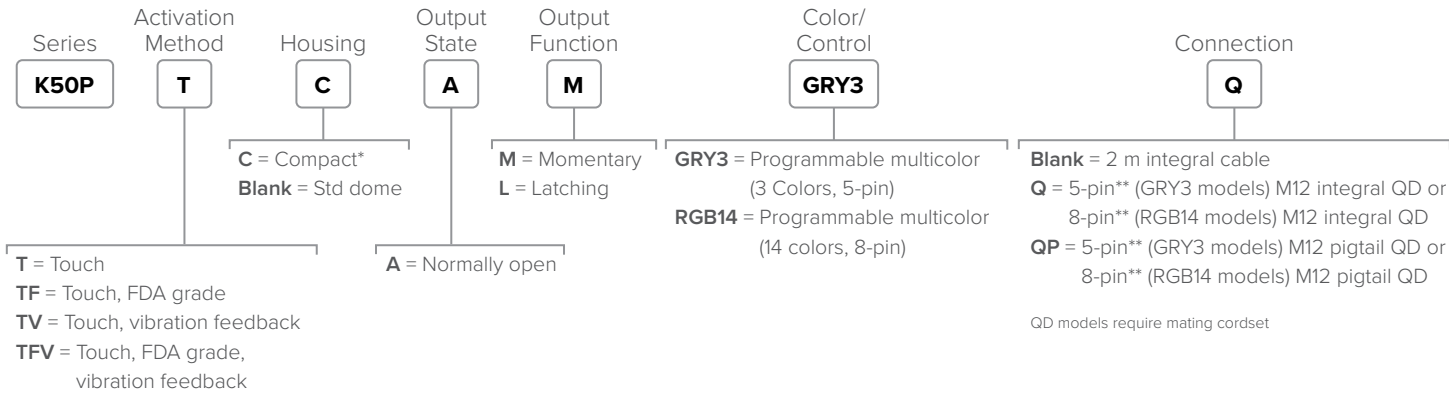
Supply Voltage	Programmable: 12 to 30 V DC IO-Link: 18 to 30 V DC
Construction	Standard: Polycarbonate FDA: FDA grade copolyester
Operating Conditions	−40 to +50 °C
Environmental Rating	Standard: IP67, IP69K per DIN 40050-9* FDA: IP67, DIN IP69K Push Button: IP65
Certifications	CE, UL LISTED, UK CA

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

Brackets

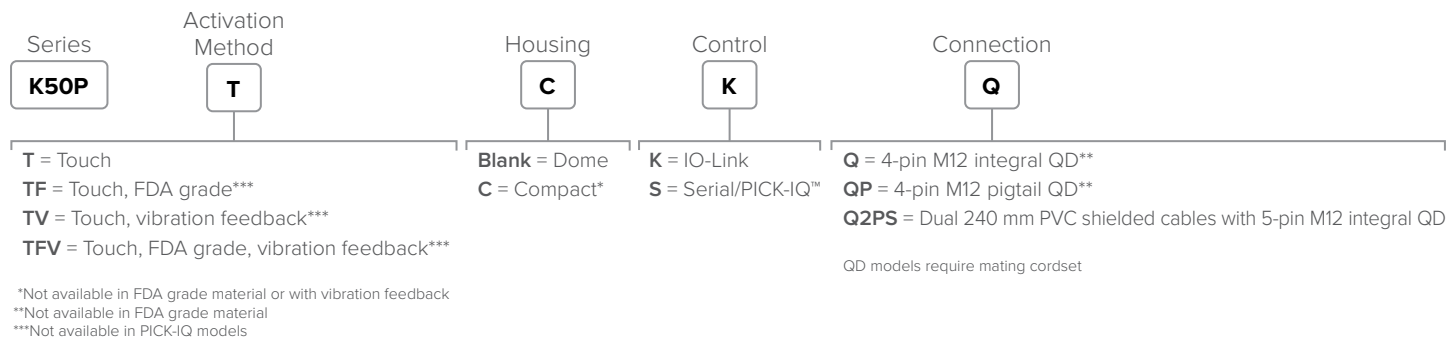


Programmable Touch Models



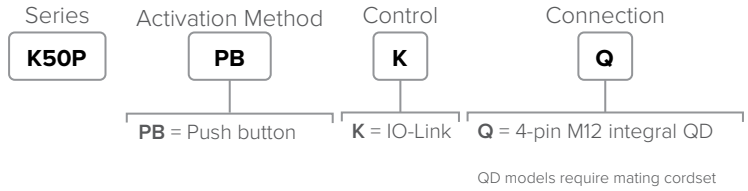
*Not available in FDA grade material or with vibration feedback
**Not available in FDA grade material

Programmable Touch Models with IO-Link or PICK-IQ



*Not available in FDA grade material or with vibration feedback
**Not available in FDA grade material
***Not available in PICK-IQ models

Programmable Push Button Models with IO-Link



Note: Not all models are shown. Visit [bannerengineering.com](https://www.bannerengineering.com) for other available models.



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			K50APFF50GXDQ
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	K50APFF100GRCQ
	Input activates color 1. Presence of hand while input is inactive causes unit to light red.					K50APFF100GREQ



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

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

Brackets



SMB30A



SMB30FVK



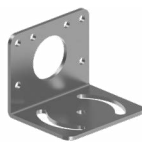
SMB30RAVK



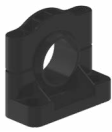
SMBAMS30P



SMBAMS30RA



SMB30MM



SMB30SC



SMB30FA



Programmable Models

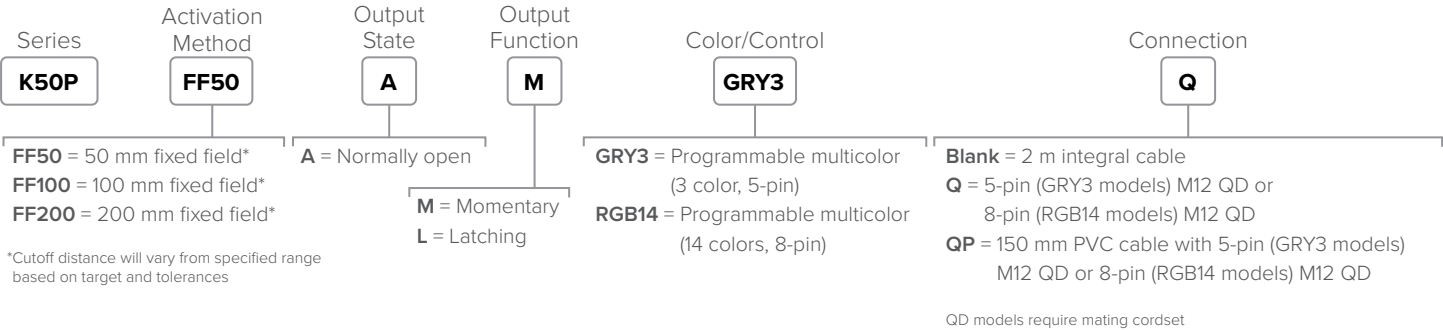
Same Functionality as Standard with Additional Features Below

- 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

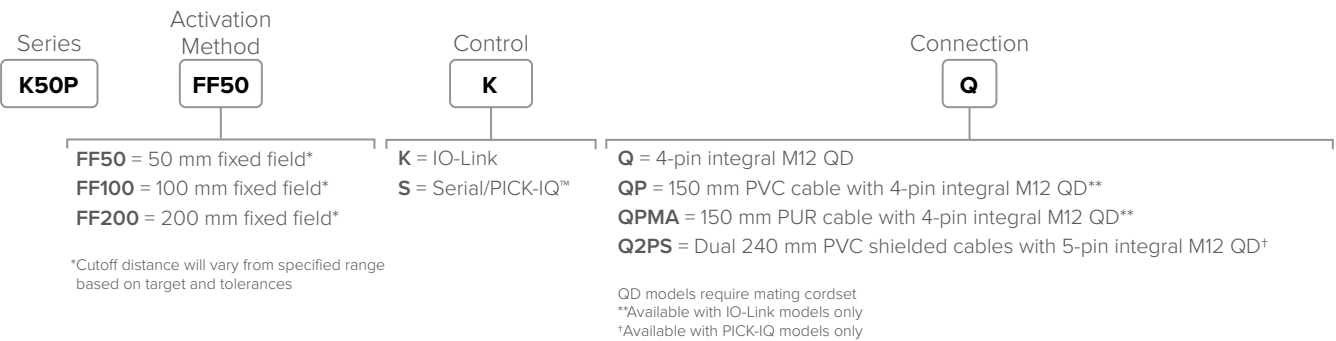
Go-To Models



Programmable Touchless Models



Programmable Touchless Models with IO-Link or PICK-IQ



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

*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

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
	Multipurpose			K70APT2GREQ
				K70APT2GRYF2Q
Green, red, yellow	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.			K70APT2GRYC3Q



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 cULUS LISTED UK CA

Brackets



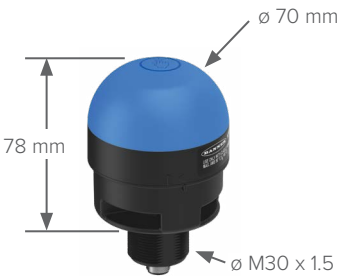
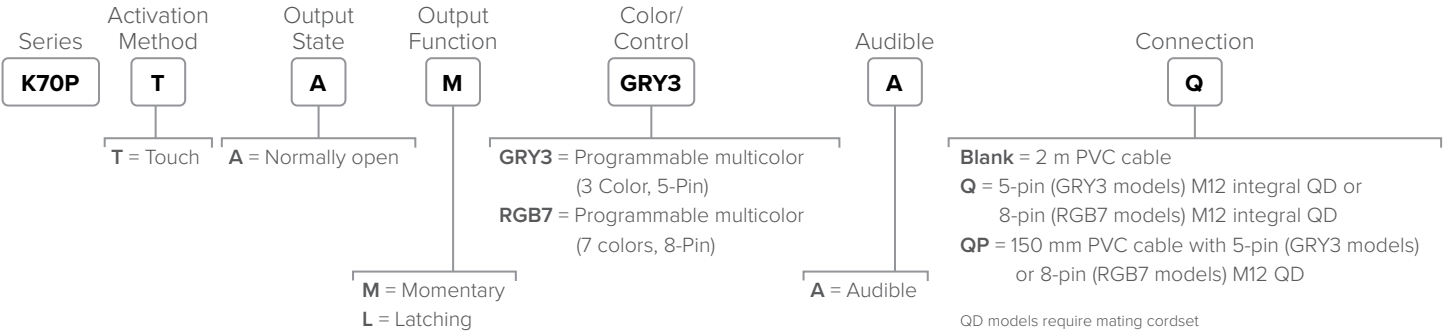
K70 Programmable Touch

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

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 cULUS LISTED UK CA

Brackets



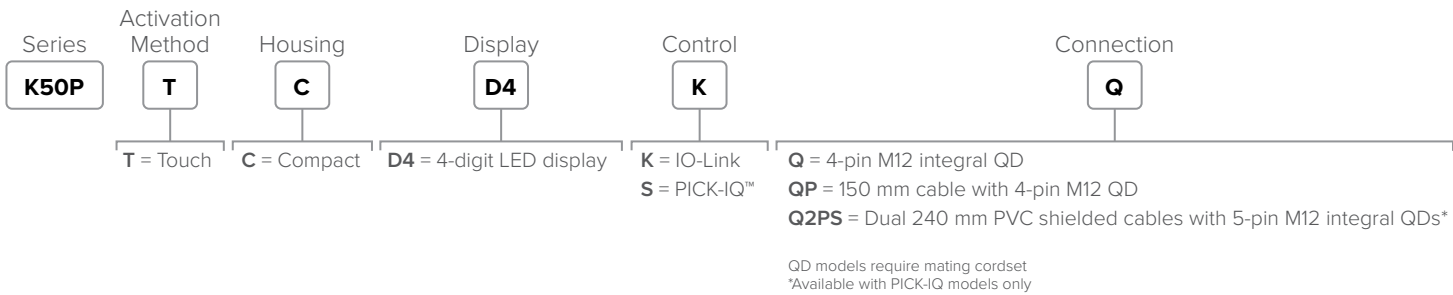


K50 Programmable Touch with Display

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

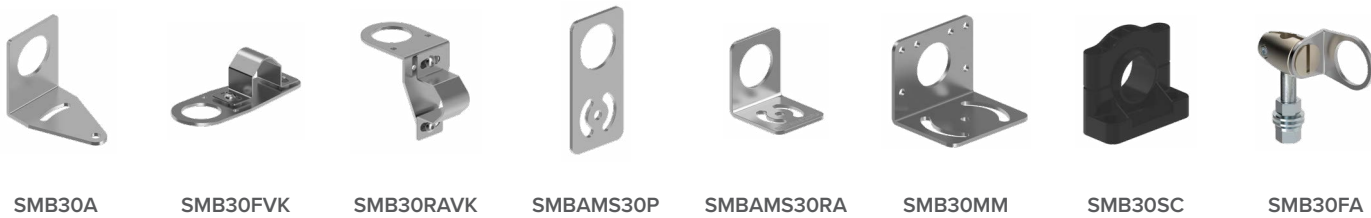
IO-Link and PICK-IQ Models



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	

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

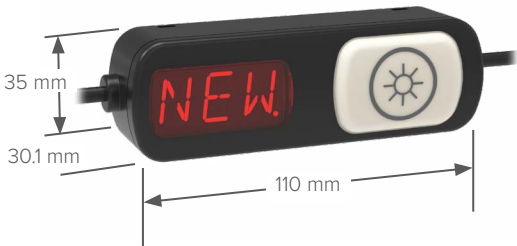
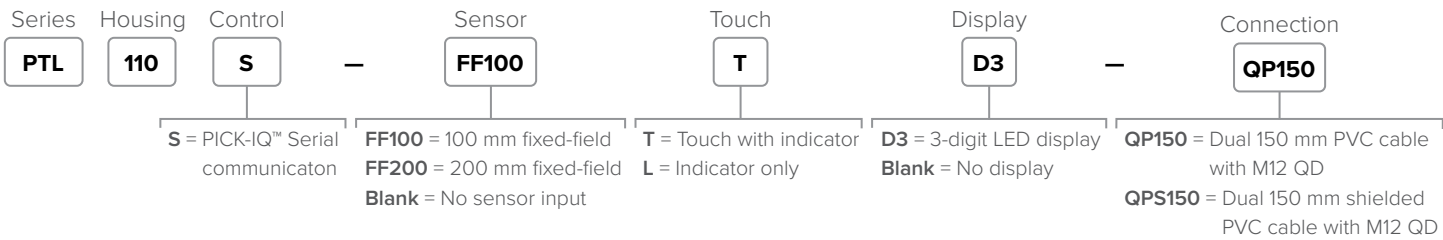
Brackets



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	

Brackets



Display

Selection Guide



pg. 94



pg. 98

Series Name	K50 Touch Display	K50 I/O Controller with Display
Dimensions (mm)	ø 50	ø 50
Number of Characters	4	4
IP Rating	IP67, IP69K	IP67, IP69K
Control Capabilities	✓	✓
Programmable	✓	✓
Communication Protocol	IO-Link® PICK-IQ®	



pg. 99



pg. 100



pg. 95

SD50	K100	PTL110
386 x 52	ø 100	35 x 110
16 or 29 scrolling	32 scrolling	3
IP65	IP65	IP66, IP67
		✓
✓	✓	✓
IO-Link® Modbus	IO-Link® Modbus	PICK-IQ®



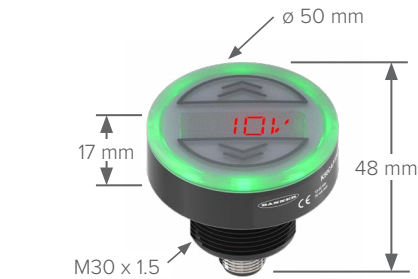
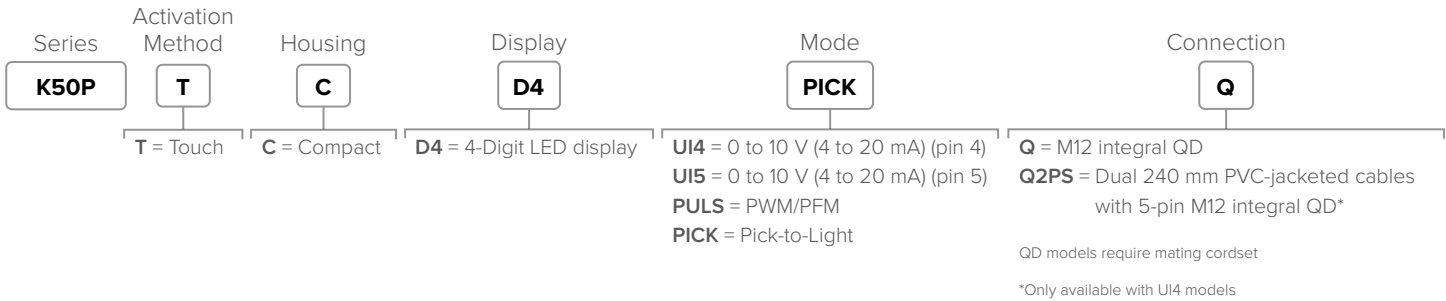
Programmable LED indicators offer multiple color choices in a single housing



K50 I/O Touch Control with Display

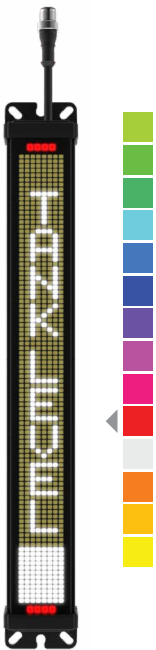
50 mm Programmable Touch Button Indicators

- 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



Supply Voltage	UI4/UI5 models: 18 to 30 V DC PULS/PICK models: 12 to 30 V DC
Supply Current	225 mA at 12 V 100 mA at 24 V 85 mA at 30 V
Construction	Polycarbonate
Operating Conditions	−40 to +50 °C
Environmental Rating	IP67, IP69K
Certifications	

Brackets

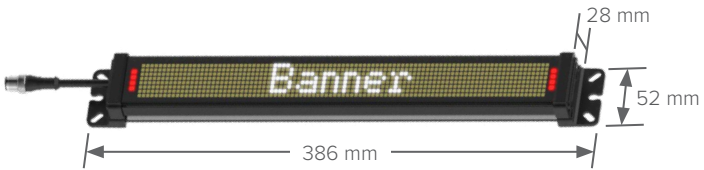


SD50 Status Display

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



Supply Voltage	18 to 30 V DC
Construction	Polycarbonate
Operating Conditions	−20 to +60 °C
Environmental Rating	IP65
Certifications	

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

K100P

Style

D

Type

BL

Color

RGB

Control

D15

Audible Alarm

Connection

Q

D = Display

BL = Beacon light

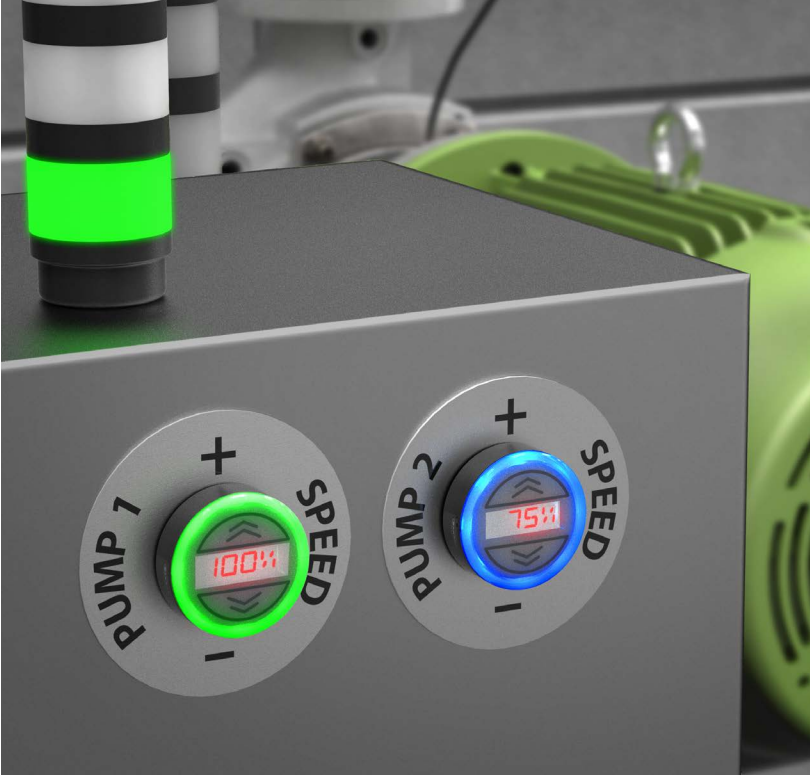
RGB = Multicolor

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

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

Brackets



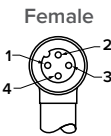
LMB36RA

Connectivity

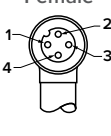
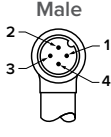
Accessories



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

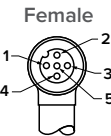
	Length	Straight	Right-Angle	Pinout
4-Pin Female QD to Flying Leads	1 m	MQDC-403	—	 Female 1 = Brown 2 = White 3 = Blue 4 = Black
	2 m	MQDC-406	MQDC-406RA	
	3 m	MQDC-410	—	
	5 m	MQDC-415	MQDC-415RA	
	9 m	MQDC-430	MQDC-430RA	
	15 m	MQDC-450	MQDC-450RA	
	18 m	MQDC-460	MQDC-460RA	
	21 m	MQDC-470	MQDC-470RA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



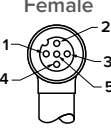
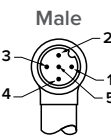
	Length	Straight/Straight (female/male)	Straight/Right-Angle (female/male)	Pinout
4-Pin Double-Ended	0.3 m	MQDEC-401SS	MQDEC-401RS	 Female 1 = Brown 2 = White 3 = Blue 4 = Black
	0.6 m	MQDEC-402SS	—	
	0.9 m	MQDEC-403SS	MQDEC-403RS	
	1.8 m	MQDEC-406SS	MQDEC-406RS	
	3.0 m	MQDEC-410SS	—	 Male 1 = Brown 2 = White 3 = Blue 4 = Black
	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	22 AWG Cable ø – 5.2 mm
	15.2 m	MQDEC-450SS	MQDEC-450RS	



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

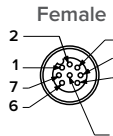
	Length	Straight	Right-Angle	Pinout
5-Pin Female QD to Flying Leads	0.9 m	MQDC1-503	—	 Female 1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
	2 m	MQDC1-506	MQDC1-506RA	
	5 m	MQDC1-515	MQDC1-515RA	
	9 m	MQDC1-530	MQDC1-530RA	
	18 m	MQDC1-560	—	
	30 m	MQDC1-5100	—	22 AWG Cable ø – 5.6 mm



	Length	Straight/Straight (female/male)	Straight/Right-Angle	Pinout
5-Pin Double-Ended	0.3 m	MQDEC-501SS	—	 Female 1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
	1 m	MQDEC-503SS	—	
	2 m	MQDEC-506SS	—	
	5 m	MQDEC-515SS	—	 Male 1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
	9 m	MQDEC-530SS	—	
	15 m	MQDEC-550SS	—	22 AWG Cable ø – 5.6 mm

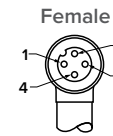


8-Pin M12 (Voltage: 30 V DC/AC, Current: 2 A)

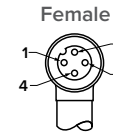
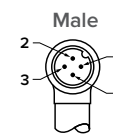
	Length	Straight	Right-Angle	Pinout
8-Pin Female QD to Flying Leads Open Shield with Drain Wire	2 m	MQDC2S-806	MQDC2S-806RA	 Female 1 = White 2 = Brown 3 = Green 4 = Yellow 5 = Gray 6 = Pink 7 = Blue 8 = Red
	5 m	MQDC2S-815	MQDC2S-815RA	
	10 m	MQDC2S-830	MQDC2S-830RA	
	16 m	MQDC2S-850	MQDC2S-850RA	
	31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



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

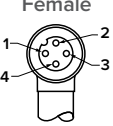
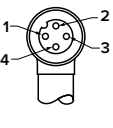
	Length	Straight	Right-Angle	Pinout
4-Pin Female QD to Flying Leads	2 m	MQDC-406-PUR	MQDC-406RA-PUR	 Female 1 = Brown 2 = White 3 = Blue 4 = Black
	5 m	MQDC-415-PUR	MQDC-415RA-PUR	
	10 m	MQDC-430-PUR	MQDC-430RA-PUR	22 AWG Cable ø – 4.1 mm



	Length	Straight/Straight (female/male)	Right-Angle/Straight (female/male)	Pinout
4-Pin Double-Ended	0.3 m	MQDEC-401SS-PUR	MQDEC-401SR-PUR	 Female 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	 Male 1 = Brown 2 = White 3 = Blue 4 = Black
	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

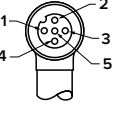
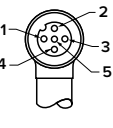


4-Pin M12 Lighted (Voltage: 10 to 30 V DC at 15 mA max)

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

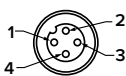


5-Pin M12 Lighted (Voltage: 10 to 30 V DC at 15 mA max)

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

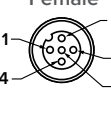
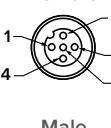
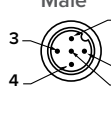


4-Pin M12 Washdown (Voltage: 250 V DC/AC, Current: 4 A)

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



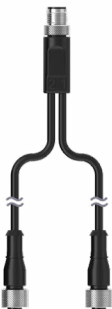
5-Pin M12 Washdown (Voltage: 60 V DC/AC, Current: 4 A)

	Length	Straight	Pinout	
5-Pin	2 m	MQDC-WDSS-0506		1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
	5 m	MQDC-WDSS-0515		
	9 m	MQDC-WDSS-0530		
			22 AWG	Cable ø – 5.2 mm
	Length	Straight/Straight	Pinout	
5-Pin Double-Ended	1.5 m	MQDEC-WDSS-505SS		1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
	3 m	MQDEC-WDSS-510SS		
	4.57 m	MQDEC-WDSS-515SS		
			22 AWG	Cable ø – 4.8 mm



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

	Models	Cable Lengths		Pinout
		Trunk (Male)	Branches (Female)	
4-Pin	CSB-M1240M1241	No Trunk/Integral QD	2 x 0.3 m	Female 1 2 3 4 Male 1 2 3 4 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)	
4-Pin	S15YB-M124-M124-0.2M	2 x 0.2 m	No Trunk	Branch 1 (female) 1 2 3 4 Trunk (male) 1 2 3 4 Branch 2 (female)
	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	
5-Pin	CSB-M1251M1251B	0.3 m (Male)	2 x 0.3 m (Female)	Female 1 2 3 4 5 Male 1 2 3 4 5 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



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



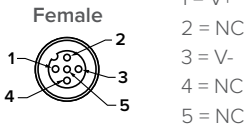
Programmable Cordset

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

Power Accessories



5-Pin Power Supply

	Model	Input	Output	Length	Pinout
5-Pin	PSW-24-1	100 to 240 V AC	Voltage: 24 V DC $\pm$ 5% Current: 1.0 Amp Power: 24 W max.	2 m	
	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 on Pin 5		SPS30PAR5NQ5
	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	Red	N/A	Green	2-Wire DC devices	LC15T-127AL2RGQP LC25T-AL2RGQ
3-Wire PWM control		Blue		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
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	2-Wire	LC65P2Q5

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.



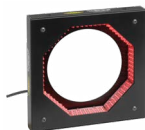
Area Lights
Area Lights create shadows to detect changes in depth, illuminate specific surface angles, and avoid glare from reflective surfaces when directed at an angle away from the lens.



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.

