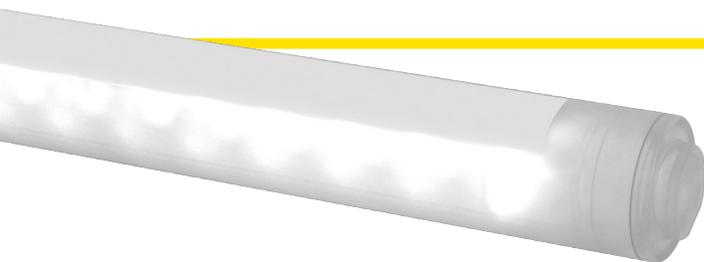
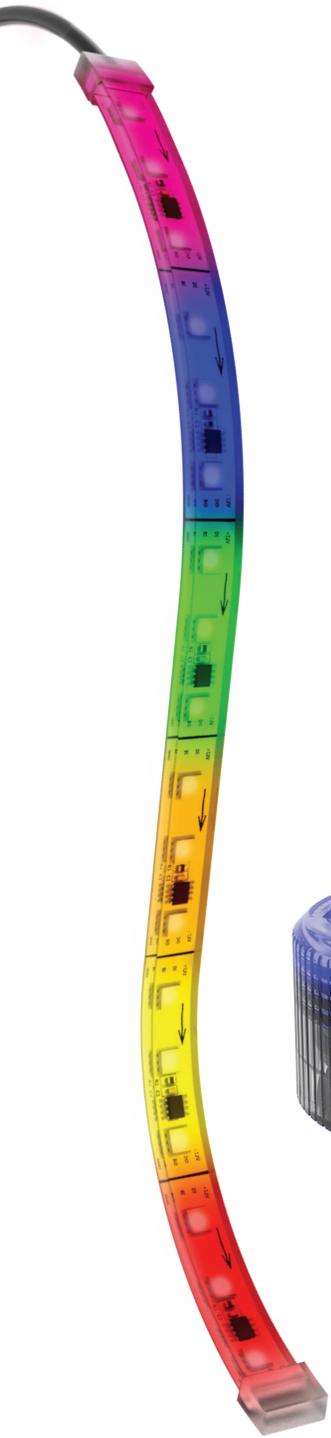


Lighting & Indication Solutions



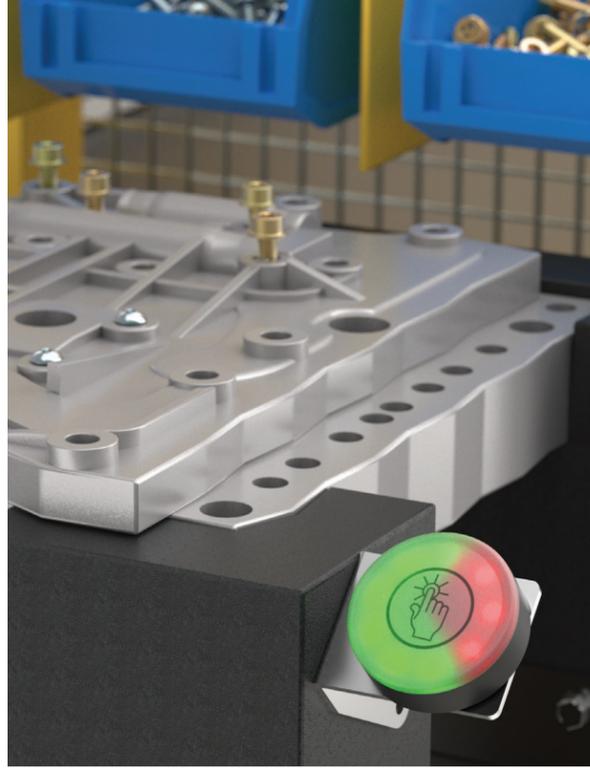
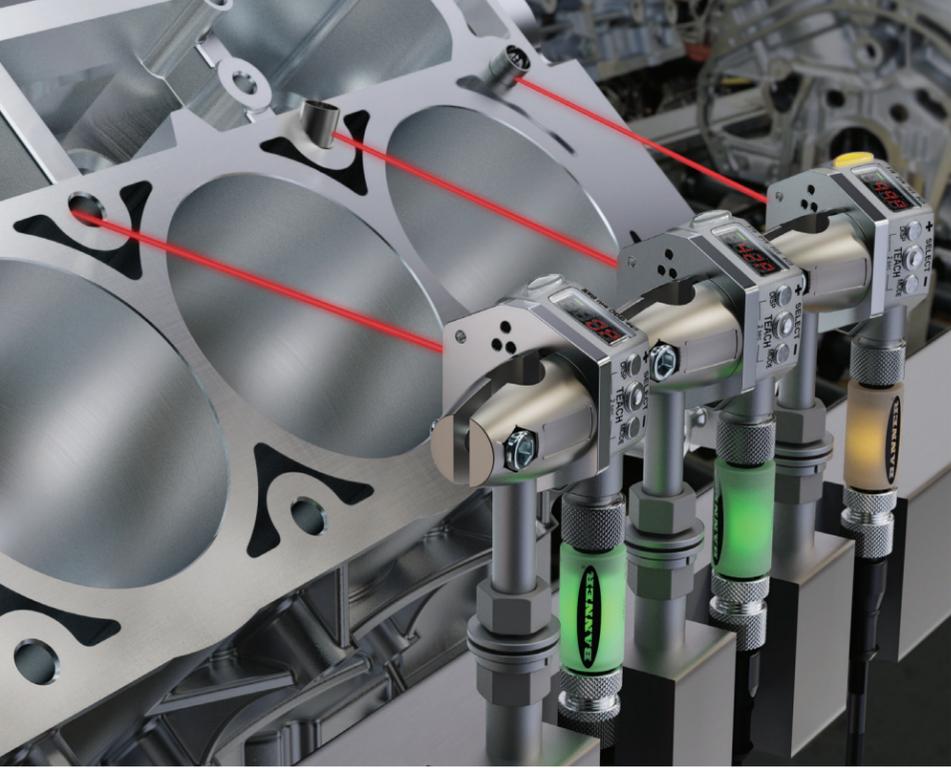


Table of Contents

| | |
|---------------------|----|
| Visual Factory..... | 4 |
| New Products..... | 8 |
| Pro Products | 10 |

Lighting and Indication Solutions

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

Accessories

| | |
|---------------------------|-----|
| Connectivity..... | 96 |
| Pro..... | 102 |
| Power..... | 103 |
| Switches and Dimming..... | 104 |
| Standoff Pipes | 105 |

Specialty Solutions

| | |
|-------------------------------|-----|
| Audible Indication | 106 |
| Hazardous Location | 107 |
| Heavy Duty and Washdown | 108 |
| Vision Lighting..... | 109 |

Light Up the Visual Factory

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



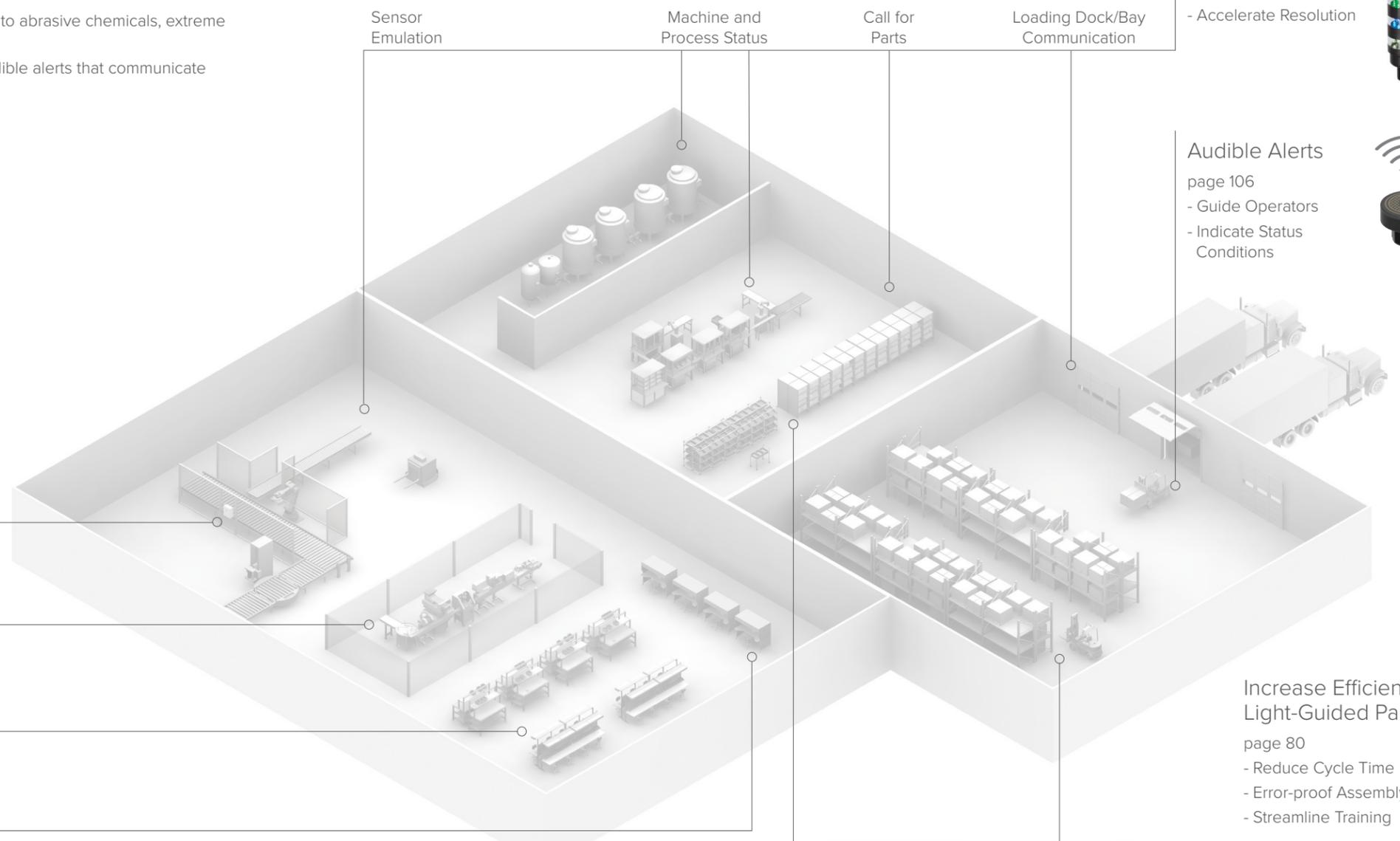
Illuminate the Work Area with LED Lighting
 page 12
 - Boost Worker Productivity
 - Improve Product Quality
 - Increase Worker Safety

Electrical Panel Lighting

Machine Lighting

Workstation Lighting

Visual Inspection Station



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



Audible Alerts
 page 106
 - 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

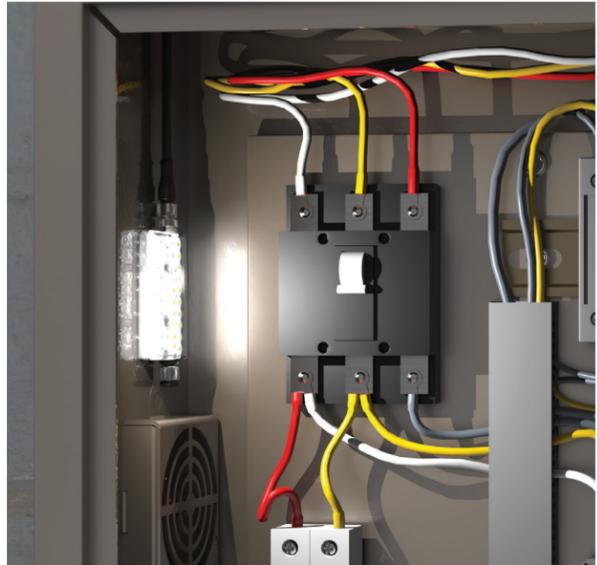
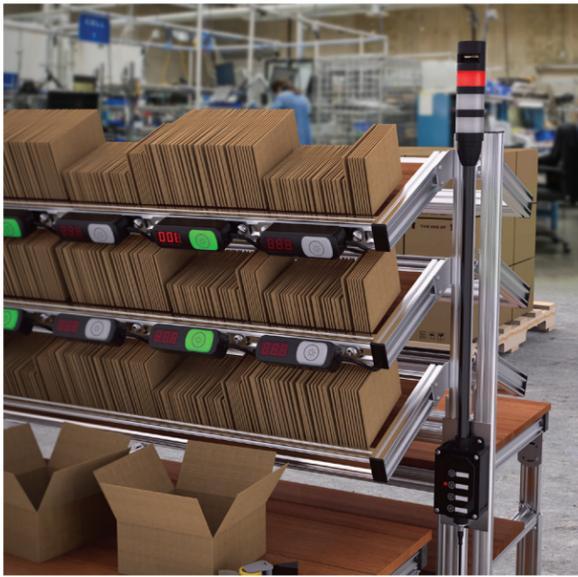
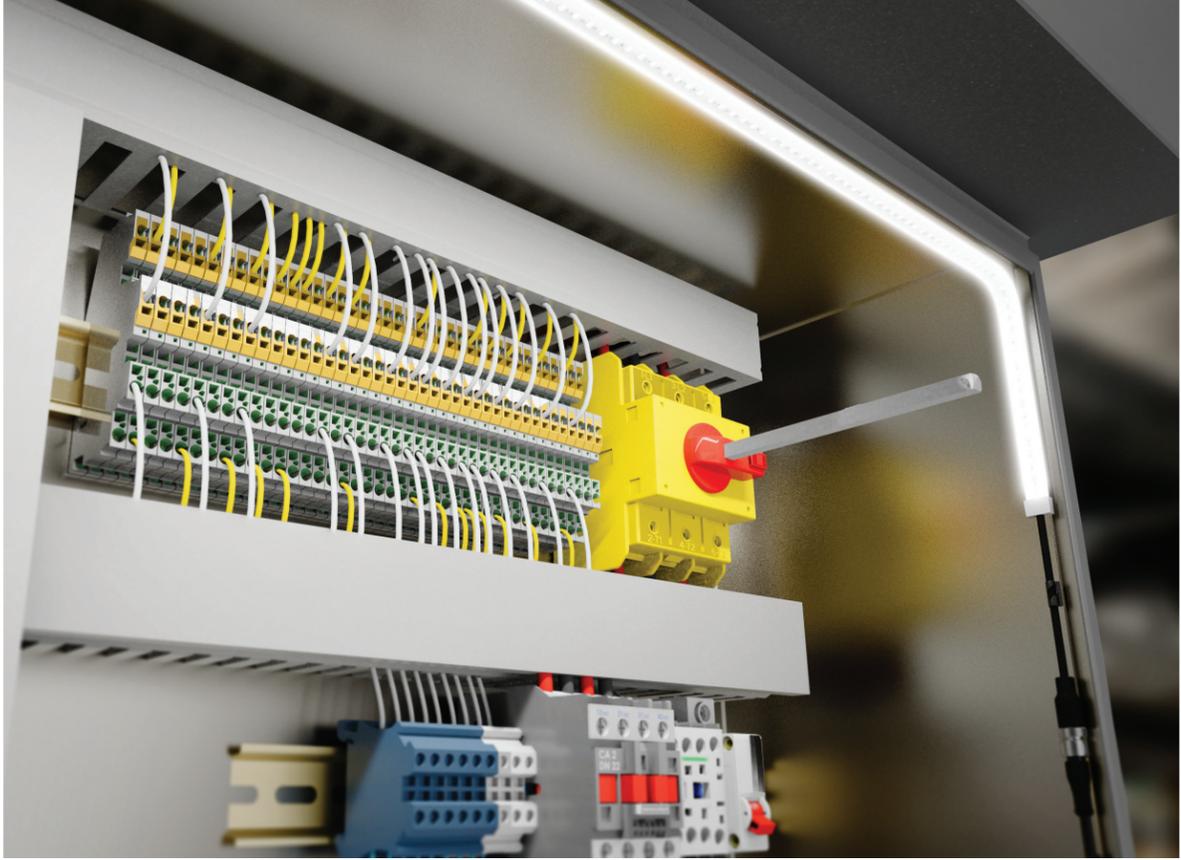


Magnetic mounting options for easy installation and portability



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

New Products





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



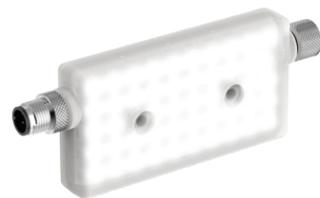
K30 Pro Optical Sensors

- 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 prevents contamination and eliminates the need for physical force to operate
- Adjustable range from 20 to 1000 mm for detection where needed; ignores objects in the background
- Configurable indication states show target position/distance



WLB72I Industrial LED Strip Lights

- Focused light produces “zebra” pattern on vehicle surface to help workers identify flaws
- Extended eye shield improves worker comfort and performance by preventing lateral glare in the inspection tunnel
- Plug-and-play connections simplify installation
- Adjust intensity of 4 zones independently with optional LCS10 controller



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



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



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



K100 Pro Beacons

- 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
- Multiple colors in one device
- Programmable using Banner's Pro Editor Software and Pro Converter Cable (DC models)
- Rugged UV-stabilized polycarbonate base and window
- Audible models available with volume from 93-101 dB at 1 m



TL50 Andon Tower Lights

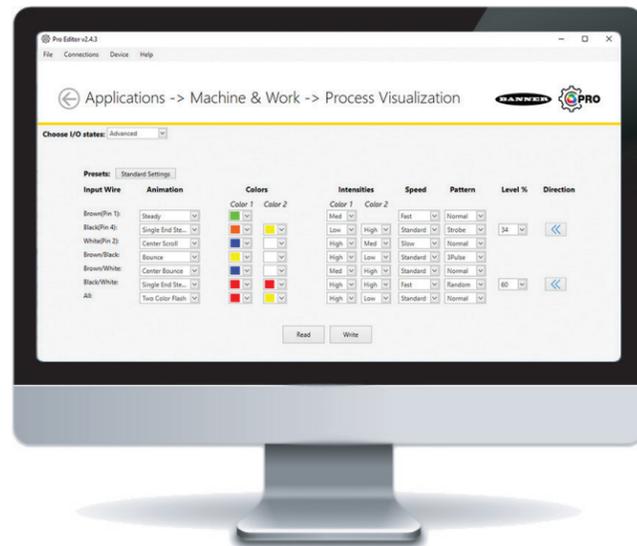
- Model options for 3 or 4 color segments, with or without omnidirectional audible
- Tower light segments appear grey when powered off, eliminating false indication from ambient conditions
- Available in two color combinations: green, yellow, and red or blue, green, yellow and red
- Wireless models facilitate transfer of information across the facility to simplify installation and speed response

and LCA130T Andon Control Box

- Rugged, cost-effective, and easy-to-install standalone lighting control box
- Integral 4 or 5 capacitive touch button controller with programmable LEDs and discrete outputs
- Two M12 connectors for easy installation
- Collect and record status data with IO-Link and wireless models

Pro Products

The Pro Series programmable multicolor LED devices from Banner Engineering offer limitless possibilities for advanced indication of dynamic machine states, operator interaction, and process status. The Pro Series is ideal if you are looking for advanced capabilities or flexibility beyond a traditional factory light. Whether you have discrete or protocol devices, the Pro Series use Banner's Pro Editor Software, IO-Link, or PICK-IQ™ for real-time communication across your factory.



Software for Programmable Devices

Banner's Pro Editor Software allows users to program device status, colors, animations, and much more for control via discrete inputs, bringing intuitive indication and interaction to the visual factory. Programmable 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, and communicating multiple machine states.



| | | | | | |
|----------|------------------------------------|---------------------------------------|---------------------------------------|---------|----------|
| pg. 58 | pg. 82 | pg. 68, 85 | pg. 71, 73, 87-89 | pg. 47 | pg. 45 |
| S15L Pro | S22 Pro Indicator and Touch Button | K30 Pro Indicator, Touch, and Optical | K50 Pro Indicator, Touch, and Optical | LCA130T | CL50 Pro |



✓ ✓ ✓ ✓ ✓ ✓



| | | | | | |
|--|--|---|---|---|---|
| | | ✓ | ✓ | ✓ | ✓ |
|--|--|---|---|---|---|



✓ ✓ ✓

Technologies



allows simple configuration via discrete inputs with advanced options for colors, animations, logic, and much 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 purpose-built, Modbus-compatible serial bus protocol that uses a Common ID to reduce the typical latency that results from polling multiple devices.

Modes and Animations



Spectrum



50/50



Rotate



Timer



Scroll



Bounce



Flash



Level



Strobe



Counter



| | | | | | | | | | | |
|----------|--------|---------|----------|------------|-----------|-----------|-----------|-----------|-----------|--------|
| pg. 50 | pg. 53 | pg. 77 | pg. 78 | pg. 54 | pg. 62 | pg. 64 | pg. 65 | pg. 66 | pg. 67 | pg. 94 |
| TL50 Pro | TL70 | K90 Pro | K100 Pro | TLF100 Pro | WLF12 Pro | WLS15 Pro | WLS27 Pro | RLS27 Pro | WLS28 Pro | PTL110 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | | ✓ | |
| | | | | | | ✓ | | | | ✓ |



Programmable LED indicators offer multiple color choices in a single housing

LED Task Lighting Selection Guide



pg. 16 pg. 17 pg. 18 pg. 20 pg. 22

| | | | | | |
|--------------------------------|--------------------------|--------------------------------------|--------------------------|--------------|---------------------------------------|
| Series Name | WLF12 | WLS15 | WLS27 | RLS27 | WLS28-2 |
| Length (mm) | 300 to 4000 | 220 to 1200 | 145 to 1130 | 285 to 2270 | 145 to 1130 |
| AC/DC | DC | DC | DC | DC | DC |
| White Lumens per Foot (300 mm) | 285 | 350 standard 750 high intensity | 800 | 850 | 800 |
| IP Rating | IP66, IP67, IP69K | IP66, IP67 | IP66, IP67, IP69K | IP67, IP69K | Unsealed: IP50 Sealed: IP67, IP69K |
| RGB Programmable | IO-Link® (see pg. 62) | IO-Link® PICK-IQ® (see pg. 64) | IO-Link® (see pg. 65) | (see pg. 66) | IO-Link® (see pg. 67) |
| Color Options | | ✓ | ✓ | ✓ | ✓ |
| Hazardous Location Models | | | HLS27 | | HLS28 |



pg. 21 pg. 24 pg. 25 pg. 26 pg. 27 pg. 28 pg. 29

| | | | | | | | |
|--------------------------------|-------------|-------------|---------------|--------------|-----------------------|-----------------------|-----------------|
| Series Name | WLB32 | WLS70 | WLB72 | WLB92 | BL60 | WLC60 | WLH60 High Temp |
| Length (mm) | 285 to 1130 | 300 to 1200 | 1200 and 2400 | 550 and 1100 | 340 and 640 | 340 and 640 | 340 and 640 |
| AC/DC | AC and DC | AC and DC | AC | AC and DC | DC | DC | DC |
| White Lumens per Foot (300 mm) | 750 | 1350 | 1700 | 1755 | 1375 | 1300 | 1150 |
| IP Rating | IP50 | IP65 | IP20 | IP40 | IP67, IP68g, IP69K | IP68, IP68g, IP69K | IP68, IP69K |
| RGB Programmable | | | | | | | |
| Color Options | | | | | ✓ | | |

Programmable LED indicators offer multiple color choices in a single housing

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

RGB Programmable



(see pg. 58)

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



Programmable LED indicators offer multiple color choices in a single housing

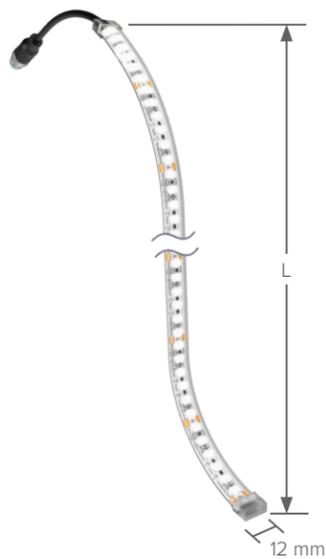


WLF12

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 | 300 600 1200 2000 3000 4000 | S = Sealed | 24 = 24 V | QP = 150 mm PVC-jacketed cable with 4-pin M12 male quick disconnect |



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

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



Brackets



LMBWLF12C
Set of 10 clamp brackets, translucent silicone



WLS15

LED Strip Lights

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

Single and Multicolor Models

| Series | Cascadable | Color | Length (mm) | Window | Construction | Connector |
|--------------------------------------|------------|--|-------------------------------------|-------------|-------------------------|--|
| 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* |

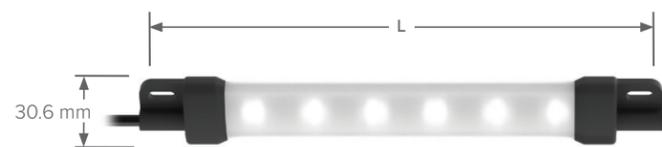
QD models require mating cordset
*Not available with multicolor models

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 104



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

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

Brackets



LMBWLS15-150S



LMBWLS15



LMBWLS15MAG
Magnetic Mount



LMBWLS15TF
Tape



LMBWLS15TD
Velcro



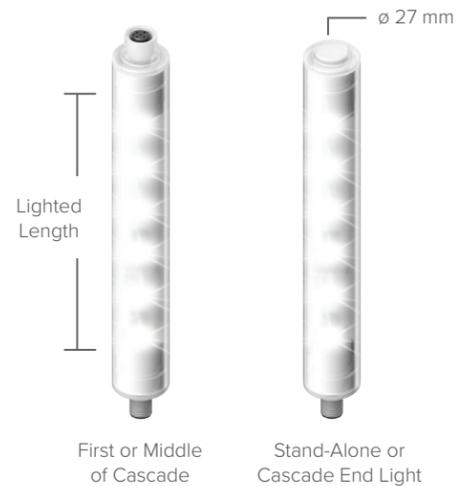


WLS27

LED Strip Lights

- Cylindrical design, ideal for laminar airflow applications
- Rugged, water-resistant IP66, IP67, and IP69K construction
- Chemically resistant copolyester housing
- Available in eight lengths from 145 mm to 1130 mm
- Power can be daisy-chained to multiple lights
- Capability to dim lights using the wiring pinout (Hi/Low/Off)*
- Intensity can be controlled from 0% to 100% using Pulse Width Modulation (PWM) dimming*
- Optional snap clips for easy installation and repositioning
- Automatic temperature protection built into the unit. Above 50 °C, the light dims to manage heat and protect product lifetimez

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



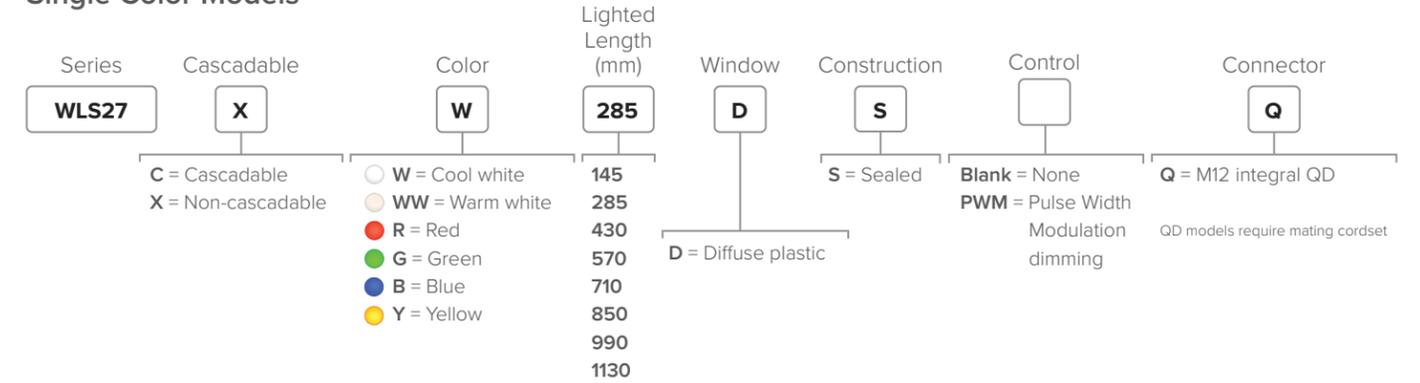
| | |
|-----------------------------|--|
| Supply Voltage | White: 12 to 30 V DC Multicolor: 24 V DC |
| Lumens | White: 400–3200** Multicolor: 125–2600** |
| Construction | Housing: Copolyester Inner Housing: Clear anodized aluminum Outer Housing: FDA grade copolyester |
| Operating Conditions | Single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

**Depending on length and color

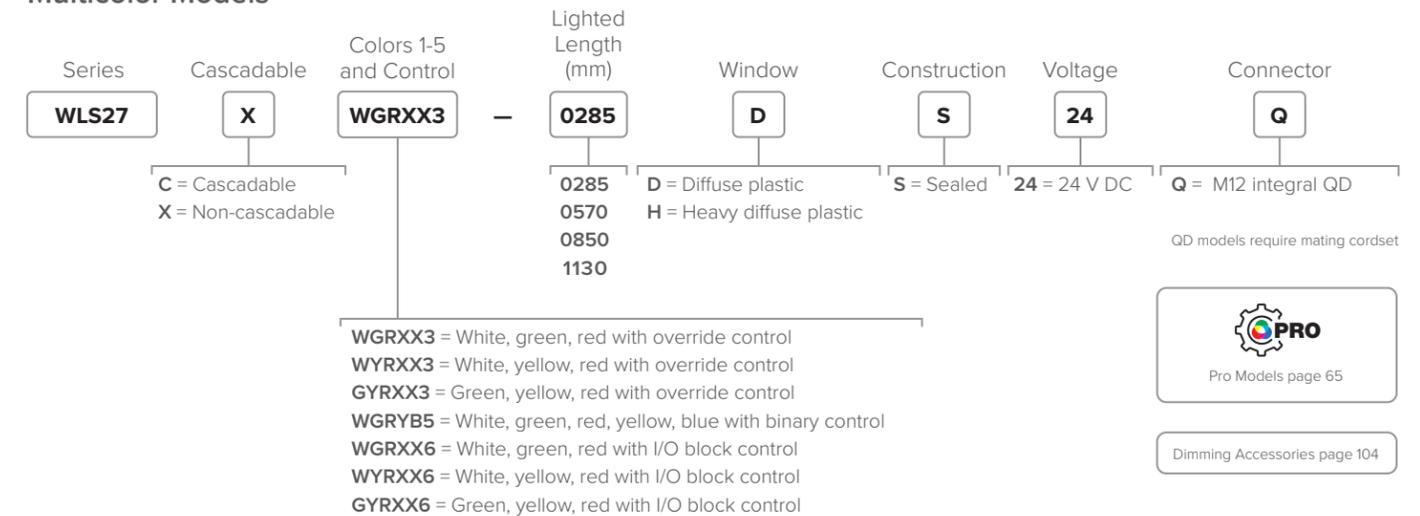
Lighted Length (L)

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

Single Color Models



Multicolor Models



Pro Models page 65

Dimming Accessories page 104

Brackets



LMBWLS27EC
Clear Copolyester



LMBWLS27H



LMBWLS27T



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



LMBWLS27SP
Clear Copolyester

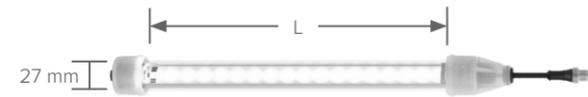
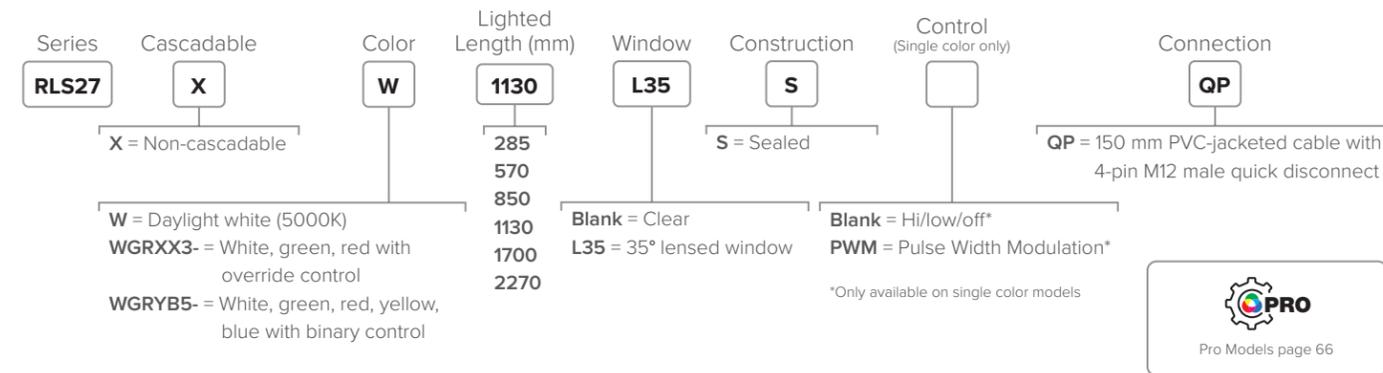


RLS27

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 | Single color: 12 to 30 V DC Multicolor: 24 V DC |
| Lumens | White: 850–6800** Multicolor: 125–5200** |
| 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, cUL LISTED, UK CA, UL LISTED, NOM |

**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)



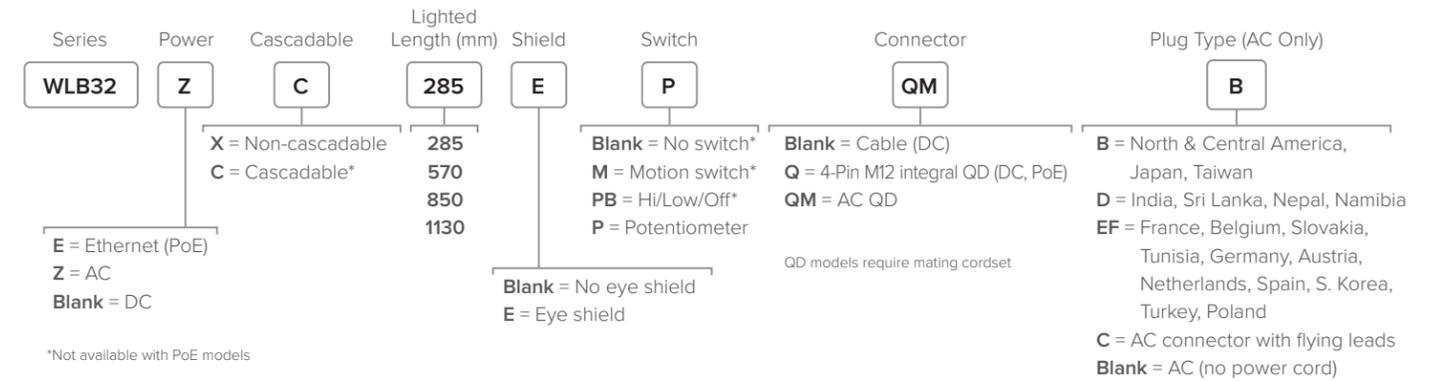
LMBWLS27U
Universal clamp bracket
(optional)



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



*Not available with PoE models



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

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

*Not available with PoE models

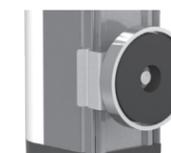
Brackets



LMBWLB32



LMBWLB32-180S



LMBWLB32MAG
Magnetic Mount



LMBWLB32U



LMBWLB32UT



WLS28-2

LED Strip Lights

- Compact, space-saving design
- Lensed models or choice of clear or diffuse window
- Cascade models for connecting multiple lights end-to-end, minimizing wiring
- Hi/Low/Off switch, motion switch, and non-switch models available
- Low power consumption; less than 9 watts per foot
- Optional snap clips for easy installation and repositioning
- Automatic temperature protection built into the unit. Above 50 °C, the light dims to manage heat and protect product lifetime

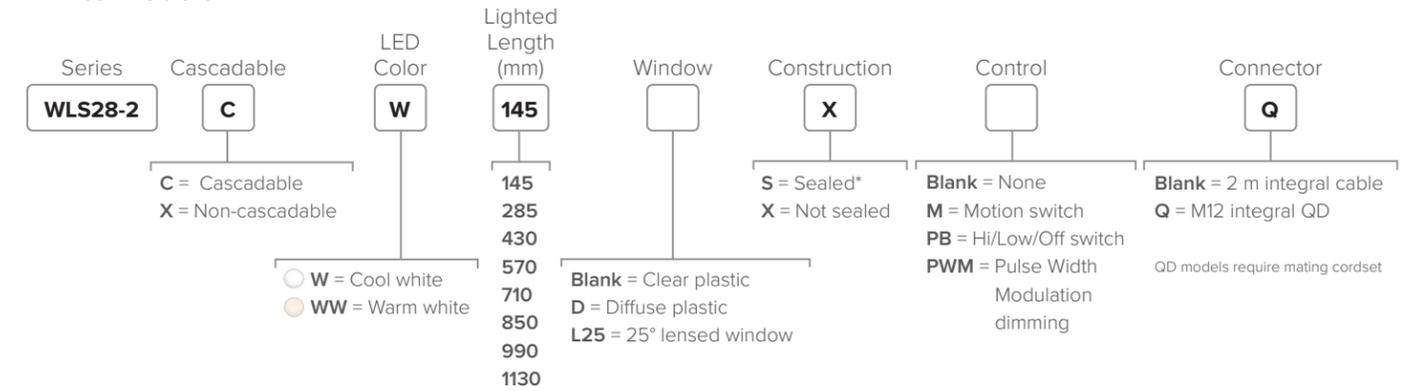


| | |
|-----------------------------|---|
| Supply Voltage | 12 to 30 V DC |
| Lumens | White: 400–3200* Multicolor: 125–2600* |
| Construction | Housing: Clear anodized aluminum Window: Polycarbonate (clear and diffuse plastic models) or acrylic (lensed models) End Caps: Painted zinc |
| Operating Conditions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

*Depending on length and color

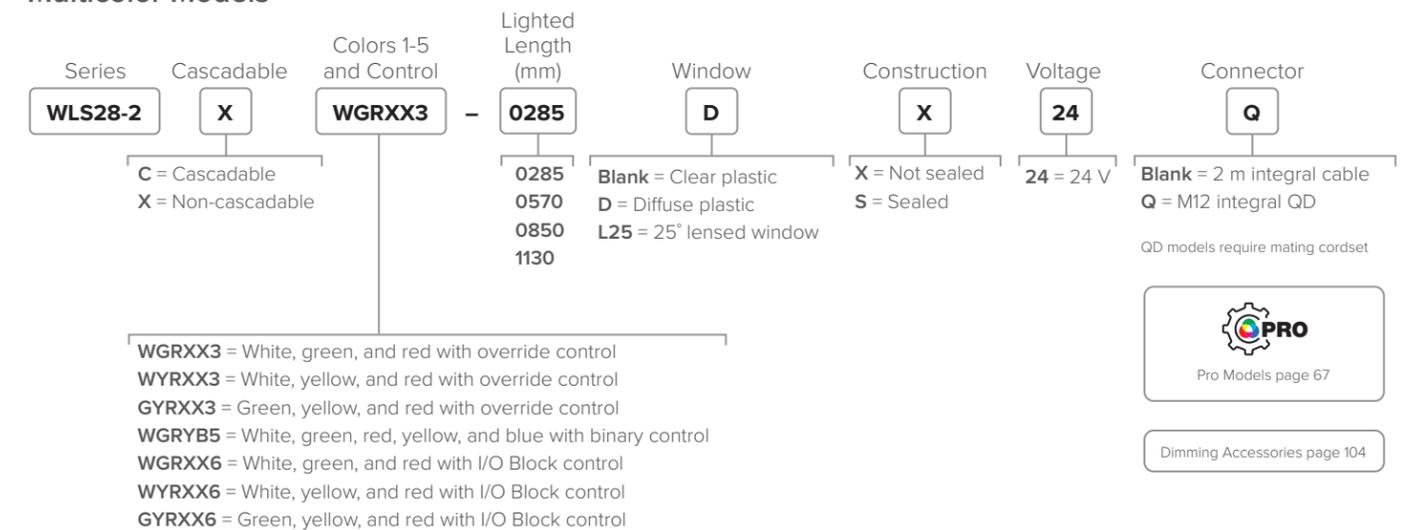
| Lighted Length (L) | |
|--------------------|---------|
| 145 mm | 710 mm |
| 285 mm | 850 mm |
| 430 mm | 990 mm |
| 570 mm | 1130 mm |

White Models



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

Multicolor Models



Dimming Accessories page 104

Brackets

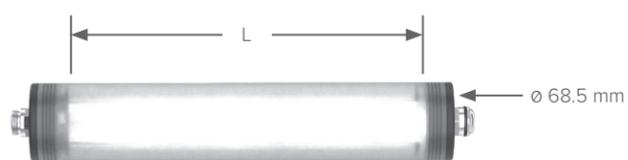
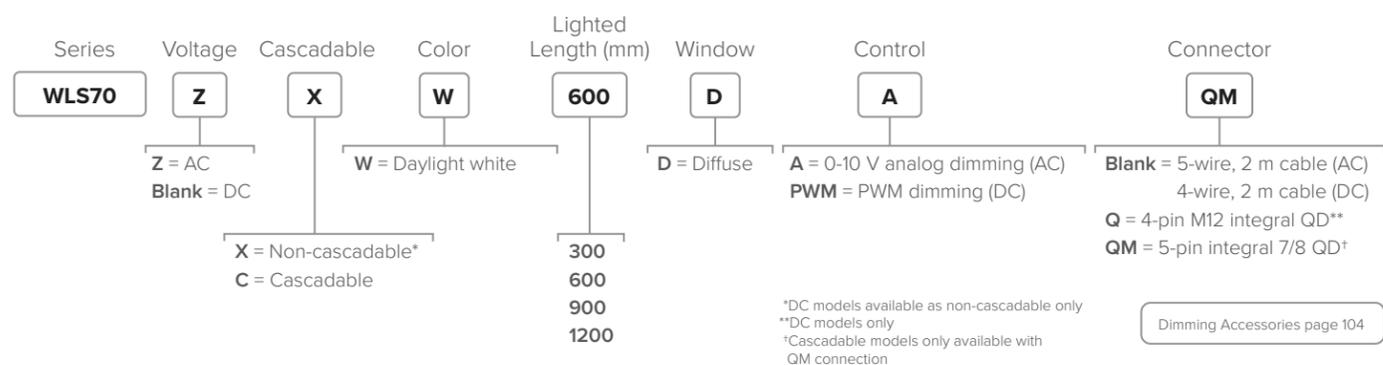




WLS70

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 | |

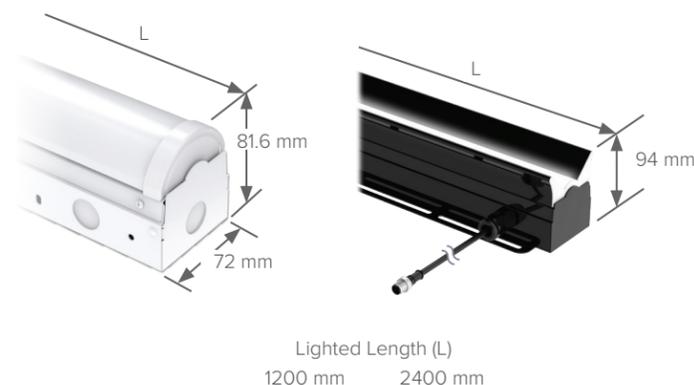
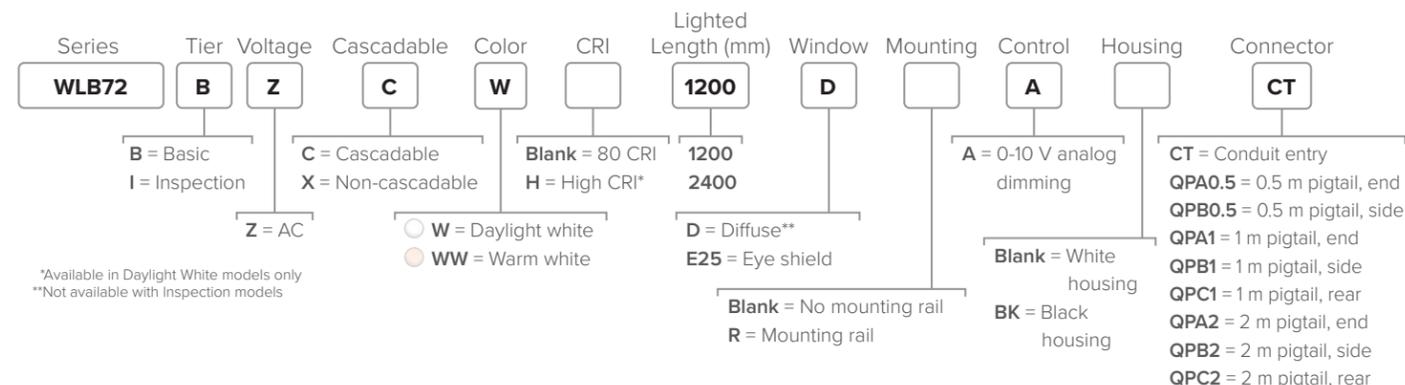
Brackets



WLB72

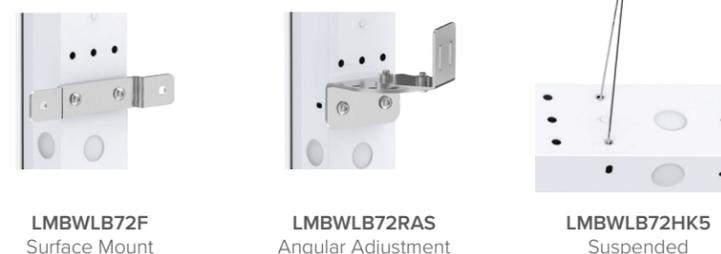
Industrial LED Strip Lights

- 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



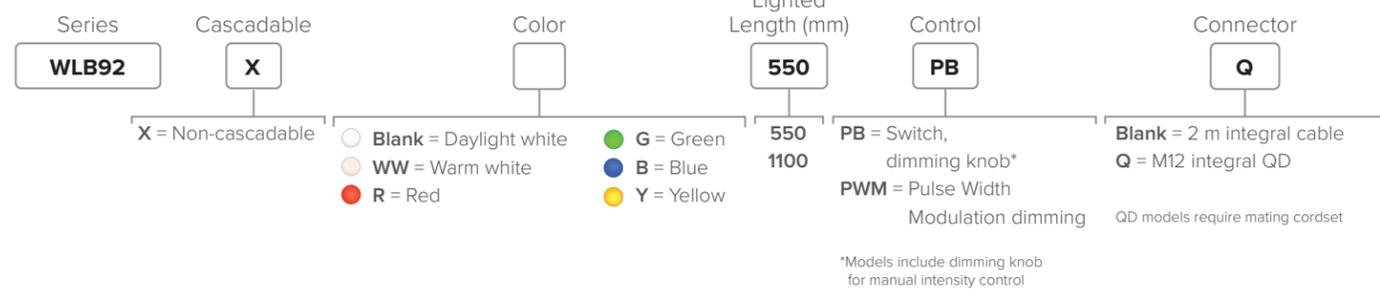


WLB92

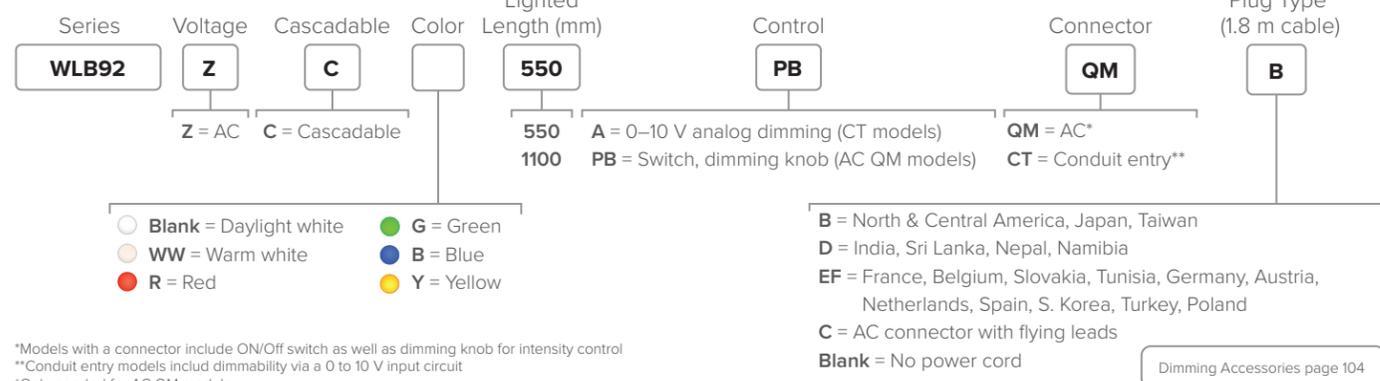
Industrial LED Strip Lights

- 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

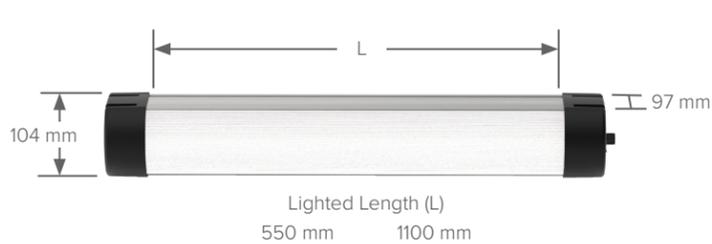
DC Models



AC Models



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



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

*Depending on length and color

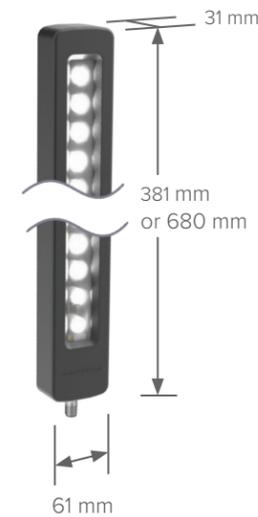
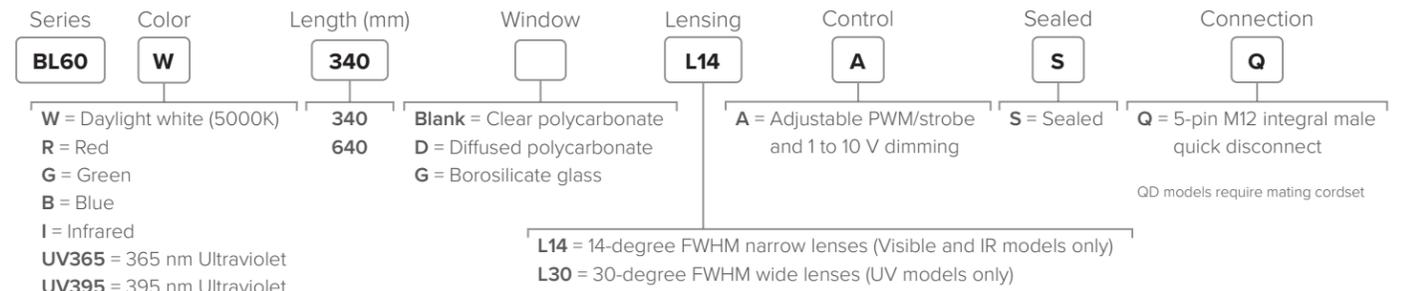
Brackets



BL60

Sealed LED Bar Lights

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



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

*Depending on length and color

Brackets



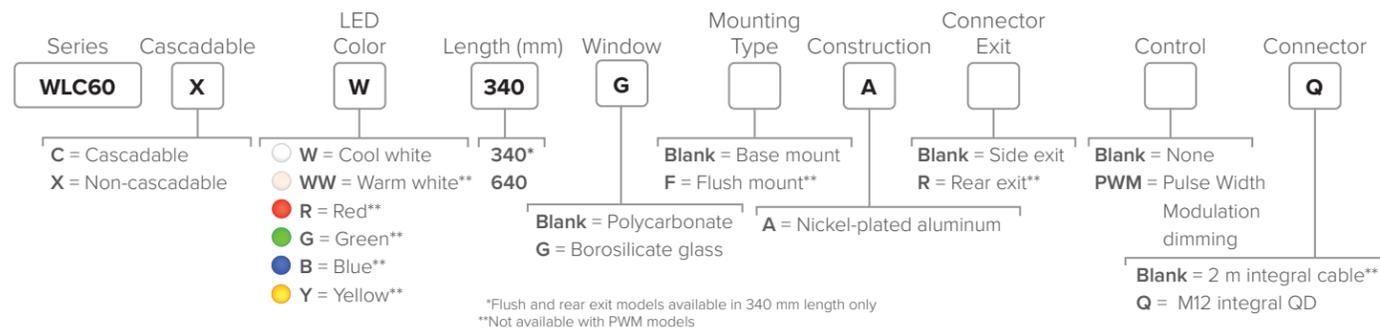
Note: Not all models are shown. Visit bannerengineering.com for other available models.



WLC60

Heavy Duty LED Strip Lights

- Oil, chemical, and water resistant with IP67, IP68G, and IP69K ratings
- High brightness paired with advanced glare-reducing optics
- Easy to install with a wide variety of mounting solutions
- Resistant to vibration and shock
- Input voltage of 12–30 V DC
- Integral 4-pin M12 quick disconnect connector
- Models have four discrete intensity level settings



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

Brackets



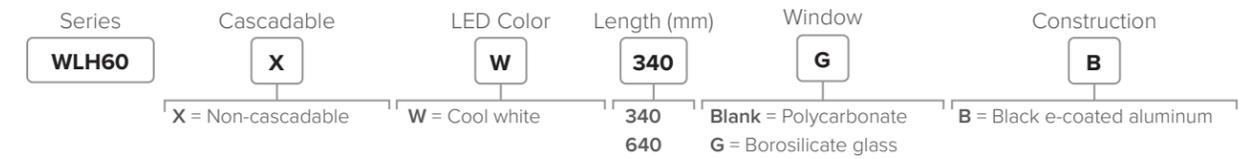
LMBWLC60F
LMBWLC60RA
LMBWLC60RAS
 4 Bracket Swivel Kit, can mount with SMBMAG3 magnet
LMBWLC60MAG*
 Magnetic Mount
 *Do not use with stainless steel models. Protective cover for magnet sold separately (SMBWLSMAGR).



WLH60

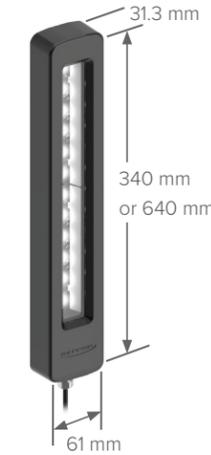
High Temperature LED Strip Lights

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



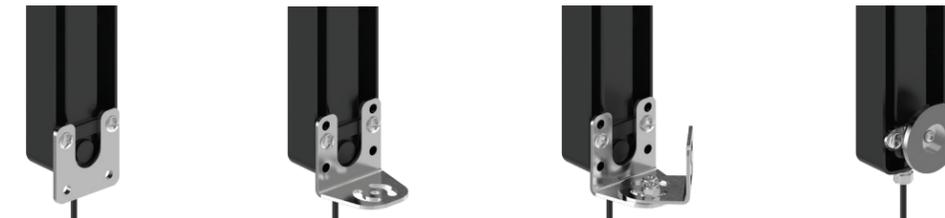
NOTE: Connection for all WLH60 models is a 2 m (6.5') integral FEP cable

Dimming Accessories page 104



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

Brackets



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

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



S15WL In-Line Work Lights

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

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



| | |
|-----------------------------|--|
| 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 | Adjustable PWM/strobe and 1 to 10 V dimming | GS60UV395L8Q |
| Daylight White - 5000K | | 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

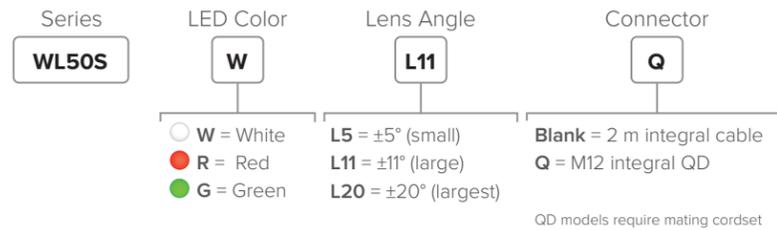


WL50S

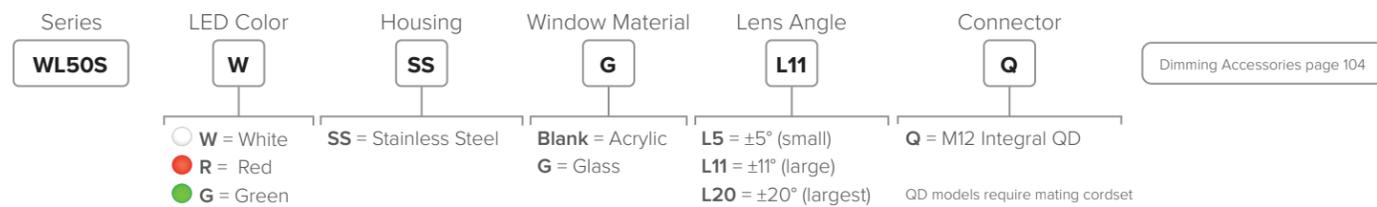
LED Spot Lights

- 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 | |

*Depending on lens angle and color

Brackets

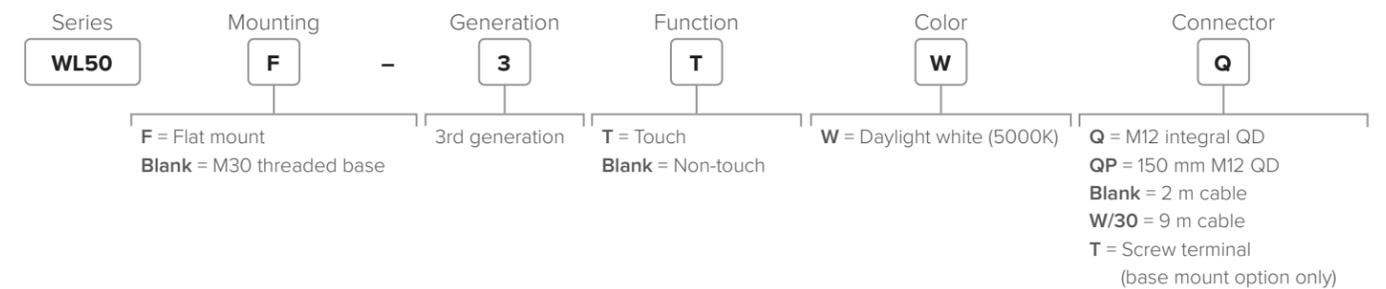


WL50-3

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 | |

Brackets





Flex Arm Lights

Bright LED Task Lights

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



| | |
|-----------------------------|---|
| 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 104

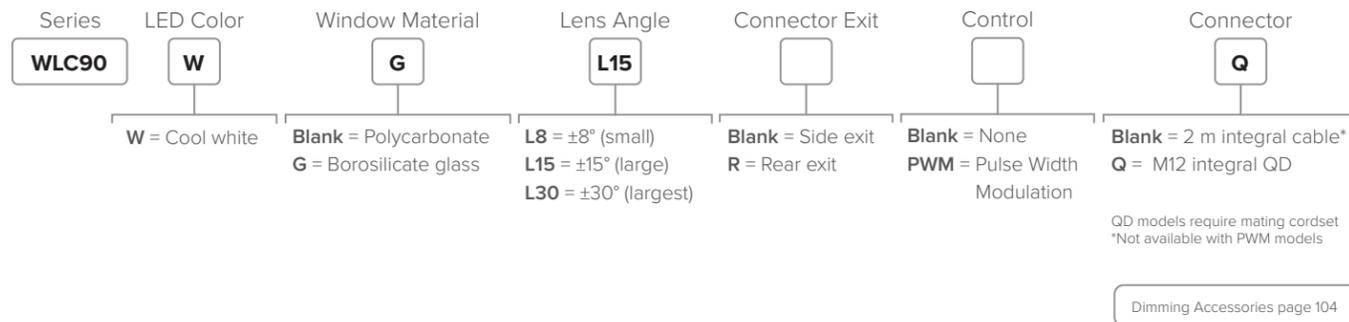
| | | | |
|-----|---------------------------|-----------|--------------------|
| S18 | Magnet | No button | K-FLX18-18WDMAGDQP |
| | | | K-FLX18-18W12XQP |
| | 2 × 1/4-20W 1.375 spacing | | K-FLX18-18WDXQP |
| | | | Flange |
| | Quick connect | | K-FLX18-18WQCXQP |



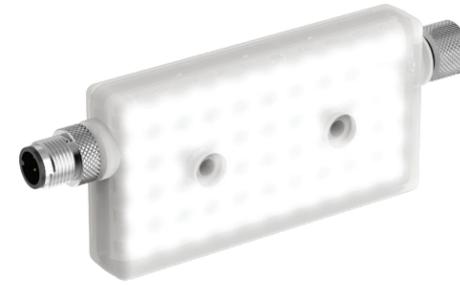
WLC90

Heavy-Duty LED Lights

- Oil, chemical, and water resistant with IP67, IP68G, and IP69K ratings
- Vast operating temperature range internal monitoring circuit dims the LEDs to a safe level at extreme temperatures
- Three lens choices to suit many application needs
- Pan-and-tilt brackets for versatile mounting to direct the light in any direction
- Models have three discrete intensity level settings



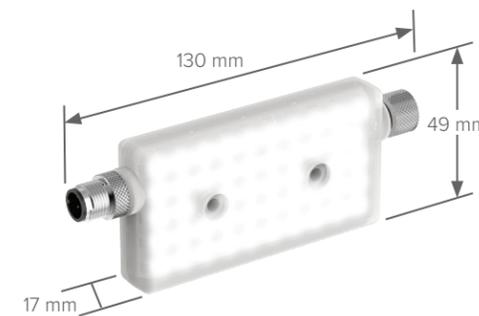
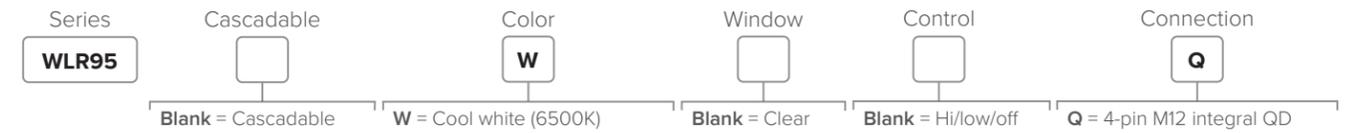
| | |
|-----------------------------|---|
| Supply Voltage | 12 to 30 V DC |
| Lumens | 625 |
| Construction | Housing: Nickel-plate aluminum Window: Polycarbonate or borosilicate glass |
| Operating Conditions | -40 to +70 °C |
| Environmental Rating | IP68, IP68G, IP69K per DIN 40050 |
| Certifications | |



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



| | |
|-----------------------------|--|
| 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 | |

Brackets



Brackets





WLA-2

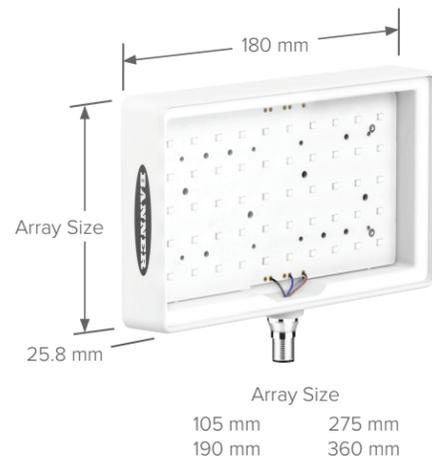
LED Area Lights

- 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 <small>QD models require mating cordset</small> |

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

Dimming Accessories page 104



| | |
|-----------------------------|--|
| 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



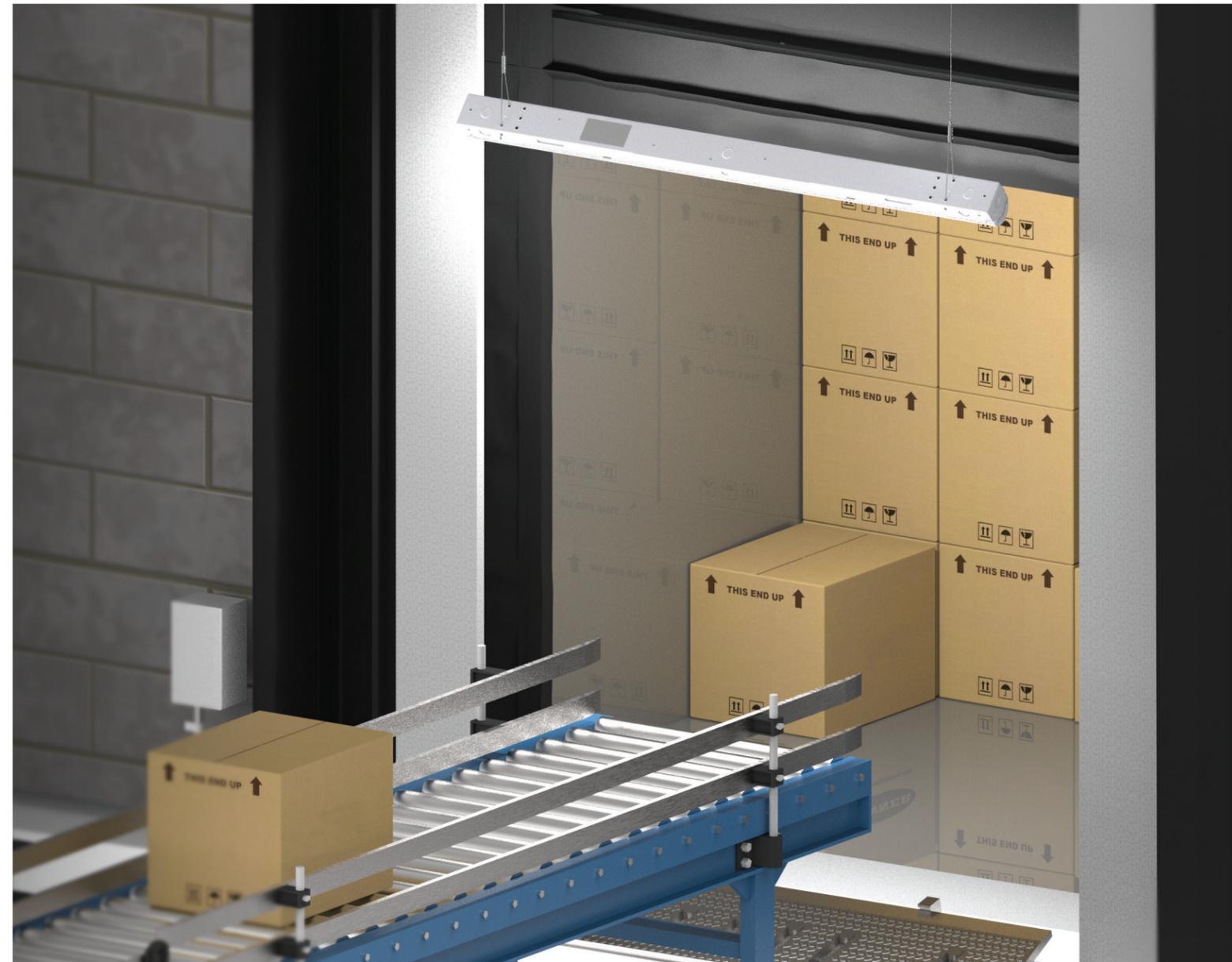
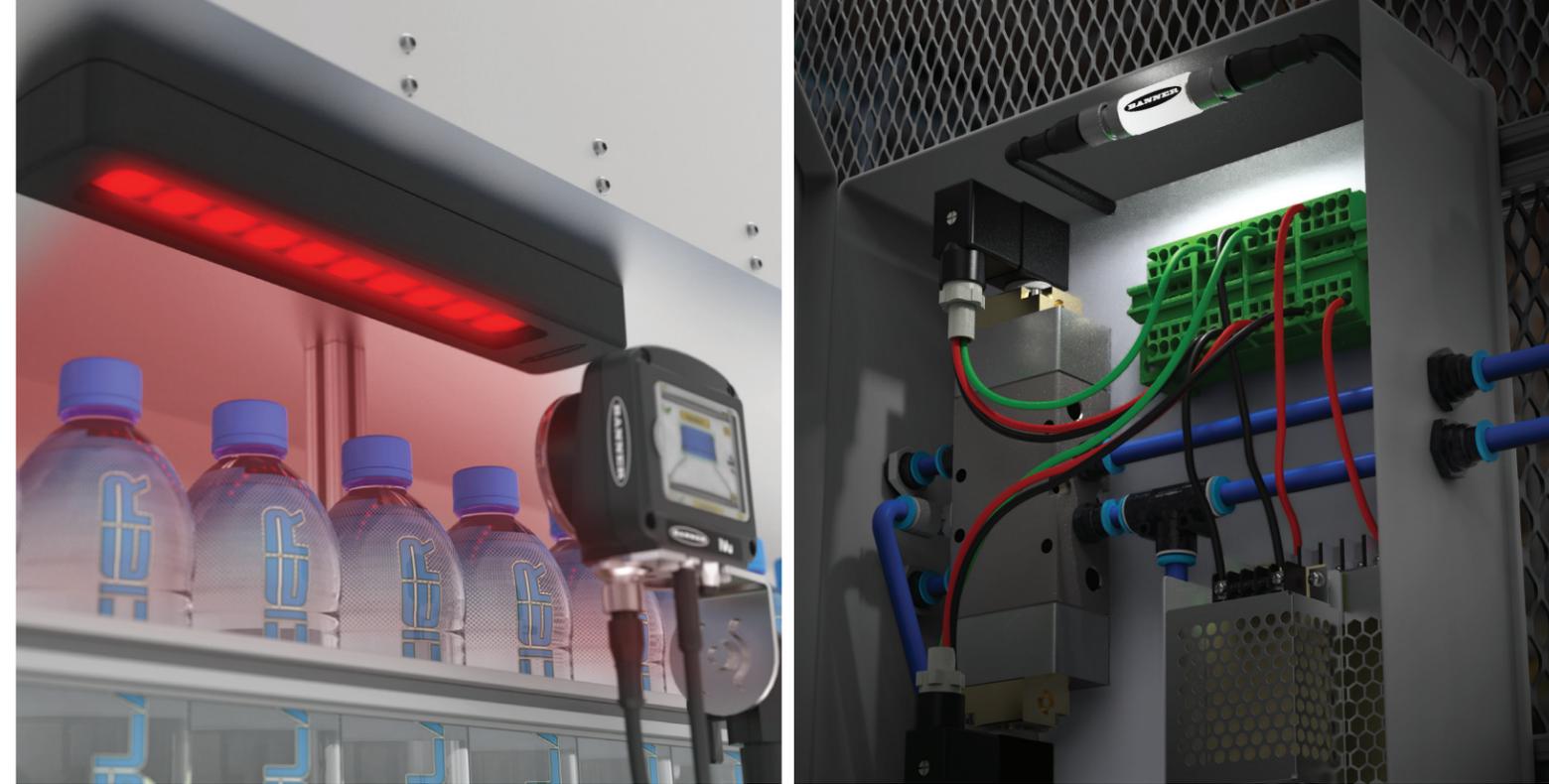
SMBBSSM



SMBBSRA



SMBWLAMAG
Magnetic Mount
(SMBWLAMAGR Protective cover for magnet sold separately)



Tower Lights

Selection Guide



| | | | | | |
|-----------------------------|------------------|-------------------|-------------|-------------|-------------------|
| Page | pg. 42 | pg. 43 | pg. 46 | pg. 45 | pg. 47 |
| Series Name | TL15 | WLS27 | TL30 Series | CL50 Series | TL50 Andon Series |
| Segment Diameter (mm) | 15 | 27 | 30 | 50 | 50 |
| Mounting Hole Diameter (mm) | — | — | 30 | 30 | — |
| AC/DC | DC | DC | DC | DC | DC |
| IP Rating | IP66, IP67, IP68 | IP66, IP67, IP69K | IP65 | IP67 | IP54 |
| RGB Programmable | | (see pg. 65) | | | |
| Audible | ✓ | | ✓ | ✓ | ✓ |
| Daylight Visible | | | | | |
| Wireless | | | | | ✓ |
| Modular Construction | ✓ | | | | |



| | | | | | |
|-----------------------------|-------------|--------------|---------------|-------------|-------------|
| Page | pg. 50 | pg. 48 | pg. 49 | pg. 52 | pg. 54 |
| Series Name | TL50 Series | TL50C Series | TL50BL Series | TL70 Series | TLF100 Pro |
| Segment Diameter (mm) | 50 | 50 | 50 | 70 | 100 |
| Mounting Hole Diameter (mm) | 30 | 30 | 30 | 30 | — |
| AC/DC | AC or DC | AC or DC | AC or DC | AC or DC | DC |
| IP Rating | IP67 | IP67 | IP67 | IP65 | IP65, IP69K |
| RGB Programmable | | | | | |
| Audible | ✓ | ✓ | ✓ | ✓ | ✓ |
| Daylight Visible | ✓ | | ✓ | | ✓ |
| Wireless | | | | ✓ | |
| Modular Construction | | | | ✓ | |



Programmable LED indicators offer multiple color choices in a single housing

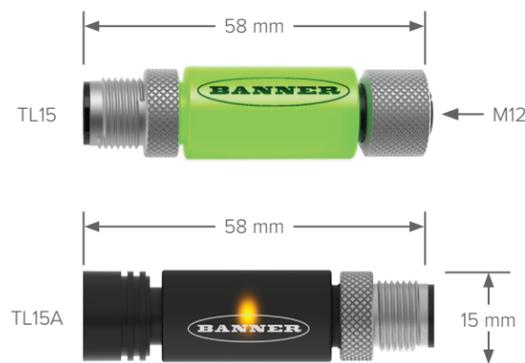


TL15 In-Line Tower Light Indicators

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

TL15 In-Line Tower Light Models

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



| | |
|---------------------------------------|---|
| 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 | |

Brackets

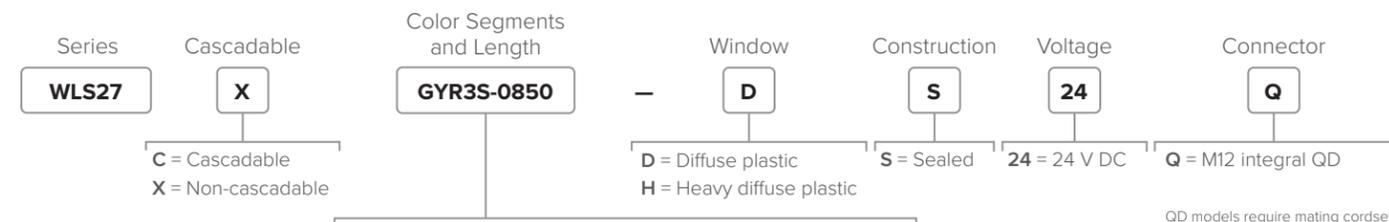


LMBM12MAG Attaches to M12 cordset end
LMBM12SP Attaches to M12 cordset end
LMBS15MAG Magnetic Mount
LMBS15SP



WLS27 Segmented LED Strip Lights

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



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



| | |
|-----------------------------|--|
| 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 | |

*Depending on length and color

Brackets



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



CL50 Series

50 mm Multicolor Column Lights

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

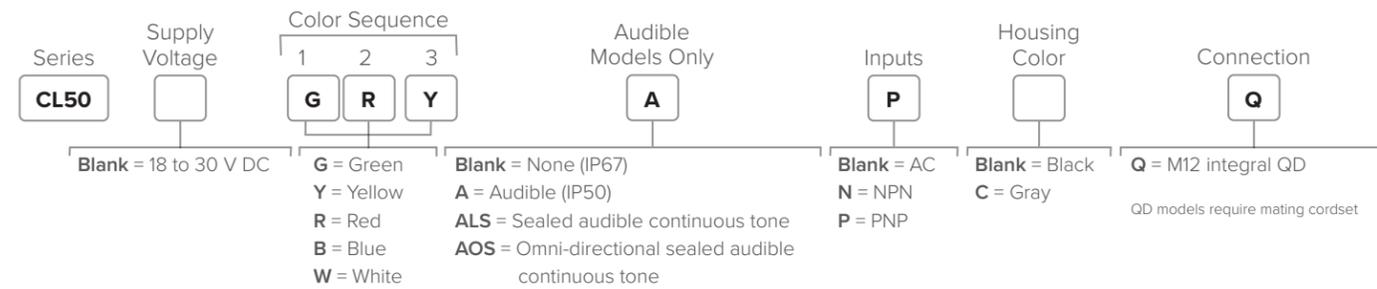


Pro Models

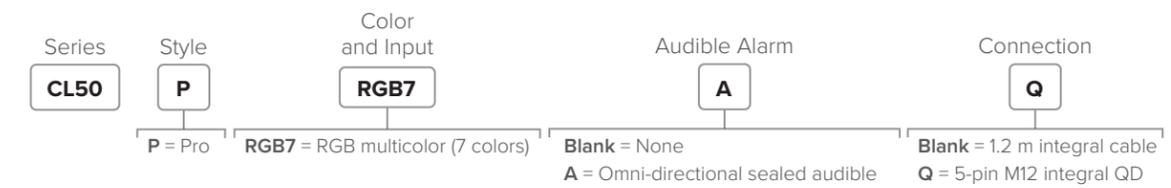
Same Functionality as Core with Additional Features Below

- 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

Core Models



Pro Models



Supply Voltage: 18 to 30 V DC

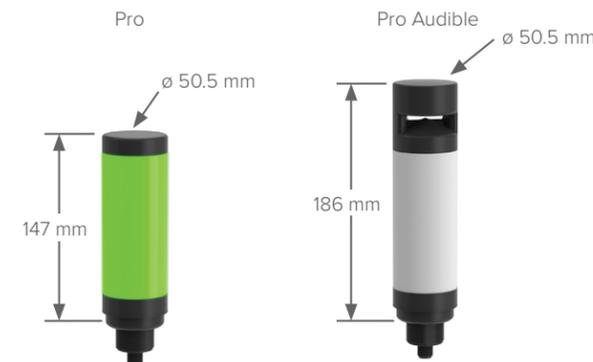
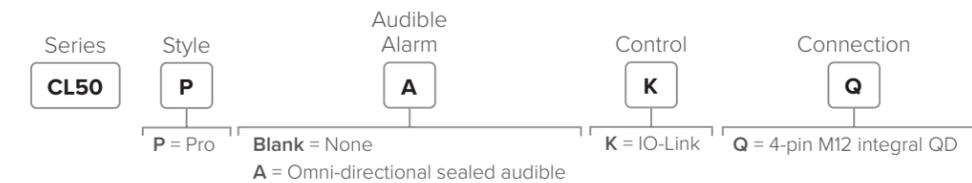
Construction: Polycarbonate

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

Pro Models with IO-Link



Supply Voltage: Pro: 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

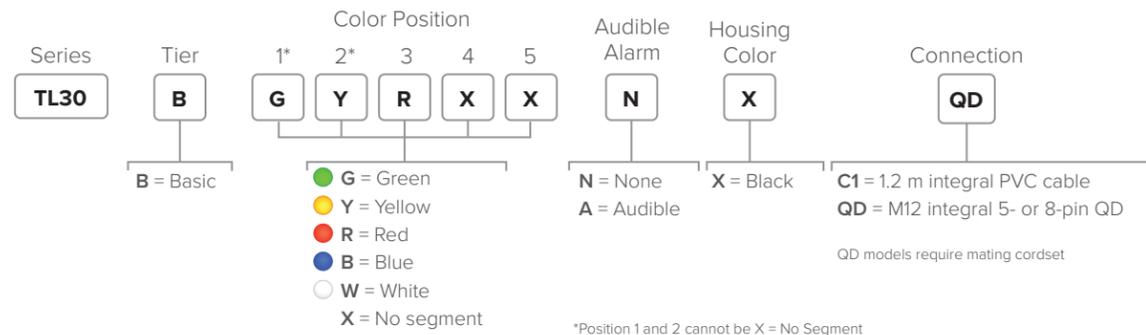




TL30

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



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

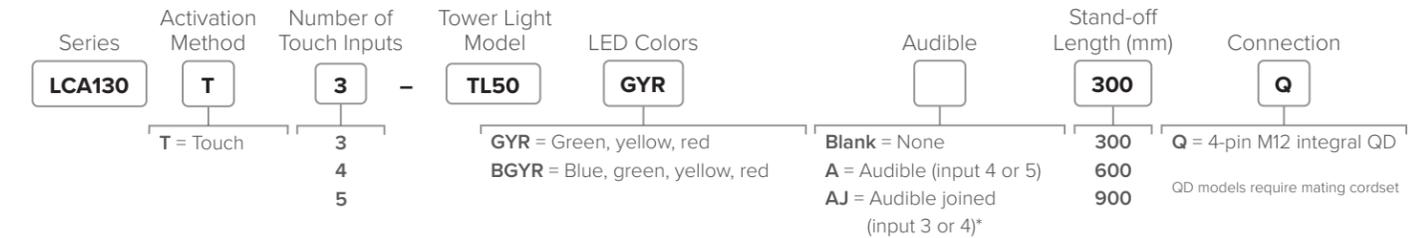


TL50 Andon

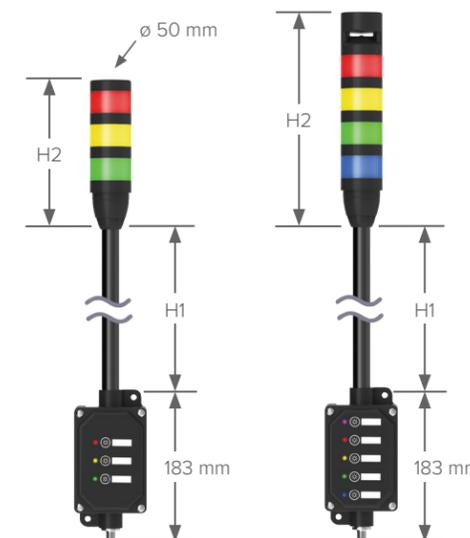
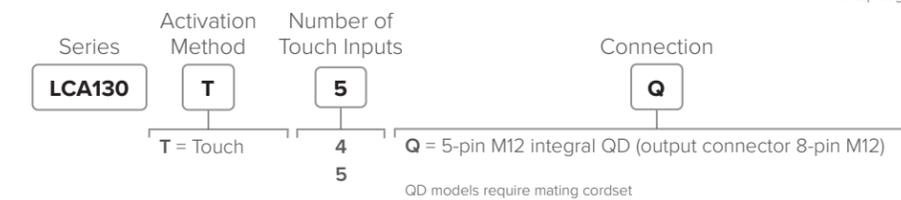
50 mm Pre-assembled Tower Lights

- 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



Core Models

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

Select models available with AC supply voltage. Search TL50Z.



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



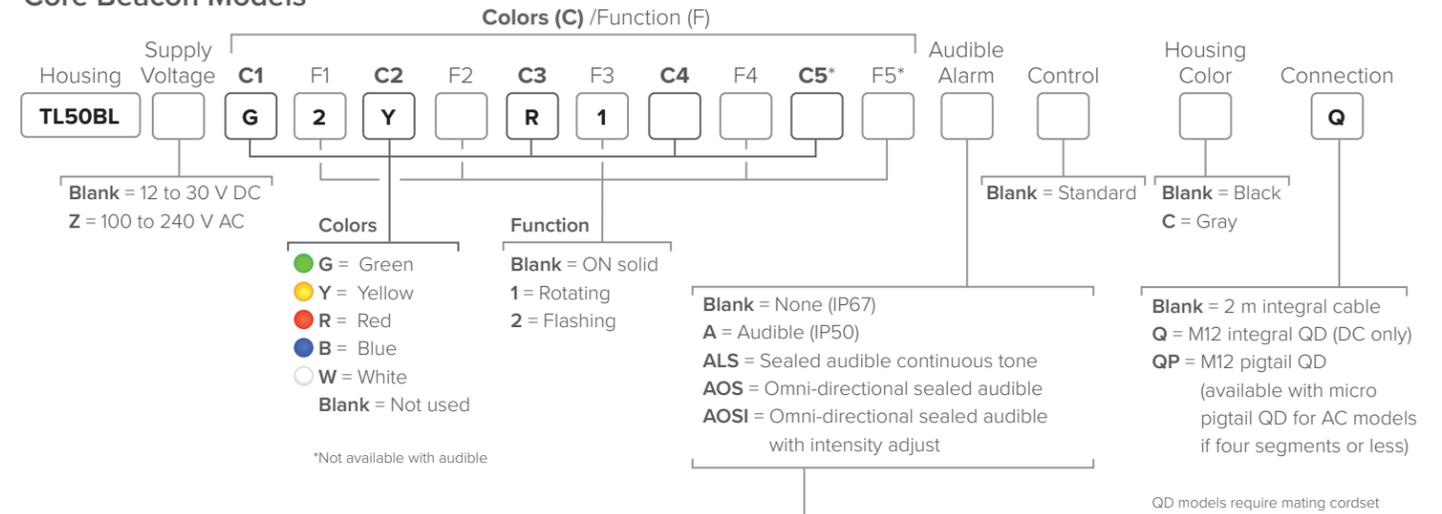
TL50BL and TL50C Models

50 mm Beacon and Compact Tower Lights

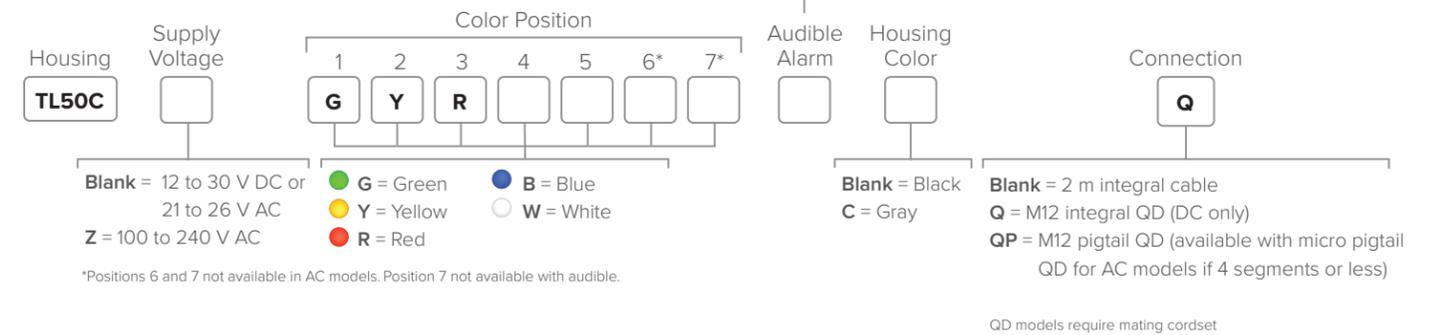
- Housing is UV stabilized, making it suitable for use in outdoor environments
- Highly visible indication for indoor or outdoor applications
- Compact, stylish design with rotating and flashing options
- Compact tower lights are half the height of standard TL50 models
- Models available with rugged,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



Core Beacon Models



Core Compact Models



Laser Marking Available



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



TL50 Pro Series

50 mm Programmable Tower Lights

- 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

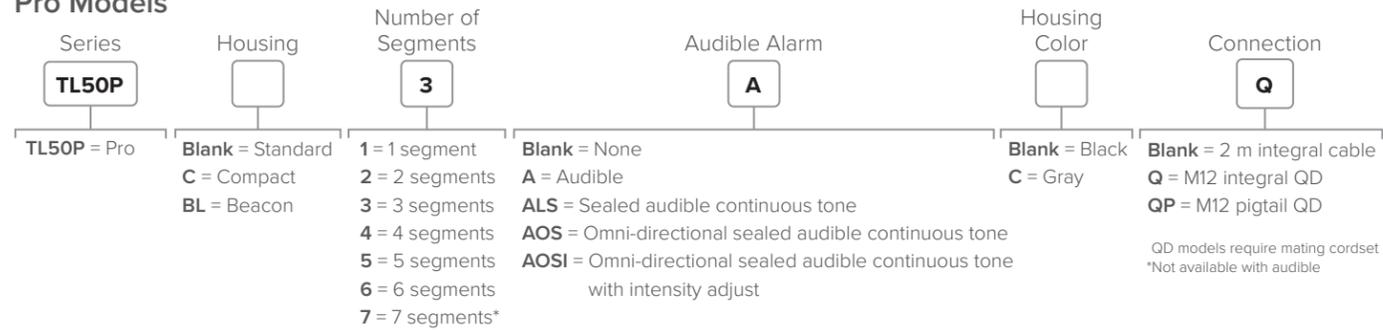


Pro Select Models

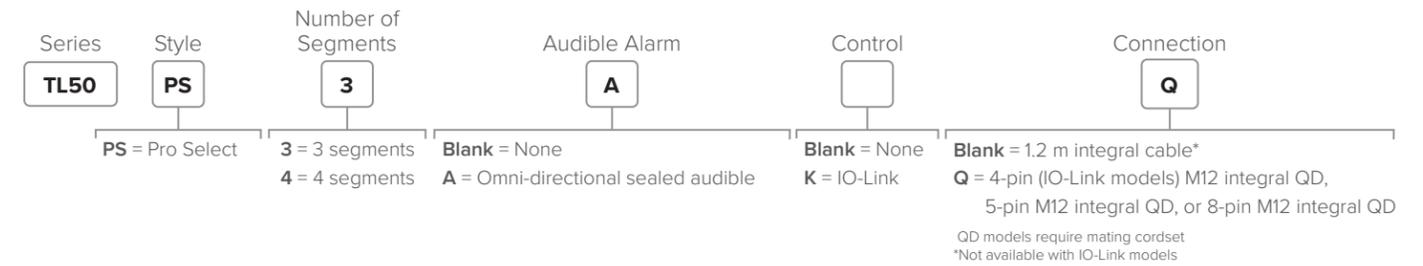
50 mm Programmable Tower Lights

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

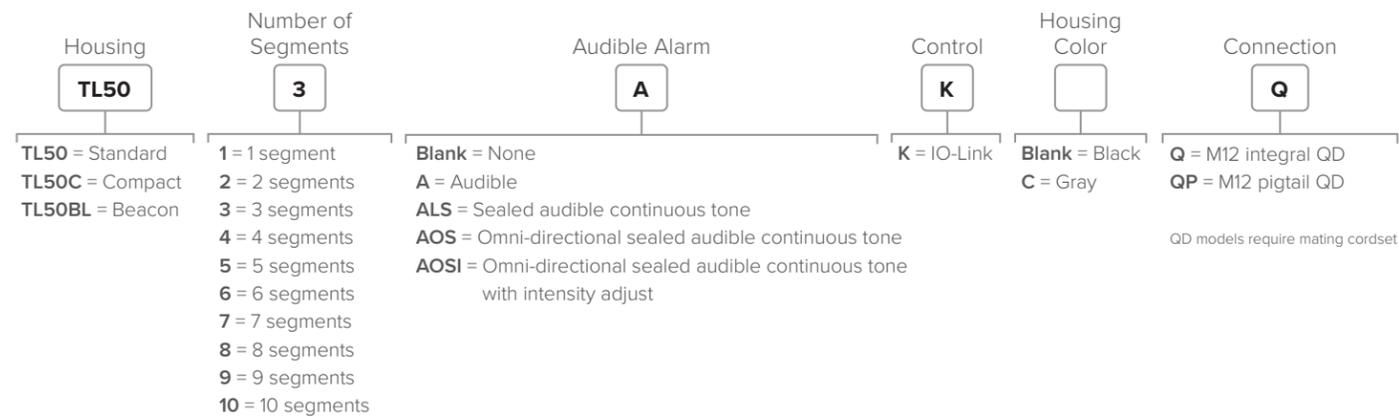
Pro Models



Pro Select Models



Pro Models with IO-Link



| | |
|-----------------------------|---|
| Supply Voltage | Pro: 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 | CE, UL LISTED, UK CA |



Brackets





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

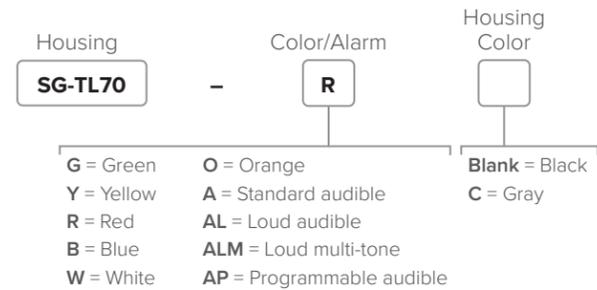


Pro Models

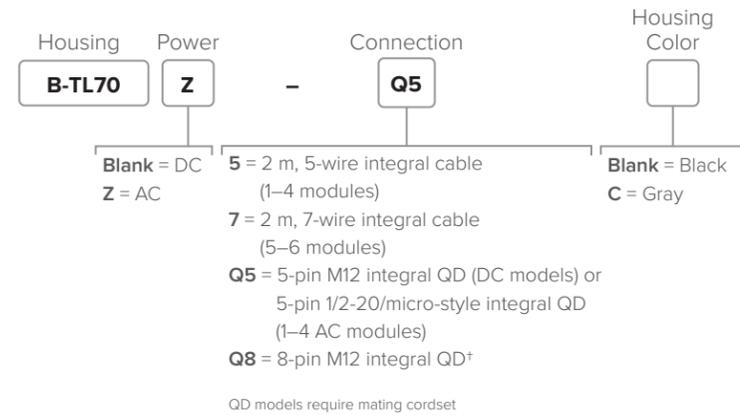
Same Functionality as Core with Additional Features Below

- Pro series tower lights provide classic segment control as well as advanced status indication that adds nuance to the visual factory
- Allows users to configure color, flashing, rotation, and light intensity
- Models with IO-Link communication enable almost limitless capacity for custom indication

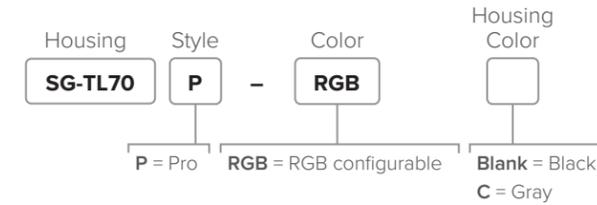
Segments or Segment Models



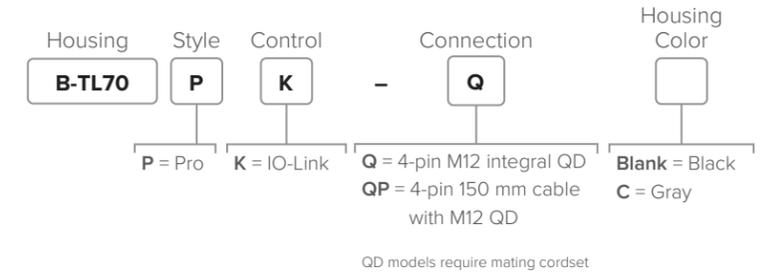
Bases or Base Models



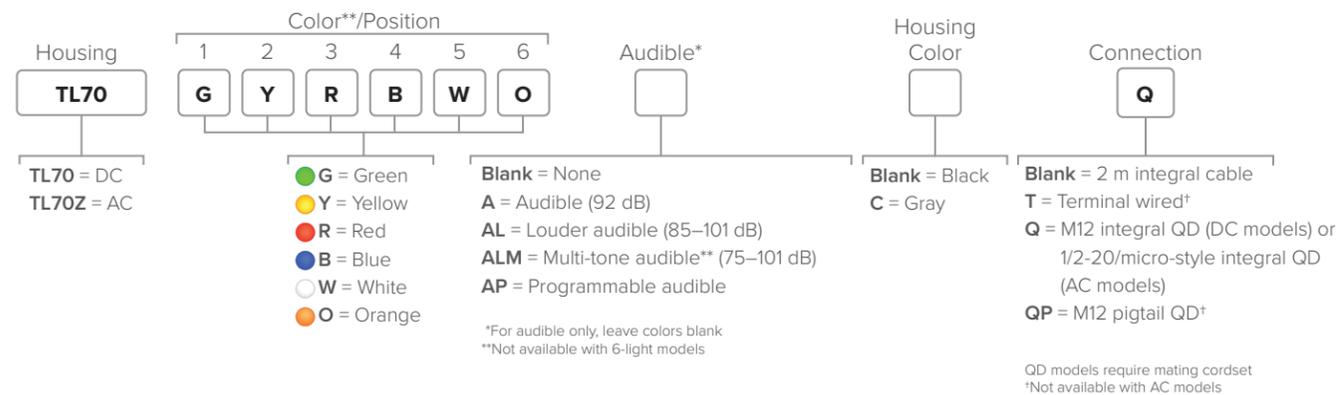
Pro Segments or Pro Segment Models



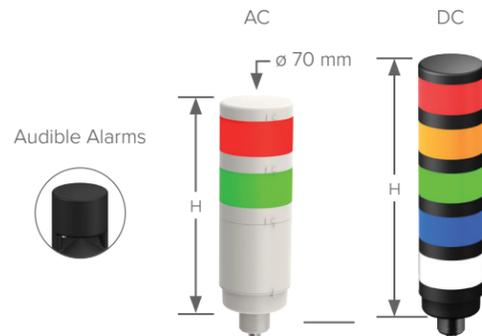
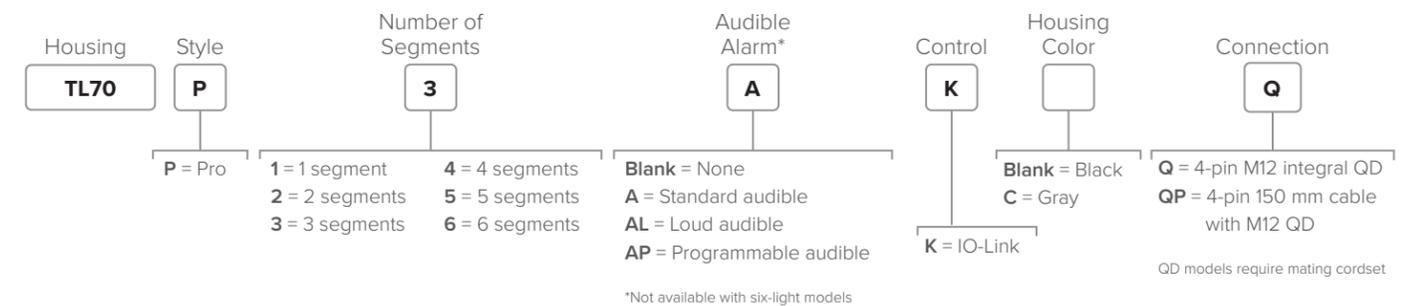
Pro Bases or Pro Base Models



Preassembled Core Models



Preassembled Pro Models with IO-Link



| Tower Height (H) | AC | DC |
|------------------|----------|----------|
| 1 color | 155.6 mm | 87.6 mm |
| 2 colors | 205.3 mm | 137.3 mm |
| 3 colors | 255.0 mm | 187.0 mm |
| 4 colors | 304.7 mm | 236.7 mm |
| 5 colors | 354.4 mm | 286.4 mm |
| 6 colors | 404.1 mm | 336.1 mm |

| | |
|-----------------------------|----------------------------------|
| Supply Voltage | 12 to 30 V DC or 100 to 240 V AC |
| Construction | Polycarbonate |
| Operating Conditions | -40 to +50 °C |
| Environmental Rating | IP65 |
| Certifications | CE, UL LISTED, UK CA |

Brackets



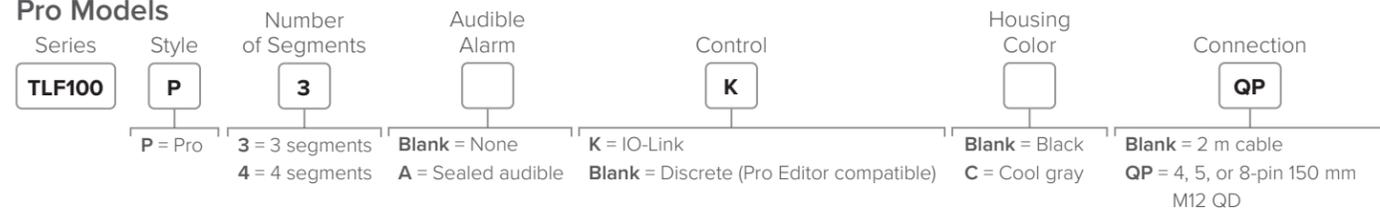


TLF100 Pro

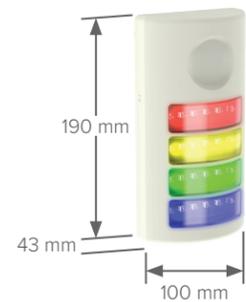
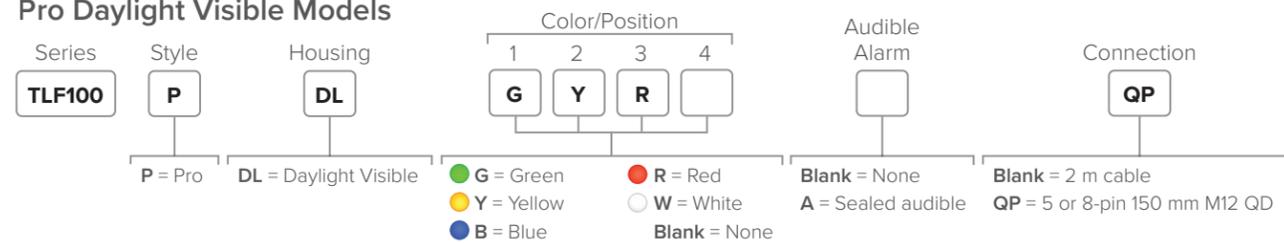
Flush Mount Tower Lights

- 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

Pro Models



Pro Daylight Visible Models



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

Construction
Polycarbonate

Operating Conditions
-40 to 50 °C

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

Certifications
CE, UL LISTED, UK CA

Brackets



SMBTLF100F
Mounted Vertically



SMBTLF100F
Mounted Horizontally



Indicators Selection Guide



| | | | | | | | |
|-----------------------------|------------------|-------------|-------------------|-------------------|------------|-------------------|-------------|
| Page | pg. 58 | pg. 59-60 | pg. 61 | pg. 62 | pg. 64 | pg. 65 | pg. 66 |
| Series Name | S15L Pro | S18L/S22L | S22 Pro | WLF12 Pro | WLS15 Pro | WLS27 Pro | RLS27 Pro |
| Housing Diameter (mm) | 15 | 18 | 20 | 12 | 15 | 27 | 27 |
| Mounting Hole Diameter (mm) | — | 18/22 | 22 | — | — | — | — |
| AC/DC | DC | DC | DC | DC | DC | DC | DC |
| IP Rating | IP66, IP67, IP68 | IP67, IP69K | IP66, IP67, IP69K | IP66, IP67, IP69K | IP66, IP67 | IP66, IP67, IP69K | IP67, IP69K |
| RGB Programmable | | | | | | | |
| Audible | | | | | | | |
| Daylight Visible | | ✓ | | | | | ✓ |



| | | | | | | | |
|-----------------------------|---------------------------------------|-------------|-------------|-------------------|----------|------------|------------------|
| Page | pg. 67 | pg. 45 | pg. 68 | pg. 71, 73 | pg. 74 | pg. 77 | pg. 78 |
| Series Name | WLS28 Pro | CL50 Series | K30 Series | K50 Series | K70 Core | K90 Series | K100 Pro |
| Housing Diameter (mm) | 28 | 50 | 30 | 50 | 70 | 90 | 100 |
| Mounting Hole Diameter (mm) | — | 30 | 30 | 30 | 30 | 30 | 36 |
| AC/DC | DC | AC or DC | DC | DC | DC | DC | AC or DC |
| IP Rating | Unsealed: IP50 Sealed: IP67, IP69K | IP67 | IP67, IP69K | IP65, IP67, IP69K | IP65 | IP66, IP67 | IP69K |
| RGB Programmable | | | | | | | (DC models only) |
| Audible | | ✓ | | ✓ | | | ✓ |
| Daylight Visible | | | | ✓ | | | ✓ |

Programmable LED indicators offer multiple color choices in a single housing



S15L Series In-Line Sensor Status Indicators

- Connect directly to or in-line with a sensor for 360-degree visibility of status
- Standard models available with two-color indication to mimic output status
- Pro 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

Pro Model

| Housing | Style | Control | Connection | Model |
|---------|-------|----------------------|---|----------------|
| S15 | Pro | 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 | S15LGYQP |
| | | NPN | | S15LGYNQ |
| | Red | PNP | | S15LGRPQ |
| | | NPN | | S15LGRNQ |
| Red | Green | PNP | | S15LRGPQ |
| Yellow | | | | S15LYGPQ |



Supply Voltage

Pro: 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

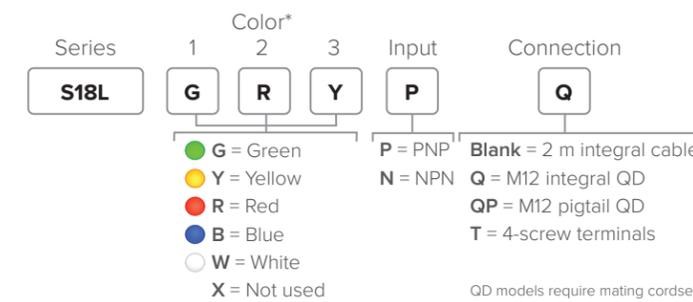
Certifications



S18L Series 18 mm Barrel Indicators

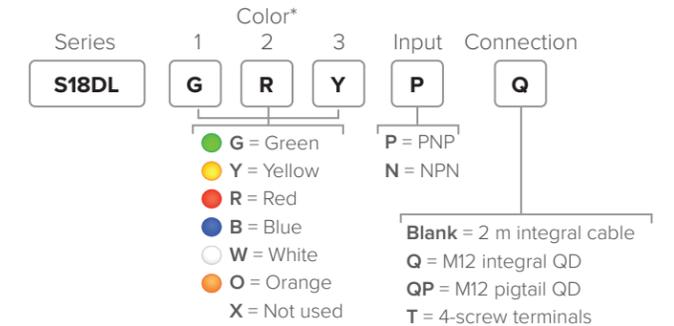
- Gasketed face flange for sealing to enclosures
- Daylight Visible models are also available for areas with high levels of ambient light
- M12 connector models available for plug-and-play indication
- 10 to 30 V DC operating range allows for use in battery-powered mobile applications
- Terminal-wired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



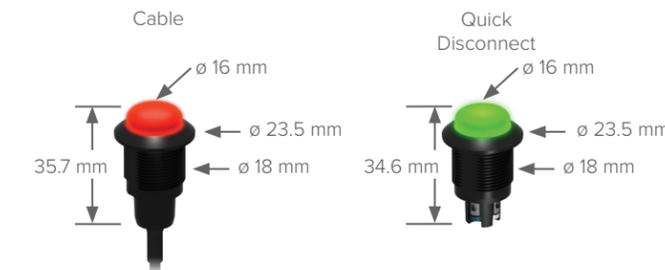
*Single-color models are available and should be ordered as PNP, but can be wired for either PNP or NPN input

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



Brackets



LMBM12MAG
Attaches to M12 cordset end



LMBM12SP
Attaches to M12 cordset end



LMBS15MAG
Magnetic Mount



LMBS15SP

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

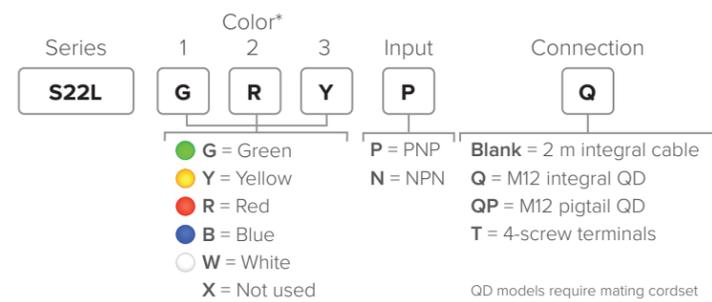


Pro Models

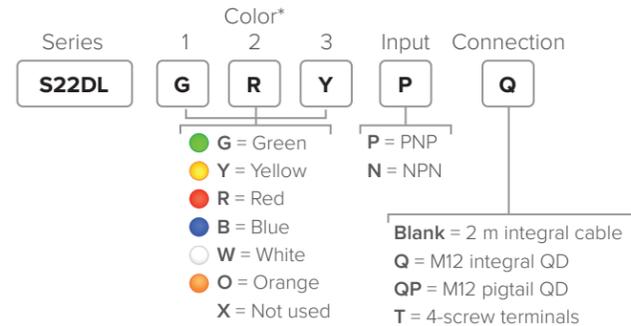
Flush Mount Programmable Indicators

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

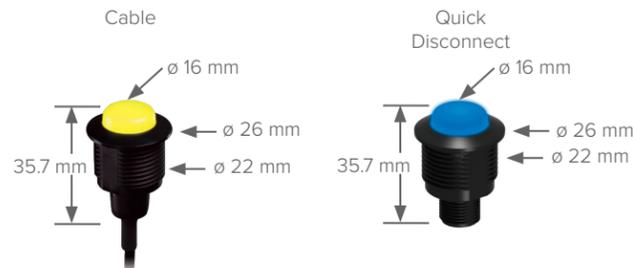
Standard Models



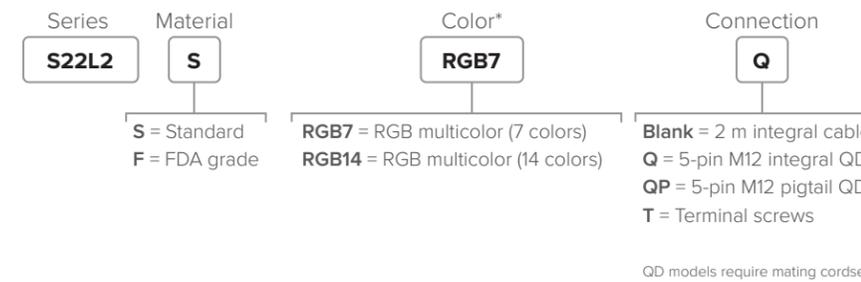
Daylight Visible Models



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



| | |
|-----------------------------|--|
| 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 |



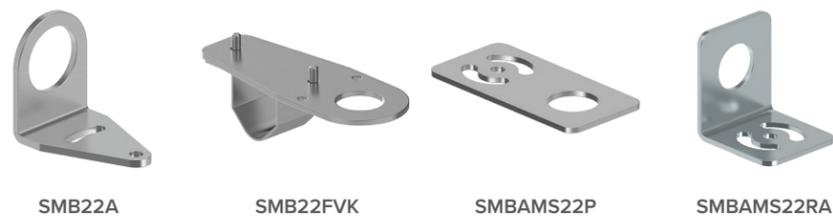
*7 colors = Green, yellow, red, blue, white, cyan, magenta with flash input
 14 colors = Above colors, plus, orange, amber, lime green, spring green, sky blue, violet, and rose

Laser Marking Available



| | |
|-----------------------------|--|
| 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



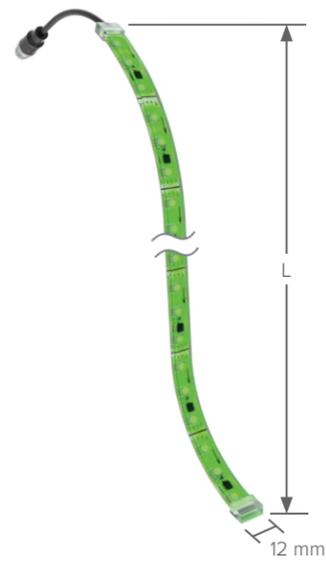
WLF12

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
- Five standard lengths (from 300 to 2000 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

| Series | Style | Cascadable | Color* | Lighted Length (mm) | Construction | Connection |
|---------|-------|--------------------|----------------------|-----------------------------------|--------------|---|
| WLF12 | P | X | RGB | 300 | S | QP |
| P = Pro | | X = Non-cascadable | RGB = RGB multicolor | 300 600 900 1200 2000 | S = Sealed | QP = 150 mm PVC-jacketed cable with 4-pin M12 male quick disconnect |

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



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

| | |
|-----------------------------|---|
| 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
Pro LED Controller*



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

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

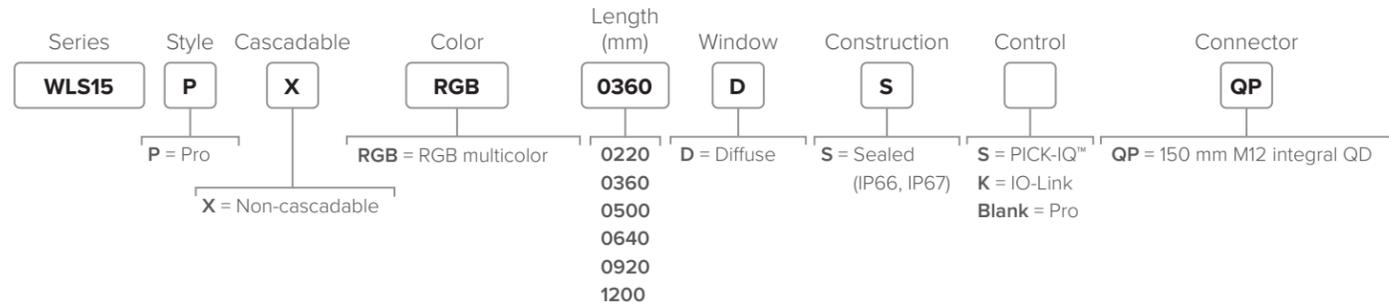




WLS15 Pro

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

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



| Length (L) | |
|------------|---------|
| 220 mm | 640 mm |
| 360 mm | 920 mm |
| 500 mm | 1200 mm |

Supply Voltage

Pro: 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



Brackets



LMBWLS15-150S



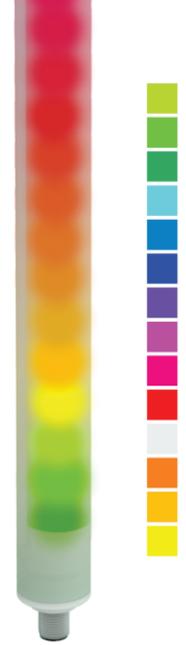
LMBWLS15



LMBWLS15MAG
Magnetic Mount



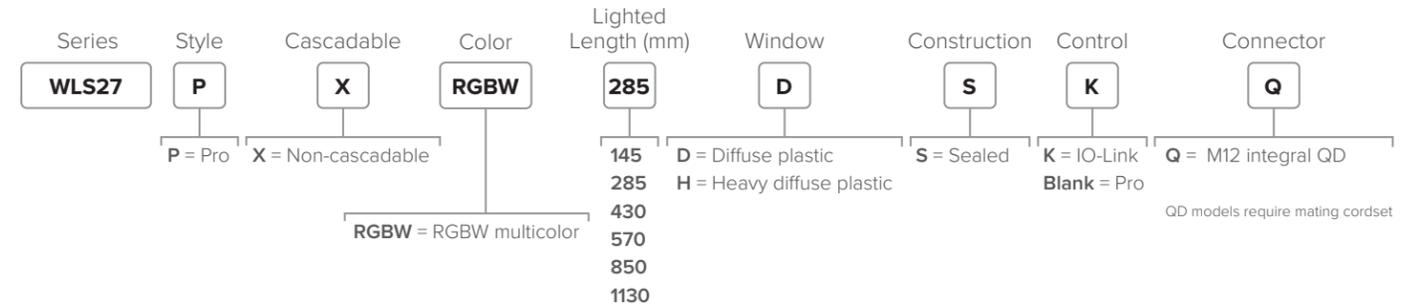
LMBWLS15TF
Tape



WLS27 Pro

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



| Lighted Length (L) | |
|--------------------|---------|
| 145 mm | 570 mm |
| 285 mm | 850 mm |
| 430 mm | 1130 mm |

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



*Depending on length and color

Brackets



LMBWLS27EC
Clear Copolyester



LMBWLS27H



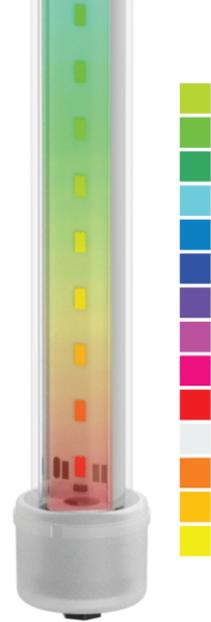
LMBWLS27T



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



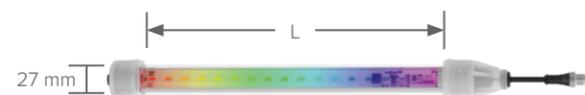
LMBWLS27SP
Clear Copolyester



RLS27 Pro

Programmable Rugged LED Strip Lights

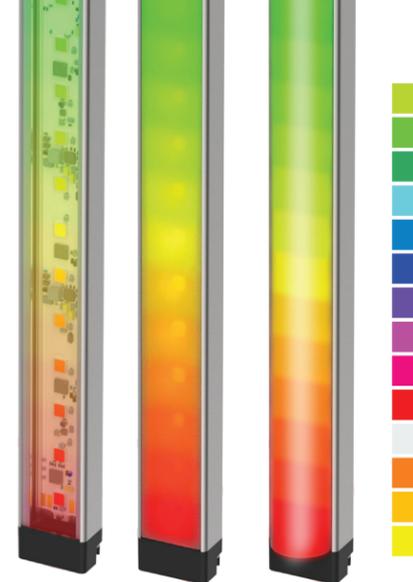
- Shatterproof, UV-stabilized polycarbonate shell offers superior chemical resistance and protection to withstand harsh environments such as car washes
- Sturdy aluminum housing and robust endcaps provide dependable use outside in any weather
- High-intensity focused lens delivers long-range illumination 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 Pro models can be customized using Banner's Pro Editor software to meet any user needs



Lighted Length (L)

| | |
|--------|---------|
| 285 mm | 1130 mm |
| 570 mm | 1700 mm |
| 850 mm | 2270 mm |

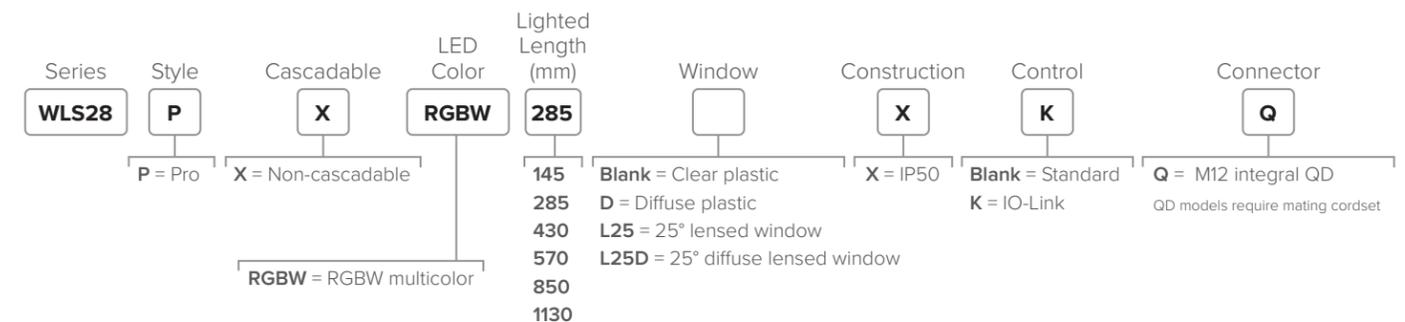
| | |
|-----------------------------|--|
| Supply Voltage | 18 to 30 V DC |
| Construction | Inner housing: Clear anodized aluminum Outer housing: UV-stabilized polycarbonate Connector: Nickel-plated |
| Operating Conditions | -40 to +70 °C (-40 to +158 °F) |
| Environmental Rating | IP67, IP69K per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



WLS28 Pro

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



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)

Brackets



SMBWLS28RA
Top Mount (included)



SMBWLS28SM
Side Mount



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



SMBWLS28SP
Snap Mount



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



Pro Models

Same Functionality as Core with Additional Features Below

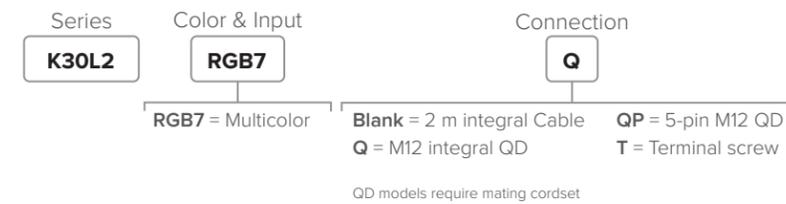
- Bright, even indication in seven standard colors, with additional color and animation options available with the exclusive Pro Editor Software
- K30 Pro devices with PICK-IQ™ and IO-Link give full access to color, flashing, rotating, and dimming settings as well as advanced animations such as dynamic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

Core Models

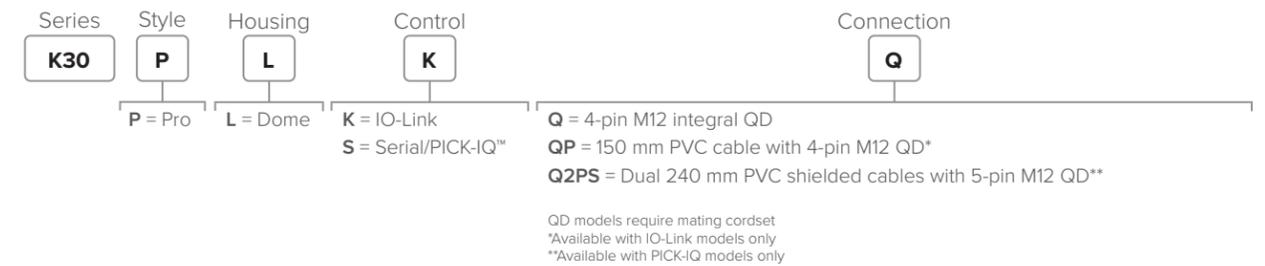
| Number of Colors | Colors | Input | Connection | Models |
|------------------|--------------------|-------|-----------------------|------------------|
| 3 | Green, red, yellow | PNP | 4-pin M12 integral QD | K30LGRYPQ |
| | | NPN | | K30LGRYNQ |

QD models require mating cordset

Pro Models



Pro Models with IO-Link or PICK-IQ



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

Brackets



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

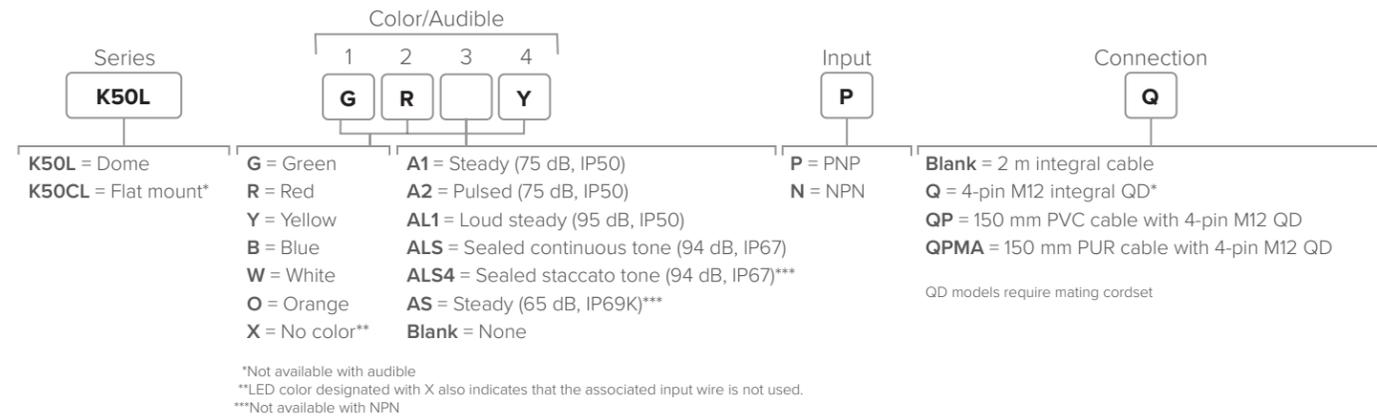


K50 Series

50 mm Multicolor Indicators

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

Core 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, UL LISTED, UK CA |

Brackets



Pro Models

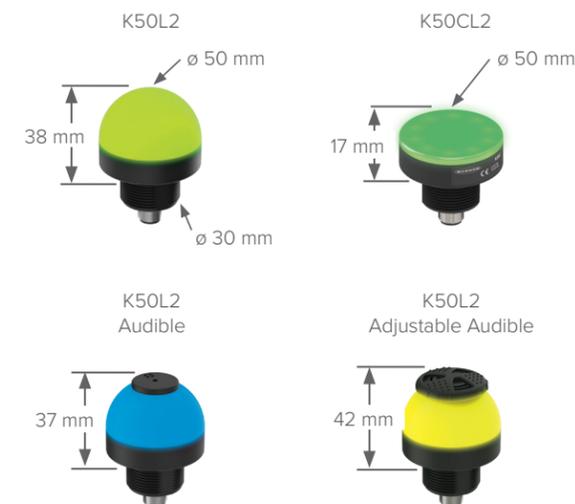
Same Functionality as Core with Additional Features Below

- 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

Pro Models



Pro 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, UL 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



Pro Models

Same Functionality as Core 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

Core Models

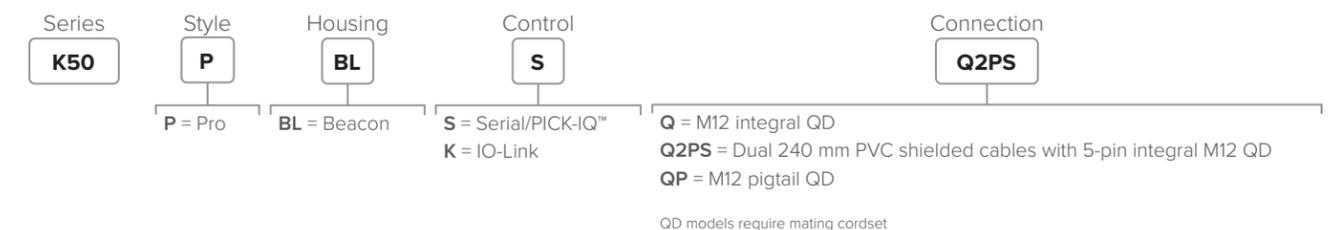
| LED Color(s) | Viewable Area | Input Type | Supply Voltage | Connection | Models |
|--------------------|------------------------|------------|----------------|-------------------------------------|-------------|
| Green | Perimeter view only | PNP | 12 to 30 V DC | 4-pin M12 integral quick disconnect | 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 for other available models.

Pro Models



Pro Models with IO-Link or PICK-IQ



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



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 Core

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

Core 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 | |

Brackets



SMB30A SMB30FVK SMB30RAVK SMBAMS30P SMBAMS30RA SMB30MM SMB30SC SMB30FA

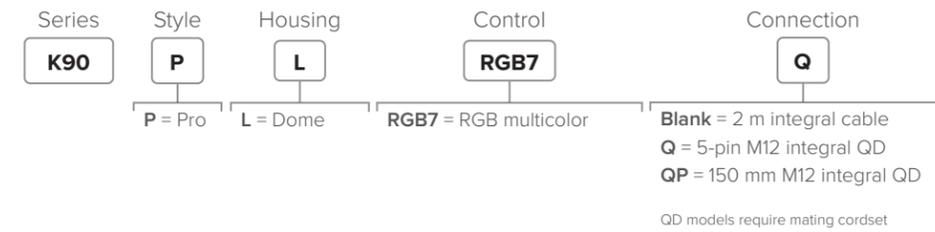


Pro Models

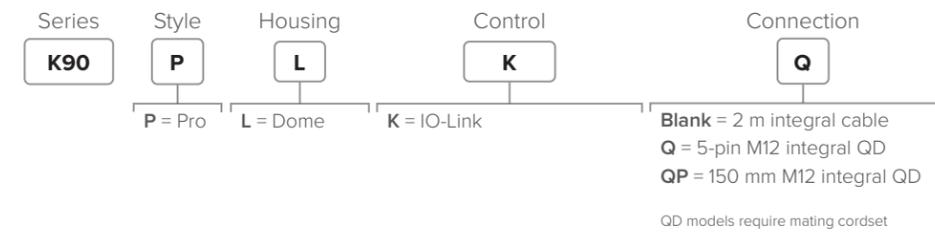
Same Functionality as Core with Additional Features Below

- 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

Pro Models



Pro Models with IO-Link



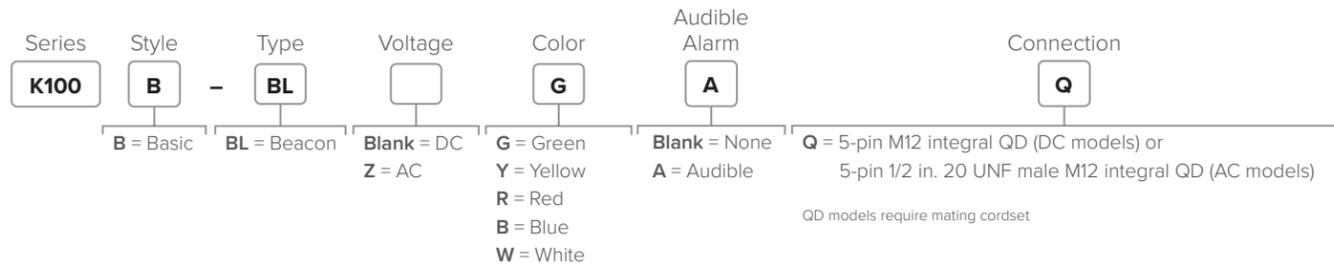
| | |
|----------------------|--|
| Supply Voltage | Pro: 10 to 30 V DC IO-Link: 18 to 30 V DC |
| Construction | Polycarbonate |
| Operating Conditions | -40 to +50 °C |
| Environmental Rating | IP67, UL Type 4X, UL Type 13 |
| Certifications | |



K100 Series

100 mm Basic Beacons

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



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

Audible Characteristics 101 dB, 2.5 KHz, at 1 m

Operating Conditions -40 to +60 °C

Construction Polycarbonate

Environmental Rating IP66, UL Type 4X

DC Certifications



Brackets



LMB36RA

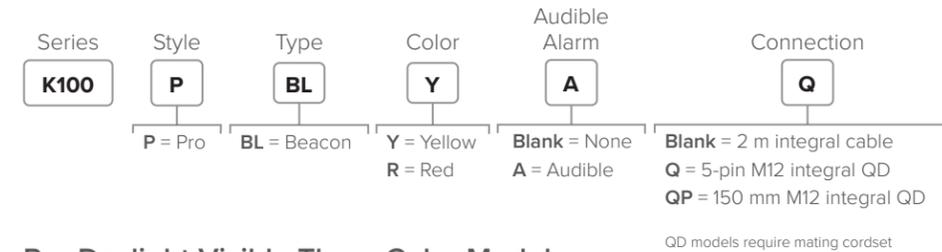


Pro Models

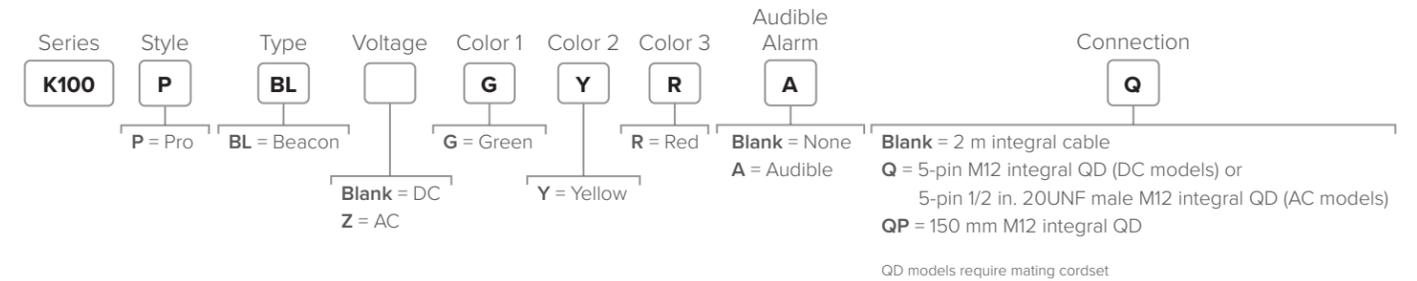
Programmable Multicolor Indicators

- 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

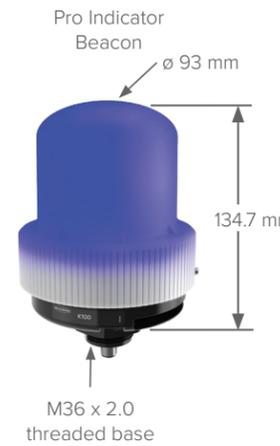
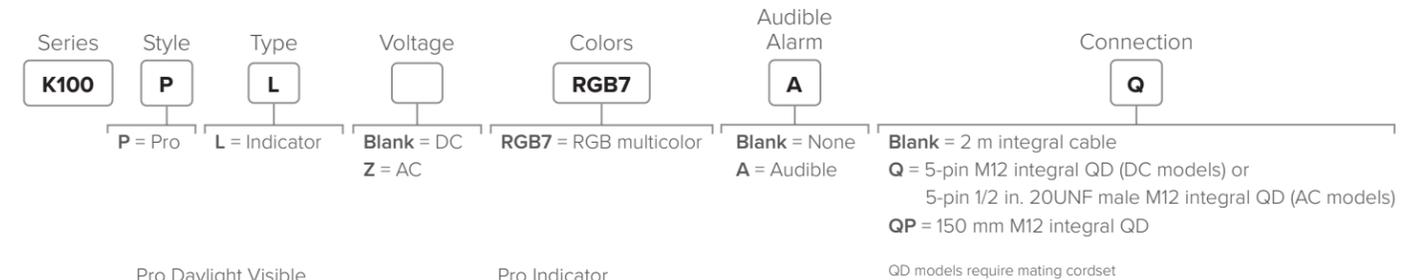
Pro Daylight Visible Single Color Models



Pro Daylight Visible Three Color Models



Pro 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



Touch Button and Pick-to-Light Selection Guide



| | | | | |
|-----------------------------|-------------------|------------------|------------------------|--------------------|
| Page | pg. 82 | pg. 85 | pg. 83 | pg. 90 |
| Series Name | S22 Pro Touch | K30 Touch Series | K30 Pro Optical Sensor | K50 Optical Series |
| Indicator Diameter (mm) | 22 | 30 | 30 | 50 |
| Mounting Hole Diameter (mm) | 22 | 22 | 22 | 30 |
| AC/DC | DC | DC | DC | DC |
| IP Rating | IP66, IP67, IP69K | IP67, IP69K | IP65 | IP67, IP69K |
| RGB Programmable | | | | |
| Audible | | | | |

| | | | | |
|-----------------------------|-------------------|-----------------------|------------------|------------|
| Page | pg. 86, 88 | pg. 89 | pg.92 | pg. 94 |
| Series Name | K50 Touch Series | K50 Pro Touch Display | K70 Touch Series | PTL110 |
| Indicator Diameter (mm) | 50 | 50 | 70 | 15 |
| Mounting Hole Diameter (mm) | 30 | 30 | 30 | — |
| AC/DC | DC | DC | DC | DC |
| IP Rating | IP65, IP67, IP69K | IP67, IP69K | IP65 | IP66, IP67 |
| RGB Programmable | | | | |
| Audible | ✓ | | ✓ | |



Programmable LED indicators offer multiple color choices in a single housing

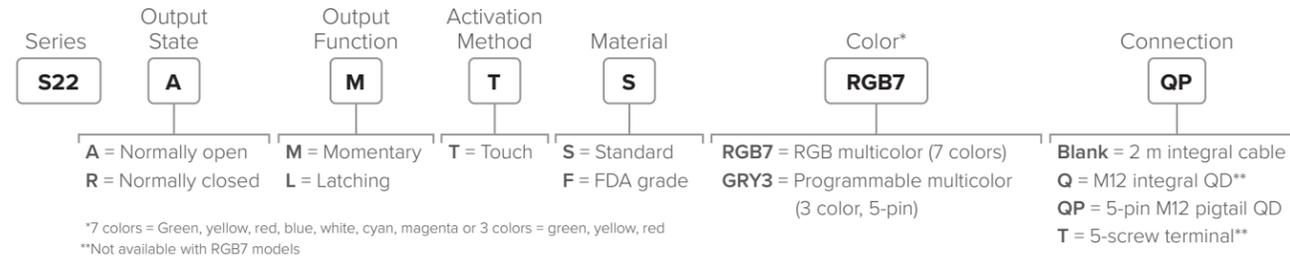


S22 Pro Touch

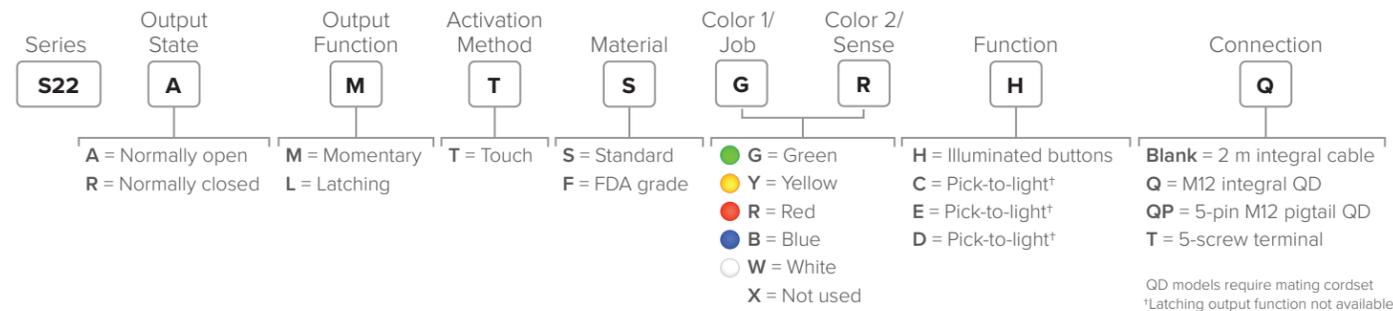
Programmable Flush Mount Touch Button Indicators

- 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

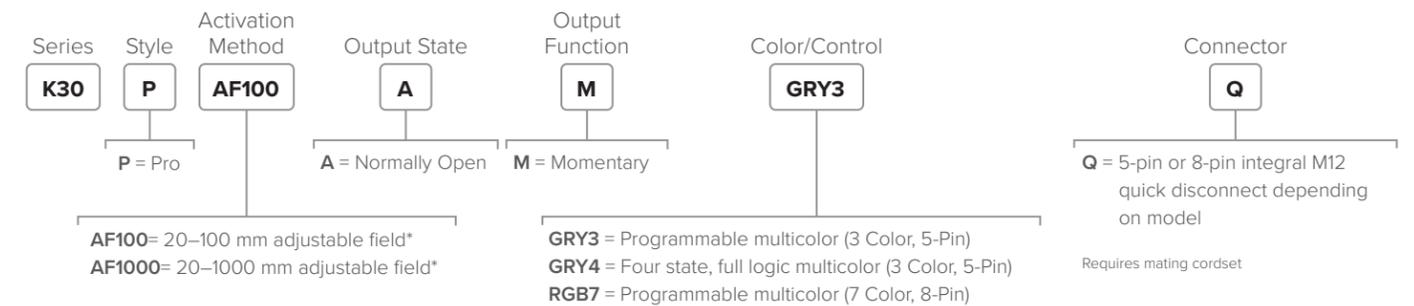


K30 Pro Optical Sensor

30 mm Programmable 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

Pro Models

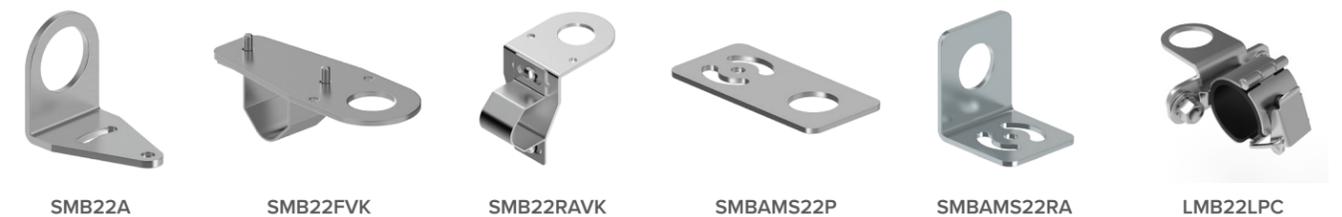


*Detection distance can be adjusted through teach mode or Pro Editor. Max distance = 1000 mm.



| | |
|-----------------------------|----------------------|
| 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

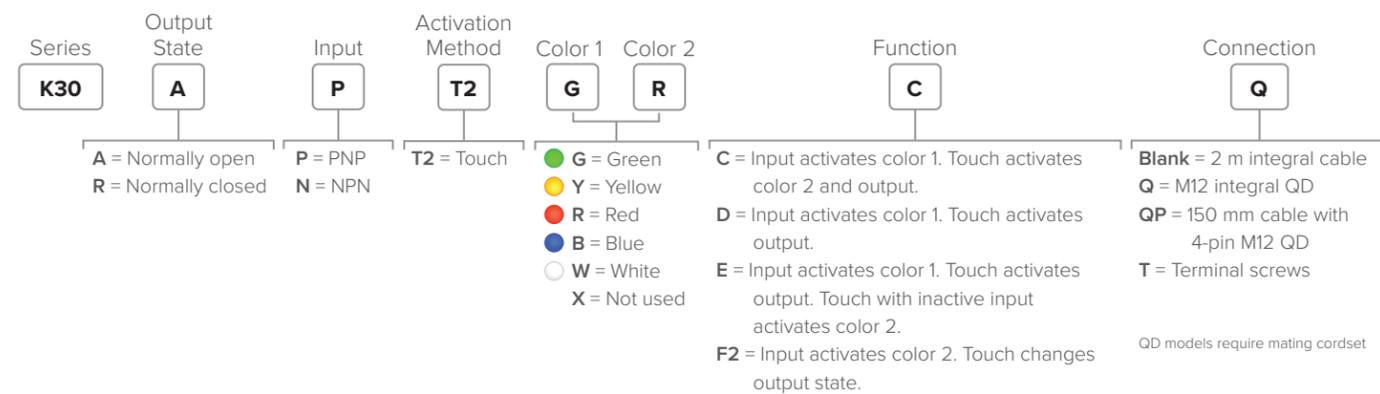


Pro Models

Same Functionality as Core 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

Core Touch Models

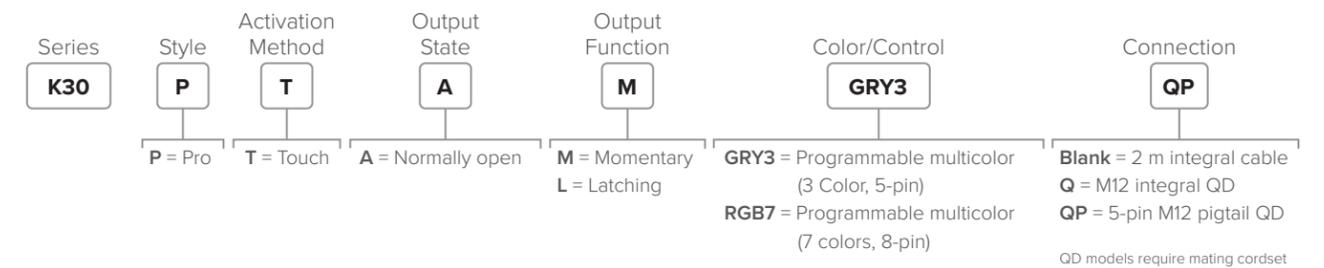


| | |
|-----------------------------|-----------------------------|
| Supply Voltage | 10 to 30 V DC |
| Construction | Polycarbonate |
| Operating Conditions | -40 to +50 °C |
| Environmental Rating | IP67, IP69K per DIN 40050-9 |
| Certifications | CE, UL LISTED, UK CA |

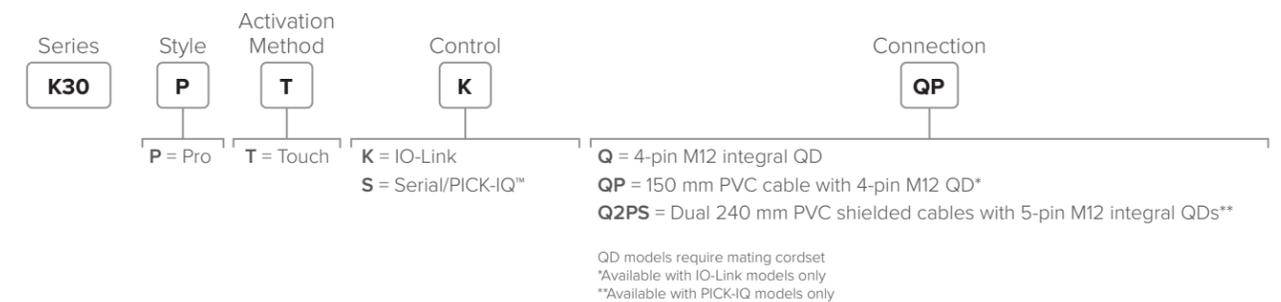
Brackets



Pro Touch Models



Pro Touch Models with IO-Link or PICK-IQ



| | |
|-----------------------------|--|
| Supply Voltage | Pro: 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

Core Touch Models

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



| | |
|-----------------------------|------------------------------|
| Supply Voltage | 12 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

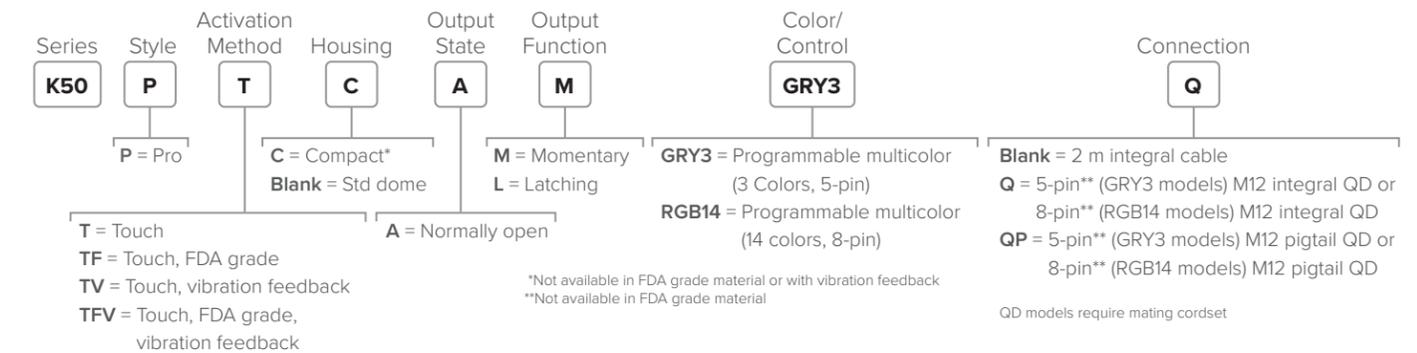


Pro Models

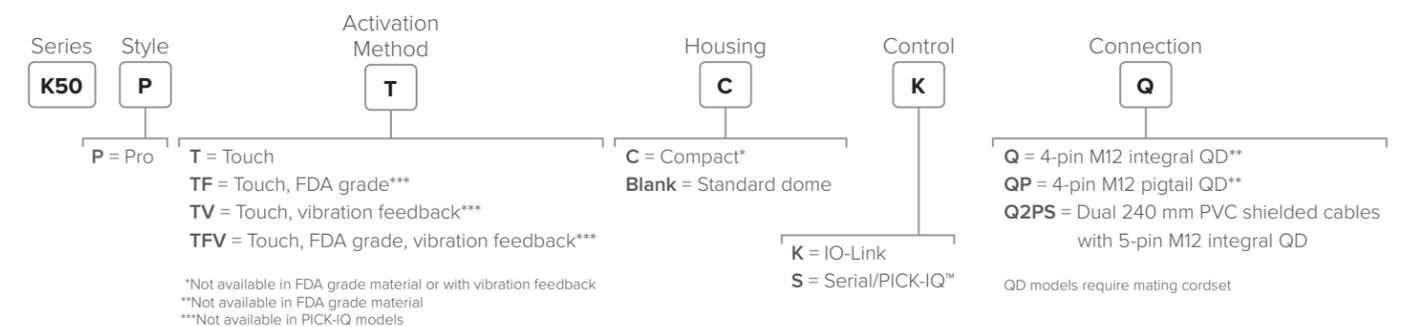
Same Functionality as Core with Additional Features Below

- 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

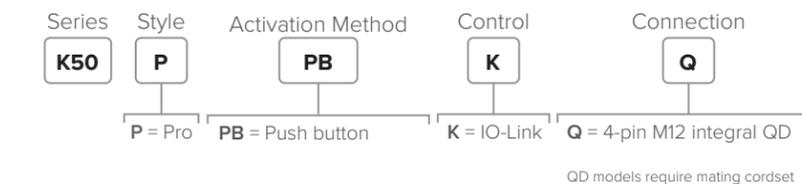
Pro Touch Models



Pro Touch Models with IO-Link or PICK-IQ



Pro Push Button Models with IO-Link



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

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



K50 Pro Touch with Audible

50 mm Programmable 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

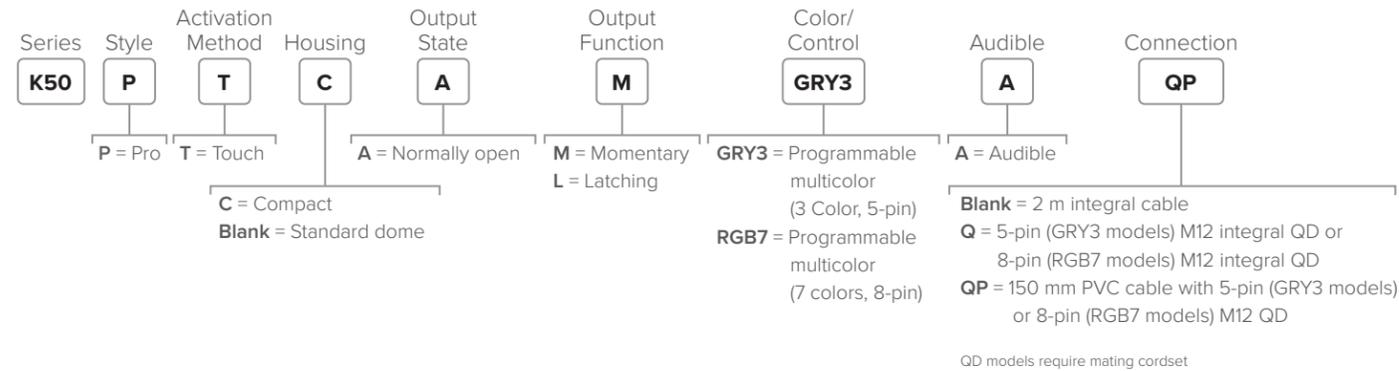


K50 Pro Touch with Display

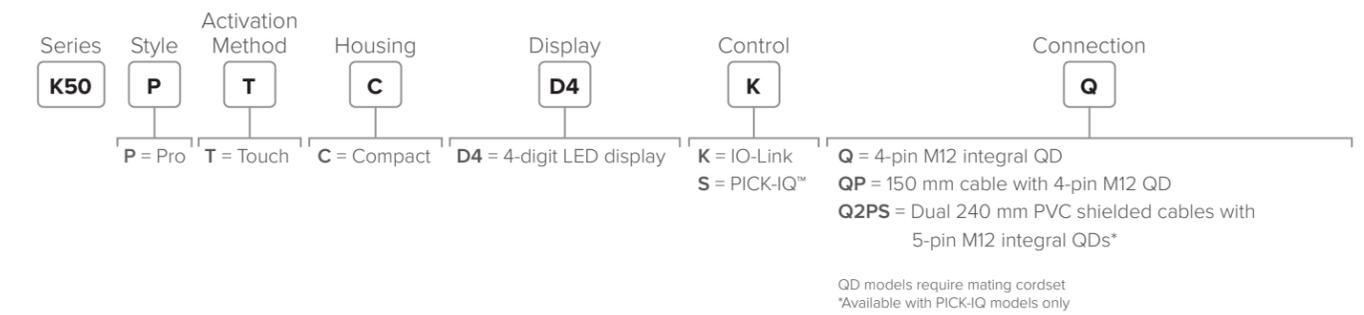
50 mm Advanced Programmable Touch Button Indicators

- 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

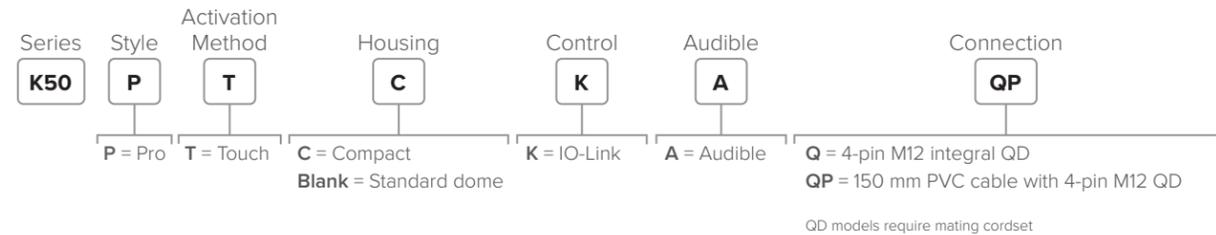
Pro Touch with Audible Models



IO-Link and PICK-IQ Models



Pro Touch with Audible and IO-Link Models



Supply Voltage

Pro: 10 to 30 V DC
IO-Link: 18 to 30 V DC

Construction

Polycarbonate

Operating Conditions

-40 to +50 °C

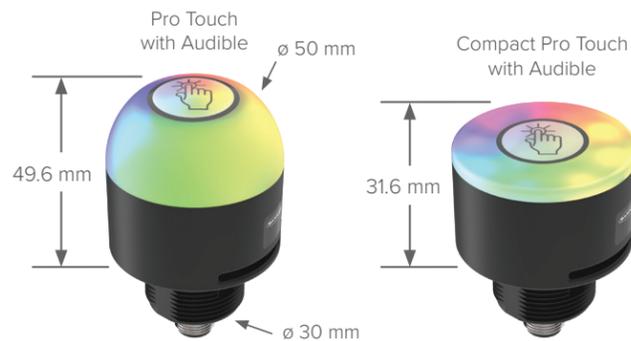
Environmental Rating

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



Supply Voltage

Pro: 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



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

Brackets





K50 Optical Series

50 mm Multicolor Touch Button Indicators

- 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



Pro Models

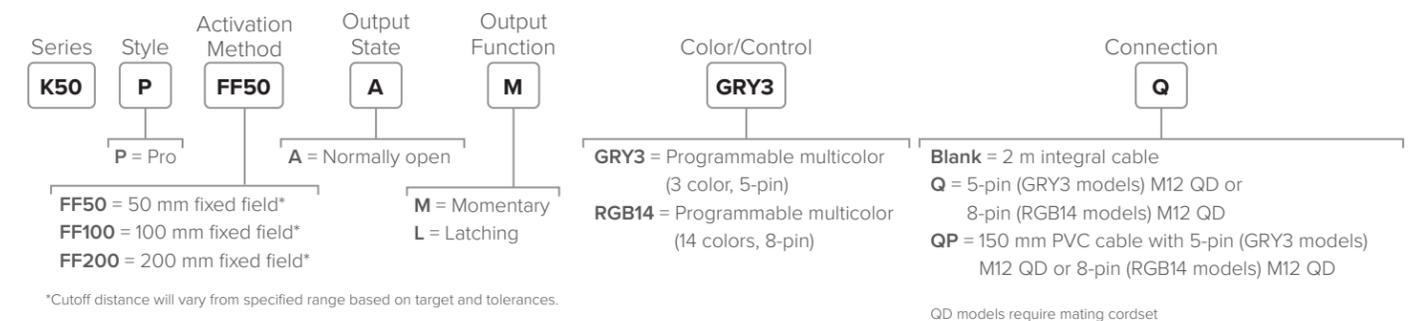
Same Functionality as Core with Additional Features Below

- 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

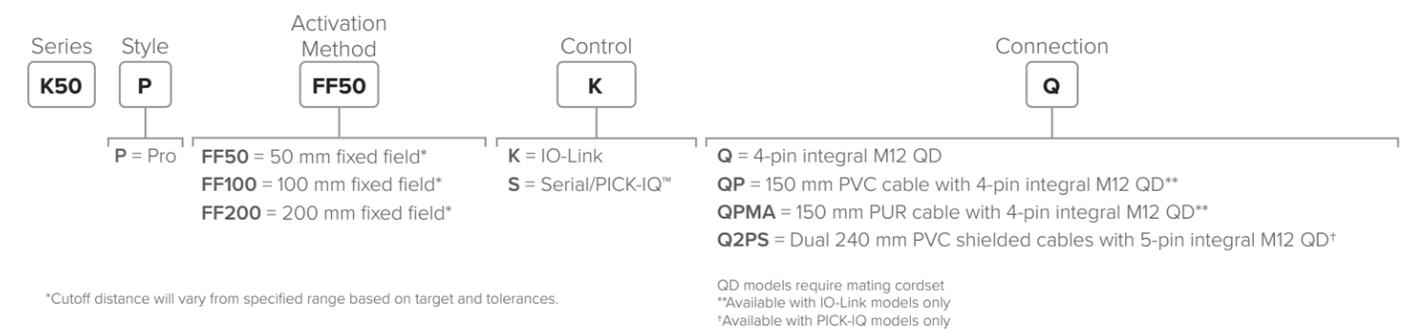
Core Optical Models

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

Pro Optical Models



Pro Optical Models with IO-Link or PICK-IQ



| | |
|-----------------------------|--|
| 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 | |

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

Brackets



| | |
|-----------------------------|---|
| Supply Voltage | Standard: 12 to 30 V DC IO-Link: 18 to 30 V DC PICK-IQ: 10 to 30 V DC |
| Construction | Standard: 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



K70 Touch Series

70 mm Multicolor Touch Button Indicators

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



K70 Pro Touch with Audible

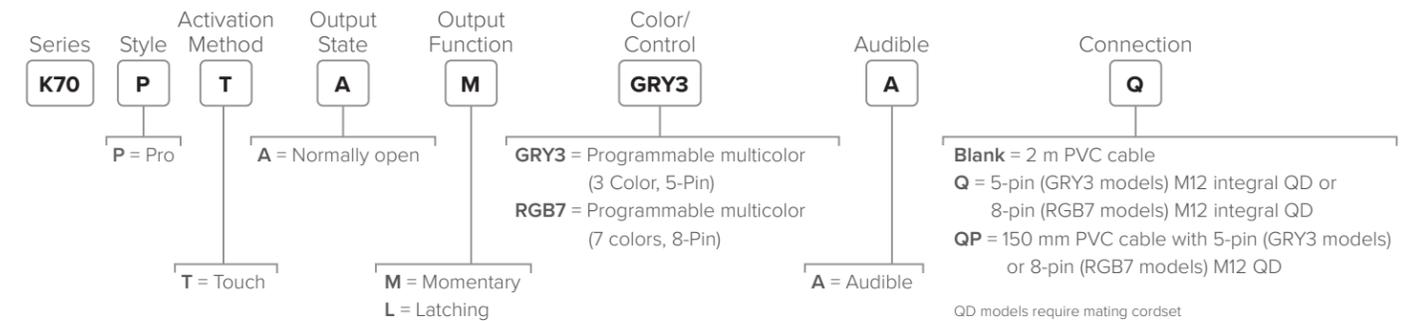
70 mm Programmable Multicolor Touch Button Indicators

- 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

Core 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 | 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. | | | K70APT2GREQ |
| Green, red, yellow | | | | K70APT2GRYF2Q |
| | | | | K70APT2GRYC3Q |

Pro Touch Models



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



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

Brackets



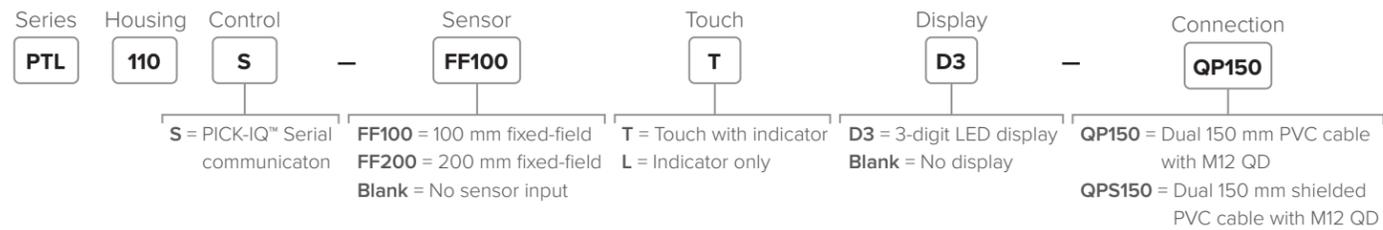
Brackets



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



LMBPTL110C
For 28 mm
Tubular Racking



LMBPTL110F
For Slotted Extrusion
and Flat Rail Mounting



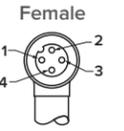
LMBPTL110A45
For Slotted Extrusion
and Flat Rail Mounting



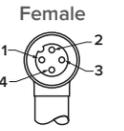
Connectivity Accessories

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



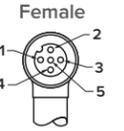
| | Length | Straight | Right-Angle | Pinout |
|---------------------------------|--------|-----------|-------------|--|
| 4-Pin Female QD to Flying Leads | 1 m | MQDC-403 | — |  1 = Brown 2 = White 3 = Blue 4 = Black |
| | 2 m | MQDC-406 | MQDC-406RA | |
| | 3 m | MQDC-410 | — | |
| | 5 m | MQDC-415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



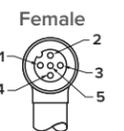
| | Length | Straight/Straight (female/male) | Straight/Right-Angle (female/male) | Pinout |
|--------------------|--------|---------------------------------|------------------------------------|--|
| 4-Pin Double-Ended | 0.3 m | MQDEC-401SS | MQDEC-401RS |  1 = Brown 2 = White 3 = Blue 4 = Black |
|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

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



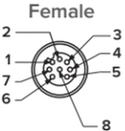
| | Length | Straight | Right-Angle | Pinout |
|---------------------------------|--------|------------|-------------|--|
| 5-Pin Female QD to Flying Leads | 0.9 m | MQDC1-503 | — |  1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray |
| | 2 m | MQDC1-506 | MQDC1-506RA | |
| | 5 m | MQDC1-515 | MQDC1-515RA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



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

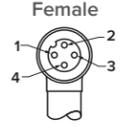
8-Pin M12 (Voltage: 30 V DC/AC, Current: 2 A)



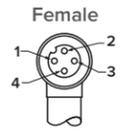
| | Length | Straight | Right-Angle | Pinout |
|---|--------|-------------|--------------|---|
| 8-Pin Female QD to Flying Leads Open Shield with Drain Wire | 2 m | MQDC2S-806 | MQDC2S-806RA |  1 = White 2 = Brown 3 = Green 4 = Yellow 5 = Gray 6 = Pink 7 = Blue 8 = Red |
| | 5 m | MQDC2S-815 | MQDC2S-815RA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

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

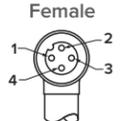
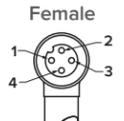


| | Length | Straight | Right-Angle | Pinout |
|---------------------------------|--------|--------------|----------------|--|
| 4-Pin Female QD to Flying Leads | 2 m | MQDC-406-PUR | MQDC-406RA-PUR |  1 = Brown 2 = White 3 = Blue 4 = Black |
| | 5 m | MQDC-415-PUR | MQDC-415RA-PUR | |
| | 10 m | MQDC-430-PUR | MQDC-430RA-PUR | |



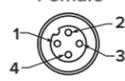
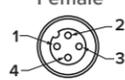
| | Length | Straight/Straight (female/male) | Right-Angle/Straight (female/male) | Pinout |
|--------------------|--------|---------------------------------|------------------------------------|--|
| 4-Pin Double-Ended | 0.3 m | MQDEC-401SS-PUR | MQDEC-401SR-PUR |  1 = Brown 2 = White 3 = Blue 4 = Black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

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

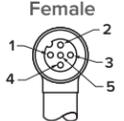
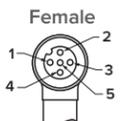
| | Length | Straight | Right-Angle | Pinout |
|-----------|--------|--------------|----------------|---|
| 4-Pin PNP | 2 m | MQDC-406-GYP | MQDC-406-GYPRA |  <p>1 = Brown 2 = White 3 = Blue 4 = Black (ouput LED)</p> |
| | 5 m | MQDC-415-GYP | MQDC-415-GYPRA | |
| | 9 m | MQDC-430-GYP | MQDC-430-GYPRA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



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

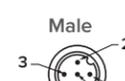
| | Length | Straight | Pinout |
|--------------------|--------|------------------|---|
| 4-Pin | 2 m | MQDC-WDSS-0406 |  <p>1 = Brown 2 = White 3 = Blue 4 = Black</p> |
| | 5 m | MQDC-WDSS-0415 | |
| | 9 m | MQDC-WDSS-0430 | |
| | | | 22 AWG Cable ø – 4.8 mm |
| 4-Pin Double-Ended | 0.31 m | MQDEC-WDSS-401SS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

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

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



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

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

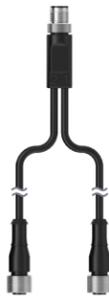
4-Pin M12 Splitters (Voltage: 250 V DC/AC, Current: 4 A)



| | Models | Cable Lengths | | Pinout |
|-------|-----------------|----------------------|-------------------|--|
| | | Trunk (Male) | Branches (Female) | |
| 4-Pin | CSB-M1240M1241 | No Trunk/Integral QD | 2 x 0.3 m | Female 1 = Brown 2 = White 3 = Blue 4 = Black Male 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 | |
| | 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 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray Male 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 |

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 |

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 |

Pro 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 |

Pro Cordset



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

5-Pin Power Supply



| Model | Input | Output | Length | Pinout |
|-------|----------|--|--------|--------|
| 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 | | NPN on Pin 5 | SPS30PAR5NQ5 |
| | | | NPN on Pin 2 | SPS30NAR5NQ5 |
| | PNP | 150 mm PVC cable with an M8 QD | NPN on Pin 2 | SPS30PAR2NQ3 |

*For use with actuator products

Switches and Dimming Accessories

WLS28 In-Line Switches

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



LC15T and LC25T In-Line Touch Switches

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



LC65 LED Dimmer Module

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

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



Standoff Pipe Accessories

Standoff Pipes

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



Adapters and Covers

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



Pipe Mounting Flange

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



Audible Indication



K50 Pro Compact Audible

K50 Pro 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 Pro 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 Pro Hazardous Beacons

K100 Pro 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.

More Sensors, More 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.

