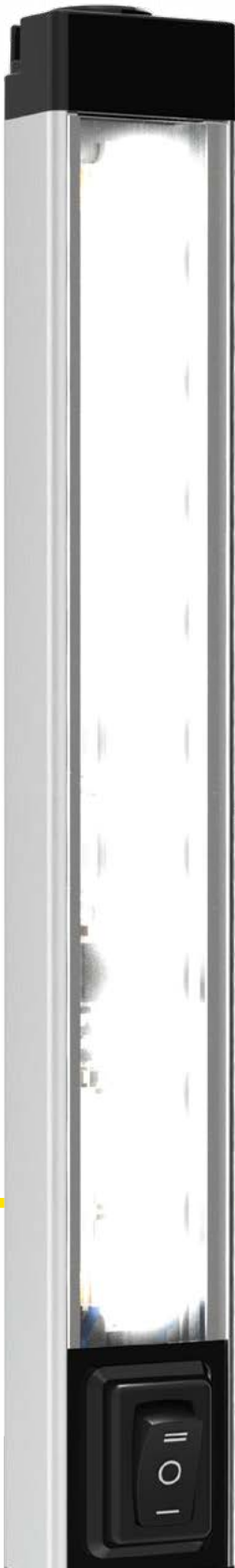


Lighting & Indication Solutions



BANNER®
more sensors, more solutions

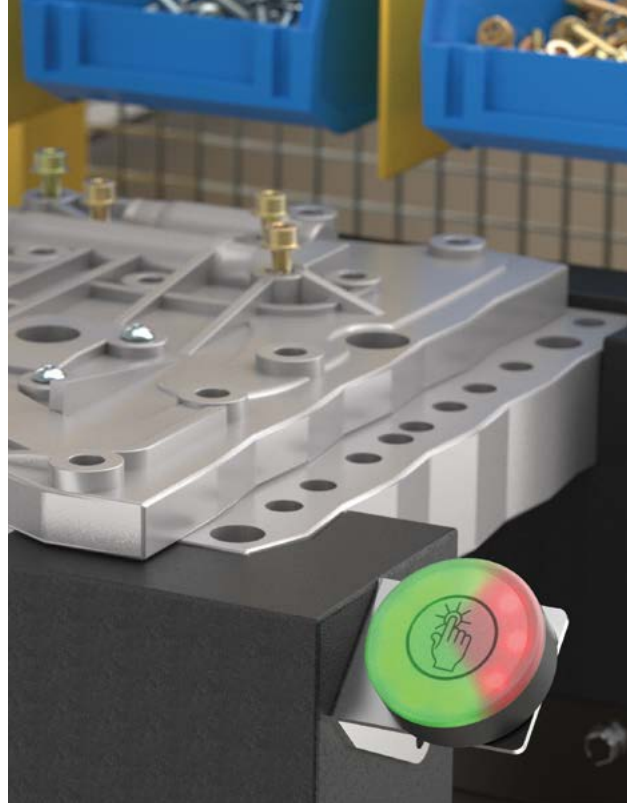
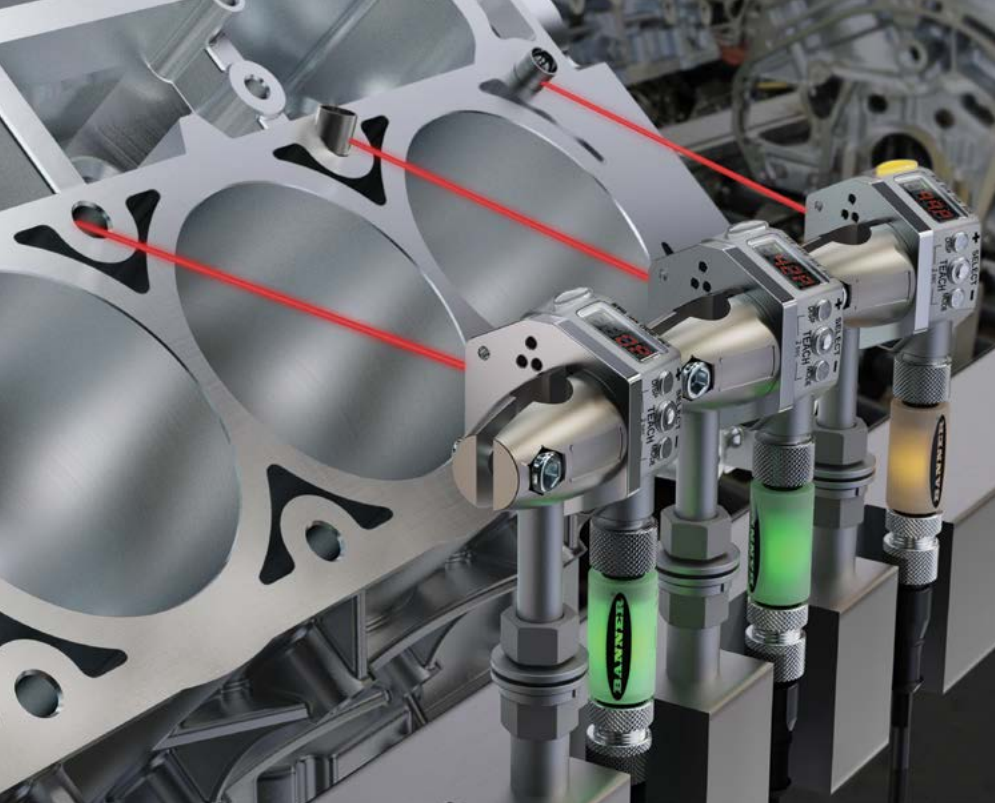


Table of Contents

Visual Factory	4
New Products	8
Pro Products	10

Lighting and Indication Solutions

LED Task Lighting	12
Tower Lights	34
Indicators	50
Touch Button and Pick-to-Light	72

Accessories

Connectivity	88
Pro	94
Power	95
Switches and Dimming	96
Standoff Pipes	97

Specialty Solutions

Audible Indication	98
Hazardous Location	99
Heavy Duty and Washdown	100
Vision Lighting	101

Light Up the Visual Factory

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



Illuminate the Work Area with LED Lighting

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

Electrical Panel Lighting

Machine Lighting

Workstation Lighting

Visual Inspection Station

Sensor Emulation

Machine and Process Status

Call for Parts

Loading Dock/Bay Communication

Communicate Status

- pages 34, 50
- Empower Operators
 - Alert Supervisors
 - Accelerate Resolution



Audible Alerts

- page 98
- Guide Operators
 - Indicate Status Conditions



Increase Efficiency with Light-Guided Part Picking

- page 72
- Reduce Cycle Time
 - Error-proof Assembly
 - Streamline Training



Pick-to-Light for Assembly and Kitting

Put-to-Light for Warehouse and Logistics



Wireless options to avoid costly wiring runs



Variety of audible options, including programmable



Color and animation options available



Multiple colors in one unit with flexible I/O configuration



Cascadeable lights

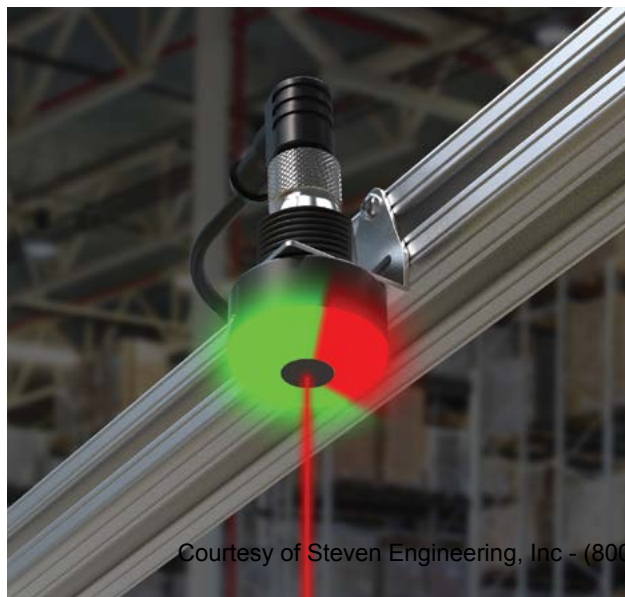
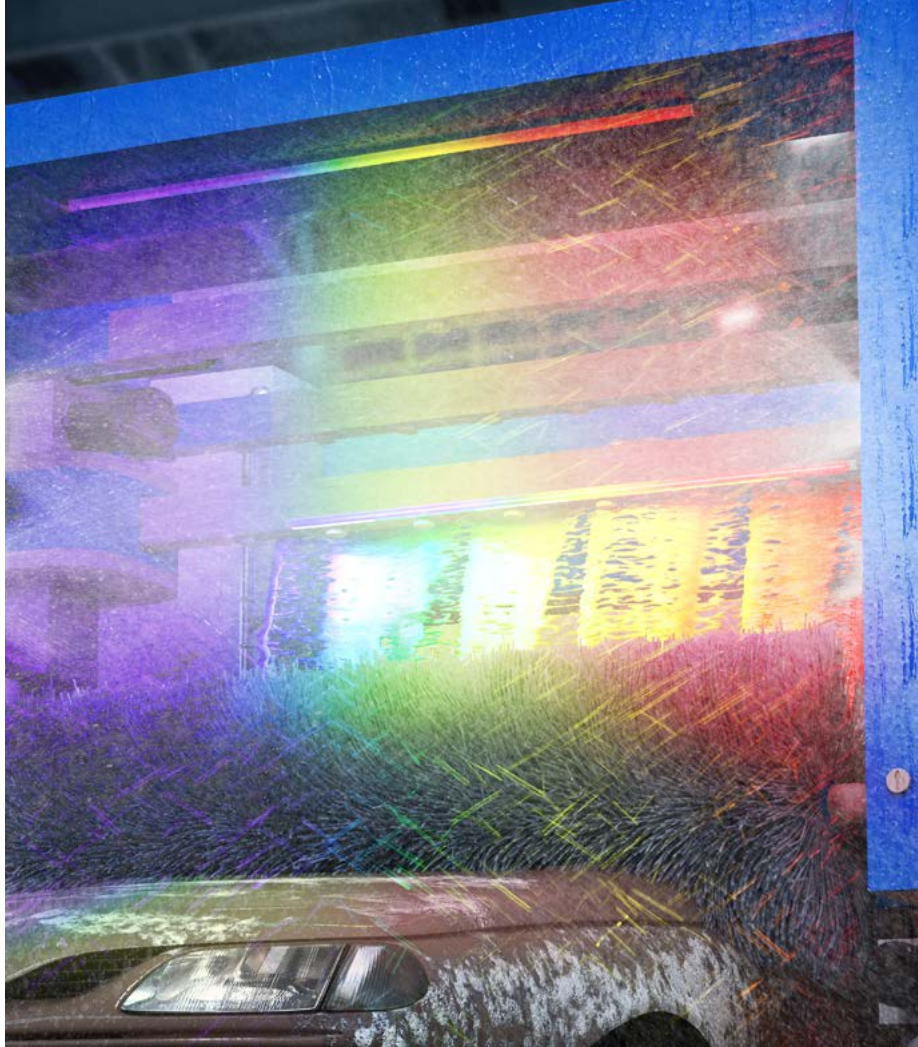
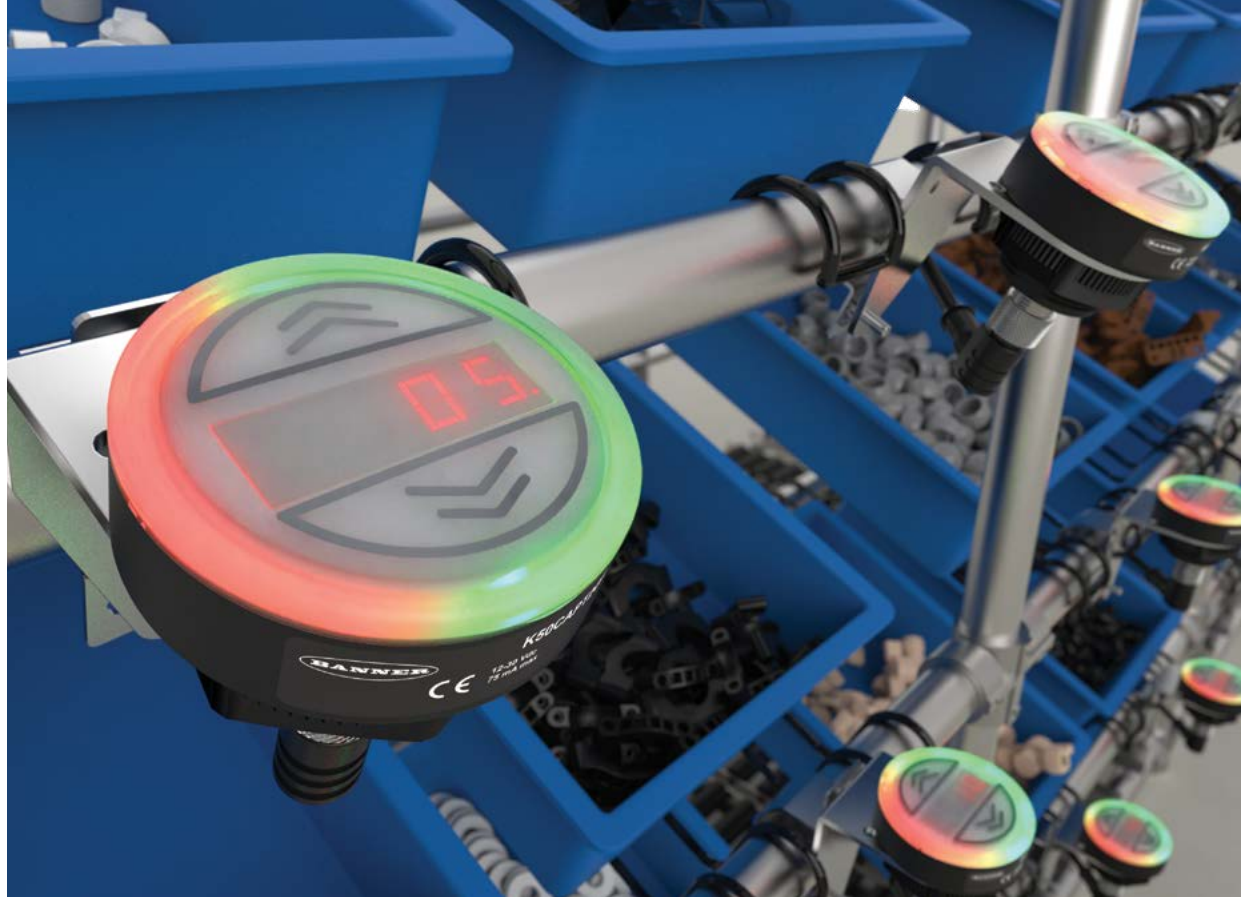


Magnetic mounting options for easy installation and portability



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

New Products





K50 Pro Touch with Display

- Four-digit, seven-segment LED display
- Two independent touch areas
- Allows users to 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



K30 Pro Optical Sensor

- 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



CL50 Pro Column Lights

- Rugged, versatile, and easy-to-install multicolor indicators
- Bright, easy-to-see operator guidance and indication of equipment status
- Programmable using Pro Editor Software or dynamically controlled with IO-Link
- Customized indication possibilities, including color, flash patterns, and light intensity control
- Audible models available with sealed, omni-directional audible element



TL15 In-Line Tower Lights

- 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 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



RLS27 Pro 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
- Focused lens provides close range intensity and long range visibility
- Banner's Pro Editor Software allows users to program device status, colors, and animations
- Offers illumination and multiple indication capabilities in a single device with EZ-STATUS



K50 Pro Touch Buttons

- Integral audible alarm has twelve 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 a standalone indicator or in conjunction with touch conditions
- Can be actuated with bare hands or gloves
- Compact models available for lower profile applications
- Configurable input/output with Pro Editor Software



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

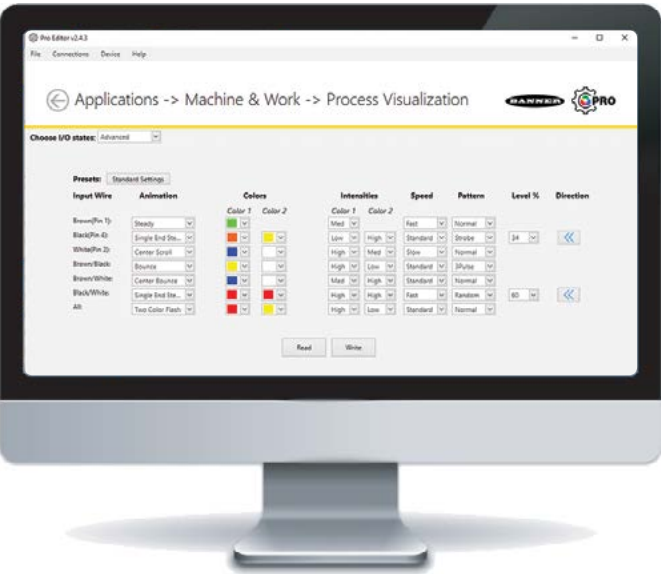
- Model options for 3 or 4 color segments, with or without omnidirectional audible
- Tower light segments appear grey when powered off, eliminating false indication from ambient conditions
- Available in two color combinations: green, yellow, and red or blue, green, yellow and red

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

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. 74 pg. 60, 77 pg. 63, 65 pg. 79, 80, 81 pg. 41

S22 Pro Indicator and Touch Button	K30 Pro Indicator and Touch	K50 Pro Indicator	K50 Pro Touch	LCA130T
------------------------------------	-----------------------------	-------------------	---------------	---------



allows simple control via discrete inputs with advanced options, configurable colors, animations, and much more.

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

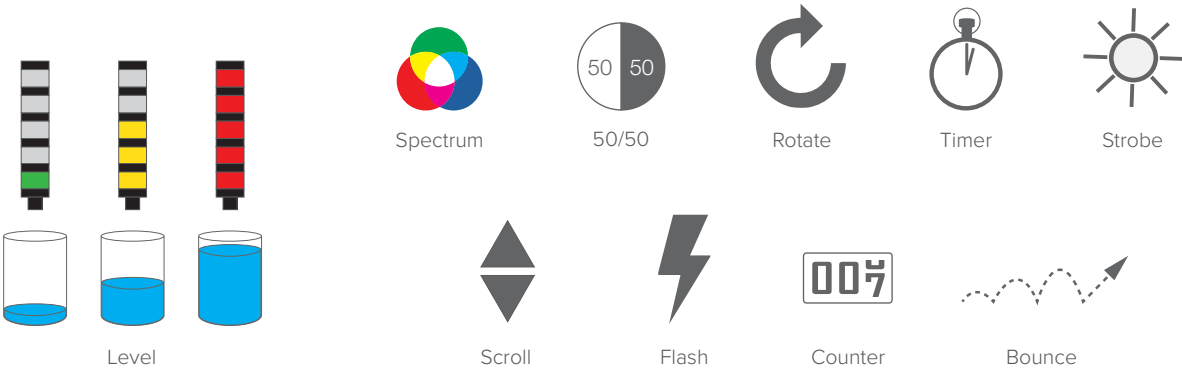
PICK-IQ® is a purpose-built, Modbus-compatible serial bus protocol that uses a Common ID to reduce the typical latency that results from polling multiple devices.

✓ ✓ ✓ ✓ ✓

✓ ✓ ✓

✓ ✓ ✓

Modes and Animations



pg. 39 pg. 44 pg. 47 pg. 69 pg. 70 pg. 48 pg. 56 pg. 57 pg. 58 pg. 59 pg. 86

CL50 Pro	TL50 Pro	TL70 Pro	K90 Pro	K100 Pro	TLF100 Pro	WLS15 Pro	WLS27 Pro	RLS27 Pro	WLS28 Pro	PTL110
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✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓

✓ ✓







Programmable LED indicators offer multiple color choices in a single housing

LED Task Lighting

Selection Guide



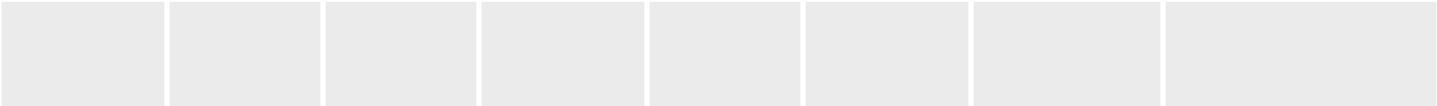
pg. 14 pg. 15 pg. 18 pg. 18 pg. 20 pg. 22 pg. 23



Series Name	S15WL	WLS15	WLS27	RLS27	WLS28-2	WLB32	WLS70
Length (mm)	28	220 to 1200	145 to 1130	285 to 2270	145 to 1130	285 to 1130	300 to 1200
AC/DC	DC	DC	DC	DC	DC	AC and DC	AC and DC
White Lumens per Foot (300 mm)	55	350 standard 750 high intensity	800	850	800	750	1350
IP Rating	IP65, IP67, IP68	IP66, IP67	IP66, IP67, IP69K	IP67, IP69K	Unsealed: IP50 Sealed: IP67, IP69K	IP50	IP65
Programmable		  IO-Link®  PICK-IQ® (see pg. 56)	  IO-Link® (see pg. 57)	 (see pg. 58)	  IO-Link® (see pg. 59)		
Multicolor Options		✓	✓	✓	✓		



pg. 24 pg. 25 pg. 26 pg. 27 pg. 28 pg. 29 pg. 32 pg. 33

WLB72	WLB92	WLC60	WLH60 High Temp	WL50S	WL50-3	WLC90	WLA-2
1200 and 2400	550 and 1100	340 and 640	340 and 640	ø 50	ø 50	89 x 91	105 x 180 to 360 x 180
AC	AC and DC	DC	DC	DC	DC	DC	DC
1700	1755	1300	1150	295	300	700	1025 per panel/size
IP20	IP40	IP68, IP68g, IP69K	IP68, IP69K	IP67, IP69K	IP67, IP69K	IP68, IP68g, IP69K	Sealed: IP67, IP69K Encapsulated: IP67, IP68, IP69K





Programmable LED indicators offer multiple color choices in a single housing



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	CE, UL LISTED, UK CA

Brackets



LMBM12MAG
Attaches to
M12 cordset end



LMBM12SP
Attaches to
M12 cordset end



LMBS15MAG
Magnetic Mount



LMBS15SP



WLS15

LED Strip Lights

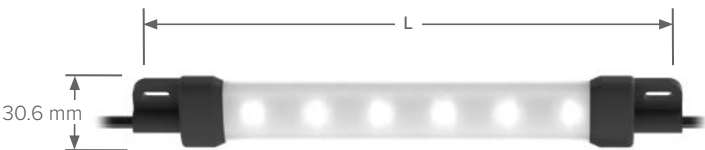
- Low-profile design for easy installation in tight spaces
- 12 or 24 V DC operation in one model
- Completely sealed with an IP67 rating for use in wet or dusty environments
- The rugged construction and polycarbonate shell resists shock and vibration while remaining lightweight
- LED lighting technology 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 96



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, ENEC, D, UL-NOM

Brackets



LMBWLS15-150S



LMBWLS15



LMBWLS15MAG
Magnetic Mount



LMBWLS15TF
Tape



LMBWLS15TD
Velcro



Pro Models page 56

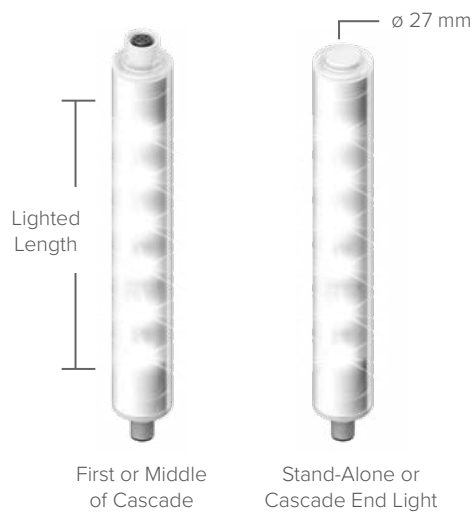


WLS27

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



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

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

**Depending on length and color

Single Color Models

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

Multicolor Models

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



Pro Models page 57

Dimming Accessories page 96

Brackets



LMBWLS27EC
Clear Copolyester



LMBWLS27H



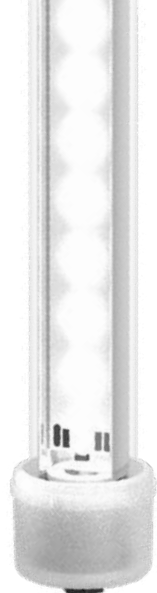
LMBWLS27T



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



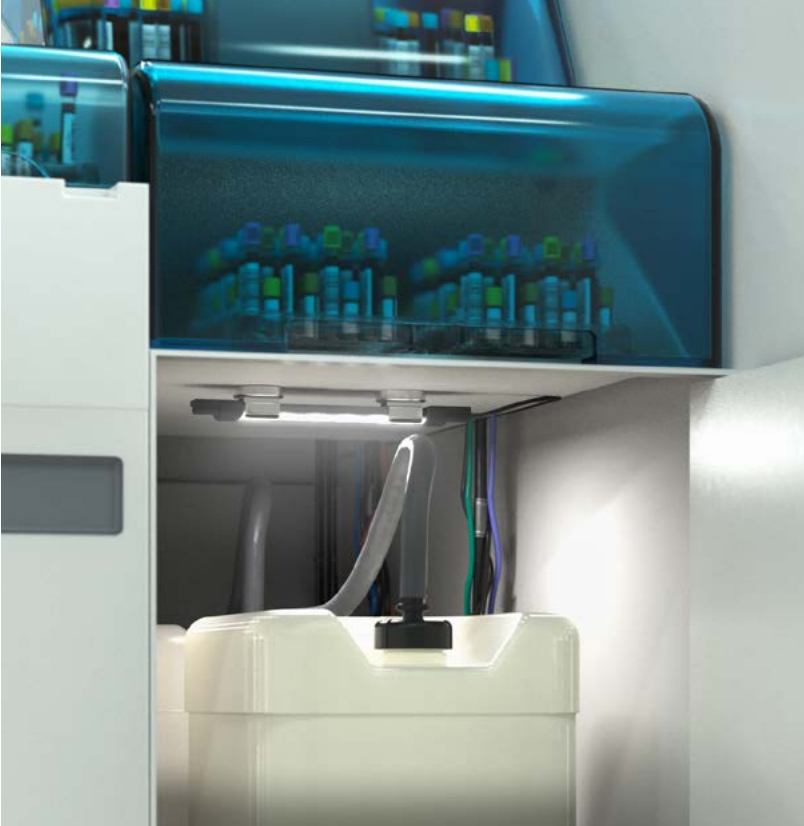
LMBWLS27SP
Clear Copolyester



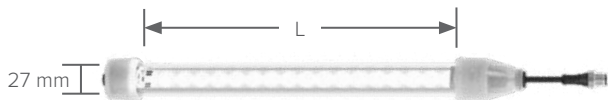
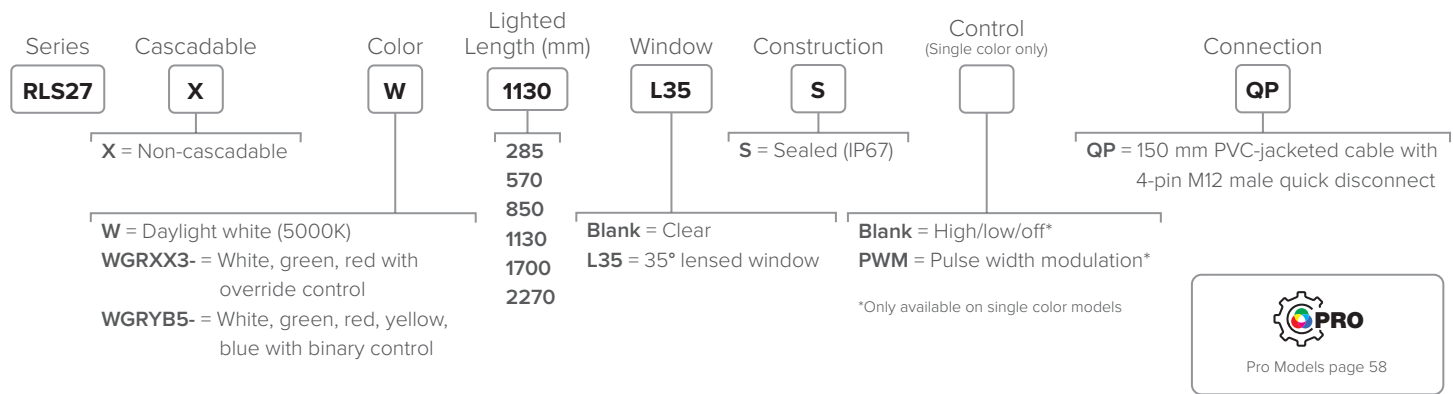
RLS27

Rugged LED Strip Lights

- Protection against common car wash soap, cleaning solutions, and other detergents
- Sturdy aluminum housing encased in a shatterproof, UV-stabilized, polycarbonate shell, making it ideal for harsh indoor and outdoor applications
- Rugged, water-resistant IP67/IP69K-rated design
- Focused lens provides close range intensity and long range visibility



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



**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)





WLS28-2

LED Strip Lights

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

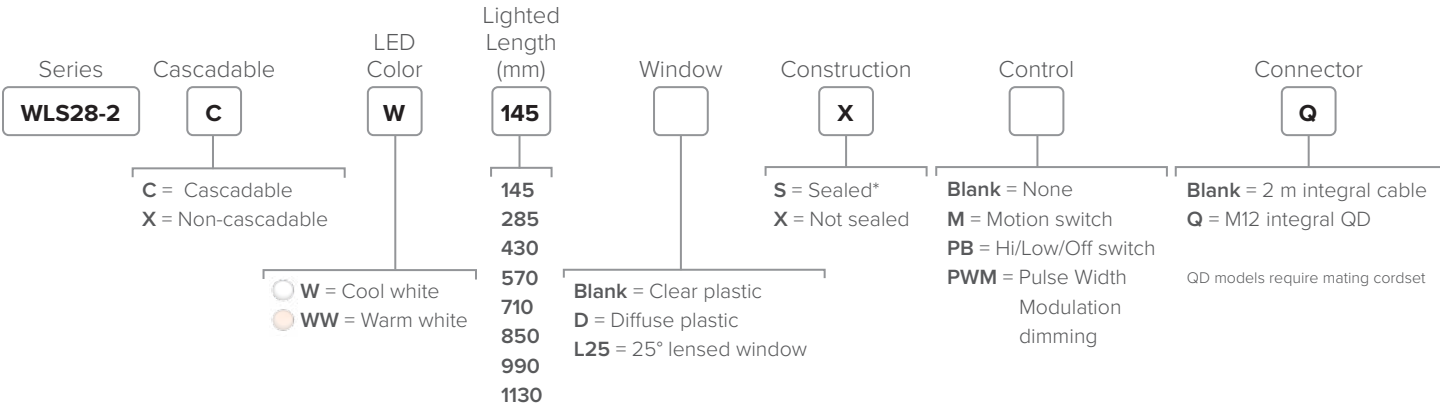


Lighted Length (L)	
145 mm	710 mm
285 mm	850 mm
430 mm	990 mm
570 mm	1130 mm

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

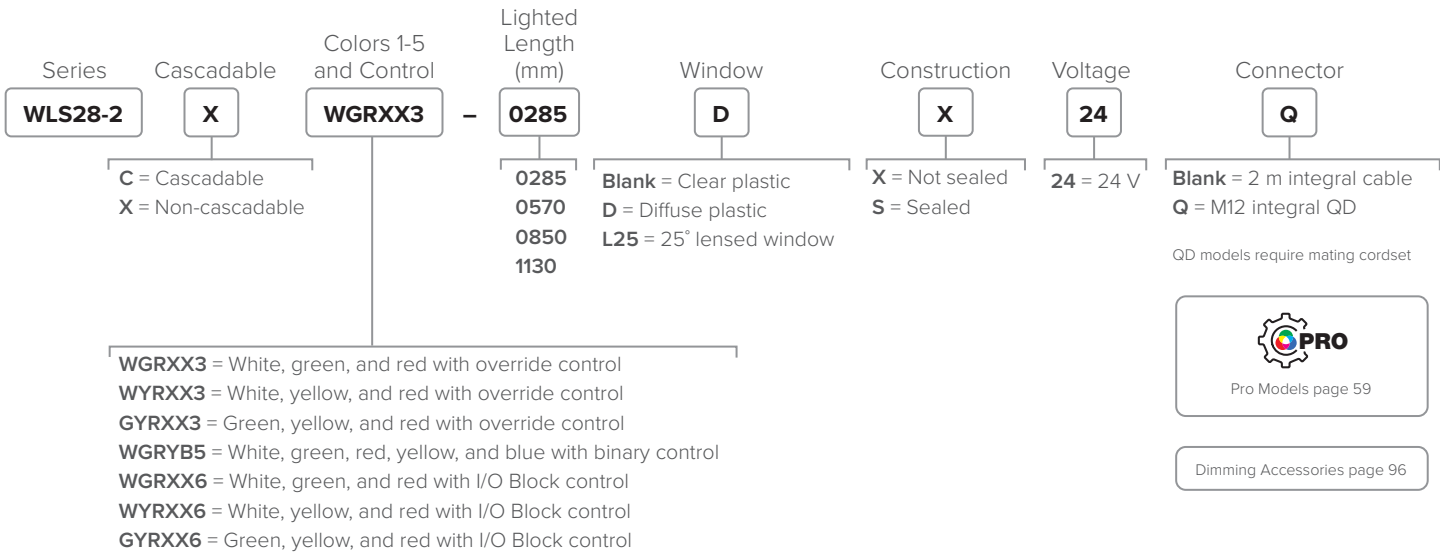
*Depending on length and color

White Models

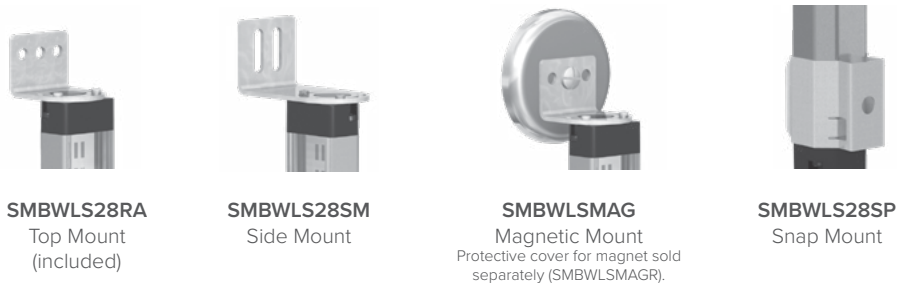


*Sealed models not available with ON/OFF Switch (PB) or Motion Switch (M)

Multicolor Models



Brackets

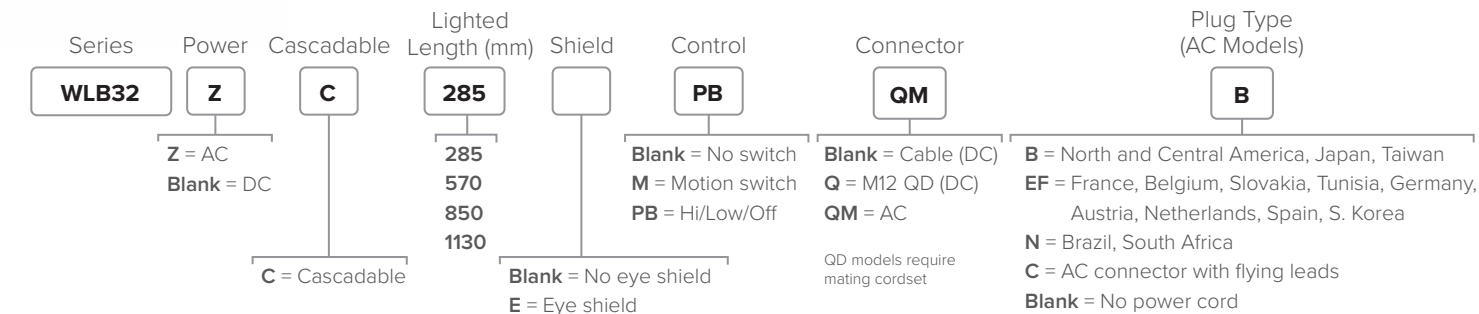




WLB32

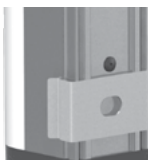
LED Strip Lights

- Energy efficient for overall cost savings
- Hi/Low/Off switch allows users to customize light levels
- 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
- Available in AC or DC models
- Available in 285 mm, 570 mm, 850 mm, or 1130 mm
- Motion detection models are ideal for locations that cannot use a physical switch or where the placement of the switch is not useful
- Models featuring an eye shield block direct line of sight to increase operator comfort

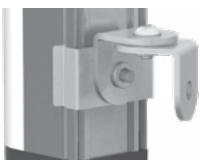


Supply Voltage	DC: 12 to 30 V DC AC: 90 to 264 V AC
Lumens	750–3000
Construction	Housing: Anodized aluminum Window: Polycarbonate End caps: Polycarbonate
Operating Conditions	DC: –40 to +70 °C AC: –25 to +45 °C
Environmental Rating	IP50
Certifications	CE, UL LISTED, UK CA, CULUS, UL-NOM MX

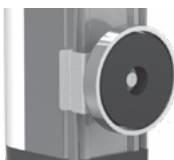
Brackets



LMBWLB32



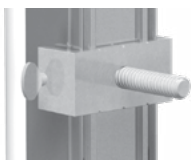
LMBWLB32-180S



LMBWLB32MAG
Magnetic Mount



LMBWLB32U



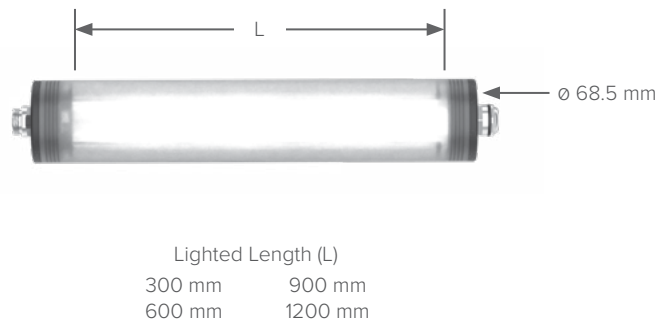
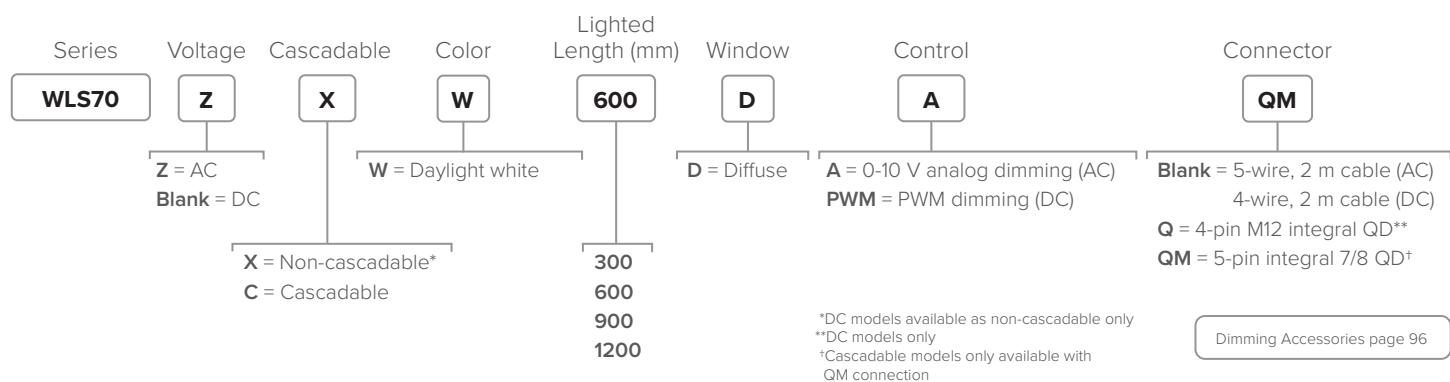
LMBWLB32UT



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



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	CE, UL LISTED, UK CA, UL-NOM MX

Brackets



LMBWLS70



LMBWLS70H



LMBWLS70T



LMBWLS70HK
Hanging Kit



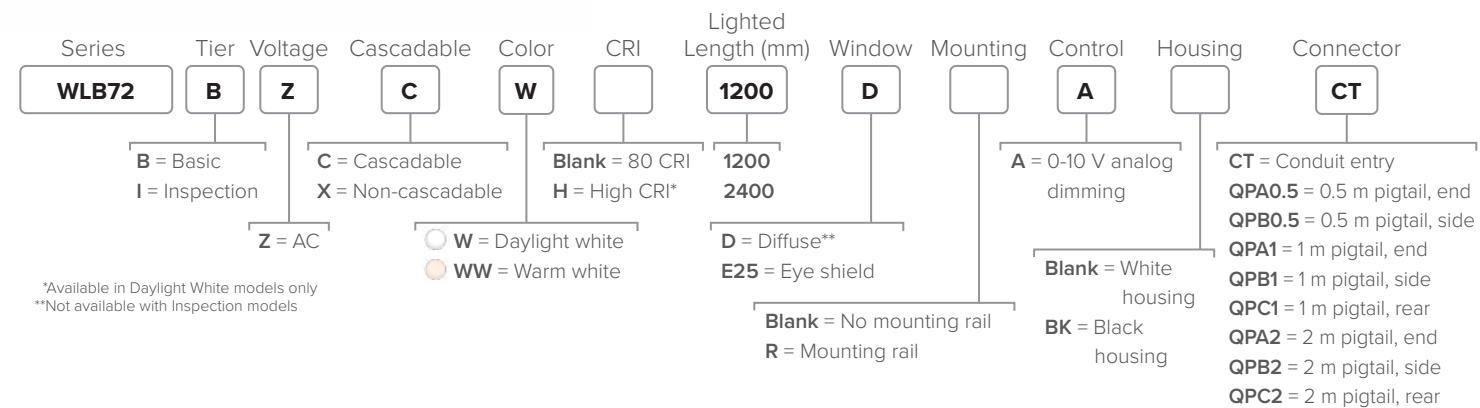
LMBWLS70HHK
Hanging Kit



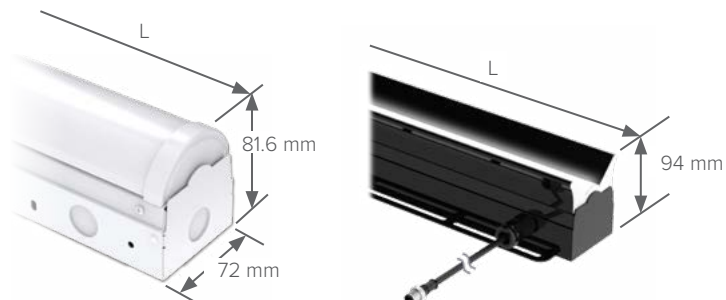
WLB72

Industrial LED Light Bars

- Provides improved visibility with bright, uniform illumination
- Reduces costs through high-efficacy, low-maintenance design
- Simplifies installation and wiring with versatile, reliable hardware
- WLB72 Inspection models are available with a focused light that produces a “zebra” pattern to help workers identify flaws and extended eye shields designed for automotive inspection applications



*Available in Daylight White models only
**Not available with Inspection models



Lighted Length (L)
1200 mm 2400 mm

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	CE, cULUS LISTED, UKCA, UL-MX, NOM

Brackets



LMBWLB72F
Surface Mount



LMBWLB72RAS
Angular Adjustment



LMBWLB72HK5
Suspended

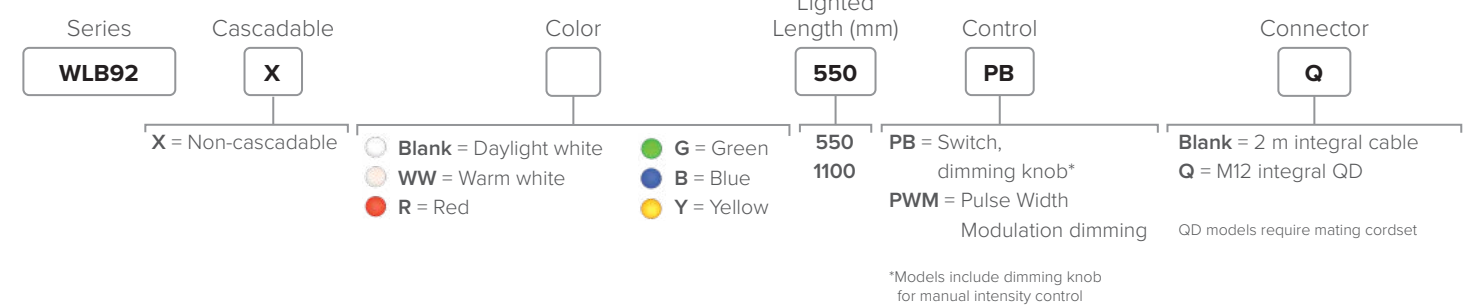


WLB92

Industrial LED Light Bars

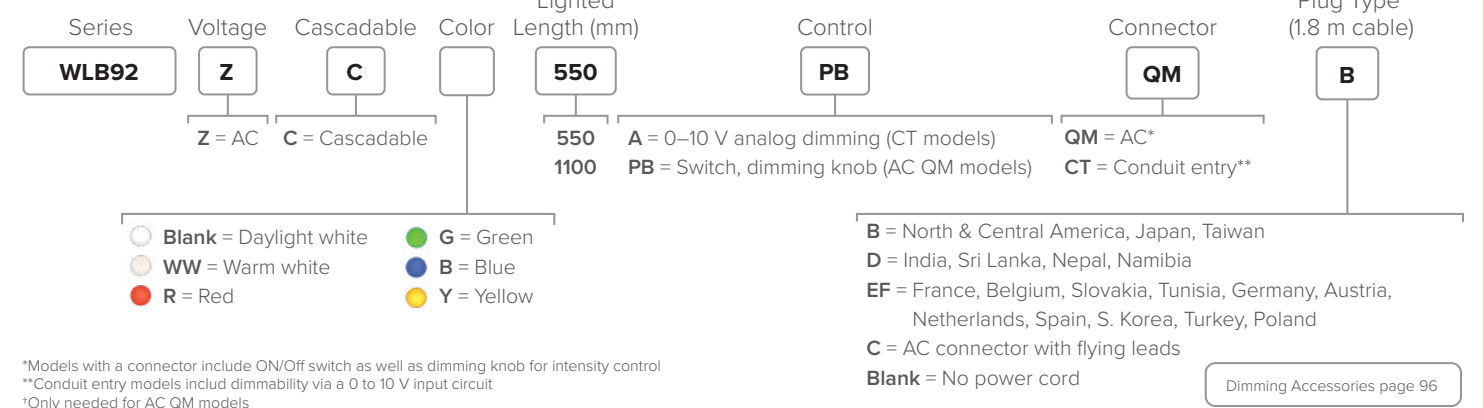
- Increases worker productivity and ergonomics with bright, high-quality, uniform light
- Durable light stands up in your environment with a rugged metal housing and shatterproof light cover
- Save maintenance time and lower utilities expenses with long-life, energy-efficient LEDs
- Flexibility to place light where needed with AC and DC models
- Easy installation with a variety of mounting options: surface, swivel, snap, and hanging brackets

DC Models



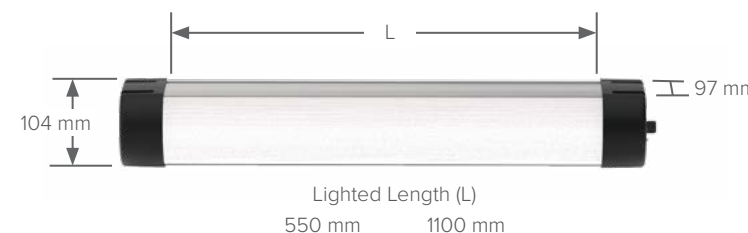
*Models include dimming knob for manual intensity control

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

Dimming Accessories page 96



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

*Depending on length and color

Brackets



LMBWLB92



LMBWLB92CLIP



LMBWLB92S



LMBWLB92HK5
Suspended



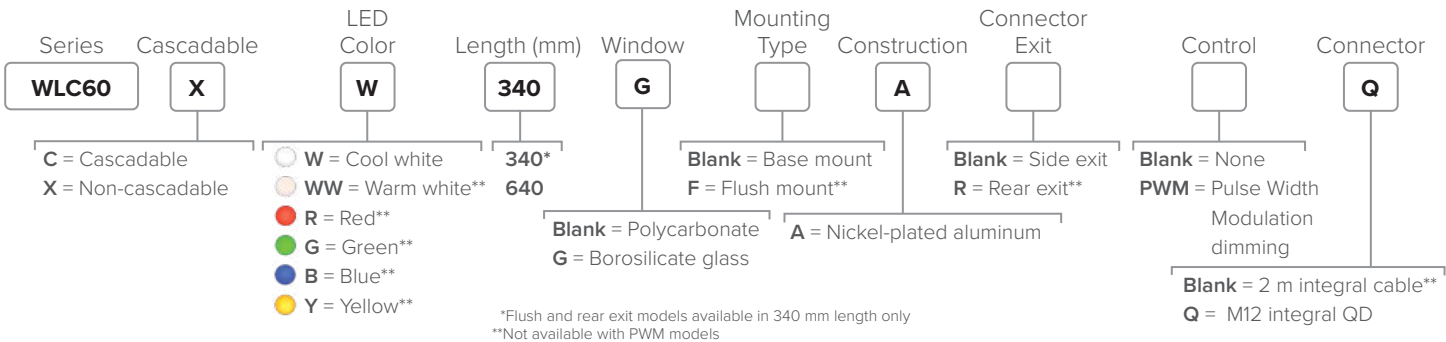
LMBWLB92RAS



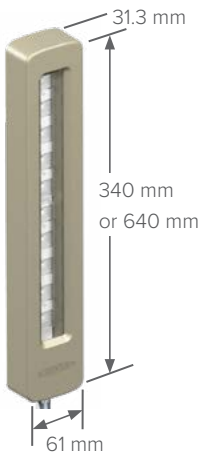
WLC60

Heavy Duty LED Strip Lights

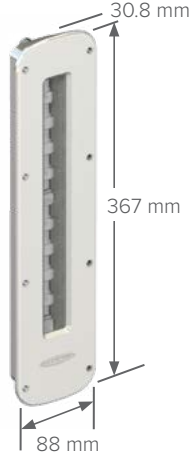
- Oil, chemical, and water resistant with IP67, IP68G, and IP69K ratings
- High brightness paired with advanced glare-reducing optics
- Easy to install with a wide variety of mounting solutions
- Resistant to vibration and shock
- Input voltage of 12–30 V DC
- Integral 4-pin M12 quick disconnect connector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



WLC60



WLC60 Flush



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

Dimming Accessories page 96

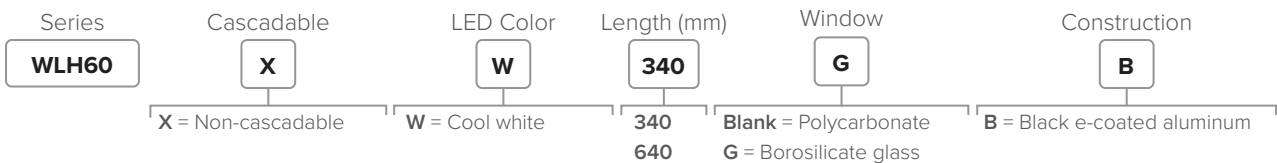
QD models require mating cordset



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 96



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

Brackets



LMBWLC60F



LMBWLC60RA



LMBWLC60RAS
4 Bracket Swivel Kit,
can mount with
SMBMAG3 magnet



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

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.

Courtesy of Steven Engineering, Inc - (800) 258-9200 - sales@steveneng.com - www.stevenengineering.com

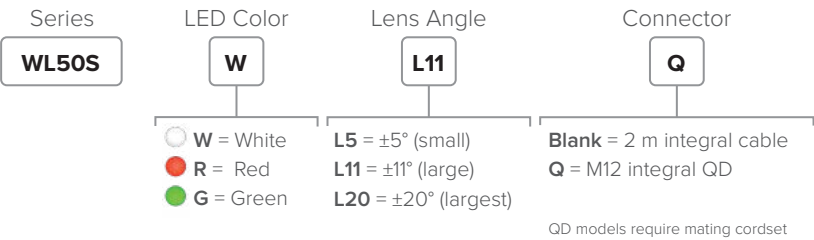


WL50S

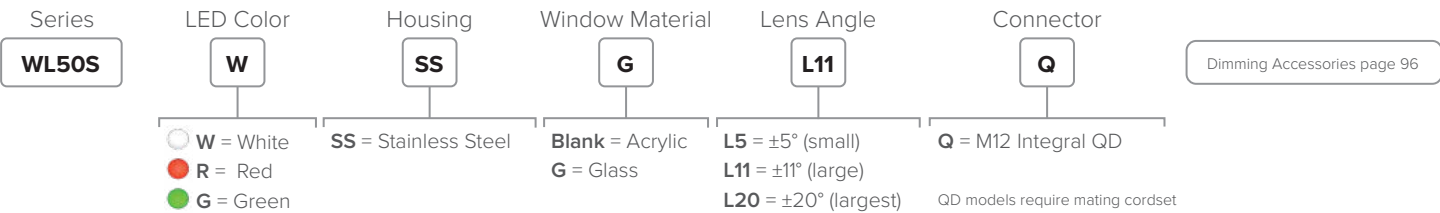
LED Spot Lights

- 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

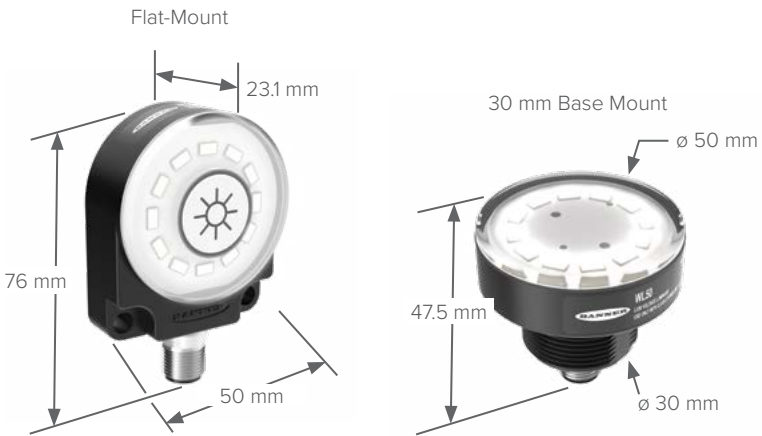
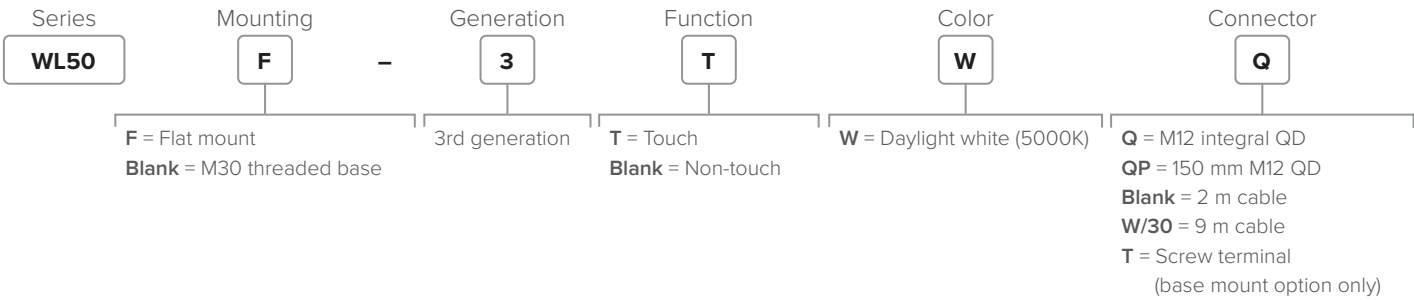
Brackets



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 96

S18	Magnet	No button	K-FLX18-18WDMAGDQP
	1/2-14 NPSM		K-FLX18-18W12XQP
	2 × 1/4-20W 1.375 spacing		K-FLX18-18WDXQP
	Flange		K-FLX18-18W12FQP
	Quick connect		K-FLX18-18WQCXQP



WLC90

Heavy-Duty LED Lights

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

Series	LED Color	Window Material	Lens Angle	Connector Exit	Control	Connector
WLC90	W	G	L15			Q
	W = Cool white	Blank = Polycarbonate G = Borosilicate glass	L8 = ±8° (small) L15 = ±15° (large) L30 = ±30° (largest)	Blank = Side exit R = Rear exit	Blank = None PWM = Pulse Width Modulation	Blank = 2 m integral cable* Q = M12 integral QD
QD models require mating cordset *Not available with PWM models						
Dimming Accessories page 96						



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

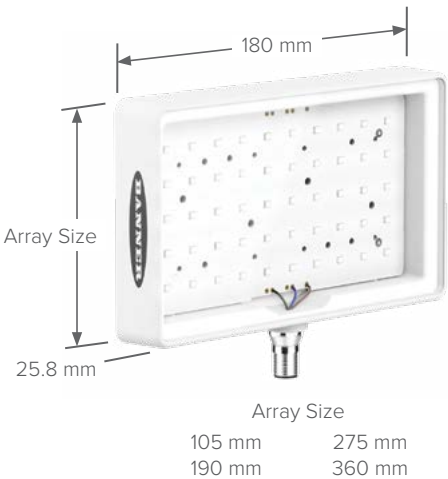


WLA-2

LED Area Lights

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

Series	Color	Array Size (mm)	Window Material	Lens Angle*	Control	Connector
WLA-2	W	105 x 180	D			Q
	W = Daylight white WW = Warm white**	105 x 180 190 x 180 275 x 180 360 x 180	Blank = Clear D = Diffuse E = Encapsulated	Blank = No lenses L30 = ±30°	Blank = Hi/Low/Off PWM = Pulse Width Modulation	Q = 4-Pin M12 integral QD QD models require mating cordset
*No lens option on encapsulated or diffuse window models **No warm white option on encapsulated models						
Dimming Accessories page 96						



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	CE, cUL US LISTED, UK CA, UL NOM
*Depending on length and color	

Brackets





Brackets



Tower Lights

Selection Guide



Page	pg. 36	pg. 37	pg. 40	pg. 39	pg. 41
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
Programmable		 (see pg. 57)			
Multicolor Options		✓		✓	
Audible	✓		✓	✓	✓
Daylight Visible					
Wireless					
Modular Construction	✓				



pg. 44	pg. 42	pg. 43	pg. 46	pg. 48
TL50 Series	TL50C Series	TL50BL Series	TL70 Series	TLF100 Pro
50	50	50	70	100
30	30	30	30	—
AC or DC	AC or DC	AC or DC	AC or DC	DC
IP67	IP67	IP67	IP65	IP65, IP69K
				
✓	✓	✓	✓	✓
✓	✓	✓	✓	✓
✓		✓		✓
			✓	
			✓	



Programmable LED indicators offer multiple color choices in a single housing



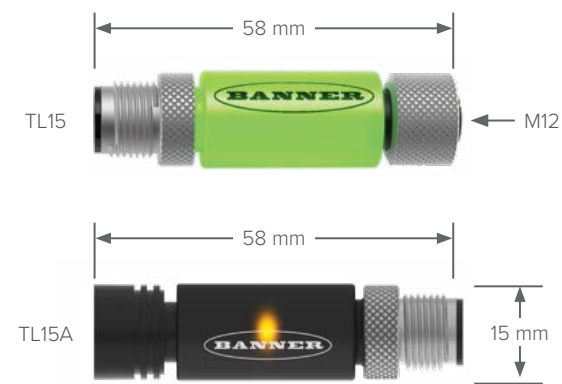
TL15

In-Line Tower Light Indicators

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

TL15 In-Line Tower Light Models

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



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

Brackets



LMBM12MAG
Attaches to M12 cordset end

LMBM12SP
Attaches to M12 cordset end

LMBS15MAG
Magnetic Mount

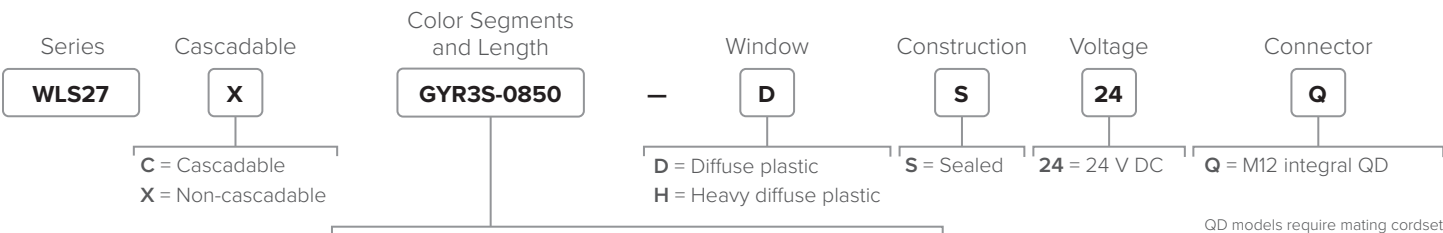
LMBS15SP



WLS27

Segmented LED Strip Lights

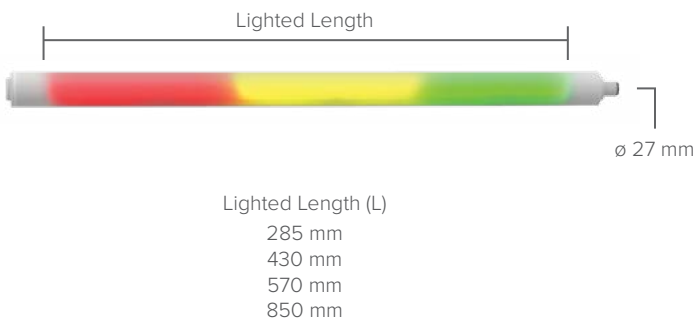
- Ultra-bright, multi-segment indicator
- Models with two or three segments available in two different segment sizes
- Rugged, water-resistant IP69K per DIN 40050-9 rating
- Power can be daisy-chained to multiple lights
- Heavy diffuse housing option provides softer, more uniform light



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



Pro Models pages 57



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

*Depending on length and color

Brackets



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

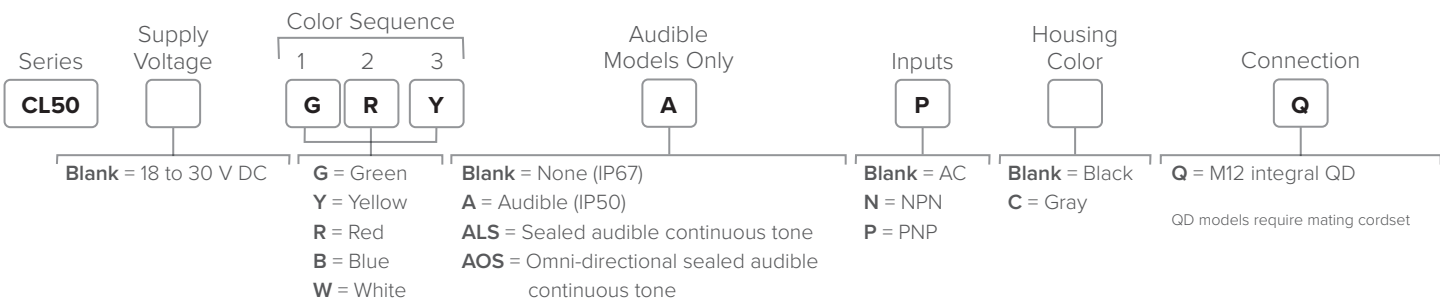


Pro Models

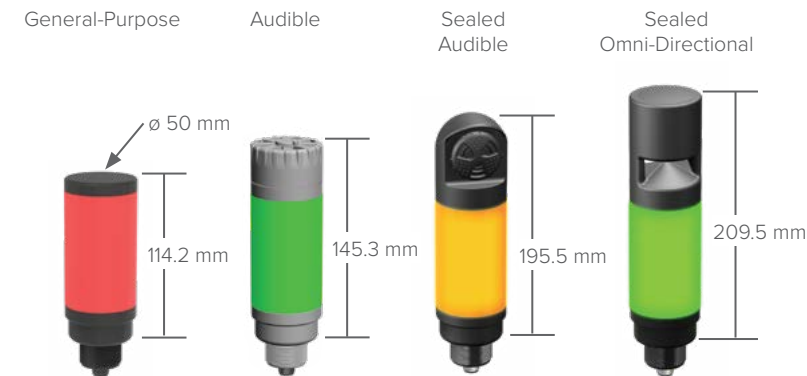
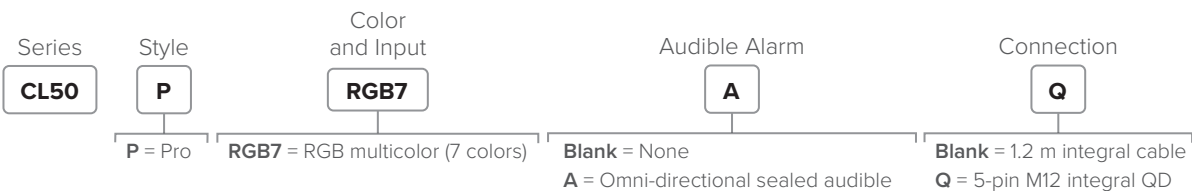
Same Functionality as Core with Additional Features Below

- 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

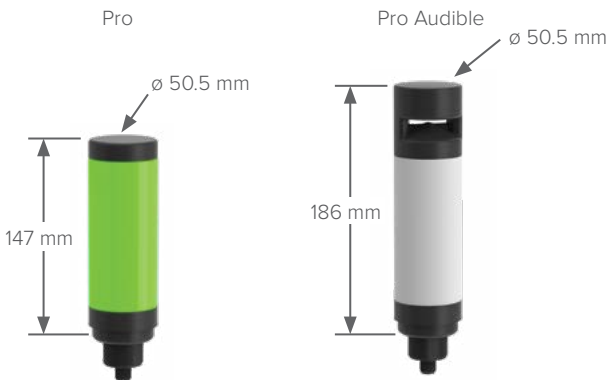
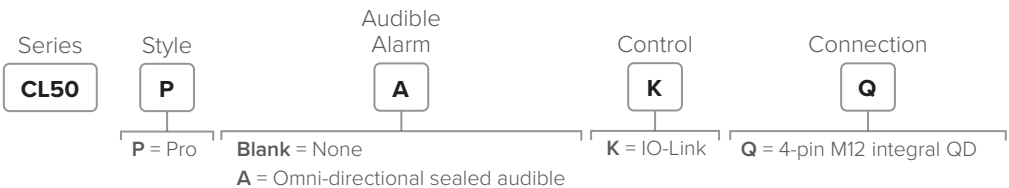


Pro Models



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

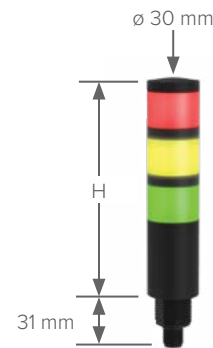
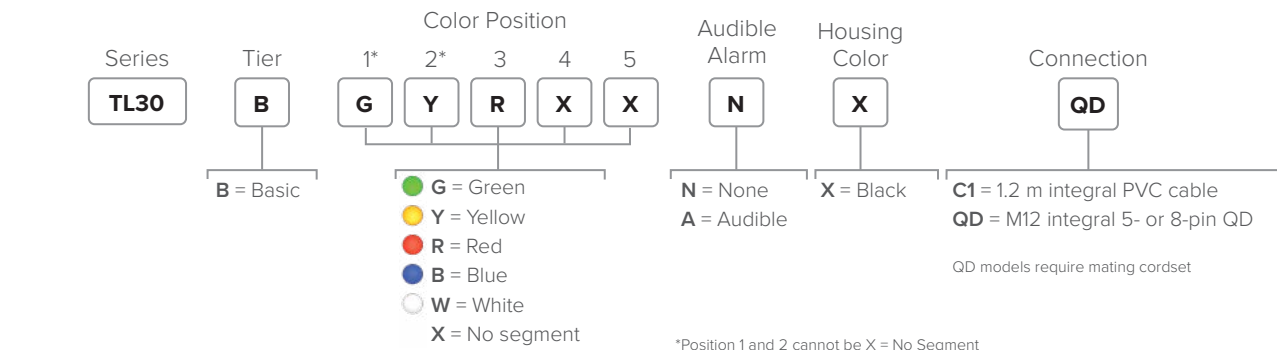




TL30

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



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

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

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

Brackets

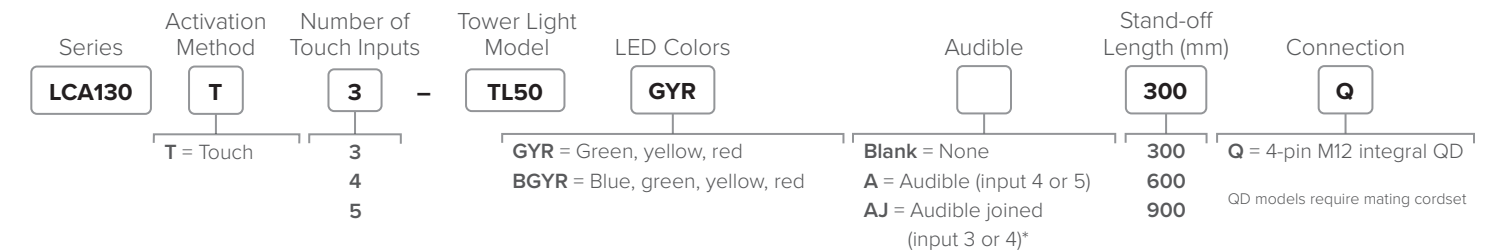


TL50 Andon

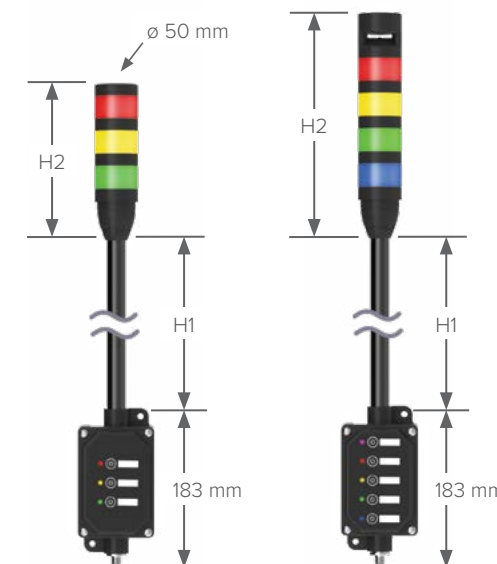
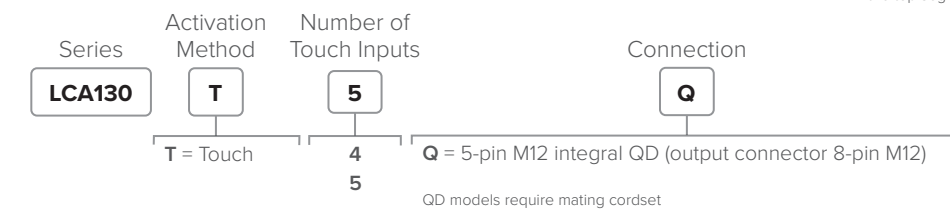
50 mm Pre-assembled Tower Lights

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

Preassembled Tower Light with Control Box Models



Standalone Control Box Models



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

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

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

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



TL50 Series

50 mm General Purpose Tower Lights

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

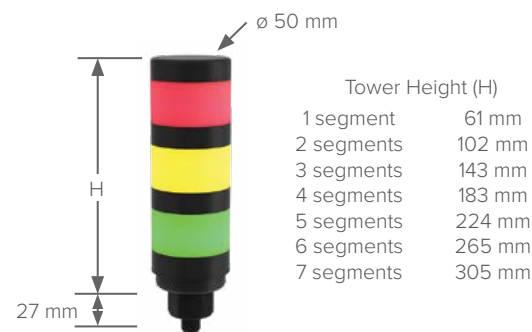


Pro Models page 44

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	TL50GYRAQ
			Blue, green, yellow, red	TL50BGYRAQ
		8-pin M12 integral QD	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

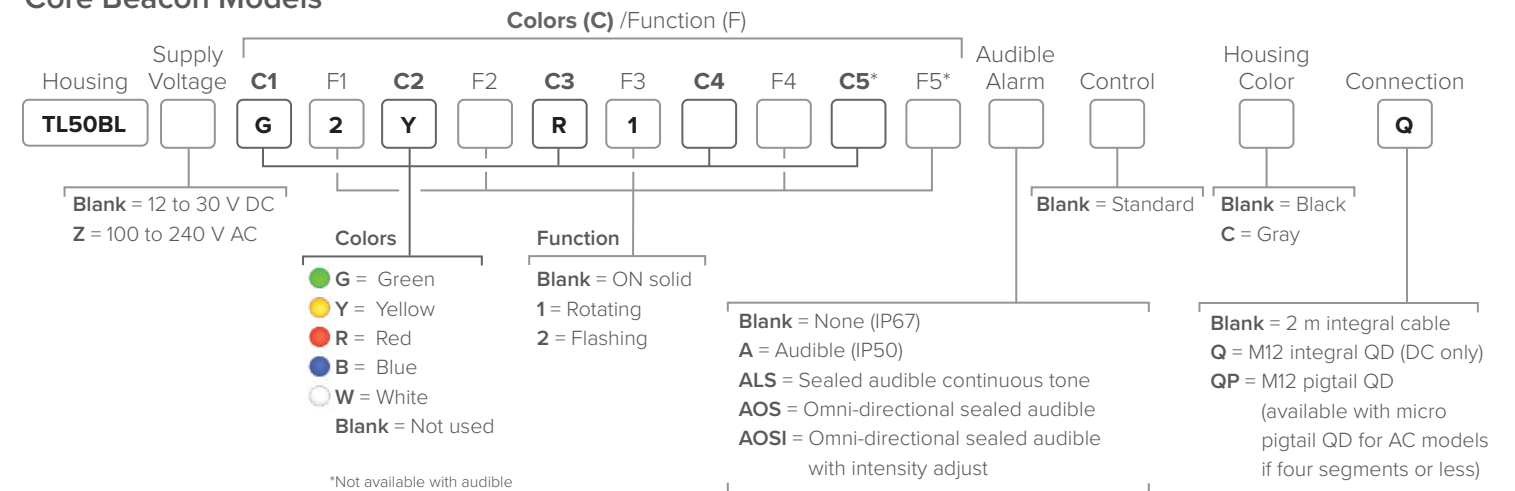
50 mm Beacon and Compact Tower Lights

- 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



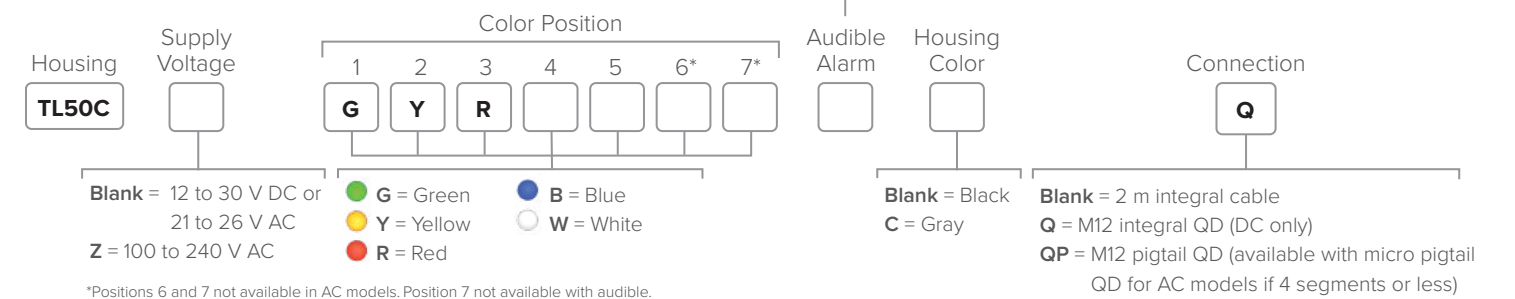
Pro Models page 44

Core Beacon Models



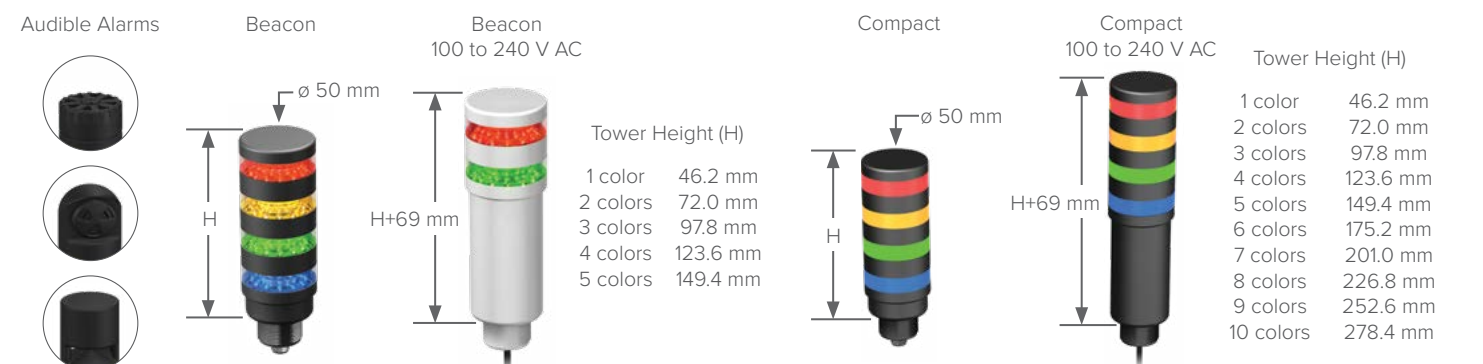
QD models require mating cordset

Core Compact Models



QD models require mating cordset

Laser Marking Available



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



TL50 Pro Series

50 mm Programmable Tower Lights

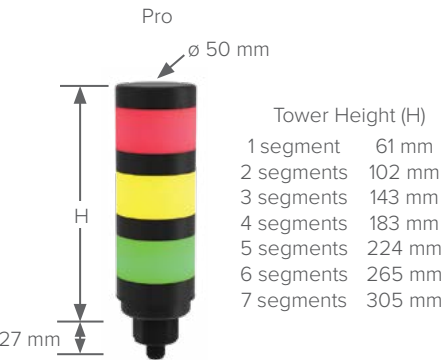
- Up to ten segments (depending on model) for advanced status signaling and high-resolution process details
- Advanced animations like level, timer, counter, and action mode provide dynamic visual response
- Parameter and process data options on IO-Link models enable fast and complete control of functionality
- 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 Models

Series	Housing	Number of Segments	Audible Alarm	Housing Color	Connection
TL50P		3	A		Q
TL50P = Pro	Blank = Standard C = Compact BL = Beacon	1 = 1 segment 2 = 2 segments 3 = 3 segments 4 = 4 segments 5 = 5 segments 6 = 6 segments 7 = 7 segments*	Blank = None A = Audible ALS = Sealed audible continuous tone AOS = Omni-directional sealed audible continuous tone AOSI = Omni-directional sealed audible continuous tone with intensity adjust	Blank = Black C = Gray	Blank = 2 m integral cable Q = M12 integral QD QP = M12 pigtail QD

Pro Models with IO-Link

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



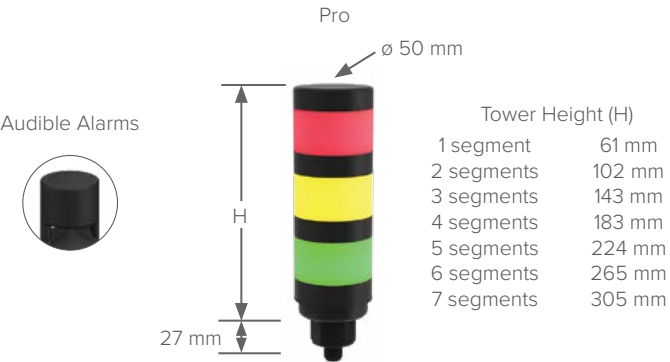
Pro Select Models

50 mm Programmable Tower Lights

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

Pro Select Models

Series	Style	Number of Segments	Audible Alarm	Control	Connection
TL50	PS	3	A		Q
PS = Pro Select		3 = 3 segments 4 = 4 segments	Blank = None A = Omni-directional sealed audible	Blank = None K = IO-Link	Blank = 1.2 m integral cable* Q = 4-pin (IO-Link models) M12 integral QD, 5-pin M12 integral QD, or 8-pin M12 integral QD



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

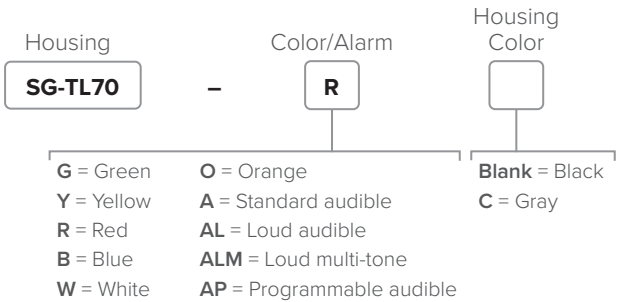


Pro Models

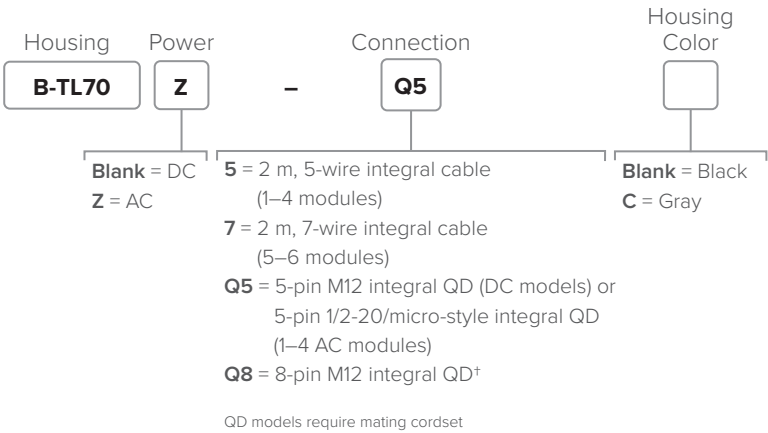
Same Functionality as Core with Additional Features Below

- 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

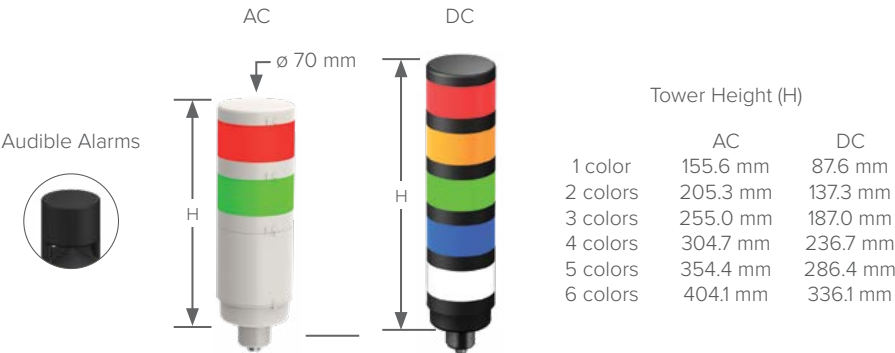
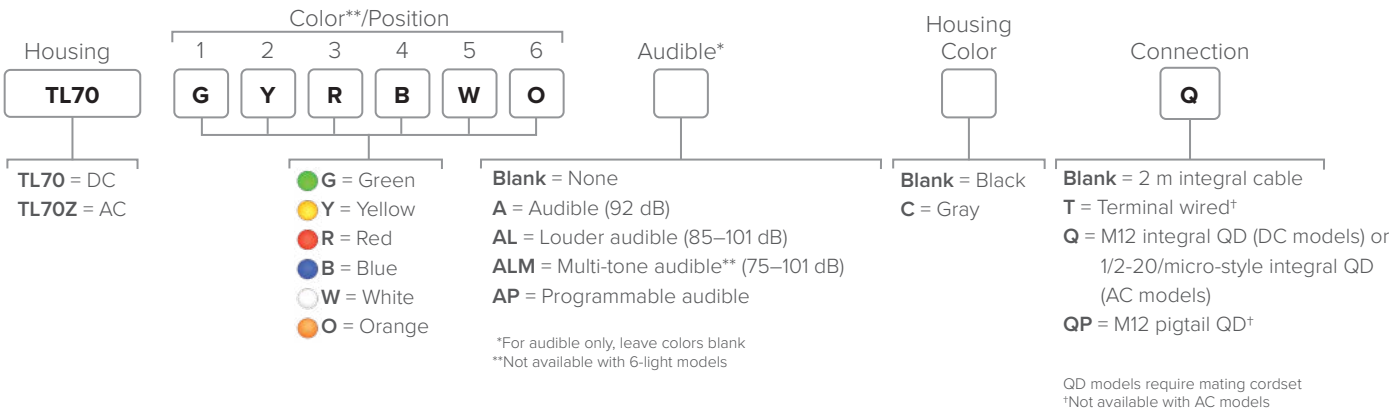
Segments or Segment Models



Bases or Base Models

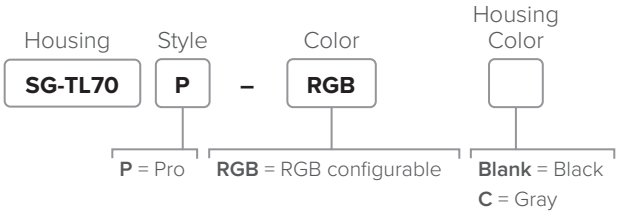


Preassembled Core Models

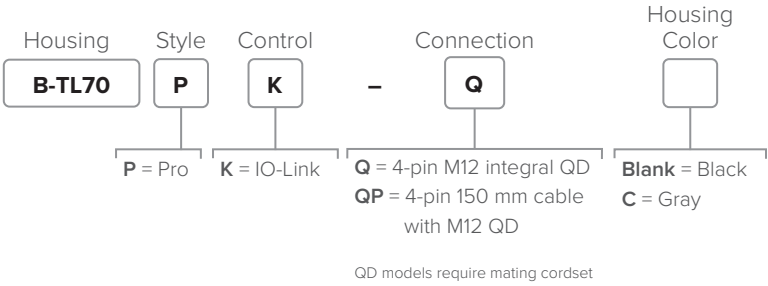


Supply Voltage	12 to 30 V DC or 100 to 240 V AC
Construction	Polycarbonate
Operating Conditions	−40 to +50 °C
Environmental Rating	IP65
Certifications	CE, UL LISTED, UK CA

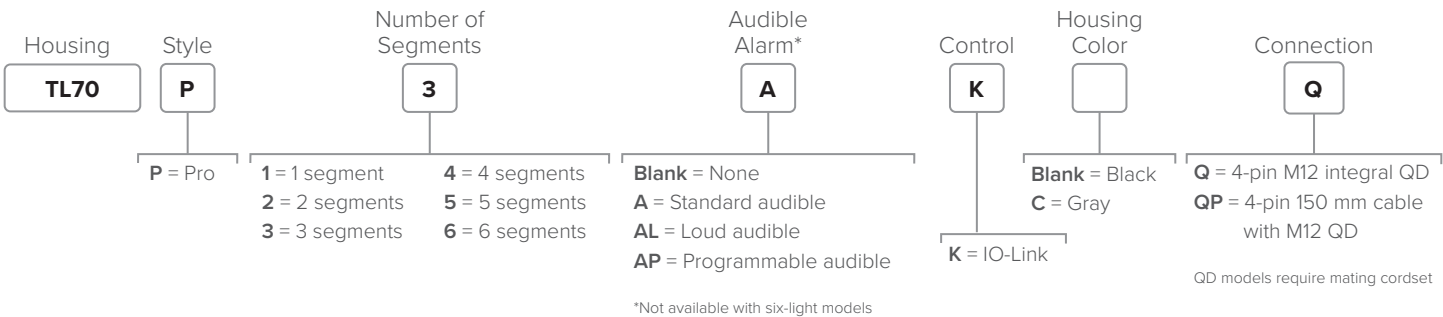
Pro Segments or Pro Segment Models



Pro Bases or Pro Base Models



Preassembled Pro Models with IO-Link



Brackets



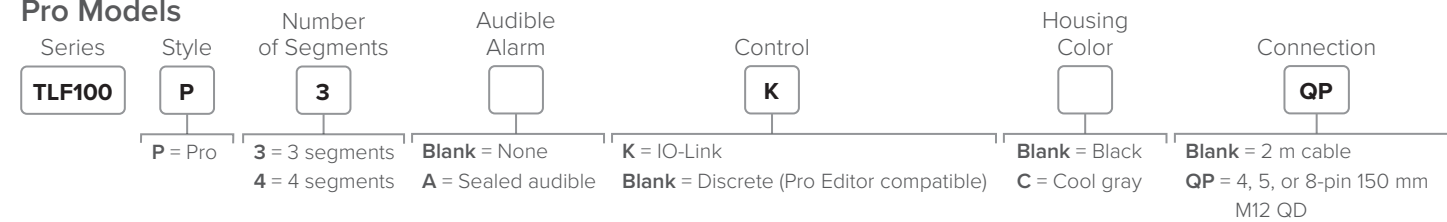


TLF100 Pro

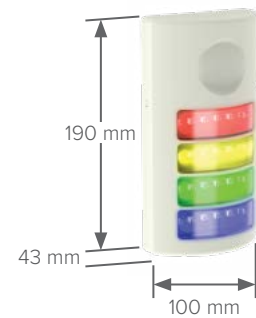
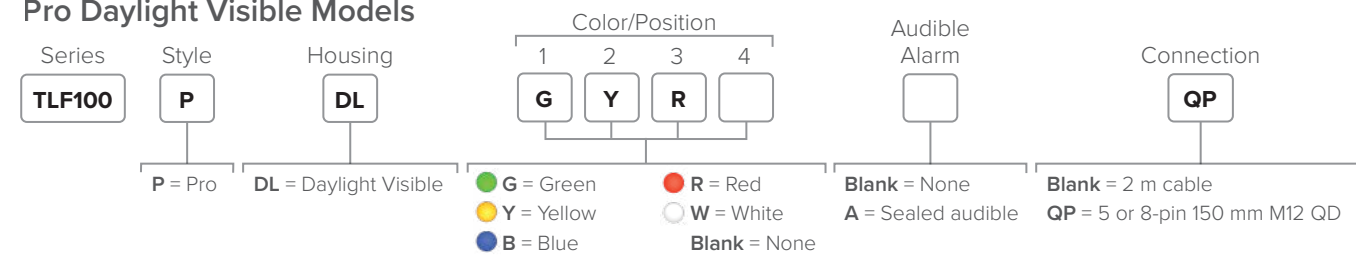
Flush Mount Tower Lights

- 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



Brackets



SMBTLF100F
Mounted Vertically













SMBTLF100F
Mounted Horizontally














Indicators



Selection Guide



Page	pg. 52	pg. 53, 54	pg. 55	pg. 56	pg. 57	pg. 58	pg. 59
Series Name	S15L	S18L/S22L	S22 Pro	WLS15 Pro	WLS27 Pro	RLS27 Pro	WLS28 Pro
Housing Diameter (mm)	15	18	20	15	27	27	28
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	IP66, IP67, IP69K	IP67, IP69K	Unsealed: IP50 Sealed: IP67, IP69K
Programmable				  	 	 	 
Multicolor Options	✓	✓	✓	✓	✓	✓	✓
Audible							
Daylight Visible		✓				✓	



pg. 39	pg. 60	pg. 63, 65	pg. 66	pg. 69	pg. 70
CL50 Series	K30 Series	K50 Series	K70 Core	K90 Series	K100 Pro
50	30	50	70	90	100
30	30	30	30	30	36
AC or DC	DC	DC	DC	DC	AC or DC
IP67	IP67, IP69K	IP65, IP67, IP69K	IP65	IP66, IP67	IP69K
 	  	  		 	 (DC models only)
✓	✓	✓	✓	✓	✓
✓		✓			✓
		✓			✓



Programmable LED indicators offer multiple color choices in a single housing



S15L Series

In-Line Sensor Status Indicators

- Two-color indicators available with green to show power and yellow or red to mimic the output status
- Mount directly on a sensor for 360-degree visibility of power and status
- Highly visible body allows workers to identify and troubleshoot problems faster
- Overmolded design is reliable and rugged to withstand harsh industrial environments
- Models available with PNP or NPN inputs

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



Supply Voltage

10 to 30 V DC

Vibration and Mechanical Shock

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

Operating Conditions

–40 to +50 °C

Environmental Rating

IP66, IP67, IP68, NEMA/UL Type 1

Certifications



Brackets



LMBM12MAG
Attaches to
M12 cordset end



LMBM12SP
Attaches to
M12 cordset end



LMBS15MAG
Magnetic Mount



LMBS15SP

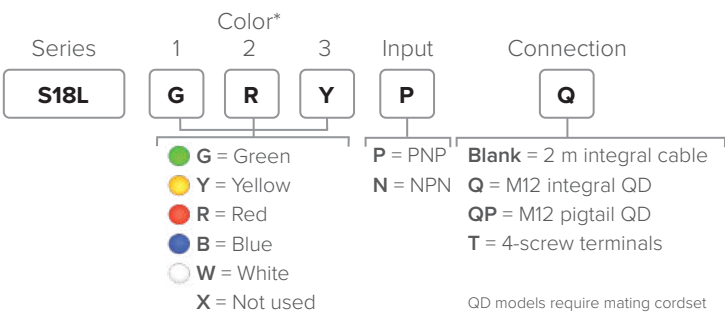


S18L Series

18 mm Barrel Indicators

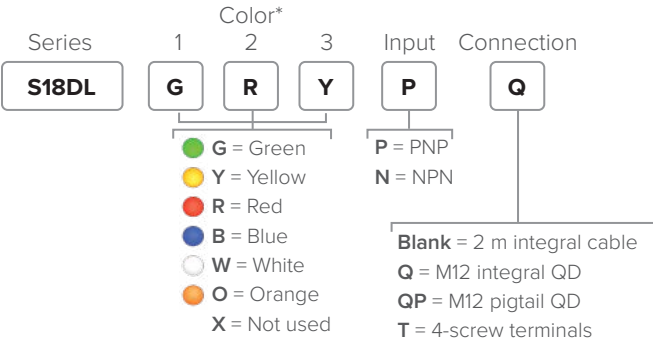
- Gasketed face flange for sealing to enclosures
- Daylight Visible models are also available for areas with high levels of ambient light
- M12 connector models available for plug-and-play indication
- 10 to 30 V DC operating range allows for use in battery-powered mobile applications
- Terminal-wired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

Standard Models



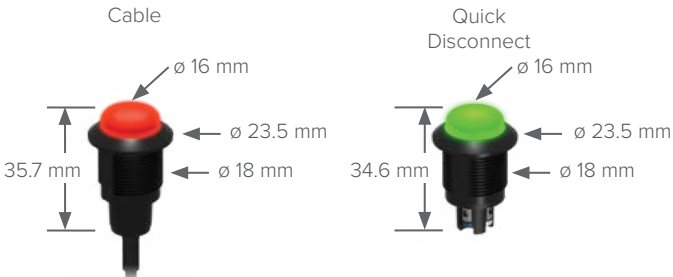
*Single-color models are available and should be ordered as PNP, but can be wired for either PNP or NPN input

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



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

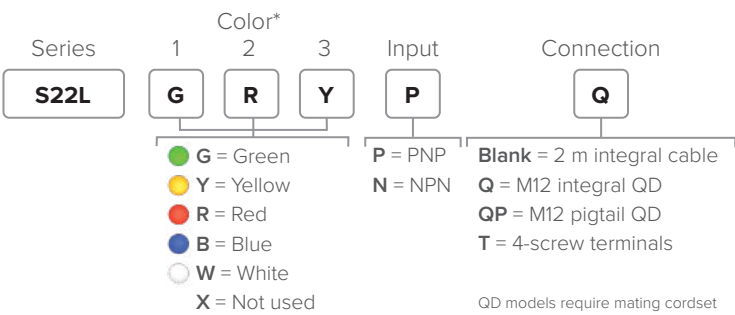


Pro Models

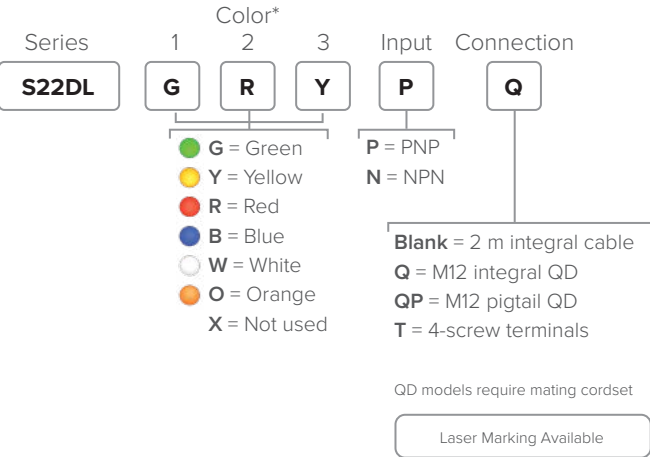
Flush Mount Programmable Indicators

- 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 74

Standard Models



Daylight Visible Models

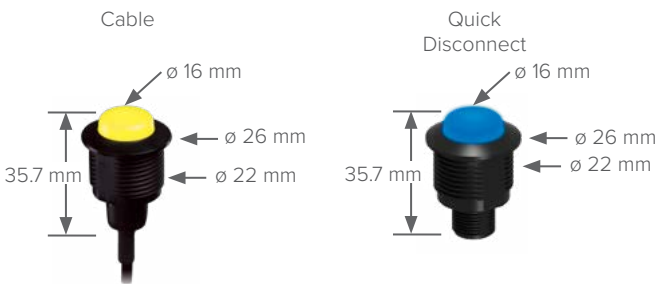


*7 colors = Green, yellow, red, blue, white, cyan, magenta with flash input

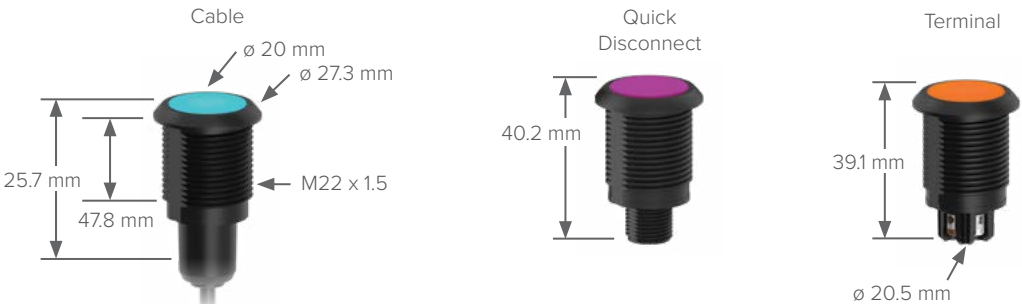
14 colors = Above colors, plus, orange, amber, lime green, spring green, sky blue, violet, and rose

Laser Marking Available

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

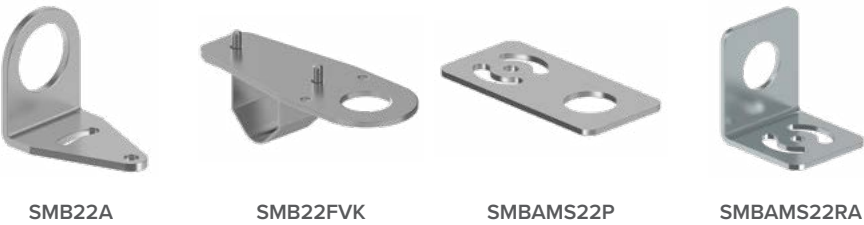



Supply Voltage	General Purpose: 10 to 30 V DC High-Intensity: 9 to 30 V DC
Construction	Housing: UV stabilized polycarbonate Mounting Nut: PBT Sealing Washer: Nitrile
Operating Conditions	General Purpose: -40 to +50 °C Other: -40 to +60 °C
Environmental Rating	IP67, IP69K, per DIN 40050
Certifications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



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

Brackets

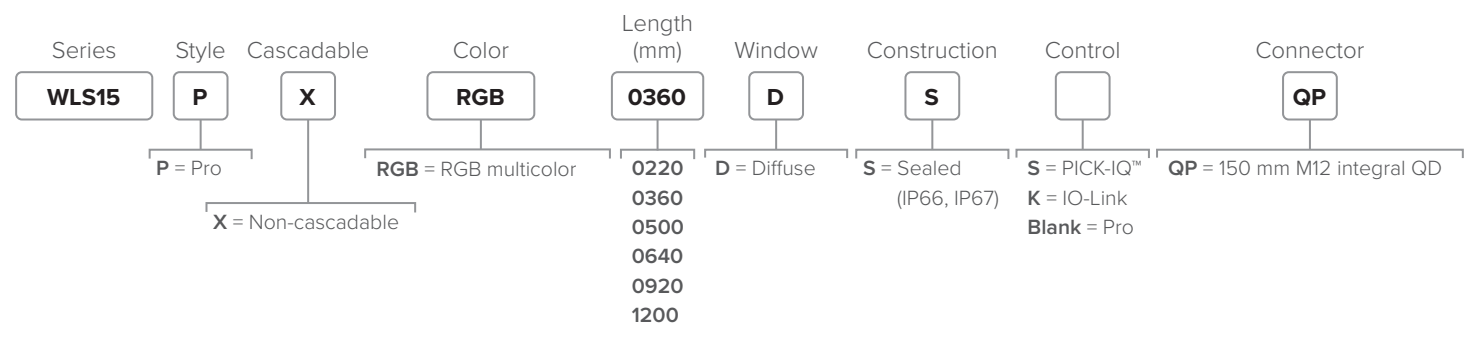





WLS15 Pro

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

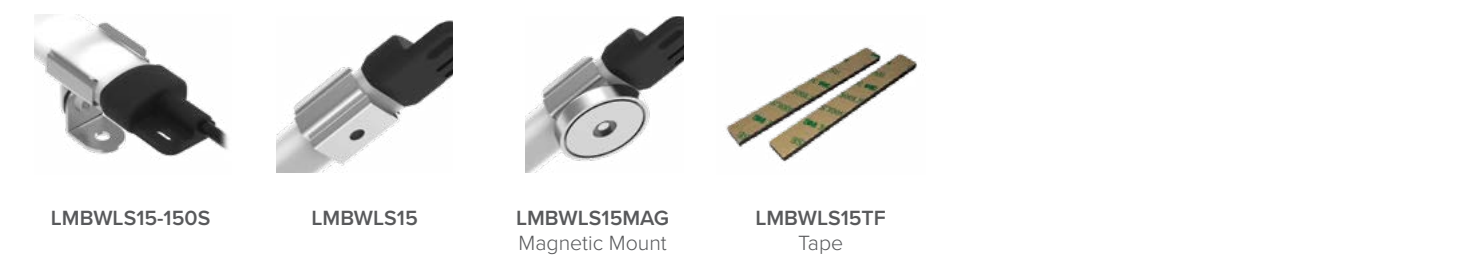
IP66, IP67

Suitable for wet locations per UL 2108

Certifications

CE, UL LISTED, UK CA, UL-MX, NOM, C US

Brackets

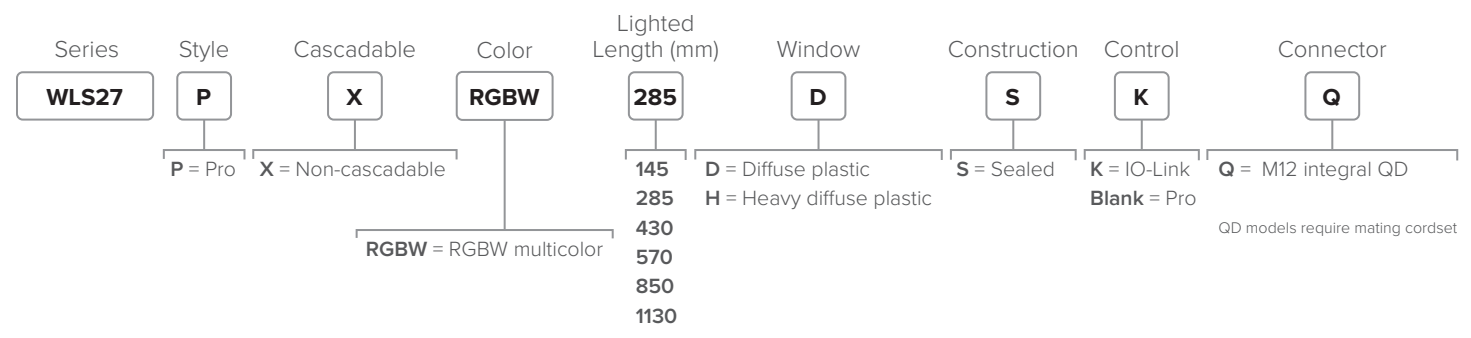


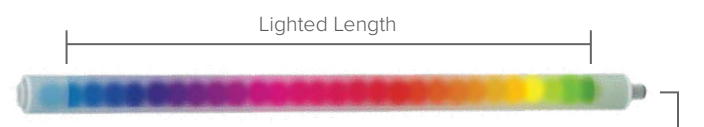


WLS27 Pro

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

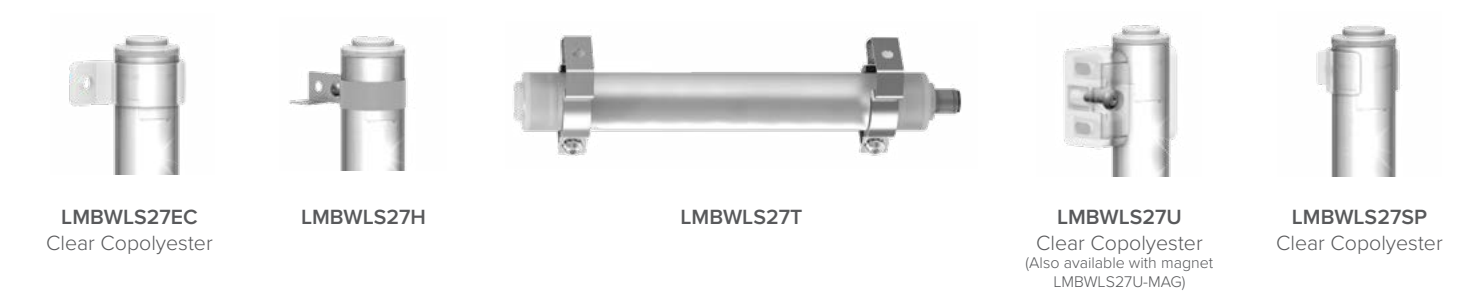
IP66, IP67, IP69K per DIN 40050-9

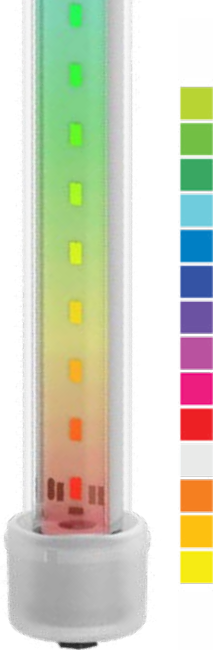
Certifications

CE, UL LISTED, UK CA, UL-MX, NOM, D

*Depending on length and color

Brackets

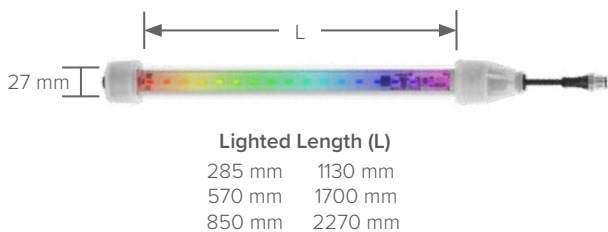
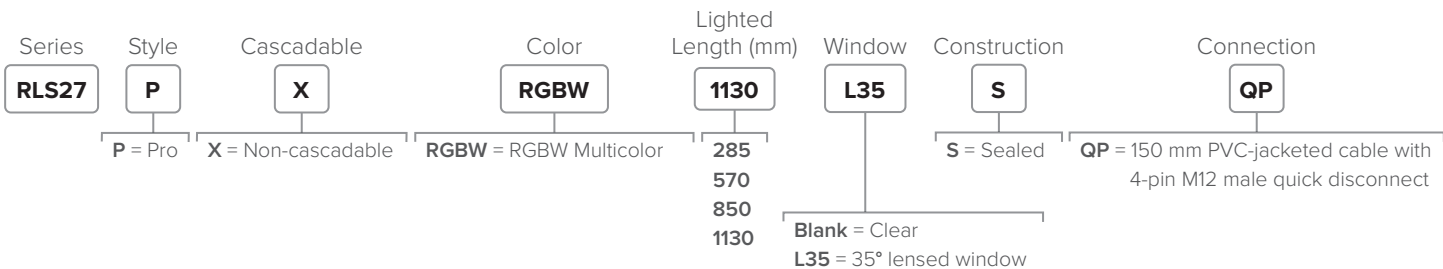




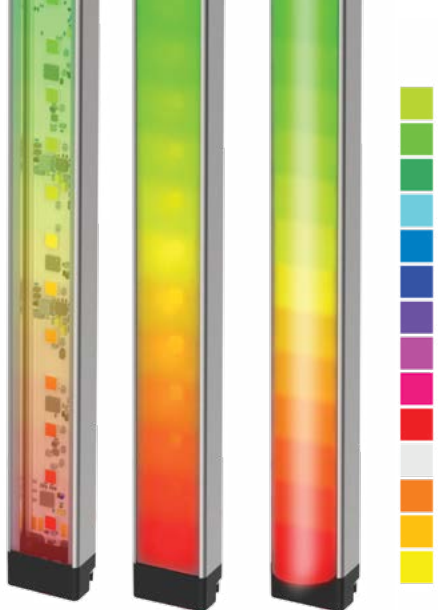
RLS27 Pro

Programmable Rugged 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
- Focused lens provides close range intensity and long range visibility
- Banner's Pro Editor Software allows users to program device status, colors, and animations
- Offers illumination and multiple indication capabilities in a single device with EZ-STATUS



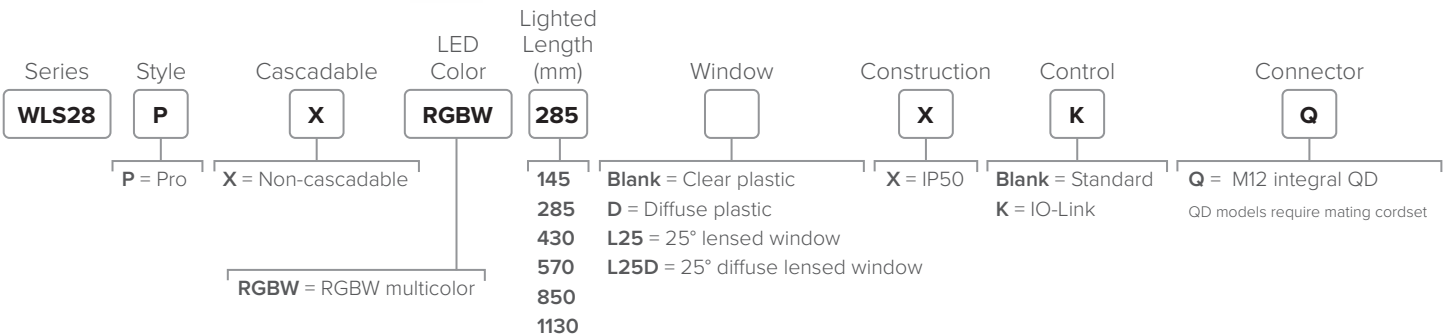
Supply Voltage	Pro: 18 to 30 V DC
Construction	Inner housing: clear anodized aluminum Outer housing: UV-stabilized polycarbonate Connector: Nickel-plated
Operating Conditions	−40 to +70 °C (−40 to +158 °F)
Environmental Rating	IP67, IP69K per DIN 40050-9
Certifications	



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

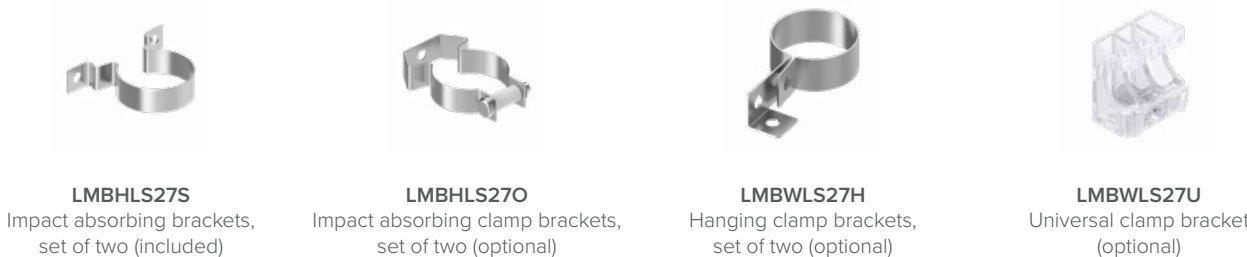


Lighted Length (L)
145 mm
285 mm
430 mm
570 mm
850 mm
1130 mm

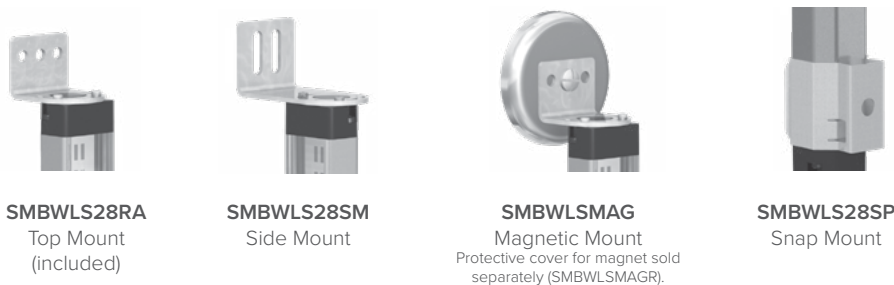
Supply Voltage	18 to 30 V DC
Construction	Housing: Clear anodized aluminum End Caps: Painted zinc Clear/Diffuse Window: Polycarbonate L25 Window: Acrylic
Operating Conditions	−40 to +50 °C
Environmental Rating	IP66, IP67, and IP69K per DIN 40050-9
Certifications	

*Depending on length and color

Brackets



Brackets





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

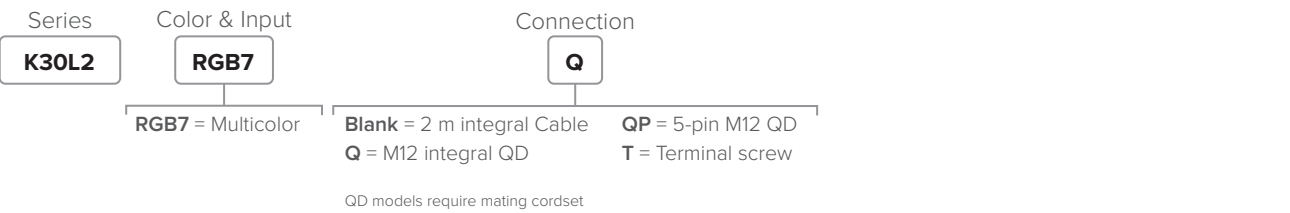
- Bright, even indication in seven standard colors, with additional color and animation options available with the exclusive Pro Editor Software
- K30 Pro devices with PICK-IQ™ and IO-Link give full access to color, flashing, rotating, and dimming settings as well as advanced animations such as dynamic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

Core Models

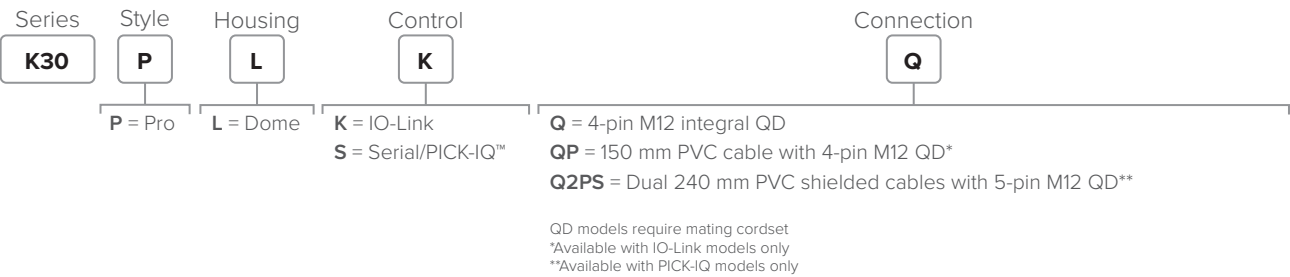
Number of Colors	Colors	Input	Connection	Models
3	Green, red, yellow	PNP	4-pin M12 integral QD	K30LGRYPQ
		NPN		K30LGRYNQ

QD models require mating cordset

Pro Models

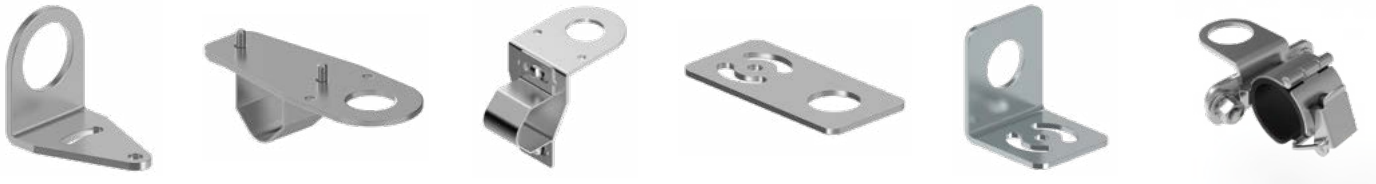


Pro Models with IO-Link or PICK-IQ



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



SMB22A SMB22FVK SMB22RAVK SMBAMS22P SMBAMS22RA LMB22LPC



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



K50 Series

50 mm Multicolor Indicators

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



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

Core Models

Series	Color/Audible				Input	Connection
	1	2	3	4		
K50L	G	R		Y	P	Q
K50L = Dome K50CL = Flat mount*	G = Green R = Red Y = Yellow B = Blue W = White O = Orange X = No color**	A1 = Steady (75 dB, IP50) A2 = Pulsed (75 dB, IP50) AL1 = Loud steady (95 dB, IP50) ALS = Sealed continuous tone (94 dB, IP67) ALS4 = Sealed staccato tone (94 dB, IP67)*** AS = Steady (65 dB, IP69K)*** Blank = None			P = PNP N = NPN	Blank = 2 m integral cable Q = 4-pin M12 integral QD* QP = 150 mm PVC cable with 4-pin M12 QD QPMA = 150 mm PUR cable with 4-pin M12 QD QD models require mating cordset

*Not available with audible
**LED color designated with X also indicates that the associated input wire is not used.
***Not available with NPN

Pro Models

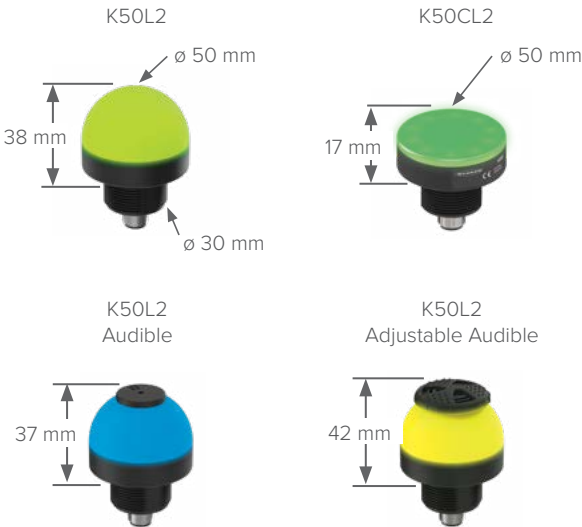
Series	Material	Color & Input	Audible Alarm**	Connection
K50L2		RGB7	A1	Q
K50L2 = Dome K50CL2 = Compact***	Blank = Standard F = FDA grade	RGB7 = RGB multicolor (7 colors) RGBK = RGB multicolor with IO-Link	Blank = No audible A1 = Audible AL1 = Loud audible ALS = Sealed audible	Blank = 2 m integral cable Q = M12 integral QD*** QP = M12 pigtail QD QD models require mating cordset

**Audible models not available in FDA grade material or compact
***Compact and integral QD models not available in FDA grade material

Pro Models with PICK-IQ

Series	Style	Activation Method	Control	Connection
K50	P	L	S	Q
P = Pro		L = Indicator	S = Serial/PICK-IQ™	Q = 4-pin M12 integral QD
Q2PS = Dual 240 mm PVC shielded cables with 5-pin M12 integral QDs				
QD models require mating cordset				

Brackets



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



K50 Beacon

50 mm Multicolor Indicators

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



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			5-pin M12 integral quick disconnect	K50BLXBXPQ
	Perimeter and top view				K50BCLXBXPQ
White	Perimeter view only				K50BLXWXPQ
	Perimeter and top view				K50BCLXWXPQ
Green, red, yellow	Perimeter view only				K50BLGRYPQ
	Perimeter and top view				K50BCLGRYPQ

*AC, rotating, and strobing models available. Visit bannerengineering.com for other available models.



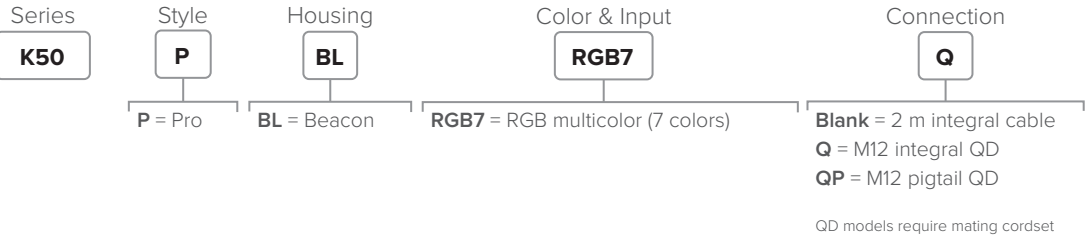
Supply Voltage	12 to 30 V DC
Construction	Polycarbonate
Operating Conditions	−40 to +50 °C
Environmental Rating	IP67, IP69K per DIN 40050-9*

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

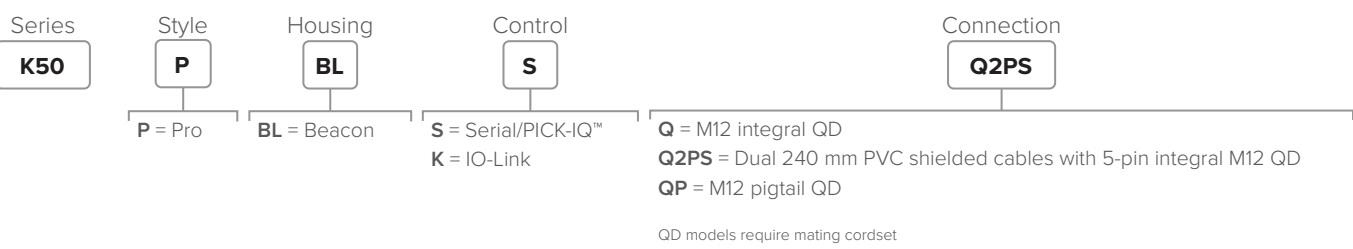
Brackets



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	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



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

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	CE, UL LISTED, UK CA

Brackets



SMB30A



SMB30FVK



SMB30RAVK



SMBAMS30P



SMBAMS30RA



SMB30MM

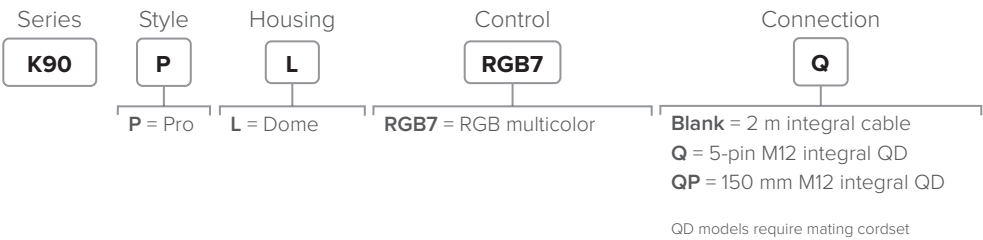


SMB30SC

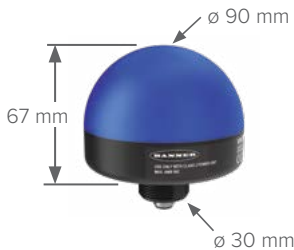
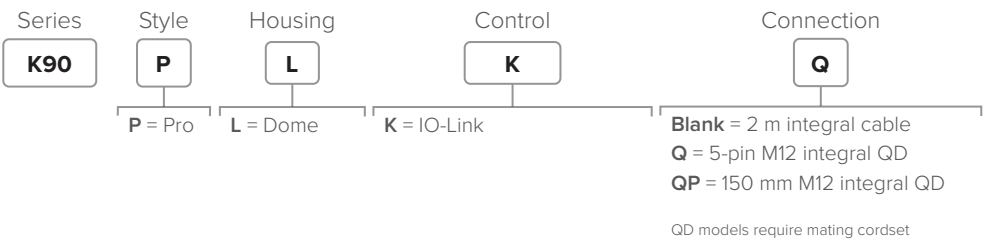


SMB30FA

Pro Models



Pro Models with IO-Link



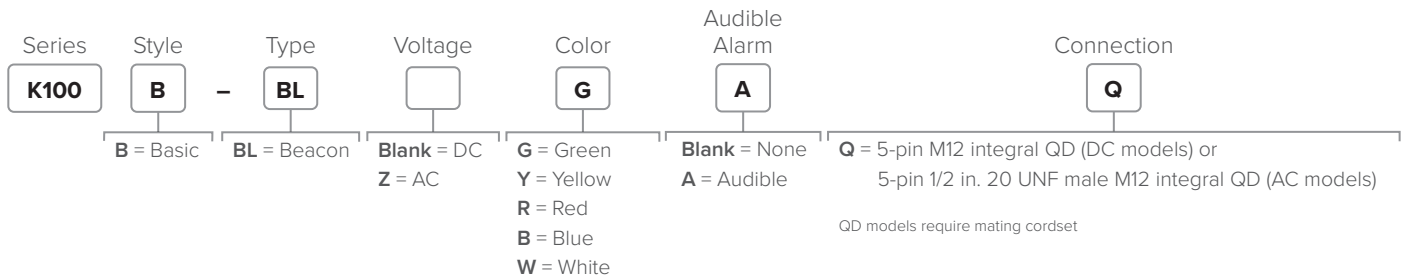
Supply Voltage	Pro: 10 to 30 V DC IO-Link: 18 to 30 V DC
Construction	Polycarbonate
Operating Conditions	−40 to +50 °C
Environmental Rating	IP67, UL Type 4X, UL Type 13
Certifications	CE, UL LISTED, UK CA



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

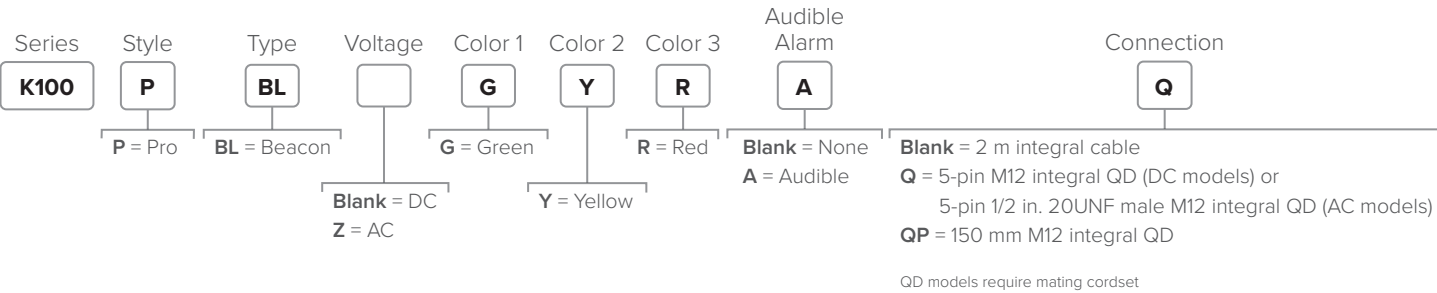
Programmable Multicolor Indicators

- 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

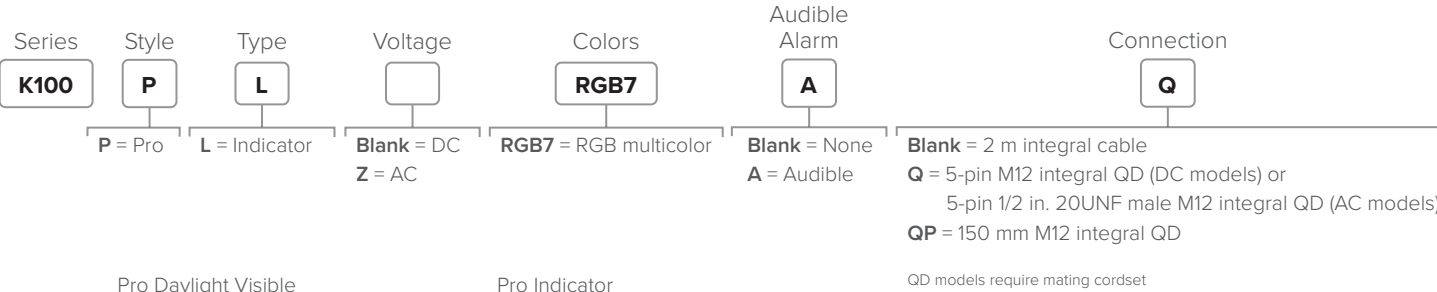
Pro Daylight Visible Single Color Models



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. 74	pg. 77	pg. 75	pg. 82
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
Programmable		 		
Multicolor Options	✓	✓	✓	✓
Audible				

pg. 78, 80	pg. 81	pg.84	pg. 86
K50 Touch Series	K50 Pro Touch Display	K70 Touch Series	PTL110
50	50	70	15
30	30	30	—
DC	DC	DC	DC
IP65, IP67, IP69K	IP67, IP69K	IP65	IP66, IP67
✓	✓	✓	
✓		✓	



Programmable LED indicators offer multiple color choices in a single housing

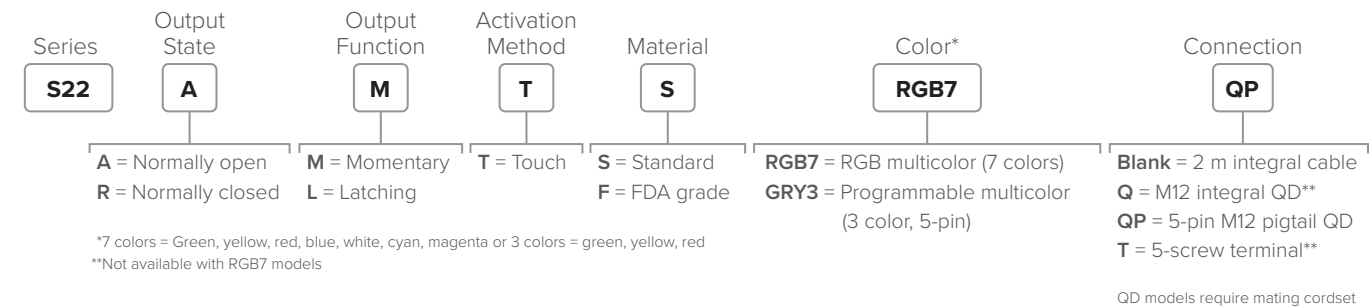


S22 Pro Touch

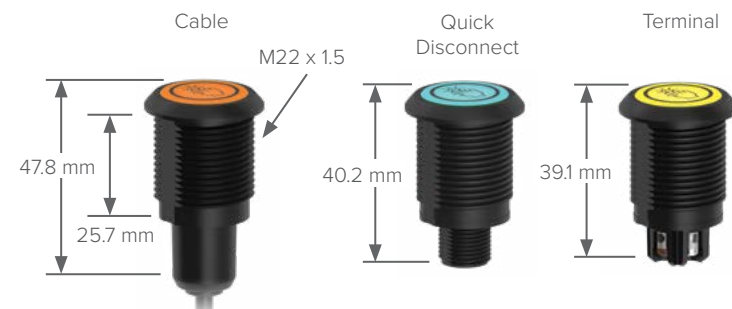
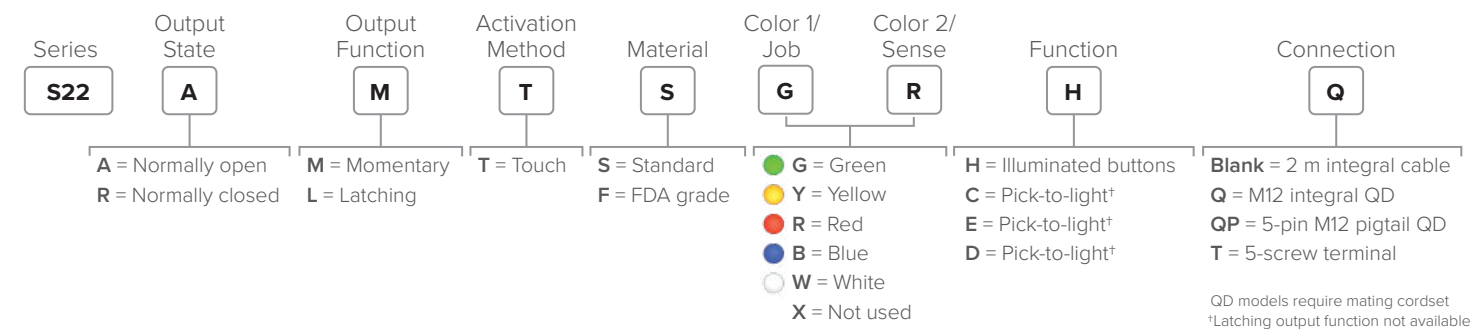
Programmable Flush Mount Touch Button Indicators

- 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



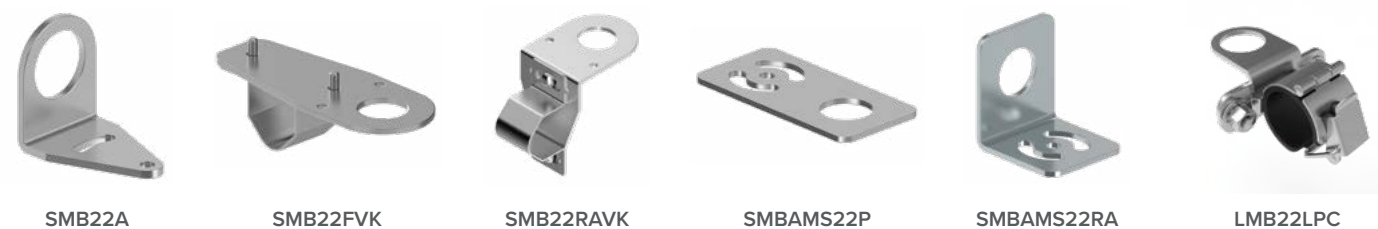
One- or Two-Color/Function Models



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	

††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

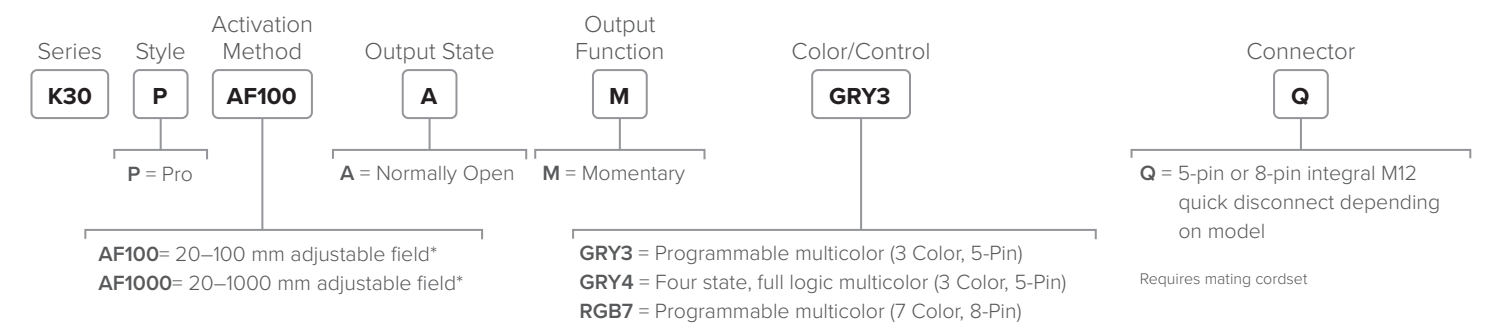


K30 Pro Optical Sensor

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

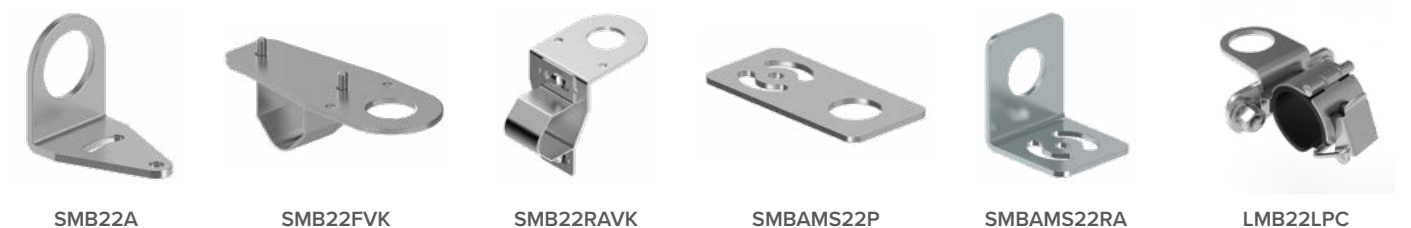


*Detection distance can be adjusted through teach mode or Pro Editor. Max distance = 1000 mm.



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	

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

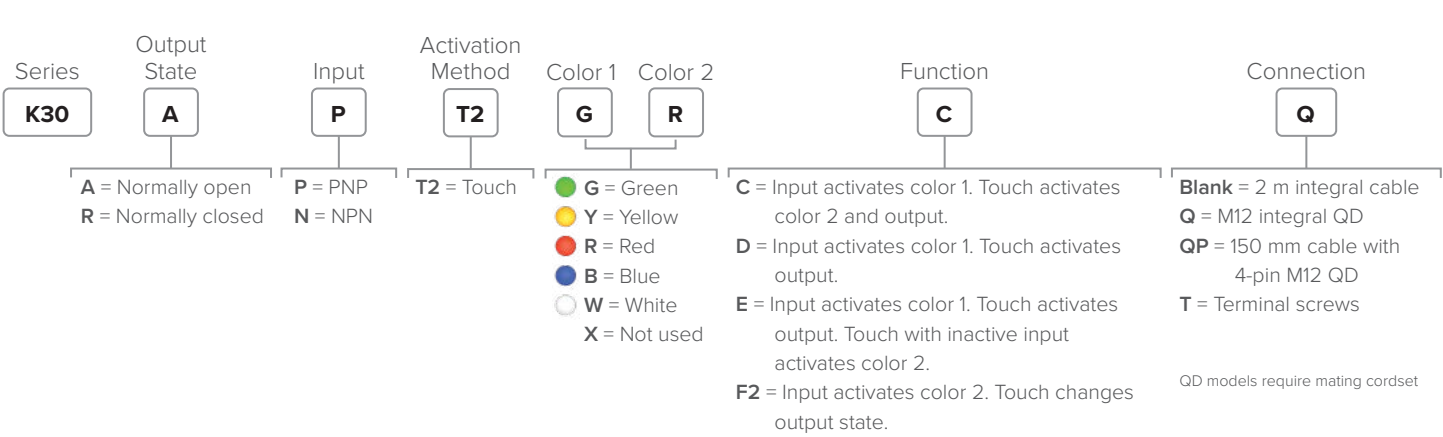


Pro Models

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



SMB22A

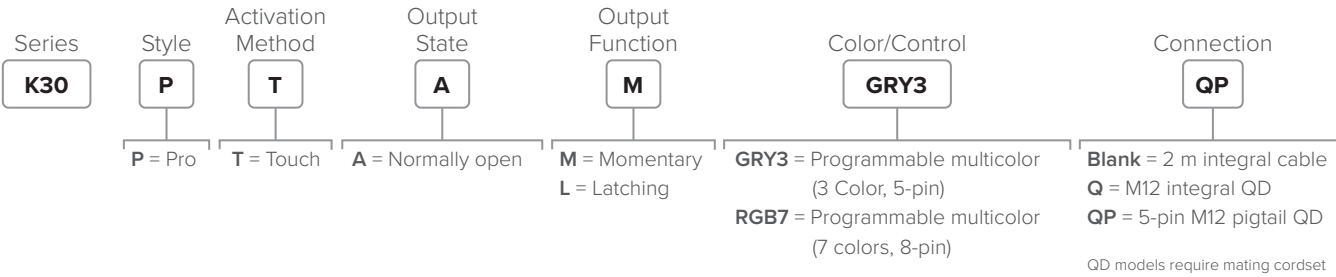


SMBAMS22P

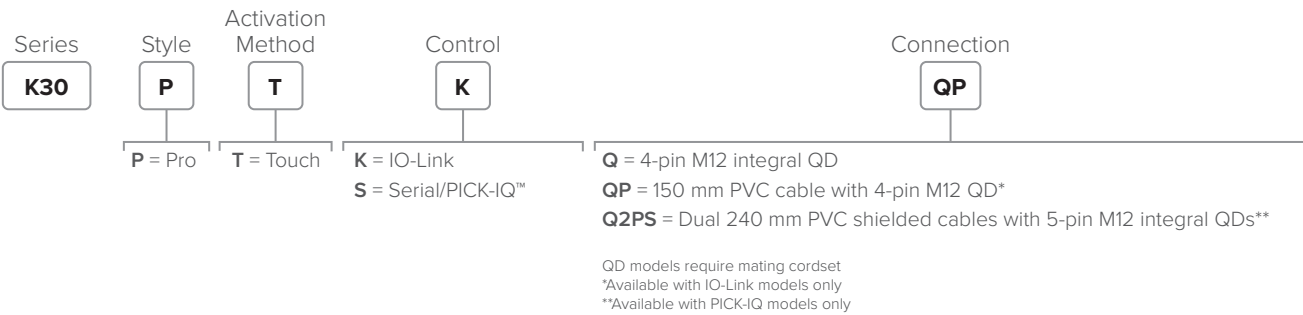


SMBAMS22RA

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
Green, red	Input activates color 1. Touch activates color 2 and output.			K50APT2GRCQ
	Input activates color 1. Touch activates output. Touch with inactive input activates color 2.			K50APT2GREQ
Green, red, yellow	Power activates color 1. Touch changes bipolar output state and activates color 2. Latch and momentary options.	PNP & NPN	5-pin M12 integral QD	K50ALBT2GRHQ
	Three inputs activate three colors. Color 3 overrides colors 1 and 2, and color 2 overrides color 1. Touch changes output state.		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	CE, UL LISTED, UK CA

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

Brackets

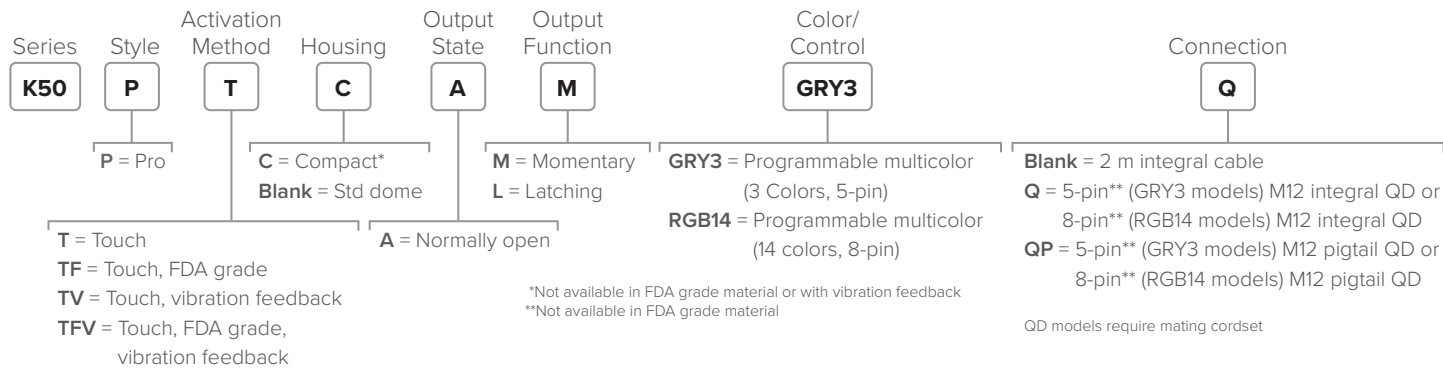


Pro Models

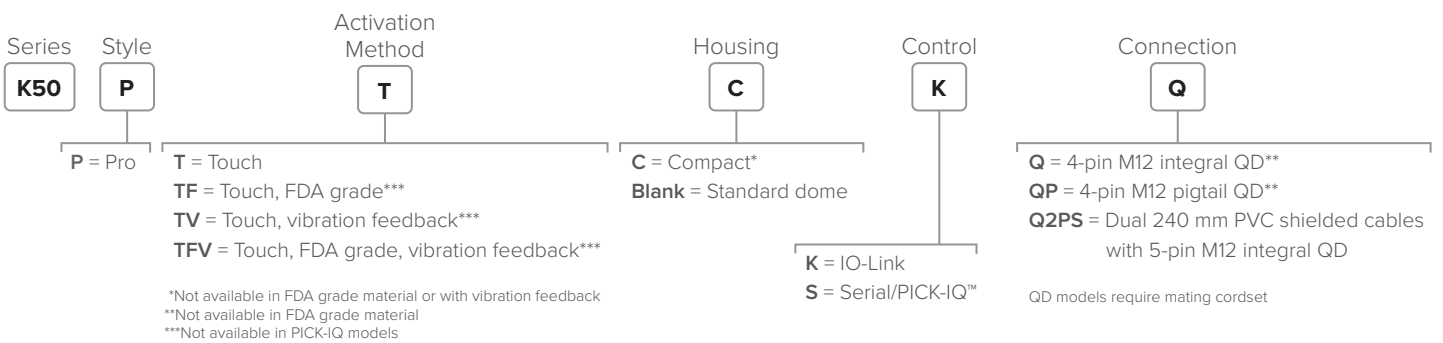
Same Functionality as Core with Additional Features Below

- 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

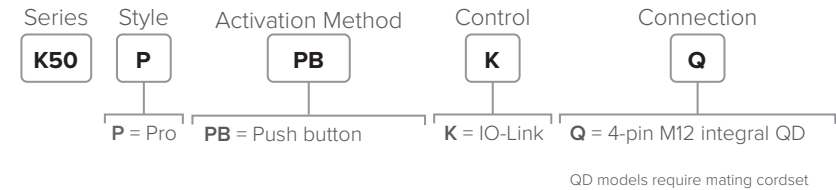
Pro Touch Models



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	CE, UL LISTED, UK CA

*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

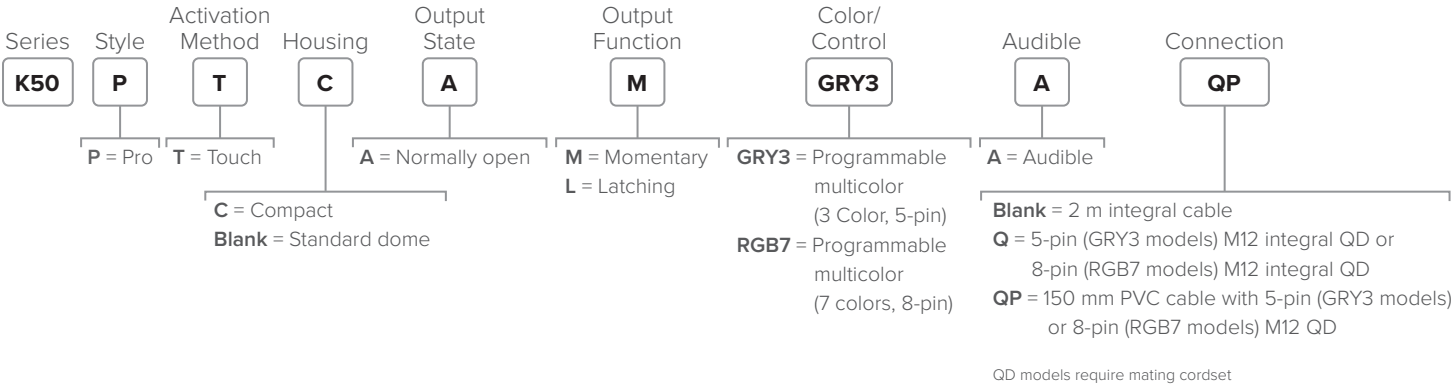


K50 Pro Touch with Display

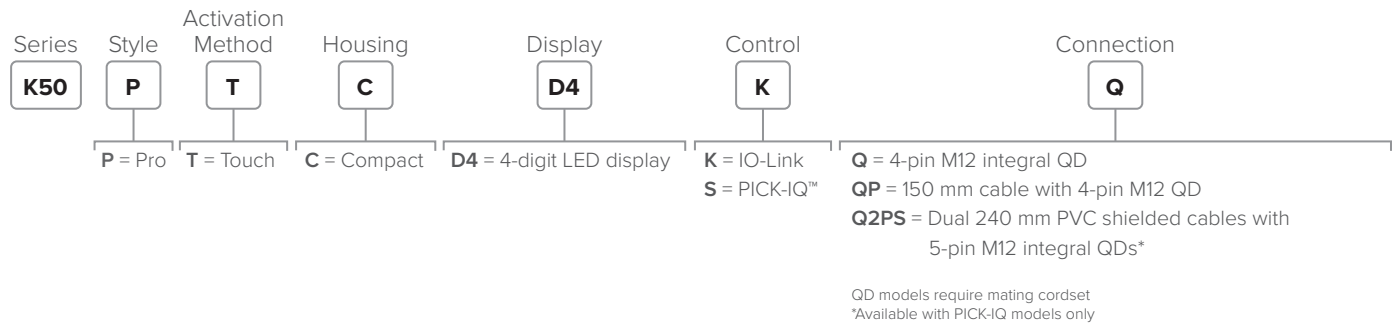
50 mm Advanced Programmable Touch Button Indicators

- 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

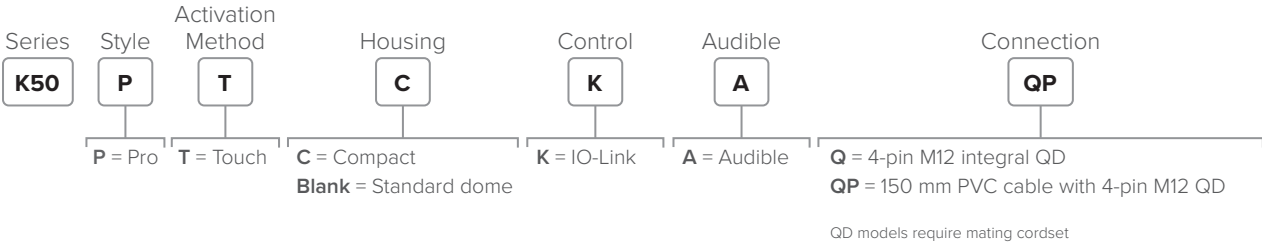
Pro Touch with Audible Models



IO-Link and PICK-IQ Models

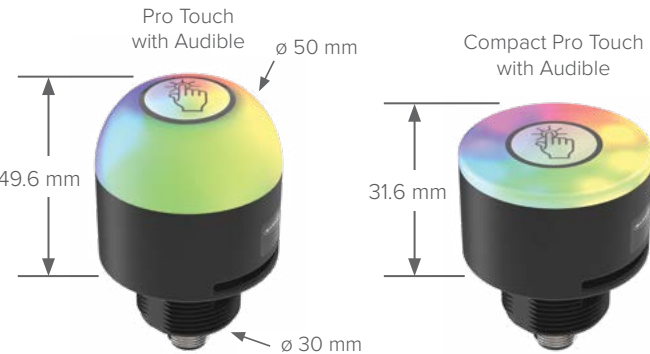


Pro Touch with Audible and IO-Link Models



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	CE, UL LISTED, UK CA

**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	CE, UL LISTED, UK CA

*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

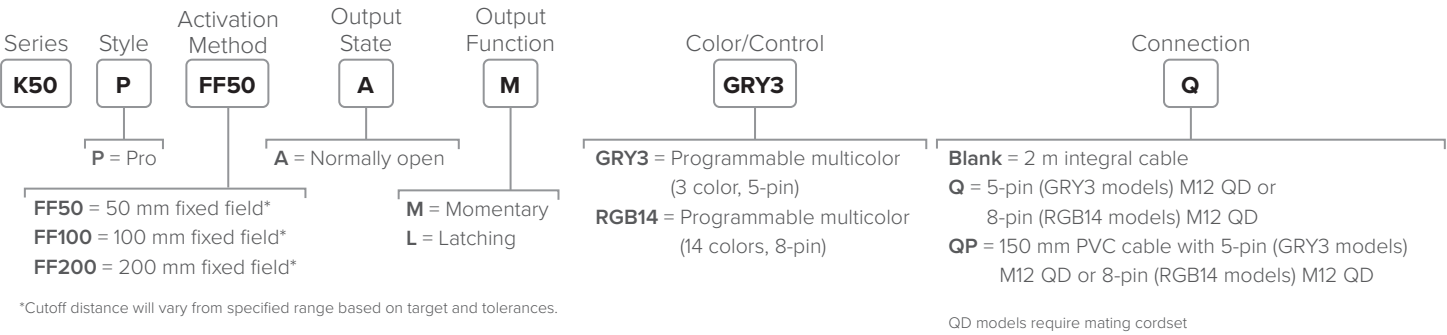
Colors	Function	Sensing Mode/LED	Range	Output	Connection	Models
Green	Input activates color 1. Presence of hand activates output.	Fixed field, infrared, 880 nm	50 mm cutoff	PNP, N.O.	4-pin M12 integral QD	K50APFF50GXDQ
Green, red	Input activates color 1. Presence of hand activates output and overrides 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



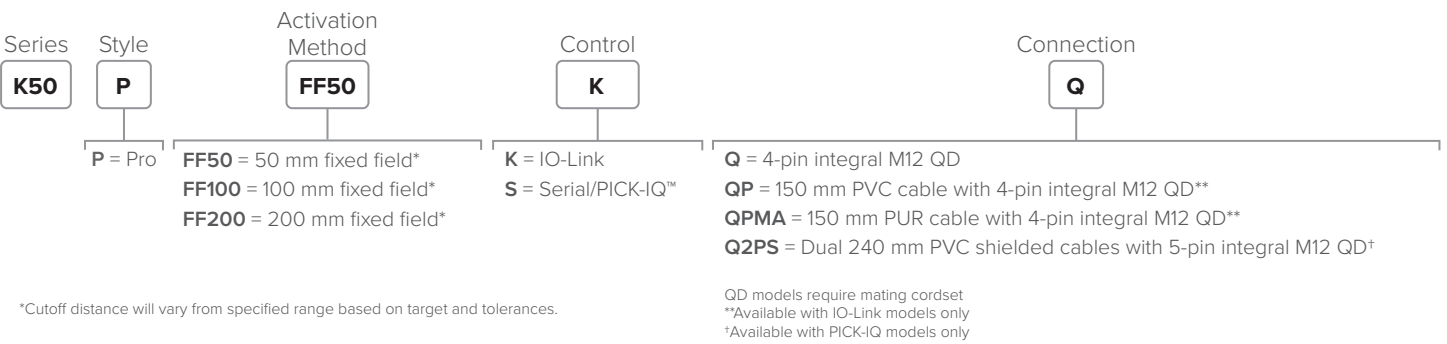
Supply Voltage	12 to 30 V DC
Construction	Standard: Polycarbonate
Operating Conditions	−40 to +50 °C
Environmental Rating	Standard: IP67, IP69K per DIN 40050-9*
Certifications	CEULUSLISTEDUKCA

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

Pro Optical Models



Pro Optical Models with IO-Link or PICK-IQ



Brackets



SMB30A



SMB30FVK



SMB30RAVK



SMBAMS30P



SMBAMS30RA



SMB30MM



SMB30SC



SMB30FA



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	CEULUSLISTEDUKCA

*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

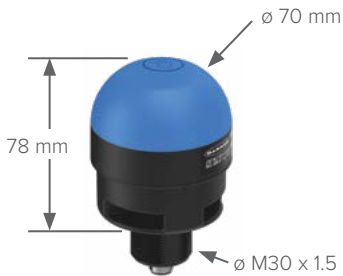
- Integrated audible alarm provides additional indication and feedback for enhanced operator experience and improved productivity
- Integral audible alarm can be toggled on and off discretely and as a function of touch logic
- Twelve different tones available, including intensity and input control
- 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
				K70APT2GREQ
	Multipurpose			K70APT2GRYF2Q
Green, red, yellow	Job light always on with job input until touched. Touch activates output and overrides job light with sense light. Touch with inactive job input activates mispick light and activates output.			K70APT2GRYC3Q

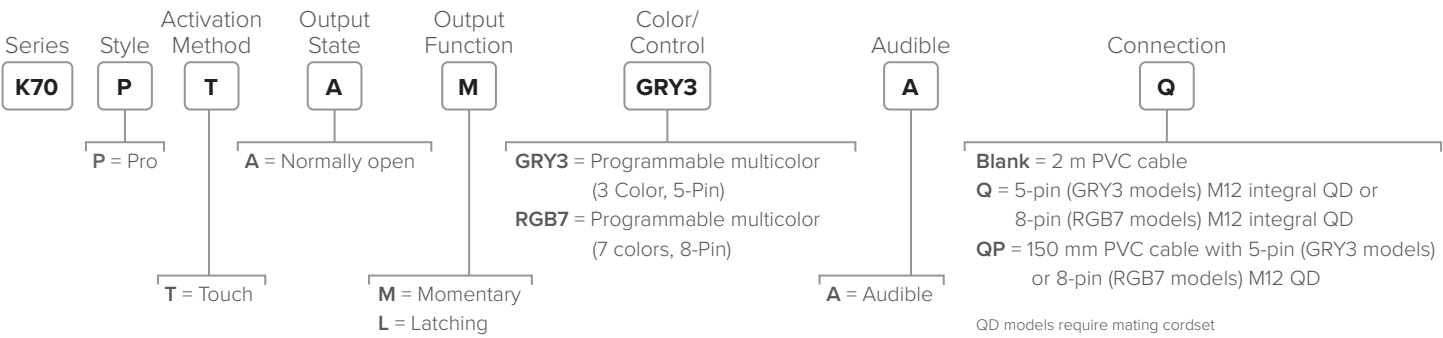


Supply Voltage	12 to 30 V DC
Audible Intensity	95–103 dB at 1 m
Construction	Polycarbonate
Operating Conditions	–40 to +50 °C
Environmental Rating	IP65
Certifications	CE, UL LISTED, UK CA



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

Pro Touch Models



Brackets



Brackets

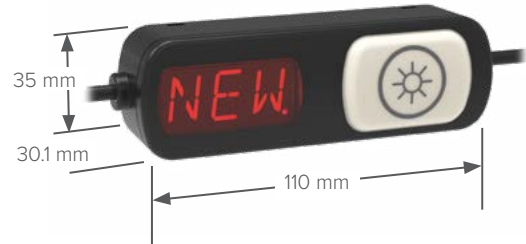
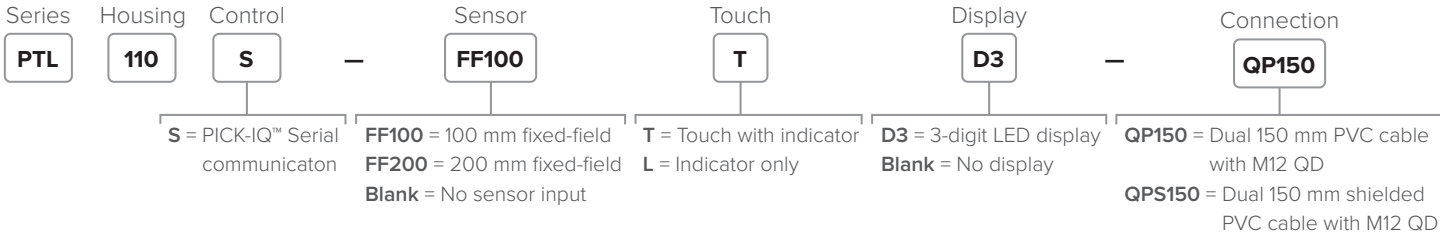





PTL110

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	CE  UK CA

Brackets



LMBPTL110C
For 28 mm
Tubular Racking



LMBPTL110F
For Slotted Extrusion
and Flat Rail Mounting



LMBPTL110A45
For Slotted Extrusion
and Flat Rail Mounting

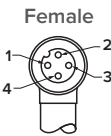


Connectivity



Accessories

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



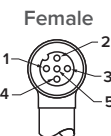
	Length	Straight	Right-Angle	Pinout	
4-Pin Female QD to Flying Leads	1 m	MQDC-403	—		1 = Brown 2 = White 3 = Blue 4 = Black
	2 m	MQDC-406	MQDC-406RA		
	3 m	MQDC-410	—		
	5 m	MQDC-415	MQDC-415RA		
	9 m	MQDC-430	MQDC-430RA		
	15 m	MQDC-450	MQDC-450RA		
	18 m	MQDC-460	MQDC-460RA		
	21 m	MQDC-470	MQDC-470RA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



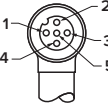
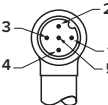
	Length	Straight/Straight (female/male)	Straight/Right-Angle (female/male)	Pinout	
4-Pin Double-Ended	0.3 m	MQDEC-401SS	MQDEC-401RS	<div><div>Female</div></div>	<div>1 = Brown 2 = White 3 = Blue 4 = Black</div>
	0.6 m	MQDEC-402SS	—		
	0.9 m	MQDEC-403SS	MQDEC-403RS		
	1.8 m	MQDEC-406SS	MQDEC-406RS		
	3.0 m	MQDEC-410SS	—		
	3.6 m	MQDEC-412SS	MQDEC-412RS	<div><div>Male</div></div>	
	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	22 AWG	

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



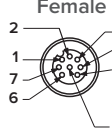
	Length	Straight	Right-Angle	Pinout	
5-Pin Female QD to Flying Leads	0.9 m	MQDC1-503	—		1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
	2 m	MQDC1-506	MQDC1-506RA		
	5 m	MQDC1-515	MQDC1-515RA		
	9 m	MQDC1-530	MQDC1-530RA		
	18 m	MQDC1-560	—		
	30 m	MQDC1-5100	—	22 AWG	Cable ø – 5.6 mm



	Length	Straight/Straight (female/male)	Straight/Right-Angle	Pinout	
5-Pin Double-Ended	0.3 m	MQDEC-501SS	—		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	—		
			22 AWG	Cable ø – 5.6 mm	

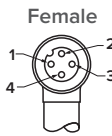
8-Pin M12 (Voltage: 30 V DC/AC, Current: 2 A)



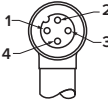
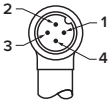
	Length	Straight	Right-Angle	Pinout	
8-Pin Female QD to Flying Leads Open Shield with Drain Wire	2 m	MQDC2S-806	MQDC2S-806RA		1 = White 2 = Brown 3 = Green 4 = Yellow 5 = Gray 6 = Pink 7 = Blue 8 = Red
	5 m	MQDC2S-815	MQDC2S-815RA		
	10 m	MQDC2S-830	MQDC2S-830RA		
	16 m	MQDC2S-850	MQDC2S-850RA		
	31 m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

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



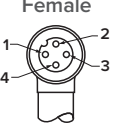
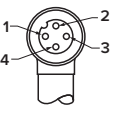
	Length	Straight	Right-Angle	Pinout	
4-Pin Female QD to Flying Leads	2 m	MQDC-406-PUR	MQDC-406RA-PUR		1 = Brown 2 = White 3 = Blue 4 = Black
	5 m	MQDC-415-PUR	MQDC-415RA-PUR		
	10 m	MQDC-430-PUR	MQDC-430RA-PUR	22 AWG	Cable ø – 4.1 mm



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

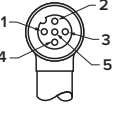
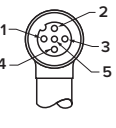


4-Pin M12 Lighted (Voltage: 10 to 30 V DC at 15 mA max)

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

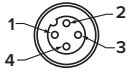


5-Pin M12 Lighted (Voltage: 10 to 30 V DC at 15 mA max)

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






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

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





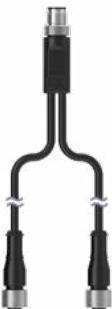
5-Pin M12 Washdown (Voltage: 60 V DC/AC, Current: 4 A)

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



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

	Models	Cable Lengths		Pinout
		Trunk (Male)	Branches (Female)	
4-Pin	CSB-M1240M1241	No Trunk/Integral QD	2 x 0.3 m	<div><div>Female</div><div></div><div><div>Male</div><div></div><div>1 = Brown 2 = White 3 = Blue 4 = Black</div></div></div>
	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	<div><div><div>Branch 1 (female)</div><div><div>1</div><div>2</div><div>3</div><div>4</div></div></div><div><div>Trunk (male)</div><div><div>1</div><div>2</div><div>3</div><div>4</div></div></div><div>Branch 2 (female)</div></div>
	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)	<div><div><div>Female</div><div><div>1</div><div>2</div><div>3</div><div>4</div><div>5</div></div></div><div><div>Male</div><div><div>1</div><div>2</div><div>3</div><div>4</div><div>5</div></div></div><div>1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray</div></div>
	CSB-M1251FM1251M	0.3 m (Female)	2 x 0.3 m (Male)	
				22 AWG Cable ø – 5.9 mm



Wall Plug Cordsets

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



Cascade Cordsets

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



2-Pin Single Color Only Cordsets

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



Pro Accessories



Pro Editor Cable Accessory Kit

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



Pro Editor Converter Cable

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



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



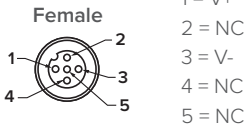
Pro Cordset

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

Power Accessories



5-Pin Power Supply

	Model	Input	Output	Length	Pinout
5-Pin	PSW-24-1	100 to 240 V AC	Voltage: 24 V DC \pm 5% Current: 1.0 Amp Power: 24 W max.	2 m	
	PSD-24-4	90 to 264 V AC	Voltage: 24 V DC \pm 5% Current: 3.9 Amp Power: 96 W max.	1.5 m	



Inline AC/DC Power Converter*

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

*For use with actuator products

Switches and Dimming Accessories

WLS28 In-Line Switches

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

LC15T and LC25T In-Line Touch Switches

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

LC65 LED Dimmer Module

Connection	Pulse Width Modulation Type	Models
Terminal block	3-Wire	LC65P1T
	2-Wire	LC65P2T
	3-Wire	LC65P1Q5
1 - 150 mm 5-pin M12 PVC cable with a female, stainless steel QD 1 - 150 mm 4-pin M12 PVC cable with a female, stainless steel QD	2-Wire	LC65P2Q5

Standoff Pipe Accessories

Standoff Pipes

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



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.



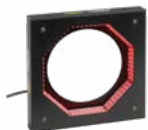
Area Lights
Area Lights create shadows to detect changes in depth, illuminate specific surface angles, and avoid glare from reflective surfaces when directed at an angle away from the lens.



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.



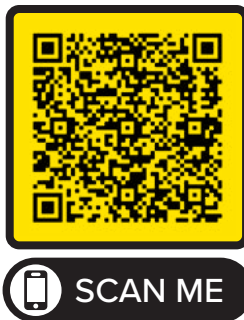
On-Axis Lights
On-Axis Lights evenly illuminate flat reflective surfaces and deliver collimated illumination in the same optical path as a camera.



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.



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