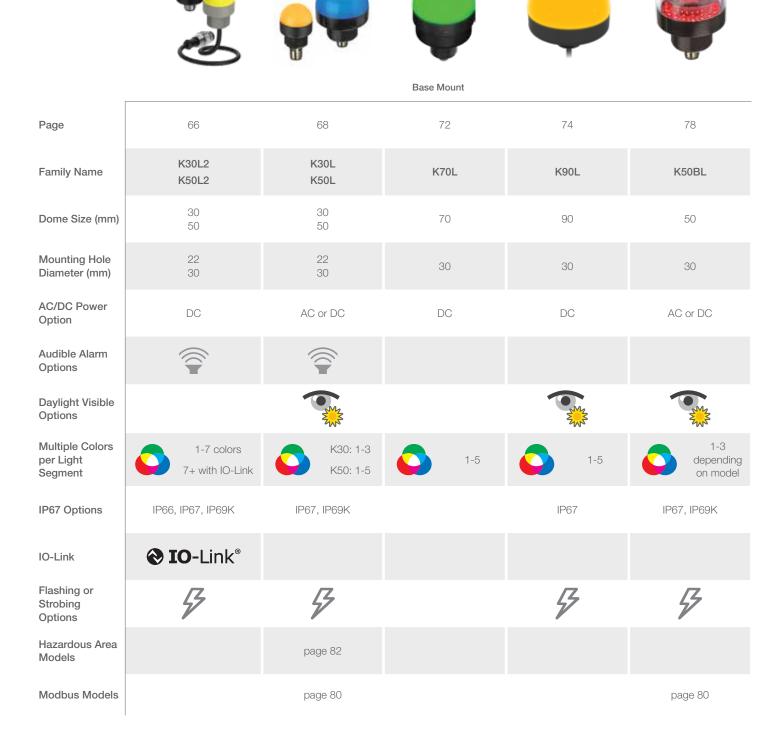




Indicators

Banner's Indicators offer a wide variety of bright, highly visible models ranging from daylight visible to multiple colors in one device. Indicators have a rugged design for long-term use and require no additional protective box. Flexibility in design, size and mounting provides a unique solution for many indication applications.

Selection Guide













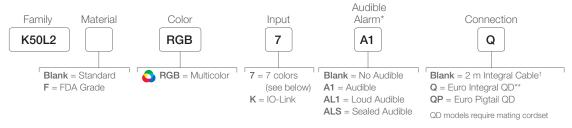


Flat Mount			Barrel Mount		
92	88	90	94	84	86
K80 Segmented	K50FL	K80	SP Series	S18L/S22L	S22L2 Flush
80	50	50	50	18	20
NA	NA	NA	NA	18/22	22
DC	DC	AC or DC	AC or DC	DC	DC
		THE STATE OF THE S	THE STATE OF THE S	SW.	
	1-5	1-5	1-3	1-3	1-7
IP67	IP67, IP69K	IP67	IP67	IP67, IP69K	IP66, IP67, IP69K
5	5	5			



- Bright, even indication in red, green, blue, yellow, cyan, magenta, and white
- Rugged IP66, IP67, and IP69K polycarbonate housing protects against impact and withstands high-pressure, high-temperature washdown to ensure reliable performance in challenging environments
- Models constructed from FDA-grade materials available for use in food and beverage applications
- Simple wiring plan enables quick installation and allows users to consolidate controller outputs
- An optional audible alarm provides a distinct, loud notification of status (K50L2 models only)
- IO-Link enables full control of color, flashing, dimming, and advanced animations like rotation, strobing, 2-color display, 2-color rotation, 2-color flashing, and chase

K50L2



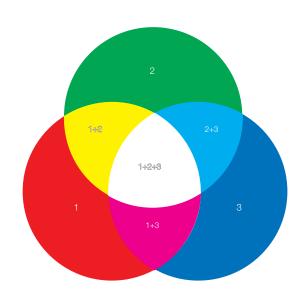
- * Audible models not available in FDA-grade material
- ** Integral QD not available in FDA-grade material
- $^{\scriptscriptstyle \dag}$ IO-Link models not available with integral cable

K30L2





Seven colors now available in one unit



	Input 1	Input 2	Input 3
Red	ON		
Green		ON	
Blue			ON
Yellow	ON	ON	
Cyan		ON	ON
Magenta	ON		ON
White	ON	ON	ON



K50L and K30L Domed Indicators

- Rugged, cost-effective and easy-to-install indicators
- Illuminated dome provides easy-to-see operator guidance and indication of equipment status
- Compact devices are completely self-contained no controller needed
- Displays up to five colors
- Immune to EMI and RFI interference

One-, Two- or Three-Color Indicators 18 to 30 V dc

Family Color Connector Input Р K50L G R Υ Q K50L P = PNP G = GreenK30I $\mathbf{Y} = \text{Yellow}$ N = NPN $\mathbf{R} = \text{Red}$ Blank = 2 m Integral Cable B = Blue Q = Euro Integral QD W = White QP = Euro Pigtail QD

One-, Two- or Three-Color Indicators 85 to 120 V ac

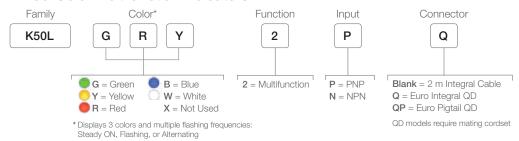


One-, Two- or Three-Color Audible Indicators

X = Not Used

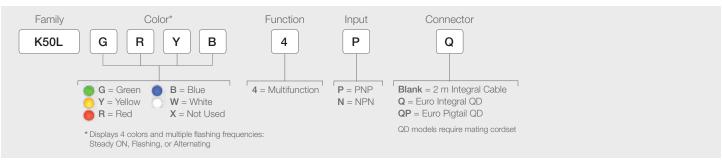


Three-Color Multifunction Indicators

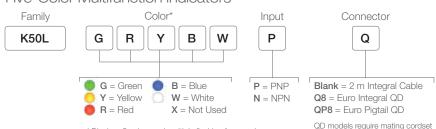


QD models require mating cordset

Four-Color Multifunction Indicators



Five-Color Multifunction Indicators



* Displays 5 colors and multiple flashing frequencies: Steady ON, Flashing, or Alternating

Accessories and specifications are on page 71



K50L/K30L Specifications

Supply Voltage K50L Sealed Audible: 12 to 30 V dc

K50L AC: 85 to 130 V ac K50L standard: 18 to 30 V dc K30L: 10 to 30 V dc

Construction Base: polycarbonate

Translucent Dome: polycarbonate

Environmental Rating Standard Models:

IEC IP67 Integral QD models meet

DIN 40050 (IP69K)

Standard Audible Models (A1, A2, AL1):

Fixed Audible Sealed Models (AS): IEC IP67/ IP69K per DIN 40050

Adjustable Loud Audible Sealed Models (ALS, ALS4): IEC IP67/ IP69K per DIN 40050

Operating Temperature Sealed Audible: -20 to +50 °C (-4 to +122 °F)

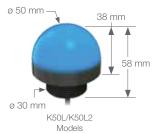
All Other Models: -40 to +50 °C (-40 to +122 °F)

Certifications











K50L/K50L2 Audible Models (A1, A2, AL1)





K50L/K50L2 Adjustable Loud Audible Models (ALS)

K50L Fixed Audible Models (AS) No open cavities to collect liquids

K50L2/K30L2 Specifications

K50L2: 10 to 30 V dc; 220mA Max. at 10 V dc; 100mA Max. at 30 V dc Power

K30L2: 10 to 30 V dc; 60mA Max. at 10 V dc;

30mA Max. at 30 V dc

Operating

Conditions

Base: polycarbonate

Construction

Translucent Dome: polycarbonate

-40 to +50 °C (-40 to +122 °F)

Environmental Rating K50L2: Standard: IEC IP66/IP67/IP69K

Standard Audible: IEC IP50
Sealed Audible: IEC IP66/IP67/IP69K

K30L2: IEC IP66/IP67/IP69K

Certifications





Accessories









SMB30SC

SMB30FA

SMB30FVK







SMB22A

SMBAMS22P

SMBAMS22RA

Cordsets for DC Models





Straight connector models listed; for right-angle models, add RA to the end of model number (example, MQDC-406RA)

5-Pin M12/Euro-Style use with 4-color models

Straight connector models listed; for right-angle models, add RA to the end of model number (example, MQDC1-506RA)

8-Pin M12/Euro-Style use with 5+ -color models

Straight connector models listed; for right-angle models, add RA to the end of model number (example, MQDC2S-806RA)

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

MQDC1-506 2 m (6.5') MQDC1-515 5 m (15') MQDC1-530 9 m (30')

MQDC2S-806 2 m (6.51 MQDC2S-815 5 m (151) MQDC2S-830 9 m (30')

Cordsets for AC Models

4-Pin Micro-Style

Straight connector models listed; for right-angle models, add RA to the end of model number (example, MQAC2-406RA)

5-Pin Micro-Style Straight connector models MQAC2-406 2 m (6.5') MQAC2-415 5 m (15') MQAC2-430 9 m (30')

MQAC2-506 2 m (6.5') MQAC2-515 5 m (15') MQAC2-530 9 m (30')



SA-FFB12 Black flush foldable bracket for use with elevated mount systems



SA-FFB12C Gray flush foldable bracket for use with elevated mount systems

see page 61 for additional information on this bracket

Elevated Mount System



SA-M30TE12 Black Acetal adapter/cover SA-M30TE12C White UHMW adapter/cover

SOP-E12-150A (150 mm) SOP-E12-300A (300 mm) SOP-E12-900A (900 mm) Black anodized aluminum pipe

SOP-E12-150AC (150 mm) SOP-E12-300AC (300 mm) SOP-E12-900AC (900 mm) Clear anodized aluminum pipe

SOP-E12-150SS (150 mm) SOP-E12-300SS (300 mm) SOP-E12-900SS (900 mm) 304 stainless steel pipe

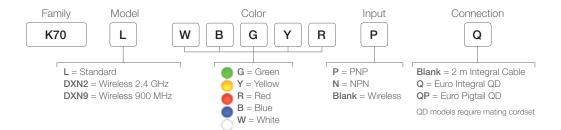
SA-E12M30 Black Acetal mounting base SA-E12M30C White UHMW mounting base



K70L 70 mm Domed Indicators

- Bright, uniform indicator light
- All models have flashing input control
- Models are available with up to five colors in one device
- Rugged IP65-rated design
- 12 V to 30 V dc operation
- Wireless models simplify installation and provide a simple operator interface for pick-to-light, call button and general industrial applications

Standard and Wireless



Supply Voltage and Current

Supply Protection Circuitry

Construction

Environmental Rating

Operating Temperature

Certifications

12 V to 30 V dc; 200 mA Max. at 12 V dc; 90 mA Max. at 30 V dc

Protected against reverse polarity, transient voltages

Base: polycarbonate

Translucent Dome: polycarbonate

IEC IP65

-40 to 50 °C



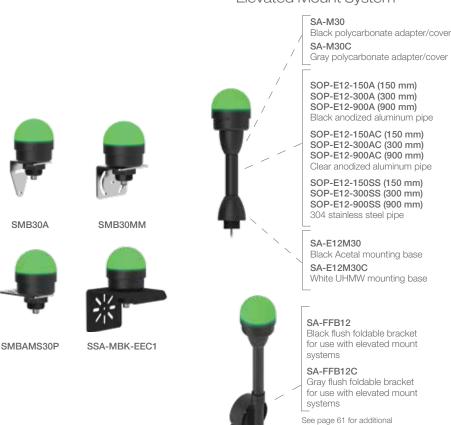






Elevated Mount System

information on this bracket





5-Pin M12/Euro-Style use with 4-color models

Straight connector models listed; for right-angle models, add RA to the end of model number (example, MQDC1-506RA)

8-Pin M12/Euro-Style

use with 5+ -color models

Straight connector models listed; for right-angle models, add RA to the end of model number (example, MQDC2S-806RA)

MQDC1-506 2 m (6.5') MQDC1-515 5 m (15') MQDC1-530 9 m (30')

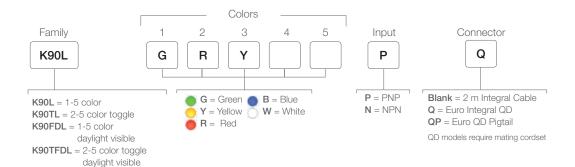
MQDC2S-806 2 m (6.51) MQDC2S-815 5 m (151) MQDC2S-830 9 m (30')

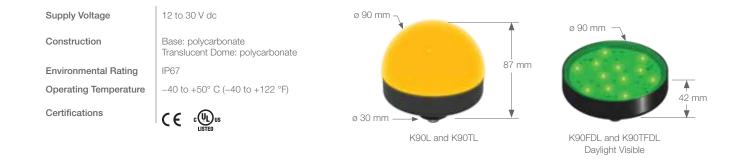




Domed Indicators

- Bright, uniform indicator light
- Models are available with up to five colors in one device
- Rugged IP67-rated design
- 12 to 30 V dc operation
- Illuminated dome provides easy-to-see operator guidance
- K90TL models alternate between colors when multiple inputs are active
- K90L models have an auxiliary input line for flashing an active input





information on this bracket

Elevated Mount System



White UHMW mounting base



Straight connector models listed; for right-angle models, add RA to the end of model number (example, MQDC1-506RA)

8-Pin M12/Euro-Style use with 5+ -color models

Straight connector models listed; for right-angle models, add RA to the end of model number (example, MQDC2S-806RA)

MQDC1-506 2 m (6.5') MQDC1-515 5 m (15') MQDC1-530 9 m (30')

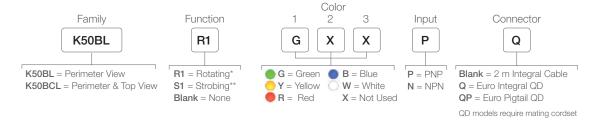
MQDC2S-806 2 m (6.5') MQDC2S-815 5 m (15') MQDC2S-830 9 m (30')





- Continuous, strobing and rotating models available
- Intense levels of light output for outdoor applications
- 12-30 V dc models are ideal for battery-powered mobile applications
- LED lighting emits from the perimeter and top view on some models
- Rugged, sealed thermoplastic housing rated for IP67 and IP69K
- Cabled and quick-disconnect models available

One-, Two-, or Three-Color DC



^{*} Rotating only available on K50BL 1-color models

One-Color AC



ø 50 mm Supply Voltage 12 to 30 V dc 85 to 130 V ac 100 to 250 V ac Construction Base and covers: polycarbonate **Environmental Rating** IEC IP67 and IP69K, per DIN 40050 ø 30 mm -49 mm **Operating Temperature** -40 to +50 °C (-40 to +122 °F) Certifications



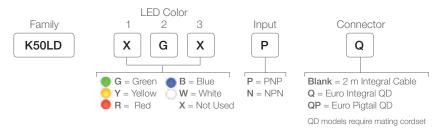


^{**} Strobing only available on K50BCL 1-color models



- Intense levels of light output for outdoor applications
- Rugged, cost-effective and easy-to-install
- Compact devices are completely self-contained no controller needed
- Up to three colors in one housing
- Immune to ambient light, EMI and RFI interference
- 50 mm diameter with flat profile and 30 mm mounting base
- Available in both 18 to 30 V dc and 85 to 130 V ac power options

One- or Three- Color Indicators, 15 to 30 V dc



One-Color Indicators, 85 to 130 V ac









Additional accessories are available at bannerengineering.com

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

3-Pin M12/Micro-StyleStraight connector models listed; for right-angle models, add RA to the end of model number (example, MQDC-306RA)

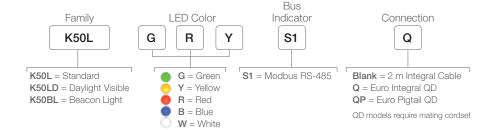
MQDC-406 2 m (6.5') MQDC-415 5 m (15') MQDC-430 9 m (30')

MQDC-306 2 m (6.5') MQDC-315 5 m (15') MQDC-330 9 m (30')

BANNER



- Built-in flashing and strobing capability
- High intensity models for outdoor applications
- Fully encapsulated IP67/IP69K construction
- Modbus RTU communication minimizes the cabling requirements



Supply Voltage

12 to 30 V dc

Base: Polycarbonate
Covers: Polycarbonate
LEDs on LD Models: Acrylic

Environmental Rating
Operating Temperature

Certifications

12 to 30 V dc

Base: Polycarbonate
Covers: Polycarbonate
LEDs on LD Models: Acrylic
LEDs on L





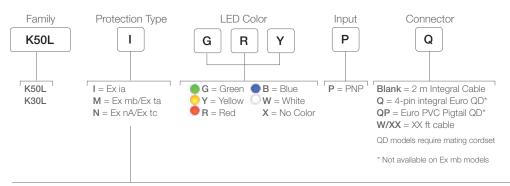






K50 and K30 Hazardous Indicators

- Up to three colors in one device and five colors to choose from
- Models rated to IP67 and IP69K for use in harsh environments
- Unique design appears gray when off, eliminating false indication from ambient light
- Easy mounting and configuration
- Extensive approvals ensure indicator lights are safe to use in most classified zones or areas.
- Worldwide IECEx approval for quicker access into countries outside Europe and North America



Indicator Family	Protection Method Suitable for ATEX		Suitable for NEC & CEC		
Ex ia	Intrinsically Safe	Gas Zones: 0, 1, & 2 Dust Zones: 20, 21, & 22 Mines	Gas zones: 0, 1, & 2	Class I Division 1 & 2 Class II/III Division 1 & 2	
Ex mb/Ex ta	Encapsulation/Enclosure	Gas Zones: 1 & 2 Dust Zones: 20, 21 & 22	Gas zones: 1 & 2	Class I Division 2 Class II/III Division 1 & 2**	
Ex nA/Ex tc	Non-Sparking/Enclosure	Gas Zones: 2 Dust Zones: 22	Gas zones: 2	Class I Division 2 Class II/III Division 2**	

^{**} Available on K50L models only

Supply Voltage Ex ia: 8 to 30 V dc

Ex mb/Ex ta and Ex nA/Ex tc: 10 to 30 V dc

Construction

Base: polycarbonate Translucent Dome: polycarbonate

Environmental Rating IP67, IP69K

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

Certifications













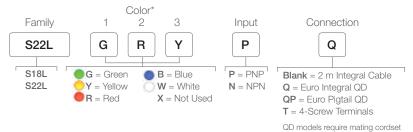




S18L & S22L Barrel Indicators

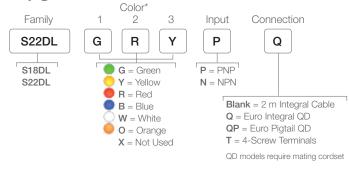
- Gasketed face flange for sealing to enclosures
- IP69K rated to withstand harsh wash-down environments
- Daylight visible models are also available for areas with high levels of ambient light
- M12 Euro connector models available for plug-and-play indication
- 10 to 30 V dc operating range allows for use in battery-powered mobile applications
- Terminal-wired models available to simplify panel wiring
- Up to three independent colors in one unit
- $\bullet\,$ Translucent face appears gray when off to avoid false indication
- Multiple colors available, including green, red, yellow, blue, white, orange
- Available with PNP or NPN input, depending on model

Standard



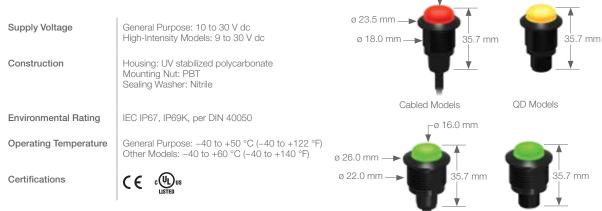
Marking Available

Daylight Visible Daylight Visible High-Intensity



Family Color Connection S22DLH R Q S18DLH G = Green S22DLH Y = Yellow R = Red Blank = 2 m Integral Cable B = Blue W = White Q = Euro Integral QD QP = Euro Pigtail QD T = 4-Screw Terminals QD models require mating cordset

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









use with S22L





S22L2 Flush Mount Indicator

- Bright, even indication in red, green, blue, yellow, cyan, magenta, and white
- 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 102









MQDC1-506

2 m (6.5')

Additional accessories are available at bannerengineering.com

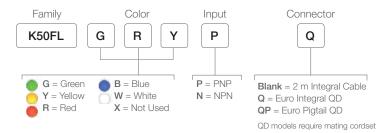
5-Pin Euro-Style

Straight connector models

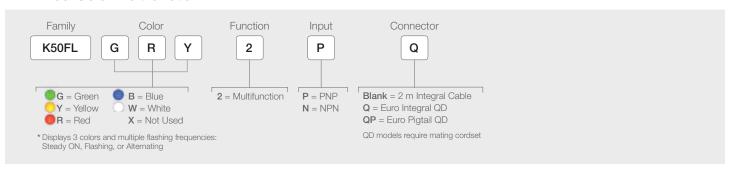


- Rugged, cost-effective and easy-to-install indicators
- Low power consumption LED design will provide years of reliable service
- Fully encapsulated IP67, IP69K
- Illuminated dome provides easy-to-see operator guidance and indication of equipment status
- Compact devices are completely self-contained no controller needed
- 18 to 30 V dc operation
- Displays up to five colors
- Immune to EMI and RFI interference

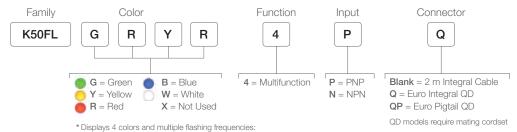
One-, Two- or Three-Color, 18 to 30 V dc



Three-Color Multifunction

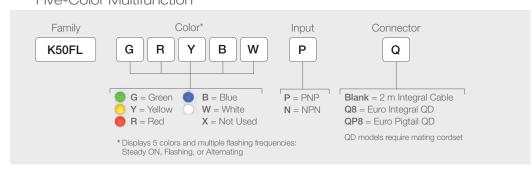


Four-Color Multifunction



Five-Color Multifunction

Steady ON, Flashing, or Alternating



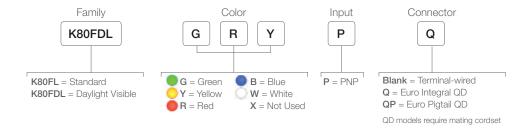


Supply Voltage 18 to 30 V dc 4-Pin 5-Pin 8-Pin Base: ABS Construction Dome: Polycarbonate MQDC-406 MQDC1-506 MQDC2-806 4-Pin M12/Euro-Style 2 m (6.5') 2 m (6.5') 2 m (6.5') Straight connector models listed; MQDC-415 MQDC1-515 MQDC2-815 for right-angle models, add RA **Environmental Rating** IP67, IP69K 5 m (15') 5 m (15') 5 m (15') to the end of model number **MQDC-430** MQDC1-530 MQDC2-830 (example, MQDC-406RA) **Operating Temperature** –40 to +50 °C 9 m (30') 9 m (30') 9 m (30') (-40 to +122 °F) Certifications (€



K80FL and K80FDL Flat-Mount Indicators

- Selection of solid or flashing light operation with internal DIP Switch
- Multicolor, single segment
- Bright, even LED light gray when OFF
- Unique shape for use in various indication applications
- Sealed to IP67 for durability in many environments
- Large, flat face allows for clear indication from greater distances
- Transparent self-adhesive cover labels can be printed for easy identification
- Daylight visible models available



Supply Voltage 12 to 30 V dc

Construction Base: Polycarbonate Translucent Face: Acrylic

Environmental Rating IEC IP67

Operating Conditions −40 to +50 °C (−40 to +122 °F)

Certifications

12 to 30 V dc

Base: Polycarbonate Translucent Face: Acrylic





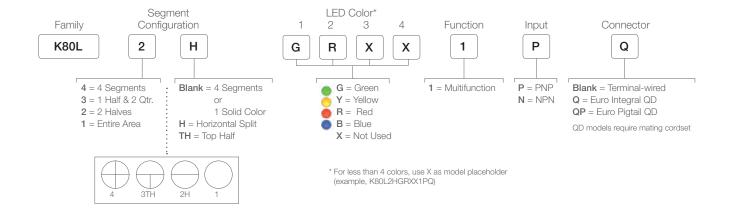


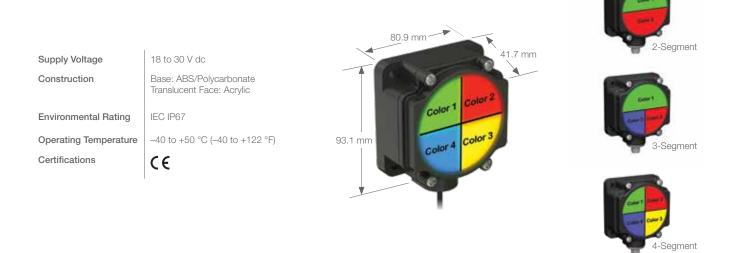
MQDC-406 2 m (6.5') MQDC-415 5 m (15') MQDC-430 9 m (30')



K80 Segmented Indicators

- Individual color quadrants can be lighted separately or in combination
- For error-proofing and "Andon" applications
- Provides operator guidance, even for those with limited color recognition ability
- Optional labels for enhanced segment identification
- Mounts easily on flat surface or pipe for elevated use
- PNP (sourcing) or NPN (sinking) input type, depending on model
- Flash functionality available on one-color models







SMBDX80DIN for mounting to 35 mm DIN Rail

Segmented Indicator Label Kits



SALK-K80L4

4-segment transparent laser label (includes 30 labels and 1 protective cover labels)



SALK-K804-0

1-segment transparent laser label (includes 30 labels)



Euro-Style Straight connector models listed;

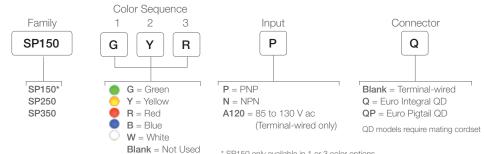
for right-angle models, add RA to the end of model number (example, MQDC1-506RA)

MQDC1-506 2 m (6.5') MQDC1-515 5 m (15" MQDC1-530 9 m (30')



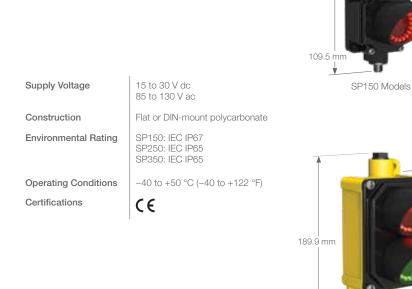
SP Series Signal Lights

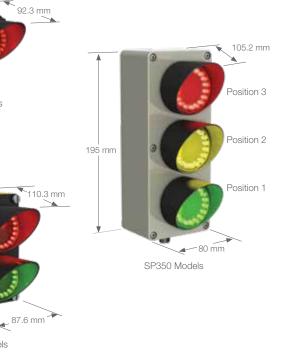
- Intense levels of light output for outdoor applications
- Controlled field of view for signage and narrow lane use
- Rugged, cost-effective and easy-to-install
- Compact devices are completely self-contained no controller needed
- Immune to EMI and RFI interference
- Choose NPN or PNP input, and 15 to 30 V dc or 85-130 V ac operation, depending on model



80.9 mm

 * SP150 only available in 1 or 3 color options. For 1 color SP150 models input is PNP/NPN selectable.









SMBDX80DIN for mounting to 35 mm DIN Rail



SMBSP350 (Tabs only)



SP250 Models



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



Banner Engineering Corp.

9714 Tenth Avenue North • Minneapolis, Minnesota 55441 763-544-3164 • 1-888-373-6767