

## EZ-LIGHT Indicators for 3-Color, 7-Function



## Datasheet

DC-operated LED indicators with solid ON or flashing capability and a Euro-style integral QD<sup>1</sup>. Choose from red, yellow, or green ON, flashing, or rotating (depending on wiring).<sup>2</sup>

| Models                                                                              |                         | Construction                                                                                        | Inputs |
|-------------------------------------------------------------------------------------|-------------------------|-----------------------------------------------------------------------------------------------------|--------|
|    | M18GRY2PQ               | Nickel-plated brass housing, M18x1 thread; thermoplastic diffuser. Fully encapsulated; IP67.        | PNP    |
|                                                                                     | M18GRY2NQ               |                                                                                                     | NPN    |
|    | T30GRY2PQ               | Thermoplastic polyester housing, thermoplastic diffuser. Fully encapsulated; IP67.                  | PNP    |
|                                                                                     | T30GRY2NQ               |                                                                                                     | NPN    |
|    | K50LGRY2PQ              | 30 mm threaded polycarbonate base, translucent polycarbonate dome. Fully encapsulated; IP67, IP69K. | PNP    |
|                                                                                     | K50LGRY2NQ              |                                                                                                     | NPN    |
|    | K50FLGRY2PQ             | Polycarbonate base, translucent polycarbonate dome. Fully encapsulated; IP67, IP69K.                | PNP    |
|                                                                                     | K50FLGRY2NQ             |                                                                                                     | NPN    |
|  | K80LGRY2PQ <sup>3</sup> | ABS and polycarbonate base, translucent polycarbonate dome. Electronics fully encapsulated; IP67.   | PNP    |
|                                                                                     | K80LGRY2NQ              |                                                                                                     | NPN    |

**Other Models:** Standard integral QD models only are listed (mating cordset required). To order 2 m (6.5 ft) cable models, omit suffix Q from model number (example, M18GRY2P). To order models with 150 mm (6 inch) PVC pigtail with 5-pin Euro QD connector, replace suffix Q with QP (example, M18GRY2PQP).

## Specifications

## Supply Voltage and Current

M18 Models: 10 to 30 V dc at 40 mA max.  
 T30 Models: 10 to 30 V dc at 50 mA max.  
 K50L, K50FL and K80L Models: 18 to 30 V dc at 50 mA max.

## Indicators

Entire translucent diffuser or dome provides indication.  
 LEDs are independently selected: Green, Red, Yellow, ON steady or flashing.  
 For other colors/combinations, contact Factory for availability

## Input Response Time

Indicator ON: 250 ms (max.)  
 Indicator OFF: 10 ms (max.)

## Indicator Flash Rate

Single Color: 1 second flash rate (500 ms ON)  
 Three Color: 1.5 second rotation rate (500 ms per color)

## Connections

K80L Models: 5-pin Euro-style integral QD (Q) standard. Terminal-wired models available for use with bulk cable; compression fitting optional. Contact Factory for cable information.  
 Other Models: 5-pin Euro-style integral QD (Q); 6" pigtail QD (QP), (do not use center pin 5); or 5-wire, 2 m (6.5') integral cable

## Operating Conditions

Temperature: -40 °C to 50 °C (-40 °F to 122 °F)

## Environmental Rating

Rated IEC IP67. K80L has encapsulated electronics only; other models fully encapsulated.  
 K50L, and K50FL quick-disconnect models meet IP69K per DIN 40050-9  
 Cabled models also meet IP69K if the cable and cable entrance are protected from high-pressure spray.

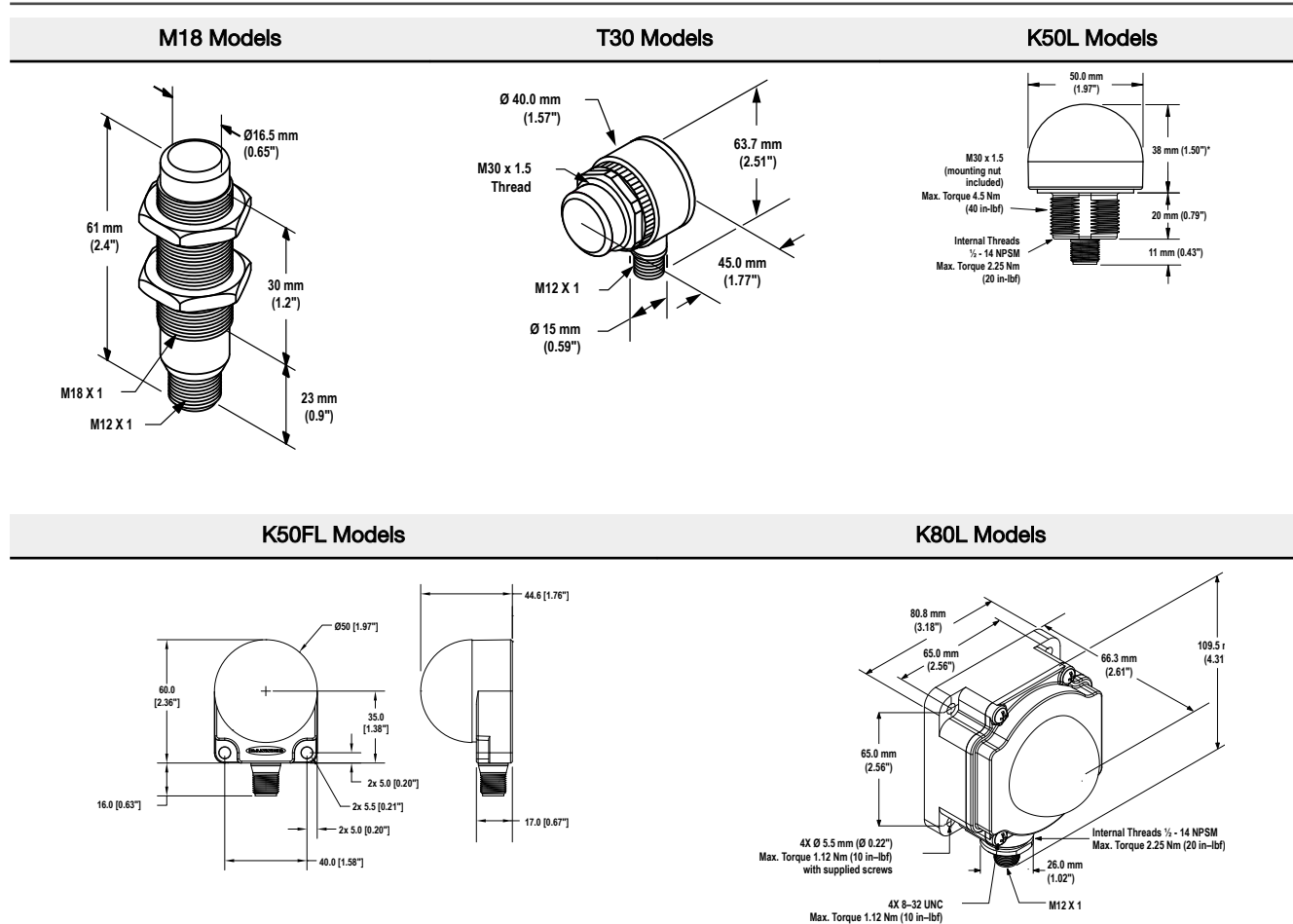
<sup>1</sup> Pin 5 is not used; connects to 4-wire QD cordset. If a cordset other than those specified in this document is used, use a 5-pin mating cordset.

<sup>2</sup> Contact Factory for other colors/color combinations, including: blue, white, orange.

<sup>3</sup> K80L Models: Standard 5-pin Euro integral QD connector models only are listed (mating cordset required). For terminal-wired model, omit suffix Q (example, K80LGRY2P).



## Dimensions



## Wiring

Table 1: Select from 7 operating schemes, depending on wiring

| LED Function              | PNP Models |            |            |           | NPN Models |            |            |            |
|---------------------------|------------|------------|------------|-----------|------------|------------|------------|------------|
|                           | Brown Wire | White Wire | Black Wire | Blue Wire | Blue Wire  | White Wire | Black Wire | Brown Wire |
| Red ON                    | +V dc      |            |            | 0 V dc    | 0 V dc     |            |            | +V dc      |
| Red Flashing              | +V dc      |            | +V dc      | 0 V dc    | 0 V dc     |            | 0 V dc     | +V dc      |
| Yellow ON                 |            | +V dc      |            | 0 V dc    |            | 0 V dc     |            | +V dc      |
| Yellow Flashing           | +V dc      | +V dc      |            | 0 V dc    | 0 V dc     | 0 V dc     |            | +V dc      |
| Green ON                  |            |            | +V dc      | 0 V dc    |            |            | 0 V dc     | +V dc      |
| Green Flashing            |            | +V dc      | +V dc      | 0 V dc    |            | 0 V dc     | 0 V dc     | +V dc      |
| Rotating Red-Green-Yellow | +V dc      | +V dc      | +V dc      | 0 V dc    | 0 V dc     | 0 V dc     | 0 V dc     | +V dc      |

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Table 2: Only QD wiring is shown; cabled wiring is functionally identical.

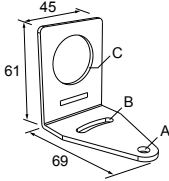
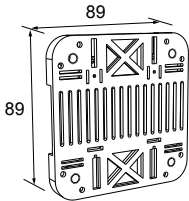
| PNP Models                                         | NPN Models |
|----------------------------------------------------|------------|
|                                                    |            |
| G = Green<br>R = Red<br>Y = Yellow<br>X = Not Used |            |

## Accessories

| 4-Pin Threaded M12/Euro-Style Cordsets—Single Ended |                |             |            |                                                 |
|-----------------------------------------------------|----------------|-------------|------------|-------------------------------------------------|
| Model                                               | Length         | Style       | Dimensions | Pinout (Female)                                 |
| MQDC-406                                            | 1.83 m (6 ft)  | Straight    |            |                                                 |
| MQDC-415                                            | 4.57 m (15 ft) |             |            |                                                 |
| MQDC-430                                            | 9.14 m (30 ft) |             |            |                                                 |
| MQDC-450                                            | 15.2 m (50 ft) |             |            |                                                 |
| MQDC-406RA                                          | 1.83 m (6 ft)  | Right-Angle |            | 1 = Brown<br>2 = White<br>3 = Blue<br>4 = Black |
| MQDC-415RA                                          | 4.57 m (15 ft) |             |            |                                                 |
| MQDC-430RA                                          | 9.14 m (30 ft) |             |            |                                                 |
| MQDC-450RA                                          | 15.2 m (50 ft) |             |            |                                                 |

To order bulk cable for terminal-wired K80L models, contact the factory. If cables other than those listed are used, use a 5-pin mating cable.

| Brackets                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>SMB18A</b> <ul style="list-style-type: none"> <li>Right-angle mounting bracket with a curved slot for versatile orientation</li> <li>12-ga. stainless steel</li> <li>18 mm sensor mounting hole</li> <li>Clearance for M4 (#8) hardware</li> </ul> <p><b>Hole center spacing:</b> A to B = 24.2<br/> <b>Hole size:</b> A = ø 4.6, B = 17.0 x 4.6, C = ø 18.5</p> | <p>For use with M18 and T18 models or base-mount T30 models. Other available 18 mm dia. brackets:</p> <p>SMB1815SF<br/>           SMB18Q<br/>           SMB18SF<br/>           SMB312PD<br/>           SMBAMS18RA<br/>           SMBAMS18P</p> |

| Brackets                                                                                                                                                                                                                                                                                                                                              |                                                                                   |                                                                                                                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>SMB30A</b> <ul style="list-style-type: none"> <li>Right-angle bracket with curved slot for versatile orientation</li> <li>Clearance for M6 (¼ in) hardware</li> <li>Mounting hole for 30 mm sensor</li> <li>12-ga. stainless steel</li> </ul> <p><b>Hole center spacing:</b> A to B=40<br/> <b>Hole size:</b> A=ø 6.3, B= 27.1 x 6.3, C=ø 30.5</p> |  | <p>For use with T30 models or base-mount K50L models. Other available 30 mm diameter brackets are:</p> <p>SMBAMS30RA<br/> SMBAMS30P<br/> SMB30SC<br/> SMB30SC<br/> SMB30MM<br/> SMB3018SC</p> |
| <b>SMBDX80DIN</b> <ul style="list-style-type: none"> <li>Black reinforced thermoplastic</li> <li>Bracket for mounting on a 35 mm DIN rail</li> </ul>                                                                                                                                                                                                  |  | <p>K50FL models include a 48 mm (1.9 inch) circular velcro mounting kit for easy mounting with no additional hardware</p>                                                                     |

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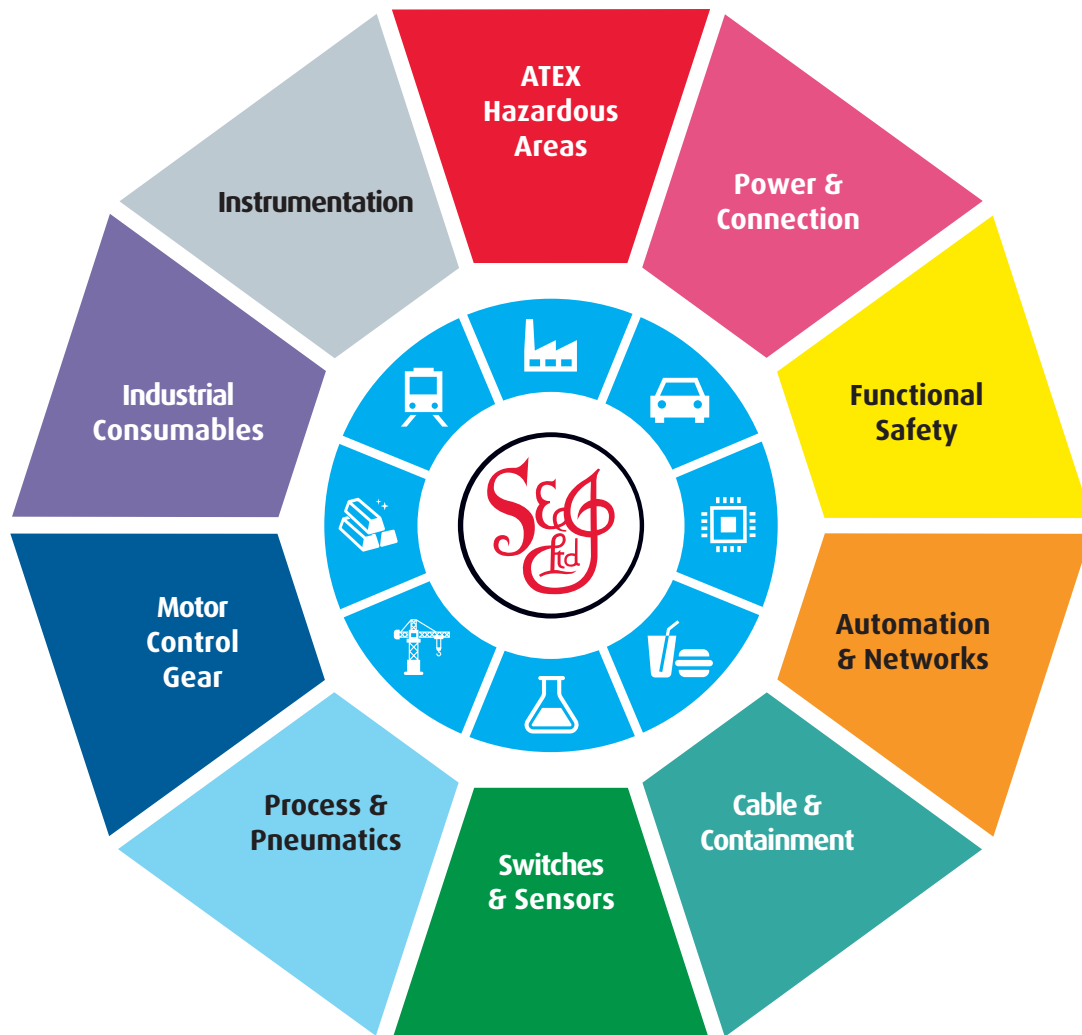
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