# EZ-LIGHT<sup>®</sup> K90FDL Daylight Visible



## Datasheet

Large one to five color daylight visible indicator with flashing input control



- Intense levels of light output for areas with high ambient light even outdoors
- All models have flashing input control
- Models are available with up to five colors in one device
- Rugged IP67-rated design
- 12 to 30 V dc operation

## Models

Model	No. of Colors	Colors	Input	Connection
K90FDLGPQ		Green		
K90FDLRPQ		Red	-	
K90FDLYPQ		Yellow	PNP	
K90FDLBPQ		Blue	-	
K90FDLWPQ	1	White		Integral 5-pin M12/Euro-style male
K90FDLGNQ		Green		quick disconnect (QD)
K90FDLRNQ		Red	•	
K90FDLYNQ		Yellow	NPN	
K90FDLBNQ		Blue	-	
K90FDLWNQ		White		

Model	No. of Colors	Colors	Connection	Input	
K90FDLGRPQ	2	Green, Red	Integral 5-pin M12/Euro-style male		
K90FDLGYRPQ	3	Green, Yellow , Red	quick discopport (OD)		
K90FDLBGYRPQ	4	Blue , Green, Yellow, Red	Integral 8-pin M12/Euro-style male	PNP	
K90FDLWBGYRPQ	5	White, Blue, Green, Yellow, Red         quick disconnect (QD)			
K90FDLGRNQ	2	Green, Red Integral 5-pin M12/Euro-style male			
K90FDLGYRNQ	3	Green, Yellow, Red	quick discopport (OD)		
K90FDLBGYRNQ	4	Blue , Green, Yellow, Red Integral 8-pin M12/Euro-style male		NPN	
K90FDLWBGYRNQ	5	White, Blue, Green, Yellow, Red quick disconnect (QD)			

Integral quick disconnect models are listed; a mating cordset is required (see Accessories on page 4).

- To order the 150 mm (5.9 in) PVC cable with QD model, replace Q with QP in the model number, for example, K90FDLGRPQP.
- To order the 2 m (6.5 ft) cable models, omit the suffix Q in the model number, for example, K90FDLGRP.



## Specifications

#### Supply Voltage and Current

12 to 30 V dc

475 mA maximum at 12 V dc

175 mA maximum at 30 V dc

Supply Protection Circuitry Protected against reverse polarity and transient voltages

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Input Response Time

75 ms maximum

#### Adjustments

1.6 Hz flash rate via flash input wire

#### Light Characteristics

Color	Typical Wavelength or Color Temperature	Typical Intensity
Red	625 nm	83 lumens
Yellow	590 nm	43 lumens
Green	525 nm	175 lumens
Blue	470 nm	55 lumens
White	4700–5300 K	235 lumens

Construction

Base and dome: Polycarbonate

#### Connections Integral 5pin M12/Eu

Integral 5-pin M12/Euro-style male quick disconnect (QD); Integral 8-pin M12/Euro-style male quick disconnect (QD); 150 mm (6 in) PVC cable with a 5-pin M12/Euro-style male quick disconnect (QD); 150 mm (6 in) PVC cable with a 8-pin M12/Euro-style male quick disconnect (QD); or 2 m (6.5 ft) unterminated PVC-jacketed cable depending on the model

### Indicators

1 to 5 colors, depending on the model Only one color can be on at a time. The higher color number overrides the lower color number.

#### Environmental Rating

IEC IP67; Enclosure UL Type 4X, 13

Vibration and Mechanical Shock

All models meet Mil Std. 202F requirements. Method 201A (vibration: 10 Hz to 60 Hz max., double amplitude 0.06 inch, maximum acceleration 10G). Also meets IEC 947-5-2 requirements: 30G 11 ms duration, half sine wave.

#### Operating Conditions

-40 °C to +50 °C (-40 °F to +122 °F)

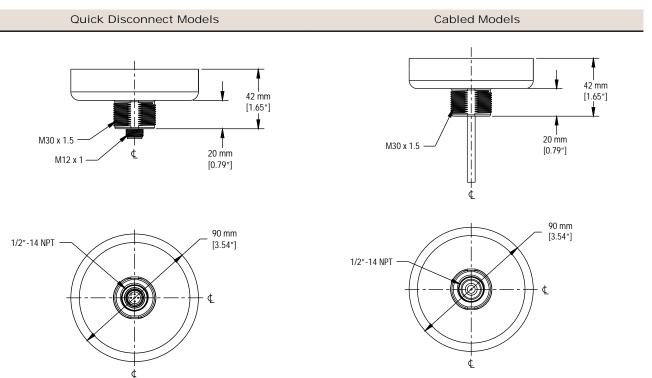
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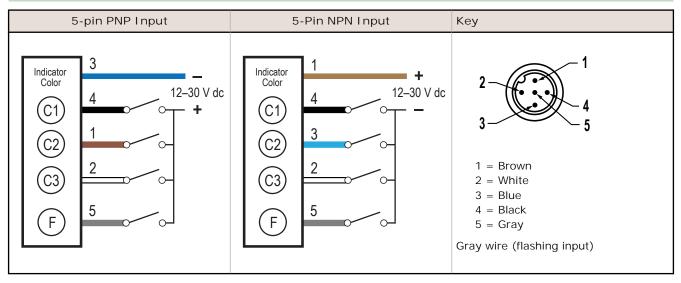


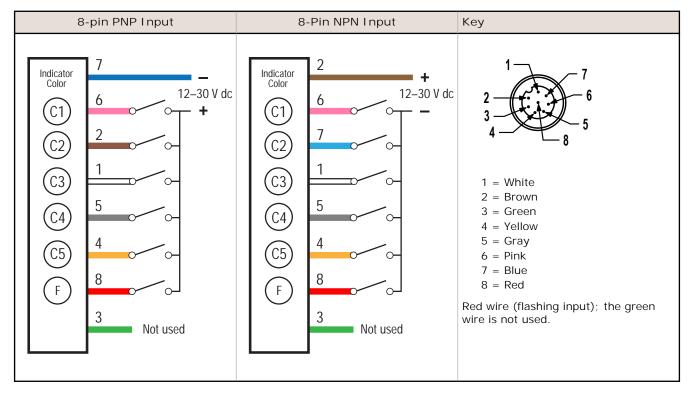
### Dimensions

All measurements are listed in millimeters [inches], unless noted otherwise.



## Wiring





## Accessories

### Cordsets

5-Pin Threaded M12/Euro-Style Cordsets—Single Ended					
Model	Length	Style	Dimensions	Pinout (Female)	
MQDC1-501.5	0.50 m (1.5 ft)		<b>→</b> 44 Typ. ———		
MQDC1-506	1.83 m (6 ft)				
MQDC1-515	4.57 m (15 ft)	Straight			
MQDC1-530	9.14 m (30 ft)		ø 14.5 –		
MQDC1-506RA	1.83 m (6 ft)			4	
MQDC1-515RA	4.57 m (15 ft)			<mark>−32 Typ</mark>   <b>−</b> [1.26"]	1 = Brown
MQDC1-530RA	9.14 m (30 ft)	Right-Angle	M12 x 1 0 14.5 [0.57"]	2 = White 3 = Blue 4 = Black 5 = Gray	

8-Pin Threaded M12/Euro-Style Cordsets with Open-Shield				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC2S-806	1.83 m (6 ft)			
MQDC2S-815	4.57 m (15 ft)	-	44 Typ	
MQDC2S-830	9.14 m (30 ft)	Straight		2_
MQDC2S-850	15.2 m (50 ft)		M12 x1 ø 14.5	1
MQDC2S-806RA	1.83 m (6 ft)			
MQDC2S-815RA	4.57 m (15 ft)		=32 Typ= [1.26"]=	1 = White 2 = Brown
MQDC2S-830RA	9.14 m (30 ft)			3 = Green
MQDC2S-850RA	15.2 m (50 ft)	Right-Angle	30 Ťyp. [1.18"] μμμμμμμμμμμμμμμμμμμμμμμμμμμμμμμμμμμμ	4 = Yellow 5 = Gray 6 = Pink 7 = Blue 8 = Red

### Elevated Mount System

Model	Features	Components
SA-M30 - Black Polycarbonate	Streamlined black PC or Gray PC thread cover	J.
SA-M30C - Gray Polycarbonate	<ul><li>Covers M30 thread on the light base</li><li>Mounting hardware included</li></ul>	

Model		Features	Components		
Polished 304 Stainless Steel	Black Anodized Aluminum	Clear Anodized Aluminum			
SOP-E12-150SS 150 mm (6 in) long	SOP-E12-150A 150 mm (6 in) long	SOP-E12-150AC 150 mm (6 in) long	g  • Polished 304 stainless steel, black anodized		
SOP-E12-300SS 300 mm (12 in) long	SOP-E12-300A 300 mm (12 in) long	SOP-E12-300AC 300 mm (12 in) long	<ul> <li>aluminum, or clear anodized aluminum surface</li> <li>½ in. NPT thread at both ends</li> <li>Compatible with most industrial environments</li> </ul>		
SOP-E12-900SS 900 mm (36 in) long	SOP-E12-900A 900 mm (36 in) long	SOP-E12-900AC 900 mm (36 in) long			
SA-E12M30 - Black A	cetal		Streamlined black acetal or white UHMW mounting base adapter/cover	Ab	
SA-E12M3OC - White UHMW		<ul> <li>Connects between ½ in. NPSM/DN15 pipe and 30 mm (1-3/16 in) drilled hole</li> <li>Mounting hardware included</li> </ul>			

Pipe Mounting Flange				
Model	Features	Construction		
SA-F12	<ul> <li>For use elevated stand-off pipes (½ in, NPSM/DN15)</li> <li>M5 mounting hardware and nitrile gasket included</li> </ul>	Die-cast zinc base with black paint	1/2-14 NPSM 10 10 10 10 10 10 10 10 10 10 10 10 10	

Foldable Mounting Brackets			
Model	Features	Construction	
SA-FFB12 SA-FFB12C	<ul> <li>For use with 1/2 inch stand-off pipes</li> <li>Stainless steel hardware</li> </ul>	Black polycarbonate Gray polycarbonate	112-14 NPSM 111 070 4 x Ø5

### LMB Sealed Right-Angle Brackets

Model	Description	Construction		
LMB30RA	Direct-Mount Models: Bracket kit with base, 30	Black polycarbonate		
LMB30RAC	mm adapter, set screw, fasteners, o-rings, and gaskets	Gray polycarbonate		
LMBE12RA	Pipe-Mount Models: Bracket kit with base, ½-14	Black polycarbonate	Q	
LMBE12RAC	pipe adapter, set screw, fasteners, o-rings, and gaskets. For use with stand-off pipe (listed and sold separately)	Gray polycarbonate		

### Sun Shield

<ul> <li>K90DS</li> <li>Use for enhanced visibility in direct sunlight conditions</li> <li>Polycarbonate</li> </ul>	
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