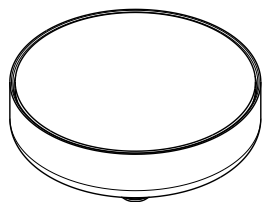


Datasheet

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	1	Green	PNP	Integral 5-pin M12/Euro-style male quick disconnect (QD)
K90FDLRPQ		Red		
K90FDLYPQ		Yellow		
K90FDLBPQ		Blue		
K90FDLWPQ		White		
K90FDLGNQ		Green	NPN	
K90FDLRNQ		Red		
K90FDLYNQ		Yellow		
K90FDLBNQ		Blue		
K90FDLWNQ		White		

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

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, K90FDLGRPQ.
- 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

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 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

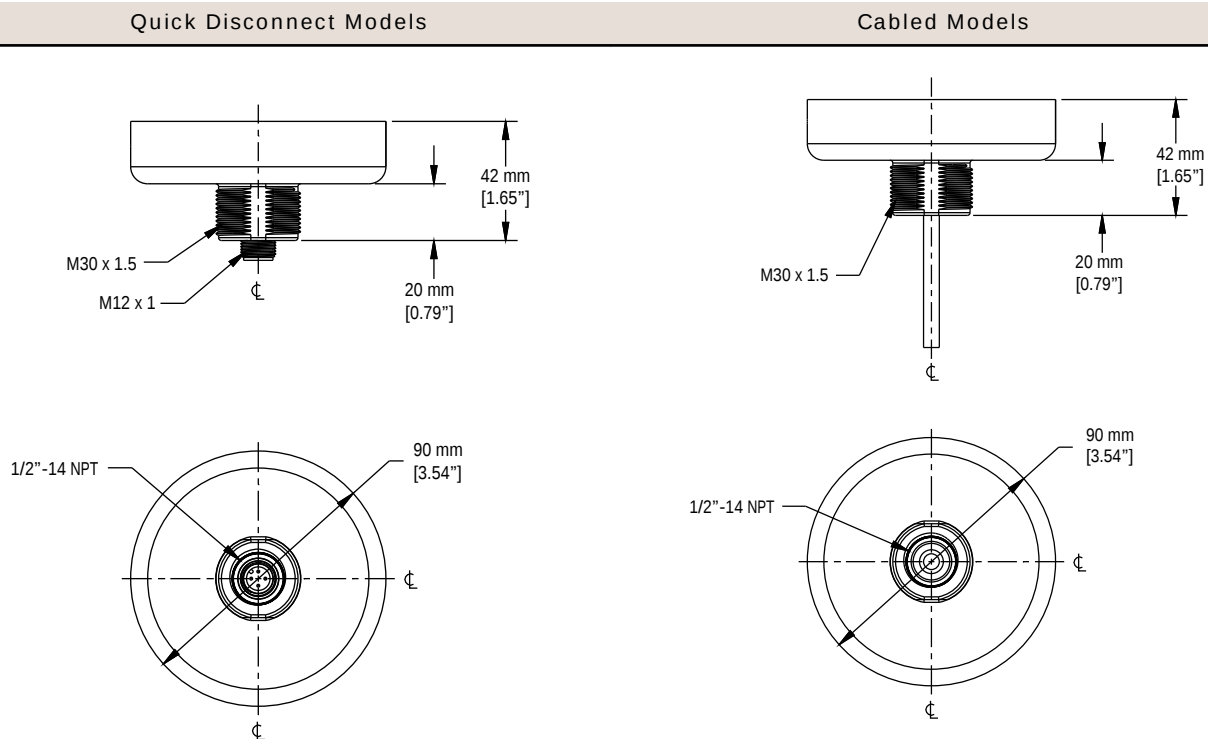
- 40 °C to +50 °C (–40 °F to +122 °F)

Certifications



Dimensions

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

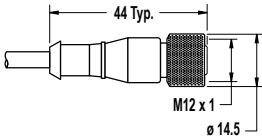
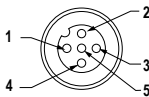
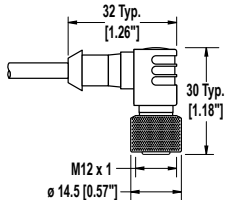


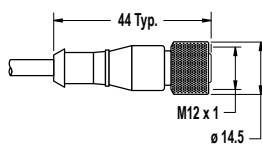
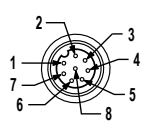
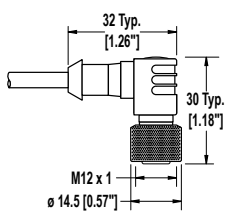
Wiring

5-pin PNP Input	5-Pin NPN Input	Key
		1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray Gray wire (flashing input)
8-pin PNP Input	8-Pin NPN Input	Key
		1 = White 2 = Brown 3 = Green 4 = Yellow 5 = Gray 6 = Pink 7 = Blue 8 = Red Red wire (flashing input); the green wire is not used.

Accessories

Cordsets

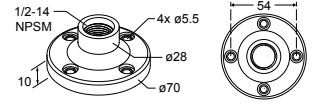
5-Pin Threaded M12/Euro-Style Cordsets—Single Ended					
Model	Length	Style	Dimensions	Pinout (Female)	
MQDC1-501.5	0.50 m (1.5 ft)	Straight		 1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray	
MQDC1-506	1.83 m (6 ft)				
MQDC1-515	4.57 m (15 ft)				
MQDC1-530	9.14 m (30 ft)				
MQDC1-506RA	1.83 m (6 ft)	Right-Angle			
MQDC1-515RA	4.57 m (15 ft)				
MQDC1-530RA	9.14 m (30 ft)				

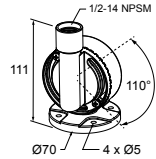
8-Pin Threaded M12/Euro-Style Cordsets with Open-Shield				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC2S-806	1.83 m (6 ft)	Straight		 1 = White 2 = Brown 3 = Green 4 = Yellow 5 = Gray 6 = Pink 7 = Blue 8 = Red
MQDC2S-815	4.57 m (15 ft)			
MQDC2S-830	9.14 m (30 ft)			
MQDC2S-850	15.2 m (50 ft)			
MQDC2S-806RA	1.83 m (6 ft)	Right-Angle		
MQDC2S-815RA	4.57 m (15 ft)			
MQDC2S-830RA	9.14 m (30 ft)			
MQDC2S-850RA	15.2 m (50 ft)			

Elevated Mount System

Model	Features	Components
SA-M30 - Black Polycarbonate	- Streamlined black PC or Gray PC thread cover - Covers M30 thread on the light base - Mounting hardware included	
SA-M30C - Gray Polycarbonate		

Model			Features	Components
Polished 304 Stainless Steel	Black Anodized Aluminum	Clear Anodized Aluminum	- Elevated-use stand-off pipe (½ in. NPSM/DN15) - Polished 304 stainless steel, black anodized aluminum, or clear anodized aluminum surface ½ in. NPT thread at both ends - Compatible with most industrial environments	
SOP-E12-150SS 150 mm (6 in) long	SOP-E12-150A 150 mm (6 in) long	SOP-E12-150AC 150 mm (6 in) long		
SOP-E12-300SS 300 mm (12 in) long	SOP-E12-300A 300 mm (12 in) long	SOP-E12-300AC 300 mm (12 in) long		
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 Acetal			- Streamlined black acetal or white UHMW mounting base adapter/cover - Connects between ½ in. NPSM/DN15 pipe and 30 mm (1-3/16 in) drilled hole - Mounting hardware included	
SA-E12M30C - White UHMW				

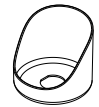
Pipe Mounting Flange			
Model	Features	Construction	
SA-F12	- For use elevated stand-off pipes (½ in, NPSM/DN15) - M5 mounting hardware and nitrile gasket included	Die-cast zinc base with black paint	

Foldable Mounting Brackets			
Model	Features	Construction	
SA-FFB12	- For use with 1/2 inch stand-off pipes - Stainless steel hardware	Black polycarbonate	
SA-FFB12C		Gray polycarbonate	

LMB Sealed Right-Angle Brackets

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

Sun Shield

K90DS - Use for enhanced visibility in direct sunlight conditions - Polycarbonate	
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