



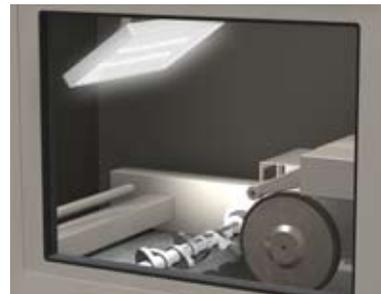
## TASK LIGHTS

**Work Lights****page 405**

- 50 mm light of flat or 30 mm base mounting in wet or dirty environments
- Standard or push-button models available

**Strip Lights****page 407**

- 28 mm wide industrial strip lighting for enclosures and area lighting

**Area Lights****page 410**

- Solid-state LED light for area and machine lighting

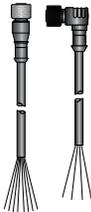


## WL50 Specifications

<b>Supply Voltage</b>	12 to 30V dc (10% max. ripple) <b>Max. current:</b> 105 mA @ 12V dc; 55 mA @ 30V dc <b>Max. input power:</b> 1.7 watts
<b>Power-up Response Time</b>	<b>Light ON:</b> 1 millisecond max. (models without push button)
<b>Light Characteristics</b>	<b>Color temperature (CCT):</b> 5,000 to 10,000 K <b>Color:</b> Cool white <b>Intensity (typical):</b> 65 lumens; 50 lux @ 1 meter
<b>Construction</b>	Polycarbonate housing; Nickel-plated QD connector or PVC-jacketed cable
<b>Environmental Rating</b>	<b>Standard models:</b> IP69K per DIN 40050 <b>Push-button models:</b> IEC IP67
<b>Connections</b>	Integral 4-pin Euro-style QD, 150 mm PVC pigtail with QD or 2 m integral cable, depending on model. QD cordsets are ordered separately. See page 406.
<b>Operating Conditions</b>	-40° to +50° C
<b>Application Note</b>	<b>Push-button models:</b> When power is initially applied to the device, push the push button to turn the light on. If power to the device is interrupted the light will turn off and will remain off when power is restored. To turn light back on, push the push button.
<b>Certification</b>	
<b>Hookup Diagrams</b>	LI25 (p. 775)

### Cordsets

Euro QD		
See page 682		
Threaded 4-Pin		
Length	Straight	Right-Angle
1.83 m	MQDC-406	MQDC-406RA
4.57 m	MQDC-415	MQDC-415RA
9.14 m	MQDC-430	MQDC-430RA



Additional cordset information available. See page 679.

### Brackets

WL50		
		
pg. 639 SMB30A	pg. 640 SMB30MM	pg. 641 SMB30SC



Additional brackets and information available. See page 620.





WLS28 Specifications (cont'd)	
<b>Connections</b>	Integral 4-pin Euro style QD or 2 m integral cable, depending on model. QD cordsets are ordered separately. See page 409.
<b>Operating Conditions</b>	<b>Temperature:</b> -20° to +50° C <b>Relative Humidity:</b> 90% (non-condensing) <b>Storage Temperature:</b> -40° to +85° C
<b>Certifications</b>	
<b>Application Notes</b>	When connecting cascading lights in series it is important not to exceed maximum current limitations: Maximum linear feet of light at 12V dc = 1.5 m Maximum linear feet of light at 24V dc = 3.0 m Maximum linear feet of light at 30V dc = 3.1 m
<b>Hookup Diagrams</b>	L125 (p. 775)

### Cordsets

Euro QD			
See page 682			
Threaded 4-Pin			
Length	Straight	Right-Angle	
1.83 m	MQDC-406	MQDC-406RA	
4.57 m	MQDC-415	MQDC-415RA	
9.14 m	MQDC-430	MQDC-430RA	

Additional cordset information available. See page 679.

Euro QD-Double-Ended			
See page 697			
Threaded 4-Pin			
Length	Straight/Straight	Straight/Right-Angle	
0.91 m	MQDEC-403SS	MQDEC-403RS	
1.83 m	MQDEC-406SS	MQDEC-406RS	
3.66 m	MQDEC-412SS	MQDEC-412RS	
6.10 m	MQDEC-420SS	MQDEC-420RS	
9.14 m	MQDEC-430SS	MQDEC-430RS	
15.2 m	MQDEC-450SS	MQDEC-450RS	

Euro QD-Splitter			
See page 685			
Length		Threaded 4-Pin	
Branches	Trunk		
0 m	0 m	CSB-M1240M1240	
0.30 m	0 m	CSB-M1240M1241	
0.30 m	0.30 m	CSB-M1241M1241	
0.30 m	2.50 m	CSB-M1246M1241	
0.30 m	4.60 m	CSB-M12415M1241	
0.03 m	7.60 m	CSB-M12425M1241	

### Brackets

WLS28
pg. 676
SMBWLS28RA

Additional bracket information available. See page 620.

# WLA

## Area Work Light

- Solid-state LED light for area and machine lighting
- White LED lights in four sizes
- High-power LEDs for superior illumination with an even pattern of light and no shadows
- Extremely long-lasting LED technology for >50,000 hours of continuous working life
- Rugged, sealed thermoplastic housing; IP69K rated



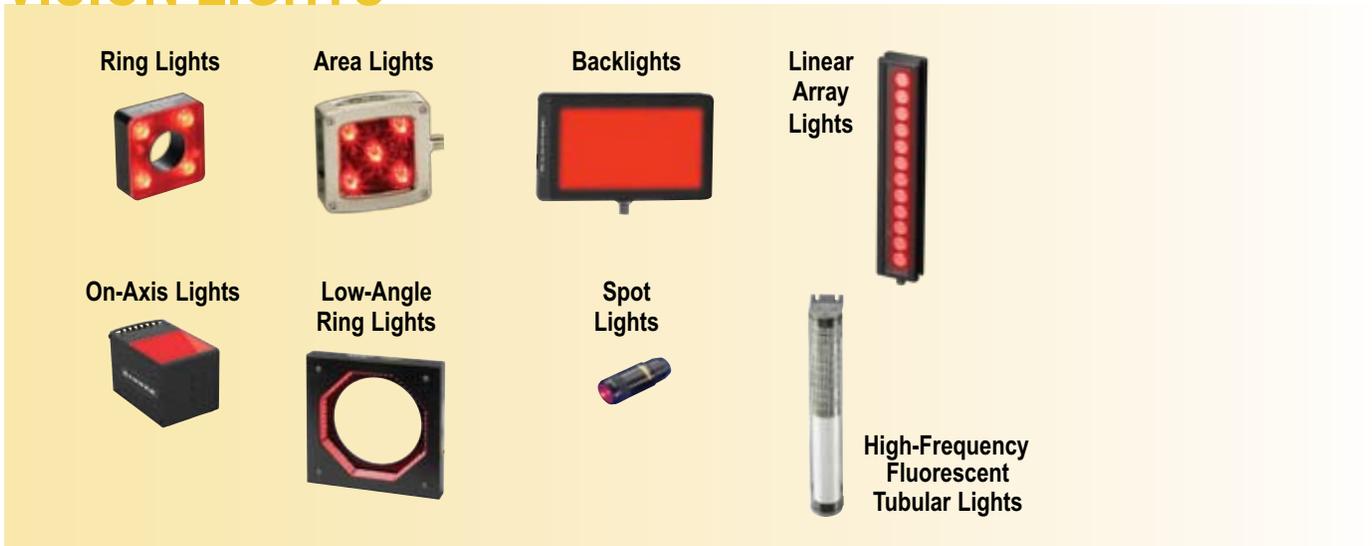
### WLA Area Work Light, 12 to 30V dc

Length (L)		LED Color	Connection	Models
	105.1 mm	White	2 m	WLAW105X180
			4-pin Euro QD	WLAW105X180Q
	180.1 mm		2 m	WLAW190X180
			4-pin Euro QD	WLAW190X180Q
	275 mm		2 m	WLAW275X180
			4-pin Euro QD	WLAW275X180Q
	356.6 mm		2 m	WLAW360X180
			4-pin Euro QD	WLAW360X180Q

 QD models: A model with a QD requires a mating cordset (see page 679).



# VISION LIGHTS



## Vision Lighting

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- Hundreds of lighting solutions and accessories—the most by any single source
- A complete offering of sizes and colors, including:
  - Ring Lights
  - Area Lights
  - Backlights
  - Linear Array Lights
  - On-Axis Lights
  - Low-Angle Ring Lights
  - Spot Lights
  - Tubular Fluorescent Lights
  - Structured Lights
- Robust solutions rated to IP68/NEMA 4X
- LEDs for up to 50,000+ hours of maintenance-free illumination
- Internal self-regulation for consistent illumination
- Built-in universal strobe control
- A comprehensive selection of lighting accessories











Sealed *Pro* LED Ring Lights (IP68), 24V dc



Color	Housing	Connection	90 mm Diameter Models <sup>†</sup>	
			Glass Window	Plastic Window
Red	Nickel-plated Aluminum	3-pin Pico QD	LEDRR90S-G	LEDRR90S-P
	Stainless Steel		LEDRR90SS-G	LEDRR90SS-P
White	Nickel-plated Aluminum		LEDWR90S-G	LEDWR90S-P
	Stainless Steel		LEDWR90SS-G	LEDWR90SS-P
Blue	Nickel-plated Aluminum		LEDBR90S-G	LEDBR90S-P
	Stainless Steel		LEDBR90SS-G	LEDBR90SS-P
Green	Nickel-plated Aluminum		LEDGR90S-G	LEDGR90S-P
	Stainless Steel		LEDGR90SS-G	LEDGR90SS-P
Infrared	Nickel-plated Aluminum		LEDIR90S-G	LEDIR90S-P
	Stainless Steel		LEDIR90SS-G	LEDIR90SS-P

 **Connection options:** Models requires a mating cordset (see page 425).

<sup>†</sup> Windows are factory replaceable, contact factory at 1-888-373-6767.

- Photoelectrics
- Sensors
- Fiber Optic Sensors
- Special Purpose Sensors
- Measurement & Inspection Sensors
- Vision

Wireless

**Lighting & Indicators**

- Safety Light Screens
- Safety Laser Scanners
- Fiber Optic Safety Systems
- Safety Controllers & Modules
- Safety Two-Hand Control Modules
- Safety Interlock Switches
- Emergency Stop & Stop Control

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**TASK LIGHTS**

**VISION LIGHTS**

- Ring Lights
- Area Lights
- Backlights
- Linear Array Lights
- On-Axis Lights
- Low-Angle Lights
- Spot Lights
- Tubular
- Fluorescent Lights
- Structured Lights

**INDICATORS**

**ACTUATORS**

# Area Lights

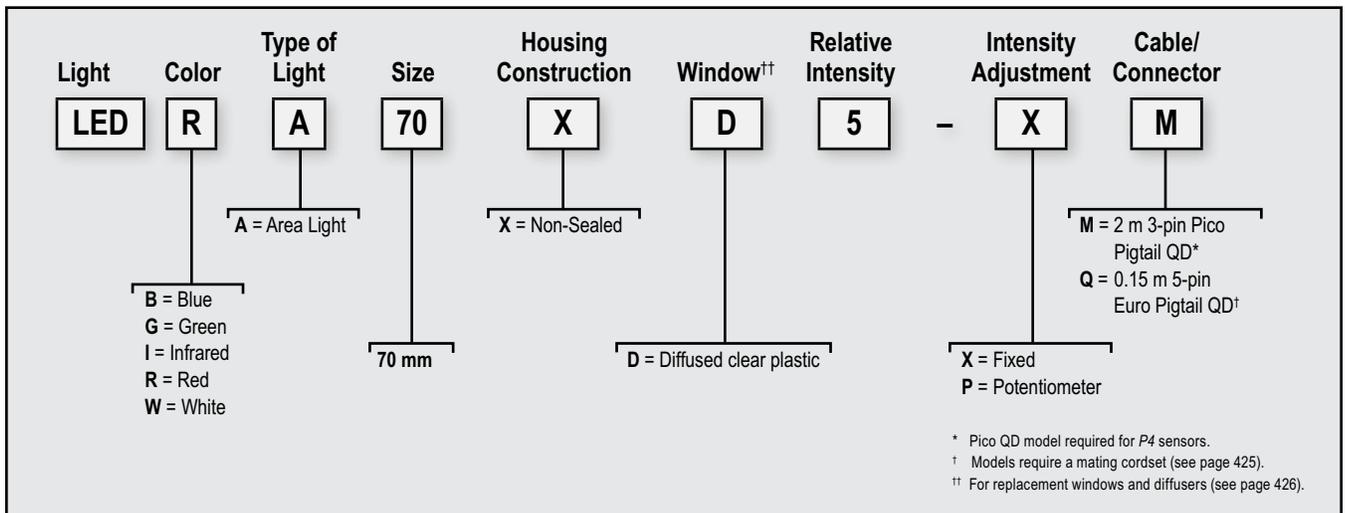
An area light provides even illumination in a concentrated area. Well-placed area lights can create shadows and glare, allowing the vision sensor to detect the presence or absence of a feature.

- Creates shadows to detect changes in depth, depending on mounting
- Lights distances greater than 12 inches (high-intensity)



ACCESSORIES  
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## High-Intensity LED Area Light (IP50) Model Key, 24V dc





# Backlights

A backlight provides even lighting. It is placed behind the target and aimed directly back towards the camera. The resulting silhouette can be inspected for proper size and shape.

- Determines the shape and size of target objects
- Offers a highly diffused surface and uniform brightness
- Provides the most robust lighting for measuring and gauging
- Highlights through-holes in target objects



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## Sealed LED Backlights (IP67) Model Key, 24V dc

Light	Color	Type of Light	Size	Housing Construction	Window†	Relative Intensity	Intensity Adjustment	Connector Type
<b>LED</b>	<b>R</b>	<b>B</b>	<b>75X150</b>	<b>P</b>	<b>W</b>	<b>2</b>	— <b>X</b>	<b>Q</b>
	B = Blue G = Green I = Infrared R = Red W = White	B = Backlight	75 x 150 mm 150 x 150 mm 225 x 150 mm 300 x 150 mm	P = Plastic	W = White Plastic		X = Fixed	Q = 5-pin Euro integral QD*

\* Models require a mating cordset (see page 425).  
† For replacement windows and diffusers (see page 426).

## LED Backlights (IP40), 24V dc

Color	Connection	Models <sup>†</sup>	
		70 x 70 mm	85 x 220 mm
Red	2 m	LEDRB70X70W	LEDRB85X220W
	2 m Threaded 3-pin Pico Pigtail QD	LEDRB70X70M	LEDRB85X220M
Infrared	2 m	LEDIB70X70W	LEDIB85X220W
	2 m Threaded 3-pin Pico Pigtail QD	LEDIB70X70M	LEDIB85X220M

Connection options:

For 9 m cable, add suffix **W/30** to the 2 m model number (example, **LEDRB70X70W W/30**).  
QD models can be connected directly to P4 sensors; splitter cordsets available for powering two lights (see page 425).

† For replacement windows and diffusers (see page 426).



## On-Axis Lights

On-axis lighting provides even, diffused illumination. A beam splitter directs the light rays along the same axis as the camera lens. Reflective surfaces perpendicular to the camera appear bright. Surfaces at an angle to the camera and non-reflective surfaces appear dark.



- Provides more uniform illumination than a ring light
- Delivers collimated illumination in same optical path as camera

### LED On-Axis (IP40) Lights, 24V dc

Color	Connection	Models <sup>†</sup>	
		100 x 100 mm	50 x 50 mm
Red	0.6 m Threaded 3-pin Pico Pigtail QD	LEDRO100M	LEDRO50M
White		LEDWO100M	LEDWO50M
Blue		LEDBO100M	LEDBO50M
Green		LEDGO100M	LEDGO50M
Infrared		LEDIO100M	LEDIO50M

Connection options:

QD cordsets with flying leads are available for connecting to models other than P4 (see page 425).

<sup>†</sup> For models with dust cover, add suffix **-D** to model number (example, **LEDRO100M-D**).

## Low-Angle Ring Lights

Low-angle lighting enhances the contrast of surface features. The low-angle light is aimed nearly perpendicular to the imaged surface of the target object, highlighting changes in elevation.



- Highlights surface irregularities
- Highlights changes in elevation
- Illuminates from an angle nearly perpendicular to object



### LED Low-Angle Ring Lights, 24V dc

Color	Connection	Size	Model
Red	2 m	150 mm dia.	LEDRI150-3W
	2 m Threaded 3-pin Pico Pigtail QD		LEDRI150-3M
Infrared	2 m	150 mm dia.	LEDII150-3W
	2 m Threaded 3-pin Pico Pigtail QD		LEDII150-3M

Connection options:

For 9 m cable, add suffix **W/30** to the 2 m model number (example, **LEDRI150-3W W/30**). QD models can be connected directly to P4 sensors.











































































