![smart vision lights]

SXA30 *Prox Light*
S P O T L I G H T
A D J U S T A B L E   L E N S

P R O D U C T   D A T A   S H E E T

Two Mounting Nuts

30 mm Barrel Style Housing

Telescoping Lens

Easily Adjust Mounting Nuts Location

5-Pin M12 Connector
(Male)

High Intensity LED

Warranty	Compliant	Compliant	Rated	Connector
2 YEAR	**IEC** 62471	**CE** RoHS	**IP 50**	**5 PIN M12**

PRODUCT HIGHLIGHTS

✓ Telescoping lens allows the projected spot to be set to desired size

✓ 5-pin M12 quick connect

✓ Built-in driver

✓ 30 mm barrel style housing

PRODUCT DESCRIPTION

The SXA30 Series of Adjustable Spot Lights features an adjustable length lens allowing for the projected spot to be set to a desired size, without having to adjust the position of the entire light. The SXA30 Series also offers a completely homogeneous light pattern at any recommended working distance for a very define and even projected spot. NPN or PNP strobe triggers can be used to control the pulse of the light. Intensity of the light can be controlled via 1–10VDC remote analog signal. The versatility of the SXA30 Series and its convenient mounting options make this light the ideal spot light.

PRODUCT SPECIFICATIONS

Electrical Input	24 V DC +/- 5%
Input Current	Max. 200 mA
Input Power	Max. 5 W
PNP Trigger	2.8 mA @ 4VDC │ 8.8 mA @ 12VDC │ 17.6 mA @ 24VDC
NPN Trigger	14.4 mA @ Ground (0VDC)
Trigger Input	PNP > +4 VDC (24 VDC max.) to activate or NPN ≥ GND <1VDC to activate (not both)
Continuous Mode	Connect pin 5 to 1-10 VDC (10 - 100% output); 24 VDC (Max)
Power Indicator	Turns green when powered up
Status Indicator	Strobe indicator will turn red when on
Analog Intensity	The output is adjustable from 10%–100% of brightness by a 1–10VDC signal. (Jumpering pin 5 to pin 1 will provide maximum intensity)
Connection	5-pin M12 connector
Operating Temperature	-10° - 40° C (14°-104° F) │ RH max 80% non-condensing humidity
Storage Temperature	-20° - 70° C (-4°-158° F) │ RH max 80% non-condensing humidity
IP Rating	IP50
Weight	~320g
Compliances	CE, RoHS, IEC 62471
Warranty	2 years*

See SmartVisionLights.com/warranty for details

WIRING CONFIGURATION
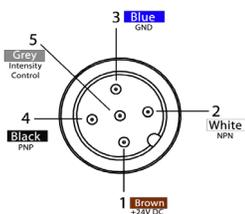
Pins	Function	Signal	Wire Color
1	Power In	+24VDC	BROWN
2	NPN	Sinking Signal	WHITE
3	GND	Ground	BLUE
4	PNP	Sourcing Signal	BLACK
5	Intensity Control	1– 10VDC	GREY *

* Some cables use green/yellow for 1-10V adjustment

Pin layout for light (Male Connector)

For proper light function, apply either a PNP or NPN signal, not both.

Failure to supply light with correct input current will result in inconsistent lighting behavior.
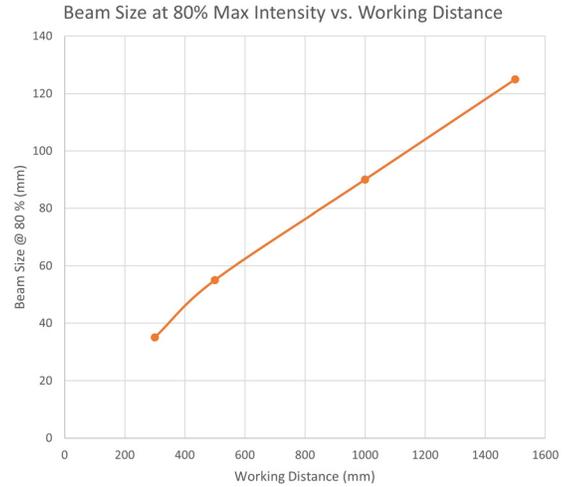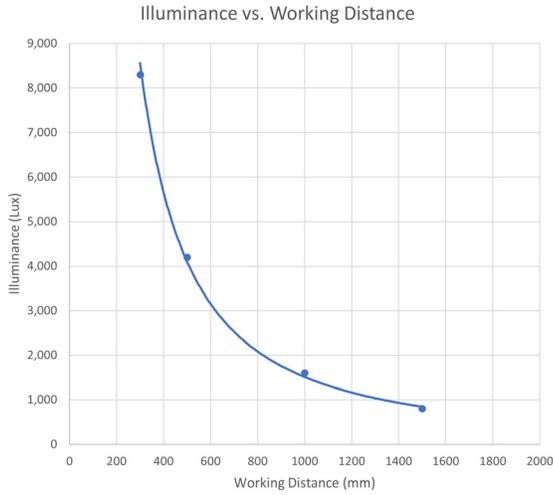(see Product Specifications for requirements)

RESOURCE CORNER

Additional resources available on our website including CAD files, videos and application examples.
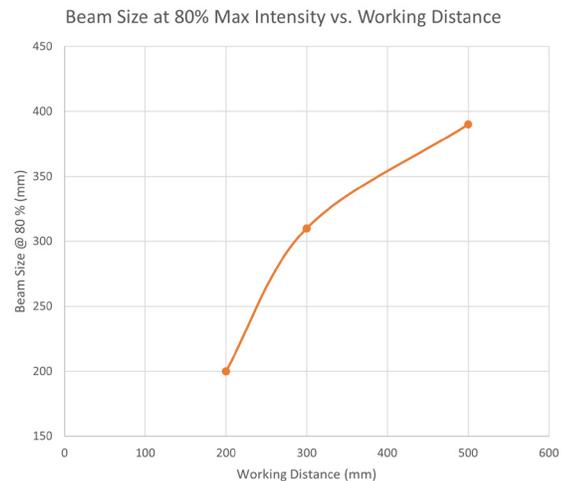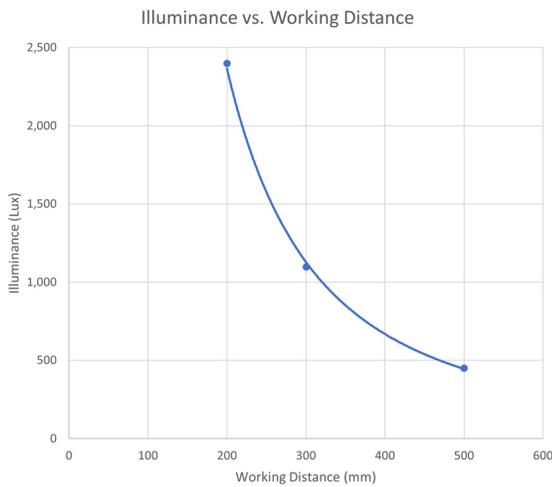
LIGHT PATTERNS

Smart Vision Lights recommends the SXA30 be used at a working distance between 500 mm and 4000 mm

LIGHTING PATTERN FOR THE SXA30 **Fully Extended Lens**

Illuminance vs. Working Distance

Beam Size at 80% Max Intensity vs. Working Distance

Beam Size X (mm)   Beam Size Y (mm)

LIGHTING PATTERN FOR THE SXA30 **Fully Retracted Lens**

Illuminance vs. Working Distance

Beam Size at 80% Max Intensity vs. Working Distance

Beam Size X (mm)   Beam Size Y (mm)

BEAM PATTERN FOR THE SXA30 **Fully Extended Lens**
Grid set to 75 mm

600 mm

300 mm working distance

500 mm working distance

1000 mm working distance
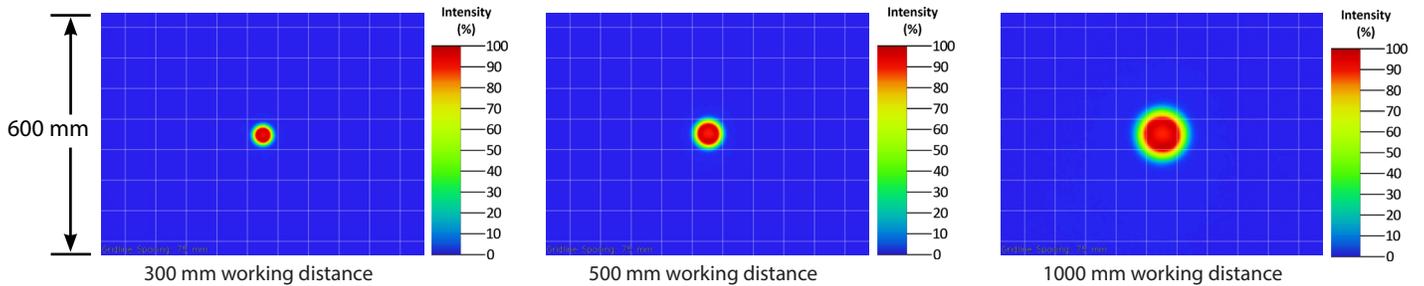
LIGHT PATTERNS (CONTINUED)

BEAM PATTERN FOR THE SXA30 **Fully Retracted Lens**
Grid set to 75 mm

600 mm

Intensity (%)	Intensity (%)	Intensity (%)

200 mm working distance   300 mm working distance   500 mm working distance
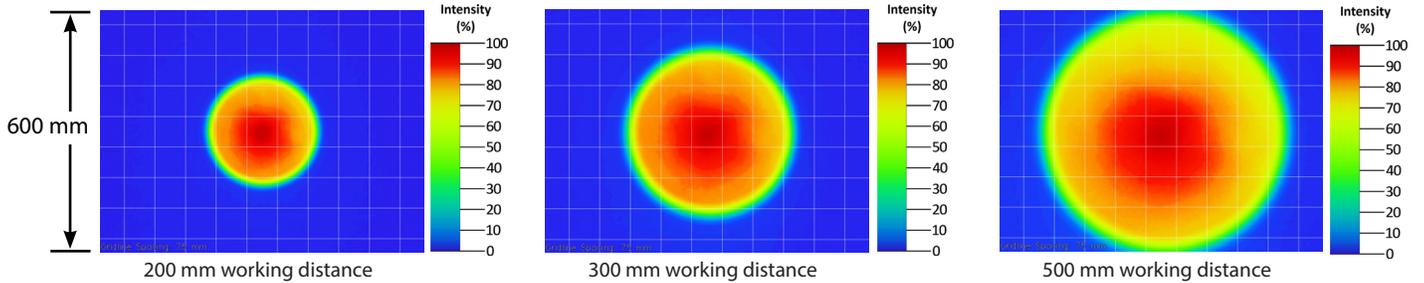
PRODUCT DRAWING

CAD files available on our website.
Dimensions are in mm.

Φ39.50

108.15
Fully Extended

41.50

15

82.30
Fully Compressed

M30x1.5
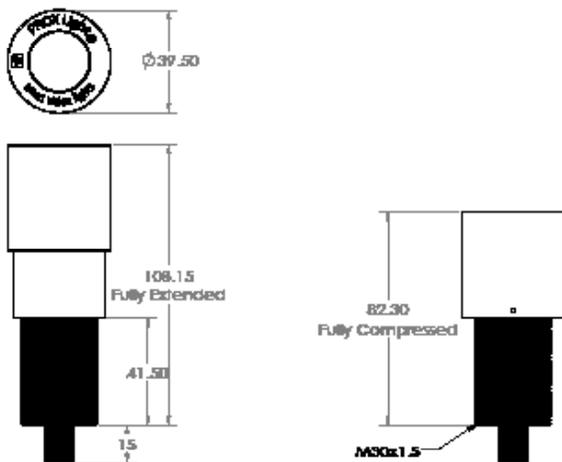
ILLUMINATION

SXA30 series of Prox Lights works best for:

Bright Field   Projector

EYE SAFETY

IEC 62471 COMPLIANT
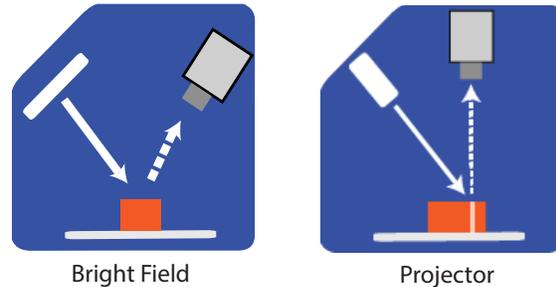
According to IEC 62471:2006. Full documentation upon request with purchase of product.

Notice
Exempt Group: No photobiological hazard to eyes or skin even for continuous, unrestricted use. Applicable for wavelengths: 625, 850, and 940.

Caution
Risk Group 1: Possibly hazardous optical radiation emitted from this product. Do not stare at operating lamp. May be harmful to eye. Safe for most applications except prolonged exposures. Applicable for wavelengths: 470, 505, 530, and WHI.

Caution
Risk Group 2: UV emitted from this product. Eye or skin irritation may result from exposure. Use appropriate shielding. Does not pose optical hazard if aversion responses limit exposure. Applicable for wavelengths: 365 and 395.

PART NUMBER

SXA30 — ☐☐☐

COLOR:

WHI 365/395 470 505
530 625 850/940

Additional wavelengths options available upon request

Part Number Example:
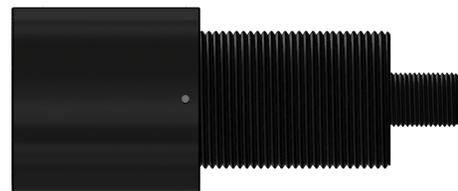**SXA30-625** SXA30, 625 nm Red Wavelength

ADJUSTING LENS

The telescoping lens can be adjusted by first loosening the M2 locking screw, followed by either extending or retracting the lens housing to desired position. Once lens is set to desired position, tighten M2 locking screw.

Fully Extended
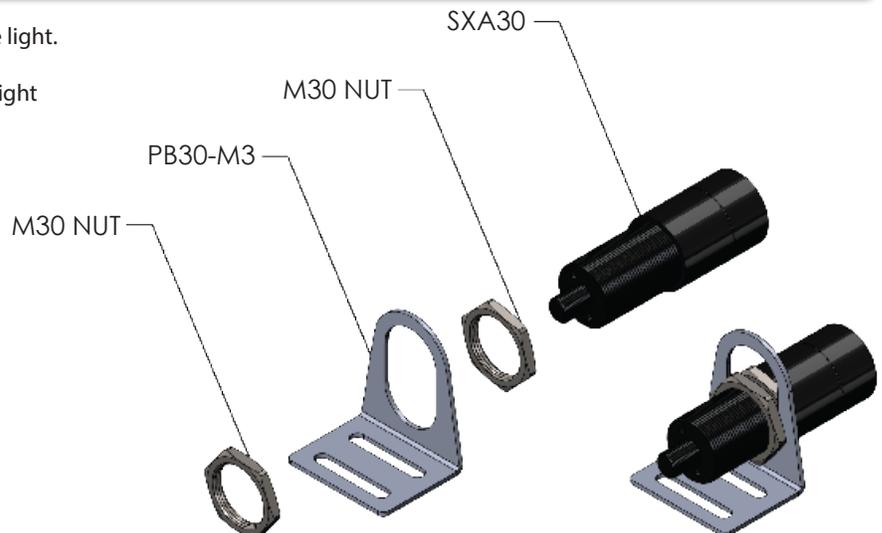

Locking Screw

Fully Retracted

MOUNTING

Two M30 nuts for mounting are included with the light.

Example of the SXA30 shown using the Slotted Right Angle mount (**Part Number: PB30-M3**).

See accessories for additional mounting options.

SXA30

M30 NUT

PB30-M3

M30 NUT

ACCESSORIES

Mount	
Description	Part Number
Swivel Mount	PB30-M1

Mount	
Description	Part Number
Slotted Block Mount	PB30-M2

Mount	
Description	Part Number
Slotted Right Angle	PB30-M3

Mount	
Description	Part Number
Blot-on Block Mount	PB30-M6

Power Cables	
Lengths	Part Number
5 m	5PM12-5
10 m	5PM12-10
15 m	5PM12-15

GLOSSARY

This glossary covers all Smart Vision Lights product families; some content in this section may not apply to this specific light.

TERMINOLOGY

OverDrive™ Lights include an integrated high-pulse driver for complete LED light control.
Continuous Operation Lights stay on continuously.
Multi-Drive™ Combines continuous operation and OverDrive™ strobe (high-pulse operation) mode into one easy-to-use light.
**Built-In Driver** The built-in driver allows full function without the need of an external controller.
Camera to Light Connecting the light directly to the camera, without the need for additional controllers or equipment.
**Polarizers** Filters that reduce reflections on specular surfaces.
Diffuser Used to widen the angle of light emission, reduce reflections, and increase uniformity.

TYPES OF ILLUMINATIONS

Projector
Dark Field
Radial
Bright Field
Direct
Axial
Line
Diffuse Panel
Backlight
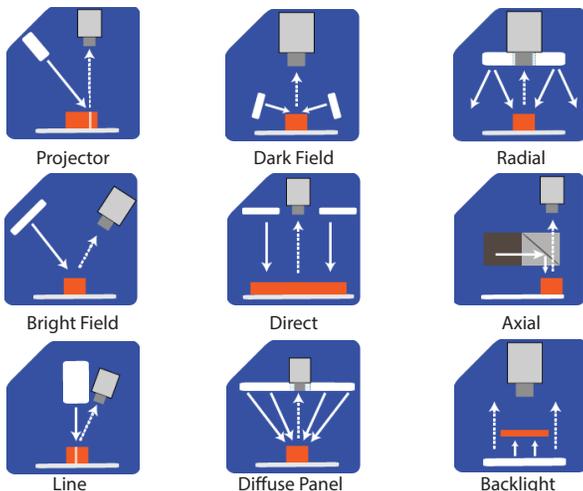
COLOR/WAVELENGTHS LEGEND

Wavelengths options range from 365 nm to 1550 nm.
Additional wavelengths available for many light families.
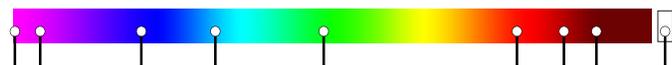
*See Part Number section for **this light's** available standard wavelengths.*

SHORT WAVE **INFRARED**