

# MINI SPOT LIGHT

## SP2-12

Direct intensive illumination of distant objects and codes.



MINIMAL INSTALLATION DIMENSIONS

EXCEPTIONAL ILLUMINATION POWER

ANALOGUE CONTROL OF LIGHTING INTENSITY

## LIGHT OPERATING MODES

### PERMANENT ILLUMINATION MODE

The light is designed for both the permanent and light-triggering mode. For permanent illumination bring the voltage of 10-24 V to the pin number 4 (black wire). The light is ON during the time when the 24 V EN signal is activated. Use a PCL, camera or another binary signal source. For the light intensity control, please see the text bellow.

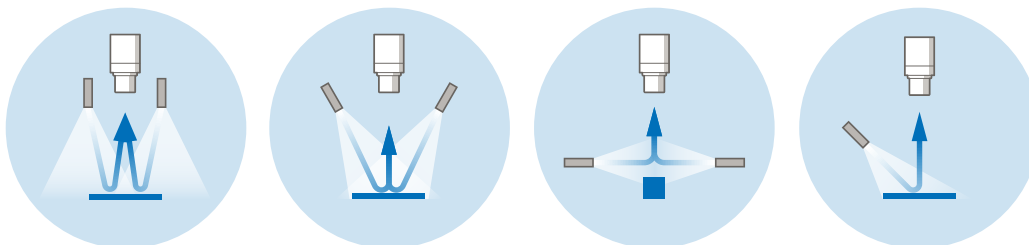
### LIGHT TRIGGERING MODE

Light triggering mode saves energy and extends the lifetime of the light. Trigger operation mode is recommended when a parallel operation of 2 or more lights might affect the quality of the acquired image. To start using a triggering mode, bring the pin number 4 (black wire) to a 10-24 V signal. The light is ON when a voltage of 24 V is present at pin number 4 then. Use a PCL, camera, or another binary signal source for triggering. For the light intensity control, please see the text bellow.

### LIGHT SOURCE INTENZITY REGULATION

The light intensity might be regulated by an analogue voltage, PWM signal or an external controller. In case of using an analogue signal, the light intensity might be regulated in a linear way at a pin number 4 by the voltage span of 2.7 -10 V. Bringing a voltage of 10-24 V to the pin number 4, the light works at its maximum intensity. The maximum PWM frequency is  $\leq 40$  kHz.

## WAYS OF USE



## ORDERING CODE

example of the ordering code

SP2 - 12 B470

Spot Light    Ø of Active Area    Exact Wavelength Value

## CONFIGURATION

Model	Wavelength [nm]	Ø of Active Area [mm]
SP2-12W	CTR 5000 k	12
SP2-12IR	940   850	12
SP2-12R	660   625	12
SP2-12G	528	12
SP2-12B	470	12
SP2-12UV	405   395   385   365	12

## ELECTRIC PARAMETERS

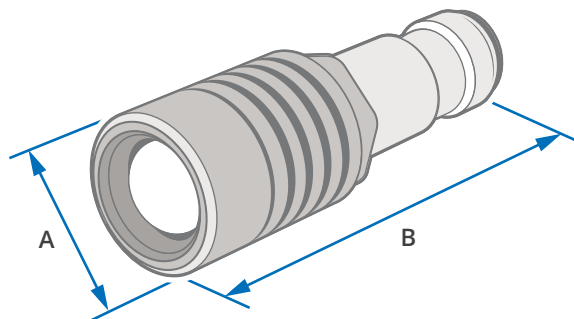
Model	SP2-12W	SP2-12IR	SP2-12R	SP2-12G	SP2-12B	SP2-12UV
$U_n$ Voltage Span	12-28 V	12-28 V	12-28 V	12-28 V	12-28 V	12-28 V
$U_{jm}$ Nominal Voltage	24 V DC	24 V DC	24 V DC	24 V DC	24 V DC	24 V DC
$I_{jm}$ Nominal Current	70 mA	70 mA	60 mA	70 mA	70 mA	70 mA
P Input	1.7 W	1.7 W	1.5 W	1.7 W	1.7 W	1.7 W
$U_{trig}$ Trigger Voltage	≥ 10 - 24 V <sup>2</sup>		$I_{trig}$ Trigger Current		2.3 mA <sup>2</sup>	
$U_{EN}$ Analogue Dimming	≥ 2.7 .. ≤ 10 V <sup>2</sup>		$I_{EN}$ PWM Dimming		> 10 V .. ≤ 24 V <sup>1</sup>	

<sup>1</sup> PWM maximal rate is ≤ 40 kHz    <sup>2</sup> EN (Enable) trigger signal values, M8 connector – pin number 4

## DIMENSIONS & WEIGHT

<b>A</b> Outer Ø [mm]	16
<b>B</b> Length [mm]	51
<b>Weight [g]</b>	24

**i** For more details please see our 2D drawings.

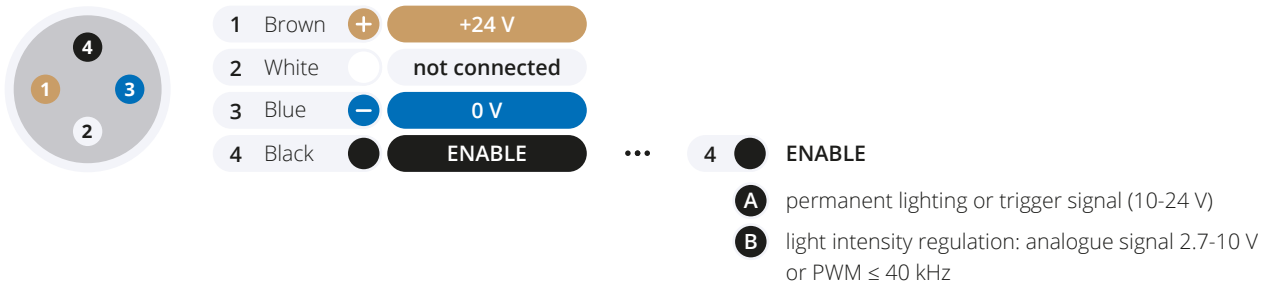


## TECHNICAL DATA

IP Category: **IP67**    Protection Category: **III**    Ambient Temperature: **-20 - +40 °C**    Isolation Resistance: **500 V**    Housing Material: **Brass & Aluminium alloy**

## CONNECTOR M12-4PIN ASSIGNMENT

light connector front view



## ACCESSORIES

✓ 2x **M12x1 Nuts** and 2x **Washers**

## OPTIONAL ACCESSORIES

+ Cable with Connector **M12 4-Pin Female 5m**

+ Controller **Smart Light CT-SL4D** + Controller **CM-01**

 **SmartView**

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