



**Very intense**

**Pattern projection**

**Flexible**

**HSI**

**IP54**

**CE**

## **effi**SHARP-PSV-HSI

Powerful shape projector

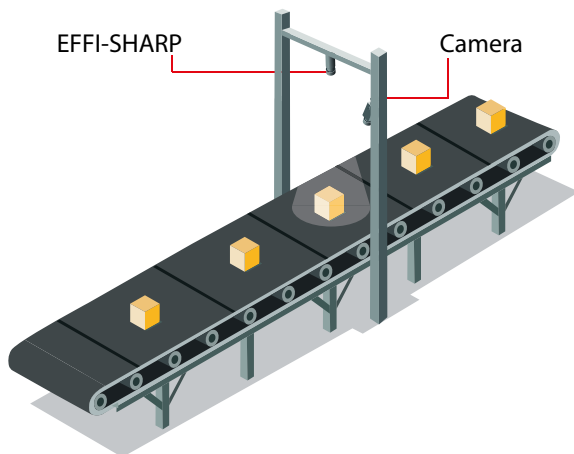
# INTRODUCTION

## TABLE OF CONTENTS

PART NUMBERING.....	PAGE 3
TECHNICAL SPECIFICATIONS.....	PAGE 3
OPTICAL SPECIFICATIONS.....	PAGE 4
ELECTRONICAL SPECIFICATIONS.....	PAGE 6
MECHANICAL SPECIFICATIONS.....	PAGE 7
CONTACT INFORMATION.....	PAGE 7

## APPLICATIONS

### Sharp standard



Precise spot light with sharp edges for long working distances.

# PART NUMBERING

## STANDARD VERSION

EFFI-SHARP-PSV-HSI - XX - M

### Optical lens

**NF:** Near Field

**MF:** Middle Field

**FF:** Far Field

**CM:** For any other  
C-mount configuration lens

### Mask

**1:** Square 9x9 mm

**2:** Disc Ø 15.1 mm

**3:** Half-moon R = 9.5 mm

# TECHNICAL SPECIFICATIONS

## effiSHARP-PSV-HSI

<b>Illumination Mode</b>	Continuous mode
<b>Spectrum</b>	400-900nm
<b>Power Supply</b>	24V DC
<b>Connector(s)</b>	M12 - 5 pins
<b>Power Consumption</b>	8W
<b>Weight</b>	620g
<b>Dimensions</b>	Height x length x width = 171,9 mm (NF / MF) - 212,4 mm (FF) x 79,1 mm x 79,1 mm
<b>Material</b>	Device body: Aluminum alloy
<b>Fastener</b>	6 x M5 holes on the sides of the device / 4 x M4 on the top of the device
<b>IP rating</b>	IP54
<b>Operation environment</b>	Temperature: 0°C to 40°C - Humidity: 20 to 85%RH (with no condensation) - Altitude: Up to 2000m
<b>Storage environment</b>	Temperature: -20° to 60°C - Humidity: 20 to 85%RH (with no condensation)
<b>Informations</b>	Overvoltage category I - Protective class III - Pollution degree 3
<b>Regulations &amp; Marking</b>	CE - UKCA
<b>Environmental Standards</b>	RoHS Directives (2011/65/EU, 2015/863/EU and China RoHS) - REACH Regulation - WEEE Regulation
<b>Country of Origin</b>	France

# OPTICAL SPECIFICATIONS

## TYPE OF LENS

NF: Near Field	MF: Middle Field	FF: Far Field
NF: 80 to 400 mm	MF: 400 to 3000 mm	FF: 400 to 3000 mm

## MASK AND PATTERN PROJECTION (IF NOT SPECIFIED, DEFAULT 2)

1: Square (9 x 9mm)



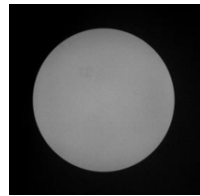
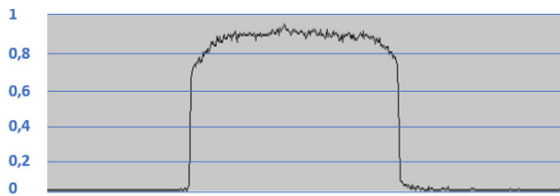
2: Disc (Ø 15.1 mm)



3: Half-moon (R = 9.5 mm)

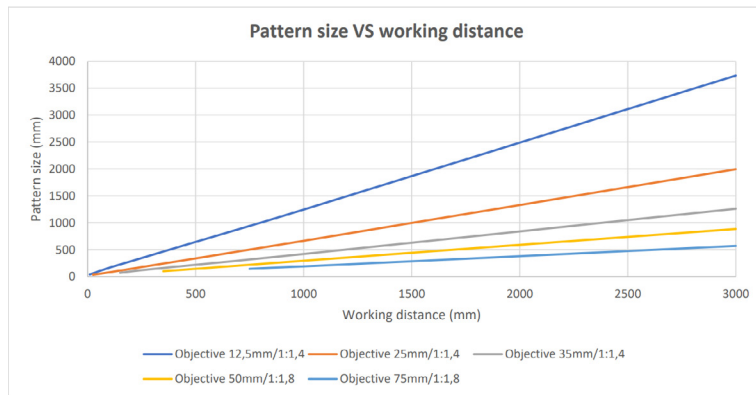


## UNIFORMITY



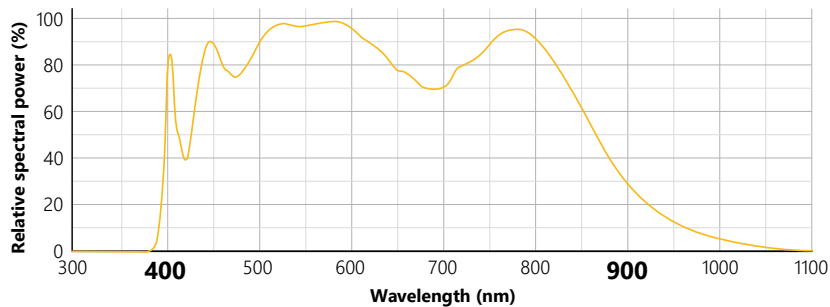
Uniformity higher than 80%

## PATTERN SIZE VS WORKING DISTANCE



**Notes:** Measurements were made with the disc Ø15,1 mm mask (Z=2).

## SPECTRUM



# C-MOUNT OBJECTIVE SELECTION



Any C-mount objective can be mounted on the EFFI-SHARP-PSV-HSI. The objective is not provided with the EFFI-SHARP-PSV-HSI.

To guarantee the quality of the projector, the pattern is directly mounted in the projector body. However, the pattern can be observed through the aperture of the projector. Avoid any sharp contact with the mask: this one is sensitive and can easily be damaged.

EFFILUX recommends using one of the following objectives with the EFFI-SHARP-PSV-HSI (2/3" 1.5MP and 1" 1.5MP) :

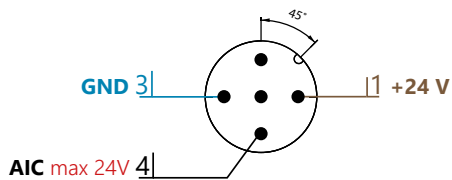
	<b>OBJ-1-F12.5 CF12.5HA-1</b>	<b>OBJ-1-F25 CF25HA-1</b>	<b>OBJ-1-F35 CF35HA-1</b>	<b>OBJ-1-F50 CF50HA-1</b>	<b>OBJ-1-F75 CF75HA-1</b>
Focal length (mm)	12.5	25	35	50	75
Iris range	F1.4 - F22			F1.8 - F22	
Angle of view (HxV)	45° 13' x 42° 01'	28° 43' x 21° 44'	20° 43' x 15° 37'	14° 35' 10° 58'	9° 45' x 7° 19'
Filter thread	M49 x 0.75 mm				
L x Ø	68.5 x 51 mm	75.5 x 51 mm	48.5 x 51 mm	55.5 x 51 mm	76 x 51 mm
Mechanical characteristics					

# ELECTRONICAL CONSIDERATIONS

## WIRING LAYOUT

The EFFI-SHARP-PSV-HSI is supplied with a 24V constant voltage. The power consumption depends on the intensity which flows through the LED. The maximum is 8W.

### M12 5pins - 1 input

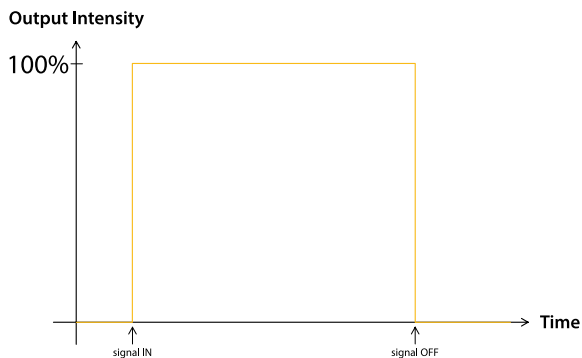


#### Notes:

- Cable length = 500 mm.
- If the AIC is not connected, the light will light on at 100% as if VAIC=24V. If you don't need to adjust light level do not connect/ use this PIN.


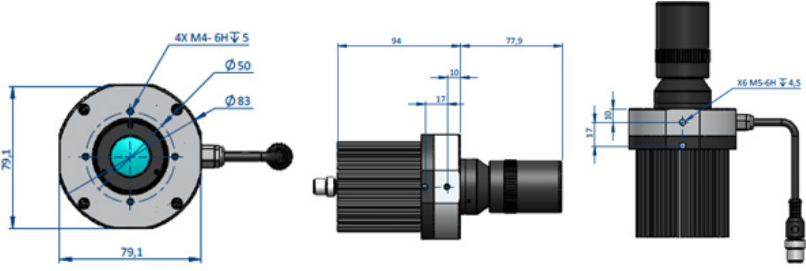

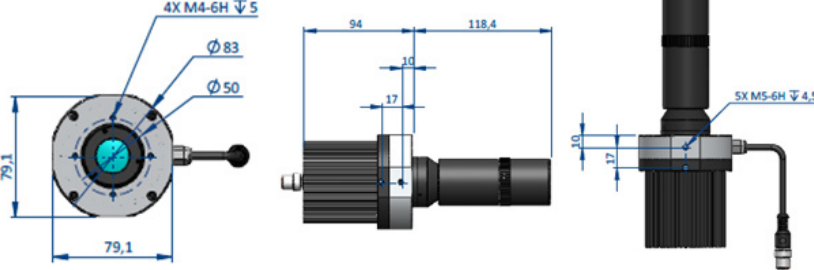

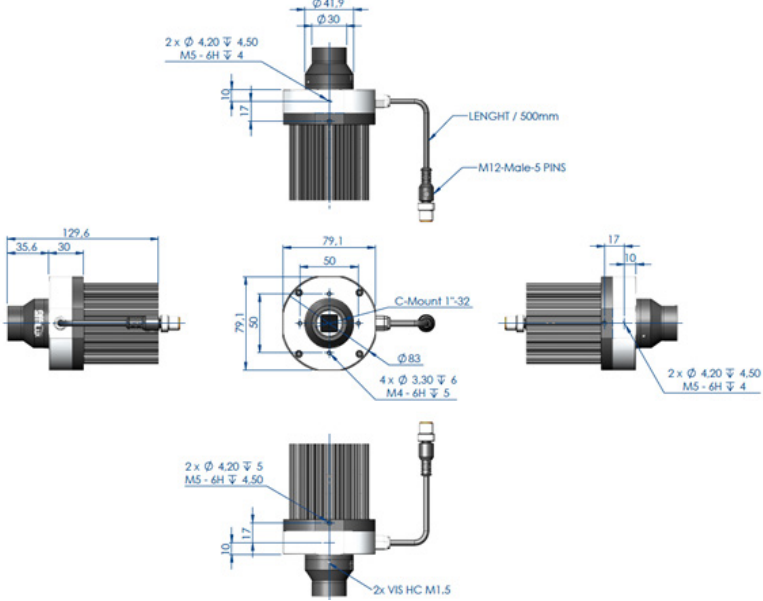
## WORKING MODE

### Continuous mode



If you set trigger PNP/NPN continuously ON the light will run continuously. The current through the LED can be controlled with the AIC contact (500mA max).

# MECHANICAL CONSIDERATIONS (DIMENSIONS IN MM)

Objective version	Dimensions & fastener (in mm)
<p>Near Field (NF) &amp; Middle Field (MF)</p> 	 <p>4X M4-6H <math>\Psi</math> 5  <math>\Phi</math> 50  <math>\Phi</math> 83            79,1            79,1            94            10            17            77,9            10            17            16            5X M5-6H <math>\Psi</math> 4,5</p>
<p>Far Field (FF)</p> 	 <p>4X M4-6H <math>\Psi</math> 5  <math>\Phi</math> 83  <math>\Phi</math> 50            79,1            79,1            94            10            17            118,4            10            17            16            5X M5-6H <math>\Psi</math> 4,5</p>
<p>C-mount (CM)</p> 	 <p><math>\Phi</math> 41,9  <math>\Phi</math> 30            2 x <math>\Phi</math> 4,20 <math>\Psi</math> 4,50            M5 - 6H <math>\Psi</math> 4            10            17            LENGHT / 500mm            M12-Male-5 PINS            129,6            35,6            30            79,1            50            C-Mount 1"-32  <math>\Phi</math> 83            4 x <math>\Phi</math> 3,30 <math>\Psi</math> 6            M4 - 6H <math>\Psi</math> 5            17            10            2 x <math>\Phi</math> 4,20 <math>\Psi</math> 4,50            M5 - 6H <math>\Psi</math> 4            2 x <math>\Phi</math> 4,20 <math>\Psi</math> 5            M5 - 6H <math>\Psi</math> 4,50            10            17            2x VIS HC M1,5</p>

# ACCESSORIES

Please refer to the specific documentation for additional information on the accessories of the EFFI-SHARP-PSV.



## M12

2meters: EFFC-CAB-M12-FM-5-DD-L2

5meters: EFFC-CAB-M12-FM-5-DD-L5

10meters: EFFC-CAB-M12-FM-5-DD-L10



Clamping: EFFM-1-0001

Pivot joint: EFFM-1-0009

Tripod adapter: EFFM-1-0027

# CONTACT INFORMATION

Please refer to the specific documentation (datasheet, user manual and drawing) for complementary information. Contents of this document are based on information available as of March 2025 and may be changed without prior notice.



EFFILUX  
1, Rue de Terre Neuve  
Mini Parc du Verger - Bâtiment E  
91940 Les Ulis - FRANCE

Tel: +33 9 72 38 17 80  
Fax: +33 9 72 11 21 69  
Mail: sales@effilux.fr

Copyright 2022 Effilux - All rights Reserved