

HPLS-90R-REG700-D-4T30



The HPLS-90R-REG700-D-4T30 series is a multiple LED illuminator that slides over a telecentric or other style camera lens to provide 'darkfield' illumination. The system can be ordered as a complete unit as described on this page and replacement or spare components can be ordered as detailed in the following pages. Standard configuration is with the -D disable option.

Replacement or spare parts:

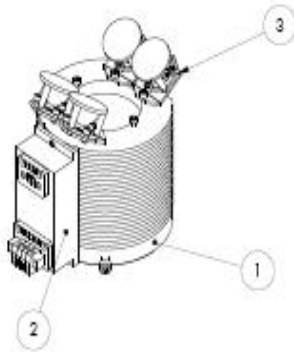
HPLS-90R-A002-BASE a hollow base that provides mounting structure and heat sinking. (Page 2)

HPLS-90R-A007-TAB30 a single LED mounted on an angled facet with reflector. (Page 3)

HPLS-90R-A008-DRIVER700 Drive Electronics Housing with driver. (Page 4)

LEDH-630-NP Replacement LED (Page 5)

LEDH-TAB30REFLECTOR Replacement Reflector (Page 5)



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	HPLS-90R-A002-BASE		1
2	HPLS-90R-A008-DRIVER700		1
3	HPLS-90R-A007-TAB30		4

Description and specifications:

LED light source with 4 individual tab assemblies

* tuning of the beam profile by rotation

* tuning of the beam profile by adjusting the tab angle

* Tab assemblies are individually replaceable (soldering required)

* Tab assembly: 30 degrees bent

* Driver: 700mA with disable input

Notes:

The standard configuration operates with 630nm LEDs. Other wavelengths are available.

The HPLS-90R-A006-DRIVER700 LED driver provides continuous output. Short pulse, higher intensity drivers are available.

Specifications

Input Connector

Pin1: common power return

Pin2: +24V, 0.5A nominal, 1A MAX

Pin3: (optional) Enable / Disable return

Pin4: (optional) TTL/CMOS Enable / Disable 0-5V

Fits Maximum Lens Diameter: 2.175 inches

Clear Aperture Diameter: 1.38 inches

MTTF: 15,000 hours (90% of initial illumination)

Ordering Instructions

Part numbers:

HPLS-90R-REG700-4T30: 4LED ring light source with built-in driver, 700mA/LED

HPLS-90R-REG700-E-4T30: same with remote enable

HPLS-90R-REG700-D-4T30: same with remote disable (Standard configuration)

Mating Connector (included)

Phoenix Contact part 1827729

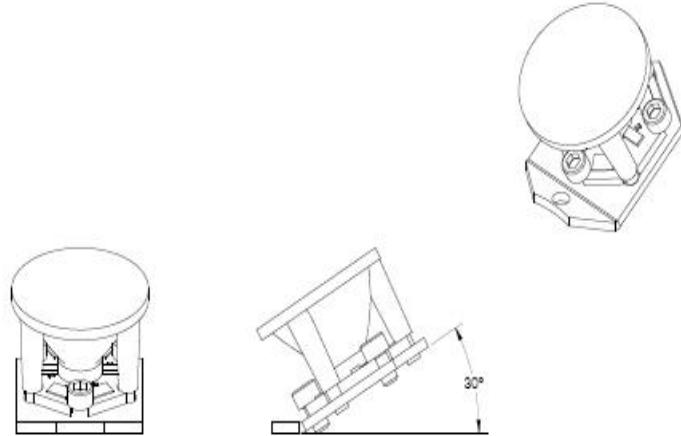
Pluggable Mini Terminal Blocks

3.81mm 4pin PLG W/FLG

HPLS-90R-A007-TAB30

Replacement Part for HPLS-90R

HPLS-90R-A007-TAB30 a single LED mounted on a tab with angled facet. The replacement tab includes mounted LED with reflector. Connections are made by soldered wires. The HPLS-90R-REG700-D-4T30 illuminator utilizes four of the HPLS-90R-A007-TAB30 optimized for uniform illumination.



Notes:

HPLS-90R-A007-TAB30 is designed to provide a maximum illumination of 1.1 inch diameter at a height of 30mm above the top surface of the HPLS-90R-A002-BASE hollow base. Facet angle and reflector sets are possible for optimizing illumination at other distances. Contact Lightspeed Technologies for more information.

Specifications

630nm Standard Wavelength

Mounting Screws are on HPLS-90R-A002-BASE

Lead Length will only reach appropriate connector on Driver.

Ordering Instructions

Part numbers:

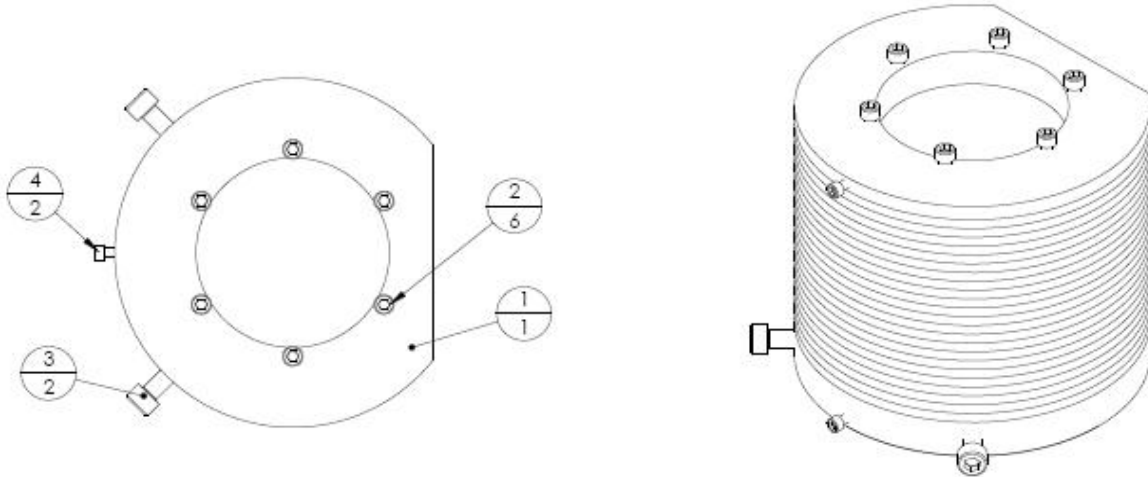
HPLS-90R-A007-TAB30

HPLS-90R-A002-BASE



Replacement Part for HPLS-90R

HPLS-90R-A002-BASE is a hollow base that provides mounting structure and heat sinking for the HPLS-90R series illuminators.



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	HPLS-90-004 - barrel support	Base	1
2	HX-SHCS 0.112-40x0.375x0.375-N	Socket head screw, black oxide	6
3	HX-SHCS 0.164-32x0.75x0.75-N	Socket head screw, black oxide, nylon point	2
4	HX-SHCS 0.086-56x0.25x0.25-N	Socket head screw, SS	2

Notes:

The standard HPLS-90R-A002-BASE comes with a machined flat on one side for a narrower profile when fitting into tight spaces.

Specifications

Material: Aluminum

Fits Maximum Lens Diameter: 2.175 inches

Anodized Black

Ordering Instructions

Part numbers:

HPLS-90R-A002-BASE

HPLS-90R-A008-DRIVER700 LIGHTSPEED TECHNOLOGIES

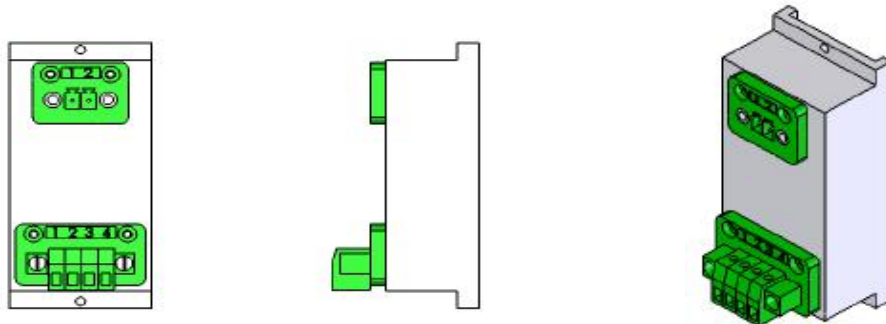
Replacement Part for HPLS-90R

HPLS-90R-A008-DRIVER700 is a Drive Electronics Housing with driver for the HPLS-90R illuminator

There are two connectors on HPLS-90R-A008-DRIVER700 drive electronics housing.

One connector socket is for the LED clusters. The HPLS-90R clusters includes the mating connector and a lead length such that it can only be attached to the appropriate connector of the HPLS-90R-A008-DRIVER700 drive electronics housing.

The second connector socket is for power and optional user enable or disable inputs. A mating connector is supplied for the user to configure.



Notes:

HPLS-90R-A008-DRIVER700 operates on a +24V input.
Optional wall plug power supplies are available

Specifications

Input Connector
Pin1: common power return
Pin2: +24V, 0.5A nominal, 1A MAX
Pin3: (optional) Enable / Disable return
Pin4: (optional) TTL/CMOS Enable / Disable 0-5V

Mating Connector (included)

Phoenix Contact part 1827729
Pluggable Mini Terminal Blocks
3.81mm 4pin PLG W/FLG

Ordering Instructions

Part numbers:

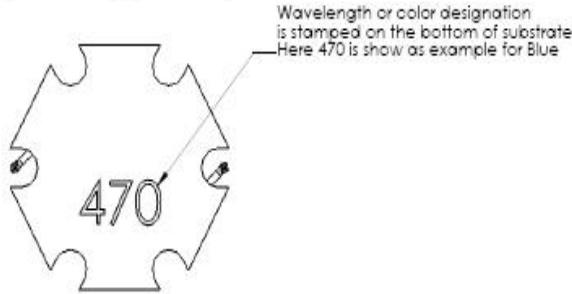
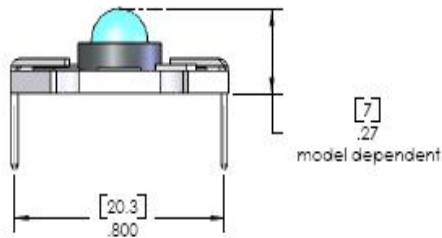
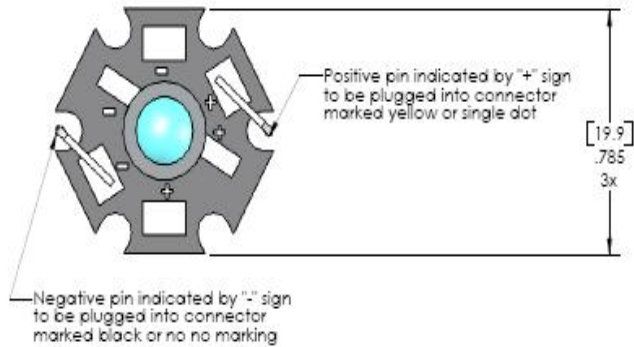
HPLS-90R-REG700 Drive electronics housing with built-in driver,
700 mA/LED for HPLS-90R Illuminator

HPLS-90R-REG700-E Same with optional enable

HPLS-90R-REG700-D Same with optional disable

HPLS-90R-REG700--PS Optional Wall Plug Power Supply

LEDH-XXXX



Part numbers:
LEDH-xxxx, where xxxx designates wavelength in NM or effective radiation temperature in K

- LEDH-455 - LED Head 0.8 inch pin spacing - Royal Blue
- LEDH-470 - LED Head 0.8 inch pin spacing - Blue
- LEDH-505 - LED Head 0.8 inch pin spacing - Cyan
- LEDH-530 - LED Head 0.8 inch pin spacing - Green
- LEDH-590 - LED Head 0.8 inch pin spacing - Amber
- LEDH-617 - LED Head 0.8 inch pin spacing - Orange
- LEDH-630 - LED Head 0.8 inch pin spacing - Red
- LEDH-3500 - LED Head 0.8 inch pin spacing - Warm White
- LEDH-5500 - LED Head 0.8 inch pin spacing - Bright White

Ordering Instructions

Part numbers:

LEDH-630-NP 630nm LED for HPLS-90R-A007-TAB30, no pins

Reflector Option

LEDH-TAB30REFLECTOR Reflector replacement for HPLS-90R-A007-TAB30