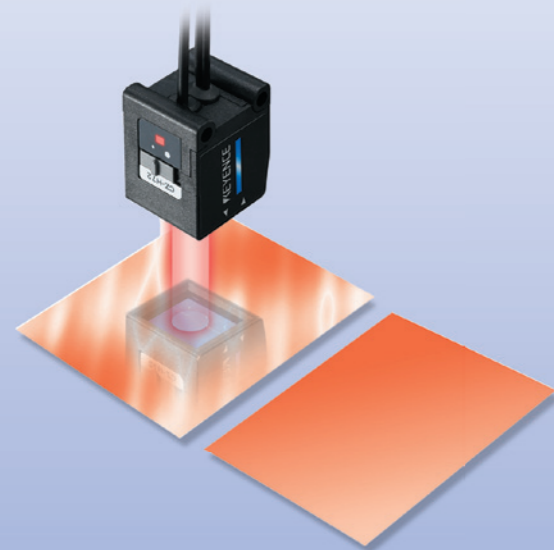


# Luster Detection Sensor Head CZ-H72

CE Refer to P.821 for a list of products complying with EU Directives.  
 cULUS Refer to P.844 for UL Certified Products.



## Detecting presence/absence of adhesive on targets

It extracts only the luster component from the target's surface

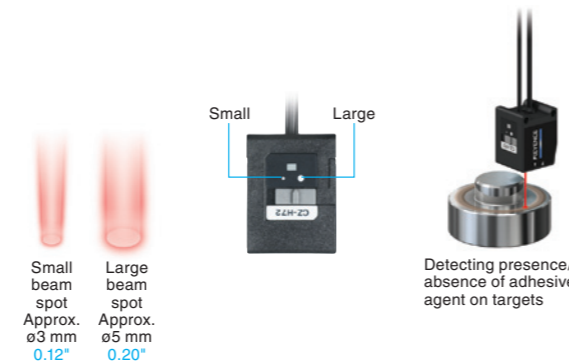
Most targets reflect both regular and diffuse light components. The special luster capturing optics in the CZ-H72 sensor head extract only the luster component and eliminate the undesirable effects of diffuse reflections.

## Unaffected by colored patterns or print below a glossy surface

The CZ-H72 can reliably detect targets by their luster level, without being affected by colors or print

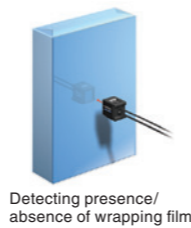
## Selectable beam spot size

Choose from 3 mm 0.12" or 5 mm 0.20" diameter beam spots (when detecting from 15 mm 0.59")  
 Note: Total detecting range is from 10 to 20 mm (0.39" to 0.79")



## FILM mode for detecting presence/absence of films

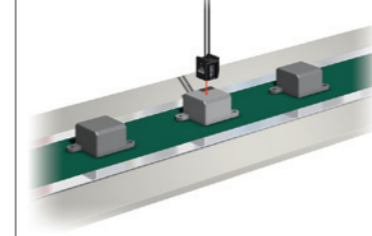
The amplifier features a built-in FILM mode, which can be selected for difficult detection of such targets as packaging films for cigarettes or Compact Discs. These films exhibit birefringence, which can prevent stable detection in conventional photoelectric sensors.



## Applications

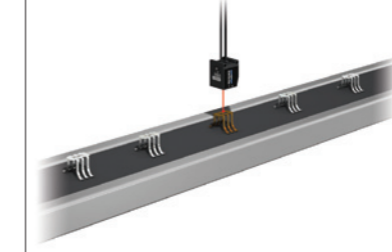
### Detecting presence/absence of flat paint on plastics

Detects different types of molded articles by checking presence/absence of flat paint. It can recognize up to 4 different types of targets without tooling changes.



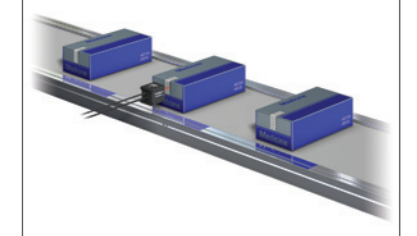
### Detecting presence/absence of plating at contact points

Detects presence/absence of plating electrodes. With selectable large/small beam spots, it can stably detect small targets.



### Detecting presence/absence of sealing tape

Detects presence/absence of sealing tape. It stably detects patterned transparent sticker without being affected by background colors or patterns.



## Lineup

### Sensor head

Type	Detection range	Smallest spot diameter	Model
Luster detection	15 mm 0.59" (Center)	Small 3 mm 0.12" dia. Large 5 mm 0.20" dia. at reference distance of 15 mm 0.59"	CZ-H72

### Amplifier

Type	Main unit	Expansion unit
Model	NPN CZ-V21A PNP CZ-V21AP	CZ-V22A CZ-V22AP
Appearance		

## Specifications

### Sensor head

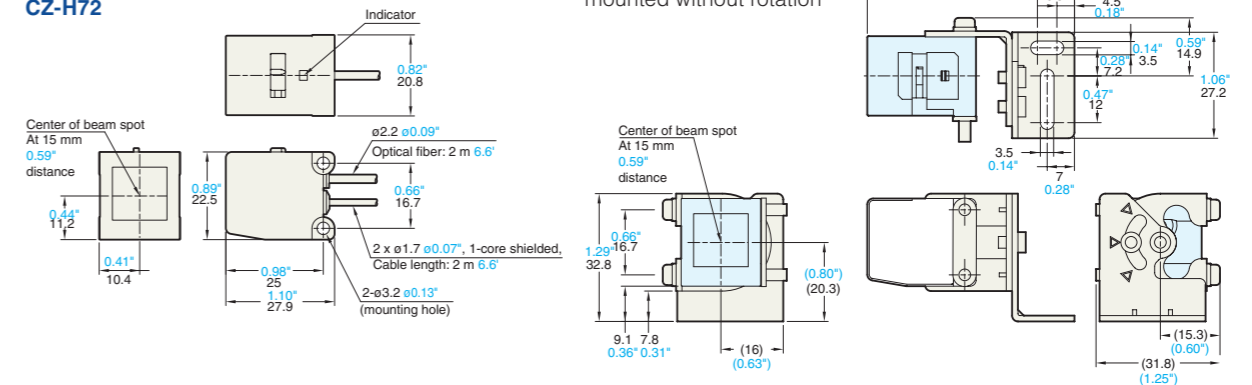
Type	Luster detection (Adjustable beam spot)
Model	CZ-H72
Detection range	15 mm 0.59" (Center) 1
Smallest spot diameter	Small: 3 mm 0.12" dia. Large: 5 mm 0.20" dia. at reference distance of 15 mm 0.59"
Light source	Red LED (665 nm)
Minimum bend radius of fiber	25 mm 0.98"
Ambient light	Incandescent lamp: 10,000 lux max., Sunlight: 20,000 lux max.
Ambient temperature	-10 to +55°C (14 to 131°F), No freezing
Vibration resistance	10 to 55 Hz, 1.5 mm 0.06" double amplitude in X, Y, and Z directions, 2 hours respectively
Enclosure rating	IP40
Material	Housing: Fiberglass reinforced plastic Lens cover: Glass
Weight (with 2-m 6.6' cable)	Approx. 50 g

\* Refer to P.185 for amplifier specifications.  
 1. Small beam spot: 15 ± 3 mm 0.59" ± 0.12", Large beam spot: 15 ± 5 mm 0.59" ± 0.20"

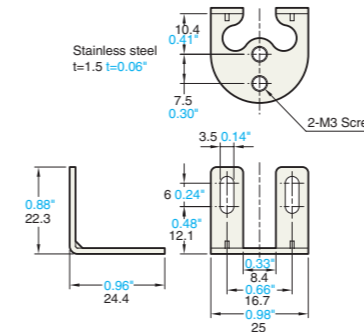
## Dimensions

Unit: mm inch

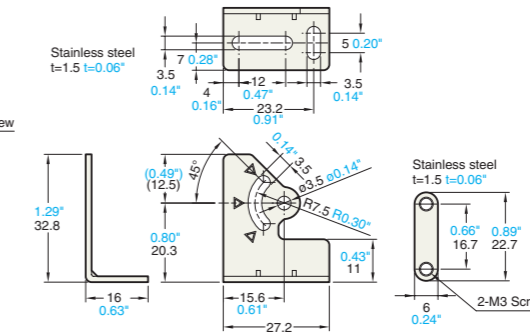
### Sensor head CZ-H72



### Mounting bracket A\*



### Mounting bracket B\*



\* Mounting bracket A/B is attached to CZ-H72.

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