

NEW


Small Spot Size
LV-H35F



DUSTPROOF
WATERPROOF

NEW

Long Distance
LV-H62F



Amplifier
LV-21A

Durable Laser Sensors
Stable Detection in Harsh Environments

A One-of-a-Kind Laser Sensor that Works in Even the Harshest Environments

The waterproof, dust-tight PFA Fluoroplastic casing ensures unmatched durability and maximum detecting performance.

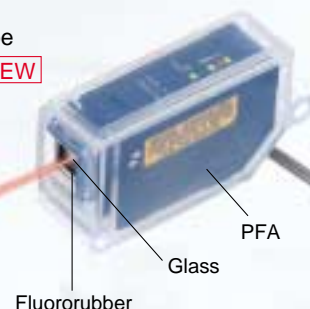
Ultra-small beam spot enables highly accurate detection at long distances.

LV-H35F

A constant 2 mm(0.08") diameter beam spot at up to 450 mm(17.71")

System design and installation are easy because the beam spot diameter remains constant regardless of the detecting distance.

Reflective type
LV-H35F **NEW**



Retro-reflective type
LV-H62F **NEW**



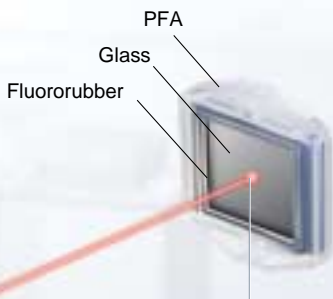
P.R.O. function eliminates dead zones

Even when a reflective target passes near the sensor, the P.R.O. function cancels the light directly reflected from the target. Eliminating dead zones ensures reliable detection (in FINE mode)

The retro-reflective design simplifies optical alignment at up to 5m (16.4')

LV-H62F

Enclosure rating **IP-67**



Bright beam spot for easy optical axis alignment

The coaxial optical system detects the reflected light in the same axis as the transmitted laser. Performance is equivalent to a thru-beam without the need for a separate receiver.

* Note: The sensor may detect splashing water during operation. Simply adjust the settings to an appropriate level to prevent this.

Specifications

Reflective/retro-reflective type

■ Sensor head

Waterproof type (IP-67)

Type	Small-spot, reflective	Retro-reflective
Shape		
Model	LV-H35F	LV-H62F
FDA class	class II	
Light source	Visible red semiconductor laser, Wavelength: 650 nm	
Detecting distance	FINE	100 mm 3.94'
	TURBO	200 mm 7.87'
	SUPER	450 mm 17.72'
Ambient temperature	-10 to 55°C (14 to 131°F), No condensation	
Relative humidity	35 to 85%, No condensation	
Materials	Case	Fluoroplastic (PFA)
	O-ring	Fluororubber
	Lens Cover	Glass

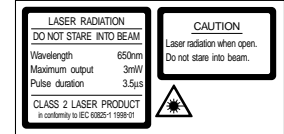
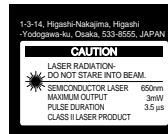
1. The minimum bend radius of the cable is 25 mm 0.98".

■ Warning

The LV Series conforms to the FDA standard for Class II and IEC standard for Class 2 laser products.

FDA Class II [LV-H62F/H35F]

IEC Class 2 [LV-H62F/H35F]



Amplifier

The digital display amplifiers provide various easy-to-use support functions.

Amplifier unit for reflective/retro-reflective type sensors
LV-21A(P)/22A(P)

- Full-range, dual digital display indicating up to "9999"
- Direct access for easy sensitivity setting/fine adjustment
- 16-bit high-precision, high-power mode (Super mode)



■ Amplifier

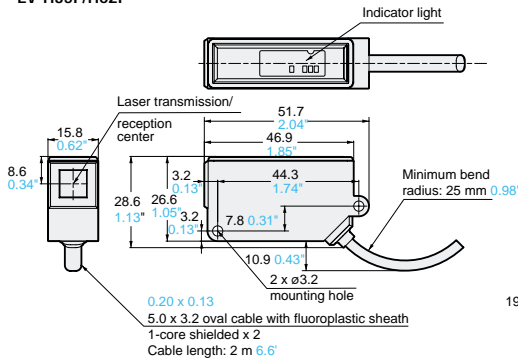
Type	NPN	LV-21A	LV-22A
	PNP	LV-21AP	LV-22AP
Main unit/ expansion unit	Main unit		Expansion unit (1 line)
Response time	FINE	TURBO	SUPER
	80μs	500μs	4ms
Control output	NPN x 2 ch, 100 mA max. (40 V max.), residual voltage 1 V max. LV-21AP/22AP: PNP open-collector x 2 ch, max. 100mA (30VA max.), residual voltage 1 V max.		
Protection circuit	Reverse-polarity protection, overcurrent protection, surge absorber		
Power voltage	12 to 24V DC ±10% max., Ripple (P-P) 10% max.		
Power consumption	1.5 W max. (current consumption: 12V: 125 mA, 24V: 62.5 mA)		
Ambient temperature	-10 to 55°C (14 to 131°F), No condensation		
Relative humidity	35 to 85%, No condensation		
Materials	Main body & cover: Polycarbonate		

1. With additional units connected, the allowable ambient temperature range varies as follows.
2 to 5 units connected: -10 to +50°C (14 to 122°F) 6 to 7 units connected: -10 to +45°C (14 to 113°F)
Note: To connect several units they must be mounted on a DIN rail (metal DIN rail).
Make sure that output current is 20 mA. max.

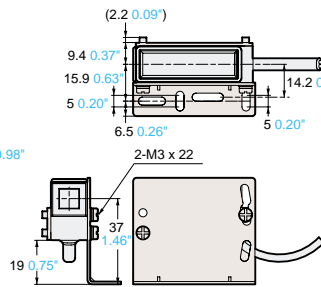
Dimensions

Reflective/retro-reflective sensor head

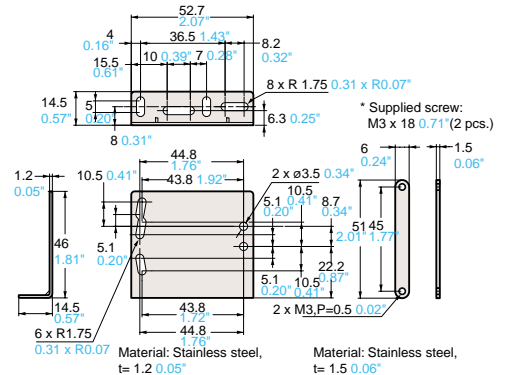
LV-H35F/H62F



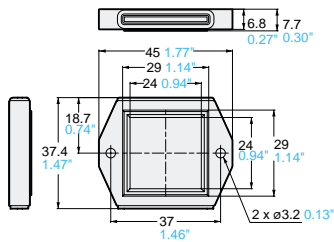
When the mounting bracket is attached



Mounting bracket (accessory)

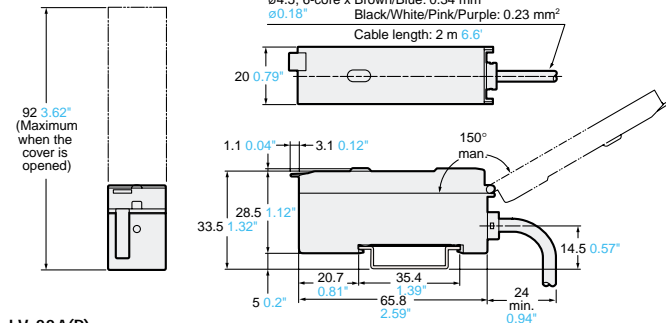


Reflector R-8 (included with LV-H62)

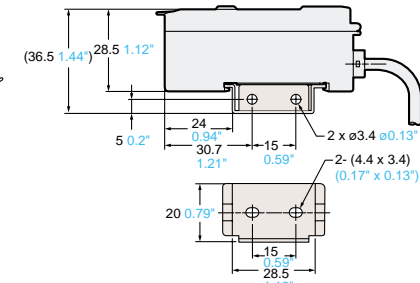


Amplifier units

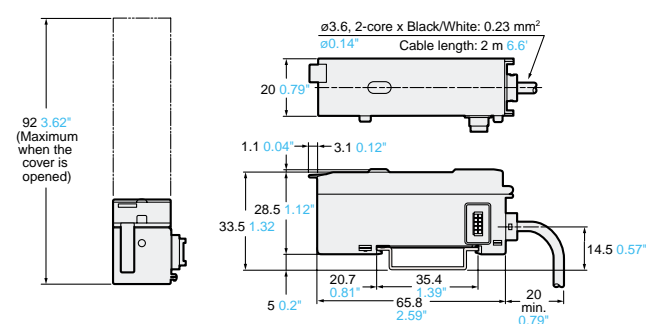
LV-21A(P)/11A



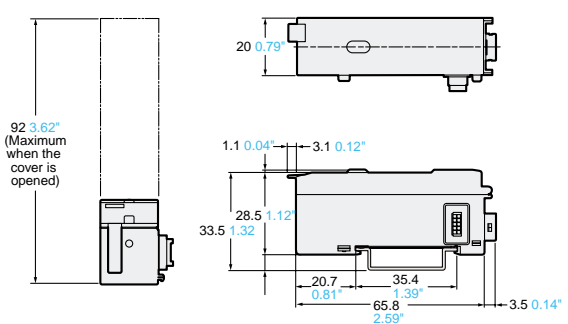
When the mounting bracket (included with LV-21A(P)/11A) is attached:



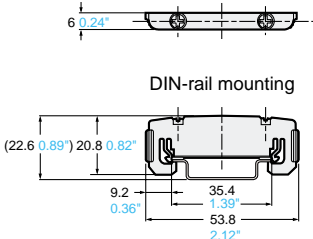
LV-22A(P)



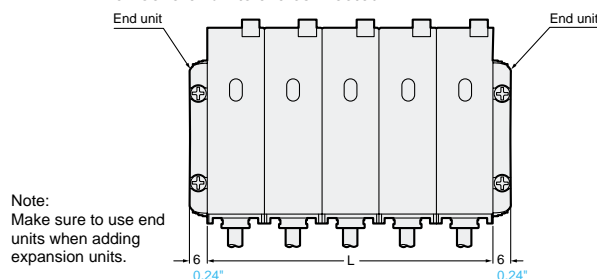
LV-20A



End unit (included with LV-22A(P))



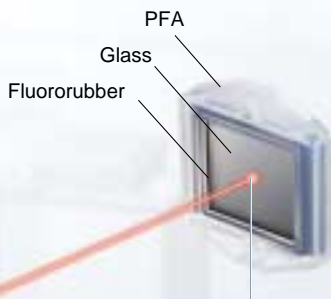
When several units are connected:



No. of expansion units	L
1	20 0.79"
2	40 1.57"
3	60 2.36"
4	80 3.15"
5	100 3.94"
6	120 4.72"
7	140 5.51"
8	160 6.3"

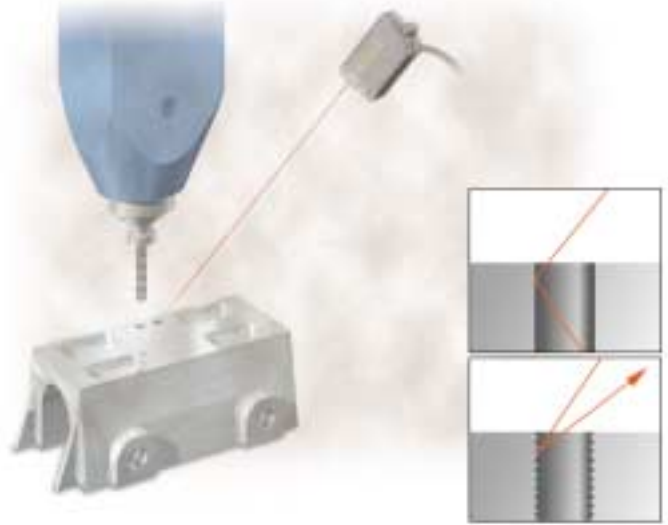
Features

Enclosure rating **IP-67**



NEW Waterproof
R-8 Reflector
(Included)

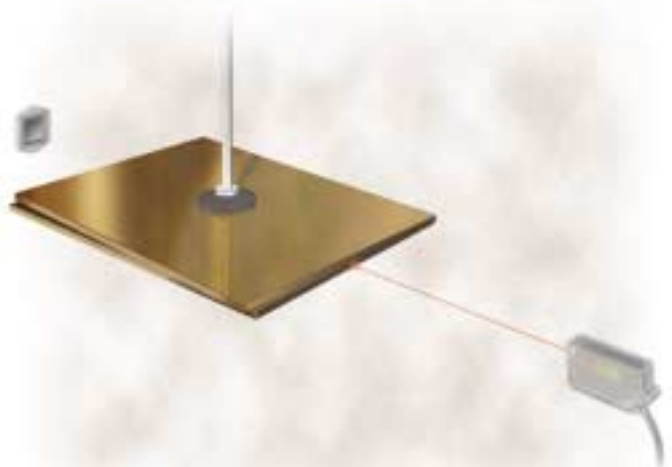
Straight beam, reflective **LV-H35F**
**The small beam spot is constant
at up to 450 mm (17.71")**



Detection of threading on metal parts

The long distance detection of the LV Series is stable because it is not affected by the harsh environment.

Straight beam, retro-reflective **LV-H62F**
**The retro-reflective sensor
simplifies optical axis alignment**



Detecting the transfer of two copper plates

With its powerful laser, the LV Series can reliably detect thin targets at long distances.