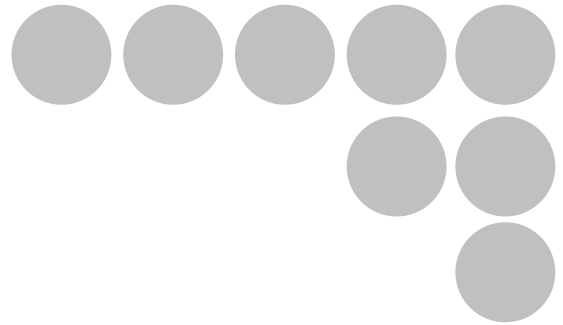




High Luminance Illumination And  
Strobe Controller  
for FZ Series



# Data sheet

# Bar-Type Illumination

Direct illumination from an free angle can be obtained for each type of work.

## Main Uses

- Appearance inspection of rechargeable battery.
- Date verification of package.
- Crack inspection of Molding.
- Size measurement of electronic part.

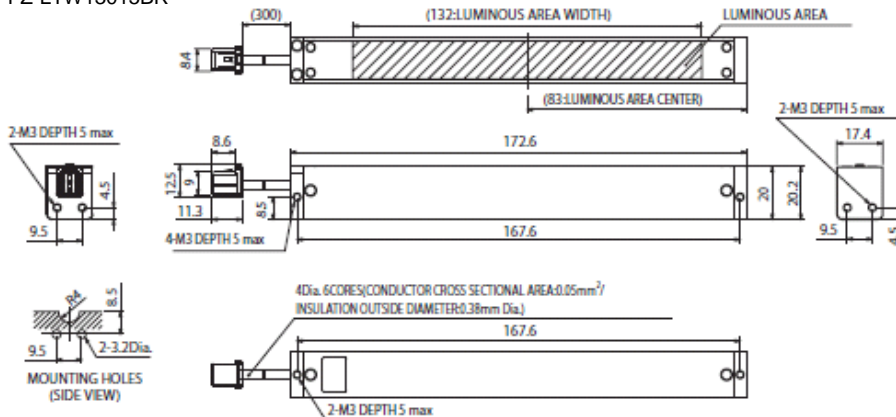


## Specifications

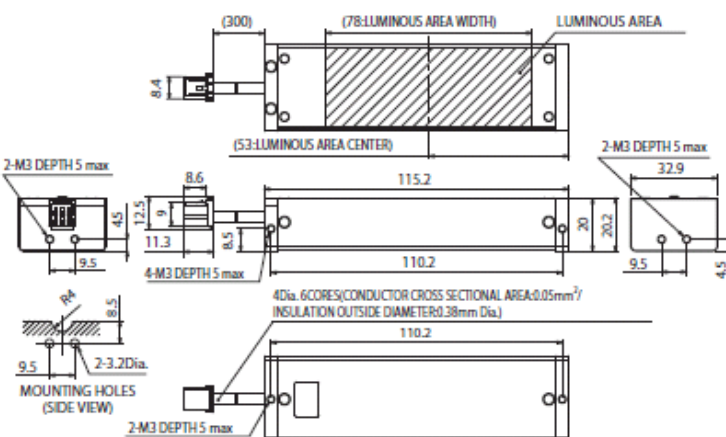
	FZ-LTW5015BR	FZ-LTW7530BR	FZ-LTW13015BR
Luminous Area size	50mm x 15mm	78mm x 30mm	132mm x 15mm
Light source	White LED		
Lighting system	4-block lighting with variable illumination intensity		
Mean life (Typical)	10,000hours (Time required for the illumination intensity to drop to 50% of original level at shipment at maximum intensity with the ambient temperature of 25° C)		
Power consumption	18W maximum(12 VDC, 1.5A maximum) (including strobe controller and camera)		
Vibration resistance	10 to 150 Hz, half-amplitude : 0.35 mm(maximum acceleration 50 m/s <sup>2</sup> ) 10 times for 8 minutes each in directions		
Shock resistance	150 m/s <sup>2</sup> 3 times each in 3 directions		
Ambient Temperature	Operating: 0 to 50° C (with no icing or condensation) Storage : -25 to 60° C (with no icing or condensation)		
Ambient humidity	Operation and storage: 35 to 85 % (with no condensation)		
Ambient environment	No corrosive gases		
Degree of protection	IEC60259 IP20		
Material	Case for Illumination : Galvanized steel sheet metal, Cover for Illumination : PC		
Weight (including Cable)	Approx. 80 g	Approx. 150g	Approx. 140g

## ■Dimensions(UNIT:mm)

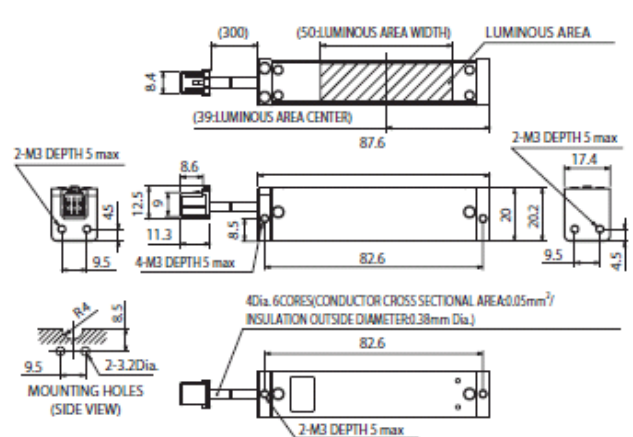
FZ-LTW13015BR



FZ-LTW7530BR



FZ-LTW5015BR



# Direct ring-Type Illumination

High-luminance LEDs deployed at high density to produce 360-degree illumination.

## Main Uses

- Positioning of PC board.
- Existence of chip component.
- Existence of automotive assembled parts.
- Label inspection.

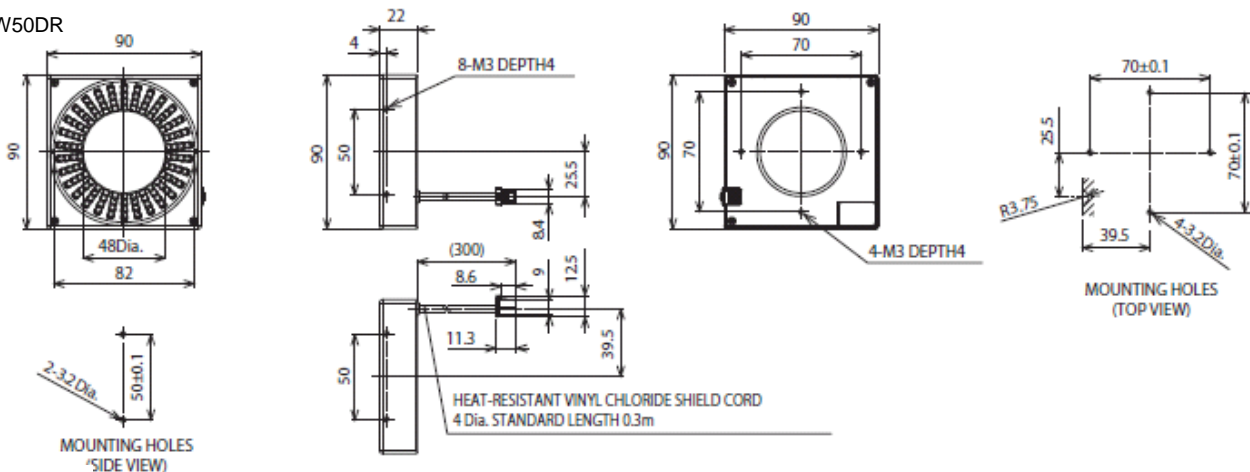


## Specifications

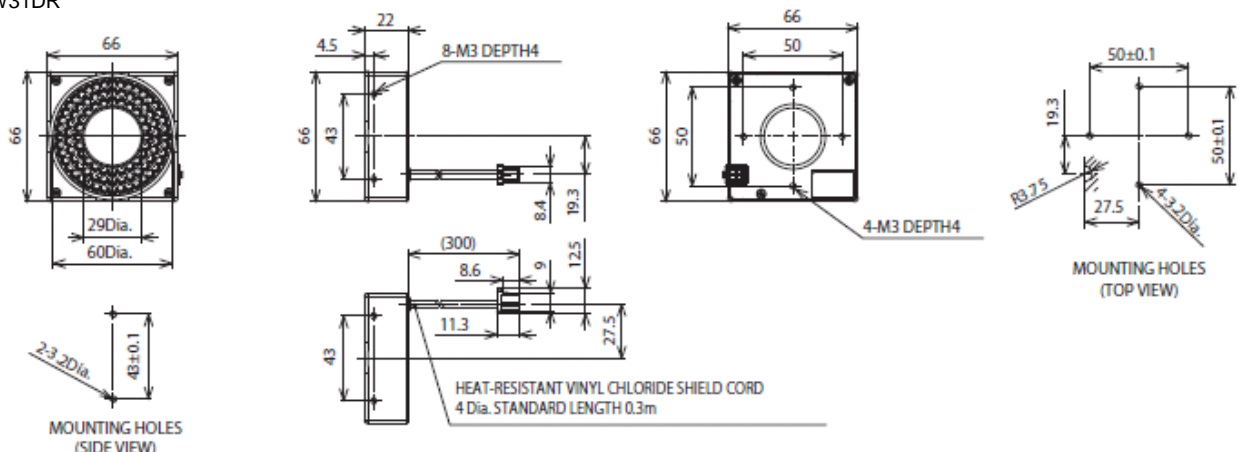
	FZ-LTW31DR	FZ-LTW50DR
Luminous Area size	φ 29mm to 60mm	φ 48mm to 90mm
Light source	White LED	
Lighting system	4-block lighting with variable illumination intensity	
Mean life (Typical)	10,000hours (Time required for the illumination intensity to drop to 50% of original level at shipment at maximum intensity with the ambient temperature of 25° C)	
Power consumption	18W maximum(12 VDC, 1.5A maximum) (including strobe controller and camera)	
Vibration resistance	10 to 150 Hz, half-amplitude : 0.35 mm(maximum acceleration 50 m/s <sup>2</sup> ) 10 times for 8 minutes each in 3 directions	
Shock resistance	150 m/s <sup>2</sup> 3 times each in 6 directions	
Ambient Temperature	Operating: 0 to 50° C (with no icing or condensation) Storage : -25 to 60° C (with no icing or condensation)	
Ambient humidity	Operation and storage: 35 to 85 % (with no condensation)	
Ambient environment	No corrosive gases	
Material	Case for Illumination : Aluminum	
Weight (including Cable)	Approx. 100 g	Approx. 160 g

## ■Dimensions(UNIT:mm)

FZ-LTW50DR



FZ-LTW31DR



# Coaxial Illumination

Produces coaxial lighting.



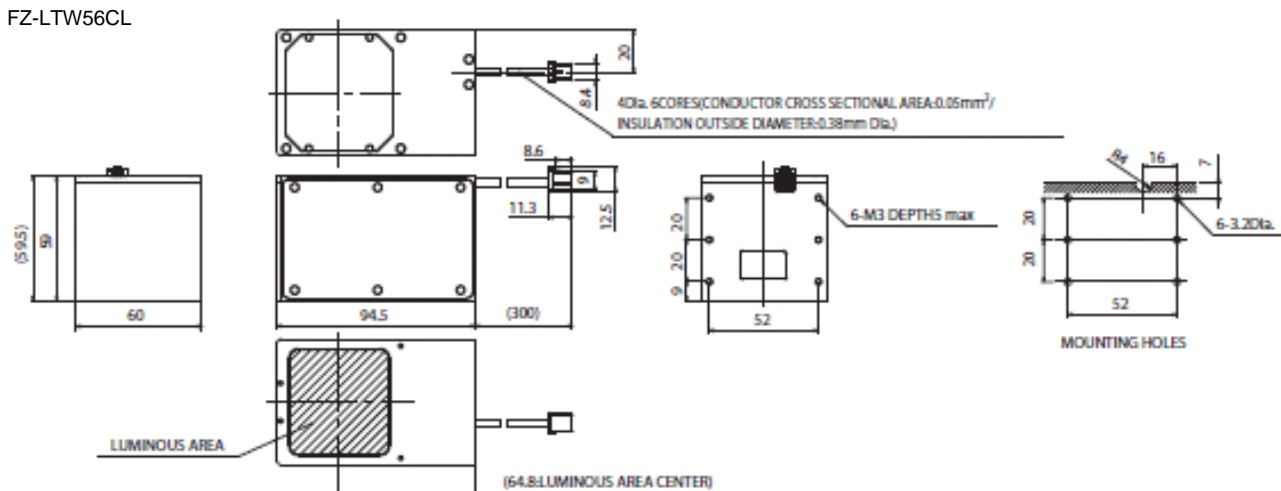
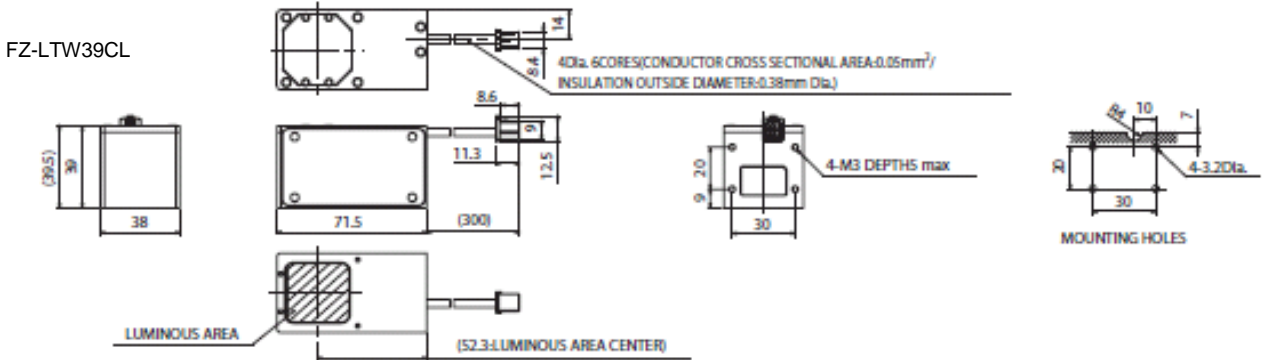
## Main Uses

Alignment inspection of wafer, metal surface, film, LC, and other mirror-finished materials,

## Specifications

	FZ-LTW39CL	FZ-LTW56CL
Luminous Area size	28mm x 30.5mm	50mm x 47mm
Light source	White LED	
Lighting system	4-block lighting with variable illumination intensity	
Mean life (Typical)	10,000hours (Time required for the illumination intensity to drop to 50% of original level at shipment at maximum intensity with the ambient temperature of 25° C)	
Power consumption	18W maximum(12 VDC, 1.5A maximum) (including strobe controller and camera)	
Vibration resistance	10 to 150 Hz, half-amplitude : 0.35 mm(maximum acceleration 50 m/s <sup>2</sup> ) 10 times for 8 minutes each in 3 directions	
Shock resistance	150 m/s <sup>2</sup> 3 times each in 6 directions	
Ambient Temperature	Operating: 0 to 50° C (with no icing or condensation) Storage : -25 to 60° C (with no icing or condensation)	
Ambient humidity	Operation and storage: 35 to 85 % (with no condensation)	
Ambient environment	No corrosive gases	
Degree of protection	IEC60259 IP20	
Material	Case for Illumination : Galvanized steel sheet metal Cover for Illumination : PC	
Weight (including Cable)	Approx. 140 g	Approx. 80 g

## ■Dimensions(UNIT:mm)



# Strobe Controller

One Strobe Controller can control 2 illuminations.  
Easy to wiring and lighting control.



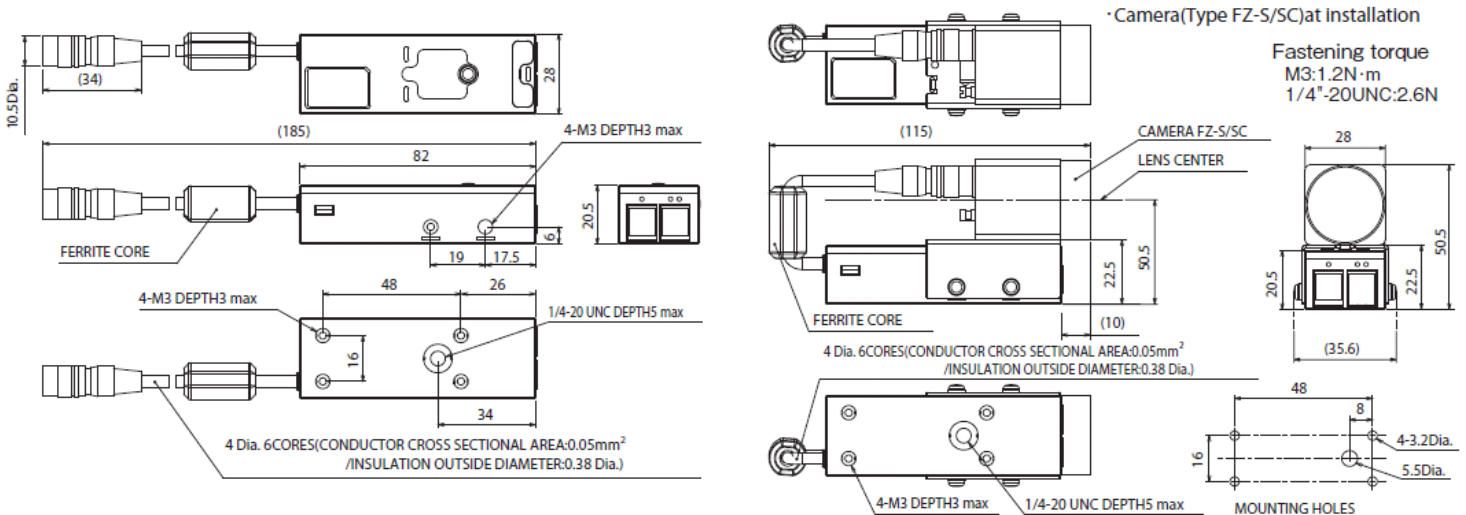
## Specifications

	FZ-LTA100	FZ-LTA200
Number of channel for illumination	1ch	2ch
Connectable camera	FZ-S,FZ-SC,FZ-S2M,FZ-SC2M,FZ-SP,FZ-SPC,FZ-SF,FZ-SFC	
Connectable camera cable	FZ-VS(2m/5m), FZ-VSL(2m/5m), FZ-VSB(2m/5m) *1	
Controllable software version	FZ3-(H)9**Series : FZ3 Ver.3.13 or more FZ3-(H)3**/(H)7**Series : FZ3 Ver.2.00 or more *2	
Power supply voltage	DC +12 V±10% (supply from Camera)	
Output current	300 mA maximum	
Number of trigger for illumination	4 signals x 1ch(individual)	4 signals x 1ch(individual)
Auto-Light Control for High-Shutter Speed	Yes (Selectable) Default : OFF	
ON period for illumination trigger	Synchronous for Shutter timing of Camera (variable)	
Power consumption	18W maximum(12 VDC, 1.5A maximum) (including strobe controller and camera)	
Vibration resistance	10 to 150 Hz, half-amplitude : 0.35 mm (maximum acceleration 50 m/s <sup>2</sup> ) 10 times for 8 minutes each in directions	
Shock resistance	150 m/s <sup>2</sup> 3 times each in 3 directions	
Ambient Temperature	Operating: 0 to 50° C (with no icing or condensation) Storage : -25 to 60° C (with no icing or condensation)	
Ambient humidity	Operation and storage: 35 to 85 % (with no condensation)	
Ambient environment	No corrosive gases	
Degree of protection	IEC60259 IP20	
Material	Case for strobe controller : PC/ABS, Attachment for camera : Stainless steel : PC	
Weight (including Cable)	Approx. 80 g (including Cable)	

\*1 It is impossible to use camera cable more than 10m.However, it is possible to extend the length (max. 15m) by jointing cables (max. 3 pieces), when using Camera Cable Extension Unit (FZ-VSJ).

\*2 This strobe controller is recognized as type FZ-SLC100 in FZ3-(H)3\*\* / (H)7\*\* series (previous ver.2.12). And so, the image of LED's allocation on the Menu is displayed as FZ-SLC100's one. Refer to the instruction sheet of Illumination FZ-LT Series about the relation between lighting block and selected part.

## ■Dimensions(UNIT:mm)



# Extension cable

## Specifications

	FZ-LT-EXV 1M	FZ-LT-EXV 3M	FZ-LT-EXV 5M
Usable Illumination	All type		
Cable length	1m	3m	5m

\*The only one extension cable can be connected with one Illumination.

# Option

## Diffusion Plate for Bar-type Illumination

### Specifications

	FZ-LT-DF5015BR	FZ-LT-DF7530BR	FZ-LT-DF13015BR
Usable Illumination	FZ-LTW13015BR	FZ-LTW7530BR	FZ-LTW5015BR
Ambient Temperature	Operating: 0 to 50° C (with no icing or condensation), Storage : -25 to 60° C (with no icing or condensation)		
Ambient humidity	Operation and storage: 35 to 85 % (with no condensation)		
Ambient environment	No corrosive gases		
Material	Diffusion Plate :PMMA, Spacer :ABS		
Cable length	Approx. 5g	Approx. 10g	Approx. 10 g

## Diffusion Plate for Ring-type Illumination

### Specifications

	FZ-LT-DF31DR	FZ-LT-DF50DR
Usable Illumination	FZ-LTW31DR	FZ-LTW50DR
Ambient Temperature	Operating: 0 to 50° C (with no icing or condensation), Storage : -25 to 60° C (with no icing or condensation)	
Ambient humidity	Operation and storage: 35 to 85 % (with no condensation)	
Ambient environment	No corrosive gases	
Material	Diffusion Plate :Acrylic resin	
Cable length	Approx. 5 g	Approx. 5g

## Polarizing Plate for Ring-type Illumination

### Specifications

	FZ-LT-PL31DR	FZ-LT-PL50DR	FZ-LT-PL31DR-C	FZ-LT-PL50DR-C
Usable Illumination	FZ-LTW31DR	FZ-LTW50DR	FZ-LTW31DR (Camera)	FZ-LTW50DR(Camera)
Ambient Temperature	Operating: 0 to 50° C (with no icing or condensation), Storage : -25 to 60° C (with no icing or condensation)			
Ambient humidity	Operation and storage: 35 to 85 % (with no condensation)			
Ambient environment	No corrosive gases			
Material	PET			
Cable length	Approx. 5 g	Approx. 10g	Approx. 5 g	Approx. 10g

## adaptor

### Specifications

	FZ-LT-AD31DR	FZ-LT-AD50DR
Usable Illumination	FZ-LTW31DR	FZ-LTW50DR

# Revision History

---

Date	Revised contents
January, 2010	Original production

**OMRON Corporation** Industrial Automation Company  
Tokyo, JAPAN

Contact: [www.ia.omron.com](http://www.ia.omron.com)

*Regional Headquarters*

**OMRON EUROPE B.V.**  
Sensor Business Unit  
Carl-Benz-Str. 4, D-71154 Nufringen, Germany  
Tel: (49) 7032-8111-0/Fax: (49) 7032-811-199

**OMRON ASIA PACIFIC PTE. LTD.**  
No. 438A Alexandra Road # 05-05/08 (Lobby 2),  
Alexandra Technopark,  
Singapore 119967  
Tel: (65) 6835-3011/Fax: (65) 6835-2711

**OMRON ELECTRONICS LLC**  
One Commerce Drive Schaumburg,  
IL 60173-5302 U.S.A.  
Tel: (1) 847-843-7900/Fax: (1) 847-843-7787

**OMRON (CHINA) CO., LTD.**  
Room 2211, Bank of China Tower,  
200 Yin Cheng Zhong Road,  
PuDong New Area, Shanghai, 200120, China  
Tel: (86) 21-5037-2222/Fax: (86) 21-5037-2200

Authorized Distributor:

© OMRON Corporation 2009 All Rights Reserved.  
In the interest of product improvement,  
specifications are subject to change without notice.

Cat. No. Q176-E1-01

Printed in Japan  
0126-0M(0126)(Web)