

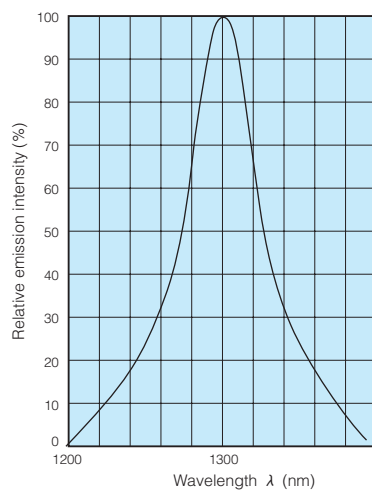
- Slim width of 12 mm
- Multifunctional slim sensor ideal for dark room use
  - Infrared ray of 1,300 nm used as light source, no indicator provided and no visible light emitted
  - 4-turn adjustment with indicator for fine-tuning

### Type

Detection method	Detecting distance	Model	Operation mode	Output mode
Through-beam type	30mm (GLT500 series)	<b>F1RM-DR</b>	Light-ON/ Dark-ON selectable	NPN open collector
Reflective type	5mm (GLX 500 series)			
(*Depending on fiber optic cable)				

\*The light source is infrared LED. Use glass fiber optic cable (separately provided).

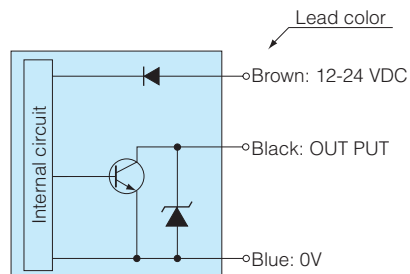
### Emission Spectrum Characteristics (Typical Example)



## Rating/Performance/Specification

Model	F1RM-DR
Light source (wavelength)	Infrared LED (1300nm)
Power supply	12-24V DC $\pm 10\%$ / Ripple 10% max.
Current consumption	30mA max.
Operation mode	Light-ON/Dark-ON selectable with switch
Timer	Off-delay/timer disabled selectable with switch
Delay time	About 50 ms fixed
Output mode	NPN open collector
Rating	Sink current 30V DC 100 mA max. (Residual voltage: 1 V)
Hysteresis	10% max. of distance (reflective type)
Response time	250 $\mu$ s max
Sensitivity adjustment	With volume (4-turn without stopper, indicator provided)
Protective structure	IP 40
Material	ABS resin
Connection	Permanently attached cord (Outer dimension: dia. 4) / 0.3 mm <sup>2</sup> x 3cores 2m
Mass	About 80 g max. (including cord)
Applicable power supply unit	PS Series, IP Series

## Input/Output Circuit and Connection

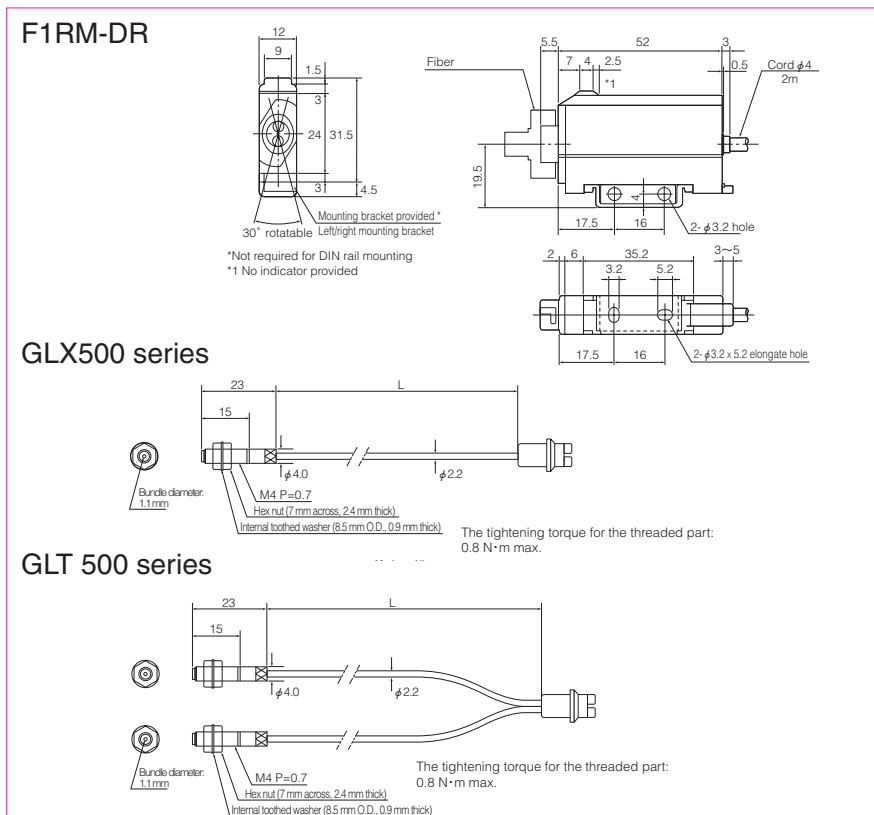


- Output is provided with a short circuit protection circuit. The output transistor turns off when load short circuit or overload occurs. Check the load and turn the power back on.

## Environmental Specification

Ambient light	10000lx max.
Ambient temperature	-25 - +55 °C Storage: -40 - +70 °C (non-freezing)
Ambient humidity	35-85%RH max. (non-condensing)
Vibration	10-55 Hz / 1.5 mm amplitude / 2 hours each in 3 directions

## Dimensions (in mm)



## Fiber Optic Cable (Typical Example)

### GLT Series (detecting distance: 30 mm)

Model	GLT505	GLT510	GLT520
Fiber length L (m)	0.5	1	2
Ambient temperature	Tip: -60 - +200°C; covering: 200°C		
Fiber material	Covering	Fluoroplastic	
	Core	Glass	
Fiber diameter	Cable	2.2	
	Core	Bundle diameter 1.1	
Allowable bending radius	R25		
Minimum detector object diameter	1.0 (fine-tunable)		

### GLX series Detecting distance 5mm

Model	GLX505	GLX510	GLX520
Fiber length L (m)	0.5	1	2
Ambient temperature	Tip: -60 - +200°C; covering: 200°C		
Fiber material	Covering	Fluoroplastic	
	Core	Glass	
Fiber diameter	Cable	2.2	
	Core	Bundle diameter 1.1 (2-division)	
Allowable bending radius	R25		
Minimum detector object diameter	0.05 (fine-tunable)		