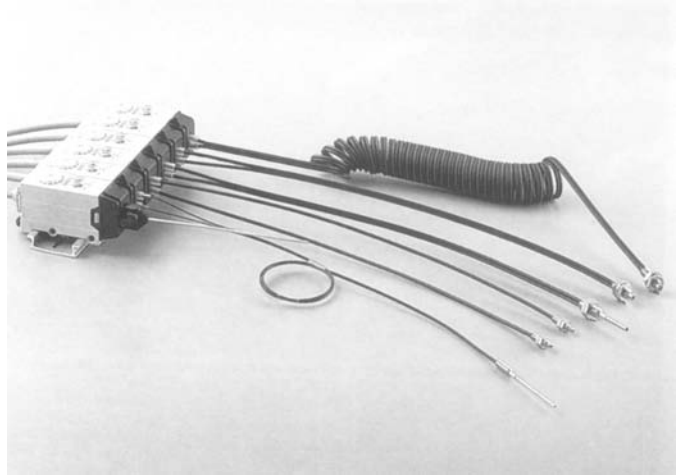


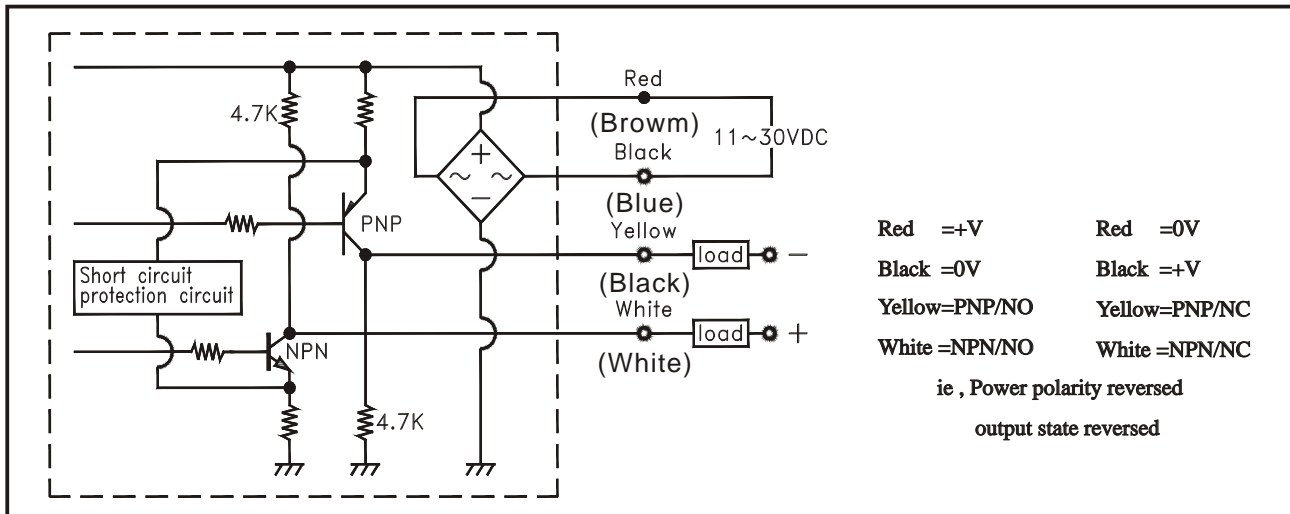
High speed response time 0.1 ms/ON.  
 Free cut fiber cable.  
 DIN rail fixer.  
 Thermal drift less than  $1\mu\text{m}/^\circ\text{C}$   
 Illumination over 10,000 Lux of lamp light.  
 Fiber sensor with high repetitive  $5\mu\text{m}$ .



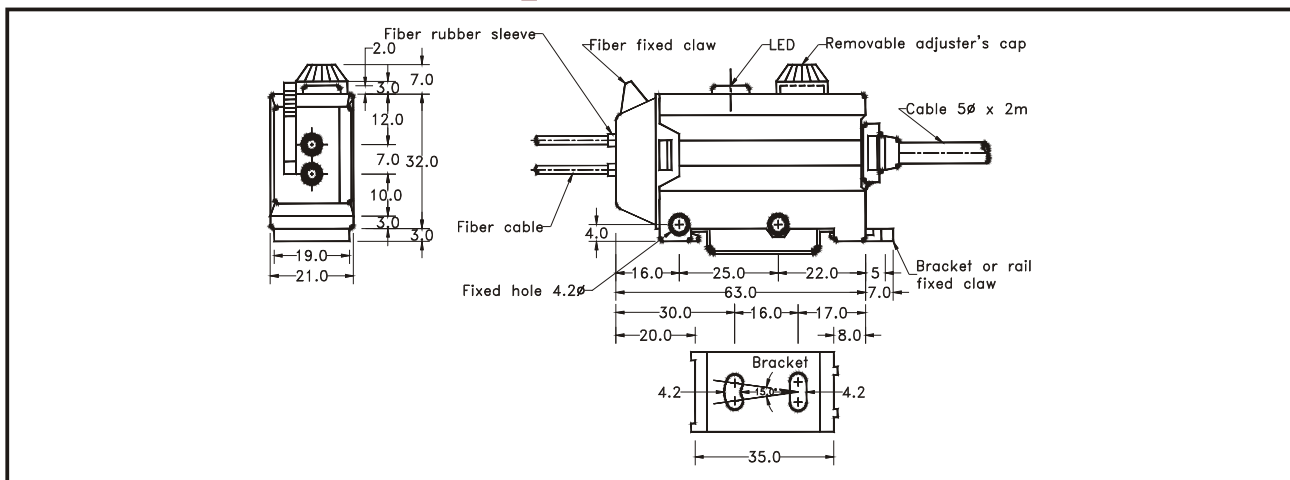
## ■ Specification < Amplifier Unit >

Output Method	Standard Type		Long Distance Type	
Model	FF-03R	FF-03X	FF-06R	FF-06X
Emitter	Red LED	Infrared LED	Red LED	Infrared LED
Response Time	ON : 0.1ms , OFF : 0.15ms			
Hysteresis	< 5% of Sensing Distance			
Operating Voltage	11~30 VDC ; Ripple < 20% of Peak to Peak			
Current Consumption	30 mA max.		40 mA max.	
Residual Voltage	< 0.8V			
Leakage Current	< 0.8mA			
Output Method	NPN & PNP Two Way Output			
Output Status	NO/NC Changeable			
Output Current	150mA max.			
Protection Method	Short Circuit & Polarity Reversed Protection			
Connection Method	4 Cores / 5.0 φ X 2m			
Protect Class	IP-65			
Illumination	Lamplight < 5,000 Lux ; Sunlight < 10,000 Lux.			
Operating Temp./Hum.	-20°C~+70°C ; 35%~85% RH			
Housing Material	PBT			
Weight	Appr. 105g			

## Output Circuit & Connection Diagram



## Dimension < Amplifier Unit >



## Attachment < Lens >

Type	Right View Lens		Aside View Lens	
Model	FL-1		FL-2	
Shape				
Suitable fiber unit	FPT-02			
Amplifier	FF-03R (X)	FF-06R (X)	FF-03R (X)	FF-06R (X)
Sensing distance	1200mm	2000mm	400mm	600mm
Min. sensible object	1 φ			