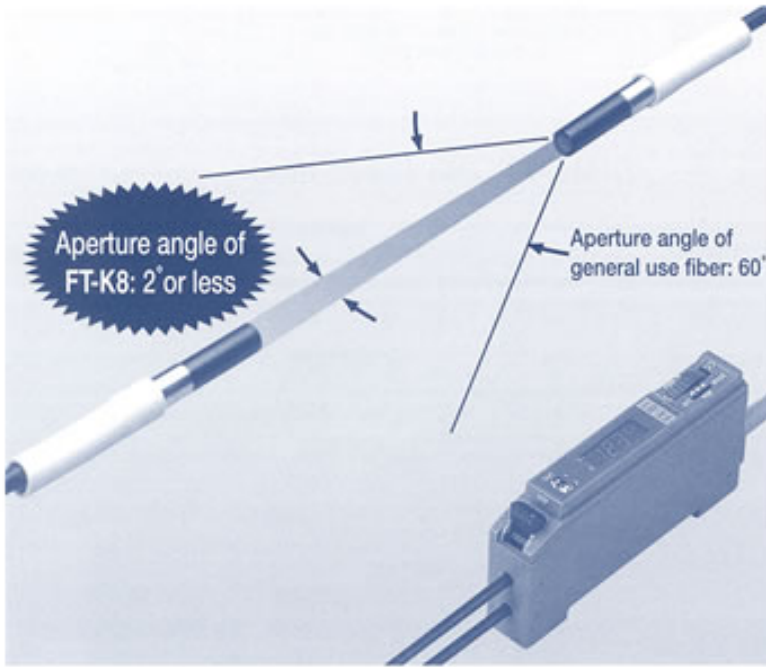
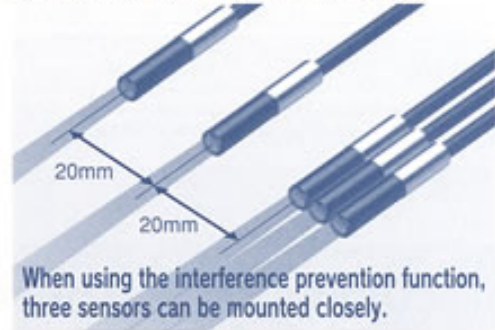


700mm long sensing range with 2° or less aperture angle!



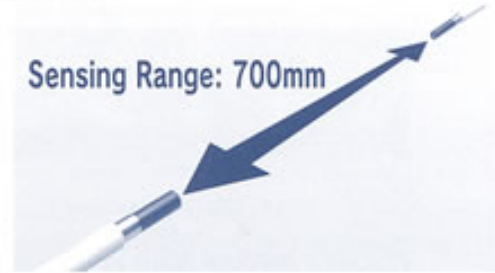
Ultra-narrow Beam·Aperture Angle of 2° or Less

It has an aperture angle of 2° or less (1/2 of the conventional models), so that, in comparison with the conventional models, it hardly receives any extraneous light from the surroundings. Even if the fibers are mounted at an interval of 20mm, since there is hardly any mutual interference, reliable sensing is possible. Moreover, up to three sensors can be mounted next to each other if the interference prevention function of the amplifier FX-D1/A1/M1 series is used.



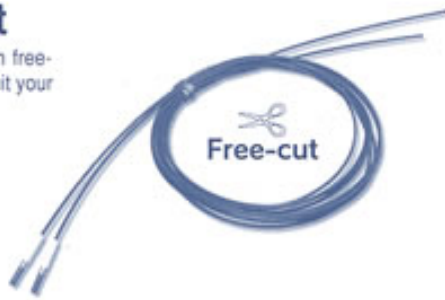
Long Sensing Range: 700mm

Since its sensing range is 700mm, it can be set with sufficient margin.



2m Free-cut

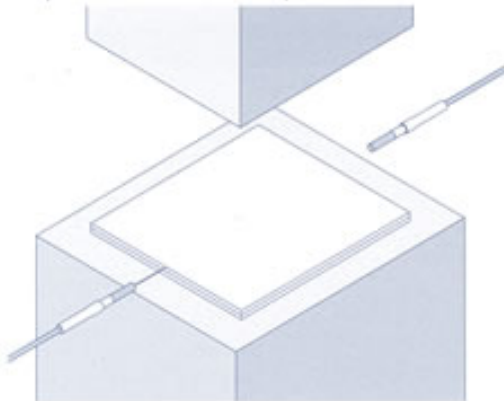
Since the fiber cable is 2m free-cut type, it can be cut to suit your equipment.



Application

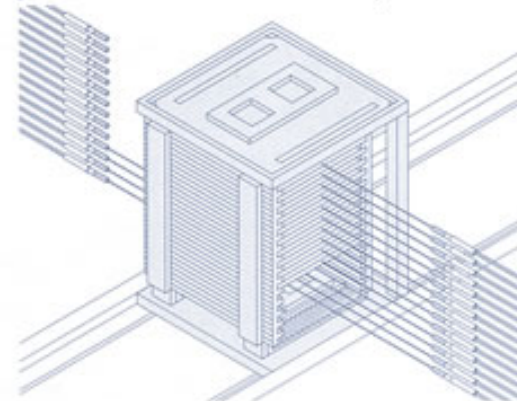
● Detecting overlap of ceramic sheets

Since the aperture angle is 2° or less, the beam spread is small and there is hardly any effect of surroundings. Hence, detecting overlap of thin ceramic sheets is possible.



● Detecting presence/absence of glass sheets

Even when the fibers are arranged in a row, since there is very little mutual interference or influence of surroundings, presence/absence of glass sheets inside the rack can be reliably detected.



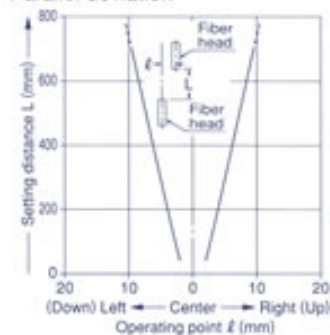
SPECIFICATIONS

Type	Narrow beam
	Top sensing
Item Model No.	FT-K8
Applicable amplifiers	Red LED type of FX-D1 , FX-A1 and FX-M1 series
Sensing range	700mm
Min. sensing object	φ0.3mm opaque object (at the optimum sensitivity)
Repeatability	Perpendicular to sensing axis: 0.05mm or less
Aperture angle	2° or less
Allowable bending radius	R25mm or more
Fiber cable length	2m free-cut
Ambient temperature	-40 to +60°C (No dew condensation or icing allowed). Storage: -40 to +60°C
Ambient humidity	35 to 85% RH, Storage: 35 to 85% RH
Material	Fiber core Acrylic
	Sheath Polyethylene
	Fiber head Stainless steel(SUS303)(Holder: Polycarbonate, Lens: Norbornene resin)
Material	60g approx.
Accessory	FX-CT1 (Fiber cutter): 1 No.

Note: Please refer to the sensor general catalog or the **FX** series catalog for further details of the applicable amplifiers.

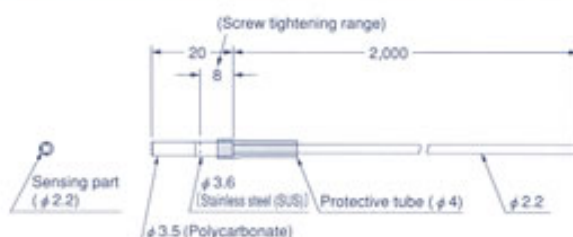
SENSING CHARACTERISTICS (TYPICAL)

Parallel deviation



DIMENSIONS (Unit: mm)

Free-cut



Digital setting fiber sensor FX-D1 series

Innovative feature! Simple operation with jog switch!!

Just three basic operations

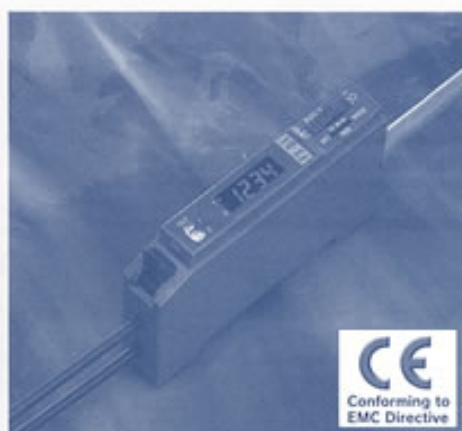
Press	Turn to '+' side	Turn to '-' side
Just press the jog switch for setting.	A fine increase of threshold value is possible simply by turning the jog switch.	A fine decrease of threshold value is possible simply by turning the jog switch.

Clearly visible digital display!

Since the display has a backlight, the values can be read even in a dark place.

Numerical control of threshold and incident light levels!

Since the threshold level and the incident light level can be numerically displayed, these levels can be numerically specified and checked during assembly line setup or maintenance. Further, the margin available for sensing can be known at a glance by changing to percentage display.



MAIN SPECIFICATIONS

- Supply voltage: 12 to 24V DC±10%
- Current consumption: 45mA or less
- Output (Output 1, Output 2): NPN open-collector transistor or PNP open-collector transistor
- Ambient temperature: 0 to +50°C
- Weight: 70g approx.