

◆ Characteristics / 特點:

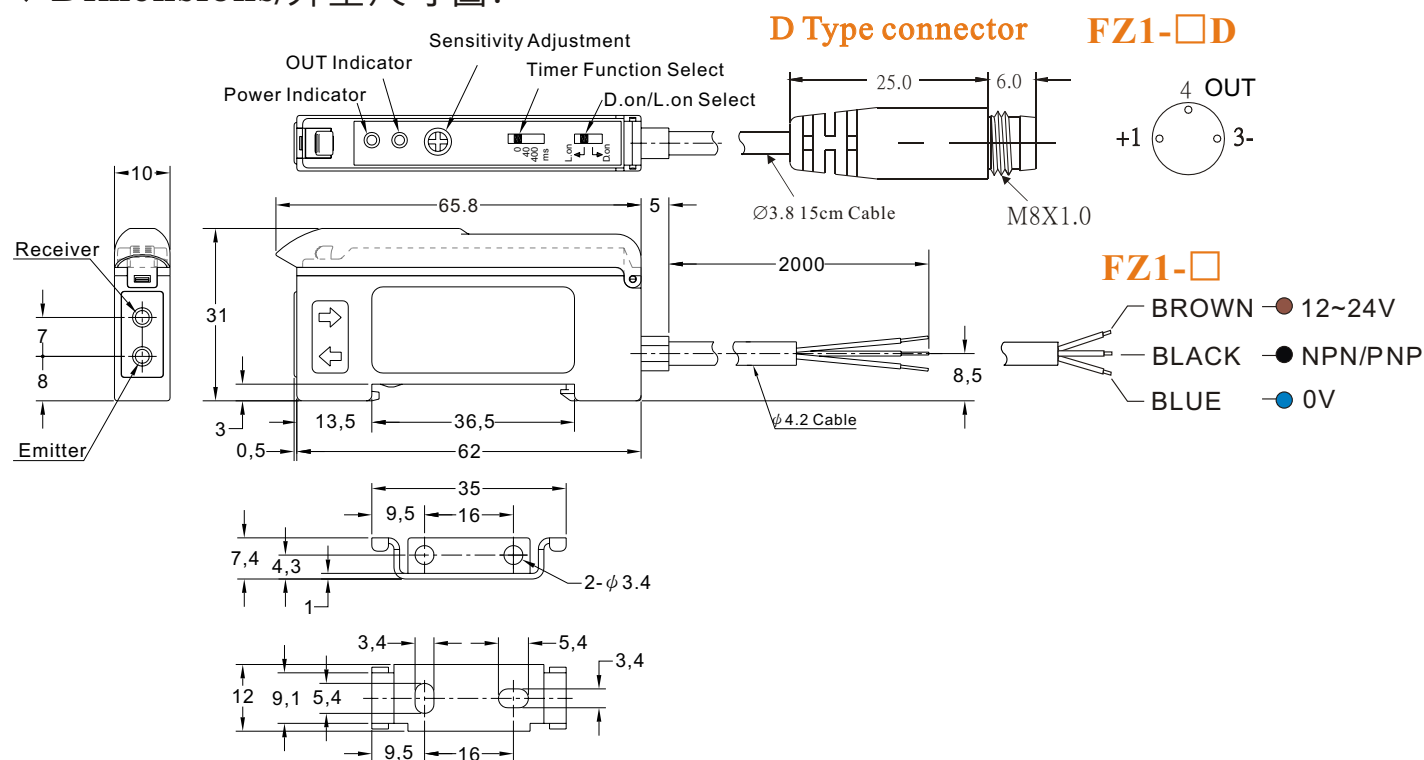
- 20-TURNS TRIMMER. The optimum sensitivity can be set easily.
多迴轉(20 TURNS)靈敏度調整。
- Small size, 10 mm thickness, can be mounted in a small space.
Several sensors can be mounted side by side.
體積薄，厚度只有10mm，使用空間小，多個併排安裝。
- Off-delay timer adjustable for 0ms, 40ms and 400ms.
可調整OFF TIMER感應時間(0ms,40ms,400ms)。



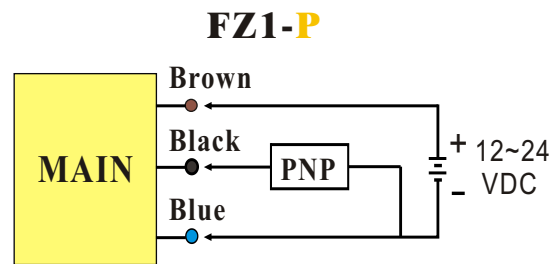
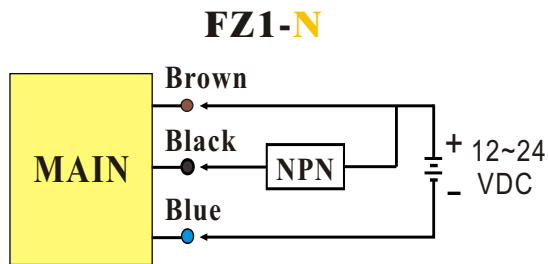
◆ Specifications / 規格表:

Model / 型號	FZ1-N	FZ1-P
	FZ1-ND	FZ1-PD
Sensing type / 發光源	RED LED 680 nm	
Operation voltage / 工作電壓	DC : 12~24VDC $\pm$ 10%	
Current Consumption / 消耗電流	40mA max.	
Output Current / 輸出電流	24VDC : 100mA max.	
Output Type / 輸出模式	NPN L.on / D.on	PNP L.on / D.on
Protection circuit / 保護電路	Reversed polarity protection, over-current protection	
Response time / 反應時間	0.5 ms max.	
Indicators / 指示燈	Output indicator : Red LED, Power indicator : Green LED	
Sensitivity adjustment / 靈敏度功能	20 turns trimmer	
Insulation resistance / 隔離阻抗	20M Ω min. 500VDC	
Voltage Withstandability / 絕緣耐壓	500VAC for 1min.	
Operation temperature / 工作溫度	10°C ~ +60°C	
Ambient humidity / 工作濕度	35% ~ 85% RH	
Protection degree / 防水等級	IP64	
Material / 外觀材質	ABS	
Wiring method / 出線方式	FZ1-□	Pre-wired $\varnothing 4.2 \times 2$ M / 3-cores
	FZ1-□D	M8 pigtailed type / M8 接頭15cm電線式

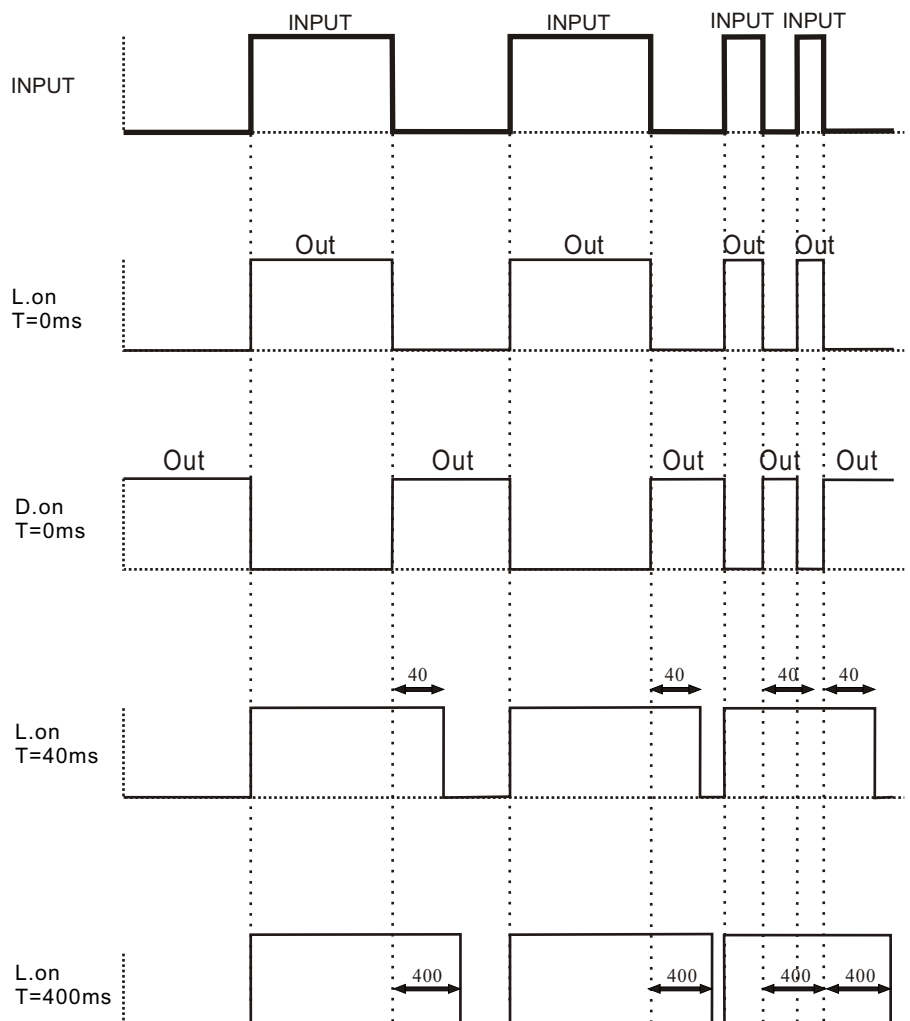
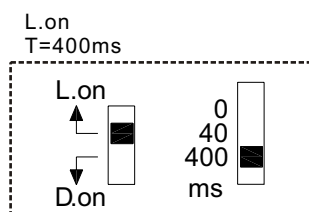
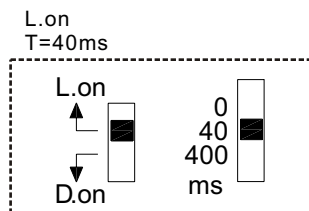
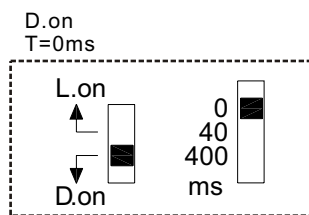
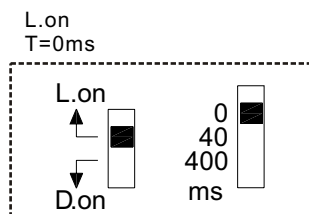
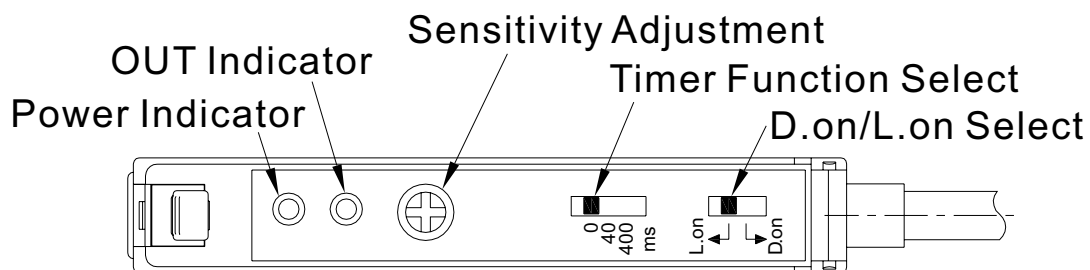
◆ Dimensions / 外型尺寸圖:



◆ Wiring Schemes:



◆ Operation chart:

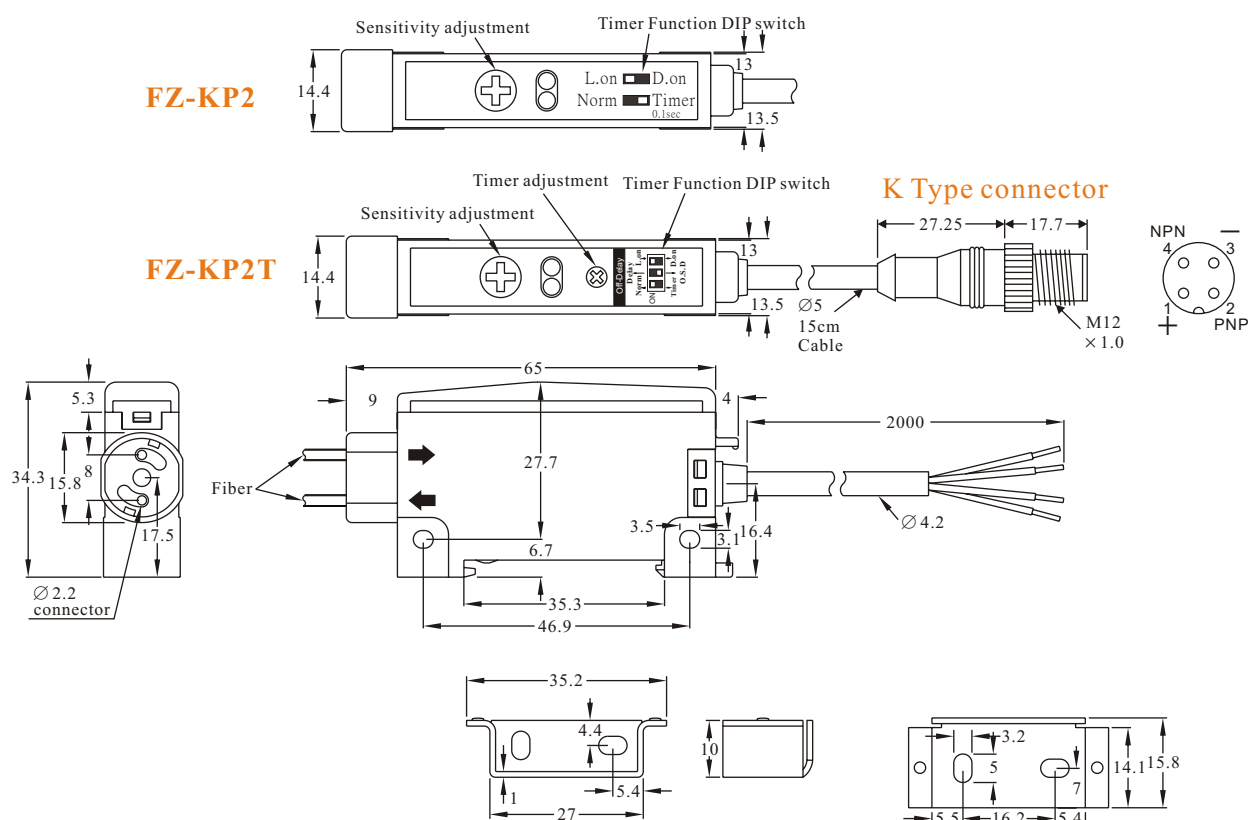




◆ Specifications /規格表:

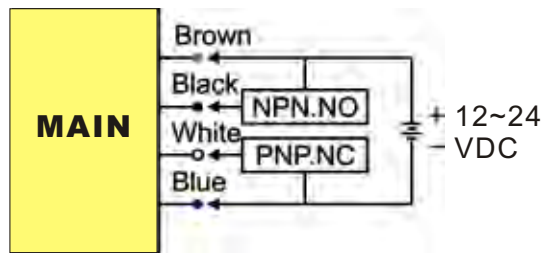
Model / 型號	FZ-KP2	FZ-KP2I	FZ-KP2T
	FZ-KP2K	FZ-KP2IK	FZ-KP2TK
Emitting light / 發光源	Red LED (625nm)	IR LED (940nm)	Red LED (625nm)
Operating voltage / 工作電壓	12 to 24 VDC $\pm$ 10%		
Current consumption / 消耗電流	35mA max		40mA max
Output current / 輸出電流	100mA max(24VDC max.), Residual voltage : 1V max		
Output type / 輸出模式	NPN and PNP L-on / D-on		
Protection circuit / 保護電路	Reversed polarity protection, over-current protection, surge absorber		
Response time / 反應時間	0.5 msec		1 msec
Indicators / 指示燈	Output indicator : Red LED, Power indicator : Green LED		
Sensitivity adjustment / 靈敏度功能	4-turns trimmer		
Timer function / 計時器功能			One shot 0~7 sec off-delay (switch selectable)
Material / 外觀材質	ABS Resin		
Wiring method / 出線方式	FZ-□KP2	Pre-wired $\varnothing 4 \times 2$ M / 4-cores	
	FZ-□KP2K	M12 Pigtailed type / M12接頭 15cm電線式	
Weight / 重量	FZ-□KP2	Approx. 85 g	
	FZ-□KP2K	Approx. 55 g	

◆ Dimensions / 外型尺寸圖:



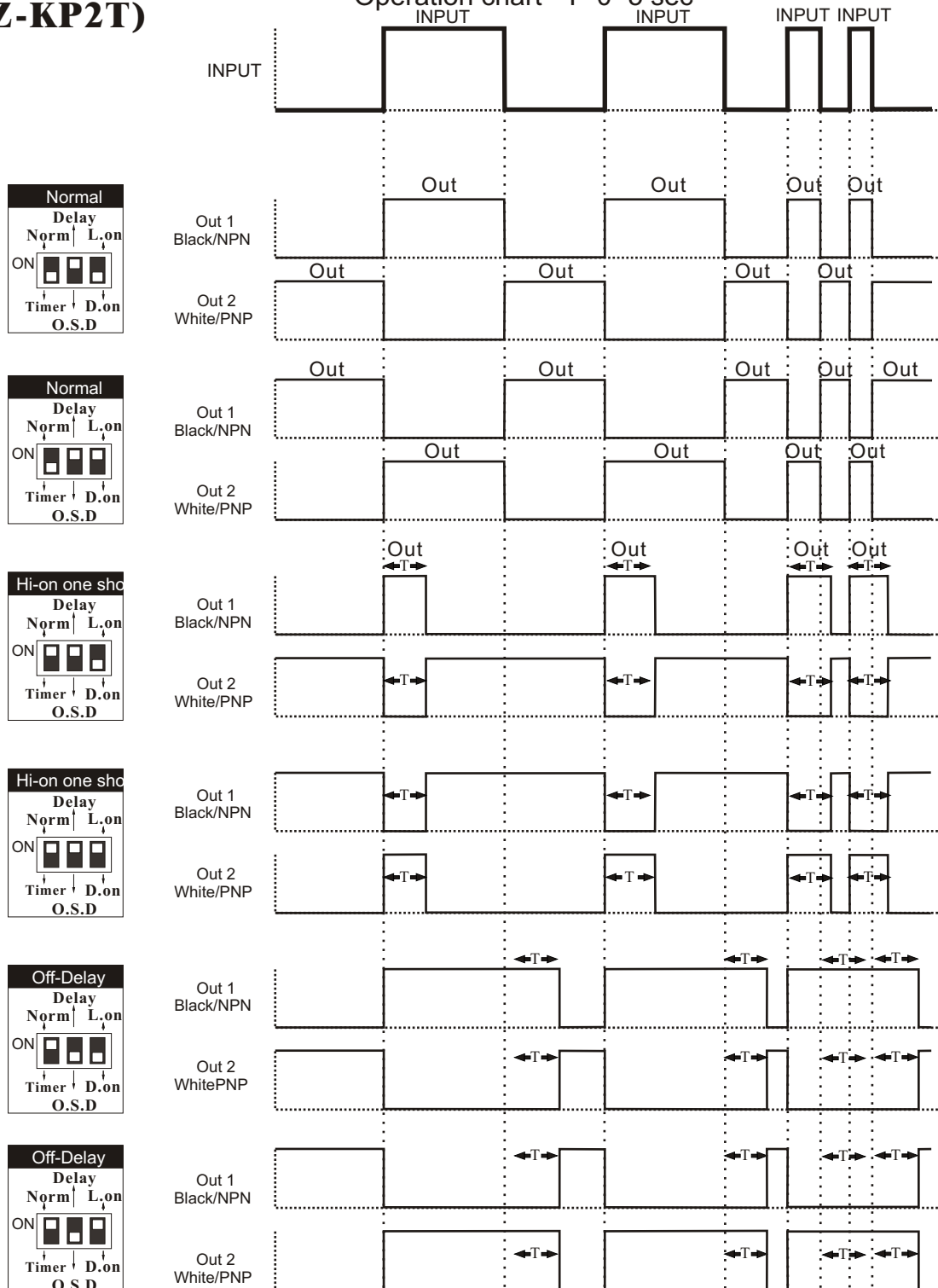
◆ Wiring Schemes:

FZ-KP2 □



◆ Operation chart: (FZ-KP2T)

Operation chart T=0~5 sec



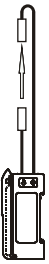
FZ-KP2

Features	Shape	Detecting Distance (mm)	* FZ-KP2	Smallest detectable object(metal wire)	Minimum bend radius	Weight(g)	Model				
	 M6		90	Ø0.2	R25	40	FR-610				
	 Ø5					40	FR-510				
	 M4					40	FRB-410				
	 Ø3					40	FRB-310-Q				
	 M6		120	Ø0.5	R40	43	FRX-610				
	 Ø5					40	FRX-510				
	 M6		70	Ø0.1	R25	40	FRC-610				
	 M4					35	FRC-410				
	 M3		30	Ø0.05	R15	33	FRC-310				
	 Ø3					33	FRC-310-Q				
	 Ø1					30	FRC7-110-Q20				
	 M3		7	Ø0.05	R15	30	FRC4-310				
	 Ø2					30	FRC4-210				
	 Ø1					30	FRC4-110				
	 M6		80	Ø0.2	R25	40	FRH-610				
	 Ø5					40	FRH-510				
	 M4		70	Ø0.2	R2	40	FRZ-410				
	 Ø3					40	FRZ-310-Q				
	 M4		20	Ø0.1	R1	40	FRW-410				
	 Square					40	FRW-11				
	 M6		70	Ø0.2	R2	45	FRY-610				
	 M4					33	FRE-410				
	 M3		5	Ø0.05	R10	35	FRA-410				
						33	FRE-310				
	 Ø2					35	FRA-310				
	 Ø5					33	FRE-210				
	 M4		25	Ø0.1	R15	36	FRS-510				
	 M3					33	FRS-410				
						33	FRD-410				
	 Ø2					33	FRS-310				
	 M4					35	FRD-310				
						33	FRS-210				
	 M3		60	Ø0.05	R15	40	FRJ-410				
	 19 x 25					40	FRJ-310				
	 10 x 10		70	Ø1.0	R25	60	FR-20ML				
						40	FR-10ML				

FZ

Thrubeam Fiber Optics Specifications **RIKO**

FZ-KP2

Features	Shape	Detecting Distance (mm)	* FZ-KP2	Smallest detectable object(metal wire)	Minimum bend radius	Weight(g)	Model
	 M6		500	Ø0.5	R25	49	FT-610
	 Ø5					47	FT-510
	 M4					45	FT-410
	 M3					45	FT-310
	 M4					35	FTB-410
	 M3					35	FTB-310
	 Ø2					35	FTB-210
	 M4		250	Ø0.2	R15	40	FTJ-410
	 Ø2					40	FTJ-210
	 Ø5					42	FTX-510
	 M4		700	Ø1.0	R40	42	FTX-410
	 M3					40	FTX-310
	 Ø2		600	Ø0.5	R25	35	FTE-310
	 M4					35	FTA-310
	 Ø1		30	Ø0.03	R10	35	FTE-210
	 Ø2					33	FTA-210
	 Ø1					32	FTE-110
	 M6					47	FTY-610
	 M4					45	FTY-410
	 M3		300	Ø0.5	R2	40	FTY-310
	 M4					40	FTZ-410
	 M3					40	FTZ-310
	 M4		80	Ø0.05	R1	35	FTW-410
	 Ø1.5					50	FTW2-475D
	 M4		130	Ø0.05	R15	35	FTS-410
	 M3					35	FTS-310
	 Ø2					35	FTD-310
	 Ø1					33	FTS-210
	 Ø1					33	FTD-210
	 Ø2					32	FTS-110
	 M3					30	FTC4-110
	 10 x 10		100	Ø0.1	R15	33	FTC4-210
	 15 x 15					30	FTC4-310
	 19 x 25					35	FT-10ML
	 10 x 10		500	Ø1.0	R15	55	FT-15MLD
	 15 x 15		400	Ø1.0	R25	95	FT-20ML
	 19 x 25		500	Ø1.0	R60		

The diagram illustrates the naming convention for fiber optic cables, showing how various specifications are combined into a single model number. The specifications are categorized into three main groups: Head type and Head diameter, Core specifications, and Sleeve and Fiber length.

Head type and Head diameter:

- Reflective type: R
- Thrubeam type: T
- High precision....0.25mm/1.0Ø: E
- High precision..... 0.25mm/1.25Ø: A
- Precision.....0.5mm/1.0Ø: S
- Precision.....0.5mm/2.2Ø: S2
- Precision.....0.5mm/1.25Ø: D
- Precision.....0.75mm/1.25Ø: J
- Standard.....1.0mm/2.2Ø: (empty box)
- Standard.....1.0mm/1.3Ø: B
- Long sensing range...1.5mm/2.2Ø: X
- Coaxial..... $\frac{0.25\text{mm} \times 16/1.0\text{mm} \times 1}{0.25\text{mm} \times 9/0.5\text{mm} \times 1}$: C
- Coaxial....0.25mm $\times$ 6/0.25 $\times$ 1: C7
- Multiple-core....0.25mm $\times$ 4/1Ø: C4
- Multiple-core....0.25mm $\times$ 4/2.2Ø: C42
- Multiple-core....0.25mm $\times$ 9/1.3Ø: C9
- Multiple-core....0.25mm $\times$ 16/2.2Ø: C16
- Multiple-core....0.25mm $\times$ 32/2.8Ø: C32
- 115°C Heat resistant....1.0mm/2.2Ø: H
- Flexible R2 fiber....1.0mm/2.2Ø: Y
- Flexible R2 fiber....1.0mm/1.3Ø: Z
- Flexible R1 fiber....0.5mm/1.0Ø: W
- Flexible R1 fiber....0.5mm/2.2Ø: W2

Head diameter:

- Head diameter M6: 6
- Head diameter Ø5: 5
- Head diameter M4, Ø4: 4
- Head diameter M3, Ø3: 3
- Head Ø2: 2
- Head diameter Ø1.5, Ø1: 1

Core specifications:

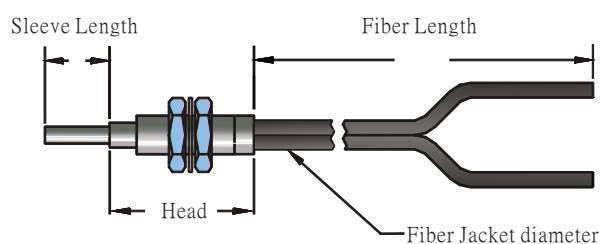
- Sensing end tip without thread: Q
- Curved Sensing end tip: U
- Side view: D
- Fiber assemblies with SUS sheathing: KS
- Without Sleeve: (empty box)
- Sleeve Length 10mm: I
- Sleeve Length 20mm: S
- Sleeve Length 40mm: M
- Sleeve Length 90mm: L
- Sleeve Length by customer design: S (empty box)
- Fiber Length 500 mm: 05
- Fiber Length 1000 mm: 10
- Fiber Length 2000 mm: 20
- Fiber Length 3000 mm: 30

Model Number Format:

The model number is constructed as follows: [Head type] [Head diameter] - [Core specifications] - [Sleeve Length] - [Fiber Length].

Examples of model numbers:

- R-6-10-10-10
- T-6-10-10-10
- E-6-10-10-10
- A-6-10-10-10
- S-6-10-10-10
- S2-6-10-10-10
- D-6-10-10-10
- J-6-10-10-10
- 6-10-10-10
- B-6-10-10-10
- X-6-10-10-10
- C-6-10-10-10
- C7-6-10-10-10
- C4-6-10-10-10
- C42-6-10-10-10
- C9-6-10-10-10
- C16-6-10-10-10
- C32-6-10-10-10
- H-6-10-10-10
- Y-6-10-10-10
- Z-6-10-10-10
- W-6-10-10-10
- W2-6-10-10-10

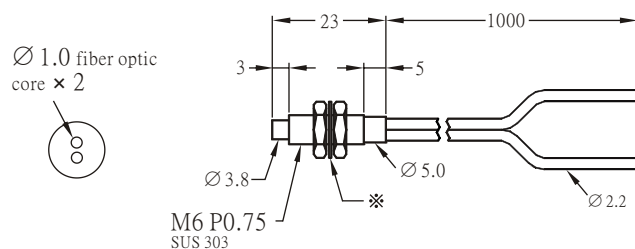


Reflective M6 Type

RiKO M6

FR-610

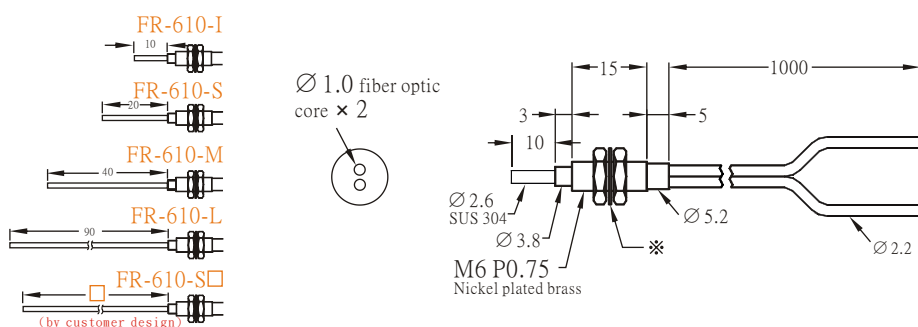
Free cut



Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D Ø2.2 d Ø1.0
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	90mm

FR-610-I

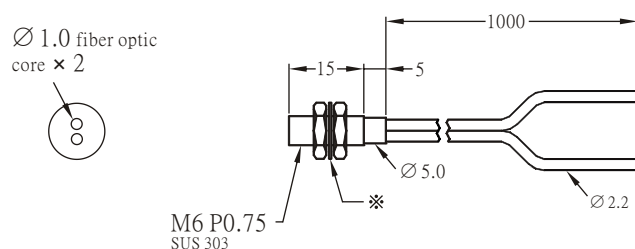
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Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D Ø2.2 d Ø1.0
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	90mm

FR-610-F

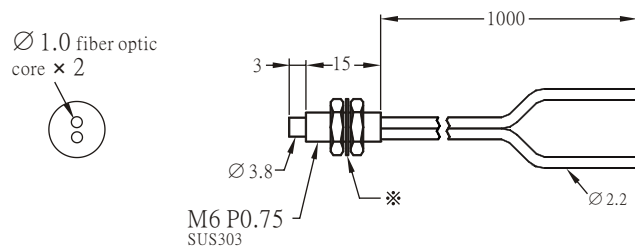
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Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D Ø2.2 d Ø1.0
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	90mm

FR-610-F1

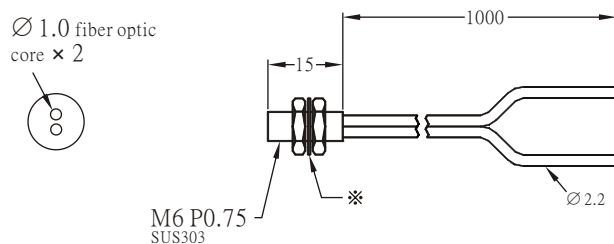
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Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D Ø2.2 d Ø1.0
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	90mm

FR-610-F2

Free cut



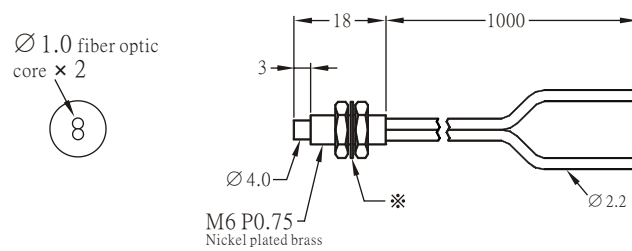
* Washer toothed lock Ø11;
Nuts width across flats 10 mm, thickness 2.5 mm

Reflective M6 Type

RiKO M6

FR-610-6F

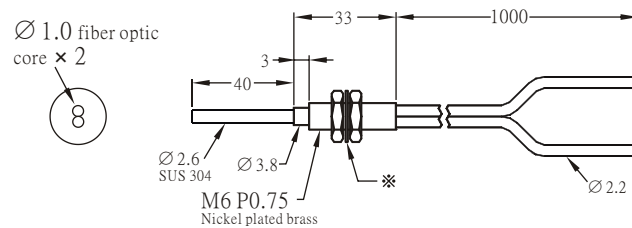
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Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D Ø2.2 d Ø1.0
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	90mm

FR-610-M-H33

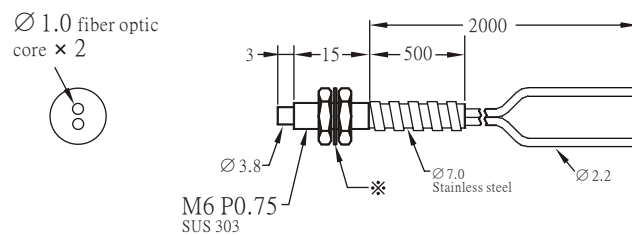
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Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D Ø2.2 d Ø1.0
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	90mm

FR-620-KS5

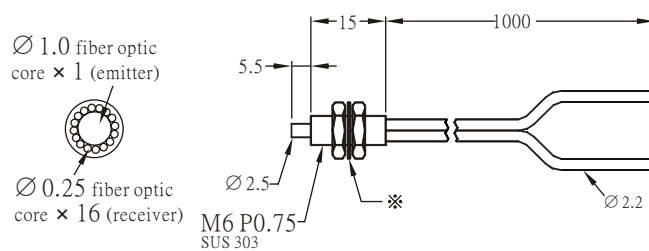
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Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D Ø2.2 d Ø1.0
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	90mm

FRC-610

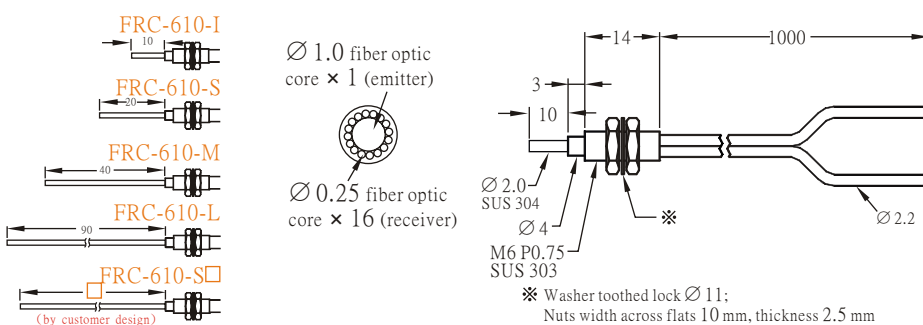
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Fiber material	Plastic
Fiber Type	Coaxial
Fiber diameter	D Ø2.2mm x1 Ø2.2mm x1 d 1.0mm x1 0.25mm x16
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	70mm

FRC-610-I

Free cut



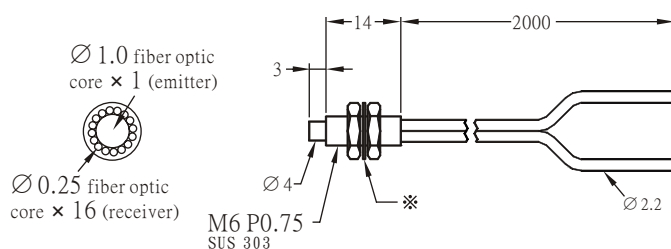
Fiber material	Plastic
Fiber Type	Coaxial
Fiber diameter	D Ø2.2mm x1 Ø2.2mm x1 d 1.0mm x1 0.25mm x16
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	70mm

Reflective M6 Type

RiKO M6

FRC-620-25

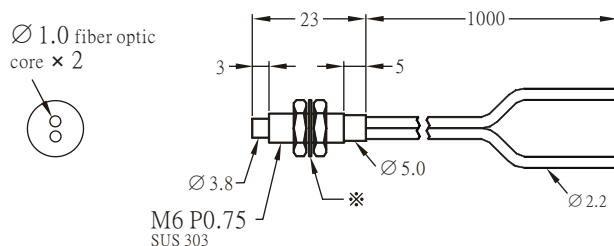
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Fiber material	Plastic
Fiber Type	Coaxial
Fiber diameter	D Ø2.2mm x1 d Ø2.2mm x1 1.0mm x1 0.25mm x16
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	70mm

FRH-610

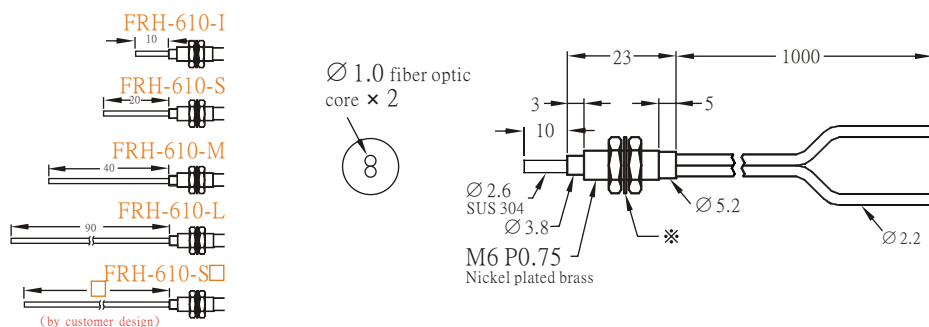
Free cut



Fiber material	Plastic
Fiber Type	Heat Resistant
Fiber diameter	D Ø2.2 d Ø1.0
Operate temperature	-55°C ~ +115°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	80mm

FRH-610-I

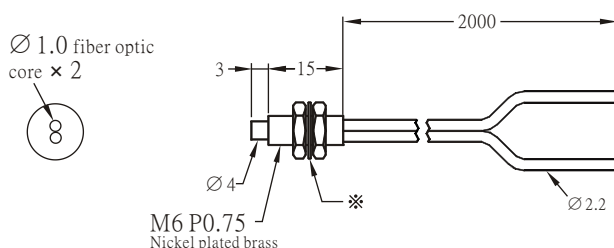
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Fiber material	Plastic
Fiber Type	Heat Resistant
Fiber diameter	D Ø2.2 d Ø1.0
Operate temperature	-55°C ~ +115°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	80mm

FRH-620-6F

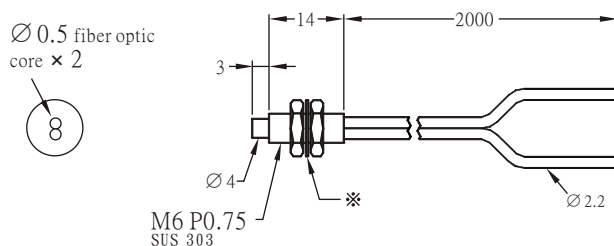
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Fiber material	Plastic
Fiber Type	Heat Resistant
Fiber diameter	D Ø2.2 d Ø1.0
Operate temperature	-55°C ~ +115°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	80mm

FRS2-620

Free cut



Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D Ø2.2 d Ø0.5
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	25mm

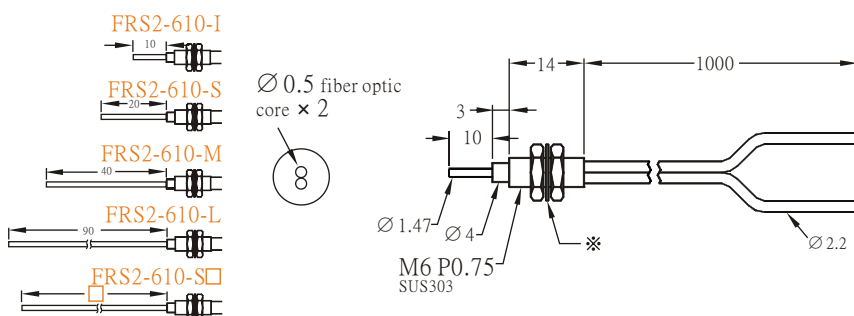
※ Washer toothed lock Ø11;
Nuts width across flats 10 mm, thickness 2.5 mm

Reflective M6 Type

RiKO M6

FRS2-610-I

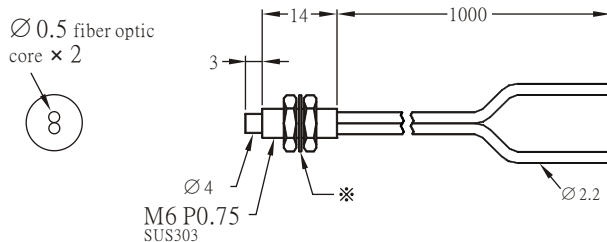
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Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D $\varnothing 2.2$ d $\varnothing 0.5$
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	25mm

FRW2-610

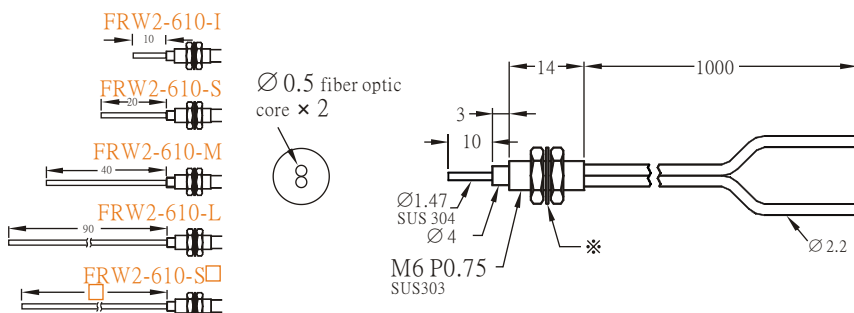
Free cut



Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D $\varnothing 2.2$ d $\varnothing 0.5$
Operate temperature	-40°C ~ +70°C
Minimum bending radius	R1
Sensing distance/FZ-KP2	20mm

FRW2-610-I

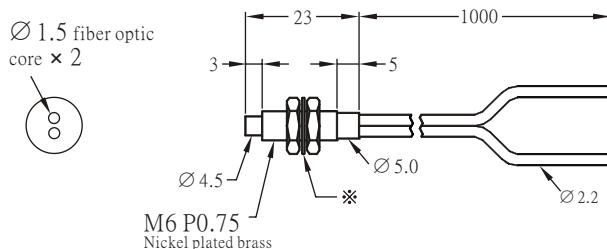
Free cut



Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D $\varnothing 2.2$ d $\varnothing 0.5$
Operate temperature	-40°C ~ +70°C
Minimum bending radius	R1
Sensing distance/FZ-KP2	20mm

FRX-610

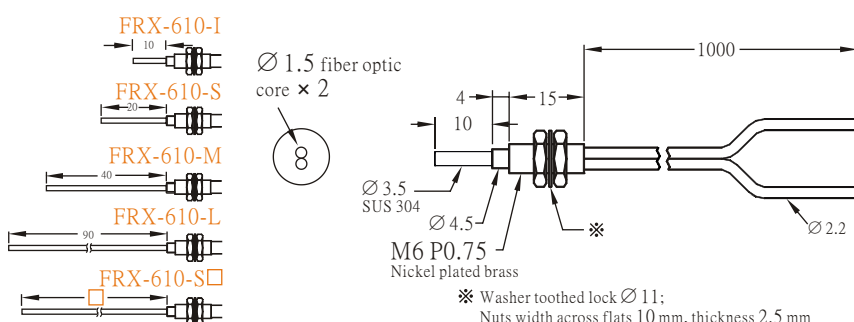
Free cut



Fiber material	Plastic
Fiber Type	Long sensing range
Fiber diameter	D $\varnothing 2.2$ d $\varnothing 1.5$
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R40
Sensing distance/FZ-KP2	120mm

FRX-610-I

Free cut



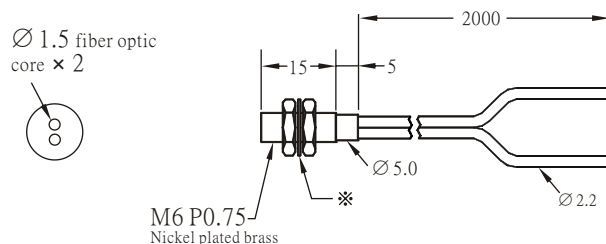
Fiber material	Plastic
Fiber Type	Long sensing range
Fiber diameter	D $\varnothing 2.2$ d $\varnothing 1.5$
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R40
Sensing distance/FZ-KP2	120mm

Reflective M6 Type

RiKO M6

FRX-620-F

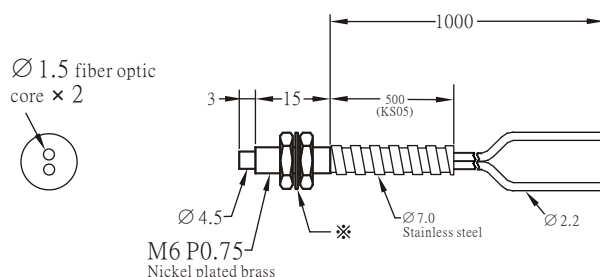
Free cut



Fiber material	Plastic
Fiber Type	Long sensing range
Fiber diameter	D Ø2.2 d Ø1.5
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R40
Sensing distance/FZ-KP2	120mm

FRX-610-KS5

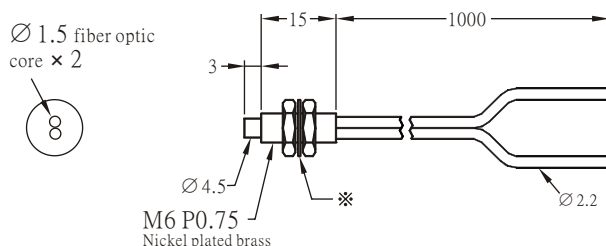
Free cut



Fiber material	Plastic
Fiber Type	Long sensing range
Fiber diameter	D Ø2.2 d Ø1.5
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R40
Sensing distance/FZ-KP2	120mm

FRX-610-6F

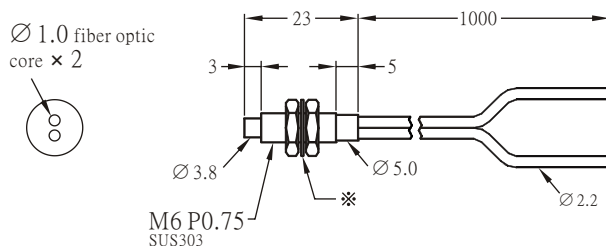
Free cut



Fiber material	Plastic
Fiber Type	Long sensing range
Fiber diameter	D Ø2.2 d Ø1.5
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R40
Sensing distance/FZ-KP2	120mm

FRY-610

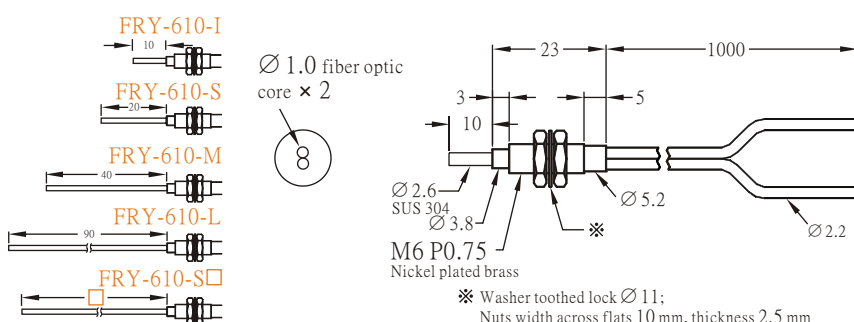
Free cut



Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D Ø2.2 d Ø1.0
Operate temperature	-40°C ~ +70°C
Minimum bending radius	R2
Sensing distance/FZ-KP2	70mm

FRY-610-I

Free cut



Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D Ø2.2 d Ø1.0
Operate temperature	-40°C ~ +70°C
Minimum bending radius	R2
Sensing distance/FZ-KP2	70mm

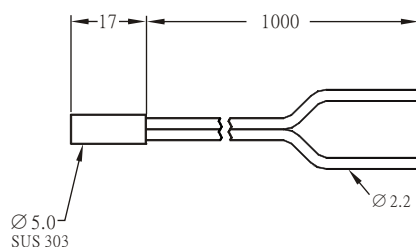
Reflective Ø5 Type

RiKO Ø5

FR-510

Free cut

Ø 1.0 fiber optic
core × 2



Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D d
Operate temperature	− 55°C ~ + 70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	90mm

FR-510-I

Free cut

FR-510-I

FR-510-S

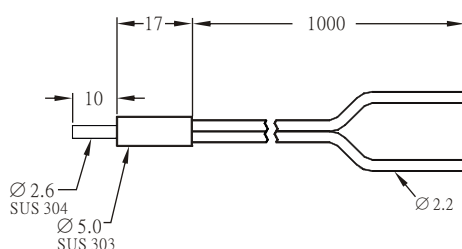
FR-510-M

FR-510-L

FR-510-S□

(by customer design)

Ø 1.0 fiber optic
core × 2



Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D d
Operate temperature	− 55°C ~ + 70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	90mm

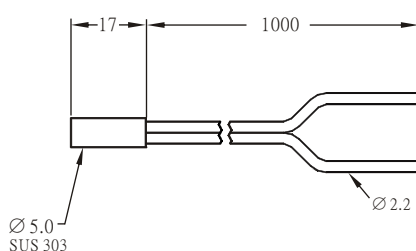
FRC-510

Free cut

Ø 1.0 fiber optic
core × 1 (emitter)



Ø 0.25 fiber optic
core × 16 (receiver)



Fiber material	Plastic
Fiber Type	Coaxial
Fiber diameter	D d
Operate temperature	− 55°C ~ + 70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	70mm

FRC-510-I

Free cut

FR-510-I

FR-510-S

FR-510-M

FR-510-L

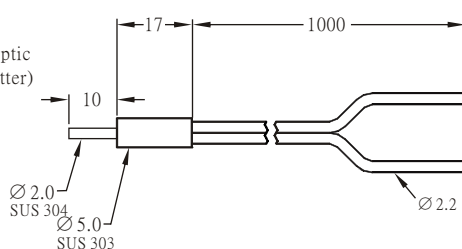
FR-510-S□

(by customer design)

Ø 1.0 fiber optic
core × 1 (emitter)



Ø 0.25 fiber optic
core × 16 (receiver)

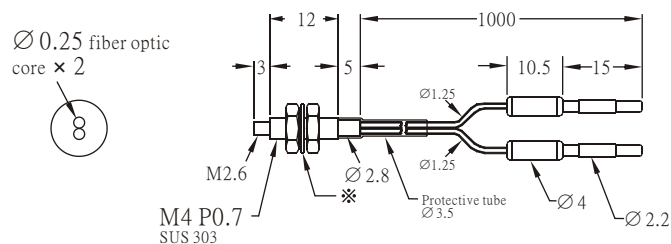


Fiber material	Plastic
Fiber Type	Coaxial
Fiber diameter	D d
Operate temperature	− 55°C ~ + 70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	70mm

Reflective M4 Type

FRA-410

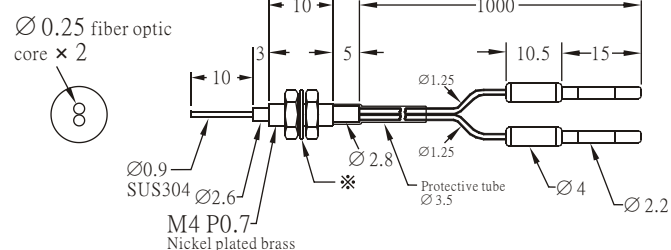
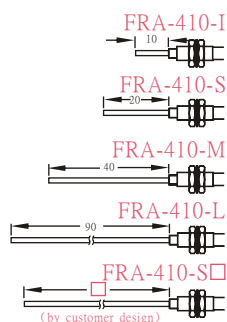
Free cut



Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	5mm

FRA-410-I

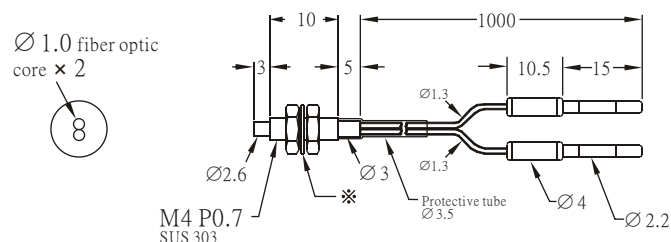
Free cut



Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	5mm

FRB-410

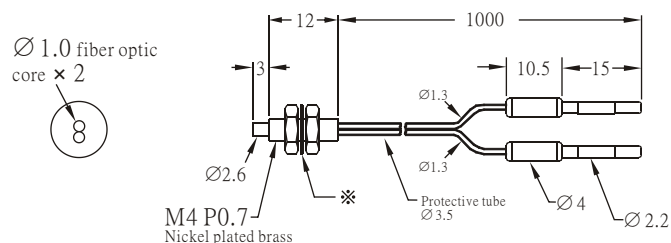
Free cut



Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	80mm

FRB-410-6F

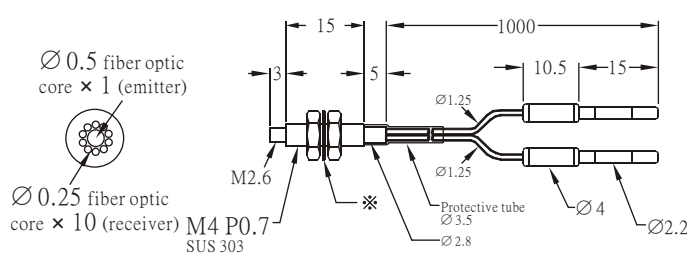
Free cut



Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	80mm

FRC-410

Free cut



※ Washer toothed lock Ø 8.3;
Nuts width across flats 8 mm, thickness 2.3 mm

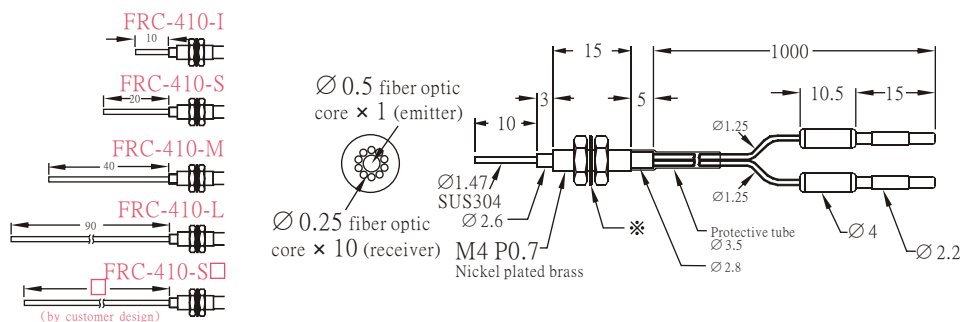
Fiber material	Plastic
Fiber Type	Coaxial
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	30mm

Reflective M4 Type



FRC-410-I

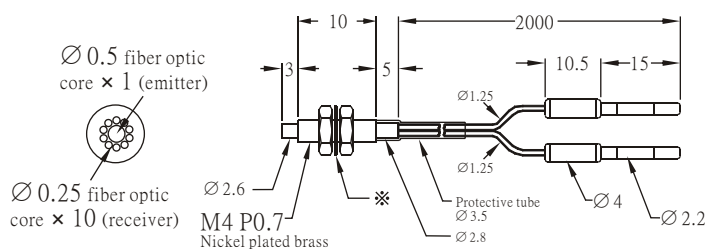
Free cut



Fiber material	Plastic
Fiber Type	Coaxial
Fiber diameter	D Ø1.25mm x1 d Ø1.25mm x1 0.5mm x1 0.25mm x9
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	30mm

FRC-420-84BC

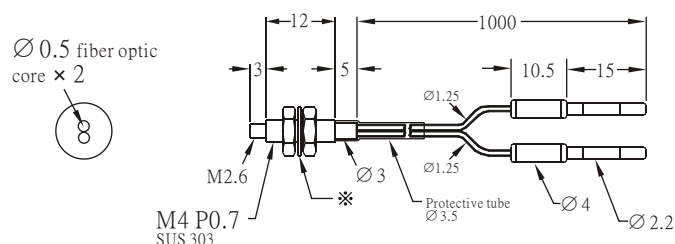
Free cut



Fiber material	Plastic
Fiber Type	Coaxial
Fiber diameter	D Ø1.25mm x1 d Ø1.25mm x1 0.5mm x1 0.25mm x9
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	30mm

FRD-410

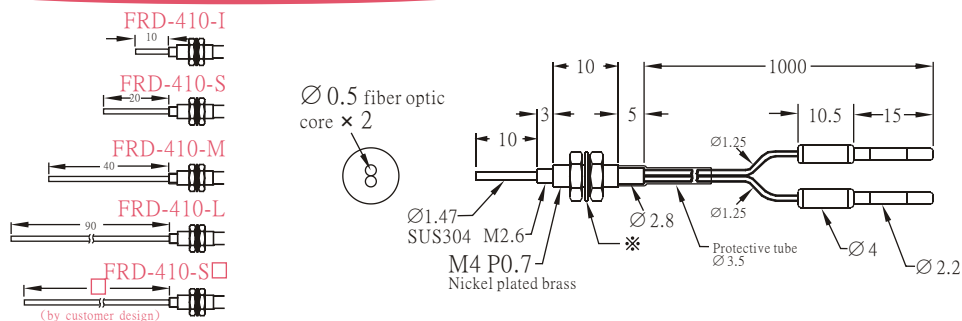
Free cut



Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D Ø1.25 d Ø0.5
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	25mm

FRD-410-I

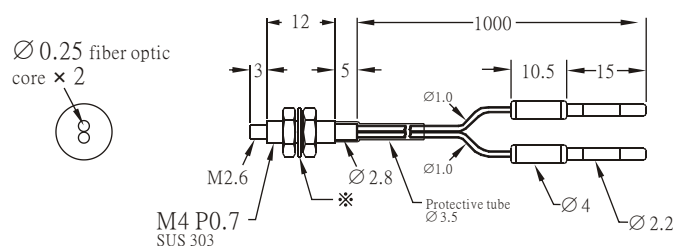
Free cut



Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D Ø1.25 d Ø0.5
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	25mm

FRE-410

Free cut



Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D Ø1.0 d Ø0.25
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	5mm

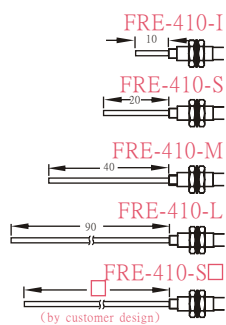
* Washer toothed lock Ø 8.3;
Nuts width across flats 8 mm, thickness 2.3 mm

Reflective M4 Type

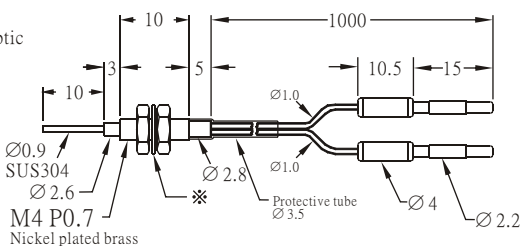


FRE-410-I

Free cut



Ø 0.25 fiber optic
core × 2

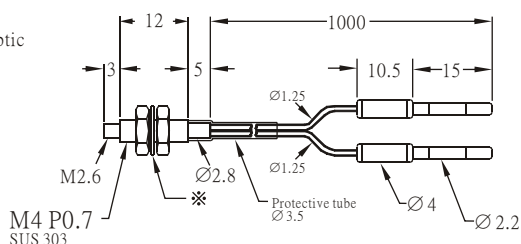


Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D d
Operate temperature	- 55°C ~ + 70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	5mm

FRJ-410

Free cut

Ø 0.75 fiber optic
core × 2

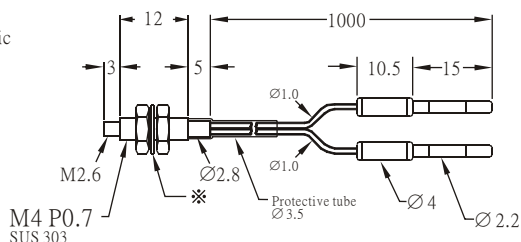


Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d
Operate temperature	- 55°C ~ + 70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	60mm

FRS-410

Free cut

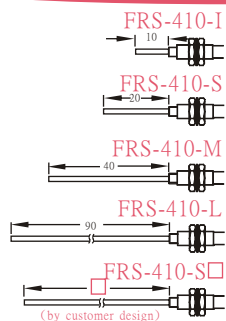
Ø 0.5 fiber optic
core × 2



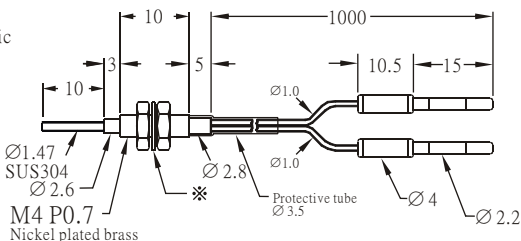
Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d
Operate temperature	- 55°C ~ + 70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	25mm

FRS-410-I

Free cut



Ø 0.5 fiber optic
core × 2

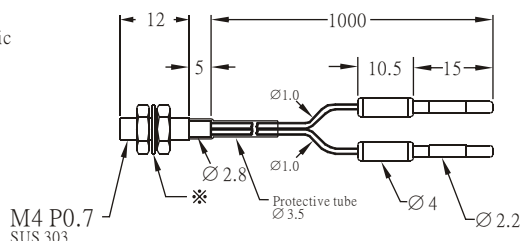


Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d
Operate temperature	- 55°C ~ + 70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	25mm

FRS-410-F

Free cut

Ø 0.5 fiber optic
core × 2



※ Washer toothed lock Ø 8.3;
Nuts width across flats 8 mm, thickness 2.3 mm

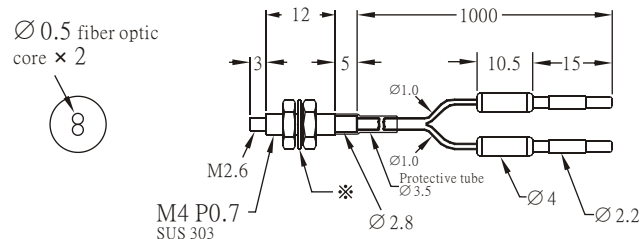
Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d
Operate temperature	- 55°C ~ + 70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	25mm

Reflective M4 Type



FRW-410

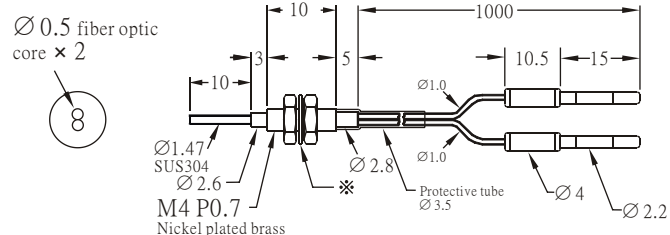
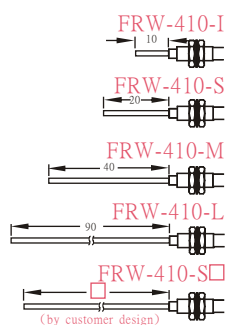
Free cut



Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D d
Operate temperature	- 40°C ~ + 70°C
Minimum bending radius	R1
Sensing distance/FZ-KP2	20mm

FRW-410-I

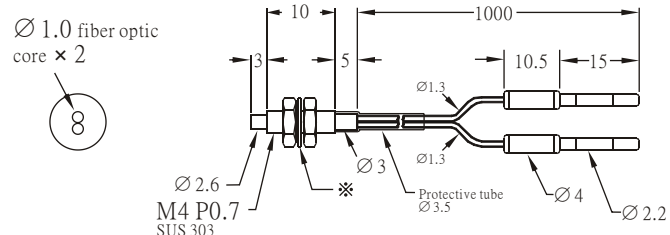
Free cut



Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D d
Operate temperature	- 40°C ~ + 70°C
Minimum bending radius	R1
Sensing distance/FZ-KP2	20mm

FRZ-410

Free cut



Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D d
Operate temperature	- 40°C ~ + 70°C
Minimum bending radius	R2
Sensing distance/FZ-KP2	70mm

※ Washer toothed lock Ø 8.3;
Nuts width across flats 8 mm, thickness 2.3 mm

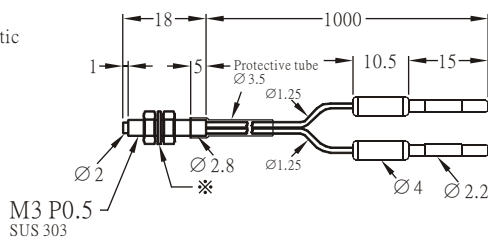
Reflective Ø3/M3 Type

RiKO M3 Ø3

FRA-310

Free cut

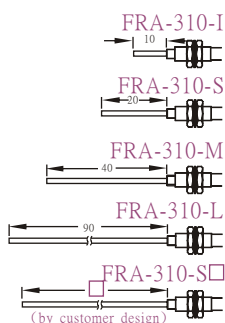
Ø 0.25 fiber optic
core × 2



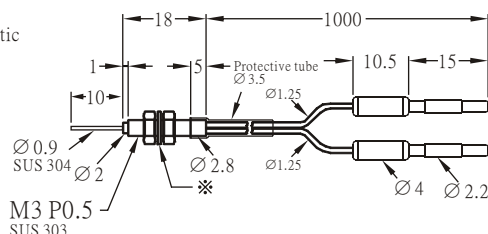
Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	5mm

FRA-310-I

Free cut



Ø 0.25 fiber optic
core × 2



Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	5mm

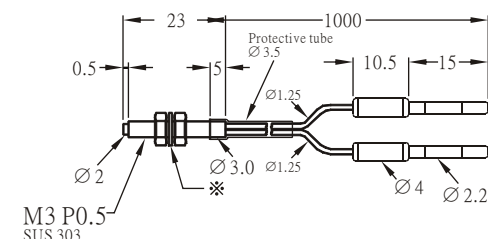
FRC-310

Free cut

Ø 0.5 fiber optic
core × 1 (emitter)



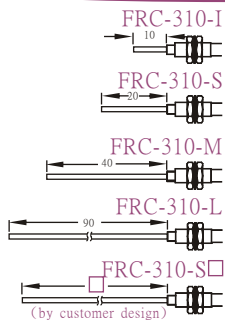
Ø 0.25 fiber optic
core × 10 (receiver)



Fiber material	Plastic
Fiber Type	Coaxial
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	30mm

FRC-310-I

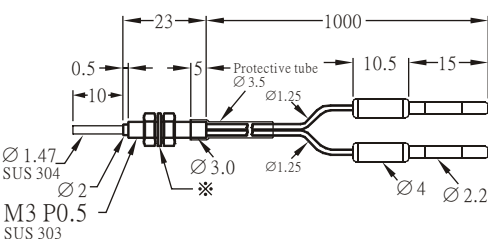
Free cut



Ø 0.5 fiber optic
core × 1 (emitter)



Ø 0.25 fiber optic
core × 10 (receiver)



Fiber material	Plastic
Fiber Type	Coaxial
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	30mm

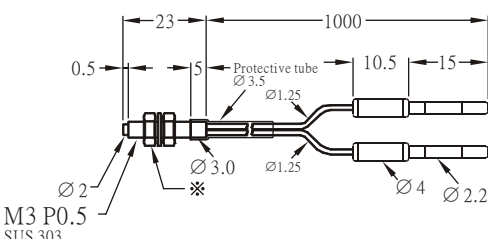
FRC-310-35FA

Free cut

Ø 0.5 fiber optic
core × 1 (emitter)



Ø 0.25 fiber optic
core × 10 (receiver)



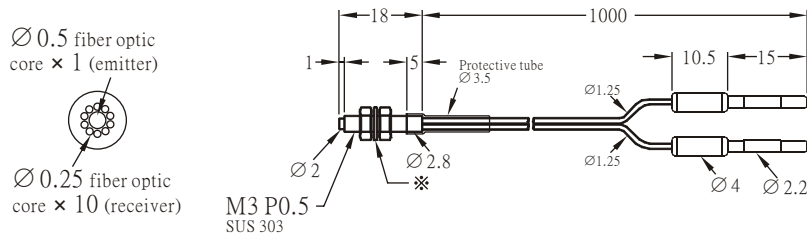
※ Washer toothed lock Ø 6.4;
Nuts width across flats 5 mm, thickness 2.2 mm

Reflective M3 Type

RiKO M3

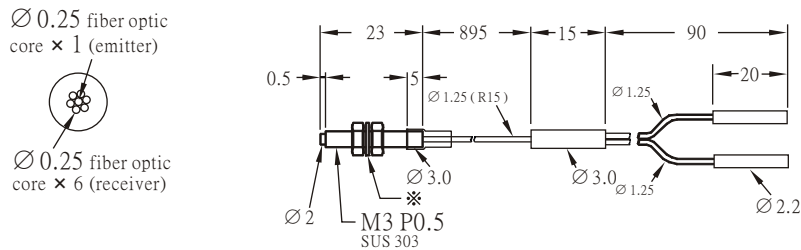
FRC-310-35FZ

Free cut



Fiber material	Plastic
Fiber Type	Coaxial
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	30mm

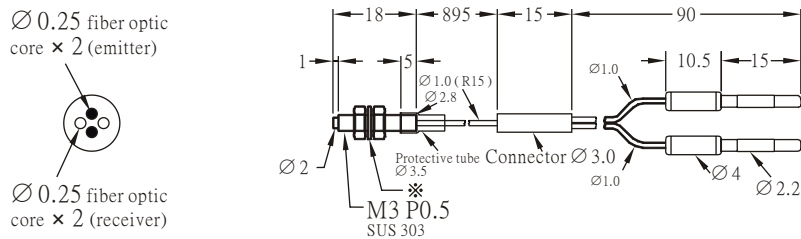
FRC7-310-FA



Fiber material	Plastic
Fiber Type	Coaxial
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	20mm

FRC4-310

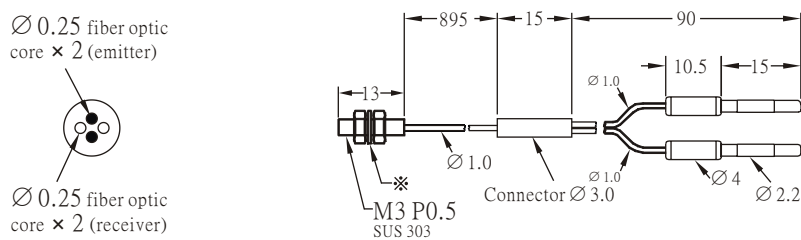
Free cut



Fiber material	Plastic
Fiber Type	Coaxial
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	7mm

FRC4-320-H13

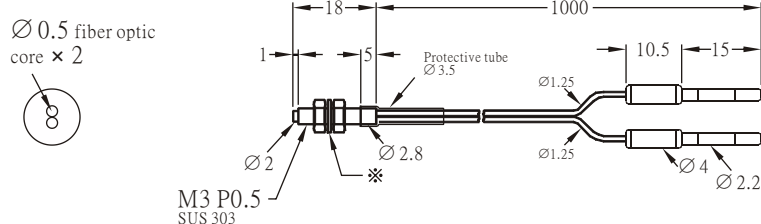
Free cut



Fiber material	Plastic
Fiber Type	Coaxial
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	7mm

FRD-310

Free cut



Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	25mm

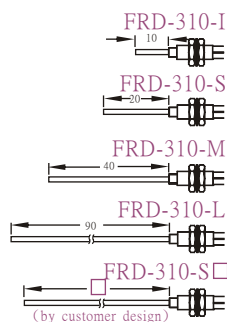
※ Washer toothed lock $\varnothing 6.4$;
Nuts width across flats 5 mm, thickness 2.2 mm

Reflective M3 Type

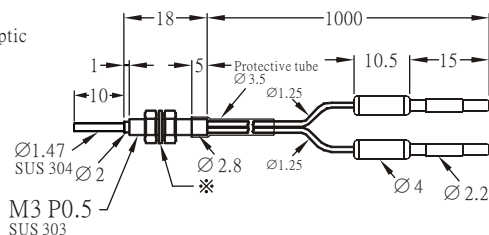
RiKO M3

FRD-310-I

Free cut



Ø 0.5 fiber optic
core × 2

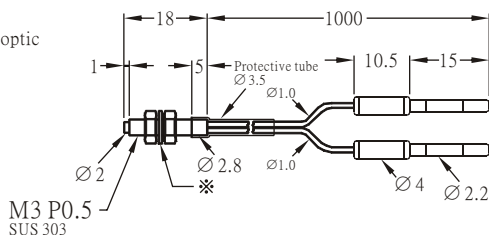


Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	25mm

FRE-310

Free cut

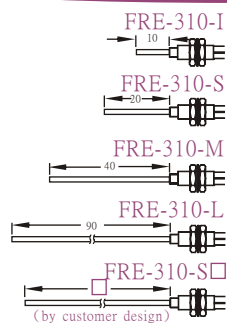
Ø 0.25 fiber optic
core × 2



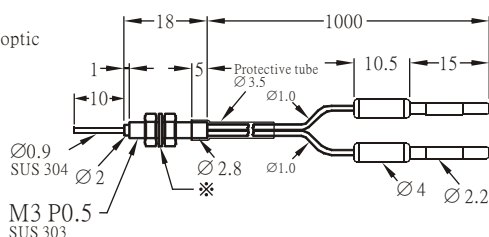
Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	5mm

FRE-310-I

Free cut



Ø 0.25 fiber optic
core × 2

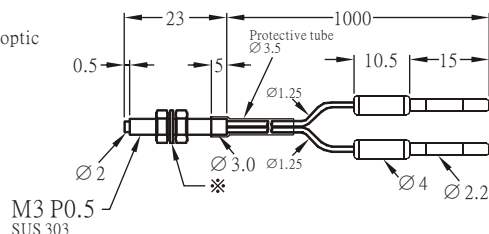


Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	5mm

FRJ-310

Free cut

Ø 0.75 fiber optic
core × 2

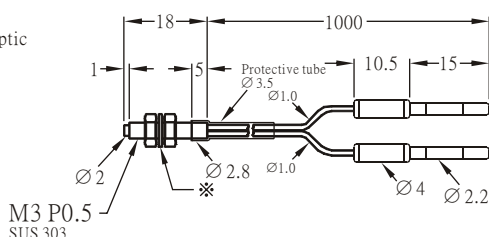


Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	60mm

FRS-310

Free cut

Ø 0.5 fiber optic
core × 2



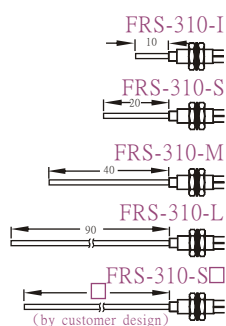
※ Washer toothed lock Ø6.4;
Nuts width across flats 5 mm, thickness 2.2 mm

Reflective M3 Type

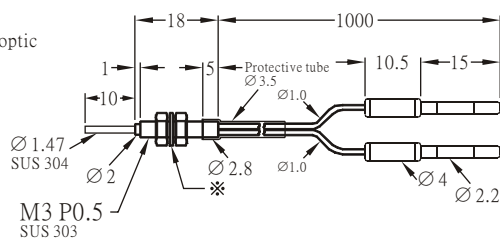
RiKO M3

FRS-310-I

Free cut



Ø 0.5 fiber optic
core × 2

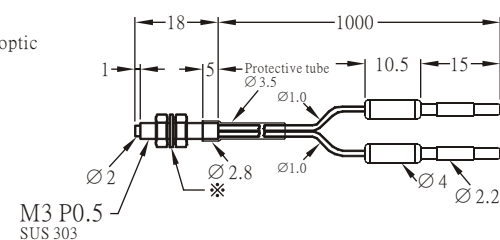


Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d
Operate temperature	−55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	25mm

FRW-310

Free cut

Ø 0.5 fiber optic
core × 2



Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D d
Operate temperature	−40°C ~ +70°C
Minimum bending radius	R1
Sensing distance/FZ-KP2	20mm

※ Washer toothed lock Ø 6.4;
Nuts width across flats 5 mm, thickness 2.2 mm

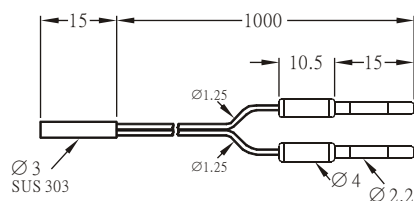
Reflective Ø3 Type

RiKO Ø3

FRA-310-Q

Free cut

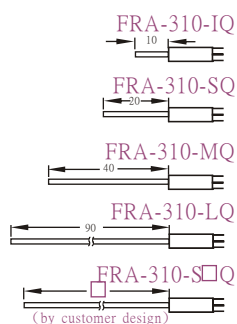
Ø 0.25 fiber optic
core × 2



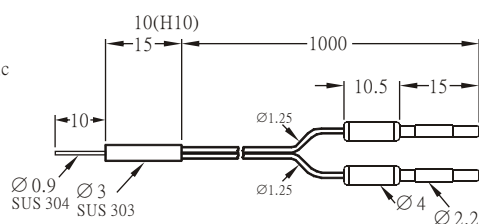
Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D Ø1.25 d Ø0.25
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	5mm

FRA-310-IQ(H10)

Free cut



Ø 0.25 fiber optic
core × 2

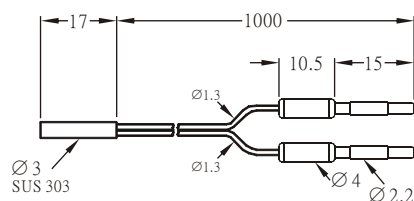


Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D Ø1.25 d Ø0.25
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	5mm

FRB-310-Q

Free cut

Ø 1.0 fiber optic
core × 2



Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D Ø1.3 d Ø1.0
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	80mm

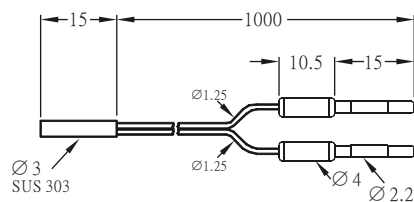
FRC-310-Q

Free cut

Ø 0.5 fiber optic
core × 1 (emitter)



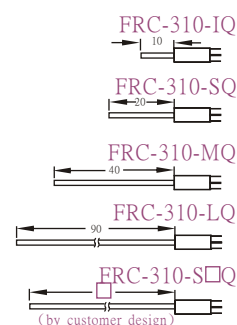
Ø 0.25 fiber optic
core × 10 (receiver)



Fiber material	Plastic
Fiber Type	Coaxial
Fiber diameter	D Ø1.25mm x1 Ø1.25mm x1 0.5mm x1 0.25mm x9 d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	30mm

FRC-310-IQ

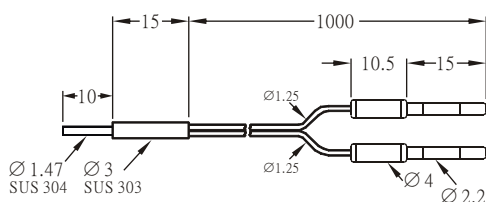
Free cut



Ø 0.5 fiber optic
core × 1 (emitter)



Ø 0.25 fiber optic
core × 10 (receiver)



Fiber material	Plastic
Fiber Type	Coaxial
Fiber diameter	D Ø1.25mm x1 Ø1.25mm x1 0.5mm x1 0.25mm x9 d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	30mm

Reflective Ø3 Type

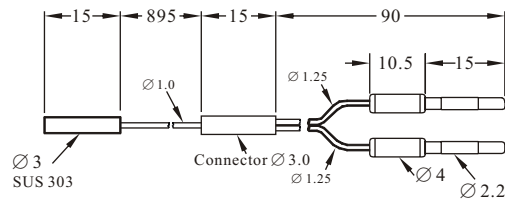
RiKO 

FRC4-310-Q

Free cut

Ø 0.25 fiber optic core × 2 (emitter)

Ø 0.25 fiber optic core × 2 (receiver)

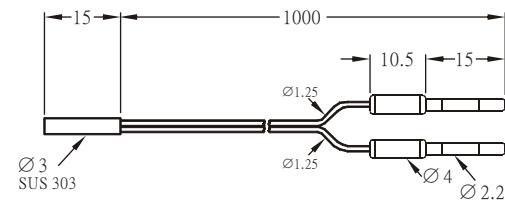


Fiber material	Plastic
Fiber Type	Coaxial
Fiber diameter	D d
Operate temperature	−55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	7mm

FRD-310-Q

Free cut

Ø 0.5 fiber optic core × 2

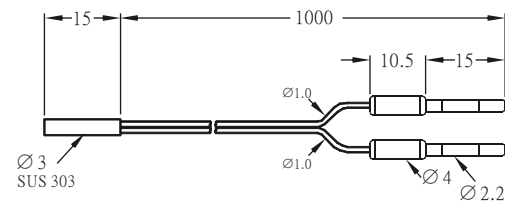


Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d
Operate temperature	−55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	25mm

FRE-310-Q

Free cut

Ø 0.25 fiber optic core × 2



Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D d
Operate temperature	−55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	5mm

FRE-310-IQ

Free cut

FRE-310-IQ

FRE-310-SQ

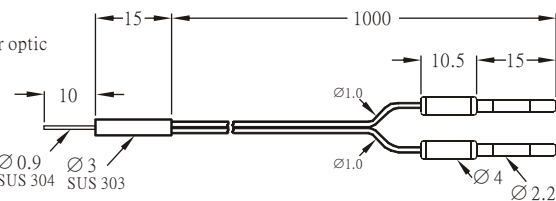
FRE-310-MQ

FRE-310-LQ

FRE-310-S□Q

(by customer design)

Ø 0.25 fiber optic core × 2

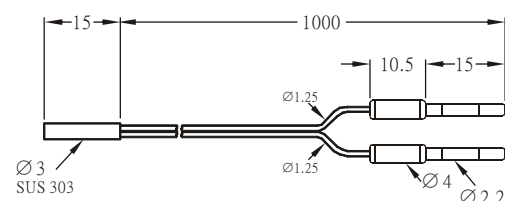


Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D d
Operate temperature	−55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	5mm

FRJ-310-Q

Free cut

Ø 0.75 fiber optic core × 2



Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d
Operate temperature	−55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	60mm

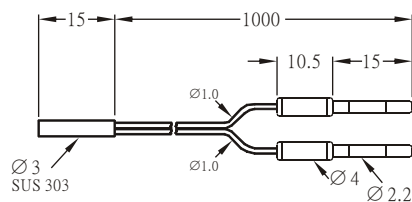
Reflective Ø3 Type

RiKO Ø3

FRS-310-Q

Free cut

Ø 0.5 fiber optic
core × 2



Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D Ø1.0 d Ø0.5
Operate temperature	- 55°C ~ + 70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	25mm

FRS-310-IQ

Free cut

FRS-310-IQ

FRS-310-SQ

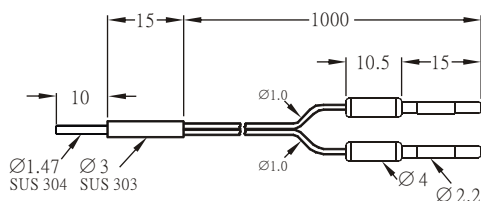
FRS-310-MQ

FRS-310-LQ

FRS-310-S□Q

(by customer design)

Ø 0.5 fiber optic
core × 2

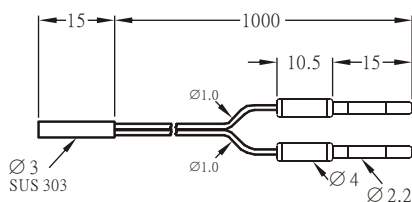


Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D Ø1.0 d Ø0.5
Operate temperature	- 55°C ~ + 70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	25mm

FRW-310-Q

Free cut

Ø 0.5 fiber optic
core × 2



Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D Ø1.0 d Ø0.5
Operate temperature	- 40°C ~ + 70°C
Minimum bending radius	R1
Sensing distance/FZ-KP2	20mm

FRW-310-IQ

Free cut

FRW-310-IQ

FRW-310-SQ

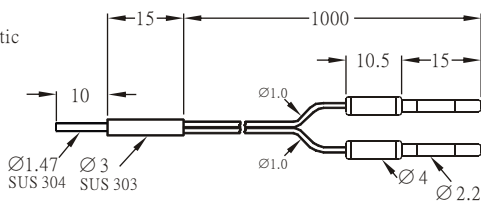
FRW-310-MQ

FRW-310-LQ

FRW-310-S□Q

(by customer design)

Ø 0.5 fiber optic
core × 2

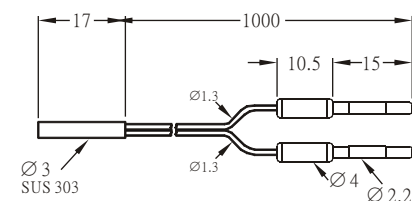


Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D Ø1.0 d Ø0.5
Operate temperature	- 40°C ~ + 70°C
Minimum bending radius	R1
Sensing distance/FZ-KP2	20mm

FRZ-310-Q

Free cut

Ø 1.0 fiber optic
core × 2



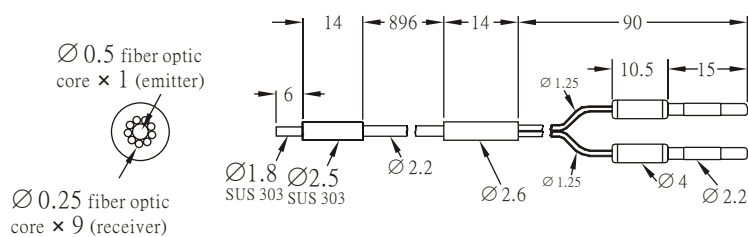
Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D Ø1.3 d Ø1.0
Operate temperature	- 40°C ~ + 70°C
Minimum bending radius	R2
Sensing distance/FZ-KP2	70mm

Reflective Ø2 Type

RiKO Ø2

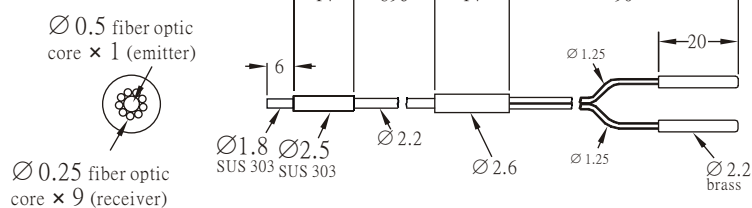
FRC-210-22X

Free cut



Fiber material	Plastic
Fiber Type	Coaxial
Fiber diameter	D Ø2.2 d Ø0.5x1 Ø0.25x9
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	30mm

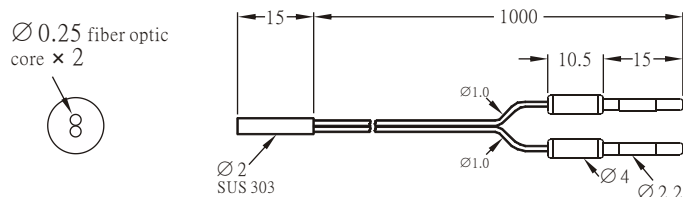
FRC-210-22X(Brass)



Fiber material	Plastic
Fiber Type	Coaxial
Fiber diameter	D Ø2.2 d Ø0.5x1 Ø0.25x9
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	30mm

FRE-210

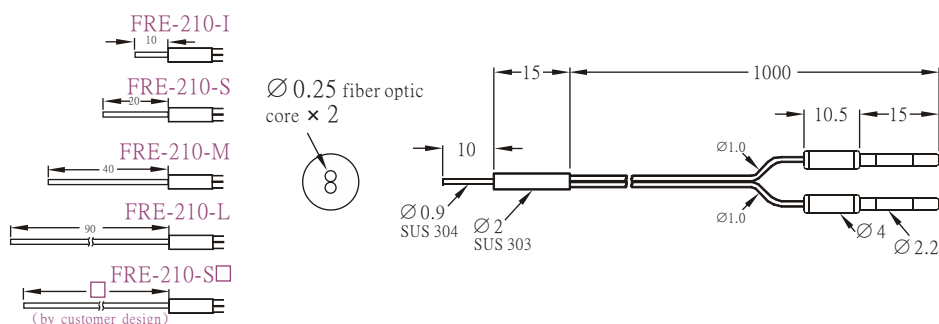
Free cut



Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D Ø1.0 d Ø0.25
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	5mm

FRE-210-I

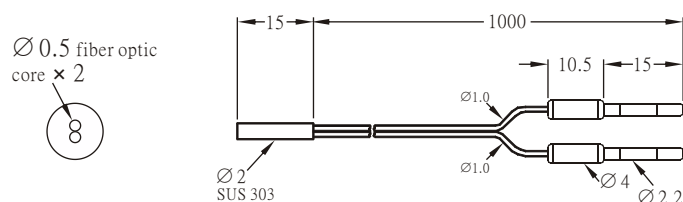
Free cut



Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D Ø1.0 d Ø0.25
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	5mm

FRS-210

Free cut



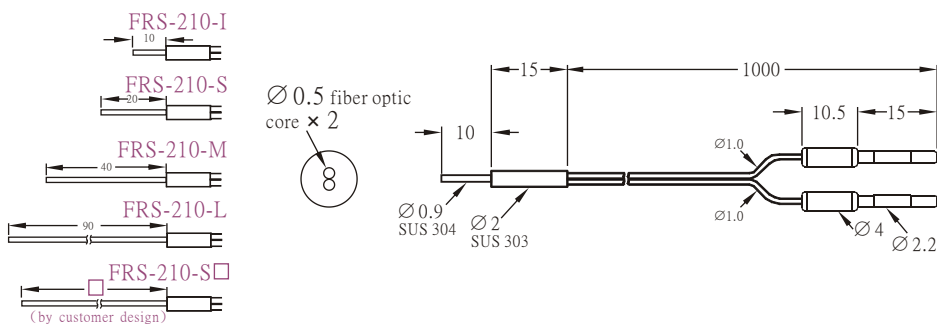
Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D Ø1.0 d Ø0.5
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	25mm

Reflective Ø1.5 Type

RiKO Ø2 Ø1.5

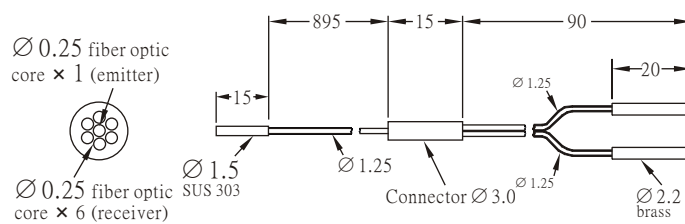
FRS-210

Free cut



Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	25mm

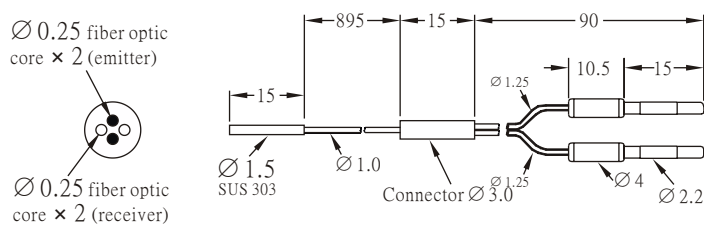
FRC7-110-Q20



Fiber material	Plastic
Fiber Type	Coaxial
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	20mm

FRC4-110-49X

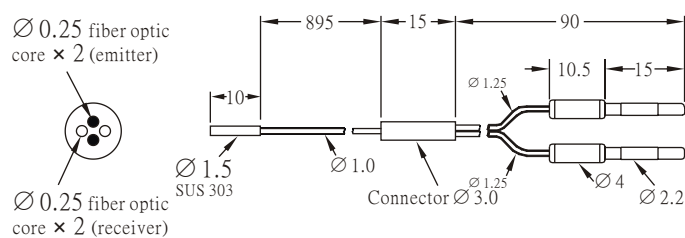
Free cut



Fiber material	Plastic
Fiber Type	Multiple-core
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	7mm

FRC4-110-H10

Free cut

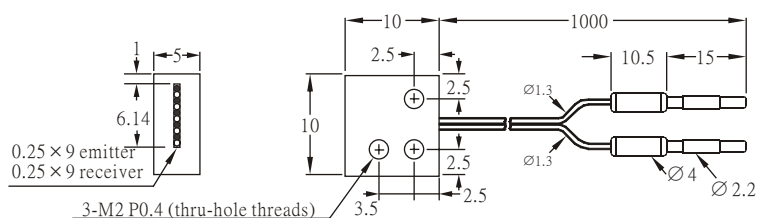


Fiber material	Plastic
Fiber Type	Multiple-core
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	7mm

Reflective Others Type

FR-10ML-10

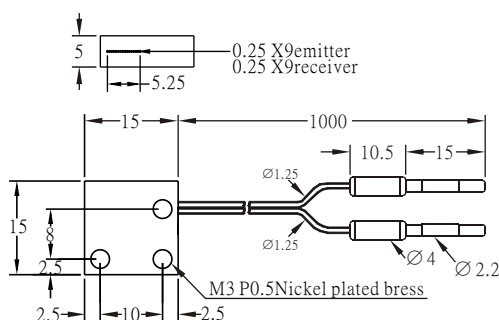
Free cut Array Fiber



Fiber material	Plastic
Fiber Type	Multiple-core
Fiber diameter	D d Ø1.25 x 2 (Ø0.25 x 9) x 2
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	25mm

FR-15MLD-20

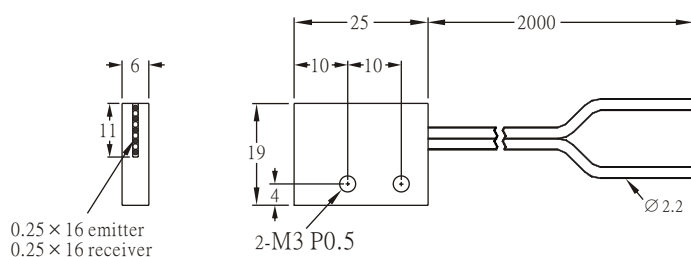
Free cut Array Fiber



Fiber material	Plastic
Fiber Type	Multiple-core
Fiber diameter	D d Ø1.25 x 2 (Ø0.25 x 9) x 2
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	20mm

FR-20ML-20

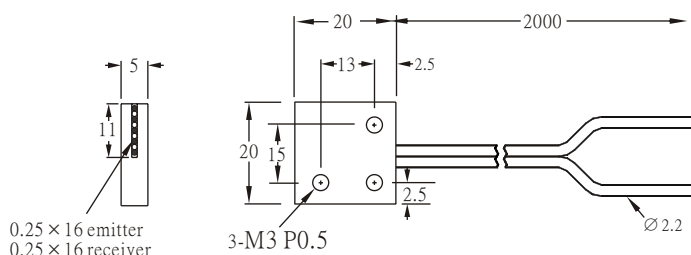
Free cut Array Fiber



Fiber material	Plastic
Fiber Type	Multiple-core
Fiber diameter	D d Ø2.2 x 2 (Ø0.25 x 16) x 2
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	70mm

FR-20MLS-20

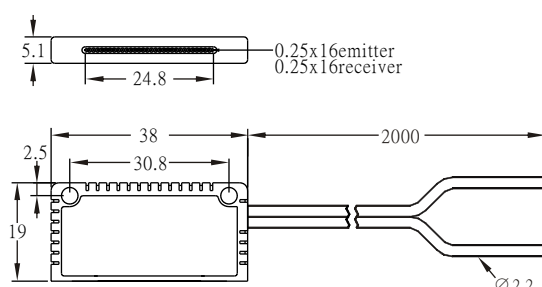
Free cut Array Fiber



Fiber material	Plastic
Fiber Type	Multiple-core
Fiber diameter	D d Ø2.2 x 2 (Ø0.25 x 16) x 2
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	60mm

FR-30ML-20

Free cut Array Fiber



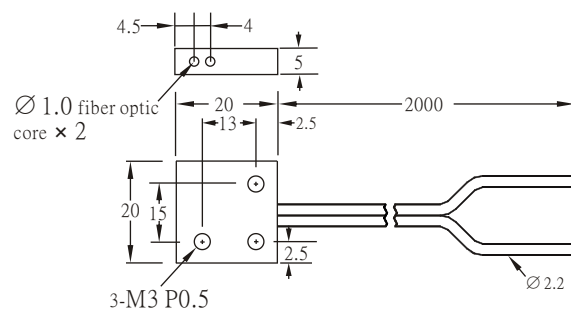
Fiber material	Plastic
Fiber Type	Multiple-core
Fiber diameter	D d Ø2.2 x 2 (Ø0.25 x 16) x 2
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	70mm

Reflective Others Type



FRY-20MLSD-20

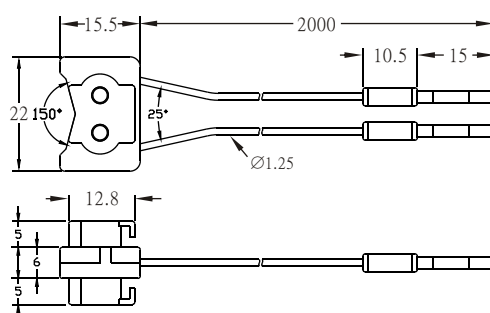
Free cut



Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	Ø2.2 Ø1.0
Operate temperature	-40°C ~ +70°C
Minimum bending radius	R2
Sensing distance/FZ-KP2	70mm

FRD-FU901-20

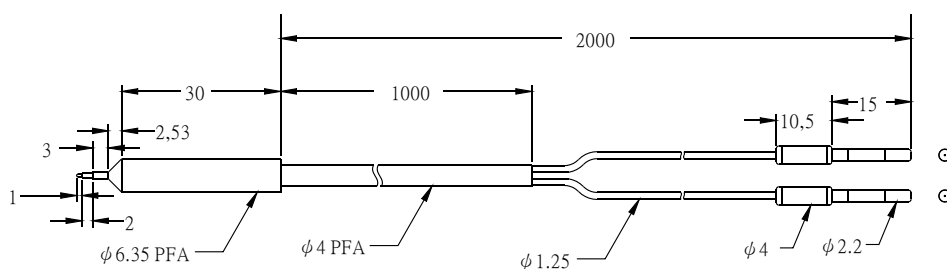
Free cut



Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d Ø1,25 Ø0,5
Operate temperature	- 55°C ~ +70°C
Minimum bending radius	R15
Tube	Ø4-Ø26

FRJ-9310-20

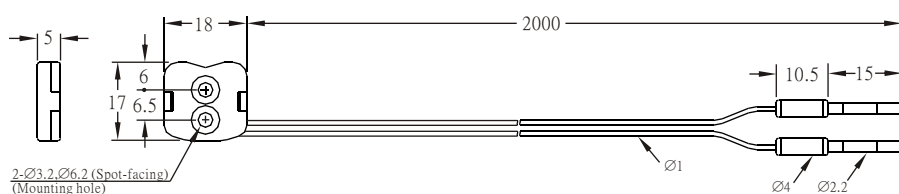
Free cut



Fiber material	Plastic
Fiber Type	Pescision
Fiber diameter	$\varnothing 1.25$ $\varnothing 0.75$
Operate temperature	$-55^{\circ}\text{C} \sim +70^{\circ}\text{C}$
Minimum bending radius	R15 / R40

FRW-K10-20

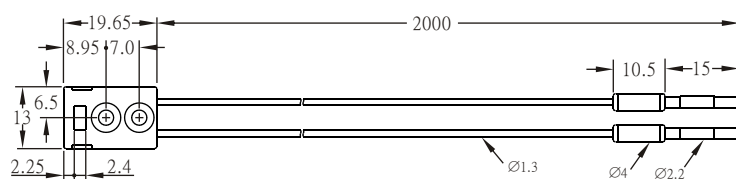
Free cut



Fiber material	Plastic
Fiber Type	Flexibile
Fiber diameter	$\varnothing 1.0$ $\varnothing 0.5$
Operate temperature	$-40^{\circ}\text{C} \sim +70^{\circ}\text{C}$
Minimum bending radius	R1
Sensing distance/FZ-KP2	5 ~ 10mm

FRB-38V-20

Free cut

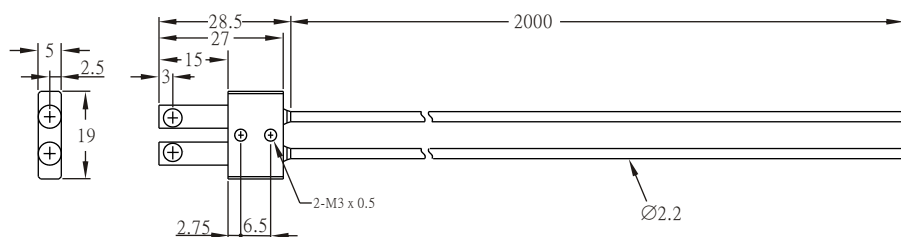


Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	$\begin{matrix} \text{D} \\ \text{d} \end{matrix}$ $\begin{matrix} \varnothing 1.3 \\ \varnothing 1.0 \end{matrix}$
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	1 ~ 6mm

Reflective Others Type

FRH-38H-20

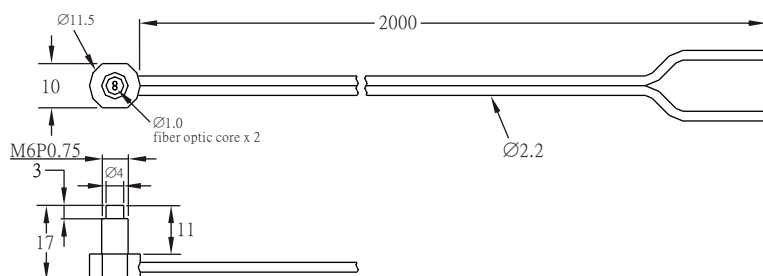
Free cut



Fiber material	Plastic
Fiber Type	Heat Resistant
Fiber diameter	D Ø2.2 d Ø1.0
Operate temperature	-55°C ~ +115°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	5 ~ 18mm

FRY-67TZ-20

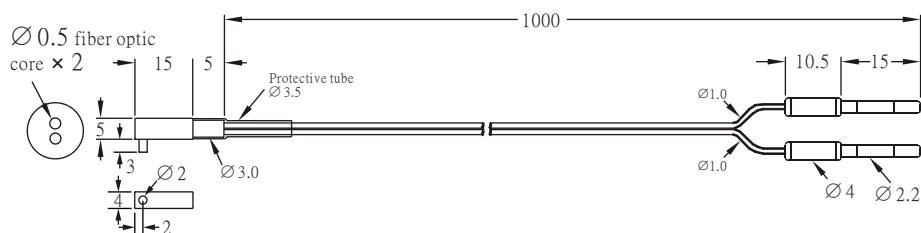
Free cut



Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D Ø2.2 d Ø1.0
Operate temperature	-40°C ~ +70°C
Minimum bending radius	R2
Sensing distance/FZ-KP2	70mm

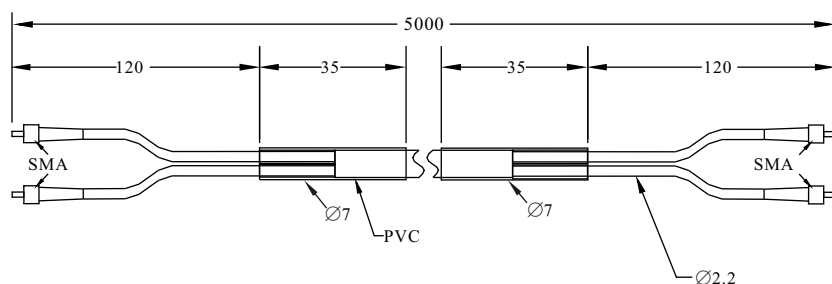
FRW-11-10

Free cut



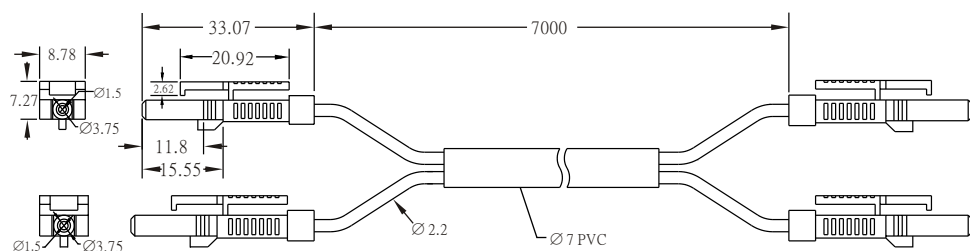
Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D Ø1.0 d Ø0.5
Operate temperature	-40°C ~ +70°C
Minimum bending radius	R1
Sensing distance/FZ-KP2	20mm

FRX-50-SMA



Fiber material	Plastic
Fiber Type	Long sensing range
Fiber diameter	D Ø2.2 d Ø1.5
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R40

FRX-70-FSC



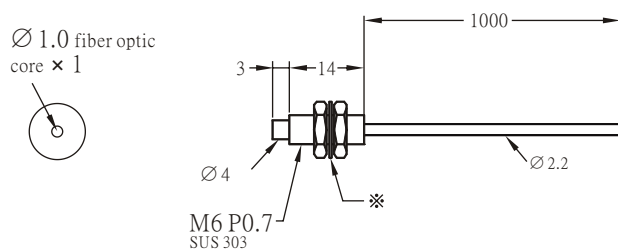
Fiber material	Plastic
Fiber Type	Long sensing range
Fiber diameter	D Ø2.2 d Ø1.5
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R40

Thrubeam M6 Type

RiKO M6

FT-610

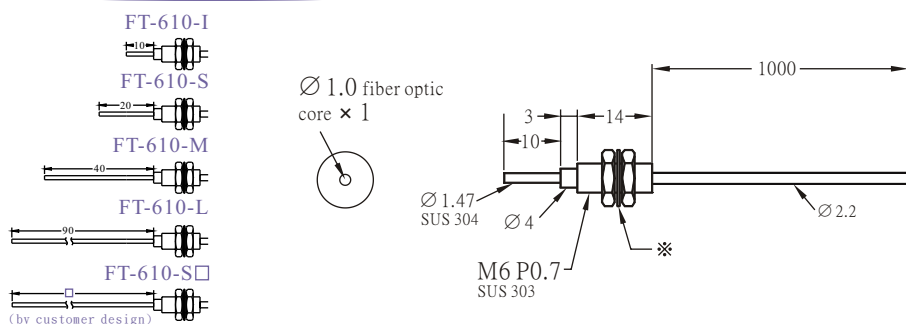
Free cut



Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D Ø2.2 d Ø1.0
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	500mm

FT-610-I

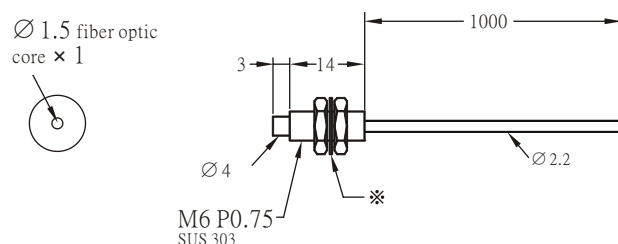
Free cut



Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D Ø2.2 d Ø1.0
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	500mm

FTX-610

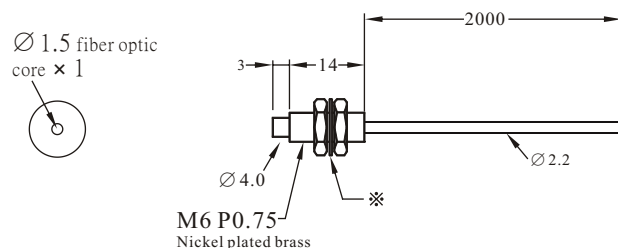
Free cut



Fiber material	Plastic
Fiber Type	Long sensing range
Fiber diameter	D Ø2.2 d Ø1.5
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R40
Sensing distance/FZ-KP2	700mm

FTX-620-6F

Free cut

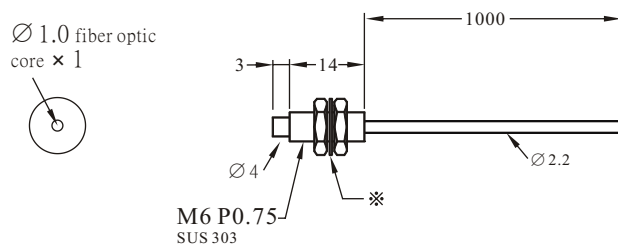


Fiber material	Plastic
Fiber Type	Long sensing range
Fiber diameter	D Ø2.2 d Ø1.5
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R40
Sensing distance/FZ-KP2	700mm

FTY-610

Free cut

Minimum bend radius R2



※ Washer toothed lock Ø 11;
Nuts width across flats 10 mm, thickness 2.5 mm

Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D Ø2.2 d Ø1.0
Operate temperature	-40°C ~ +70°C
Minimum bending radius	R2
Sensing distance/FZ-KP2	300mm

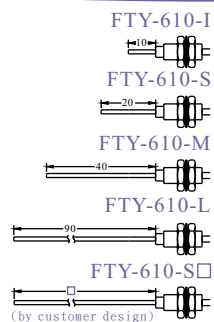
Thrubeam M6 Type

RiKO M6

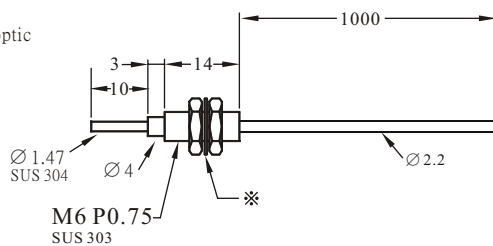
FTY-610-I

Free cut

Minimum bend radius R2



Ø 1.0 fiber optic
core × 1



Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D Ø2.2 d Ø1.0
Operate temperature	- 40°C ~ + 70°C
Minimum bending radius	R2
Sensing distance/FZ-KP2	300mm

※ Washer toothed lock Ø 11;
Nuts width across flats 10 mm, thickness 2.5 mm

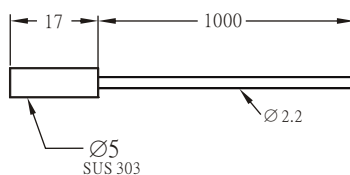
Thrubeam Ø5 Type

RiKO M6

FT-510

Free cut

Ø 1.0 fiber optic
core × 1



Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D d
	Ø2.2 Ø1.0
Operate temperature	- 55°C ~ + 70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	500mm

FT-510-I

Free cut

FT-510-I

FT-510-S

FT-510-M

FT-510-L

FT-510-L

FT-510-L

FT-510-L

FT-510-L

FT-510-L

FT-510-L

FT-510-L

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FT-510-L

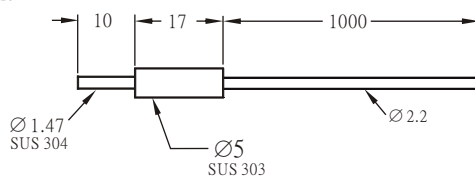
FT-510-L

FT-510-L

FT-510-L

FT-510-L

Ø 1.0 fiber optic
core × 1

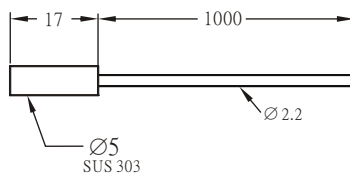


Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D d
	Ø2.2 Ø1.0
Operate temperature	- 55°C ~ + 70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	500mm

FTX-510

Free cut

Ø 1.5 fiber optic
core × 1



Fiber material	Plastic
Fiber Type	Long sensing range
Fiber diameter	D d
	Ø2.2 Ø1.5
Operate temperature	- 55°C ~ + 70°C
Minimum bending radius	R40
Sensing distance/FZ-KP2	700mm

FTX-510-I

Free cut

FTX-510-I

FTX-510-S

FTX-510-M

FTX-510-L

FTX-510-L

FTX-510-L

FTX-510-L

FTX-510-L

FTX-510-L

FTX-510-L

FTX-510-L

FTX-510-L

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FTX-510-L

FTX-510-L

FTX-510-L

FTX-510-L

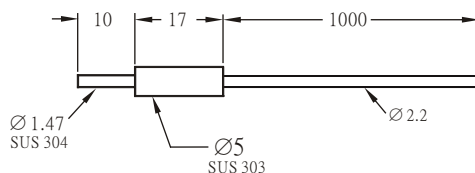
FTX-510-L

FTX-510-L

FTX-510-L

FTX-510-L

Ø 1.5 fiber optic
core × 1



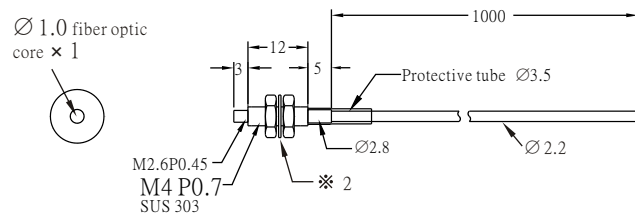
Fiber material	Plastic
Fiber Type	Long sensing range
Fiber diameter	D d
	Ø2.2 Ø1.5
Operate temperature	- 55°C ~ + 70°C
Minimum bending radius	R40
Sensing distance/FZ-KP2	700mm

Thrubeam M4 Type

RiKO M4

FT-410

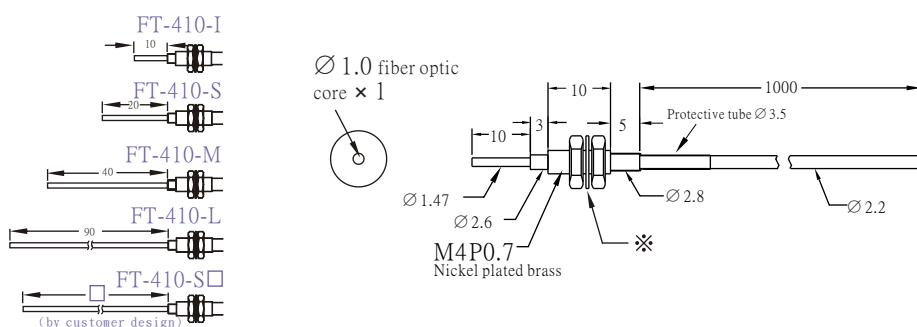
Free cut



Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	500mm

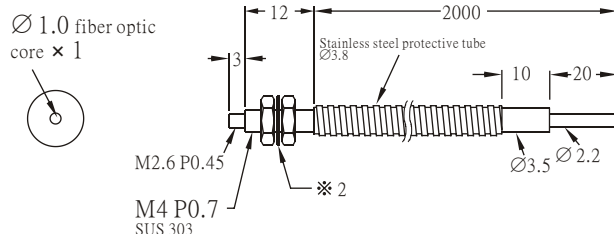
FT-410-I

Free cut



Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	500mm

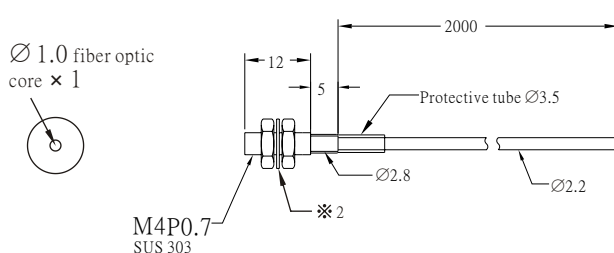
FT-420-KS26



Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	500mm

FT-420-F

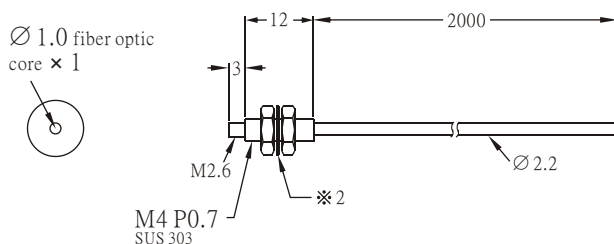
Free cut



Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	500mm

FT-420-F1

Free cut



Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	500mm

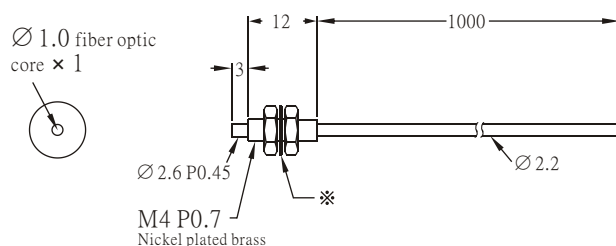
※ Washer toothed lock Ø8.3;
Nuts width across flats 8 mm, thickness 2.3 mm

Thrubeam M4 Type

RiKO M4

FT-410-6F

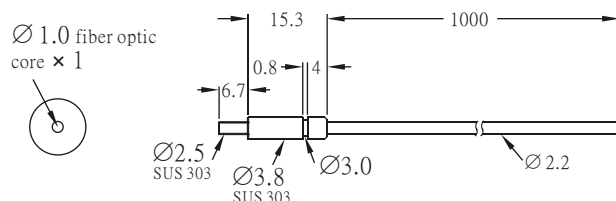
Free cut



Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D $\varnothing$ 2.2 d $\varnothing$ 1.0
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	500mm

FT-410-38G

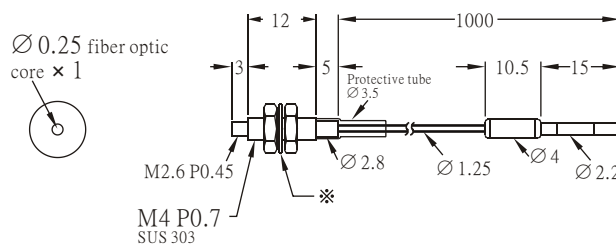
Free cut



Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D $\varnothing$ 2.2 d $\varnothing$ 1.0
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	500mm

FTA-410

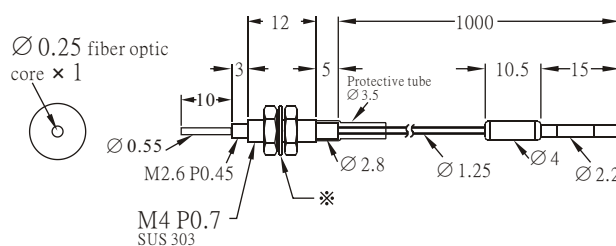
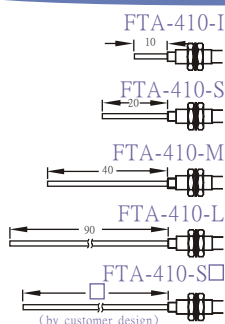
Free cut



Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D $\varnothing$ 1.25 d $\varnothing$ 0.25
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	30mm

FTA-410-I

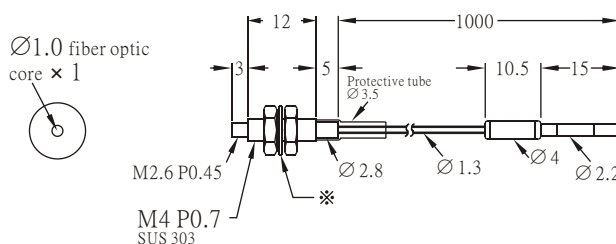
Free cut



Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D $\varnothing$ 1.25 d $\varnothing$ 0.25
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	30mm

FTB-410

Free cut



Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D $\varnothing$ 1.3 d $\varnothing$ 1.0
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	400mm

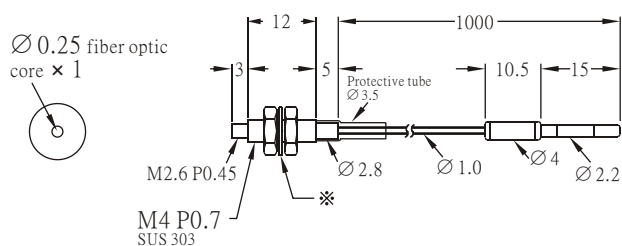
※ Washer toothed lock $\varnothing$ 8.3;
Nuts width across flats 8 mm, thickness 2.3 mm

Thrubeam M4 Type

RiKO M4

FTE-410

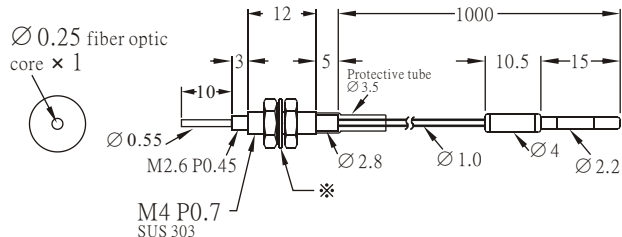
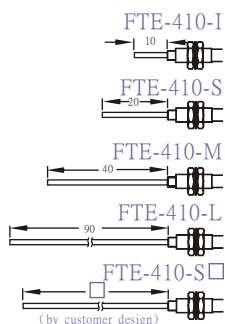
Free cut



Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	30mm

FTE-410-I

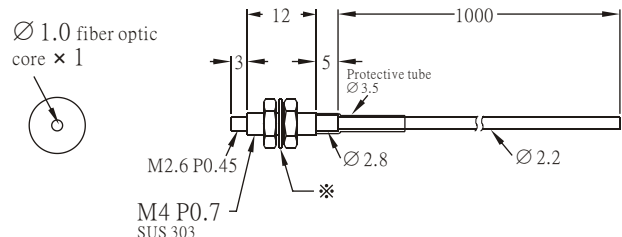
Free cut



Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	30mm

FTH-410

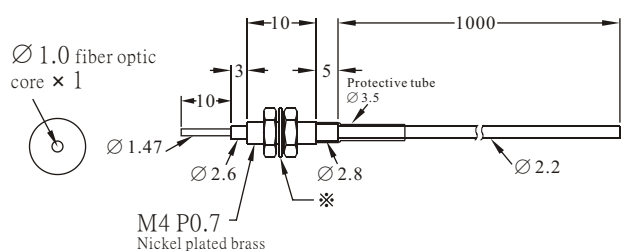
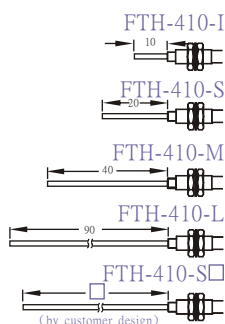
Free cut



Fiber material	Plastic
Fiber Type	Heat Resistant
Fiber diameter	D d
Operate temperature	-55°C ~ +115°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	600mm

FTH-410-I

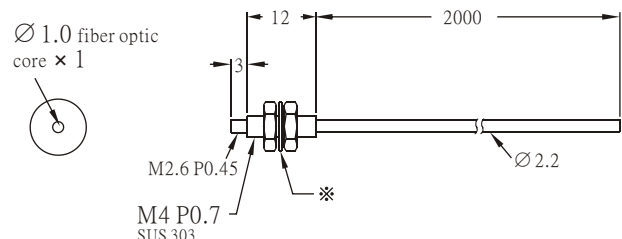
Free cut



Fiber material	Plastic
Fiber Type	Heat Resistant
Fiber diameter	D d
Operate temperature	-55°C ~ +115°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	600mm

FTH-420-F1

Free cut



Fiber material	Plastic
Fiber Type	Heat Resistant
Fiber diameter	D d
Operate temperature	-55°C ~ +115°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	600mm

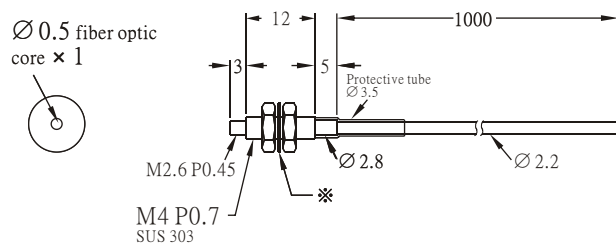
※ Washer toothed lock Ø8.3;
Nuts width across flats 8 mm, thickness 2.3 mm

Thrubeam M4 Type

RiKO M4

FTS2-410

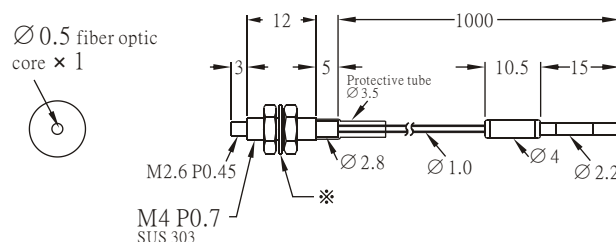
Free cut



Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D $\varnothing 2.2$ d $\varnothing 0.5$
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	130mm

FTS-410

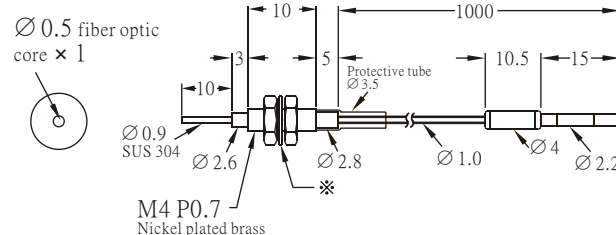
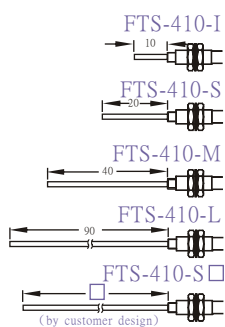
Free cut



Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D $\varnothing 1.0$ d $\varnothing 0.5$
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	130mm

FTS-410-I

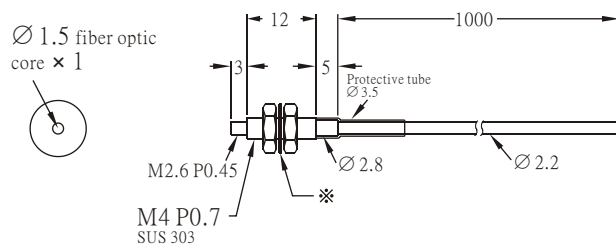
Free cut



Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D $\varnothing 1.0$ d $\varnothing 0.5$
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	130mm

FTX-410

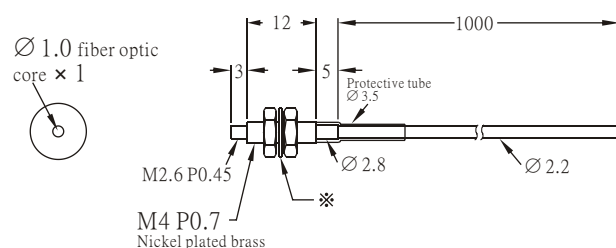
Free cut



Fiber material	Plastic
Fiber Type	Long sensing range
Fiber diameter	D $\varnothing 2.2$ d $\varnothing 1.5$
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R40
Sensing distance/FZ-KP2	700mm

FTY-410

Free cut



* Washer toothed lock $\varnothing 8.3$;
Nuts width across flats 8 mm, thickness 2.3 mm

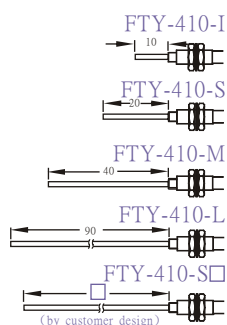
Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D $\varnothing 2.2$ d $\varnothing 1.0$
Operate temperature	-40°C ~ +70°C
Minimum bending radius	R2
Sensing distance/FZ-KP2	300mm

Thrubeam M4 Type

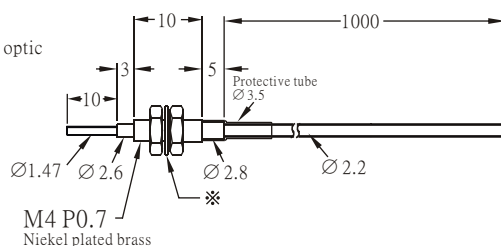
RiKO M4

FTY-410-I

Free cut



Ø 1.0 fiber optic
core × 1

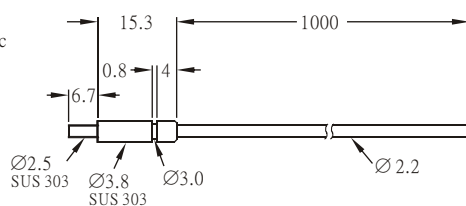


Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D Ø2.2 d Ø1.0
Operate temperature	- 40°C ~ + 70°C
Minimum bending radius	R2
Sensing distance/FZ-KP2	300mm

FTY-410-38G

Free cut

Ø 1.0 fiber optic
core × 1

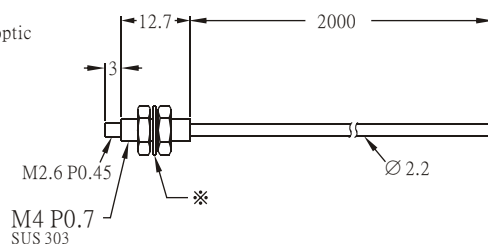


Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D Ø2.2 d Ø1.0
Operate temperature	- 40°C ~ + 70°C
Minimum bending radius	R2
Sensing distance/FZ-KP2	300mm

FTY-420-F1

Free cut

Ø 1.0 fiber optic
core × 1

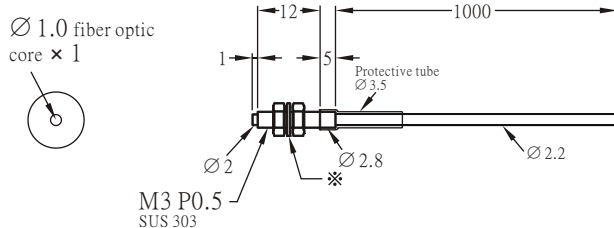


Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D Ø2.2 d Ø1.0
Operate temperature	- 40°C ~ + 70°C
Minimum bending radius	R2
Sensing distance/FZ-KP2	300mm

※ Washer toothed lock Ø 8.3;
Nuts width across flats 8 mm, thickness 2.3 mm

FT-310

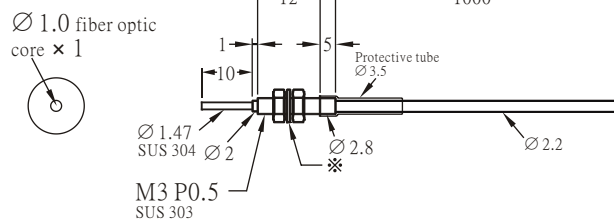
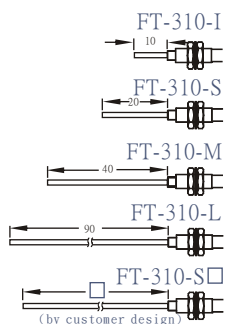
Free cut



Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	500mm

FT-310-I

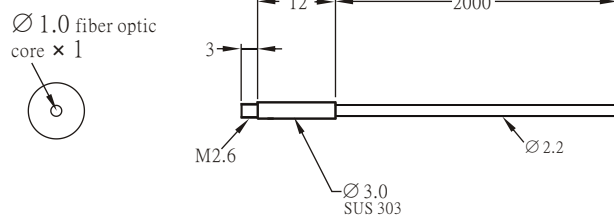
Free cut



Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	500mm

FT-320-T004

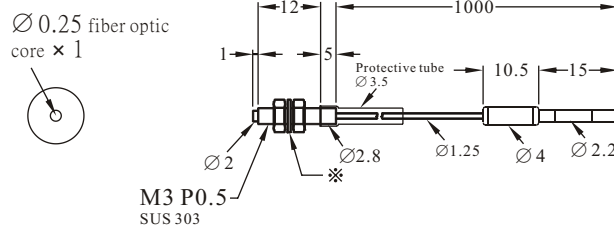
Free cut



Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	500mm

FTA-310

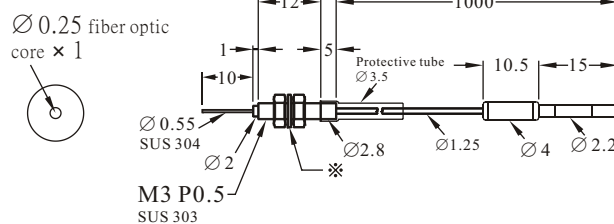
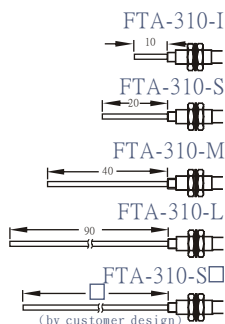
Free cut



Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	30mm

FTA-310-I

Free cut



※ Washer toothed lock Ø6.4;
Nuts width across flats 5 mm, thickness 2.2 mm

Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	30mm

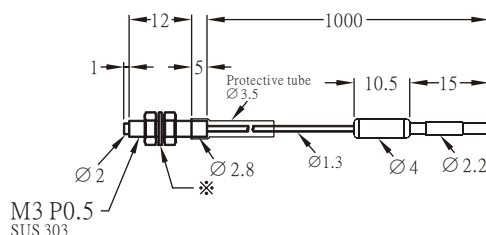
Thrubeam M3 Type

RiKO M3

FTB-310

Free cut

Ø 1.0 fiber optic
core × 1

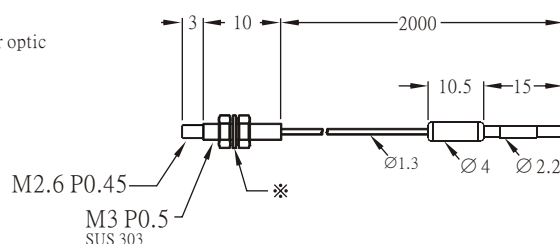


Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	400mm

FTB-310-T80

Free cut

Ø 1.0 fiber optic
core × 1

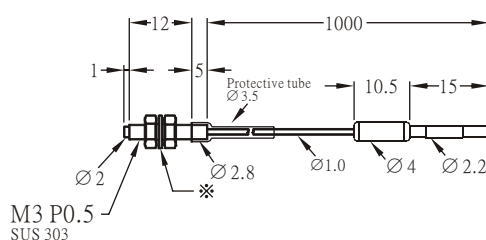


Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	400mm

FTC4-310

Free cut

Ø 0.25 fiber optic
core × 4

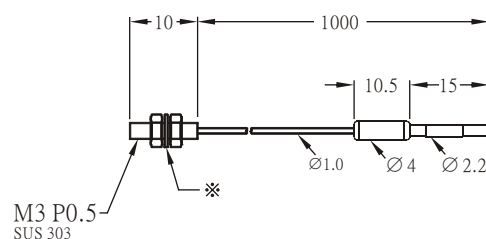


Fiber material	Plastic
Fiber Type	Multiple-core
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	100mm

FTC4-310-H10(79)

Free cut

Ø 0.25 fiber optic
core × 4



Fiber material	Plastic
Fiber Type	Multiple-core
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	100mm

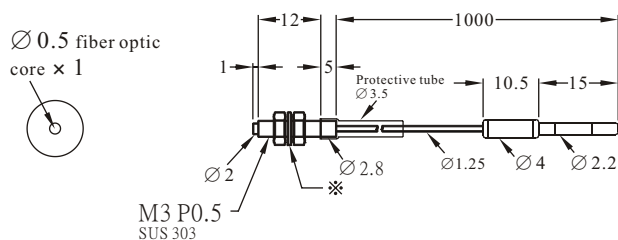
※ Washer toothed lock Ø6.4;
Nuts width across flats 5 mm, thickness 2.2 mm

Thrubeam M3 Type

RiKO M3

FTD-310

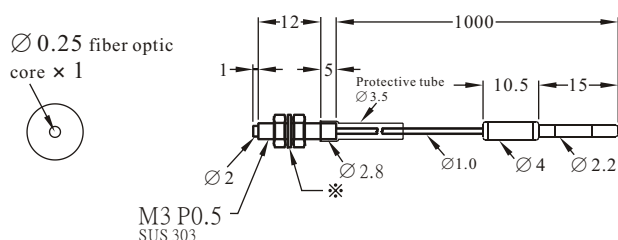
Free cut



Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d Ø1.25 Ø0.5
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	130mm

FTE-310

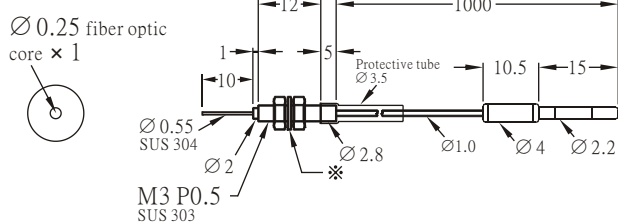
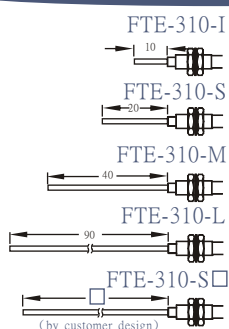
Free cut



Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D d Ø1.0 Ø0.25
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	30mm

FTE-310-I

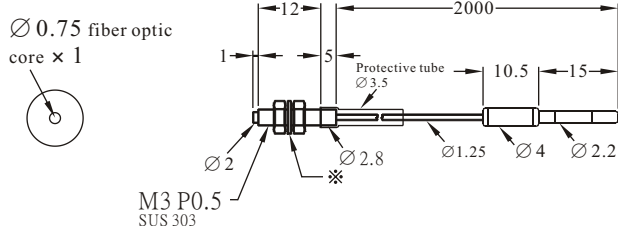
Free cut



Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D d Ø1.0 Ø0.25
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	30mm

FTJ-320

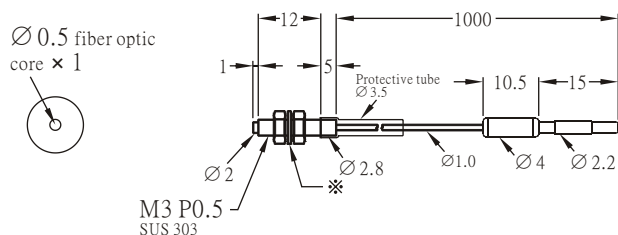
Free cut



Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d Ø1.25 Ø0.75
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	250mm

FTS-310

Free cut



Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d Ø1.0 Ø0.5
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	130mm

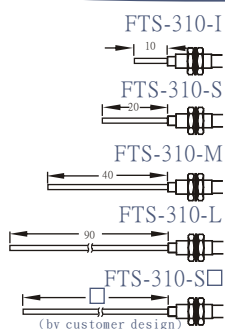
※ Washer toothed lock Ø 6.4;
Nuts width across flats 5 mm, thickness 2.2 mm

Thrubeam M3 Type

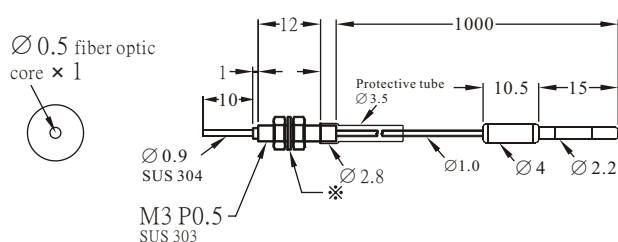
RiKO M3

FTS-310-I

Free cut



Ø 0.5 fiber optic
core × 1

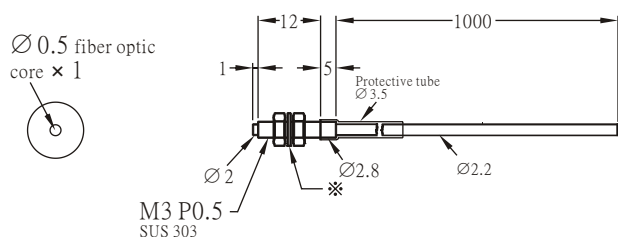


Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	130mm

FTS2-310

Free cut

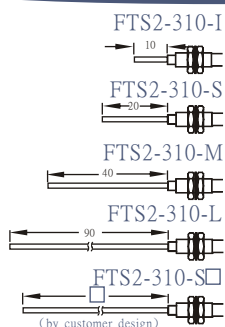
Ø 0.5 fiber optic
core × 1



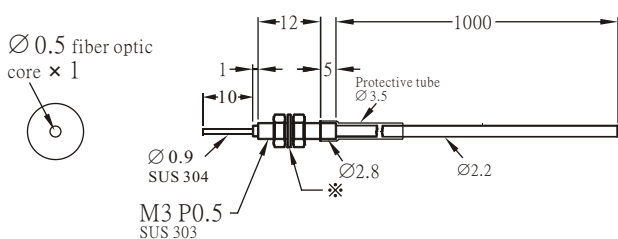
Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	130mm

FTS2-310-I

Free cut



Ø 0.5 fiber optic
core × 1

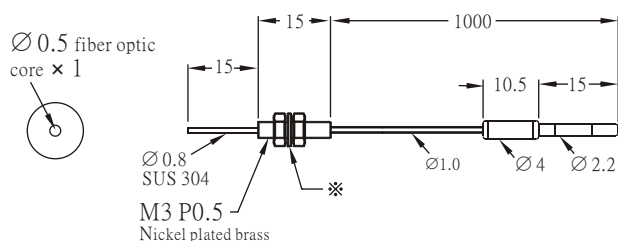


Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	130mm

FTS-310-75F

Free cut

Ø 0.5 fiber optic
core × 1

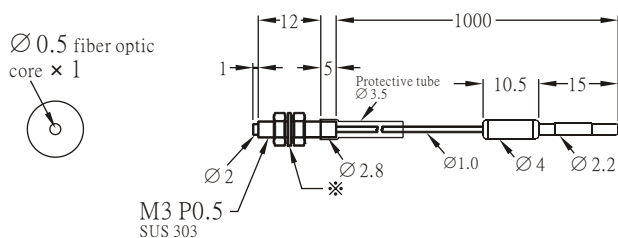


Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	130mm

FTW-310

Free cut

Ø 0.5 fiber optic
core × 1



Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D d
Operate temperature	-40°C ~ +70°C
Minimum bending radius	R1
Sensing distance/FZ-KP2	80mm

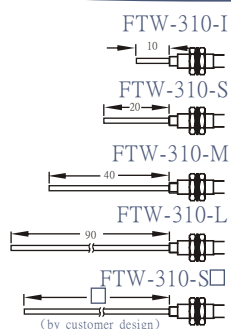
※ Washer toothed lock Ø 6.4;
Nuts width across flats 5 mm, thickness 2.2 mm

Thrubeam M3 Type

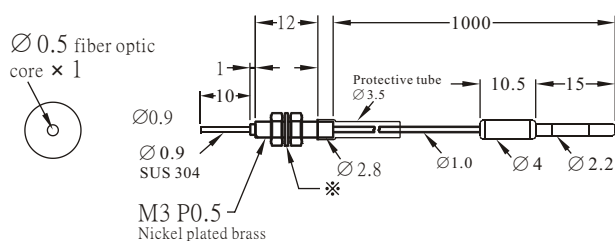
RiKO M3

FTW-310-I

Free cut



Ø 0.5 fiber optic
core × 1

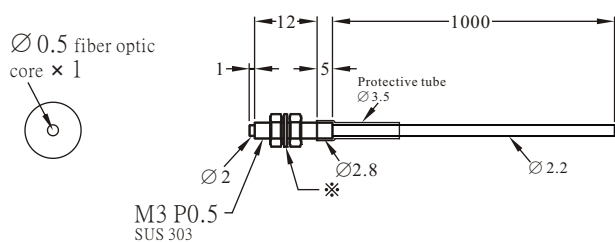


Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D d Ø1.0 Ø0.5
Operate temperature	- 40°C ~ + 70°C
Minimum bending radius	R1
Sensing distance/FZ-KP2	80mm

FTW2-310

Free cut

Ø 0.5 fiber optic
core × 1

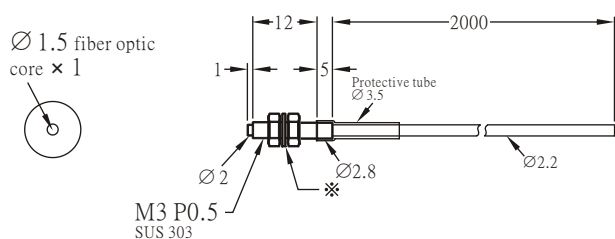


Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D d Ø2.2 Ø0.5
Operate temperature	- 40°C ~ + 70°C
Minimum bending radius	R1
Sensing distance/FZ-KP2	80mm

FTX-320

Free cut

Ø 1.5 fiber optic
core × 1

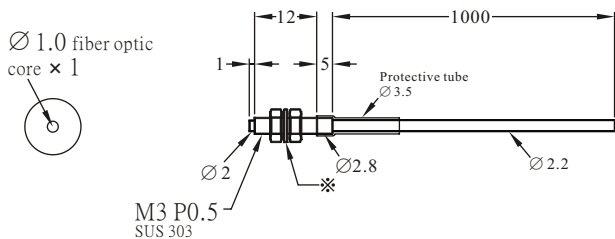


Fiber material	Plastic
Fiber Type	Long sensing range
Fiber diameter	D d Ø2.2 Ø1.5
Operate temperature	- 55°C ~ + 70°C
Minimum bending radius	R40
Sensing distance/FZ-KP2	700mm

FTY-310

Free cut

Ø 1.0 fiber optic
core × 1

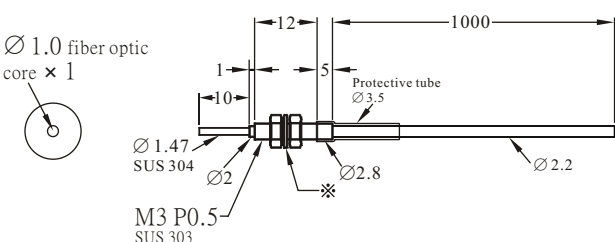
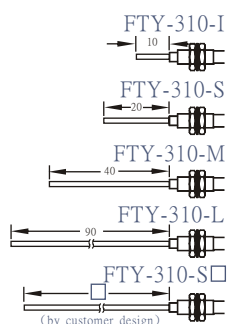


Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D d Ø2.2 Ø1.0
Operate temperature	- 40°C ~ + 70°C
Minimum bending radius	R2
Sensing distance/FZ-KP2	300mm

FTY-310-I

Free cut

Ø 1.0 fiber optic
core × 1



※ Washer toothed lock Ø 6.4;
Nuts width across flats 5 mm, thickness 2.2 mm

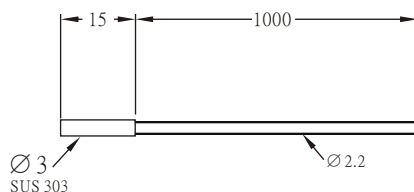
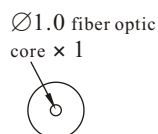
Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D d Ø2.2 Ø1.0
Operate temperature	- 40°C ~ + 70°C
Minimum bending radius	R2
Sensing distance/FZ-KP2	300mm

Thrubeam Ø3 Type

RiKO Ø3

FT-310-Q

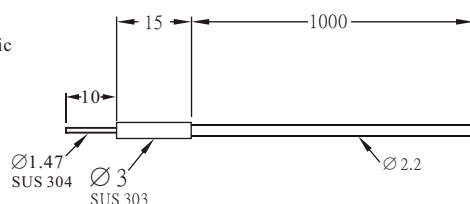
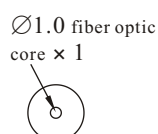
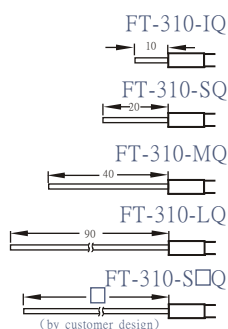
Free cut



Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D d
	Ø2.2 Ø1.0
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	500mm

FT-310-IQ

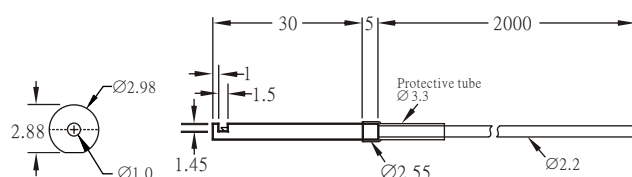
Free cut



Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D d
	Ø2.2 Ø1.0
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	500mm

FT-320-D-T14L

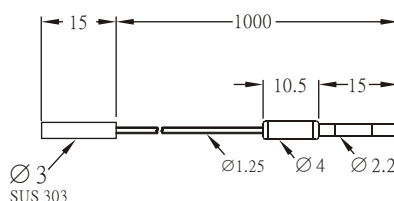
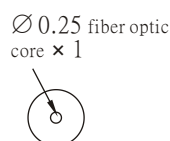
Free cut



Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D d
	Ø2.2 Ø1.0
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	600mm

FTA-310-Q

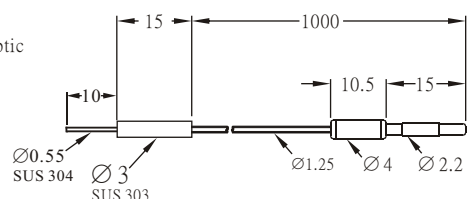
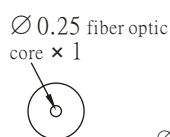
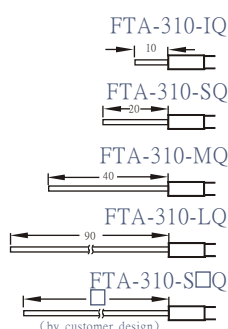
Free cut



Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D d
	Ø1.25 Ø0.25
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	30mm

FTA-310-IQ

Free cut

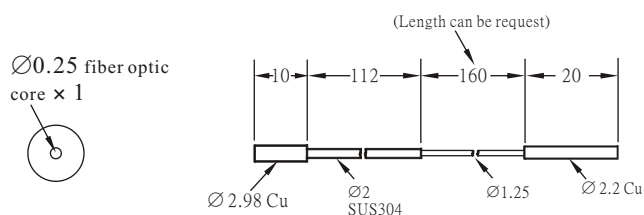


Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D d
	Ø1.25 Ø0.25
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	30mm

Thrubeam Ø3 Type

RiKO 

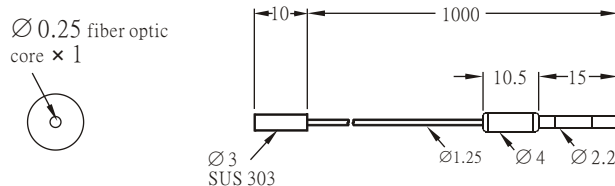
FTA-11(280/600/1300/2100)



Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D d
	Ø1.25 Ø0.25
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	30mm

FTA-310-H10Q

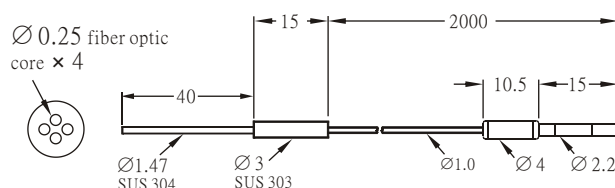
Free cut



Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D d
	Ø1.25 Ø0.25
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	30mm

FTC4-320-MQ

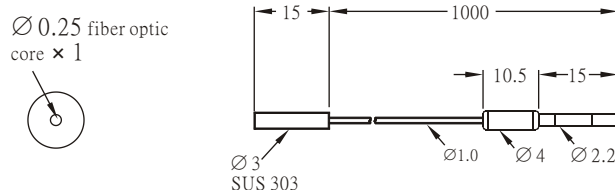
Free cut



Fiber material	Plastic
Fiber Type	Multiple-core
Fiber diameter	D d
	Ø1.0mm x1 Ø0.25mmx4
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	100mm

FTE-310-Q

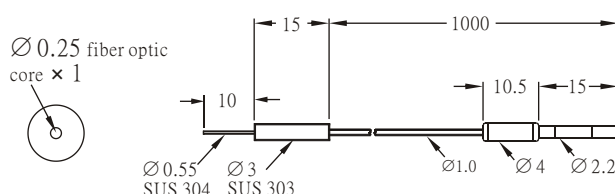
Free cut



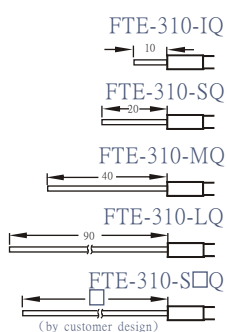
Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D d
	Ø1.0 Ø0.25
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	30mm

FTE-310-IQ

Free cut



Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D d
	Ø1.0 Ø0.25
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	30mm



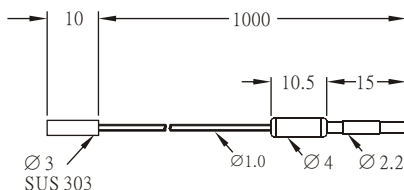
Thrubeam Ø3 Type

RiKO 

FTE-310-H10Q

Free cut

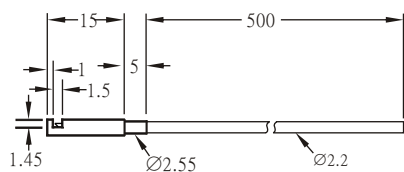
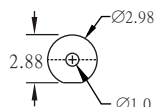
Ø 0.25 fiber optic
core × 1



Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	30mm

FTH-305-D

Free cut

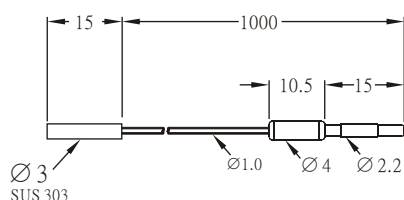


Fiber material	Plastic
Fiber Type	Heat resistant
Fiber diameter	D d
Operate temperature	-55°C ~ +115°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	600mm

FTS-310-Q

Free cut

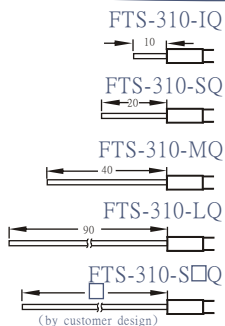
Ø 0.5 fiber optic
core × 1



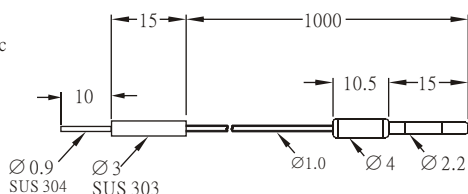
Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	130mm

FTS-310-IQ

Free cut



Ø 0.5 fiber optic
core × 1

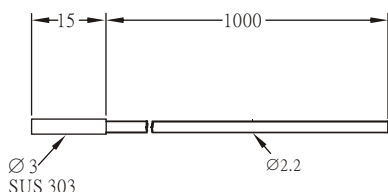


Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	130mm

FTS2-310-Q

Free cut

Ø 0.5 fiber optic
core × 1



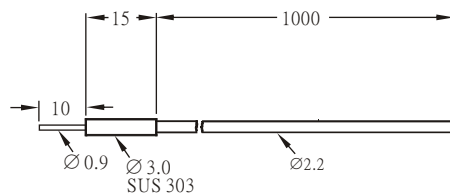
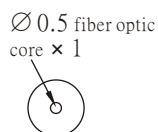
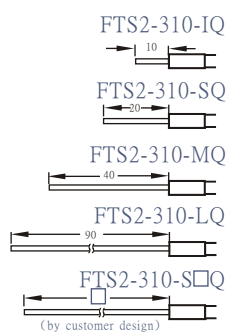
Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	130mm

Thrubeam Ø3 Type



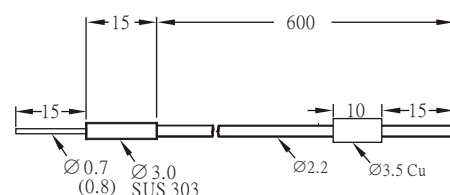
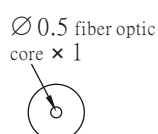
FTS2-310-IQ

Free cut



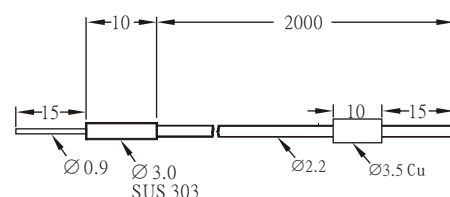
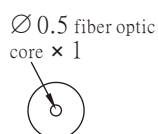
Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d
	Ø2.2 Ø0.5
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	130mm

FTS2-306-S15Q(0.7)(0.8)



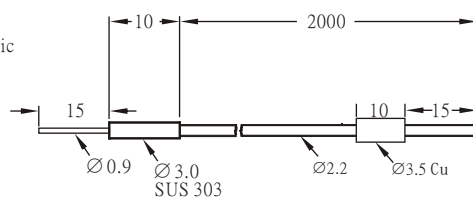
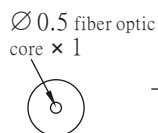
Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d
	Ø2.2 Ø0.5
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	130mm

FTS2-320-22



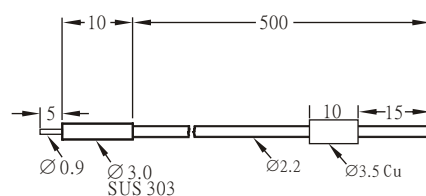
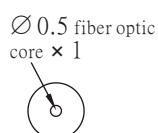
Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d
	Ø2.2 Ø0.5
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	130mm

FTW2-320-22



Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D d
	Ø2.2 Ø0.5
Operate temperature	-40°C ~ +70°C
Minimum bending radius	R1
Sensing distance/FZ-KP2	80mm

FTW2-305-21



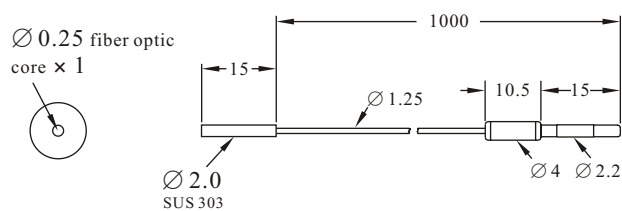
Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D d
	Ø2.2 Ø0.5
Operate temperature	-40°C ~ +70°C
Minimum bending radius	R1
Sensing distance/FZ-KP2	80mm

Thrubeam Ø2 Type

RiKO 

FTA-210

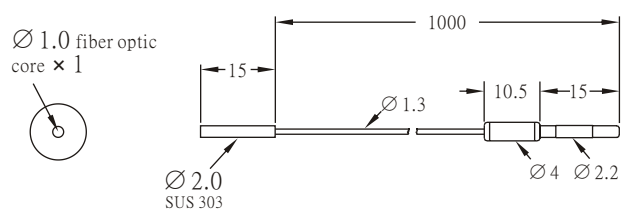
Free cut



Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	30mm

FTB-210

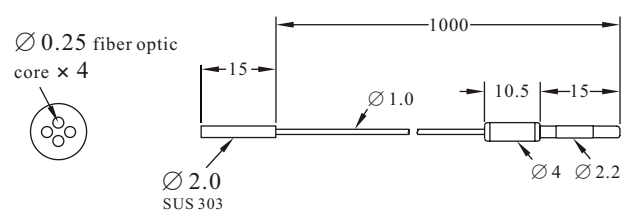
Free cut



Fiber material	Plastic
Fiber Type	Standard
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	400mm

FTC4-210

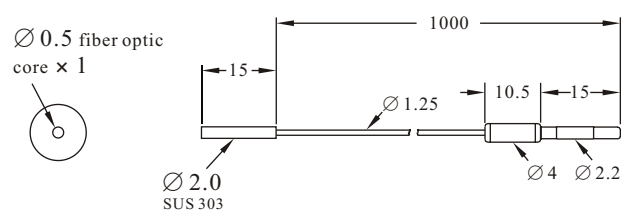
Free cut



Fiber material	Plastic
Fiber Type	Multiple-core
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	100mm

FTD-210

Free cut

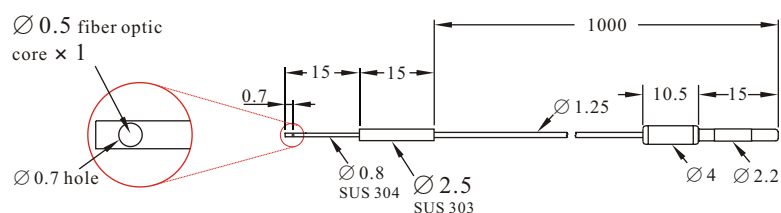


Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	130mm

FTD-210-32

Free cut

Side View Fiber



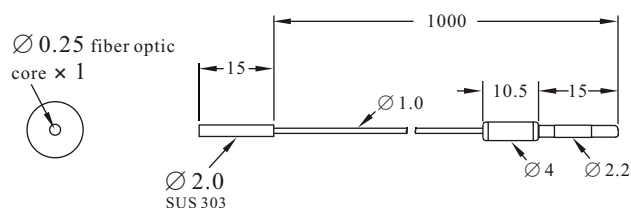
Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	80mm

Thrubeam Ø2 Type

RiKO 

FTE-210

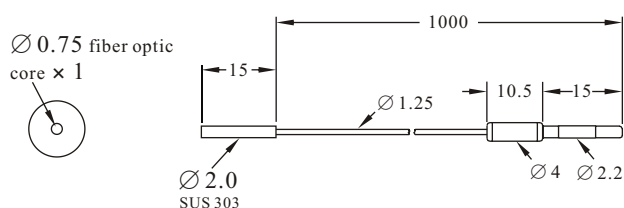
Free cut



Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	30mm

FTJ-210

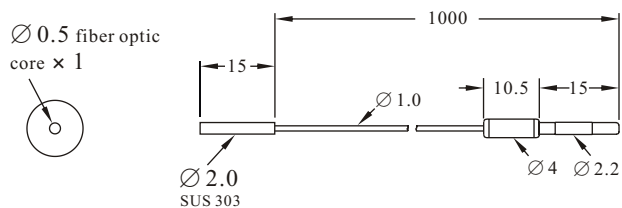
Free cut



Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	250mm

FTS-210

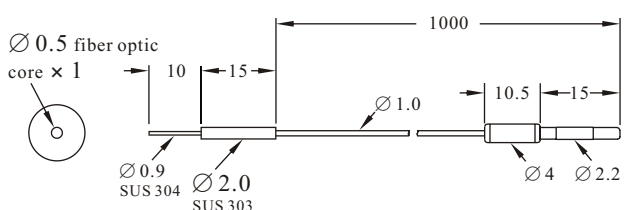
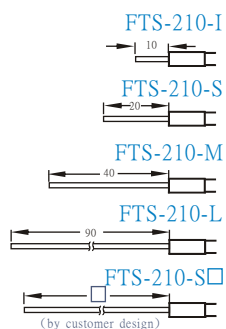
Free cut



Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	130mm

FTS-210-I

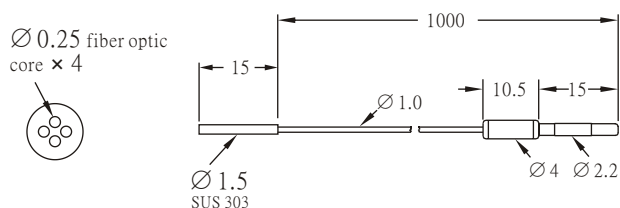
Free cut



Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	130mm

FTC4-110

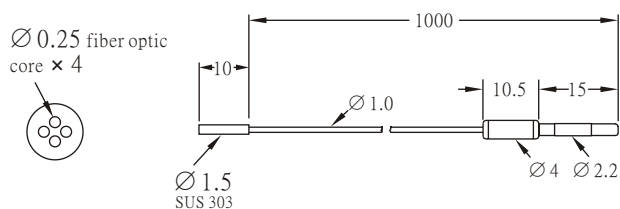
Free cut



Fiber material	Plastic
Fiber Type	Multiple-core
Fiber diameter	D d Ø1.0mm x1 Ø0.25mm x4
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	100mm

FTC4-110-59(H10)

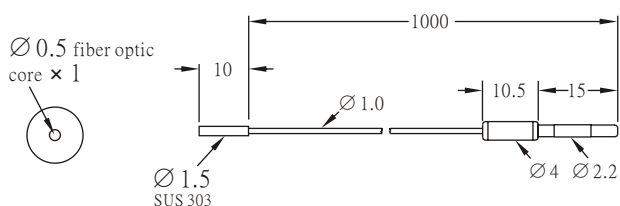
Free cut



Fiber material	Plastic
Fiber Type	Multiple-core
Fiber diameter	D d Ø1.0mm x1 Ø0.25mm x4
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	100mm

FTS-110-H10

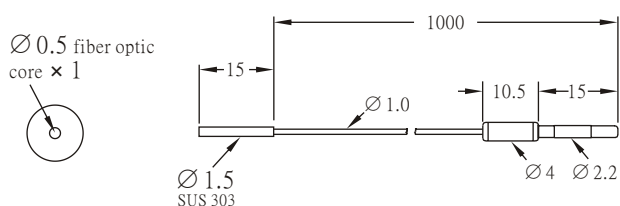
Free cut



Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d Ø1.0 Ø0.5
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	130mm

FTS-110

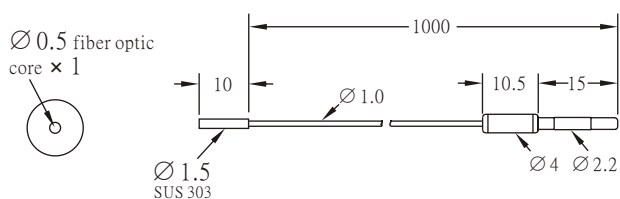
Free cut



Fiber material	Plastic
Fiber Type	Precision
Fiber diameter	D d Ø1.0 Ø0.5
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R15
Sensing distance/FZ-KP2	130mm

FTW-110-H10

Free cut



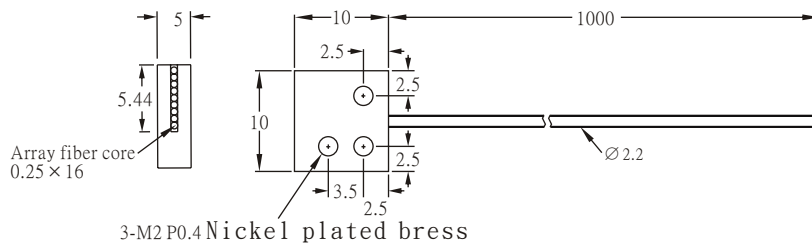
Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D d Ø1.0 Ø0.5
Operate temperature	-40°C ~ +70°C
Minimum bending radius	R1
Sensing distance/FZ-KP2	80mm

Thrubeam Others Type



FT-10ML-10

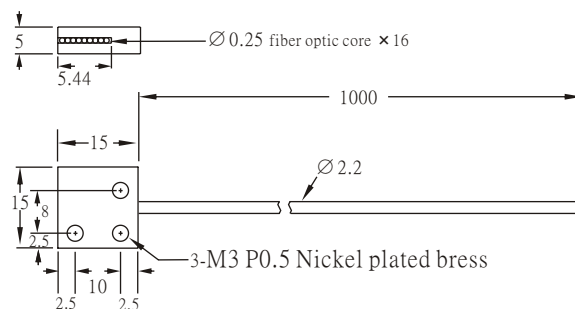
Free cut Array Fiber



Fiber material	Plastic
Fiber Type	Multiple-core
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	500mm

FT-15MLD-10

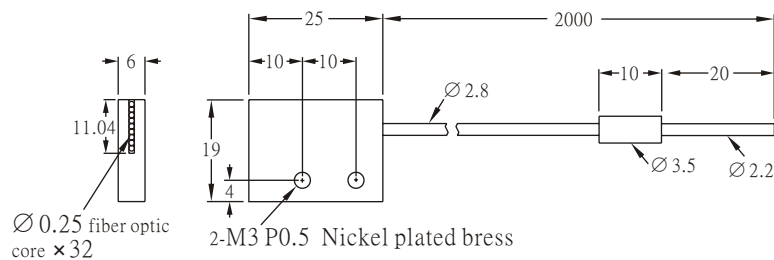
Free cut Side View Array Fiber



Fiber material	Plastic
Fiber Type	Multiple-core
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R25
Sensing distance/FZ-KP2	400mm

FT-20ML-20

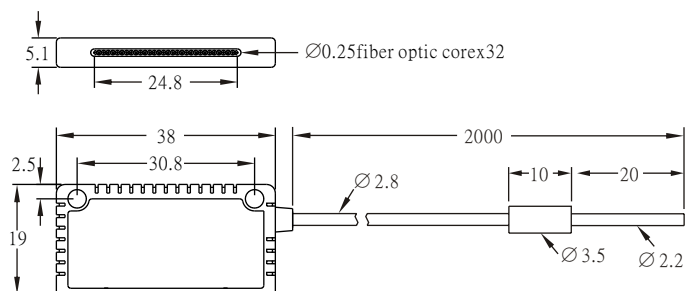
Array Fiber



Fiber material	Plastic
Fiber Type	Multiple-core
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R60
Sensing distance/FZ-KP2	500mm

FT-30ML-20

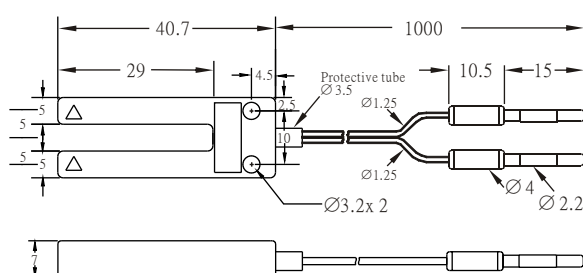
Array Fiber



Fiber material	Plastic
Fiber Type	Multiple-core
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R60
Sensing distance/FZ-KP2	300mm

FTA-SU05-10

Free cut



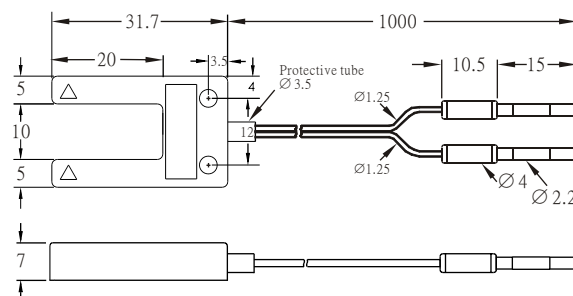
Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	5mm

Thrubeam Others Type



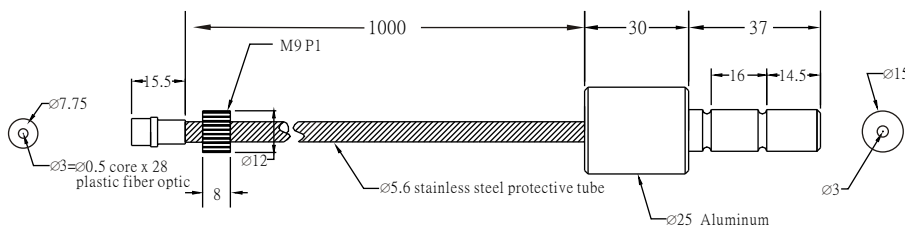
FTA-SU10-10

Free cut



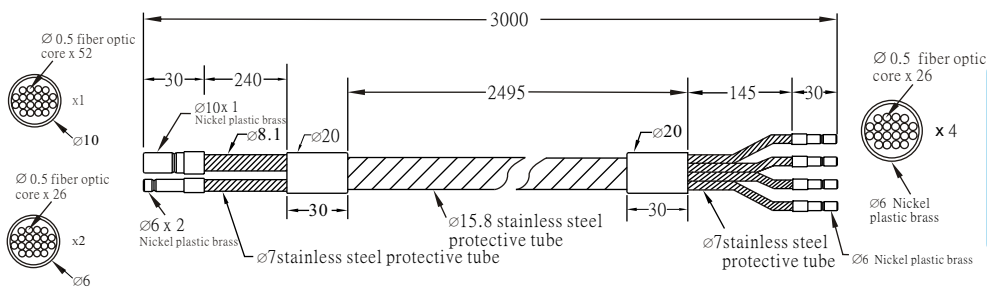
Fiber material	Plastic
Fiber Type	High precision
Fiber diameter	D d Ø1.25 Ø0.25
Operate temperature	- 55°C ~ + 70°C
Minimum bending radius	R10
Sensing distance/FZ-KP2	10mm

FT-8515-10



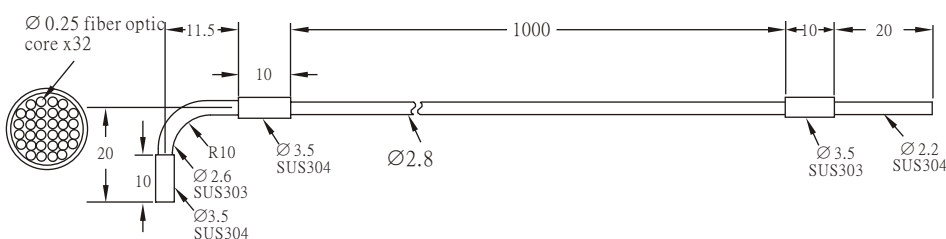
Fiber material	Plastic
Fiber Type	Standard
Fiber diameter d	Ø0.5 x 28
Operate temperature	- 55°C ~ + 70°C
Minimum bending radius	R40

FT-3430IKS



Fiber material	Plastic
Fiber Type	Standard
Fiber diameter d	Ø0.5 x104
Operate temperature	- 55°C ~ + 70°C
Minimum bending radius	R50

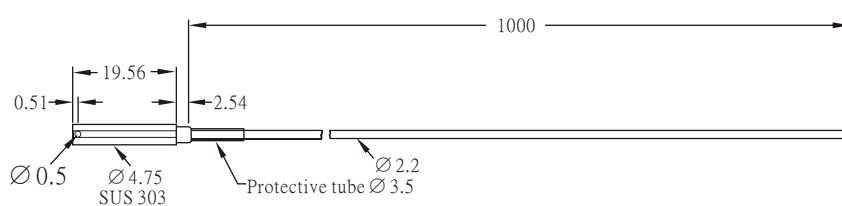
FTC32-12



Fiber material	Plastic
Fiber Type	Coaxial
Fiber diameter	Ø2.8mm Ø0.25mm x32
Operate temperature	- 55°C ~ + 70°C
Minimum bending radius	R60
Sensing distance/FZ-KP2	750mm

FTW2-475D-10

Free cut



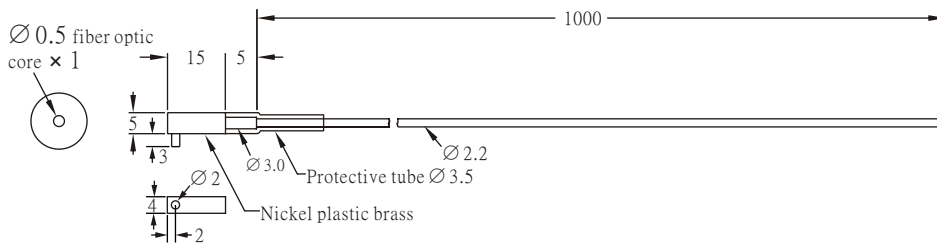
Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter D d	Ø2.2 Ø0.5
Operate temperature	- 40°C ~ + 70°C
Minimum bending radius	R1
Sensing distance/FZ-KP2	80mm

Thrubeam Others Type



FTW2-11-10

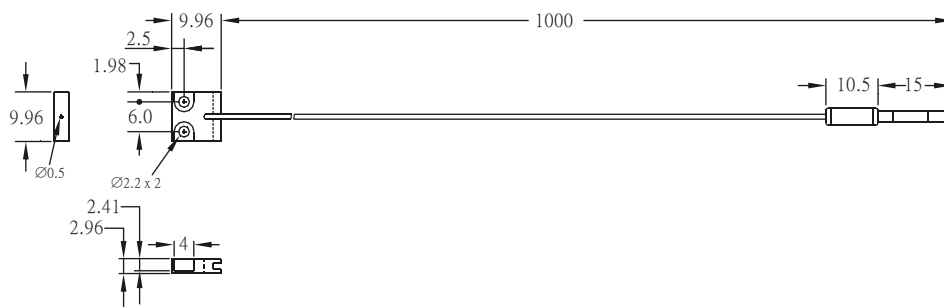
Free cut



Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D d
Operate temperature	-40°C ~ +70°C
Minimum bending radius	R1
Sensing distance/FZ-KP2	80mm

FTW-10ML-10

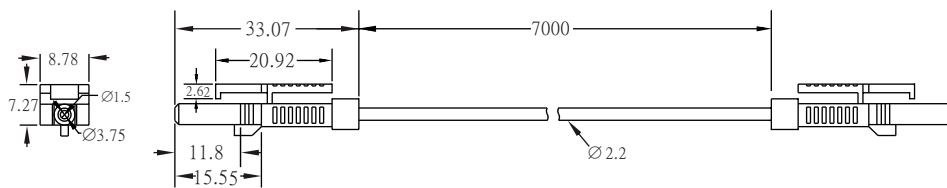
Free cut Array Fiber



Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D d
Operate temperature	-40°C ~ +70°C
Minimum bending radius	R1
Sensing distance/FZ-KP2	80mm

FTX-70-FSC

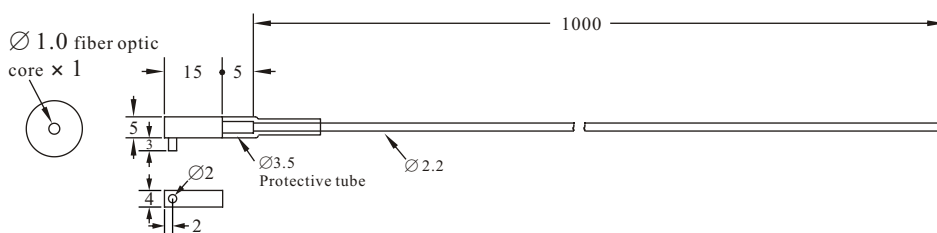
Side View Array Fiber



Fiber material	Plastic
Fiber Type	Long sensing range
Fiber diameter	D d
Operate temperature	-55°C ~ +70°C
Minimum bending radius	R40

FTY-11-10

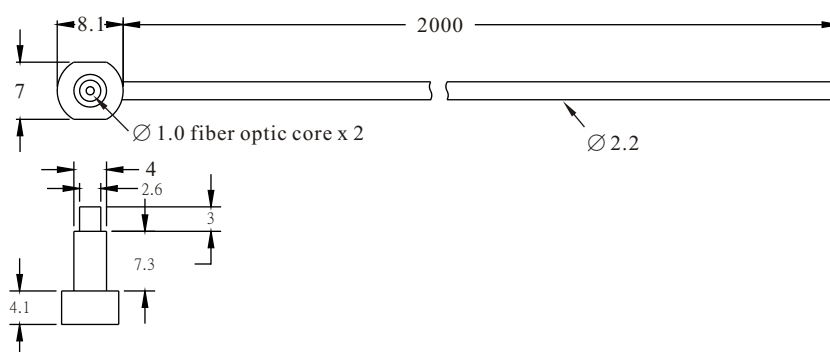
Free cut Minimum bend radius R2



Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D d
Operate temperature	-40°C ~ +70°C
Minimum bending radius	R2
Sensing distance/FZ-KP2	300mm

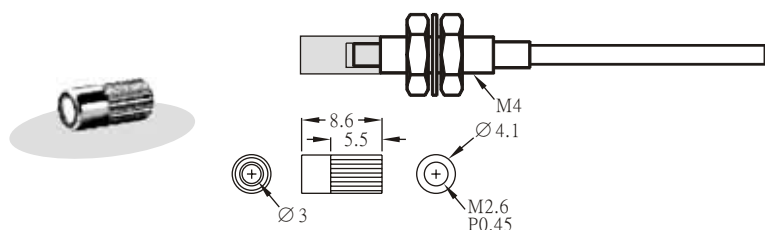
FTY-77TZ-20

Free cut Minimum bend radius R2



Fiber material	Plastic
Fiber Type	Flexible
Fiber diameter	D d
Operate temperature	-40°C ~ +70°C
Minimum bending radius	R2
Sensing distance/FZ-KP2	250mm

FLM-02



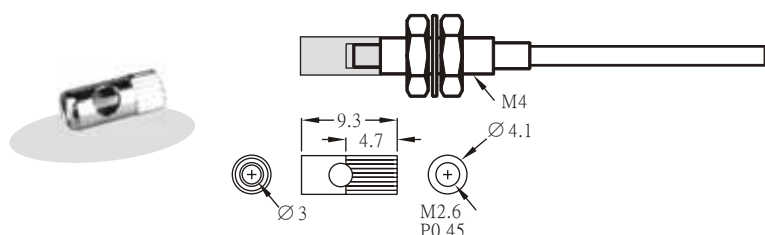
*Features and Applications

FT fiber type Scanning distance is increased 4 times if this FLM-02 unit is attached to the light emitter and receiver of a thru - scan fiber unit.

*Applicable Fiber Unit

FT-410	FTY-410
FTH-410	FGT-420
FTX-410	

FLSM-02



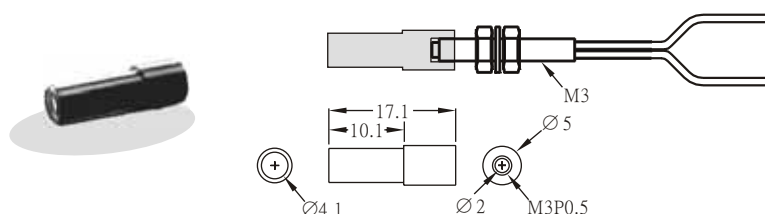
*Features and Applications

FT-410 unit can be changed to aside view type by attaching this unit to the light emitter or receiver of fiber unit.

*Applicable Fiber Unit

FT-410	FTY-410
FTH-410	FGT-410
FTX-410	

FLM-03



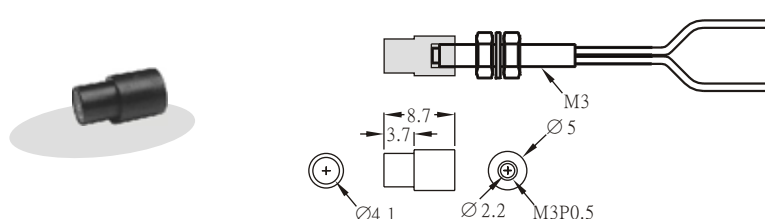
*Features and Applications

Light converges to a spot diameter of 0.5mm if this unit is attached to a fiber unit at a distance of 8mm.

*Applicable Fiber Unit

FRC-310	FRA-310
FRS-310	FRD-310
FRE-310	FRW-310
FRC-310-35FA	

FLM-03-1



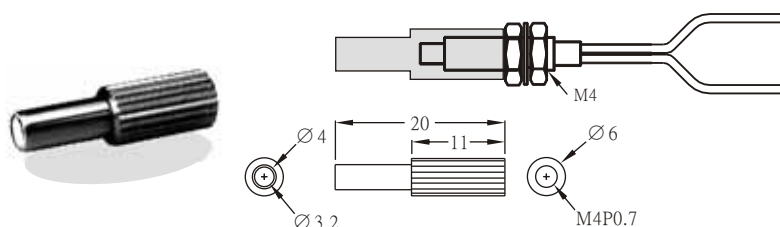
*Features and Applications

Light converges to a spot diameter of 2mm if this unit is attached to a fiber unit at a distance of 8mm.

*Applicable Fiber Unit

FT-310	FRD-310
FTX-310	FRW-310
FRC-310	
FRS-310	

FLM-04



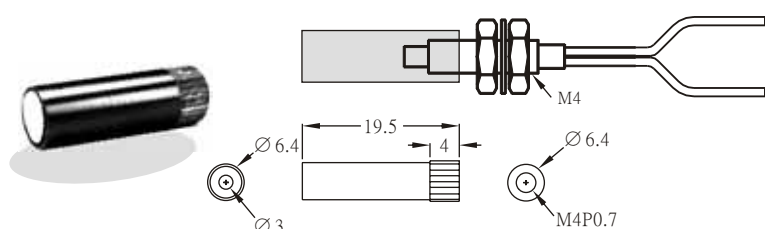
*Features and Applications

Light converges to a spot diameter of 0.7mm if this unit is attached to a fiber unit at a distance of 10mm.

*Applicable Fiber Unit

FRS-410	FRD-410
FRC-410	FRZ-410
FRJ-410	
FRW-410	

FLM-06



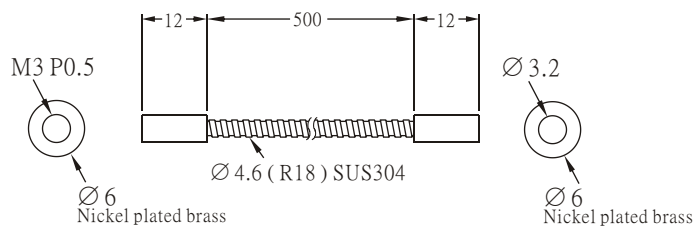
*Features and Applications

FTX-410 Scanning distance is increased 8 times if this unit is attached to the light emitter and receiver of a thru - scan fiber unit.

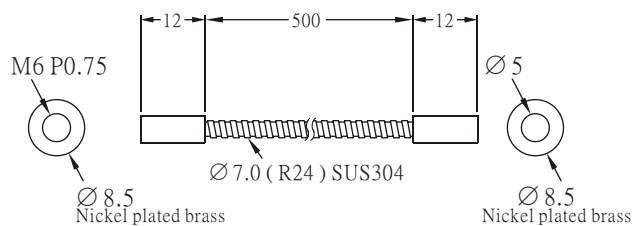
*Applicable Fiber Unit

FRC-410	FT-410
FRS-410	FTX-410
FRE-410	
FRA-410	
FGR-420	

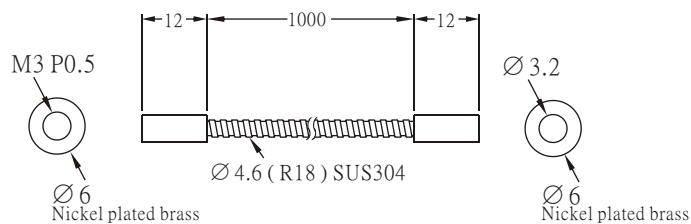
RS3N3-50 Protective tube



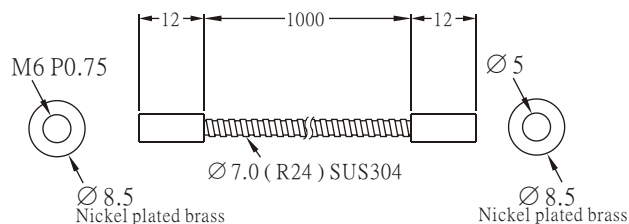
RS5N6-50 Protective tube



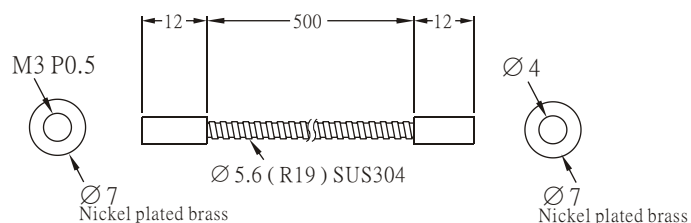
RS3N3-100 Protective tube



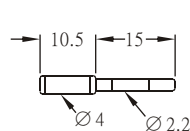
RS5N6-100 Protective tube



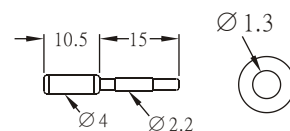
RS4N3-50 Protective tube



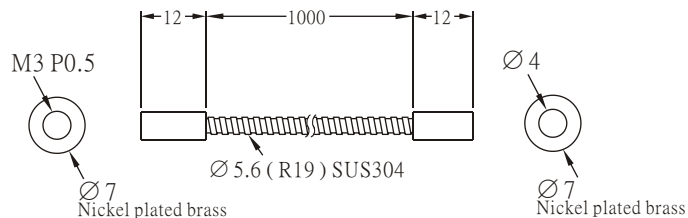
R40-10



R40-13 Adapter

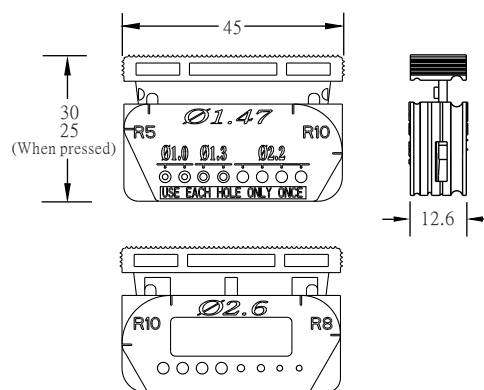


RS4N3-100 Protective tube

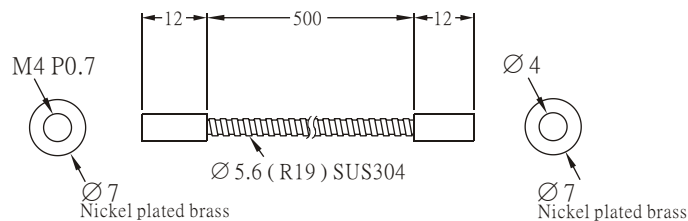


C4530

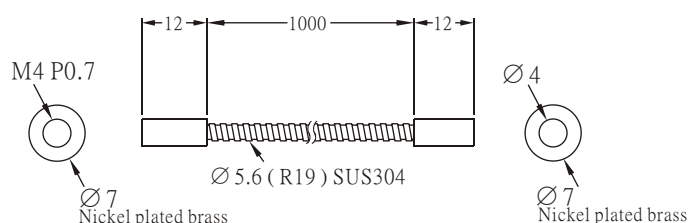
Fiber Cutter



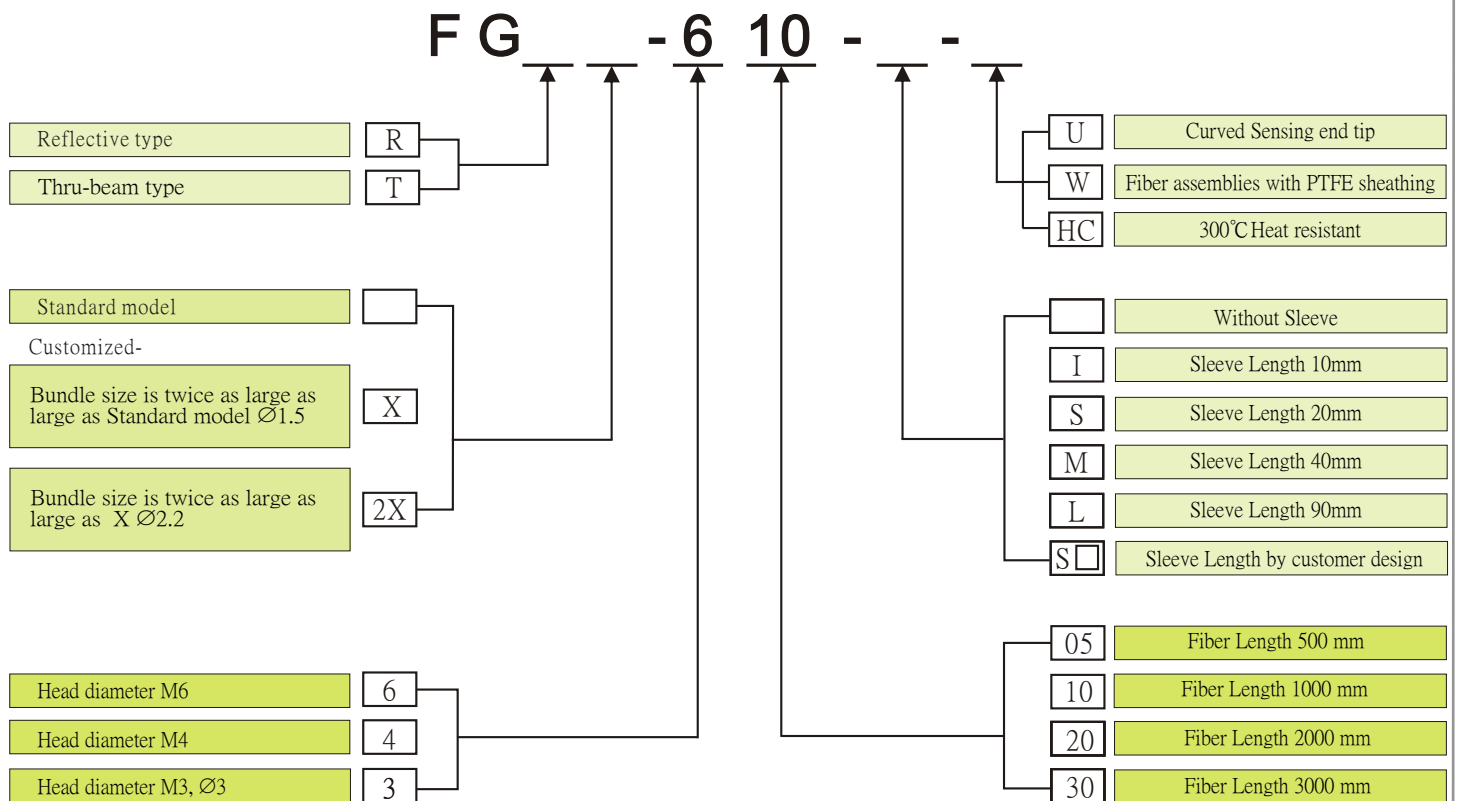
RS4N4-50 Protective tube



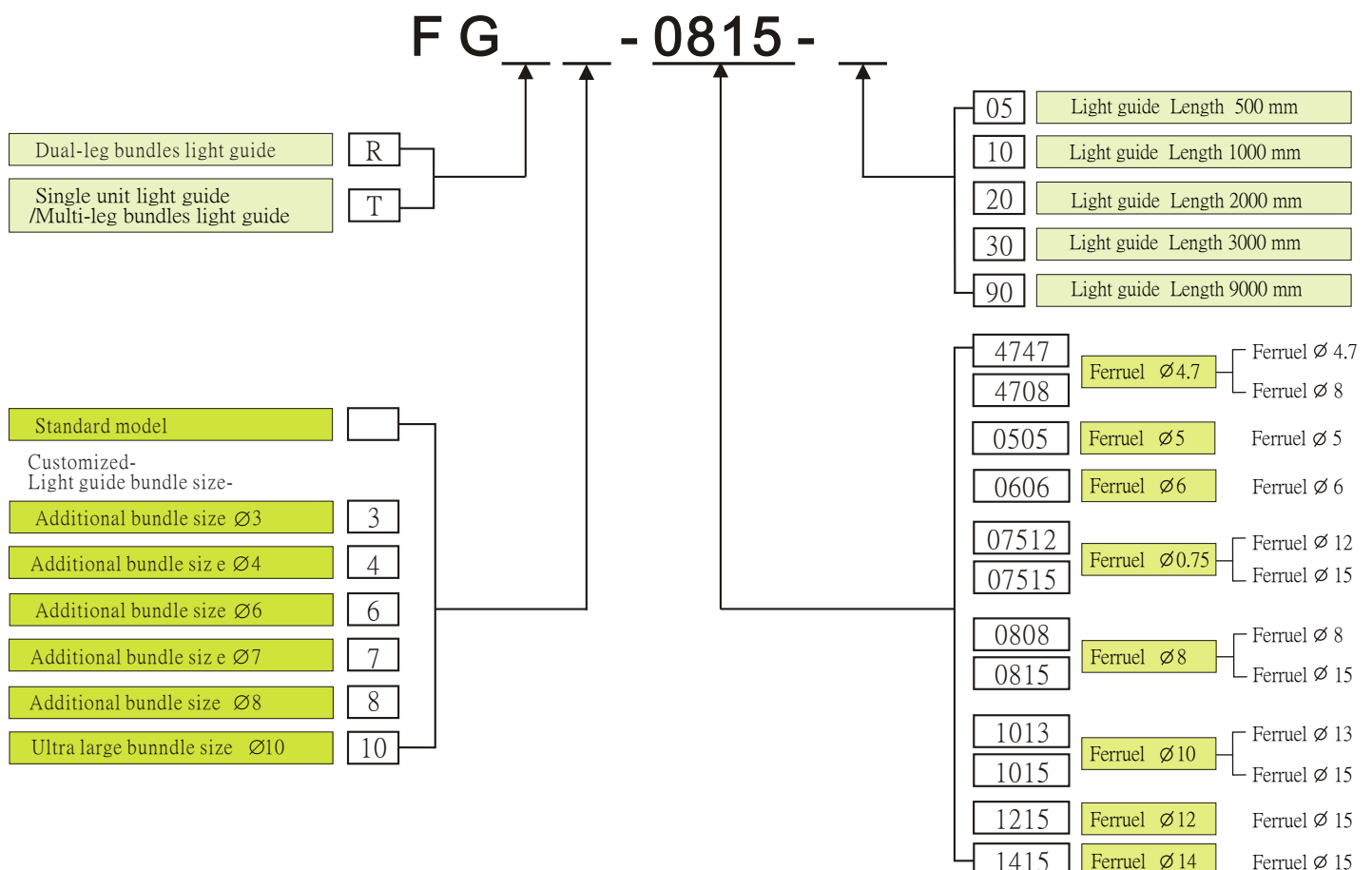
RS4N4-100 Protective tube



Glass Fiber Optics Order Information



Glass Fiber Light guide Order Information



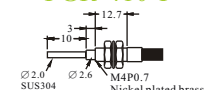
RiKO Glass

Technical drawing of the experimental setup for the single fiber pull-out test. The diagram shows a cross-section of a fiber bundle (left) and a side view of the assembly (right). Key components and dimensions are labeled:

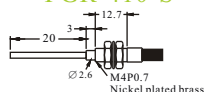
- 1.6**: Diameter of the fiber bundle.
- M3P0.5 SUS303**: Nut.
- Width Across Flats 5mm Thickness 2.2mm**: Washer.
- Ø4.3 SUS303**: Tube.
- Ø6.5 SUS303**: Tube.
- Ø2.9 stainless steel protective tube**: Protective tube.
- Toothed Lock Washer Ø6.4**: Lock washer.
- Ø5**: Diameter of the nylon PA66 adapter.
- Nylon PA66 adapter**: Adapter.
- Ø2.2**: Diameter of the nylon PA66 adapter.
- 10**, **100**, **1000**, **900**, **25**, **12**, **1**, **15**, **10**, **5**, **1.1**: Dimensions in mm.

Fiber material	Glass Fiber	Wavelength	380~1300nm
Fiber diameter	d Ø1.1	Individual fiber diameter	53 μm ± 4μm
Operate temperature	-40℃~+250℃	Active area diameter	Ø1.6
Minimum bending radius	R23	Sensing distance/FZ-KP2	80mm

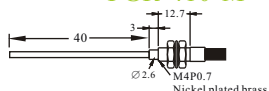
FGR-410-I



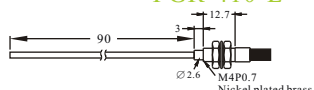
Nickel plated
FGR-410-S



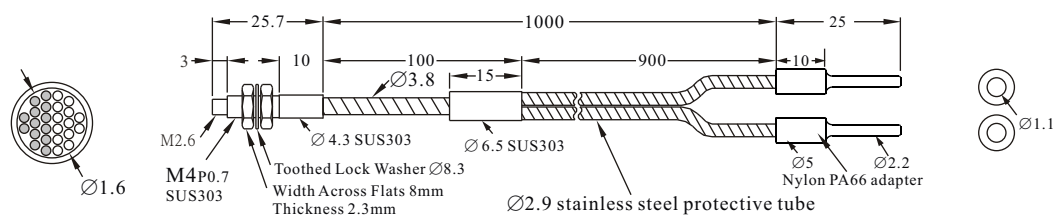
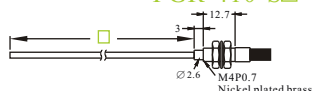
FGR-410-M



FGR-410-L



FGR-410-S□

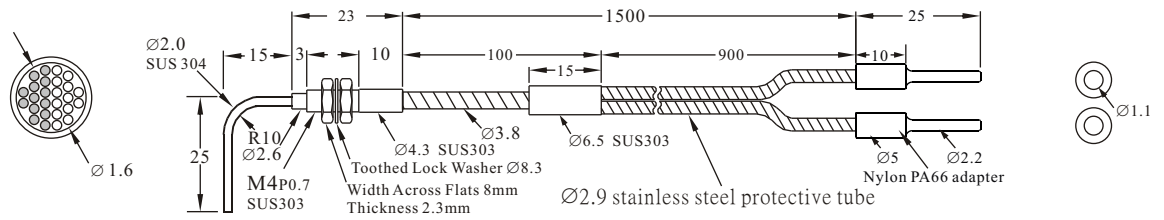


Fiber material	Glass Fiber	Wavelength	380~1300nm
Fiber diameter d	Ø1.1	Individual fiber diameter	53 μm ± 4μm
Operate temperature	-40℃~+250℃	Active area diameter	Ø1.6
Minimum bending radius	R23	Sensing distance/FZ-KP2	80mm

Technical drawing of the experimental setup for the pull-out test. The diagram shows a cross-section of the fiber bundle (Ø1.6) and a side view of the assembly. Key components and dimensions include: a 23.7 mm long section, a 40 mm section, a 3 mm section, a 10 mm section, a 100 mm section, a 15 mm section, a 1500 mm section, a 1400 mm section, a 10 mm section, and a 25 mm section. The assembly consists of a 2.6 mm diameter M4P0.7 SUS303 bolt, a 4.3 mm diameter SUS303 Toothed Lock Washer (Width Across Flats 8 mm, Thickness 2.3 mm), a 3.8 mm diameter section, a 6.5 mm diameter SUS303 section, a 2.9 mm diameter stainless steel protective tube, a 5 mm diameter Nylon PA66 adapter, and a 2.2 mm diameter section. The fiber bundle is labeled Ø1.6 and the protective tube is labeled Ø2.9.

Fiber material	Glass Fiber	Wavelength	380~1300nm
Fiber diameter	d Ø1.1	Individual fiber diameter	53 μm ± 4μm
Operate temperature	-40℃~+250℃	Active area diameter	Ø1.6
Minimum bending radius	R23	Sensing distance/FZ-KP2	80mm

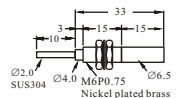
FGR-415-MU



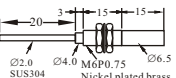
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø1.1	Individual fiber diameter	53 $\mu\text{m} \pm 4 \mu\text{m}$
Operate temperature	-40°C ~ +250°C	Active area diameter	Ø1.6
Minimum bending radius	R23	Sensing distance/FZ-KP2	80mm

FGR-610

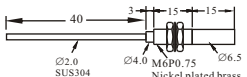
FGR-610-I



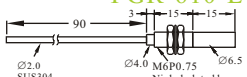
FGR-610-S



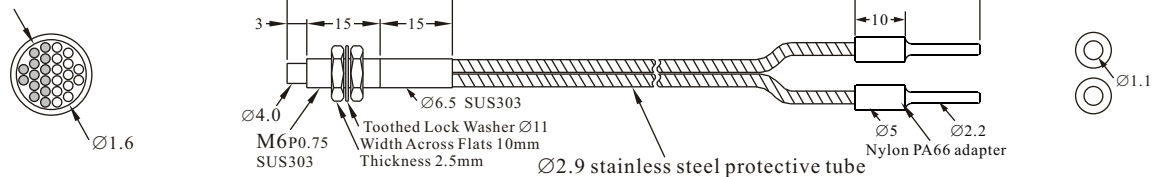
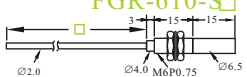
FGR-610-M



FGR-610-L

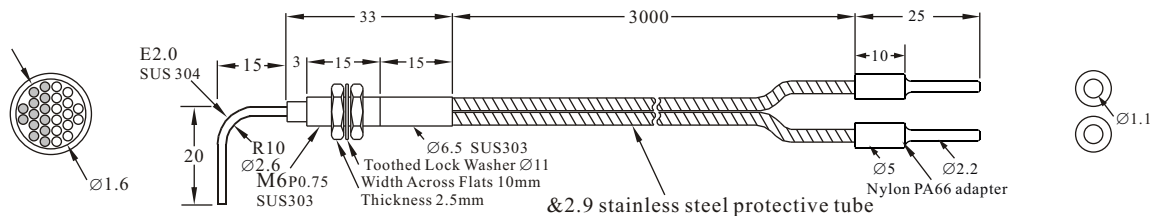


FGR-610-S



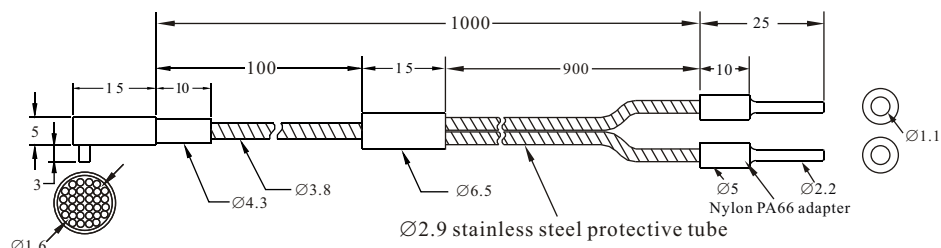
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø1.1	Individual fiber diameter	53 $\mu\text{m} \pm 4 \mu\text{m}$
Operate temperature	-40°C ~ +250°C	Active area diameter	Ø1.6
Minimum bending radius	R23	Sensing distance/FZ-KP2	80mm

FGR-630-SU



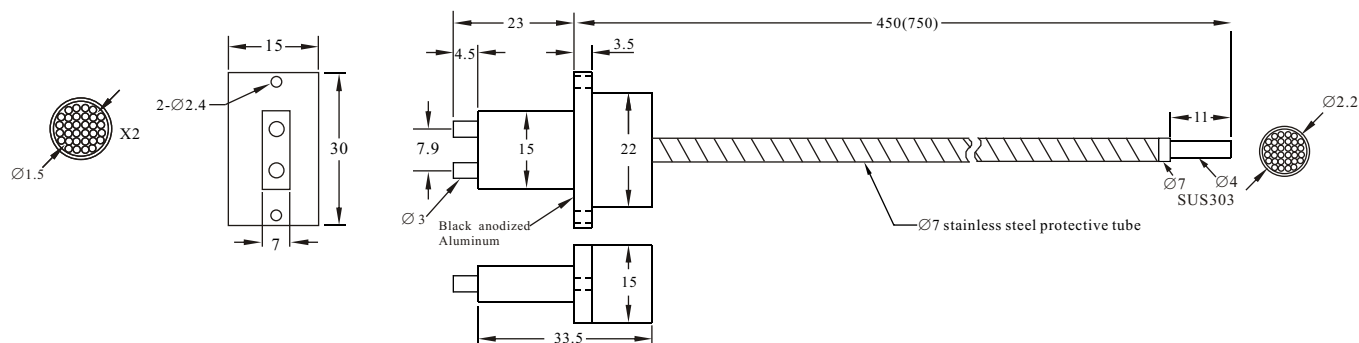
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø1.1	Individual fiber diameter	53 $\mu\text{m} \pm 4 \mu\text{m}$
Operate temperature	-40°C ~ +250°C	Active area diameter	Ø1.6
Minimum bending radius	R23	Sensing distance/FZ-KP2	80mm

FGR-11-10



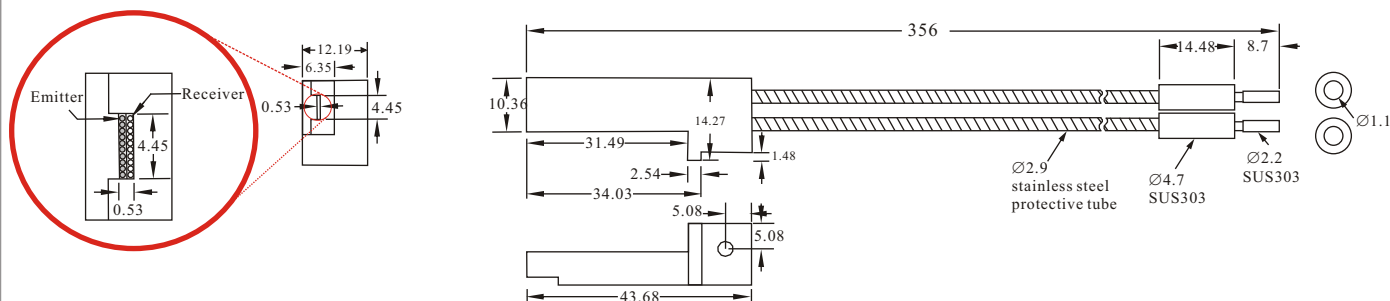
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø1.1	Individual fiber diameter	53 $\mu\text{m} \pm 4 \mu\text{m}$
Operate temperature	-40°C ~ +250°C	Active area diameter	Ø1.6
Minimum bending radius	R23	Sensing distance/FZ-KP2	80mm

FGRX-LT31-45/75



Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø1.5	Individual fiber diameter	53 $\mu\text{m} \pm 4 \mu\text{m}$
Operate temperature	-40°C ~ +250°C	Active area diameter	Ø2.2
Minimum bending radius	R23		

FGR-A355ML

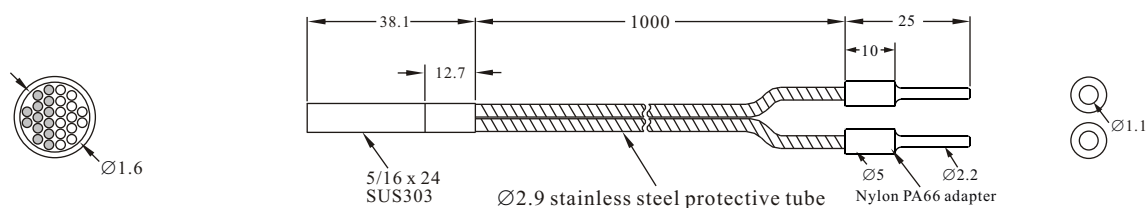


Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø1.1	Individual fiber diameter	53 $\mu\text{m} \pm 4 \mu\text{m}$
Operate temperature	-40°C ~ +250°C	Minimum bending radius	R23
		Sensing distance/FZ-KP2	30mm

Reflective Type

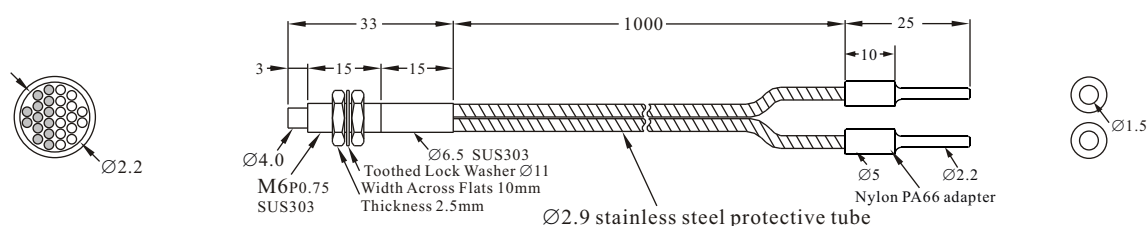
RiKO Glass

FGR-810



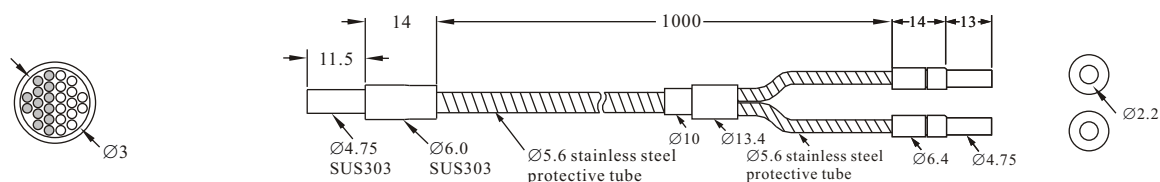
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø1.1	Individual fiber diameter	53 $\mu\text{m} \pm 4 \mu\text{m}$
Operate temperature	- 40°C ~ + 250°C	Active area diameter	Ø 1.6
Minimum bending radius	R23	Sensing distance/FZ-KP2	80mm

FGRX-610



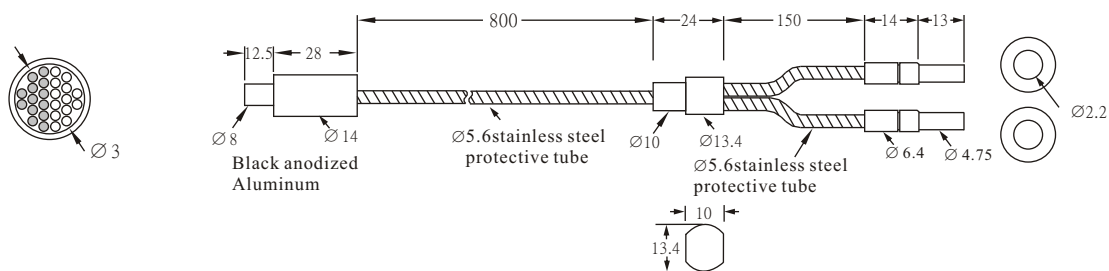
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø1.5	Individual fiber diameter	53 $\mu\text{m} \pm 4 \mu\text{m}$
Operate temperature	- 40°C ~ + 250°C	Active area diameter	Ø2.2
Minimum bending radius	R23	Sensing distance/FZ-KP2	120mm

FGR-047013(FGR-4747-10)



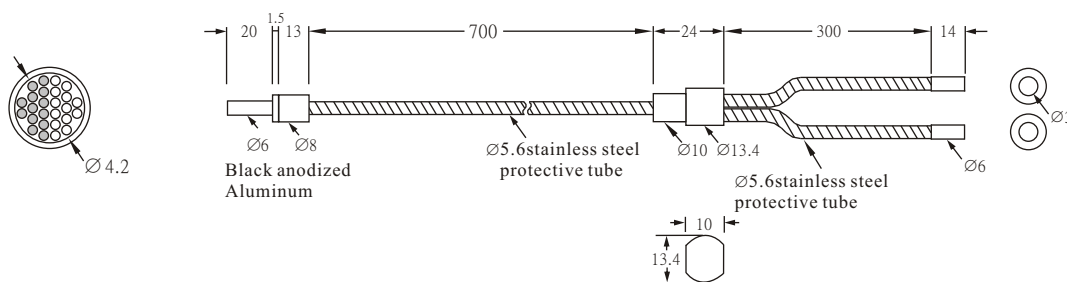
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø2.2	Individual fiber diameter	53 $\mu\text{m} \pm 4 \mu\text{m}$
Operate temperature	- 40°C ~ + 250°C	Active area diameter	Ø3
Minimum bending radius	R19		

FGR-4708-10



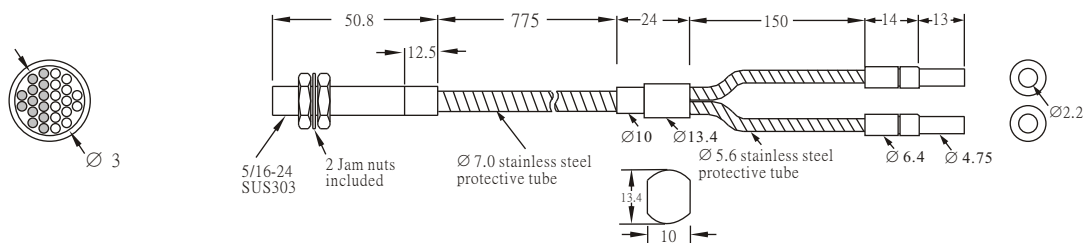
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø2.2	Individual fiber diameter	50 $\mu\text{m} \pm 4 \mu\text{m}$
Operate temperature	-40°C ~ +250°C	Active area diameter	Ø3
Minimum bending radius	R19		

FGR3-0606-10



Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø3.0	Individual fiber diameter	70 $\mu\text{m} \pm 4 \mu\text{m}$
Operate temperature	-40°C ~ +250°C	Active area diameter	Ø4.2
Minimum bending radius	R19		

FGR3-BT23SM900

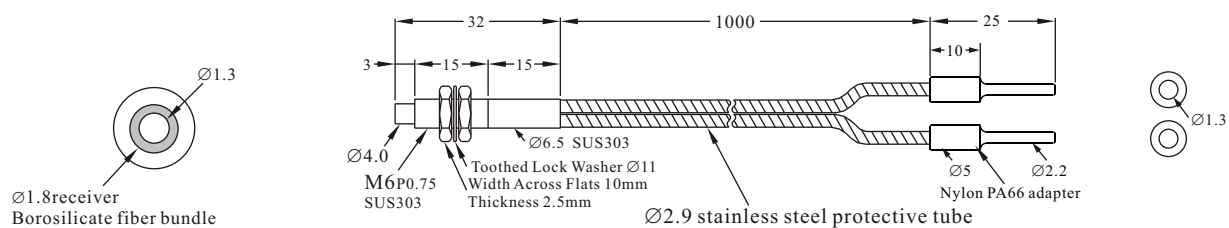


Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø2.2	Individual fiber diameter	50 $\mu\text{m} \pm 4 \mu\text{m}$
Operate temperature	-40°C ~ +250°C	Active area diameter	Ø3
Minimum bending radius	R24		

Reflective Type

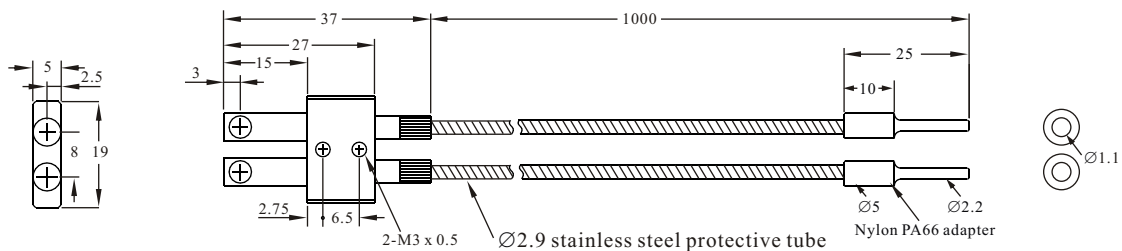
RiKO Glass

FGRC-610



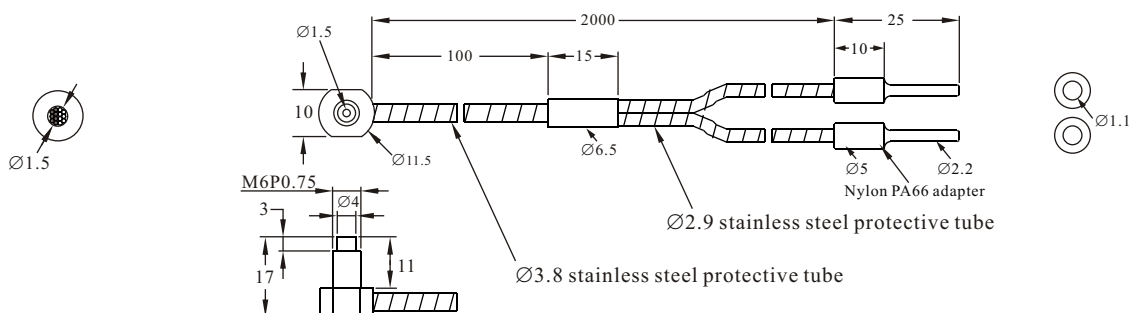
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø1.3	Individual fiber diameter	53 $\mu\text{m} \pm 4 \mu\text{m}$
Operate temperature	-40°C ~ +250°C	Active area diameter	Ø1.8
Minimum bending radius	R23	Sensing distance/FZ-KP2	60mm

FGR-38K-10



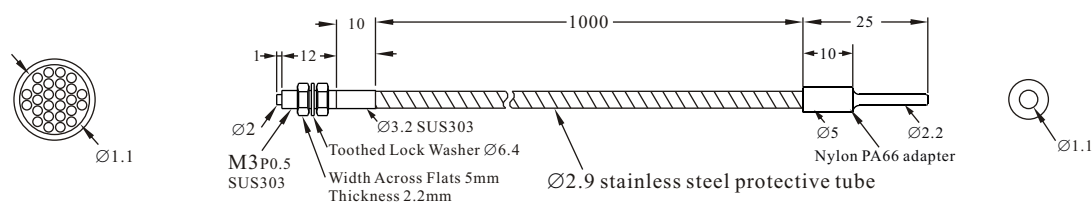
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø1.1	Individual fiber diameter	50 $\mu\text{m} \pm 4 \mu\text{m}$
Operate temperature	-40°C ~ +250°C	Active area diameter	Ø1.1
Minimum bending radius	R23	Sensing distance/FZ-KP2	5~18mm

FGR-67TG-20



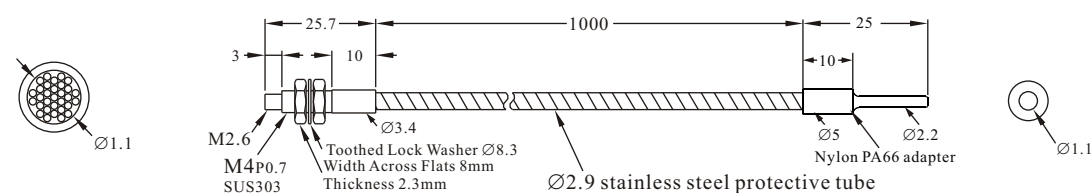
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø1.1	Individual fiber diameter	50 $\mu\text{m} \pm 4 \mu\text{m}$
Operate temperature	-40°C ~ +250°C	Active area diameter	Ø1.5
Minimum bending radius	R24	Sensing distance/FZ-KP2	80mm

FGT-310



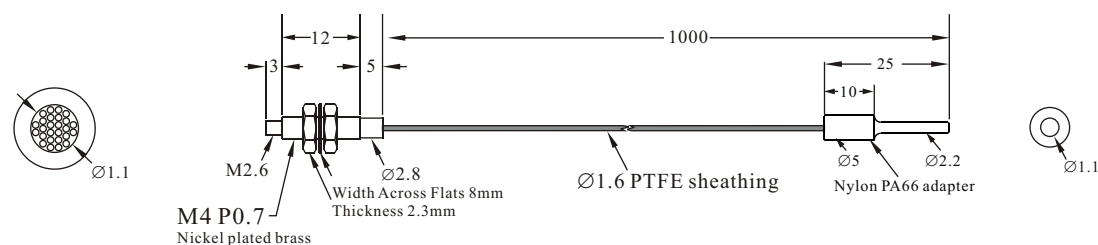
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø1.1	Individual fiber diameter	53 $\mu\text{m} \pm 4 \mu\text{m}$
Operate temperature	-40°C ~ +250°C	Active area diameter	Ø1.1
Minimum bending radius	R23	Sensing distance/FZ-KP2	360mm

FGT-410



Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø1.1	Individual fiber diameter	53 $\mu\text{m} \pm 4 \mu\text{m}$
Operate temperature	-40°C ~ +250°C	Active area diameter	Ø1.1
Minimum bending radius	R23	Sensing distance/FZ-KP2	360mm

FGT-410W



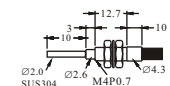
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø1.1	Individual fiber diameter	53 $\mu\text{m} \pm 4 \mu\text{m}$
Operate temperature	-40°C ~ +250°C	Active area diameter	Ø1.1
Minimum bending radius	R10	Sensing distance/FZ-KP2	360mm

Thrubeam Type

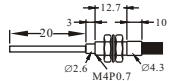
RiKO Glass

FGTX-410

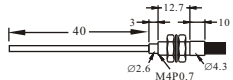
FGTX-410-I



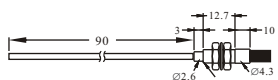
FGTX-410-S



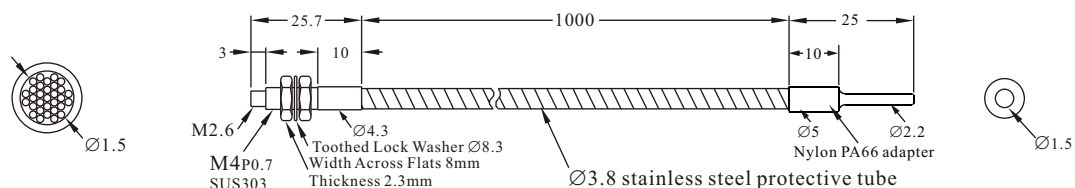
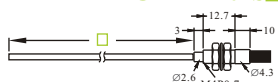
FGTX-410-M



FGTX-410-L

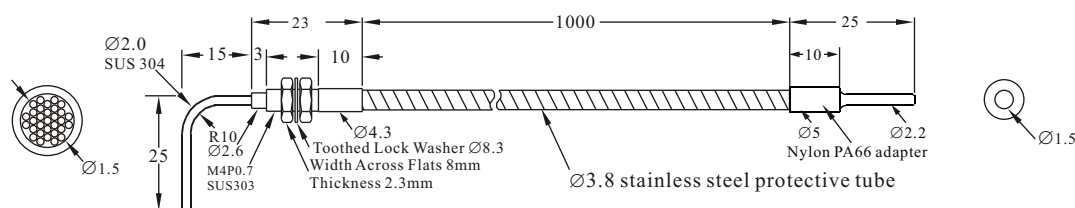


FGTX-410-S□



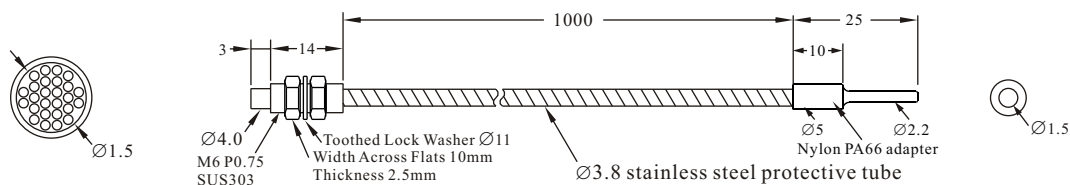
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø1.5	Individual fiber diameter	53 $\mu\text{m} \pm 4 \mu\text{m}$
Operate temperature	-40°C ~ +250°C	Active area diameter	Ø1.5
Minimum bending radius	R23	Sensing distance/FZ-KP2	500mm

FGTX-410MU



Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø1.5	Individual fiber diameter	53 $\mu\text{m} \pm 4 \mu\text{m}$
Operate temperature	-40°C ~ +250°C	Active area diameter	Ø1.5
Minimum bending radius	R23	Sensing distance/FZ-KP2	500mm

FGTX-610

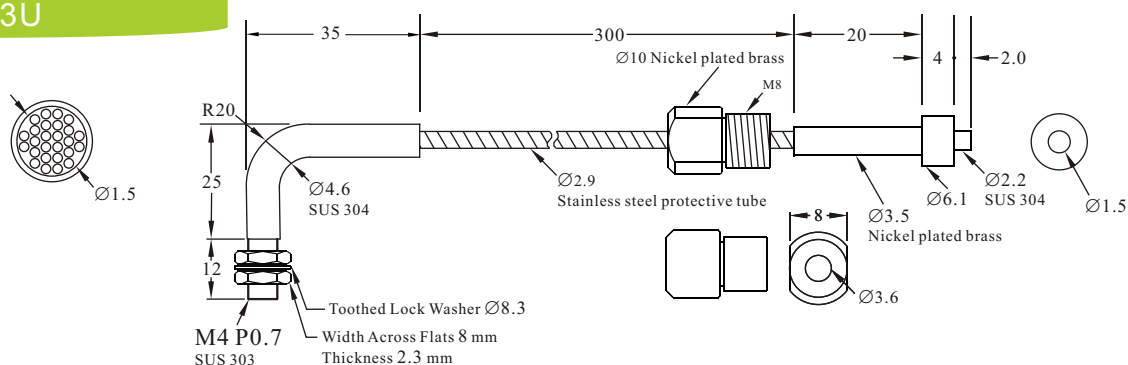


Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø1.5	Individual fiber diameter	53 $\mu\text{m} \pm 4 \mu\text{m}$
Operate temperature	-40°C ~ +250°C	Active area diameter	Ø1.5
Minimum bending radius	R23	Sensing distance/FZ-KP2	500mm

Thrubeam Type

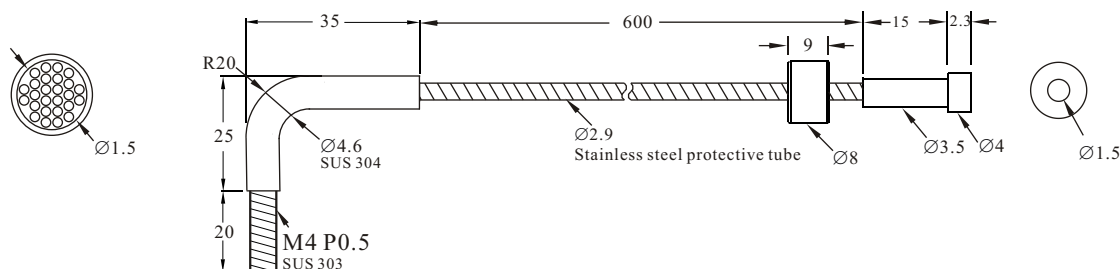
RiKO Glass

FGTX-403U



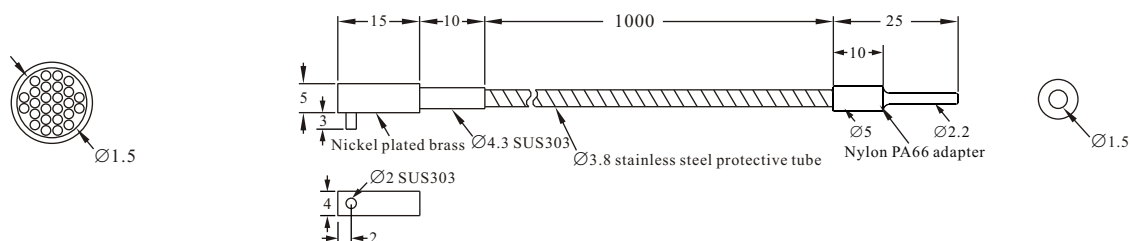
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø1.5	Individual fiber diameter	53 $\mu\text{m} \pm 4 \mu\text{m}$
Operate temperature	-40°C ~ +250°C	Active area diameter	Ø1.5
Minimum bending radius	R23		

FGTX-406-U01



Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø1.5	Individual fiber diameter	53 $\mu\text{m} \pm 4 \mu\text{m}$
Operate temperature	-40°C ~ +250°C	Active area diameter	Ø1.5
Minimum bending radius	R23		

FGT-11-10

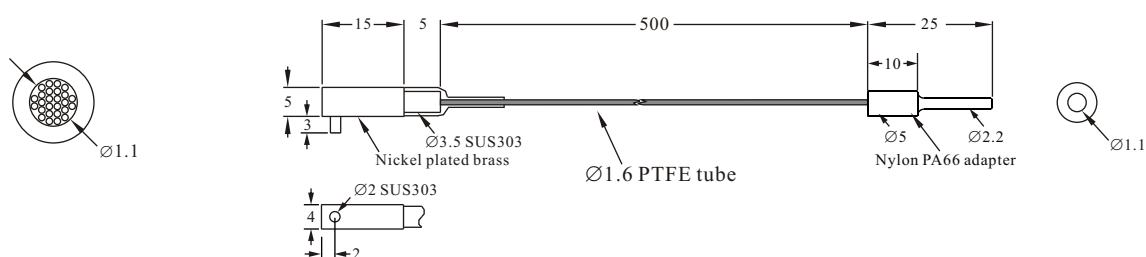


Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø1.5	Individual fiber diameter	53 $\mu\text{m} \pm 4 \mu\text{m}$
Operate temperature	-40°C ~ +250°C	Active area diameter	Ø1.5
Minimum bending radius	R23	Sensing distance/FZ-KP2	500mm

Thrubeam Type

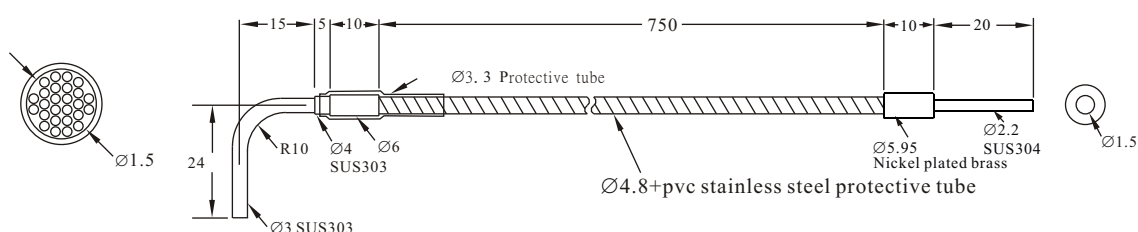
RiKO Glass

FGT-11W



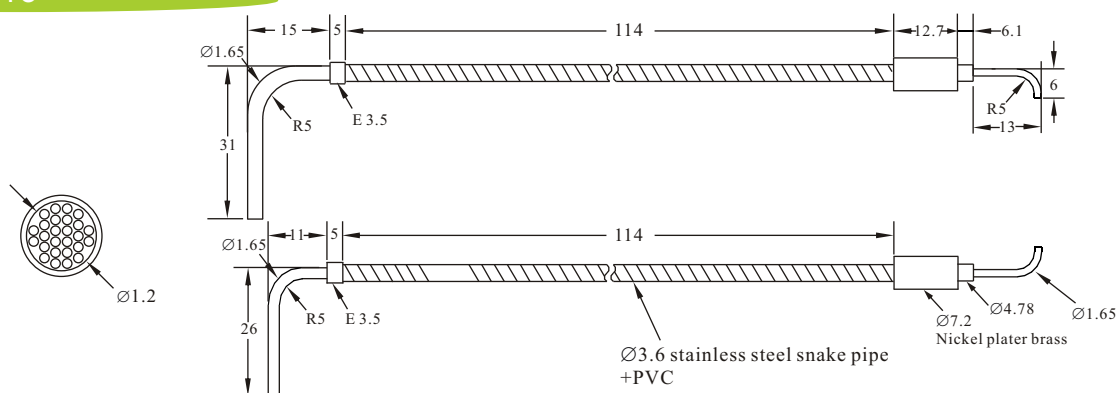
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø1.1	Individual fiber diameter	53 $\mu\text{m} \pm 4 \mu\text{m}$
Operate temperature	-40°C ~ +250°C	Active area diameter	Ø1.1
Minimum bending radius	R10	Sensing distance/FZ-KP2	360mm

FGT-12



Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø1.5	Individual fiber diameter	53 $\mu\text{m} \pm 4 \mu\text{m}$
Operate temperature	-40°C ~ +250°C	Active area diameter	Ø1.5
Minimum bending radius	R23	Sensing distance/FZ-KP2	500mm

FGT-13

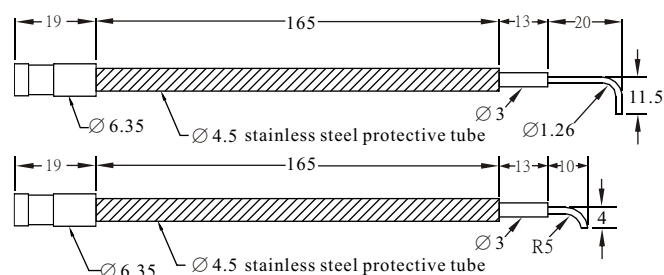


Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø1.2	Individual fiber diameter	53 $\mu\text{m} \pm 4 \mu\text{m}$
Operate temperature	-40°C ~ +250°C	Active area diameter	Ø1.2
Minimum bending radius	R23		

FGT-16

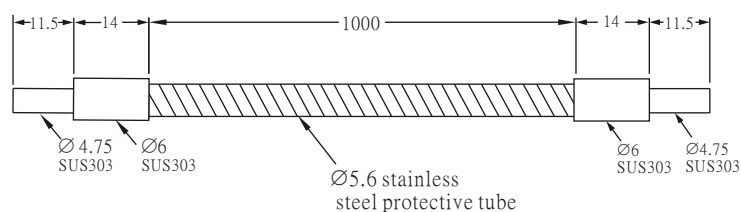
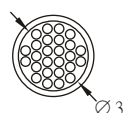
Emitter  Ø0.95

Receiver  Ø0.95



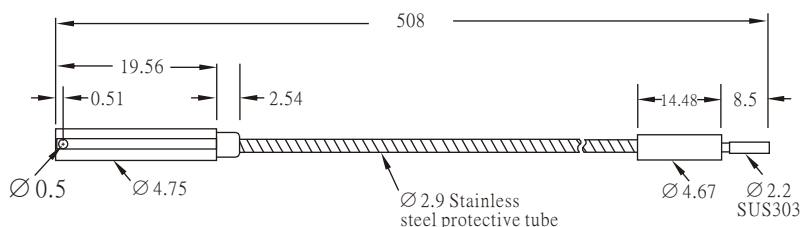
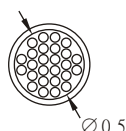
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø0.95	Individual fiber diameter	25µm ± 4 µm
Operate temperature	- 40°C ~ + 250°C	Active area diameter	Ø0.95
Minimum bending radius	R18		

FGT-4747-10



Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø3	Individual fiber diameter	70 µm ± 4 µm
Operate temperature	- 40°C ~ + 250°C	Active area diameter	Ø3
Minimum bending radius	R19		

FGT-475D

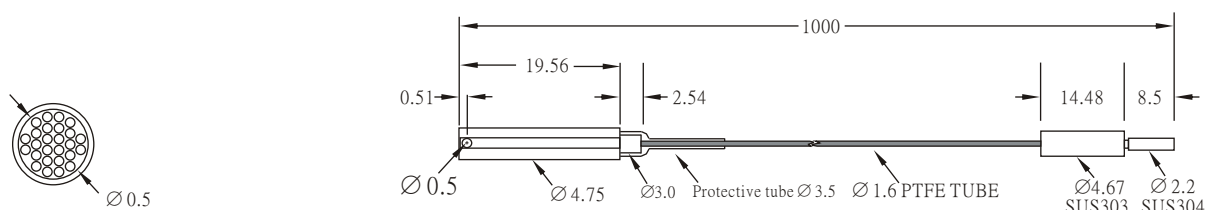


Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø0.5	Individual fiber diameter	25µm ± 4 µm
Operate temperature	- 40°C ~ + 250°C	Active area diameter	Ø0.5
Minimum bending radius	R23	Sensing distance/FZ-KP2	50mm

Thrubeam Type

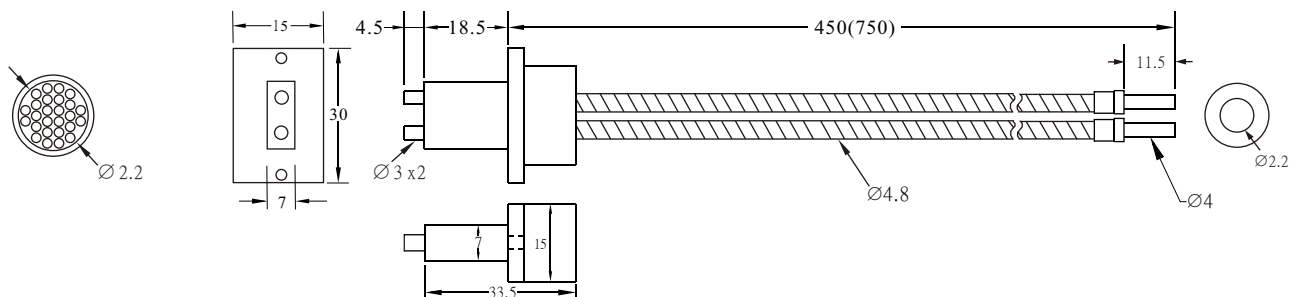
RiKO Glass

FGT-475DW-10



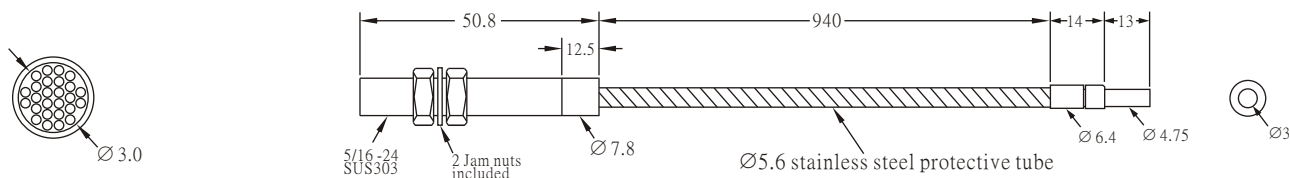
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø0.5	Individual fiber diameter	25µm ± 4 µm
Operate temperature	- 40°C ~ + 250°C	Active area diameter	Ø0.5
Minimum bending radius	R10	Sensing distance/FZ-KP2	50mm

FGT2-LM32-45/75-10



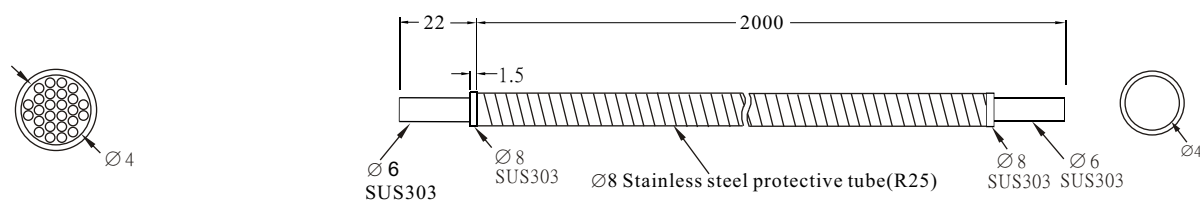
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø2.2	Individual fiber diameter	50 µm ± 4 µm
Operate temperature	- 40°C ~ + 250°C	Active area diameter	Ø2.2
Minimum bending radius	R18		

FGT3-IT23SM900



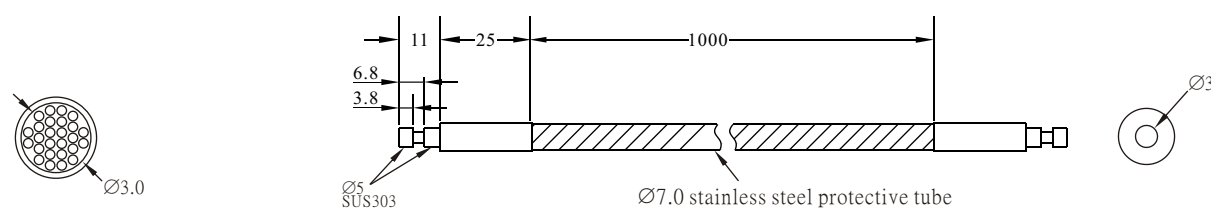
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø3.0	Individual fiber diameter	70µm ± 4 µm
Operate temperature	- 40°C ~ + 250°C	Active area diameter	Ø3
Minimum bending radius	R19		

FGT-0606-20



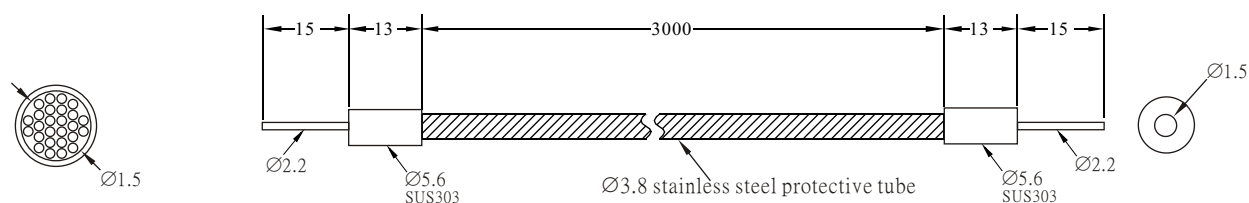
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø4	Individual fiber diameter	70 μ m $\pm$ 4 μ m
Operate temperature	- 40°C ~ + 250°C	Active area diameter	Ø4
Minimum bending radius	R25		

FGT3-0505-10



Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø3.0	Individual fiber diameter	70 μ m $\pm$ 4 μ m
Operate temperature	- 40°C ~ + 250°C	Active area diameter	Ø3
Minimum bending radius	R20		

FGTX-5656-30

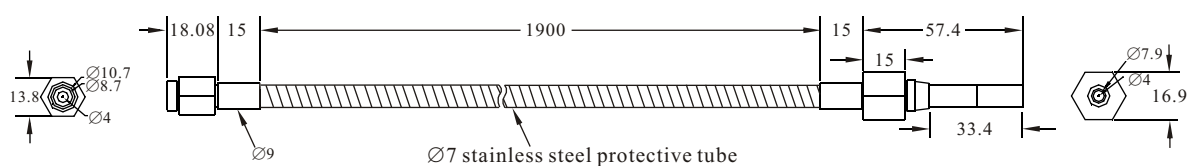


Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø1.5	Individual fiber diameter	53 μ m $\pm$ 4 μ m
Operate temperature	- 40°C ~ + 250°C	Active area diameter	Ø1.5
Minimum bending radius	R20		

Thrubeam Type

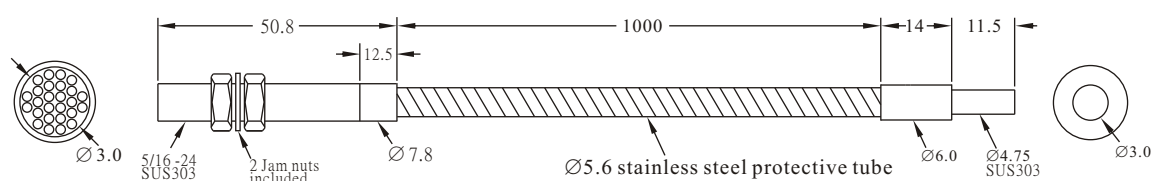
RiKO Glass

FGT4-08M12-20



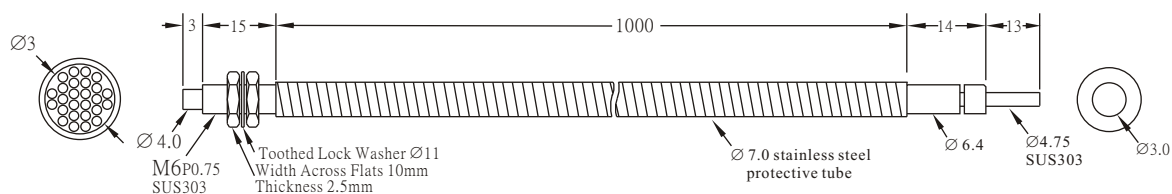
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø4.0	Individual fiber diameter	70µm ± 4 µm
Operate temperature	- 40°C ~ + 250°C	Active area diameter	Ø4
Minimum bending radius	R24		

FGT-4708-10



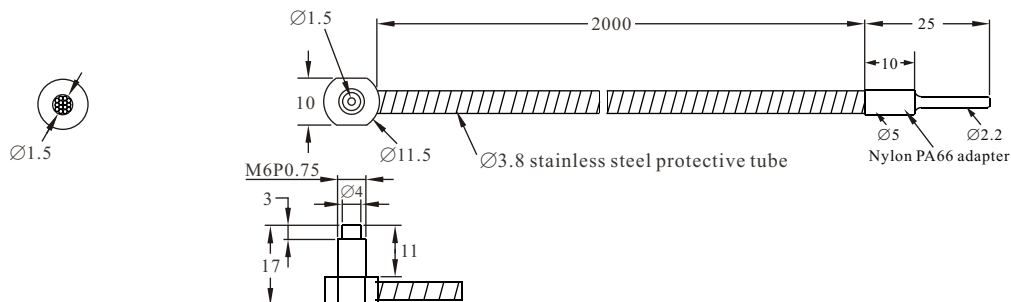
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø3.0	Individual fiber diameter	70 µm ± 4 µm
Operate temperature	- 40°C ~ + 250°C	Active area diameter	Ø3
Minimum bending radius	R23		

FGT-4706-10



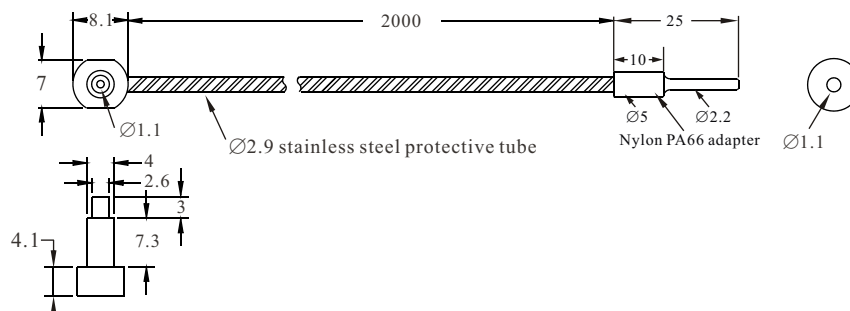
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø3.0	Individual fiber diameter	70µm ± 4 µm
Operate temperature	- 40°C ~ + 250°C	Active area diameter	Ø3
Minimum bending radius	R24		

FGTX-67TG-20



Fiber material	Glass Fiber	Wavelength	380~1300nm
Fiber diameter d	Ø1.5	Individual fiber diameter	50 $\mu\text{m} \pm 4\mu\text{m}$
Operate temperature	-40°C~+250°C	Active area diameter	Ø1.5
Minimum bending radius	R24	Sensing distance/FZ-KP2	500mm

FGT-77TG-20



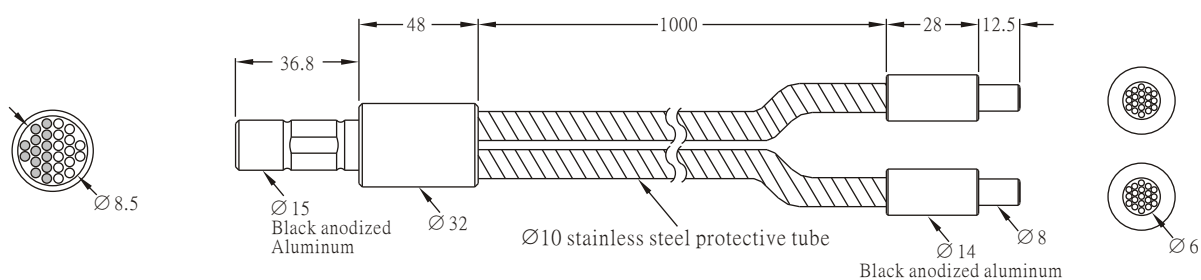
Fiber material	Glass Fiber	Wavelength	380~1300nm
Fiber diameter d	Ø1.1	Individual fiber diameter	50 $\mu\text{m} \pm 4\mu\text{m}$
Operate temperature	-40°C~+250°C	Active area diameter	Ø1.1
Minimum bending radius	R24	Sensing distance/FZ-KP2	250mm

Reflective Type

Glass Fiber Light Guide

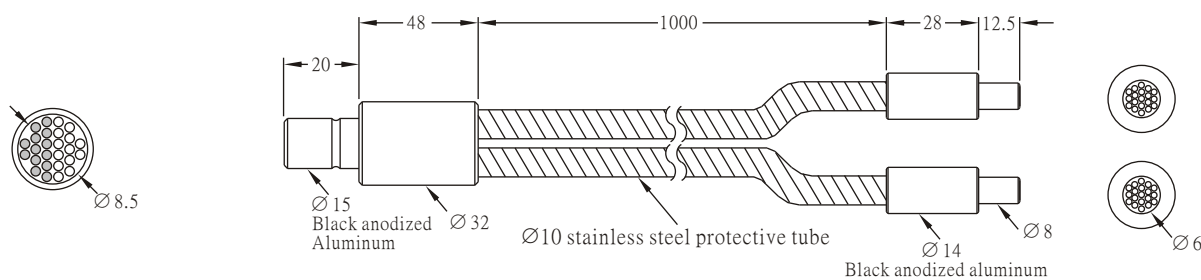
RiKO

FGR-0815-10



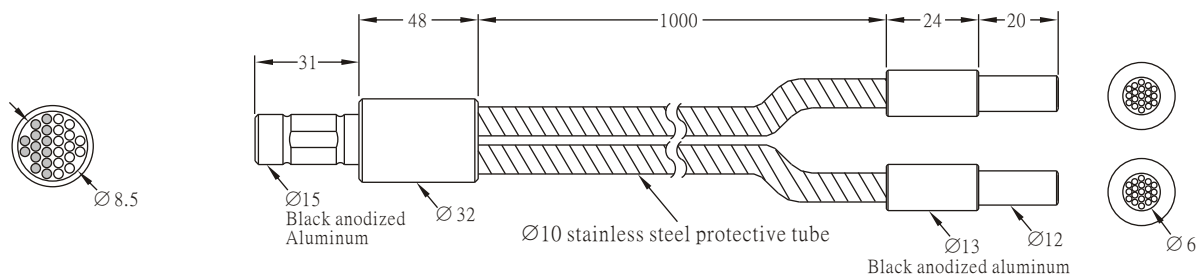
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø6.0	Individual fiber diameter	100 μ m $\pm$ 4 μ m
Operate temperature	-40°C ~ +250°C	Active area diameter	Ø8.5
Minimum bending radius	R30		

FGR-0815-10-H20



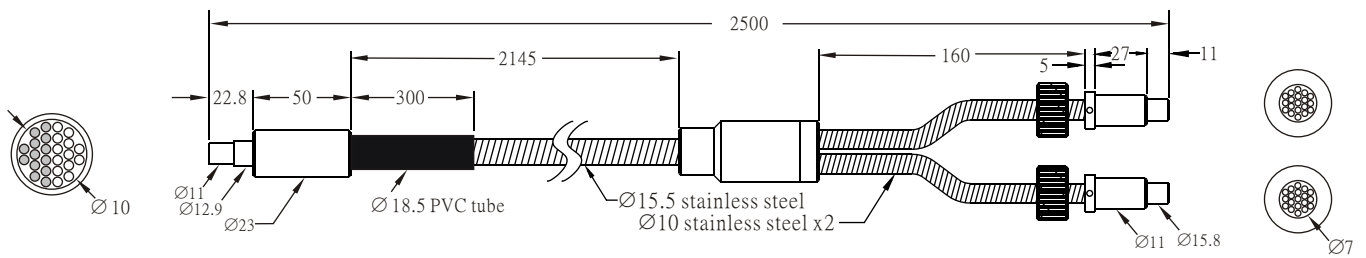
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø6.0	Individual fiber diameter	100 μ m $\pm$ 4 μ m
Operate temperature	-40°C ~ +250°C	Active area diameter	Ø8.5
Minimum bending radius	R30		

FGR-1215-10-H31



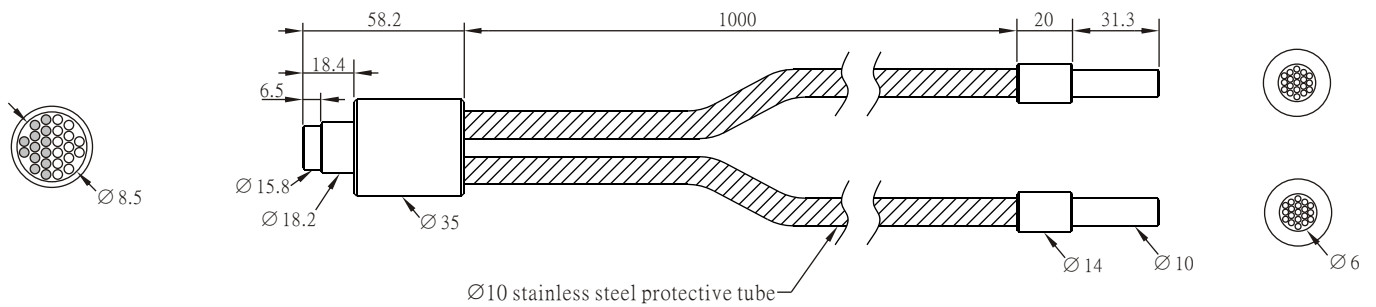
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø6.0	Individual fiber diameter	100 μ m $\pm$ 4 μ m
Operate temperature	-40°C ~ +250°C	Active area diameter	Ø8.5
Minimum bending radius	R30		

FGR10-211-25



Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø7.0	Individual fiber diameter	50μm ± 4 μm
Operate temperature	- 40℃ ~ + 250℃	Active area diameter	Ø10
Minimum bending radius	R23		

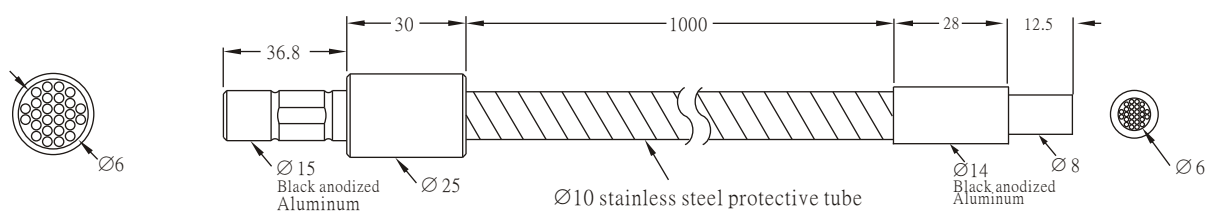
FGR-1016-10



Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø6.0	Individual fiber diameter	100μm ± 4 μm
Operate temperature	- 40°C ~ + 250°C	Active area diameter	Ø8.5
Minimum bending radius	R23		

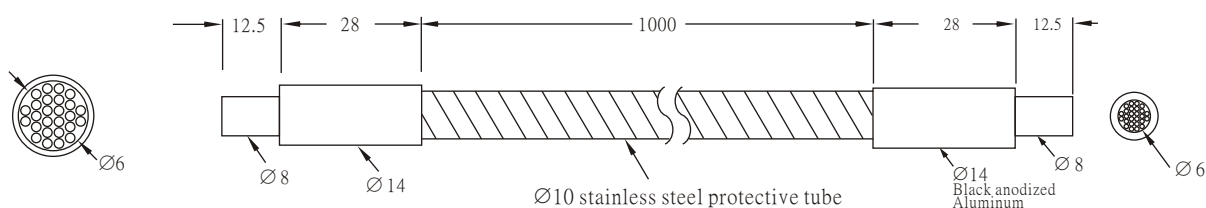


FGT-0815-10



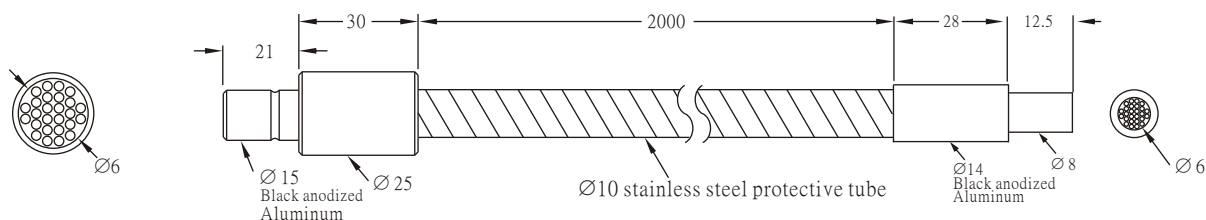
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø6.0	Individual fiber diameter	100 μ m $\pm$ 4 μ m
Operate temperature	- 40°C ~ + 250°C	Active area diameter	Ø6
Minimum bending radius	R30		

FGT-0808-10



Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø6.0	Individual fiber diameter	100 μ m $\pm$ 4 μ m
Operate temperature	- 40°C ~ + 250°C	Active area diameter	Ø6
Minimum bending radius	R30		

FGT-0815-20-H21



Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø6.0	Individual fiber diameter	100 μ m $\pm$ 4 μ m
Operate temperature	- 40°C ~ + 250°C	Active area diameter	Ø6
Minimum bending radius	R30		

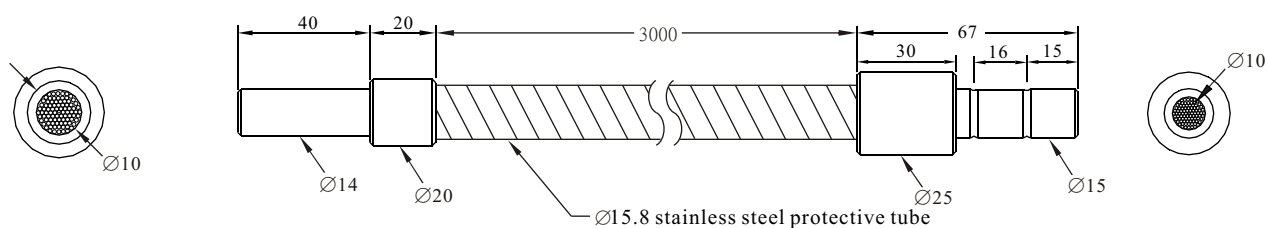
Thrubeam Type



Glass Fiber Light Guide

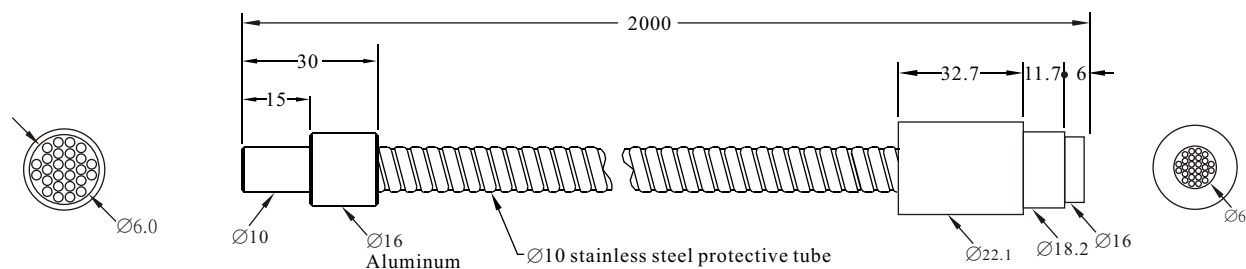
RiKO

FGT10-1415-30



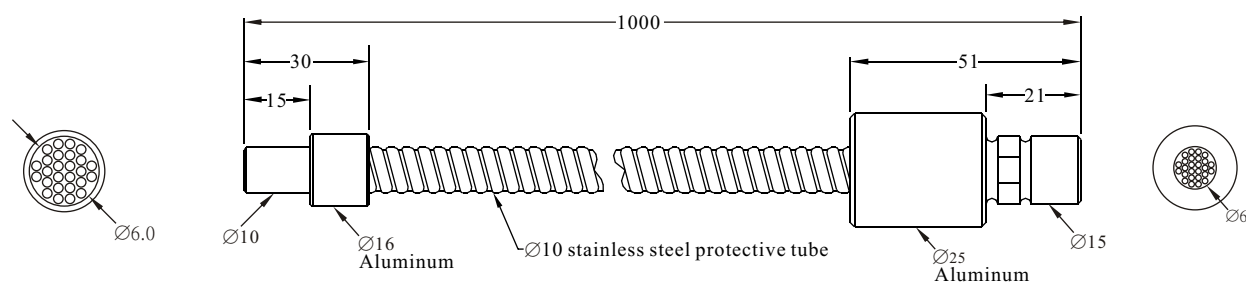
Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø10	Individual fiber diameter	100μm ± 4 μm
Operate temperature	- 40°C ~ + 250°C	Active area diameter	Ø10
Minimum bending radius	R31		

FGT-1016-20



Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø6.0	Individual fiber diameter	100μm ± 4 μm
Operate temperature	- 40°C ~ + 250°C	Active area diameter	Ø6
Minimum bending radius	R30		

FGT-1015-10-H21



Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø6.0	Individual fiber diameter	100μm ± 4 μm
Operate temperature	- 40°C ~ + 250°C	Active area diameter	Ø6
Minimum bending radius	R30		

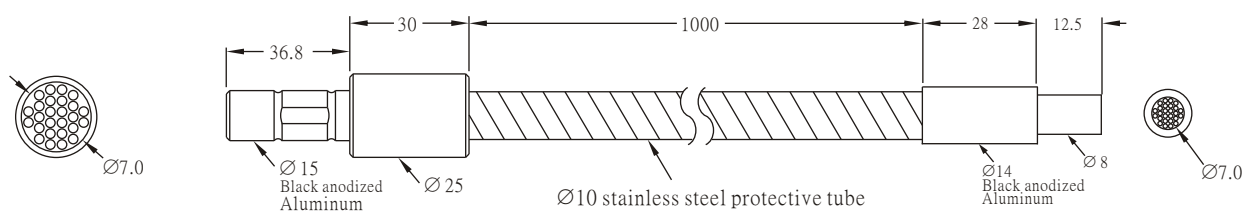
Thrubeam Type



Glass Fiber Light Guide

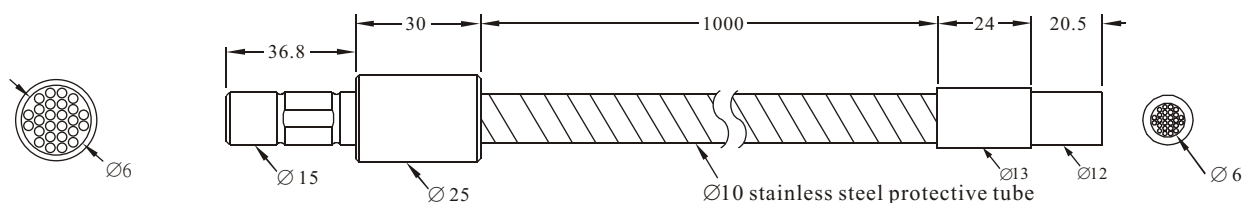
RiKO

FGT7-0815-10



Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø7.0	Individual fiber diameter	50 μ m $\pm$ 4 μ m
Operate temperature	- 40°C ~ + 250°C	Active area diameter	Ø7.0
Minimum bending radius	R30		

FGT-1215-10



Fiber material	Glass Fiber	Wavelength	380 ~ 1300 nm
Fiber diameter d	Ø6.0	Individual fiber diameter	100 μ m $\pm$ 4 μ m
Operate temperature	- 40°C ~ + 250°C	Active area diameter	Ø6
Minimum bending radius	R30		

S F - 4 05 - -

- Reflective type R
- Reflective coaxial type RC
- Thru-beam type T

- Pure fused silica core 50μm 05
- Pure fused silica core 100μm 1
- Pure fused silica core 200μm 2
- Pure fused silica core 300μm 3
- Pure fused silica core 600μm 6

- M4 sensing head 4
- M3, Ø3 sensing head 3

- U Curved Sensing end tip
- Q Sensing head without thread
- SMA End tip with SMA connector

- S Sleeve Length 5mm~90mm

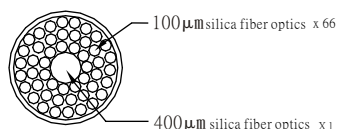
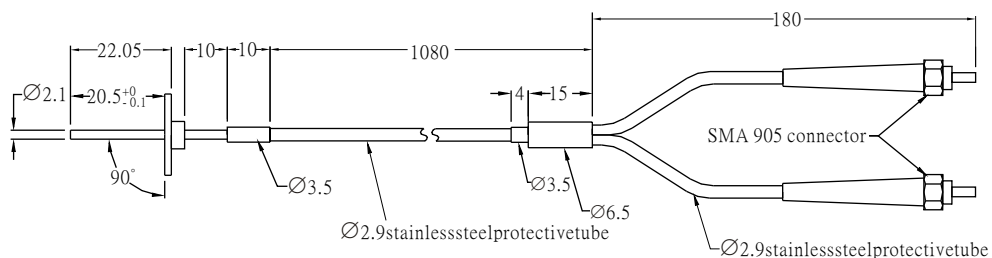
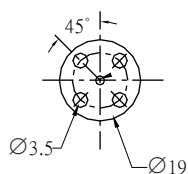
- 05 Fiber Length 500 mm
- 10 Fiber Length 1000 mm
- 20 Fiber Length 2000 mm
- 30 Fiber Length 3000 mm

Reflective Type

Silica Fiber M3 Type

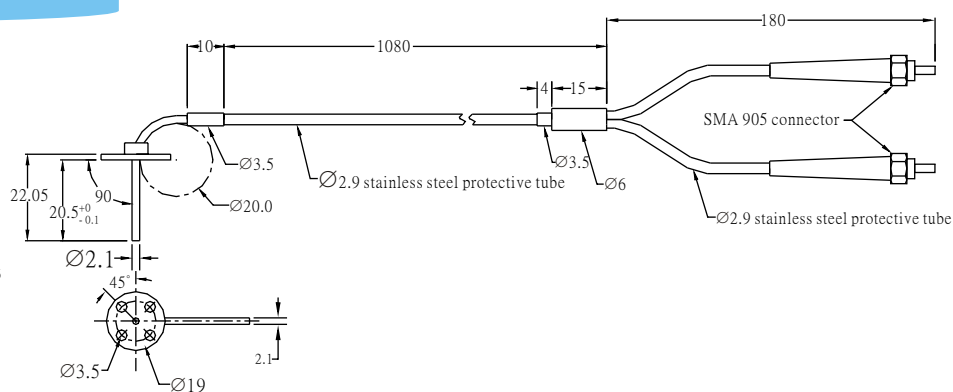
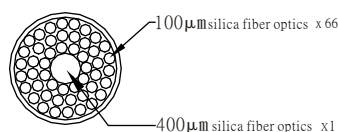
RiKO

SFRC-310M



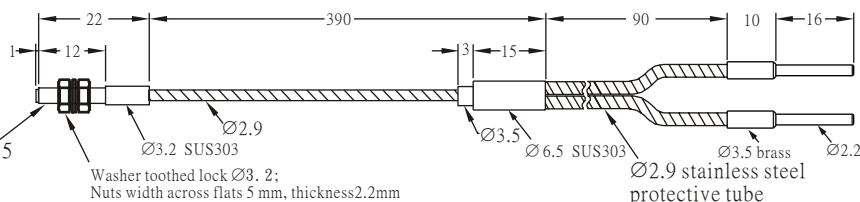
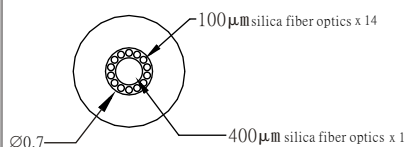
Fiber material	Silica Fiber	Wavelength	180 ~ 1100 nm
Number of fibers	66/1	Individual fiber diameter	100µm/400 µm
Operate temperature	- 40°C ~ + 300°C	Active area diameter	Ø1.2
Mechanical strength proof test	50~70 kpsi		

SFRC-310-MU



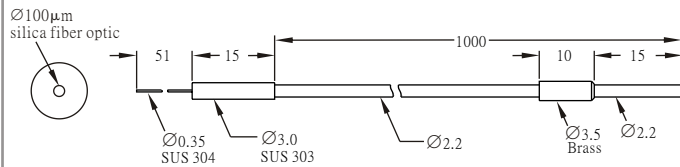
Fiber material	Silica Fiber	Wavelength	180 ~ 1100 nm
Number of fibers	66/1	Individual fiber diameter	100µm/400 µm
Operate temperature	- 40°C ~ + 300°C	Active area diameter	Ø1.2
Mechanical strength proof test	50~70 kpsi		

SFRC-305-21X



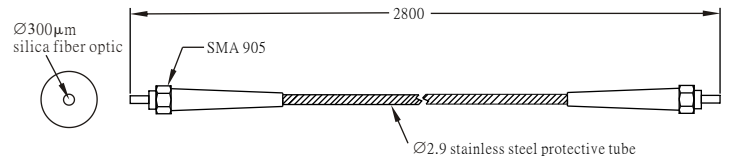
Fiber material	Silica Fiber	Wavelength	180 ~ 1100 nm
Number of fibers	14/1	Individual fiber diameter	100µm/400 µm
Operate temperature	- 40°C ~ + 300°C	Active area diameter	Ø0.7
Mechanical strength proof test	50~70 kpsi		

SFT1-310-S51Q



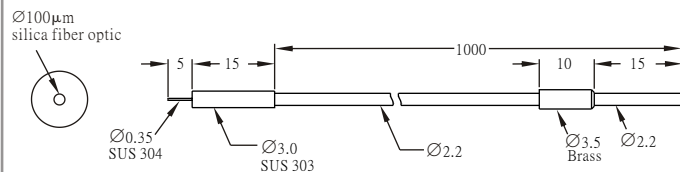
Individual fiber diameter	100 µm
Number of fibers	1
Operate temperature	- 40°C ~ + 100°C
Wavelength	220 ~ 700 nm
Mechanical strength proof test	50~70 kpsi

SFT3-28-SMA



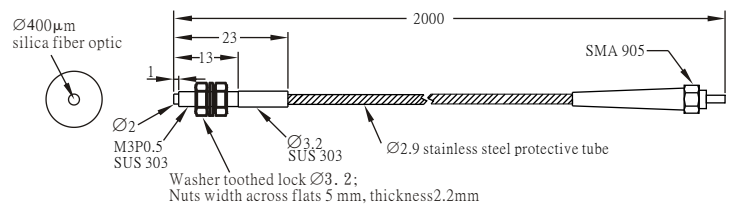
Individual fiber diameter	300 µm
Number of fibers	1
Operate temperature	- 40°C ~ + 100°C
Wavelength	220 ~ 700 nm
Mechanical strength proof test	50~70 kpsi

SFT1-310-S5Q



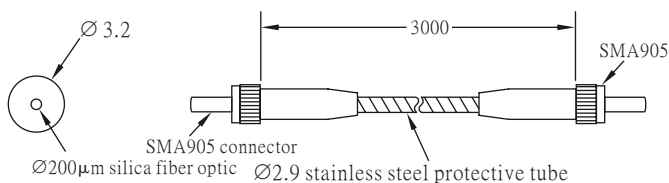
Individual fiber diameter	100 µm
Number of fibers	1
Operate temperature	- 40°C ~ + 100°C
Wavelength	220 ~ 700 nm
Mechanical strength proof test	50~70 kpsi

SFT4-320-SMA



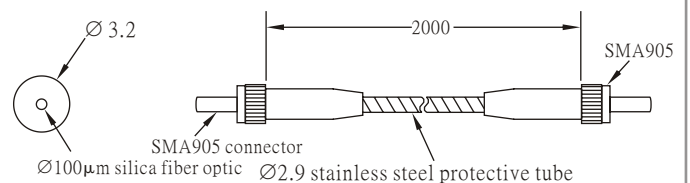
Individual fiber diameter	400 µm
Number of fibers	1
Operate temperature	- 40°C ~ + 100°C
Wavelength	220 ~ 700 nm
Mechanical strength proof test	50~70 kpsi

SFT2-30-SMA



Individual fiber diameter	200 µm
Number of fibers	1
Operate temperature	- 40°C ~ + 100°C
Wavelength	220 ~ 700 nm
Mechanical strength proof test	50~70 kpsi

SFT1-20-SMA



Individual fiber diameter	100 µm
Number of fibers	1
Operate temperature	- 40°C ~ + 100°C
Wavelength	220 ~ 700 nm
Mechanical strength proof test	50~70 kpsi