

Plastic fiber optics

FR/FT



FR/FT TYPE Plastic Fiber Optics

Fiber customized for special dimension

Fiber

PR /PT

FR /FT

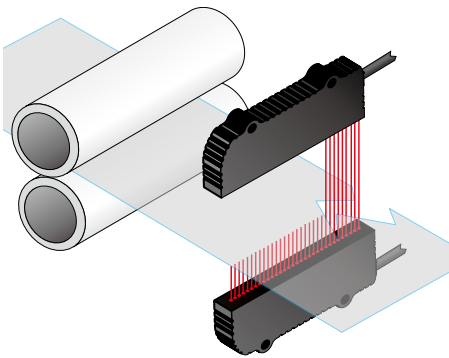
Glass Fiber

Light Guide

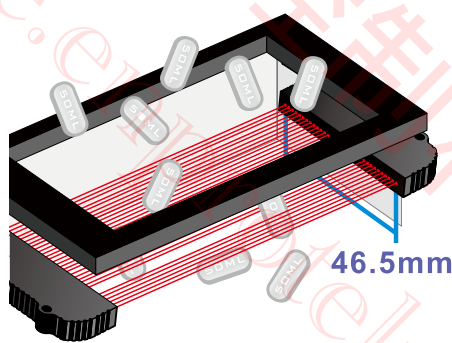
Silica Fiber

Access

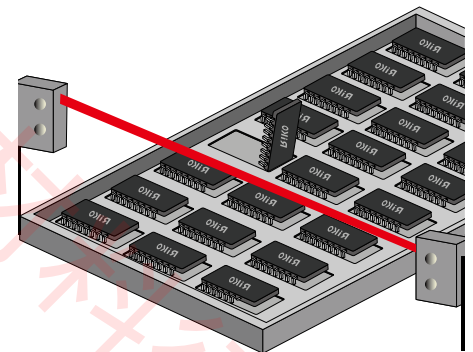
Application / 應用例



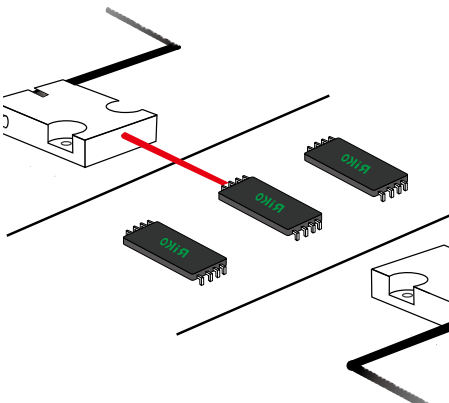
Detecting rupture of thin film
缺口斷裂檢測



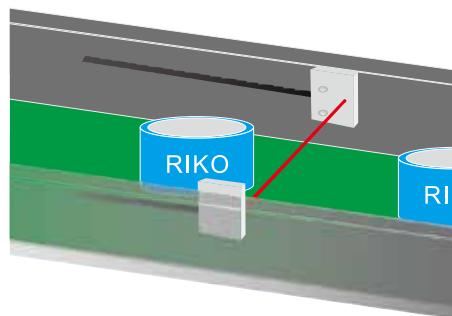
Detecting dropping objects
檢測不規則產品掉落



Detecting the unseated IC
/ 檢測IC是否翻開



Detecting the pin of IC
/ 檢測 IC pin 腳



Detecting the passing of products
on line / 隨線檢測產品通過



To detect the level of liquids
/ 液位檢測

FR/FT

Plastic fiber optics

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZI)	Operate temperature	Minimum bending radius	Fiber diameter	
							OD	ID
M6 反射型 (Reflective)	FR-620 Free cut		Standard	90mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0
	FR-620-I Free cut	 	Standard	90mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0
	FR-620-F Free cut		Standard	90mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0
	FR-620-F1 Free cut		Standard	90mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0
	FR-620-F2 Free cut		Standard	90mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0
	FR-620-6F Free cut		Standard	90mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0
	FR-620-M-H33 Free cut		Standard	90mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0
	FR-620-KSS Free cut		Standard	90mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0

※ :M6 : Toothed Lock Washer Ø11
Width Across Flats 10mm, Thickness 2.5mm

Plastic fiber optics

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Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZ1)	Operate temperature	Minimum bending radius	Fiber diameter	
							OD	ID
M6 反射型 (Reflective)	FRC-620 Free cut	<p>Ø1.0 fiber optic core x 1 (emitter)</p> <p>Ø0.265 fiber optic core x 16 (receiver)</p>	Coaxial	70mm	-55°C ~ +70°C	R25	Ø2.2 x 2	Ø1.0 x 1 ----- Ø0.265 x 16
	FRC-620-I Free cut	<p>Ø1.0 fiber optic core x 1 (emitter)</p> <p>Ø0.265 fiber optic core x 15 (receiver)</p>	Coaxial	70mm	-55°C ~ +70°C	R25	Ø2.2 x 2	Ø1.0 x 1 ----- Ø0.265 x 15
	FRC-620-25 Free cut	<p>Ø1.0 fiber optic core x 1 (emitter)</p> <p>Ø0.265 fiber optic core x 16 (receiver)</p>	Coaxial	70mm	-55°C ~ +70°C	R25	Ø2.2 x 2	Ø1.0 x 1 ----- Ø0.265 x 16
	FRH-620 Free cut	<p>Ø1.0 fiber optic core x 2</p>	Heat Resistant	80mm	-55°C ~ +105°C	R25	Ø2.2	Ø1.0
	FRS2-620 Free cut	<p>Ø0.5 fiber optic core x 2</p>	Precision	25mm	-55°C ~ +70°C	R15	Ø2.2	Ø0.5
	FRX-620 Free cut	<p>Ø1.5 fiber optic core x 2</p>	Long sensing range	120mm	-55°C ~ +70°C	R40	Ø2.2	Ø1.5
	FRY-620 Free cut	<p>Ø1.0 fiber optic core x 2</p>	Flexible	70mm	-40°C ~ +70°C	R2	Ø2.2	Ø1.0

※ :M6 : Toothed Lock Washer Ø11
Width Across Flats 10mm, Thickness 2.5mm

FR/FT

Plastic fiber optics

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZ1)	Operate temperature	Minimum bending radius	Fiber diameter	
							OD	ID
M6	FRY-620-I Free cut		Flexible	70mm	-40°C ~ +70°C	R2	Ø2.2	Ø1.0
	FR-520 Free cut		Standard	90mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0
	FR-520-I Free cut		Standard	90mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0
	FRC-520 Free cut		Coaxial	70mm	-55°C ~ +70°C	R25	Ø2.2x2	Ø1.0 x 1 ----- Ø0.265 x 16
	FRC-520-I Free cut		Coaxial	70mm	-55°C ~ +70°C	R25	Ø2.2x2	Ø1.0 x 1 ----- Ø0.265 x 15
M4	FRA-420 Free cut		Precision	5mm	-55°C ~ +70°C	R10	Ø1.25	Ø0.25

※ :M6 : Toothed Lock Washer Ø11
Width Across Flats 10mm, Thickness 2.5mm

※ :M4 : Toothed Lock Washer Ø8.3
Width Across Flats 8mm, Thickness 2.5mm

Plastic fiber optics

Specifications / 規格表

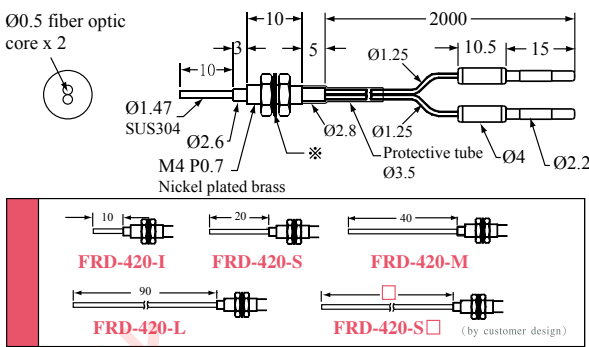
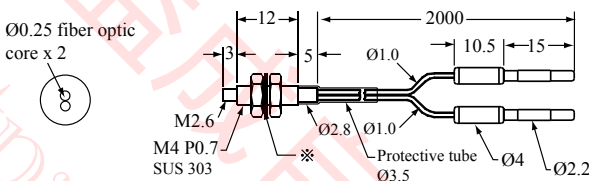
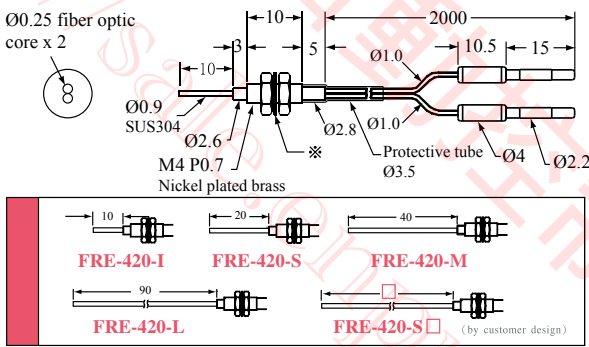
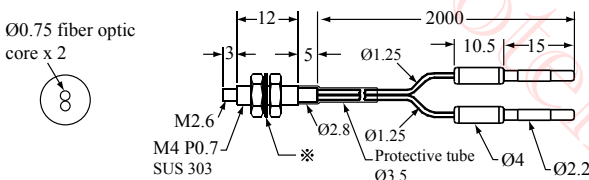
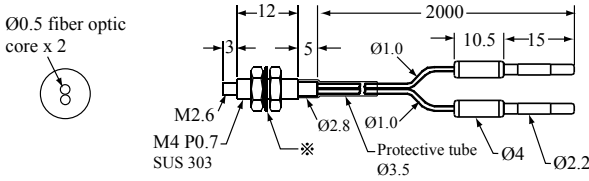
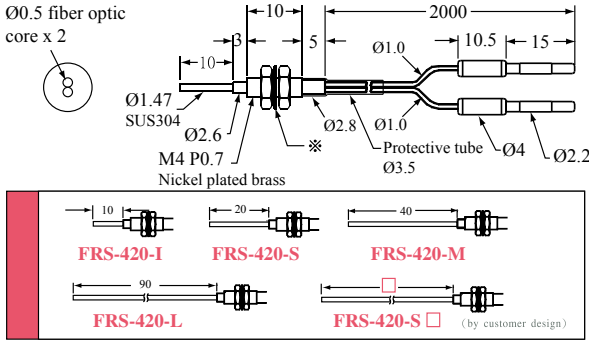
Type	Model	Dimensions	Fiber Type	Sensing distance (FZI)	Operate temperature	Minimum bending radius	Fiber diameter		Fiber
							OD	ID	
M4 反射型 (Reflective)	FRA-420-I Free cut		Precision	5mm	-55°C ~ +70°C	R10	Ø1.25	Ø0.25	FR /PT FR /FT Glass Fiber Light Guide Silica Fiber
	FRB-420 Free cut		Standard	80mm	-55°C ~ +70°C	R25	Ø1.3	Ø1.0	Access
	FRC-420 Free cut		Coaxial	30mm	-55°C ~ +70°C	R15	Ø1.25 x 2	Ø0.5 x 1 ----- Ø0.25 x 10	
	FRC-420-I Free cut		Coaxial	30mm	-55°C ~ +70°C	R15	Ø1.25 x 2	Ø0.5 x 1 ----- Ø0.25 x 10	
	FRC-420-84BC Free cut		Coaxial	30mm	-55°C ~ +70°C	R15	Ø1.25 x 2	Ø0.5 x 1 ----- Ø0.25 x 10	
	FRD-420 Free cut		Precision	25mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.5	

※ :M4 : Toothed Lock Washer Ø8.3
Width Across Flats 8mm, Thickness 2.5mm

FR/FT

Plastic fiber optics

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZI)	Operate temperature	Minimum bending radius	Fiber diameter	
							OD	ID
M4 反射型 (Reflective)	FRD-420-I Free cut		Precision	25mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.5
	FRE-420 Free cut		High precision	5mm	-55°C ~ +70°C	R10	Ø1.0	Ø0.25
	FRE-420-I Free cut		High precision	5mm	-55°C ~ +70°C	R10	Ø1.0	Ø0.25
	FRJ-420 Free cut		Precision	60mm	-55°C ~ +70°C	R20	Ø1.25	Ø0.75
	FRS-420 Free cut		Precision	25mm	-55°C ~ +70°C	R15	Ø1.0	Ø0.5
	FRS-420-I Free cut		Precision	25mm	-55°C ~ +70°C	R15	Ø1.0	Ø0.5

※ :M4 : Toothed Lock Washer Ø8.3
Width Across Flats 8mm, Thickness 2.5mm

Plastic fiber optics

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZ1)	Operate temperature	Minimum bending radius	Fiber diameter		Fiber
							OD	ID	
M4 反射型 (Reflective)	FRW-420 Free cut		Flexible	20mm	-40°C ~ +70°C	R1	Ø1.0	Ø0.5	FR /PT
	FRW-420-I Free cut	 	Flexible	20mm	-40°C ~ +70°C	R1	Ø1.0	Ø0.5	FR /FT
	FRZ-420 Free cut		Flexible	70mm	-40°C ~ +70°C	R2	Ø1.3	Ø1.0	Glass Fiber
M3	FRA-320 Free cut		High precision	5mm	-55°C ~ +70°C	R10	Ø1.25	Ø0.25	Light Guide
	FRA-320-I Free cut	 	High precision	5mm	-55°C ~ +70°C	R10	Ø1.25	Ø0.25	Silica Fiber
	FRC-320 Free cut		Coaxial	30mm	-55°C ~ +70°C	R15	Ø1.25 x 2	Ø0.5 x 1 ----- Ø0.25 x 10	Access

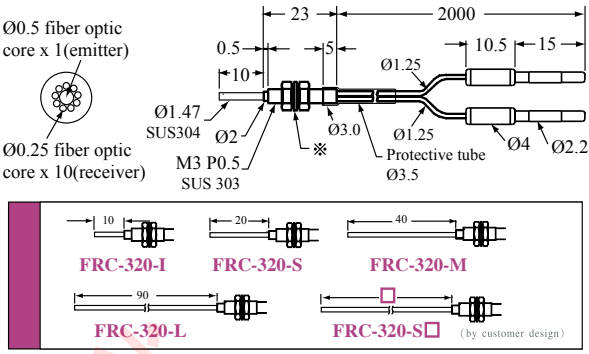
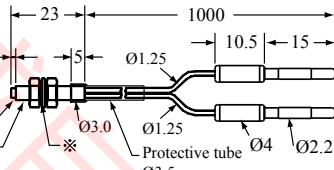
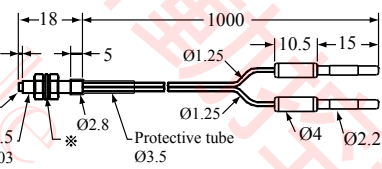
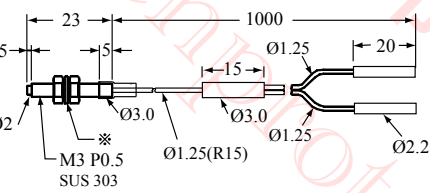
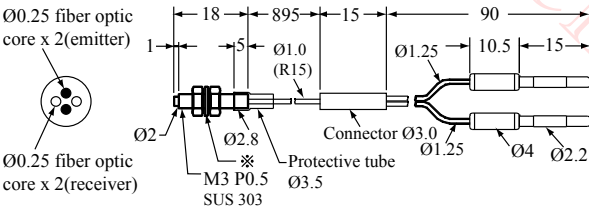
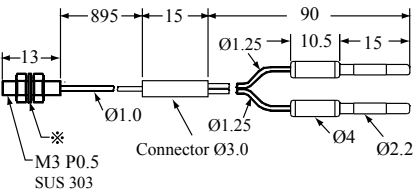
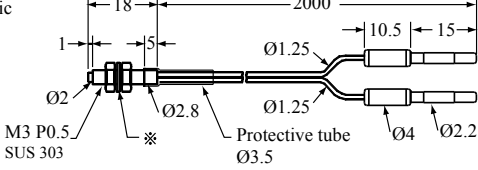
※ :M4 : Toothed Lock Washer Ø8.3
Width Across Flats 8mm, Thickness 2.5mm

※ :M3 : Toothed Lock Washer Ø6.4
Width Across Flats 5mm, Thickness 2.2mm

FR/FT

Plastic fiber optics

Specifications / 規格表

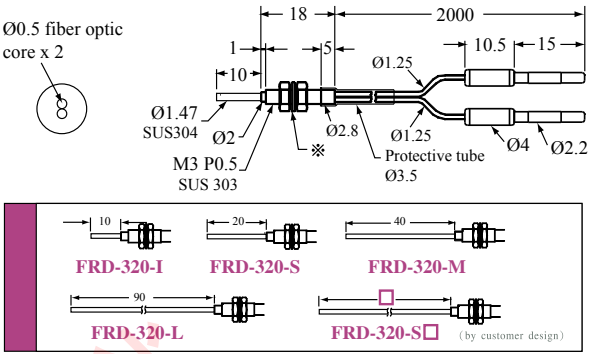
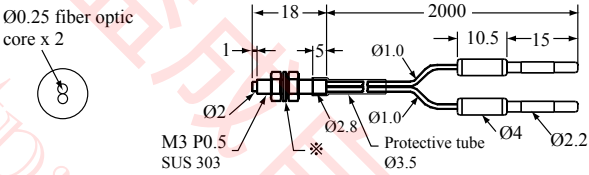
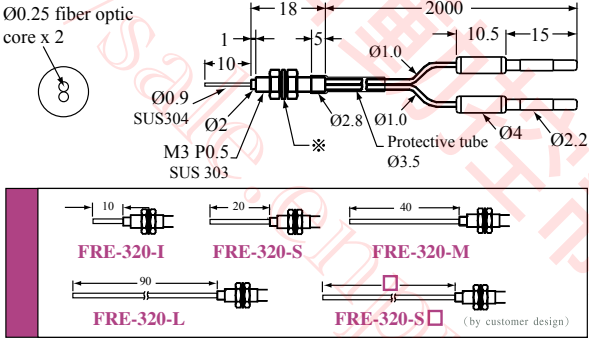
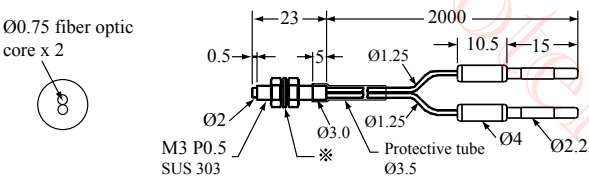
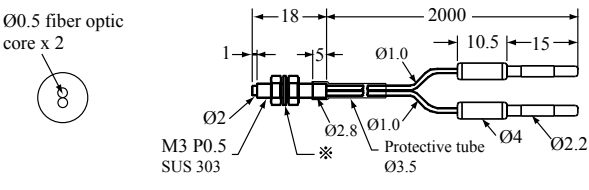
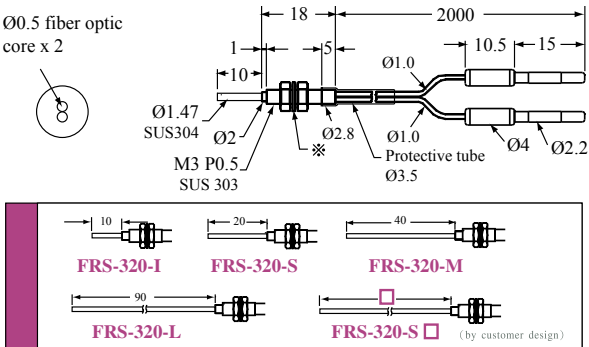
Type	Model	Dimensions	Fiber Type	Sensing distance (FZ1)	Operate temperature	Minimum bending radius	Fiber diameter	
							OD	ID
M3 反射型 (Reflective)	FRC-320-I Free cut	 <p>Ø0.5 fiber optic core x 1(emitter) Ø0.25 fiber optic core x 10(receiver)</p>	Coaxial	30mm	-55°C ~ +70°C	R15	Ø1.25 x 2	Ø0.5 x 1 ----- Ø0.25 x 10
	FRC-310-35FA Free cut	 <p>Ø0.5 fiber optic core x 1(emitter) Ø0.25 fiber optic core x 10(receiver)</p>	Coaxial	30mm	-55°C ~ +70°C	R15	Ø1.25 x 2	Ø0.5 x 1 ----- Ø0.25 x 10
	FRC-310-35FZ Free cut	 <p>Ø0.5 fiber optic core x 1(emitter) Ø0.25 fiber optic core x 10(receiver)</p>	Coaxial	30mm	-55°C ~ +70°C	R15	Ø1.25 x 2	Ø0.5 x 1 ----- Ø0.25 x 10
	FRC7-310-FA Free cut	 <p>Ø0.25 fiber optic core x 1(emitter) Ø0.25 fiber optic core x 6(receiver)</p>	Coaxial	20mm	-55°C ~ +70°C	R15	Ø1.25 x 1	Ø0.25 x 7
	FRC4-310 Free cut	 <p>Ø0.25 fiber optic core x 2(emitter) Ø0.25 fiber optic core x 2(receiver)</p>	Coaxial	7mm	-55°C ~ +70°C	R15	Ø1.0 x 1	Ø0.25 x 4
	FRC4-310-H13 Free cut	 <p>Ø0.25 fiber optic core x 2(emitter) Ø0.25 fiber optic core x 2(receiver)</p>	Coaxial	7mm	-55°C ~ +70°C	R15	Ø1.0 x 1	Ø0.25 x 4
	FRD-320 Free cut	 <p>Ø0.5 fiber optic core x 2</p>	Precision	25mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.5

※ :M3 : Toothed Lock Washer Ø6.4
Width Across Flats 5mm, Thickness 2.2mm

FR/FT

Plastic fiber optics

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZ1)	Operate temperature	Minimum bending radius	Fiber diameter		Fiber
							OD	ID	
M3 反射型 (Reflective)	FRD-320-I Free cut		Precision	25mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.5	FR / FT
	FRE-320 Free cut		High precision	5mm	-55°C ~ +70°C	R10	Ø1.0	Ø0.25	Access
	FRE-320-I Free cut		High precision	5mm	-55°C ~ +70°C	R10	Ø1.0	Ø0.25	
	FRJ-320 Free cut		Precision	60mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.75	
	FRS-320 Free cut		Precision	25mm	-55°C ~ +70°C	R15	Ø1.0	Ø0.5	
	FRS-320-I Free cut		Precision	25mm	-55°C ~ +70°C	R15	Ø1.0	Ø0.5	

※ :M3 : Toothed Lock Washer Ø6.4
Width Across Flats 5mm, Thickness 2.2mm

FR/FT

Plastic fiber optics

Specifications / 規格表

Fiber	Type	Model	Dimensions	Fiber Type	Sensing distance (FZ1)	Operate temperature	Minimum bending radius	Fiber diameter	
								OD	ID
反射型 (Reflective)	M3	FRW-320 Free cut		Flexible	5mm	-40°C ~ +70°C	R1	Ø1.0	Ø0.5
		FRA-320-Q Free cut		High precision	5mm	-55°C ~ +70°C	R10	Ø1.25	Ø0.25
		FRA-320-Q(H10) Free cut		High precision	5mm	-55°C ~ +70°C	R10	Ø1.25	Ø0.25
		FRB-320-Q Free cut		Standard	80mm	-55°C ~ +70°C	R25	Ø1.3	Ø1.0
		FRC-320-Q Free cut		Coaxial	30mm	-55°C ~ +70°C	R15	Ø1.25 x 2	Ø0.5 x 1 ----- Ø0.25 x 10
		FRC-320-IQ Free cut		Coaxial	30mm	-55°C ~ +70°C	R15	Ø1.25 x 2	Ø0.5 x 1 ----- Ø0.25 x 10
		FRC4-310-Q Free cut		Coaxial	7mm	-55°C ~ +70°C	R15	Ø1.0 x 1	Ø0.25 x 4
		FRD-320-Q Free cut		Precision	25mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.25

※ :M3 : Toothed Lock Washer Ø6.4
Width Across Flats 5mm, Thickness 2.2mm

Plastic fiber optics

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZI)	Operate temperature	Minimum bending radius	Fiber diameter		Fiber
							OD	ID	
Ø3 反射型 (Reflective)	FRE-320-Q Free cut		High precision	5mm	-55°C ~ +70°C	R10	Ø1.0	Ø0.25	PR /PT
	FRE-320-IQ Free cut		High precision	5mm	-55°C ~ +70°C	R10	Ø1.0	Ø0.25	FR /FT Glass Fiber Light Guide Silica Fiber Access
	FRJ-320-Q Free cut		Precision	60mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.75	
	FRS-320-Q Free cut		Precision	25mm	-55°C ~ +70°C	R15	Ø1.0	Ø0.5	
	FRS-320-IQ Free cut		Precision	25mm	-55°C ~ +70°C	R15	Ø1.0	Ø0.5	
	FRW-320-Q Free cut		Flexible	20mm	-55°C ~ +70°C	R1	Ø1.0	Ø0.5	
	FRW-320-IQ Free cut		Flexible	20mm	-40°C ~ +70°C	R1	Ø1.3	Ø1.0	

FR/FT

Plastic fiber optics

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZ1)	Operate temperature	Minimum bending radius	Fiber diameter		
							OD	ID	
反射型 (Reflective)	Ø3	FRZ-320-Q Free cut		Flexible	70mm	-40°C ~ +70°C	R2	Ø1.3	Ø1.0
		FRC-210-22X Free cut		Coaxial	30mm	-55°C ~ +70°C	R15	Ø2.2 x 1	Ø0.5 x 1 ----- Ø0.25 x 9
		FRC-210-22X (Brass)		Coaxial	30mm	-55°C ~ +70°C	R15	Ø2.2 x 1	Ø0.5 x 1 ----- Ø0.25 x 9
		FRE-220 Free cut		High precision	5mm	-55°C ~ +70°C	R10	Ø1.0	Ø0.25
	Ø2	FRE-220-I Free cut	 	High precision	5mm	-55°C ~ +70°C	R10	Ø1.0	Ø0.25
		FRS-220 Free cut		Precision	25mm	-55°C ~ +70°C	R15	Ø1.0	Ø0.5
		FRS-220-I Free cut	 	Precision	25mm	-55°C ~ +70°C	R15	Ø1.0	Ø0.5

Plastic fiber optics

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZ1)	Operate temperature	Minimum bending radius	Fiber diameter		Fiber
							OD	ID	
Ø1.5	FRC7-110-Q20		Coaxial	20mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.25 x 7	FR /PT
	FRC4-110 Free cut		Multiple core	7mm	-55°C ~ +70°C	R15	Ø1.0	Ø0.25 x 4	Glass Fiber
	FRC4-110-H10 Free cut		Multiple core	7mm	-55°C ~ +70°C	R15	Ø1.0	Ø0.25 x 4	Light Guide
Other Type	FR-10ML-20 Free cut Array Fiber Side view fiber		Multiple core	25mm	-55°C ~ +70°C	R25	Ø1.25 x 2	Ø0.25 x 9 ----- Ø0.25 x 9	Silica Fiber
	FR-15MLD-20 Free cut Array Fiber		Multiple core	20mm	-55°C ~ +70°C	R25	Ø1.25 x 2	Ø0.25 x 9 ----- Ø0.25 x 9	Access
	FR-20ML-20 Free cut Array Fiber		Multiple core	70mm	-55°C ~ +70°C	R25	Ø2.2 x 2	Ø0.265 x 16 ----- Ø0.265 x 16	
	FR-20MLS-20 Free cut Array Fiber		Multiple core	60mm	-55°C ~ +70°C	R25	Ø2.2 x 2	Ø0.265 x 16 ----- Ø0.265 x 16	

反射型 (Reflective)

Other Type

FR/FT

Plastic fiber optics

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZ1)	Operate temperature	Minimum bending radius	Fiber diameter	
							OD	ID
Other Type 反射型 (Reflective)	FR-30ML-20 Free cut Array Fiber Side view fiber		Multiple core	70mm	-55°C ~ +70°C	R25	Ø2.2 x 2	Ø0.265 x 16 ----- Ø0.265 x 16
	FR-50ML-20 Free cut Array Fiber Side view fiber		Multiple core	70mm	-55°C ~ +70°C	R25	Ø2.2 x 2	Ø0.265 x 16 ----- Ø0.265 x 16
	FRY-20MLSD-20 Free cut Array Fiber Side view fiber		Flexible	70mm	-40°C ~ +70°C	R2	Ø2.2	Ø1.0
	FRW-FU47-20 Free cut		Flexible	1-16mm	-40°C ~ +70°C	R1	Ø1.0	Ø0.5
	FRD-FU901-20 Free cut		Precision	-	-55°C ~ +70°C	R15	Ø1.25	Ø0.5

- Fiber
- PR /PT
- FR /FT
- Glass Fiber
- Light Guide
- Silica Fiber
- Access

Other Type
反射型 (Reflective)

Plastic fiber optics

FR/FT

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZI)	Operate temperature	Minimum bending radius	Fiber diameter		Fiber
							OD	ID	
Other Type 反射型 (Reflective)	FRJ-9310-20 Free cut		Precision	-	-55°C ~ +70°C	R15/ R40	Ø1.25	Ø0.75	PR /PT FR /FT
	FRW-K10-20 Free cut		Flexible	5~10mm	-40°C ~ +70°C	R1	Ø1.0	Ø0.5	Glass Fiber Light Guide Silica Fiber
	FRB-38V-20 Free cut		Standard	1~6mm	-55°C ~ +70°C	R25	Ø1.3	Ø1.0	Access
	FRH-38H-20 Free cut		Heat Resistant	5~18mm	-55°C ~ +105°C	R25	Ø2.2	Ø1.0	
	FRY-67TZ-20 Free cut		Flexible	70mm	-40°C ~ +70°C	R2	Ø2.2	Ø1.0	
	FRW-11-20 Free cut		Flexible	20mm	-40°C ~ +70°C	R1	Ø1.0	Ø0.5	
	FRX-50-SMA		Long sensing range	-	-55°C ~ +70°C	R40	Ø2.2	Ø1.5	

FR/FT

Plastic fiber optics

Specifications / 規格表

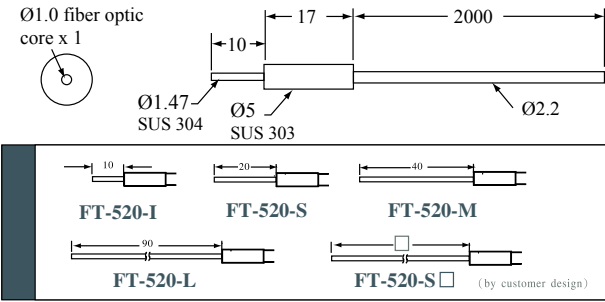
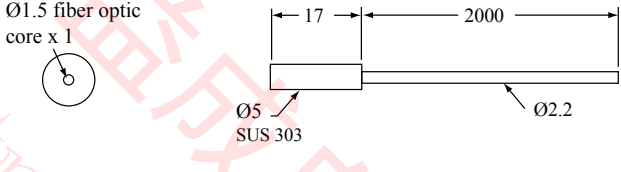
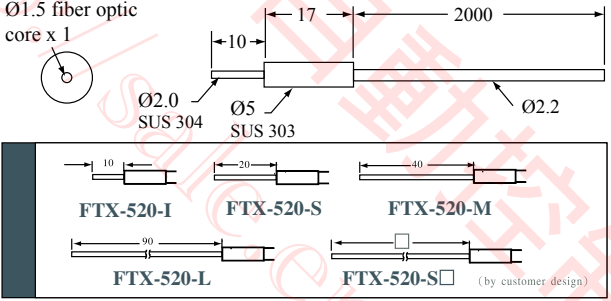
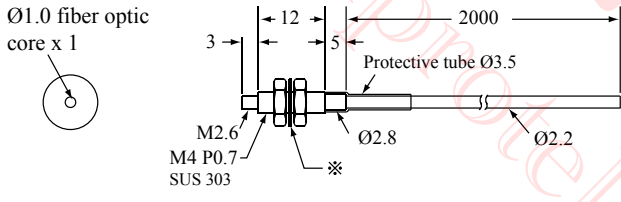
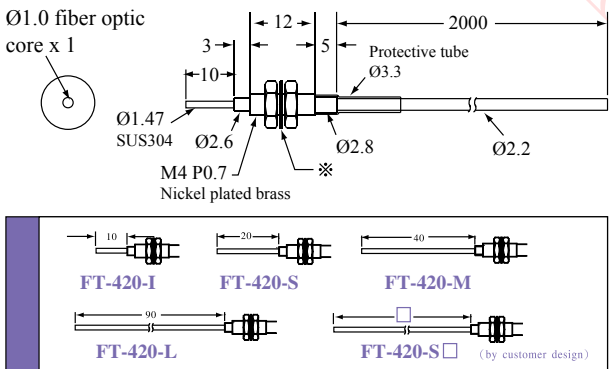
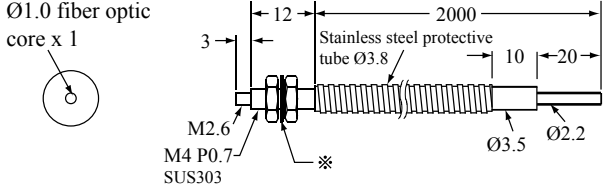
Type	Model	Dimensions	Fiber Type	Sensing distance (FZ1)	Operate temperature	Minimum bending radius	Fiber diameter	
							OD	ID
M6 新規格 (Thrubeam)	FT-620 Free cut		Standard	500mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0
	FT-620-I Free cut		Standard	500mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0
	FTX-620 Free cut		Long sensing range	700mm	-55°C ~ +70°C	R40	Ø2.2	Ø1.5
	FTX-620-6F Free cut		Long sensing range	700mm	-55°C ~ +70°C	R40	Ø2.2	Ø1.5
	FTY-620 Free cut		Flexible	300mm	-40°C ~ +70°C	R2	Ø2.2	Ø1.0
	FTY-620-I Free cut		Flexible	300mm	-40°C ~ +70°C	R2	Ø2.2	Ø1.0
Ø5	FT-520 Free cut		Standard	500mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0

※ :M6 : Toothed Lock Washer Ø11
Width Across Flats 10mm, Thickness 2.5mm

FR/FT

Plastic fiber optics

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZ1)	Operate temperature	Minimum bending radius	Fiber diameter		Fiber
							OD	ID	
Ø5	FT-520-I Free cut		Standard	500mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0	PR /PT FR /FT Glass Fiber Light Guide
	FTX-520 Free cut		Long sensing range	700mm	-55°C ~ +70°C	R40	Ø2.2	Ø1.5	Silica Fiber Access
	FTX-520-I Free cut		Long sensing range	700mm	-55°C ~ +70°C	R40	Ø2.2	Ø1.5	
M4	FT-420 Free cut		Standard	500mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0	
	FT-420-I Free cut		Standard	500mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0	
	FT-420-KS26		Standard	500mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0	

特製型 (Thrubeam)

※ :M4 : Toothed Lock Washer Ø8.3
Width Across Flats 8mm, Thickness 2.5mm

FR/FT

Plastic fiber optics

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZ1)	Operate temperature	Minimum bending radius	Fiber diameter	
							OD	ID
M4	FT-420-F Free cut		Standard	500mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0
	FT-420-F1 Free cut		Standard	500mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0
	FT-420-6F Free cut		Standard	500mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0
	FT-420-38G Free cut		Standard	500mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0
	FTA-420 Free cut		High precision	30mm	-55°C ~ +70°C	R10	Ø1.25	Ø0.25
	FTA-420-I Free cut	<div style="margin-top: 10px;"> </div>	High precision	30mm	-55°C ~ +70°C	R10	Ø1.25	Ø0.25
	FTB-420 Free cut		Standard	400mm	-55°C ~ +70°C	R25	Ø1.3	Ø1.0
	FTE-420 Free cut		High precision	30mm	-55°C ~ +70°C	R10	Ø1.0	Ø0.25

※ :M4 : Toothed Lock Washer Ø8.3
Width Across Flats 8mm, Thickness 2.5mm

FR/FT

Plastic fiber optics

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZ1)	Operate temperature	Minimum bending radius	Fiber diameter		Fiber
							OD	ID	
M4 参照型 (Thrubeam)	FTH-420 Free cut		Heat Resistant	600mm	-55°C ~ +105°C	R25	Ø2.2	Ø1.0	FR /PT
	FTH-420-I Free cut	 	Heat Resistant	600mm	-55°C ~ +105°C	R25	Ø2.2	Ø1.0	Glass Fiber Light Guide Silica Fiber Access
	FTH-420-F1 Free cut		Heat Resistant	600mm	-55°C ~ +105°C	R25	Ø2.2	Ø1.0	
	FTS2-420 Free cut		Precision	130mm	-55°C ~ +70°C	R15	Ø2.2	Ø0.5	
	FTS-420 Free cut		Precision	130mm	-55°C ~ +70°C	R15	Ø1.0	Ø0.5	
	FTS-420-I Free cut	 	Precision	130mm	-55°C ~ +70°C	R15	Ø1.0	Ø0.5	
	FTX-420 Free cut		Long sensing range	700mm	-55°C ~ +70°C	R40	Ø2.2	Ø1.5	

※ :M4 : Toothed Lock Washer Ø8.3
Width Across Flats 8mm, Thickness 2.5mm

FR/FT

Plastic fiber optics

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZ1)	Operate temperature	Minimum bending radius	Fiber diameter	
							OD	ID
M4	FTY-420 Free cut		Flexible	300mm	-40°C ~ +70°C	R2	Ø2.2	Ø1.0
	FTY-420-I Free cut		Flexible	300mm	-40°C ~ +70°C	R2	Ø2.2	Ø1.0
	FTY-420-38G Free cut		Flexible	300mm	-40°C ~ +70°C	R2	Ø2.2	Ø1.0
	FTY-420-F1 Free cut		Flexible	300mm	-40°C ~ +70°C	R2	Ø2.2	Ø1.0
	FT-320 Free cut		Standard	500mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0
M3	FT-320-I Free cut		Standard	500mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0

※ :M4 : Toothed Lock Washer Ø8.3
Width Across Flats 8mm, Thickness 2.5mm

※ :M3 : Toothed Lock Washer Ø6.4
Width Across Flats 5mm, Thickness 2.2mm

新製品 (Thrubeam)

Plastic fiber optics

FR/FT

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZ1)	Operate temperature	Minimum bending radius	Fiber diameter		Fiber
							OD	ID	
M3 Thrubeam	FT-320-T004 Free cut		Standard	500mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0	Fiber
	FTA-320 Free cut		High precision	30mm	-55°C ~ +70°C	R10	Ø1.25	Ø0.25	PR /PT FR /FT Glass Fiber Light Guide Silica Fiber
	FTA-320-I Free cut		High precision	30mm	-55°C ~ +70°C	R10	Ø1.25	Ø0.25	Access
	FTB-320 Free cut		Standard	400mm	-55°C ~ +70°C	R25	Ø1.3	Ø1.0	
	FTB-320-T80 Free cut		Standard	400mm	-55°C ~ +70°C	R25	Ø1.3	Ø1.0	
	FTC4-320 Free cut		Multiple core	100mm	-55°C ~ +70°C	R15	Ø1.0 x 1	Ø0.25 x 4	
	FTC4-320-H10(79) Free cut		Multiple core	100mm	-55°C ~ +70°C	R15	Ø1.0 x 1	Ø0.25 x 4	

※ :M3 : Toothed Lock Washer Ø6.4
Width Across Flats 5mm, Thickness 2.2mm

FR/FT

Plastic fiber optics

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZ1)	Operate temperature	Minimum bending radius	Fiber diameter	
							OD	ID
M3	FTD-320 Free cut		Precision	130mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.5
	FTE-320 Free cut		High precision	30mm	-55°C ~ +70°C	R10	Ø1.0	Ø0.25
	FTE-320-I Free cut	 	High precision	30mm	-55°C ~ +70°C	R10	Ø1.0	Ø0.25
	FTJ-320 Free cut		Precision	250mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.75
	FTS-320 Free cut		Precision	130mm	-55°C ~ +70°C	R15	Ø1.0	Ø0.5
	FTS-320-I Free cut	 	Precision	130mm	-55°C ~ +70°C	R15	Ø1.0	Ø0.5

※ :M3 : Toothed Lock Washer Ø6.4
Width Across Flats 5mm, Thickness 2.2mm

對照型 (Thru-beam)

Plastic fiber optics

FR/FT

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZ1)	Operate temperature	Minimum bending radius	Fiber diameter	
							OD	ID
M3 Thrubeam	FTS2-320 Free cut		Precision	130mm	-55°C ~ +70°C	R15	Ø2.2	Ø0.5
	FTS2-320-I Free cut		Precision	130mm	-55°C ~ +70°C	R15	Ø2.2	Ø0.5
	FTS-320-75F Free cut		Precision	130mm	-55°C ~ +70°C	R15	Ø1.0	Ø0.5
	FTW-320 Free cut		Flexible	80mm	-40°C ~ +70°C	R1	Ø1.0	Ø0.5
	FTW-320-I Free cut		Flexible	80mm	-40°C ~ +70°C	R1	Ø1.0	Ø0.5
	FTW2-320 Free cut		Flexible	80mm	-40°C ~ +70°C	R1	Ø2.2	Ø0.5

※ :M3 : Toothed Lock Washer Ø6.4
Width Across Flats 5mm, Thickness 2.2mm

FR/FT

Plastic fiber optics

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZ1)	Operate temperature	Minimum bending radius	Fiber diameter	
							OD	ID
M3	FTX-320 Free cut		Long sensing range	700mm	-55°C ~ +70°C	R40	Ø2.2	Ø1.5
	FTY-320 Free cut		Flexible	300mm	-40°C ~ +70°C	R2	Ø2.2	Ø1.0
	FTY-320-I Free cut		Flexible	300mm	-40°C ~ +70°C	R2	Ø2.2	Ø1.0
Ø3	FT-320-Q Free cut		Standard	500mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0
	FT-320-IQ Free cut		Standard	500mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0
	FT-320-D-T14L Free cut Side view fiber		Standard	600mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0

※ :M3 : Toothed Lock Washer Ø6.4
Width Across Flats 5mm, Thickness 2.2mm

Plastic fiber optics

FR/FT

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZI)	Operate temperature	Minimum bending radius	Fiber diameter	
							OD	ID
Ø3	FTA-320-Q Free cut		High precision	30mm	-55°C ~ +70°C	R10	Ø1.25	Ø0.25
	FTA-320-IQ Free cut		High precision	30mm	-55°C ~ +70°C	R10	Ø1.25	Ø0.25
	FTA-11 (280/600 /1300/2100)		High precision	30mm	-55°C ~ +70°C	R10	Ø1.25	Ø0.25
	FTA-320-H10Q Free cut		High precision	30mm	-55°C ~ +70°C	R10	Ø1.25	Ø0.25
	FTC4-320-MQ Free cut		Multiple core	100mm	-55°C ~ +70°C	R15	Ø1.0 x 1	Ø0.25 x 4
	FTE-320-Q Free cut		High precision	30mm	-55°C ~ +70°C	R10	Ø1.0	Ø0.25
	FTE-320-IQ Free cut		High precision	30mm	-55°C ~ +70°C	R10	Ø1.0	Ø0.25

挿入型 (Through beam)

Fiber

PR /PT

FR /FT

Glass Fiber

Light Guide

Silica Fiber

Access

FR/FT

Plastic fiber optics

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZ1)	Operate temperature	Minimum bending radius	Fiber diameter	
							OD	ID
Fiber PR /PT FR /FT Glass Fiber Light Guide Silica Fiber Access	FTE-320-H10Q Free cut		High precision	30mm	-55°C ~ +70°C	R10	Ø1.0	Ø0.25
	FTH-305-D Free cut Side view fiber		Heat resistant	600mm	-55°C ~ +105°C	R25	Ø2.2	Ø1.0
	FTS-320-Q Free cut		Precision	130mm	-55°C ~ +70°C	R15	Ø1.0	Ø0.5
	FTS-320-IQ Free cut	 	Precision	130mm	-55°C ~ +70°C	R15	Ø1.0	Ø0.5
	FTS2-320-Q Free cut		Precision	130mm	-55°C ~ +70°C	R15	Ø2.2	Ø0.5
	FTS2-320-IQ Free cut	 	Precision	130mm	-55°C ~ +70°C	R15	Ø2.2	Ø0.5
	FTS2-306-S15Q(Cu) (0.7)(0.8)		Precision	130mm	-55°C ~ +70°C	R15	Ø2.2	Ø0.5
	FTS2-320-S15Q(Cu)		Precision	130mm	-55°C ~ +70°C	R15	Ø2.2	Ø0.5

新設計 (Thrubeam)

FR/FT

Plastic fiber optics

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZ1)	Operate temperature	Minimum bending radius	Fiber diameter	
							OD	ID
Ø3	FTW2-320-S15Q(Cu)		Flexible	80mm	-55°C ~ +70°C	R1	Ø2.2	Ø0.5
	FTW2-305-21 Free cut		Flexible	80mm	-55°C ~ +70°C	R1	Ø2.2	Ø0.5
	FTX-320-Q Free cut		Long sensing range	700mm	-55°C ~ +70°C	R40	Ø2.2	Ø1.5
	FTY-320-Q Free cut		Flexible	300mm	-40°C ~ +70°C	R2	Ø2.2	Ø1.0
Ø2	FTA-220 Free cut		High precision	30mm	-55°C ~ +70°C	R10	Ø1.25	Ø0.5
	FTB-220 Free cut		Standard	400mm	-55°C ~ +70°C	R25	Ø1.3	Ø1.0
	FTC4-220 Free cut		Multiple core	100mm	-55°C ~ +70°C	R15	Ø1.0 x 1	Ø0.25 x 4
	FTD-220 Free cut		Precision	130mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.5
	FTD-210-32 Free cut		Precision	80mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.5

特製 (Thrubeam)

Fiber
PR /PT
FR /FT
Glass Fiber
Light Guide
Silica Fiber
Access

FR/FT

Plastic fiber optics

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZ1)	Operate temperature	Minimum bending radius	Fiber diameter	
							OD	ID
Ø2	FTE-220 Free cut		High precision	30mm	-55°C ~ +70°C	R10	Ø1.0	Ø0.25
	FTJ-220 Free cut		Precision	250mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.75
	FTS-220 Free cut		Precision	130mm	-55°C ~ +70°C	R15	Ø1.0	Ø0.5
	FTS-220-I Free cut		Precision	130mm	-55°C ~ +70°C	R15	Ø1.0	Ø0.5
Ø1.5	FTC4-120 Free cut		Multiple core	100mm	-55°C ~ +70°C	R15	Ø1.0 x 1	Ø0.25 x 4
	FTC4-120-59(H10) Free cut		Multiple core	100mm	-55°C ~ +70°C	R15	Ø1.0 x 1	Ø0.25 x 4
	FTS-120-H10 Free cut		Precision	130mm	-55°C ~ +70°C	R15	Ø1.0	Ø0.5
	FTS-120 Free cut		Precision	130mm	-55°C ~ +70°C	R15	Ø1.0	Ø0.5

新製品 (Thrubeam)

Plastic fiber optics

FR/FT

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZ1)	Operate temperature	Minimum bending radius	Fiber diameter		Fiber
							OD	ID	
Other Type (Thrubeam)	Ø1.5 FTW-120-H10 Free cut		Flexible	80mm	-40°C ~ +70°C	R1	Ø1.0	Ø0.5	FR /PT
	FT-10ML-10 Free cut Array fiber		Multiple core	500mm	-55°C ~ +70°C	R25	Ø2.2 x 1	Ø0.265 x 16	Glass Fiber Light Guide Silica Fiber
	FT-10MLD-20 Free cut Array fiber		Multiple core	150mm	-55°C ~ +70°C	R25	Ø2.2 x 1	Ø0.265 x 16	Access
	FT-15MLD-10 Free cut Array fiber Side view fiber		Multiple core	400mm	-55°C ~ +70°C	R25	Ø2.2 x 1	Ø0.265 x 16	
	FT-20ML-10 Array fiber		Multiple core	500mm	-55°C ~ +70°C	R60	Ø2.8 x 1	Ø0.25 x 32	
	FT-30ML-20 Array fiber Side view fiber		Multiple core	300mm	-55°C ~ +70°C	R60	Ø2.8 x 1	Ø0.25 x 32	

FR/FT

Plastic fiber optics

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZ1)	Operate temperature	Minimum bending radius	Fiber diameter	
							OD	ID
Other Type 参照品 (Thrubeam)	FT-50ML-20 Array fiber Side view fiber		Multiple core	300mm	-55°C ~ +70°C	R60	Ø2.8 x 1	Ø0.25 x 32
	FTW-FU53-20 Free cut		Flexible	40mm	-40°C ~ +70°C	R1	Ø1.0	Ø0.5
	FTW-FU57-20 Free cut		Flexible	45mm	-40°C ~ +70°C	R1	Ø1.0	Ø0.5
	FTA-SU05-10 Free cut		High precision	5mm	-55°C ~ +70°C	R10	Ø1.25	Ø0.25
	FTA-SU10-10 Free cut		High precision	10mm	-55°C ~ +70°C	R10	Ø1.25	Ø0.25
	FTC32-12		Coaxial	750mm	-55°C ~ +70°C	R60	Ø2.8 x 1	Ø0.25 x 32

Plastic fiber optics

FR/FT

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZ1)	Operate temperature	Minimum bending radius	Fiber diameter		Fiber
							OD	ID	
Other Type 新製品 (Thrubeam)	FTW2-475D-10 Free cut		Flexible	80mm	-55°C ~ +70°C	R1	Ø2.2	Ø0.5	FR /PT
	FTW2-11-10 Free cut		Flexible	80mm	-40°C ~ +70°C	R1	Ø2.2	Ø0.5	Glass Fiber Light Guide Silica Fiber
	FTW-10ML-10 Free cut		Flexible	80mm	-40°C ~ +70°C	R1	Ø1.0	Ø0.5	Access
	FTX-70-FSC Side View Array Fiber		Long sensing range	-	-55°C ~ +70°C	R40	Ø2.2	Ø1.5	
	FTY-11-10 Free cut		Flexible	300mm	-55°C ~ +70°C	R2	Ø2.2	Ø1.0	
	FTY-77TZ-20 Free cut		Flexible	250mm	-40°C ~ +70°C	R2	Ø2.2	Ø1.0	
	FTY-U09-20 Free cut		Flexible	9mm	-40°C ~ +70°C	R2	Ø2.2	Ø1.0	

FG

Glass Fiber Optic

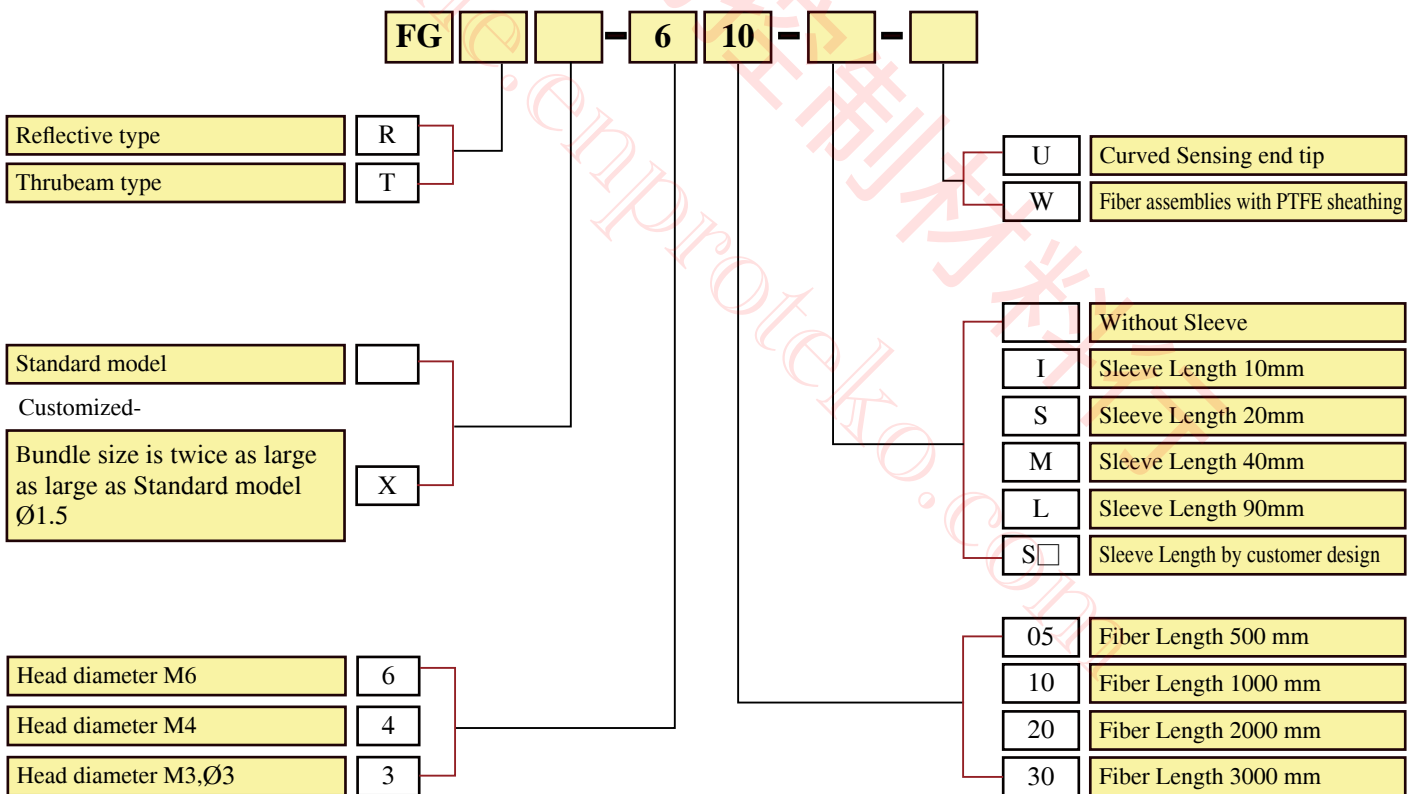
- Fiber
- PR /PT
- FR /FT
- Glass Fiber
- Light Guide
- Silica Fiber
- Access



Glass Fiber TYPE

Fiber customized for special dimension

◆Order Information :



Glass Fiber Optic

FG

Model	Dimensions	Wavelength	Individual fiber diameter	Sensing distance (FZ1)	Operate temperature	Minimum bending radius
FGR-310(R)		380nm ~ 1300nm	53 μ m \pm 4 μ m	80mm	-40°C ~ +250°C	R23
FGR-410(R)		380nm ~ 1300nm	53 μ m \pm 4 μ m	80mm	-40°C ~ +250°C	R23
FGR-415-M(R)		380nm ~ 1300nm	53 μ m \pm 4 μ m	80mm	-40°C ~ +250°C	R23
FGR-415-MU(R)		380nm ~ 1300nm	53 μ m \pm 4 μ m	80mm	-40°C ~ +250°C	R23
FGR-610(R)		380nm ~ 1300nm	53 μ m \pm 4 μ m	80mm	-40°C ~ +250°C	R23
FGR-630-SU(R)		380nm ~ 1300nm	53 μ m \pm 4 μ m	80mm	-40°C ~ +250°C	R23

反射型 (Reflective)

Fiber

PR /PT

FR /FT

Glass Fiber

Light Guide

Silica Fiber

Access

FG

Glass Fiber Optic

Fiber
PR /PT
FR /FT
Glass Fiber
Light Guide
Silica Fiber
Access

Model	Dimensions	Wavelength	Individual fiber diameter	Sensing distance (FZI)	Operate temperature	Minimum bending radius
FGR-11-10(R)		380nm ~ 1300nm	53 μm ± 4 μm	80mm	-40°C ~ +250°C	R23
FGRX-LT31-45/75		380nm ~ 1300nm	53 μm ± 4 μm	-	-40°C ~ +250°C	R23
FGR-A355ML		380nm ~ 1300nm	53 μm ± 4 μm	30mm	-40°C ~ +250°C	-
FGR-810(R)		380nm ~ 1300nm	53 μm ± 4 μm	80mm	-40°C ~ +250°C	R23
FGRX-610(R)		380nm ~ 1300nm	53 μm ± 4 μm	120mm	-40°C ~ +250°C	R23
FGR-047013 (FGR-4747-10)		380nm ~ 1300nm	53 μm ± 4 μm	-	-40°C ~ +250°C	R19
FGR-4708-10		380nm ~ 1300nm	53 μm ± 4 μm	-	-40°C ~ +250°C	R19

反射型 (Reflective)

Glass Fiber Optic

FG

Model	Dimensions	Wavelength	Individual fiber diameter	Sensing distance (FZ1)	Operate temperature	Minimum bending radius
FGR4-0606-10		380nm 1300nm	53 μm ± 4 μm	-	-40°C +250°C	R19
FGR3-BT23SM900		380nm 1300nm	53 μm ± 4 μm	-	-40°C +250°C	R24
FGR4-610		380nm 1300nm	53 μm ± 4 μm	60mm	-40°C +250°C	R23
FGR-38K-20(R)		380nm 1300nm	53 μm ± 4 μm	2 15mm	-40°C +250°C	R23
FGR-67TG-20(R)		380nm 1300nm	53 μm ± 4 μm	80mm	-40°C +250°C	R24
FGT-310(R)		380nm 1300nm	53 μm ± 4 μm	360mm	-40°C +250°C	R23
FGT-410(R)		380nm 1300nm	53 μm ± 4 μm	360mm	-40°C +250°C	R23

反射型 (Reflective)

對照型 (Through)

Fiber
PR /PT
FR /FT
Glass Fiber
Light Guide
Silica Fiber
Access

FG

Glass Fiber Optic

Fiber
PR /PT
FR /FT
Glass Fiber
Light Guide
Silica Fiber
Access

Model	Dimensions	Wavelength	Individual fiber diameter	Sensing distance (FZI)	Operate temperature	Minimum bending radius
FGTX-410	<p> Ø1.5, 25.7, 1000, 10, 15, 3, 12.7, 10, Ø1.5 M2.6, M4 P0.7 SUS303, Toothed Lock Washer Ø8.3, Width Across Flats 8mm, Thickness 2.3mm Ø4.3, Ø3.8 stainless steel protective tube, Nylon PA66 adapter, Ø5, Ø2.2 (by customer design) FGTX-410-I, FGTX-410-S, FGTX-410-M, FGTX-410-L </p>	380nm 1300nm	53 μm ± 4 μm	500mm	-40°C +250°C	R23
FGTX-410MU	<p> Ø2.0 SUS304, 23, 1000, 10, 15, Ø1.5, 15, 3, 10, R10, Ø2.6, Toothed Lock Washer Ø8.3, Width Across Flats 8mm, Thickness 2.3mm M4 P0.7 SUS303, Ø4.3, Ø3.8 stainless steel protective tube, Nylon PA66 adapter, Ø5, Ø2.2 </p>	380nm 1300nm	53 μm ± 4 μm	500mm	-40°C +250°C	R23
FGTX-610	<p> Ø1.5, 3, 14, 1000, 10, 15, Ø1.5, Ø4.0, M6 P0.75 SUS303, Toothed Lock Washer Ø11, Width Across Flats 10mm, Thickness 2.5mm Ø3.8 stainless steel protective tube, Nylon PA66 adapter, Ø5, Ø2.2 </p>	380nm 1300nm	53 μm ± 4 μm	500mm	-40°C +250°C	R23
FGTX-403U <i>One fiber only</i>	<p> R20, 35, 300, 20, 4, 2, Ø1.5, 25, Ø4.6 SUS304, Ø2.9 stainless steel protective tube, Ø10 Nickel plated brass, M8, Ø3.5 Nickel plated brass, Ø6.1 SUS304, Ø2.2 SUS304 M4 P0.7 SUS303, Toothed Lock Washer Ø8.3, Width Across Flats 8mm, Thickness 2.3mm, Ø3.6 </p>	380nm 1300nm	53 μm ± 4 μm	-	-40°C +250°C	R23
FGTX-406-U01 <i>One fiber only</i>	<p> R20, 35, 600, 9, 15, 2.3, Ø1.5, 25, Ø4.6 SUS304, Ø2.9 stainless steel protective tube, Ø8, Ø3.5, Ø4, Ø1.5, 20, M4 P0.5 SUS303 </p>	380nm 1300nm	53 μm ± 4 μm	-	-40°C +250°C	R23
FGT-11-10(R)	<p> Ø1.5, 15, 10, 1000, 10, 15, Ø1.5, 5, Nickel plated brass, Ø4.3 SUS303, Ø3.8 stainless steel protective tube, Nylon PA66 adapter, Ø5, Ø2.2, Ø2 SUS303, 4, 2 </p>	380nm 1300nm	53 μm ± 4 μm	500mm	-40°C +250°C	R23

特殊規格 (Thru-beam)

Glass Fiber Optic

FG

Model	Dimensions	Wavelength	Individual fiber diameter	Sensing distance (FZI)	Operate temperature	Minimum bending radius
FGT-12		380nm 1300nm	53 μm ± 4 μm	500mm	-40°C +250°C	R23
FGT-13		380nm 1300nm	53 μm ± 4 μm	-	-40°C +250°C	R23
FGT-16		380nm 1300nm	53 μm ± 4 μm	-	-40°C +250°C	R18
FGT-4747-10 <i>One fiber only</i>		380nm 1300nm	53 μm ± 4 μm	-	-40°C +250°C	R19
FGT-475D		380nm 1300nm	53 μm ± 4 μm	50mm	-40°C +250°C	R23
FGT-475DW-10		380nm 1300nm	53 μm ± 4 μm	50mm	-40°C +250°C	R10
FGT2-LM32-45/75-10		380nm 1300nm	53 μm ± 4 μm	80mm	-40°C +250°C	R18

對照型 (Through beam)

Fiber
 PR /PT
 FR /FT
 Glass Fiber
 Light Guide
 Silica Fiber
 Access

FG

Glass Fiber Optic

Fiber
PR /PT
FR /FT
Glass Fiber
Light Guide
Silica Fiber
Access

Model	Dimensions	Wavelength	Individual fiber diameter	Sensing distance (FZL)	Operate temperature	Minimum bending radius
FGT3-IT23SM900		380nm 1300nm	53 μm ± 4 μm	80mm	-40°C +250°C	R19
FGT-0606-20 <i>One fiber only</i>		380nm 1300nm	53 μm ± 4 μm	-	-40°C +250°C	R25
FGT3-0505-10 <i>One fiber only</i>		380nm 1300nm	53 μm ± 4 μm	-	-40°C +250°C	R20
FGTX-5656-30 <i>One fiber only</i>		380nm 1300nm	53 μm ± 4 μm	-	-40°C +250°C	R20
FGT4-08M12-20 <i>One fiber only</i>		380nm 1300nm	53 μm ± 4 μm	80mm	-40°C +250°C	R24
FGT-4708-10		380nm 1300nm	53 μm ± 4 μm	-	-40°C +250°C	R23
FGR-4706-10		380nm 1300nm	70 μm ± 4 μm	-	-40°C +250°C	R24
FGTX-67TG-20(R)		380nm 1300nm	50 μm ± 4 μm	500mm	-40°C +250°C	R24
FGT-77TG-20(R)		380nm 1300nm	50 μm ± 4 μm	250mm	-40°C +250°C	R24

普通型 (Throughbeam)

Light Guide

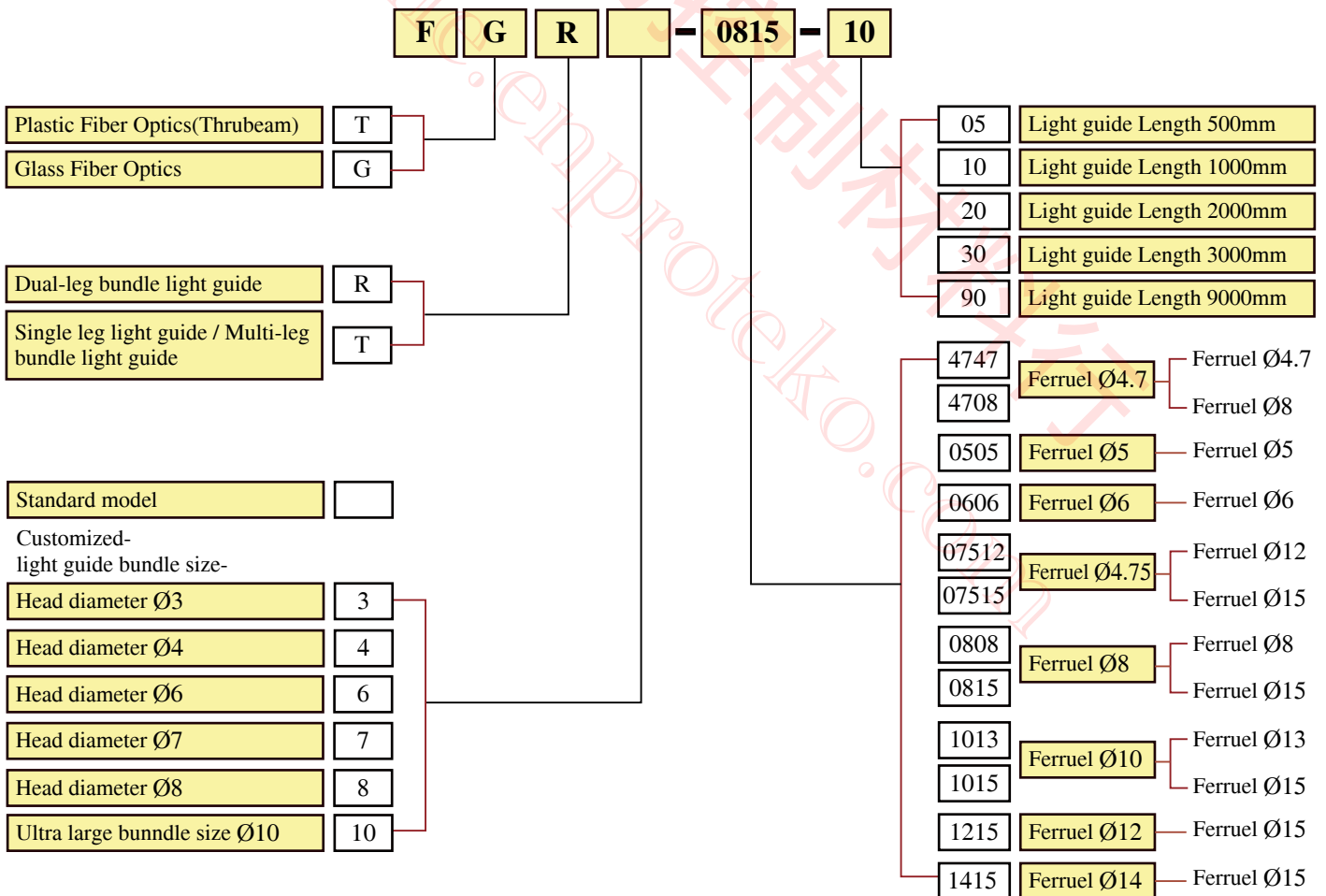
FT/FG



Light Guide TYPE

Fiber customized for special dimension

◆Order Information :



Fiber

PR /PT

FR /FT

Glass Fiber

Light Guide

Silica Fiber

Access

FT/FG

Light Guide

Fiber
PR /PT
FR /FT
Glass Fiber
Light Guide
Silica Fiber
Access

Type	Model	Dimensions	Wavelength	Individual fiber diameter	Operate temperature	Minimum bending radius
塑膠光導管 (Thrubeam) 對照型 (Thrubeam)	FT-8515-30		-	-	-55°C ~ +70°C	R40
	FT-3430IKS		-	-	-55°C ~ +70°C	R50
玻璃光導管 (Glass Fiber Light Guide) 反射型 (Reflective)	FGR-0815-10		380 ~ 1300nm	100 μm ± 4 μm	-40°C ~ +250°C	R30
	FGR-1815-10-H20		380 ~ 1300nm	100 μm ± 4 μm	-40°C ~ +250°C	R30
	FGR-1215-10-H31		380 ~ 1300nm	100 μm ± 4 μm	-40°C ~ +250°C	R30
	FGR10-211-25		380 ~ 1300nm	50 μm ± 4 μm	-40°C ~ +250°C	R23
	FGR-1016-10		380 ~ 1300nm	100 μm ± 4 μm	-40°C ~ +250°C	R23

Light Guide

FT/FG

Type	Model	Dimensions	Wavelength	Individual fiber diameter	Operate temperature	Minimum bending radius
玻璃光導管 (Glass Fiber Light Guide) 管照型 (Thrubeam)	FGT-0815-10		380 ~ 1300nm	100 μm ± 4 μm	-40°C ~ +250°C	R30
	FGT-0808-10		380 ~ 1300nm	100 μm ± 4 μm	-40°C ~ +250°C	R30
	FGT-0815-20-H21		380 ~ 1300nm	100 μm ± 4 μm	-40°C ~ +250°C	R30
	FGT10-1415-30		380 ~ 1300nm	100 μm ± 4 μm	-40°C ~ +250°C	R31
	FGT-1016-20		380 ~ 1300nm	100 μm ± 4 μm	-40°C ~ +250°C	R30
	FGT-1015-10-H21		380 ~ 1300nm	100 μm ± 4 μm	-40°C ~ +250°C	R30
	FGT7-0815-10		380 ~ 1300nm	50 μm ± 4 μm	-40°C ~ +250°C	R30
	FGT-1215-10		380 ~ 1300nm	100 μm ± 4 μm	-40°C ~ +250°C	R30

Fiber

PR /PT

FR /FT

Glass Fiber

Light Guide

Silica Fiber

Access

SFRC

Silica Fiber Optics

Fiber

PR /PT

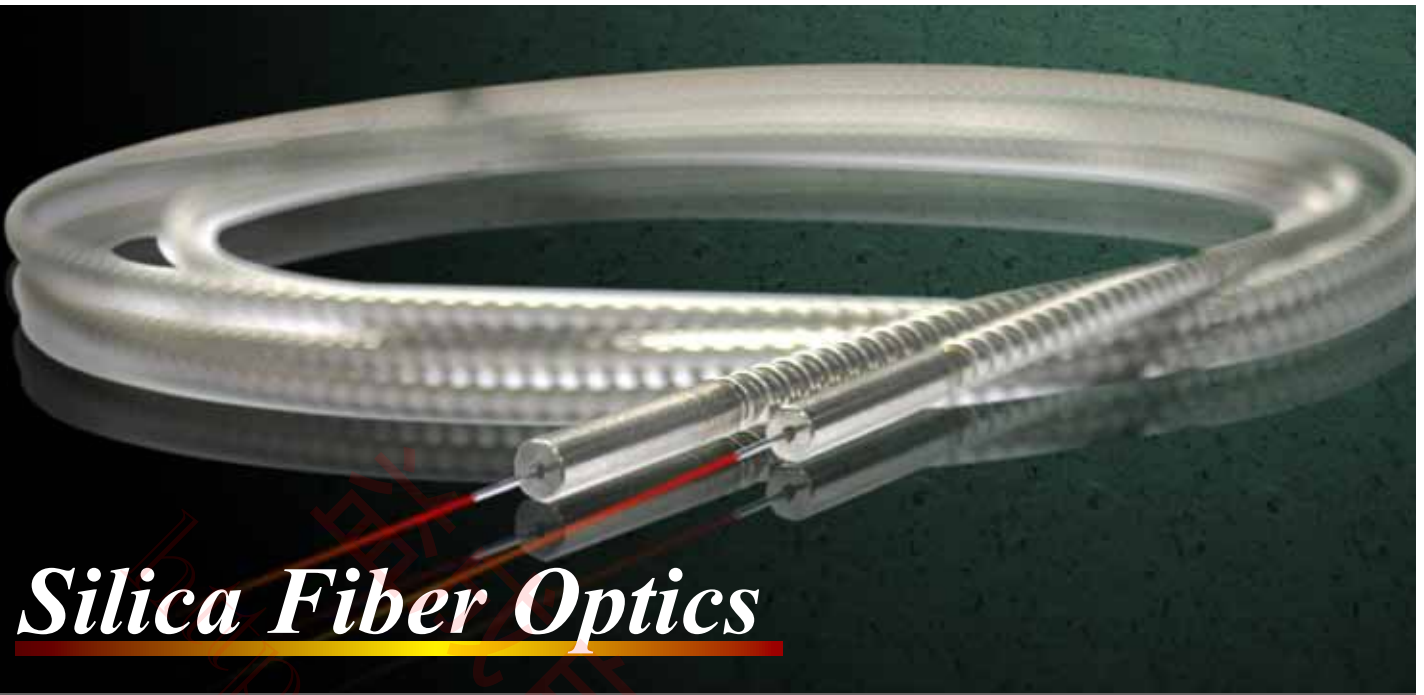
FR /FT

Glass Fiber

Light Guide

Silica Fiber

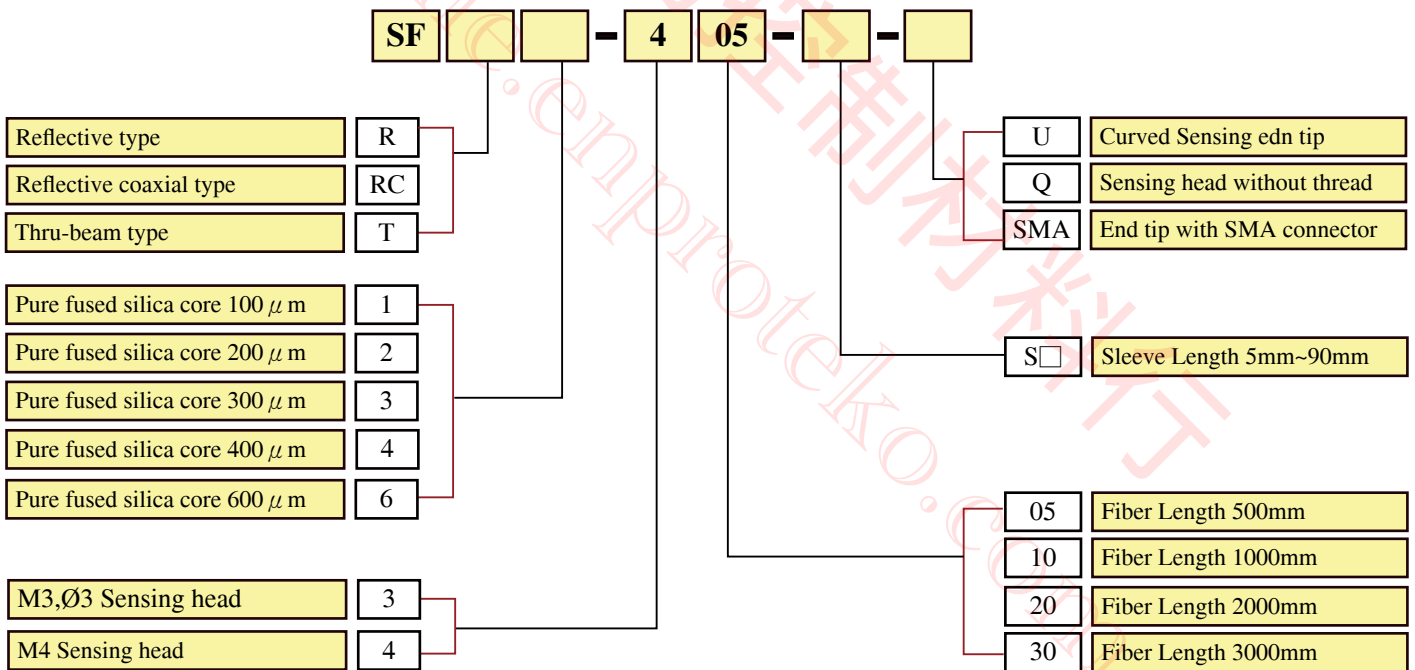
Access



Silica Fiber Optics

Fiber customized for special dimension

◆Order Information :





Silica Fiber Optics

Specifications / 規格表

Type	Model	Dimensions	Wavelength	Individual fiber diameter	Number of fibers	Operate temperature	Active area diameter
反射型 (Reflective)	SFRC-310-MU	<p>100µm silica fiber optics x 66 400µm silica fiber optics x 1</p>	180 ~ 1100nm	100 µm/ 400 µm	66/1	-40°C ~ +250°C	Ø1.2
	SFRC-305-21X	<p>100µm silica fiber optics x 14 400µm silica fiber optics x 1</p>	180 ~ 1100nm	100 µm/ 400 µm	40/1	-40°C ~ +250°C	Ø0.7
透視型 (Throughbeam)	SFT1-310-S51Q	<p>100µm silica fiber optics</p>	220 ~ 700nm	100 µm	1	-40°C ~ +70°C	-
	SFT1-310-S5Q	<p>100µm silica fiber optics</p>	220 ~ 700nm	100 µm	1	-40°C ~ +70°C	-
	SFT2-30-SMA	<p>200µm silica fiber optics</p>	220 ~ 700nm	200 µm	1	-40°C ~ +70°C	-
	SFT3-28-SMA	<p>300µm silica fiber optics</p>	220 ~ 700nm	300 µm	1	-40°C ~ +70°C	-
	SFT4-320-SMA	<p>400µm silica fiber optics</p>	220 ~ 700nm	400 µm	1	-40°C ~ +250°C	-
	SFT1-20-SMA	<p>100µm silica fiber optics</p>	220 ~ 700nm	100 µm	1	-40°C ~ +70°C	-

Fiber

PR /PT

FR /FT

Glass Fiber

Light Guide

Silica Fiber

Access

FIBER

Fiber Access

Fiber

PR /PT

FR /FT


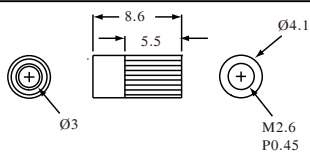

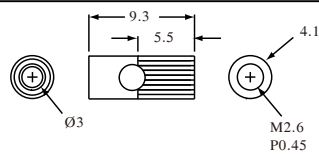

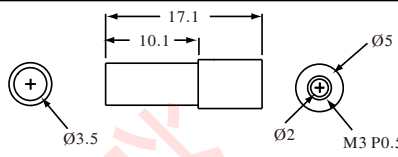

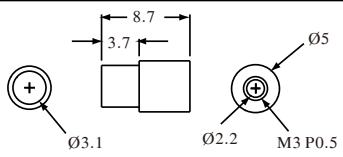

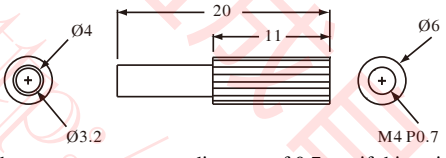

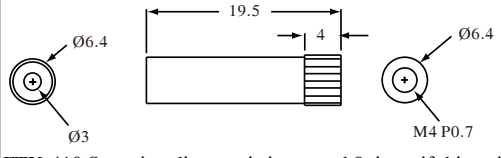
Glass Fiber

Light Guide


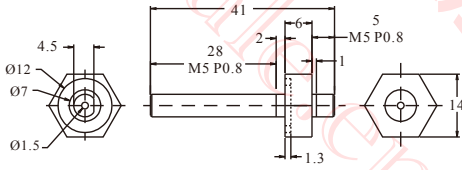
Silica Fiber

Access


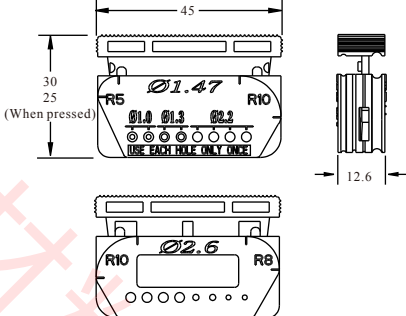
LANS / 聚焦鏡

Product Map	Dimensions	Product Map	Dimensions
 <p>FL-M02</p>	 <p>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.</p>	 <p>FLS-M02</p>	 <p>FT-410 unit can be changed to aside view type by attaching this unit to the light emitter or receiver of fiber unit.</p>
 <p>FL-M03</p>	 <p>Light converges to a spot diameter of 0.5mm if this unit is attached to a fiber unit at a distance of 8mm.</p>	 <p>FL-M03-1</p>	 <p>Light converges to a spot diameter of 2mm if this unit is attached to a fiber unit at a distance of 8mm.</p>
 <p>FL-M04</p>	 <p>Light converges to a spot diameter of 0.7mm if this unit is attached to a fiber unit at a distance of 10mm.</p>	 <p>FL-M06</p>	 <p>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.</p>

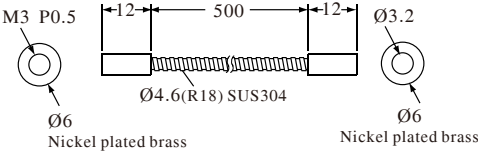
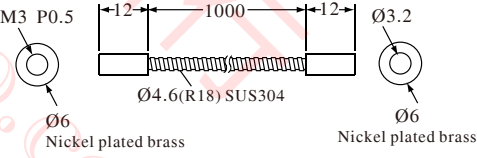
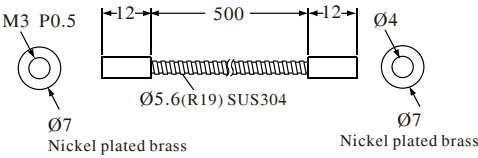
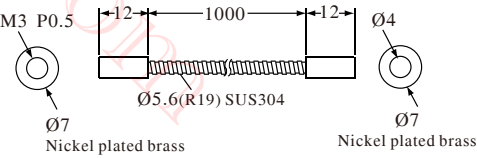
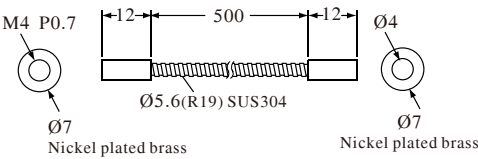
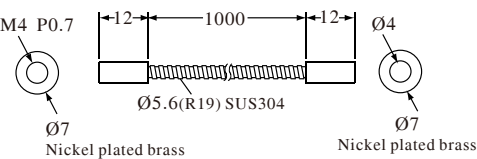
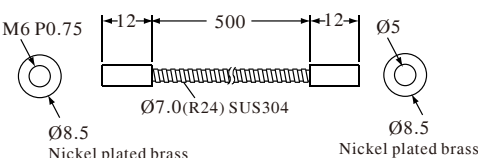
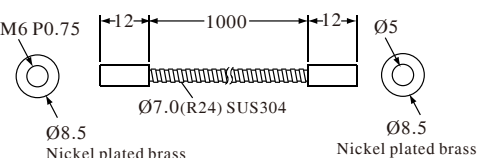
Heat resistant adapter / 高溫轉接頭

 <p>FTG015-05041</p>	 <p>1. Suitable for High Temperature and Vacuum Environment Operating Temperature: -40°C ~ 250°C 2. Effective against Air under Vacuum Sensing. 3. Connected to a Plastic Fiber Sensor Applied in High Temperature Environment</p>
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Fiber Cutter / 光纖切刀

 <p>C4530</p>	 <p>USE EACH HOLE ONLY ONCE</p>
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Protective tube / 保護管

Dimensions		Dimensions	
 <p>RS3N3-50</p> <p>Nickel plated brass</p>	 <p>RS3N3-100</p> <p>Nickel plated brass</p>		
 <p>RS4N3-50</p> <p>Nickel plated brass</p>	 <p>RS4N3-100</p> <p>Nickel plated brass</p>		
 <p>RS4N4-50</p> <p>Nickel plated brass</p>	 <p>RS4N4-100</p> <p>Nickel plated brass</p>		
 <p>RS5N6-50</p> <p>Nickel plated brass</p>	 <p>RS5N6-100</p> <p>Nickel plated brass</p>		