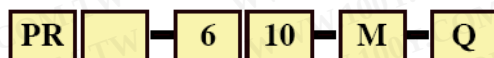


Head diameter M6	6
Head diameter Ø5	5
Head diameter M4, Ø4	4
Head diameter M3, Ø3	3
Head diameter Ø2	2
Head diameter Ø1.5, Ø1	1

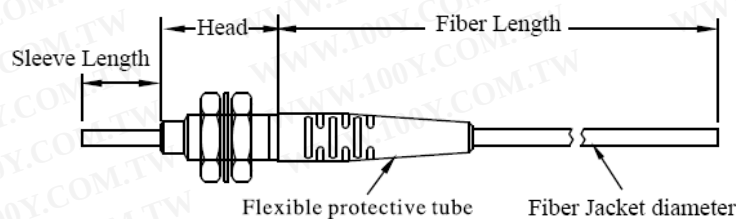


Q	Sensing end tip without thread
U	Curved Sensing end tip
D	Side view
KC	Fiber assemblies with SUS sheathing

	Without Sleeve
I	Sleeve Length 10mm
S	Sleeve Length 20mm
M	Sleeve Length 40mm
L	Sleeve Length 90mm
S ☐	Sleeve Length by customer design

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

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PT/PR TYPE

High quality, bending resistance fiber optic sensor

Patent NO. : M368808 M380485

Protection against excessive bending /高彎曲保護

Special material for bending resistance (patent) /特殊耐彎材質(自有專利)

Special material for bending resistance : better curvature and protection from breakage of fiber in case of smaller bending radius in operation.

/特殊耐彎材質，繞曲度優，保護性佳，讓您在使用的時候，不會因為R角過小，造成光纖的斷裂。



Without overmoulding protection.
無保護光纖

Traditional types



With overmoulding protection.
保護光纖

M6 Types



With overmoulding protection.
保護光纖

M3/M4 Types

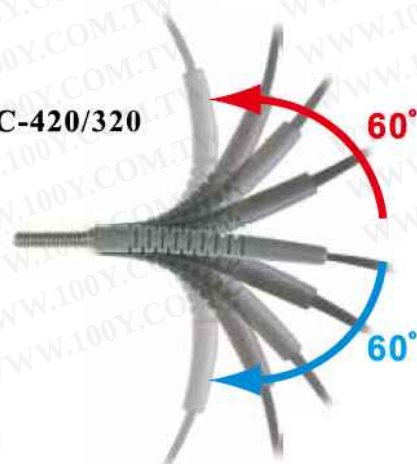
Swinging tests /搖擺測試

Swings of PR620:1000 and PRC-320/420 are up to 30000. It will efficiently protect the fiber and extend its service life.

/PR-620搖擺次數可達1萬次，PRC-320/420搖擺次數更能夠達到3萬次，因此能有效的保護光纖，使光纖的壽命更長。



PRC-420/320



Standard of test : swinging from left to right total 10cm, 120 degree, speed : 12 seconds per swing.
測試標準:左右來回5公分，角度60(正負共120度)左右搖擺、速度來回12秒。

High tensile strength /高抗拉力(8kg)

Tensile strength : 8kg is three times more stronger than traditional type fiber. It will keep fiber far from careless damage in operation.

/PR-620可承受8kg的拉力，比一般的機型強上數倍，讓在使用時，不會因不小心，而造成光纖的損傷。



PR-620
Tensile strength : 8kg
可承受8kg的拉力



PRC-420/320
Tensile strength : 7kg
可承受7kg的拉力

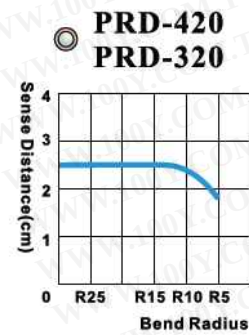
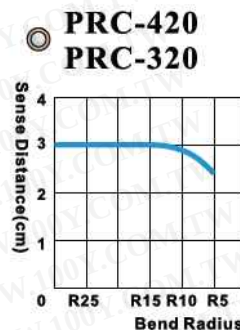
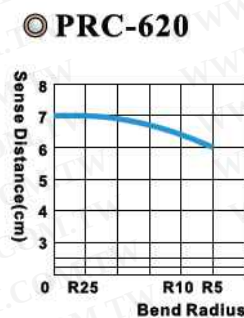
High quality /高品質

1. Stainless steel fiber head(Shorter Model) /高品質不鏽鋼接頭
光纖頭使用不鏽鋼材質，耐用度高。



2. High quality fiber /高品質光纖

Superior fiber material from Japan. Lower attenuation. /使用日本進口光纖，光纖在彎折時，光耗損率更低



Enhanced protection /有效保護光纖

Tiny mark detection
/檢測標記



Caps detection
/檢測有無蓋子



Application / 應用例

Fiber

PR
/PT

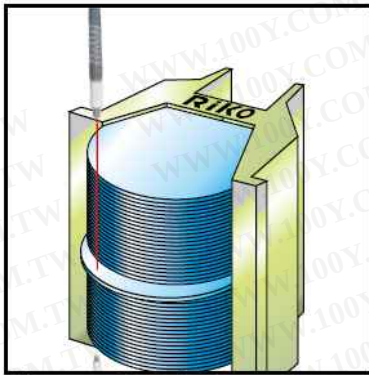
FR
/FT

Glass
Fiber

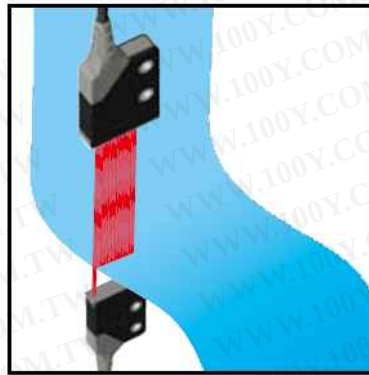
Light
Guide

Silica
Fiber

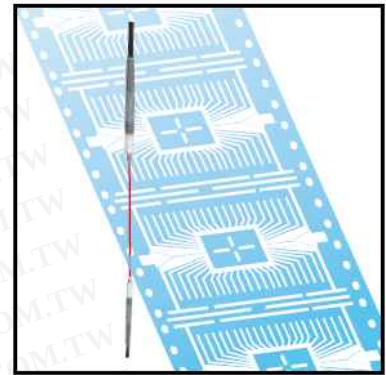
Access



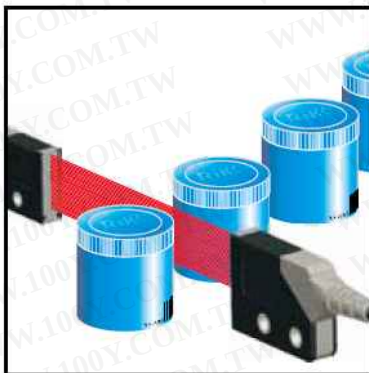
Abnormal position
檢測是否有凸出



Thin film
薄膜檢測



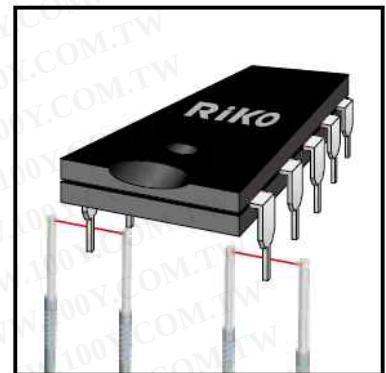
Leadframe
偵測導線架



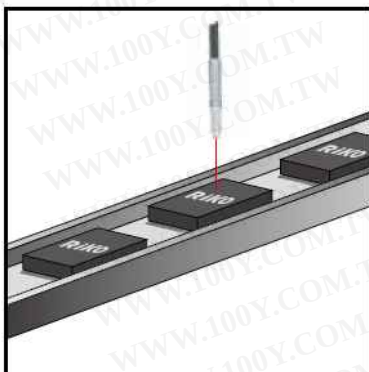
Round shape detection
檢測產品通過



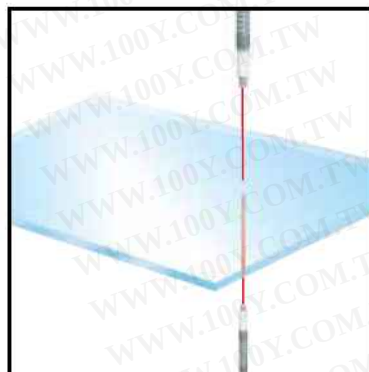
Labeling
檢測有無標籤



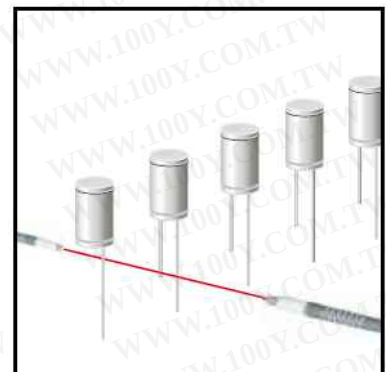
IC leg
監測IC腳位



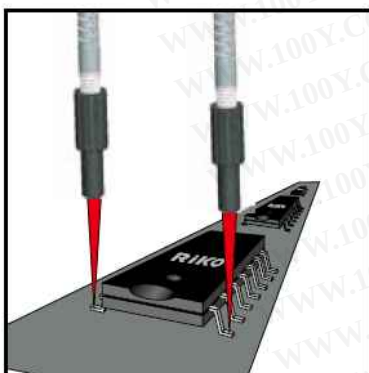
Upper detection
檢測產品通過



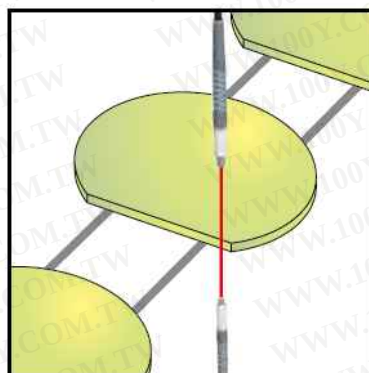
Glass
檢測玻璃



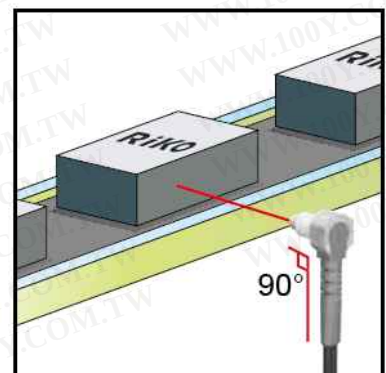
DIP
檢測電容腳



Small spot detection
檢測IC腳位

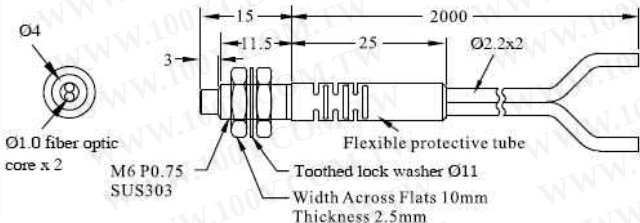
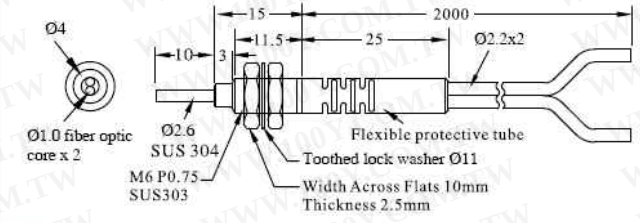
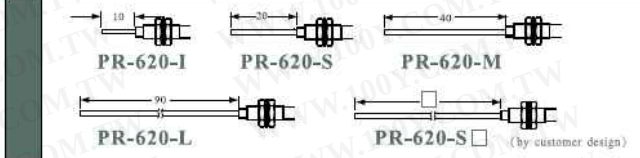
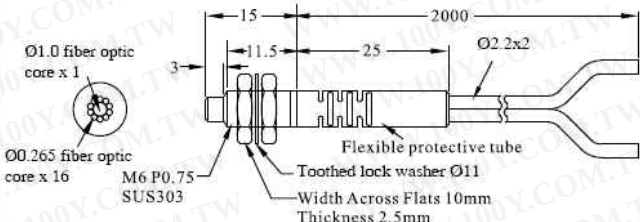
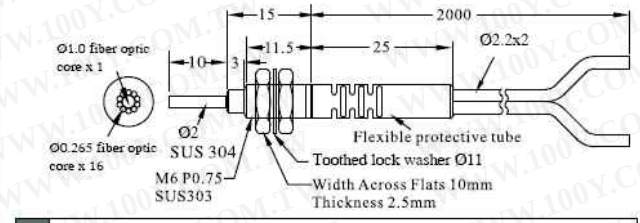
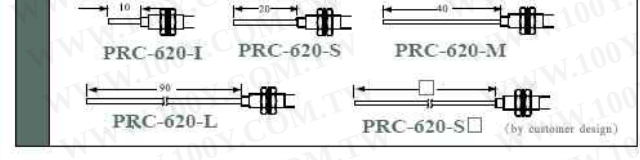
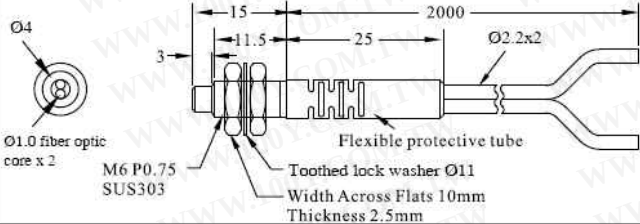
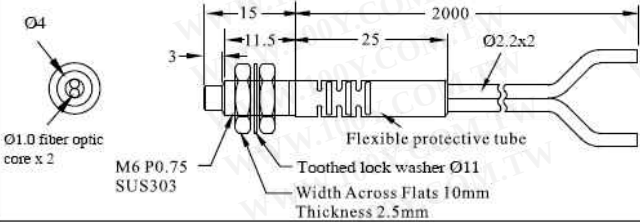


WAFER
檢測WAFER



90 angle detection
90度檢測

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZ1)	Operate temperature	Minimum bending radius	Fiber diameter		Fiber
							OD	ID	
反射型 (Reflective)	PR-620 Free cut		Standard	90mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0	PR /PT
	PR-620-I Free cut	 	Standard	90mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0	FR /FT
	PRC-620 Free cut		Coaxial	70mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0 x 1 ----- Ø0.265 x 16	Glass Fiber
	PRC-620-I Free cut	 	Coaxial	70mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0 x 1 ----- Ø0.265 x 16	Light Guide
	PRH-620 Free cut		Heat Resistant	80mm	-55°C ~ +115°C	R25	Ø2.2	Ø1.0	Silica Fiber
	PRY-620 Free cut		Flexible	70mm	-40°C ~ +70°C	R2	Ø2.2	Ø1.0	Access

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)	PRA-420 Free cut		Precision	5mm	-55°C ~ +70°C	R10	Ø1.25	Ø0.25
	PRC-420 Free cut		Coaxial	30mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.5 x 1 Ø0.25 x 10
	PRC-420-I Free cut		Coaxial	30mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.5 x 1 Ø0.25 x 10
	PRC-420-9 Free cut		Coaxial	30mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.5 x 1 Ø0.25 x 10
	PRD-420 Free cut		Precision	25mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.5
	PRD-420-I Free cut		Precision	25mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.5

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)	M4 PRD-420-9 Free cut		Precision	25mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.5
	PRA-320 Free cut		High precision	5mm	-55°C ~ +70°C	R10	Ø1.25	Ø0.25
	PRC-320 Free cut		Coaxial	30mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.5 x 1 ----- Ø0.25 x 10
	M3 PRC-320-I Free cut		Coaxial	30mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.5 x 1 ----- Ø0.25 x 10
	PRC-320-9 Free cut		Coaxial	30mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.5 x 1 ----- Ø0.25 x 10
	PRD-320 Free cut		Precision	25mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.5

Fiber

PR / PT

FR / FT

Glass Fiber

Light Guide

Silica Fiber

Access

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZ1)	Operate temperature	Minimum bending radius	Fiber diameter	
							OD	ID
M3	PRD-320-I Free cut		Precision	25mm	-55°C~+70°C	R15	Ø1.25	Ø0.5
	PRD-320-9 Free cut		Precision	25mm	-55°C~+70°C	R15	Ø1.25	Ø0.5
O3	PRC-320-Q Free cut		Coaxial	30mm	-55°C~+70°C	R15	Ø1.25	Ø0.5 x 1 ----- Ø0.25 x 10
	PRC-320-IQ Free cut		Coaxial	30mm	-55°C~+70°C	R15	Ø1.25	Ø0.5 x 1 ----- Ø0.25 x 10
	PRD-320-Q Free cut		Precision	25mm	-55°C~+70°C	R15	Ø1.25	Ø0.5
	PRD-320-IQ Free cut		Precision	25mm	-55°C~+70°C	R15	Ø1.25	Ø0.5

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)	O2	PRE-220 Free cut	Hight precision	5mm	-55°C ~ +70°C	R10	Ø1.0	Ø0.25
	O2	PRS-220 Free cut	Precision	25mm	-55°C ~ +70°C	R15	Ø1.0	Ø0.5
	O1.5	PRC4-120 Free cut	Multiple Core	7mm	-55°C ~ +70°C	R15	Ø1.0	Ø0.25 x 4
	O1.5	PRC7-120 Free cut	Coaxial	20mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.25 x 7
對照型 (Thrubeam)	M4	PT-420 Free cut	Standard	360mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0
	M4	PID-420 Free cut	Precision	90mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.5
	M4	PTH-420 Free cut	Heat Resistant	600mm	-55°C ~ +115°C	R25	Ø2.2	Ø1.0
	M4	PTS2-420 Free cut	Precision	130mm	-55°C ~ +70°C	R15	Ø2.2	Ø0.5
	M4	PTY-420 Free cut	Flexible	300mm	-40°C ~ +70°C	R2	Ø2.2	Ø1.0

Fiber

PR

/PT

FR

/FT

Glass

Fiber

Light

Guide

Silica

Fiber

Access

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZ1)	Operate temperature	Minimum bending radius	Fiber diameter	
							OD	ID
M3	PT-320 Free cut		Standard	500mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0
	PTD-320 Free cut		Precision	130mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.5
	PTH-320 Free cut		Heat Resistant	600mm	-55°C ~ +115°C	R25	Ø2.2	Ø1.0
	PTS2-320 Free cut		Precision	130mm	-55°C ~ +70°C	R15	Ø2.2	Ø0.5
	PTY-320 Free cut		Flexible	300mm	-40°C ~ +70°C	R2	Ø2.2	Ø1.0
O3	PT-320-Q Free cut		Standard	500mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0
	PT-320-IQ Free cut		Standard	500mm	-55°C ~ +70°C	R25	Ø2.2	Ø1.0

對照型 (Thrubeam)

Specifications / 規格表

Type	Model	Dimensions	Fiber Type	Sensing distance (FZ1)	Operate temperature	Minimum bending radius	Fiber diameter	
							OD	ID
O3	PTD-320-Q Free cut		Precision	130mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.5
	PTD-320-IQ Free cut		Precision	130mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.5
	PT-320-IQ PT-320-SQ PT-320-MQ PT-320-LQ PT-320-S□Q (by customer design)		Precision	130mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.5
O2	PTA-220 Free cut		High precision	20mm	-55°C ~ +70°C	R10	Ø1.25	Ø0.25
	PTC4-220 Free cut		Multiple-core	100mm	-55°C ~ +70°C	R15	Ø1	Ø0.25 x 4
	PTD-220 Free cut		Precision	130mm	-55°C ~ +70°C	R15	Ø1.25	Ø0.5
	PTE-220 Free cut		High precision	30mm	-55°C ~ +70°C	R10	Ø1.0	Ø0.25
	PTS-220 Free cut		Precision	130mm	-55°C ~ +70°C	R15	Ø1.0	Ø0.5
O1.5	PTC4-120 Free cut		Multiple-core	100mm	-55°C ~ +70°C	R15	Ø1.0	Ø0.25 x 4
	PTD-120 Free cut		Precision	130mm	-55°C ~ +70°C	R15	Ø1.0	Ø0.5
	PTS-120 Free cut		Precision	130mm	-55°C ~ +70°C	R15	Ø1.0	Ø0.5

對照型 (Thrubeam)

Fiber

PR /PT

FR /FT

Glass Fiber

Light Guide

Silica Fiber

Access

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) 90° 反射型 (array Fiber) 對照型 (Thru-beam)	PRY-67TZ-20 Free cut		Flexible	70mm	-55°C ~ +70°C	R2	Ø2.2	Ø1.0
	PR-20ML Free cut		Multiple-core	70mm	-55°C ~ +70°C	R25	Ø2.2	Ø0.25 X 16 Ø0.25 X 16
	PT-20ML Free cut		Multiple-core	500mm	-55°C ~ +70°C	R60	Ø2.8	Ø0.25 X 32

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 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

Accessories / 配件

LENS / 聚焦鏡			
Product	Dimensions	Product	Dimensions
FL-M02 	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.	FLS-M02 	FT-410 unit can be changed to aside view type by attaching this unit to the light emitter or receiver of fiber unit.
FL-M03 	Light converges to a spot diameter of 0.5mm if this unit is attached to a fiber unit at a distance of 8mm.	FL-M03-1 	Light converges to a spot diameter of 2mm if this unit is attached to a fiber unit at a distance of 8mm.
FL-M04 	Light converges to a spot diameter of 0.7mm if this unit is attached to a fiber unit at a distance of 10mm.	FL-M06 	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.
Heat resistant adapter / 高溫轉接頭		Fiber Cutter / 光纖切刀	
FTG015-05041 	- Suitable for High Temperature and Vacuum Environment Operating Temperature: -40°C ~ 250°C - Effective against Air under Vacuum Sensing. - Connected to a Plastic Fiber Sensor Applied in High Temperature Environment	C4530 	